

Fifty-three years after he started writing an Operating Manual for the Mount Washington Cog Railway, Norman "Jitney" Lewis decided to finish the manuscript at age 86. His son joined in the task. Beyond train operations, Jitney included other writings from his time spent at the Mountain working for two Colonels Teague.

Jitney suggested Junior update his first journalistic enterprise, the Cog Clatter — a weekly newspaper with employee profiles. Jitney Jr, a veteran statehouse reporter, went further enlisting the help of other employees who were there between 1950 and 1967 for more information. The result is a generously illustrated, crowd- sourced four-volume set covering the most significant events of the railway's first 150 years, the safe operation of the World's First Mountain Climbing railroad, and the most complete employee roster ever assembled. There is history, comedy and tragedy within this bittersweet Valentine to the Cog family and its patriarchs. All aboard!

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Operating Details & the Mechanism of the Steam Locomotive of the

Mt. Washington Cog Railway

1950-1967 THE JITNEY YEARS

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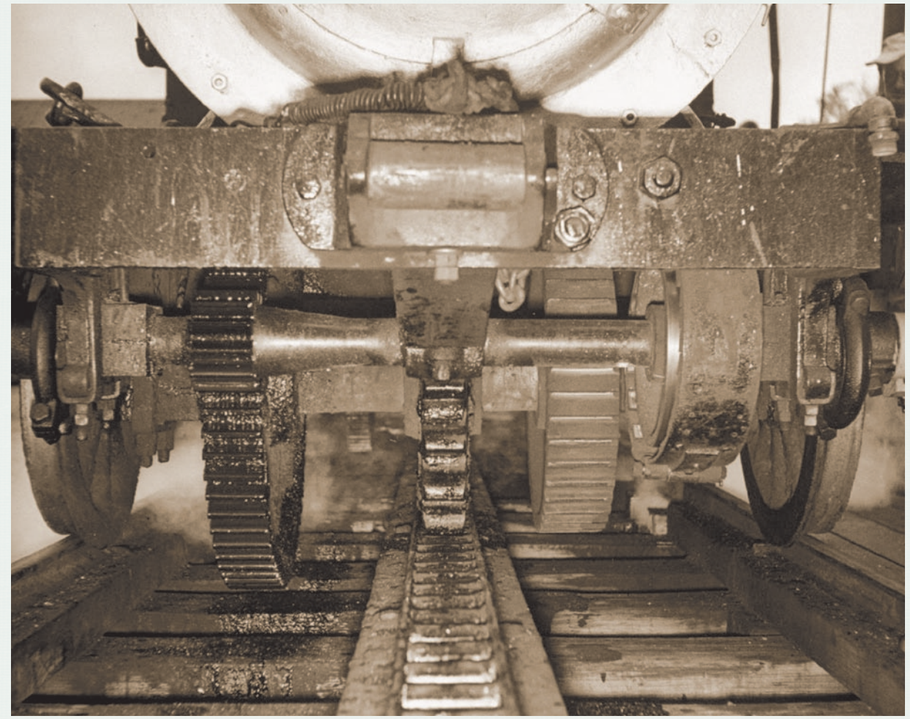
SUNSET EDITION

Operating Details & the Mechanism of the Steam Locomotive of the

Mt. Washington Cog Railway

1950-1967: THE JITNEY YEARS



An Illustrated Handbook & Crowd-Sourced Memoir of a Specific Time Period, the Equipment and the People Involved

Operating Details & the Mechanism of the Steam Locomotive of the Mt. Washington Cog Railway

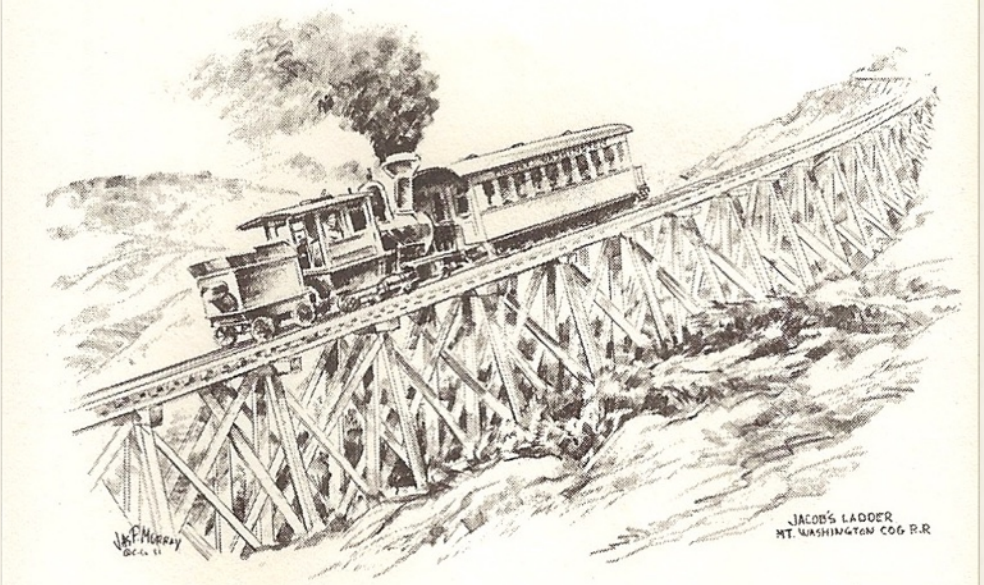
1950-1967
THE JITNEY YEARS

An Illustrated Handbook & Crowd-Sourced Memoir of a Specific Time Period, the Equipment and the People Involved

Volume 1

By Norman "Jitney" Lewis
Edited by Tim "Jitney Jr." Lewis

Ex Libris



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This manuscript is for the enjoyment of those who participated, or are interested in steam train operations on Mount Washington in New Hampshire in the mid-20th Century. It is a collective scrapbook and gathering of memories from those times (1950-1967). Best efforts have been made to ensure accuracy in those memories. Discrepancies do exist among the various recollections of the events and activities that occurred.

Cover photo: No. 6 *Great Gulf* front drive gears by Roy Stevens (1946)
Rear Cover: Illustration by Bill Manahan (1963)

"The Mount Washington Cog Railway in New Hampshire is no prissy, polite, laundered, Disneyland-style operation. A gutsy, sooty, elemental experience, it was conceived in the 1850's, a less fastidious age than our own. P. T. Barnum once called the Cog Railway 'the second greatest show on earth,' and so it remains."*

- Karl Zimmerman

New York Times - July 5, 1981

Q. (by Mr. Streeter) "What would be the effect on the Mount Washington Railway Company of one, just one, accident?"

A. "I should think it would be ruination of the company."

- John Horne

Master Mechanic - Mount Washington Railway

February 18, 1891 - Concord, New Hampshire

** P. T. Barnum actually called Mt. Washington itself "the second greatest show on earth." However, his quote was manipulated over the years for promotional purposes.*

A Note About Style

The *Jitney Years Collection* is a crowd-sourced manuscript and thus follows no standard academic stylistic formula. *Volume 1 Ops Manual* is primarily the work of two authors. Norman "Jitney" Lewis is the main voice of Chapters 1-8, and 11 & 12. Jitney Jr. is the main voice of Chapters 9-10 *(updating his Cog Clatter work)*, and 13-19. Additional information about some of the Coggers profiled in the *Clatter* (and this volume) may be found elsewhere in the manuscript - particularly *Volumes 2 Roster A-I and J-Z*.

Throughout attribution of other voices/sources has been placed as close to the material quoted/used as possible according to broadcast style when writing for the ear. There are no endnotes - readers hopefully should find sourcing without a search as they are reading.

Methodology

This was supposed to be the only volume produced. It would contain Jitney's completed *Operating Manual* from 1962-1964 and Jitney Jr's update of his *Cog Clatter* journalistic effort of 1966 & 1967. However, Jitney Jr's efforts to gather images to illustrate the manuscript, and historic material for context revealed the lack of the railroad's story ever being told through the eyes and the lives of the people seen toiling in the many images of theworld's first mountain-climbing railway over the years. Who were these people? Could a list of names be developed from close scrutiny of the many newspaper stories, magazine articles, books and contemporary records written? Jitney Jr took on the task, thinking his fourteen summers growing up at the Cog, and his later training as a journalist made him uniquely suited for the effort. *Volumes 2 Roster,* along with the collection of Mount Washington Railway news clips in *Volumes 3 Timeline,* the background material of *Volume 4 Appendix*, and the collection of foundational paperwork in *Volume 5 Documents & Maps* is the result. Everything you never wanted to know about the Cog Railway and were afraid to ask collected into one place. Enjoy?!?

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Aggregated Timeline ***2025 - present*** **Vol. 3c**
Appendices **Vol. 4**
Documents & Maps **Vol. 5**

Foreword

Fifty years ago *(1967)*, Jitney Lewis and his 20th Century nuclear family *(wife, son, daughter)* left the Base Station of the Mount Washington Railway for the last time. Eighteen summers before the departure, the Vermont-native had come to work on the "world's first mountain-climbing railroad" to supplement his G.I. Bill benefit, and underwrite his education at Lyndon Teachers College.

Jitney would become an engineer and operations manager on the road. He wrote some training manuals for the crew, and promised his employer a book on how the railroad worked would be completed in 1964. The draft manuscript languished.

In May 2015, the old engineer and his son decided to complete the manuscript in time for the road's 150th anniversary. Jitney polished the existing draft to include stories and notes from the annual entertainments he would M.C. He completed a description of a day in the life of a Cog train crew. His son, who had his first taste of reporting as a teenager at the mountain, worked to update the employee profiles contained in his mimeographed weekly newspaper from the 1960s. However, Junior's journalistic instincts, developed over his thirty-five years as a statehouse reporter, led the pair to seek the names and fact-check the background stories of the men and women who worked alongside Jitney from 1950 to 1967. Who were they? How did they wind up working at this unique 19th Century tourist attraction? Where did they go and what did they do after they went "down the mountain" for the final time? Some answers to those questions are found within the multiple volumes of this work.

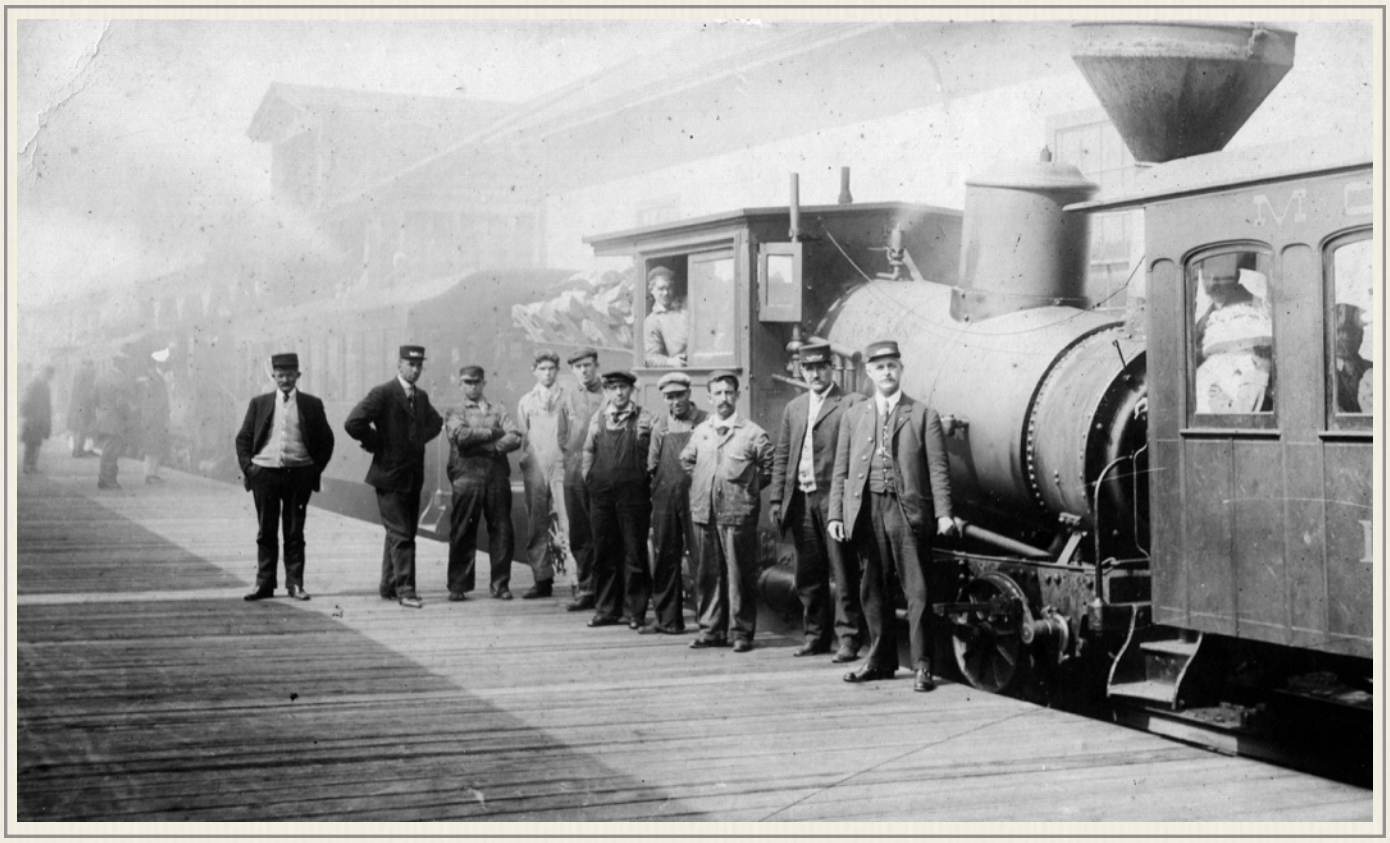
This sprawling "crowd-sourced" memoir contains comedy and tragedy, love and loss, is generously illustrated and can easily be sampled. Readers will find the manual and operating instructions for a Jitney-era Cog Railway steam train. The manual outlines in detail why this job was entrusted only to those supervisors thought could safely operate the railway, and maintain its legacy of "no paying passenger ever being killed" in nine decades of existence. Employee profiles are organized by their place of work, followed by a review of the history of that particular worksite. There is an unflinching look at the Jitneys' last year when the legacy of the Cog was lost. The appendices *(Volume 4)* bring additional background detail to prominent personalities, events, and the usual "front of the house" topics of Cog founders, *Peppersass,* and the slide board. An incomplete roster of Cog employees over the years is in *Volumes 2*, and an extensive aggregated timeline *(Volumes 3A, 3B & 3C)*. *Volume 5*. a collection of foundational documents & maps, completes the manuscript. Carefully read from start to finish, additional themes emerge in this bittersweet Valentine to the "Cog Family" and its patriarchs from two of their own.

Prof. T. R. Lewis
Northern Vermont University - Lyndon
- December 2018

Preface

There have been many books and thousands of articles written about the Mount Washington Railway since 1866, when it started proving to the world that grade and gravity could not prevent a locomotive from delivering passengers to the summit of a mountain. Authors generally follow the same theme and tell the railroad's story through its most notable characters (usually owners) and incidents – founder Sylvester Marsh, Walter Aiken, the Teague's, and the first engine known as *Peppersass* – it's travels and very public 1929 crash. For a dash of danger, they describe a unique wooden slide board used by workers to descend on the center rail called a "Devil's Shingle." To soothe any fears, authors quickly noted for 99 years no passenger had died on the line.

The tourist railroad's construction and operation coincided with the development and popularization of photography. Thus the unusual trains climbing the majestic mountain became attractive subjects for thousands of images taken by both professional and tourist. Some of those images wound up as illustrations, and in many there can be seen working, or posing in railroad regalia the unidentified men who ran the trains. The men resemble their counterparts, who ran mainline trains in the valleys, but these mountain climbing train crewmen had a unique skill set.



Trains loaded and crews ready to head up the mountain in 1910
- Robert J. Varney Collection

Preface

Skills so unique a May 1918 *Boston Daily Globe* article explained the Cog Railway would not run that summer of the Great War because "proper operation of this unusual railroad requires specially trained men. The peculiar construction of the locomotives and the extraordinary grades on the line are factors that cannot be met by anything in the training of the locomotive engineer who runs the standard type of engine."

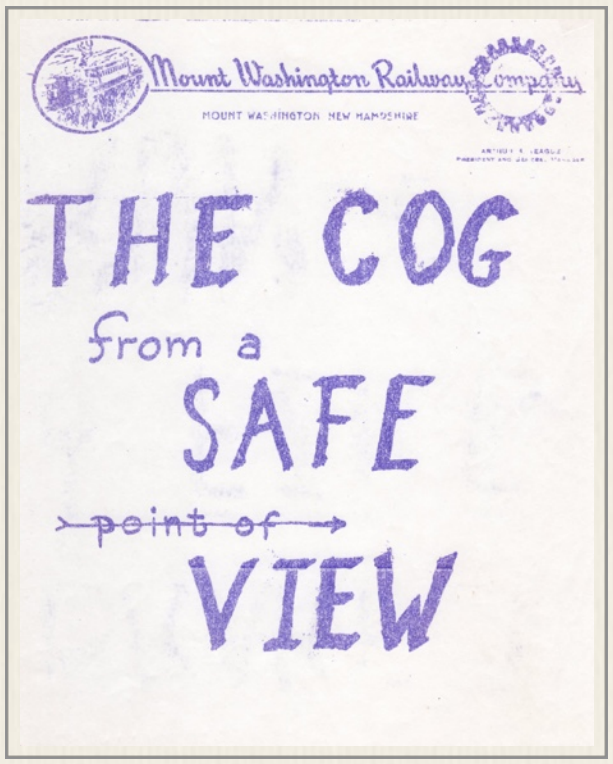
"In years past it has been the custom to recruit the men for the operation of the road from those who have been in its employ in minor capacities," wrote the *Globe*. "This season *(1918)* it is not possible to secure even inexperienced trackmen. Of the 30 required (to run the trains) but three are available. All the others have entered the service of their country or have sought some other form of employment during the Winter and cannot be located."

The article said, "The record the road has made of handling an average of 10,656 passengers a season without an accident for 50 years was declared too precious a heritage to be risked through its operation by men who are not in every way fitted to meet the peculiar requirements."

This *Operating Manual* is tied to, and only valid for, a specific time period in the history of the Mt. Washington Cog Railway *(1950-1967)* as the railroad approached its 100th anniversary without an accident resulting in the death of a paying passenger. Unlike other writings, this book will roll-up the canvas rain curtain and invite the reader into the cab of a Cog locomotive and onto passenger car platforms to learn about the "peculiar requirements" for safe operation of a train during the "Jitney Era." For the first time readers will be introduced to some men (and women) who worked at the New Hampshire attraction – the family ties that may have brought them there, and the new "family" ties forged during summer seasons at the Cog.

The engines, rolling stock, fuel source, support equipment and appurtenances no longer exist in that era's configuration as the railroad and its subsequent owners have constantly adapted this 19th Century attraction to the changing economic and environmental requirements of the late





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20th and early 21st Centuries. The changes made since 1967 are part of the continuous operational evolution that Sylvester Marsh started in 1868.

This book grows out of two manuals *(prior page)* produced for train crews in the early 1960s on a spirit duplicator purchased by Col. Arthur Teague. *Brake – Fire – Run* and *The Cog from a Safe Point of View* outlined train-crew members' responsibilities, and codified safe operation of the railway. Their contents are reprinted within this book.

The State of New Hampshire apparently never knew about these documents. In 1985, state track inspector Walter King told *Manchester Union Leader* reporter Gloria Poliquin "there were no hard and fast rules relating to the duties of crew members" at the Cog Railway before September 1967 when the railway's "precious heritage" was lost. Poliquin's article called "Cog King" profiled the former Canaan, New Hampshire selectmen "who's been monitoring the rails for the New Hampshire Public Utilities Commission for the past 15 years."

An October 1967 report to the N.H. PUC by Thomas K. Dyer, Inc. said, "Operating procedures were observed" by the consulting firm, "during train operation and additional information obtained by interviewing Railway personnel. No written operating rules, procedures, personnel tests, or personnel rosters appear to exist."

However, *Brake – Fire – Run* and *The Cog from a Safe Point of View* did exist, and put down on paper the training and operational rules that were key parts of the railway's success over the years.

A serious student of Mount Washington Railway steam train operations and educator by trade, "Jitney" Lewis wrote *Brake – Fire – Run* and *The Cog from a Safe Point of View* in the early 1960s as part of an effort by Col. Teague to ensure train crews would receive the same basic information. Night training classes at the Boarding House were planned but were never implemented. Why track inspector King and consultant Dyer never saw the pamphlets is unclear. The spirit duplicator *(right)* that produced those "hard and fast rules relating to the duties of (Cog) crew members" is now part of the Danny Gore Collection in Danville, Vermont.



The duplicator also produced a weekly "newspaper" during the summer seasons of 1966 and 1967 called the *Cog Clatter*. Reported, written and distributed by a teenaged Cog kid, material from the two volumes of that newspaper and a special edition produced for an October 1999 Cog reunion are also a part of this *Operating Manual*.

Preface

COG CLATTER

Vol. 3 No. 1 | *October 1999* | Base Station

Greetings

To some this paper needs no introduction, but for others who missed experiencing the late 60's on the Mt. Washington Cog Railway (for whatever reason - chemical, biological, etc), this publication may come as a surprise.

Be advised - *"Among the Clouds"* was not the only newspaper printed on the slopes of the Northeast's tallest mountain to enjoy a brief, but successful run (with or without a Devil's shingle!)

For two summer seasons (1966 & 1967), the *Cog Clatter* was THE rag to read. It featured profiles of those who kept the trains running, and those who served the "goofers" in a "Know Your Coggers" segment. The Old Troll at the Halfway House would serve up gossipy tidbits from all over the mountain "On The Track Phone." And weekly issues would often close with some "Waumbek Wisdom."

The collecting and reporting of news apparently agreed with the young teenager who got funding for the spirit duplicator & paper from the Colonel; stencil-typing skills from Fran Conkey, Morris Root, Jeff Taylor & others; and all those dimes from employees & tourists unlucky enough to run into him when he had papers to sell! Tim Lewis has spent the last 23 years reporting on Vermont at radio and television stations in the Green Mountain state.

This edition of the *Cog Clatter* shows what might have been IF that young lad had wielded the technology of the 90's at the Base in the 60's. Of course, we still would have needed real electrical service (not the intermittent DC of the Pelton water wheel generator) and real telephones (not the "grind-the-crank" track phones that only got you to the Summit House, or Cliff Kenney at the ticket office!)

I hope you enjoy!* Tim Lewis

*Sorry about all the pictures of the *#6 - Great Gulf* but there was an early bias built into my genetic structure

KNOW YOUR COGGERS

Since the start of Sylvester Marsh's railway to the moon, the tourists who take the 3-and-a-half mile trip to the top of New England are struck by the beauty of mountain; the primal power of the historic locomotion, and the gritty nature of the work.

And since the beginning, beneath the denim and dungarees, the caps and the coal dust, there have been some of the most interesting characters on the planet - individuals drawn from diverse backgrounds united only in their common goal of using steam to get from here to up there.



The Number 6 Crew: Engineer "Jitney" Lewis, Brakeman Dave Usher & Fireman Dave Saunders are prepared for the publisher's first ride up the mountain in the cab on July 28, 1958. - *photo by B. Lewis*

This manuscript was distributed electronically amongst the Cog family of the Jitney era for "crowd-sourcing," so there will be personal observations from responders, the author and the editor that make this *Operating Manual* a group memoir as well.

Pictures and illustrations from various sources are designed to give visual insight into this time period and those characters who lived it. While hindsight may be twenty-twenty, the minds behind this 21st Century effort are discovering many details from 65 years ago not written down are now "among the clouds." Best efforts have been made to be as accurate as possible.

Our thanks to Bob and Shirley (Jenks) Kent, Doug Taylor, Elvira Murdock, Dale Ann Granger Eckert, and others who have captured the transformation of the Mt. Washington Cog Railway over the years. A fine collection of personal recollections from those who worked on the railroad from its centennial year forward can be found on a Facebook public group called *"Mount*

Washington Cog Railway – We Were There/We Worked There." Their interest in all things "Cog" resulted in some additional images, stories and ephemera included within.

Thanks, too go to reference specialist Patricia *("What happens at the Crawford House stays at the Crawford House")* Cope and Bay Lauris ByrneSim at the Rauner Special Collections Library at Dartmouth College, Rick Nowell of the Boston & Maine Railroad Historical Society, Torene Tango-Lowy of the N.H. Parks and Recreation Division, the Littleton Historical Society, Mike Dickerman of Broadcliff Books, the helpful staff at the New Hampshire State Library in Concord and historian Rob Bermudes Jr who happened upon the Jitneys' efforts. Ken and Bonnie Randall's gracious opening of the Cog financial ledgers and Faith Bencosky Desjardins' records led to scores of additional names on the Cog Roster.

It is hoped this *Operating Manual* will fulfill a line crafted by Jitney Lewis for a parody version of the *Whiffenpoof Song* performed at mid-60s Cog parties - fulfilled with a mature understanding the final line of the phrase will also come to pass.

"We will serenade our Colonel while coal and steam shall last,
Then we'll Peppersass and be forgotten like the rest.



Col. Arthur S. Teague (1952)
- courtesy Dartmouth College

CHAPTER 1

Train of Thought Order



Jitney ready to run the No. 6 up the Mountain (1953)
- Lewis Family Collection

The intent of this manual is not to be different; however because it represents a partial summary of how to run a cog train on the famous Mt. Washington Cog Railway it is different than other railroad books.

The writer wishes to blow off steam in patterns which fit the whims of poor coal, plugged tubes, priming boiler, fireman with a hangover, leak in the smoke box, plugged net, clinkered fire, leaking tubes, fallen arch, burned grates, a stuck pop, or a lost shovel in a hundred mile wind on the oldest railway of its kind in the world.

The procedures for operating a cog train resist clear definition. The idiosyncrasies of the various seven engines and their personality traits do not require the same amount of coal, turns on the side stack, grease in the right rear box, or a slow milking of the cylinder cock lever to avoid a jackrabbit start.

Even after eighteen years as a fireman and engineer including three years as operational manager the writer cannot place in words an exact picture of the Cog Railway in action.

Talking at great lengths each summer with such Cog men as Col. Arthur Teague, Mike Boyce, Pliney Granger Sr., Pliney Granger Jr., Duncan Greene, Bill Liveston, and Paul Philbrick, I find myself able only to hint at the legacy of the men who have run trains, told stories, partied, cried, and died on Mount Washington for over a hundred years.

One is reminded of Ethan Allen from across the Connecticut River who put it like this: "Gods of the Valleys are not Gods of the Hills."

A Green Board on History with Comments

The world famous Cog Railway is an antiquated, unique, steam railway which boasts seven engines and six passenger cars from the last century.

Mount Washington is not an attraction of neon (we could not generate enough electricity when the water is low the last of July) or paint (the wind blows so hard it has been said the only way to hold paint on anything is to nail it).

Mount Washington is a showpiece sculptured by the cold hand of the last glacier and ten thousand years of nature's tears and breath. On clear days the majestic rock features are set off by a cyclorama of blue sky above, changing mists with a robe of green forests thrown at her feet. On days of storm the devil himself must take part in making the brew of the wind, rain, hail, snow and sleet. About forty-five persons have witnessed the furor in their last hours of life, a sober reminder to those who climb her sides. (P.T. Barnum supposedly described the mountain as the "Second Greatest Show on Earth").

The upheaval of rock structure which formed the Appalachian Mountains erected Mt. Washington to a height about 1000 feet higher than it stands today. Erosion has wrinkled her to 6,288 feet above sea level. The extreme weather keeps her frozen with 200 feet of permafrost year round.

Darby Field was the first to climb the mountain; it was supposedly a slow tedious climb (something like Engine No. 9 on the Long Trestle when she is going hard).

Sylvester Marsh climbed the mountain in August 1857 and was caught in a blinding snow storm, nearly perished and at the time decided there should be an easier way to get to the summit.

Two hundred years later, I heard a fireman say on Jacob's Ladder, "Old Marsh was right - there should be an easier way to get to the summit of this damn mountain." (A fireman shovels an

average of a ton of coal on the three and a half mile trip to the summit.) Gravity brings the train back down as the fireman takes his seat.

In 1858 the New Hampshire Legislature granted a charter to Sylvester Marsh for a right of way to the summit of Mount Washington. One legislator proposed an amendment to also give Marsh a right of way to the moon. (Think of it, over a hundred years ago we had a chance to get there ahead of the Russians!)

On August 29, 1866, the *Hero* was tested and the mountain climbing machine worked. This engine was later named the "*Peppersass*" (the most mispronounced name on the hill) because it resembled a pepper sauce bottle which often graced the dinner table.



Base Road view of Mt. Washington (1950s)
- Lewis Family Collection

The railway was opened to the public in 1869 and has operated continuously except for one year *(1918)* in the First World War and 3 years *(1943-45)* in the Second World War (with no problem of feather bedding – some record.)

Colonel Henry Teague purchased the railroad in 1931 from the Boston and Maine Railroad. At his death it became the property of Dartmouth College.

In 1963, the railroad was sold by Dartmouth College to a corporation with Colonel Arthur S. Teague (no relation to Col. Henry Teague) as the President and General Manager.

The Cog Brotherhood

Col. Arthur S. Teague is "Mr. Cog." Col. Teague supervises all work, hires all personnel, carries on a continuous program of improvement of design and the use of new metals. Arthur Teague and his wife, Ellen, believe that the most important ingredient of the Cog Railway operation is the welfare and happiness of the "Cog Family" of over a hundred employees.



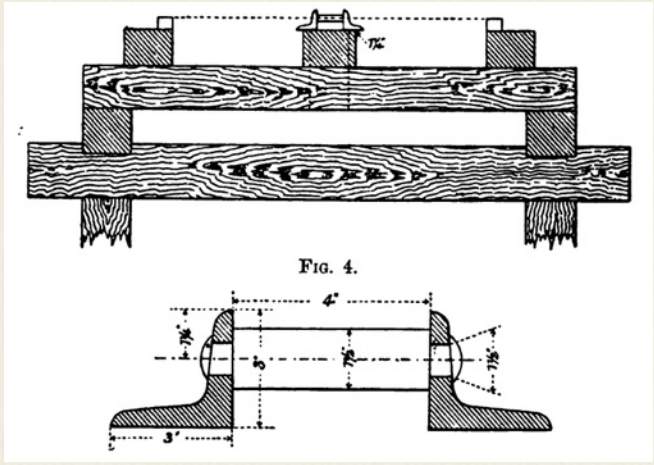
Col. Arthur S. Teague and his wife, Ellen Crawford Teague host the Cog Party (August 27, 1965)
- by Elvira Murdoch / Lewis Family Collection

Interestingly this railway has more college employees than any railway its size in the world. It is not unusual to walk by an engine and hear a discussion by collegians as to whether Diogenes used an olive oil lamp, or if a raw egg in beer will prevent too much biotin. Some of the old timers believe these college boys add to the problems. As one said it, "Them old engines don't give a damn how many degrees you got – they don't understand them big words. You got to put the bailing wire to the critters, get a torch and cut it off – fry my ass, she'll go" and so she does!

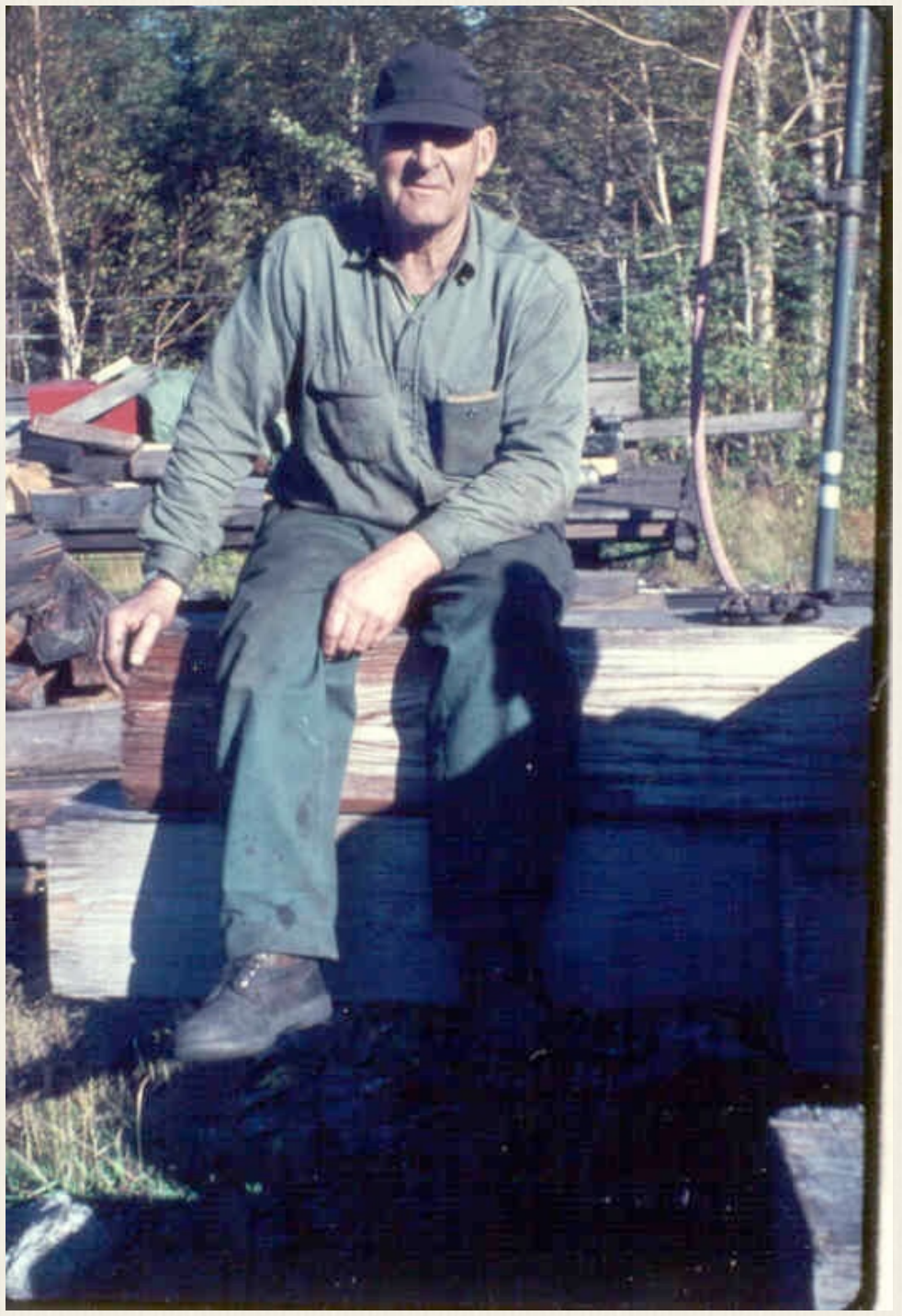
The college boys come from all types of schools - the Land Grant, the Ivy League and the ones which just have Blue Cross-Blue Shield as a fraternity, and thanks to those old-timers, they leave with an advanced communications degree in the lyrical poetry of profanity.

Ch. 1 - Train of Thought

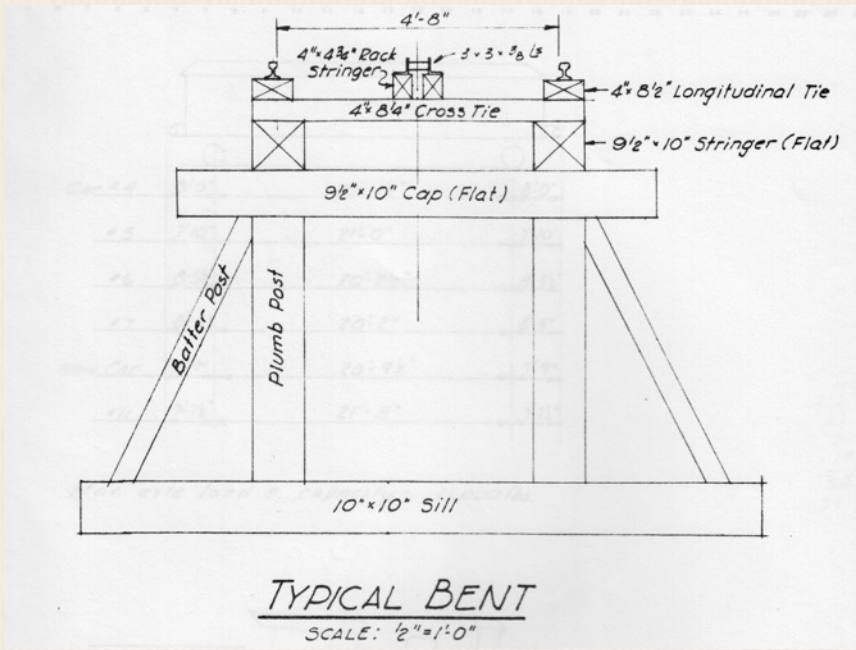
Although the majority of the employees are college men, the Cog could not run without a skilled machinist, master mechanic, and boiler maker, as well as a track foreman who requires the knowledge of how to build track on a contour similar to a gable-roofed house. He is often a man who drives spikes with tobacco juice, has hair growing out of the neck of his shirt like wheat, uses a language which makes matter and gandy dancers respond, and is fondly called "Father Goodie" by all.

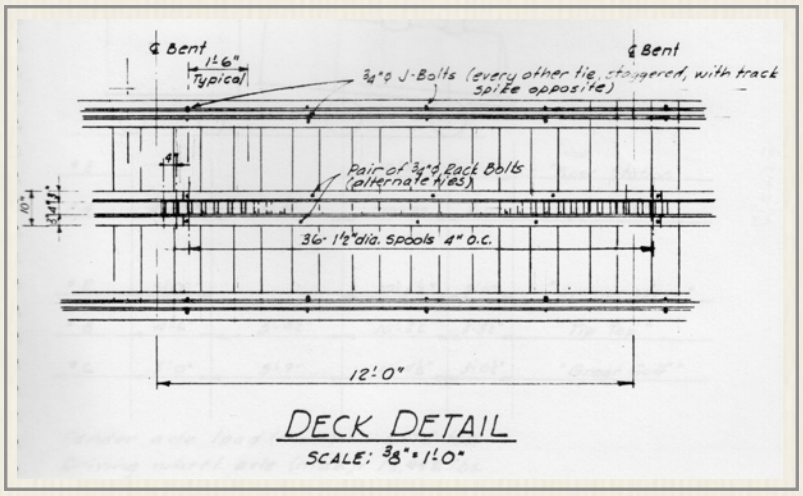


Otto Gruninger 1870 diagrams of MWR cog track sent to Niklaus Riggenbach who built a similar line up Mt. Rigi in Switzerland



"Father Goodie" resting below the bunker on stringers - Kent Family Collection



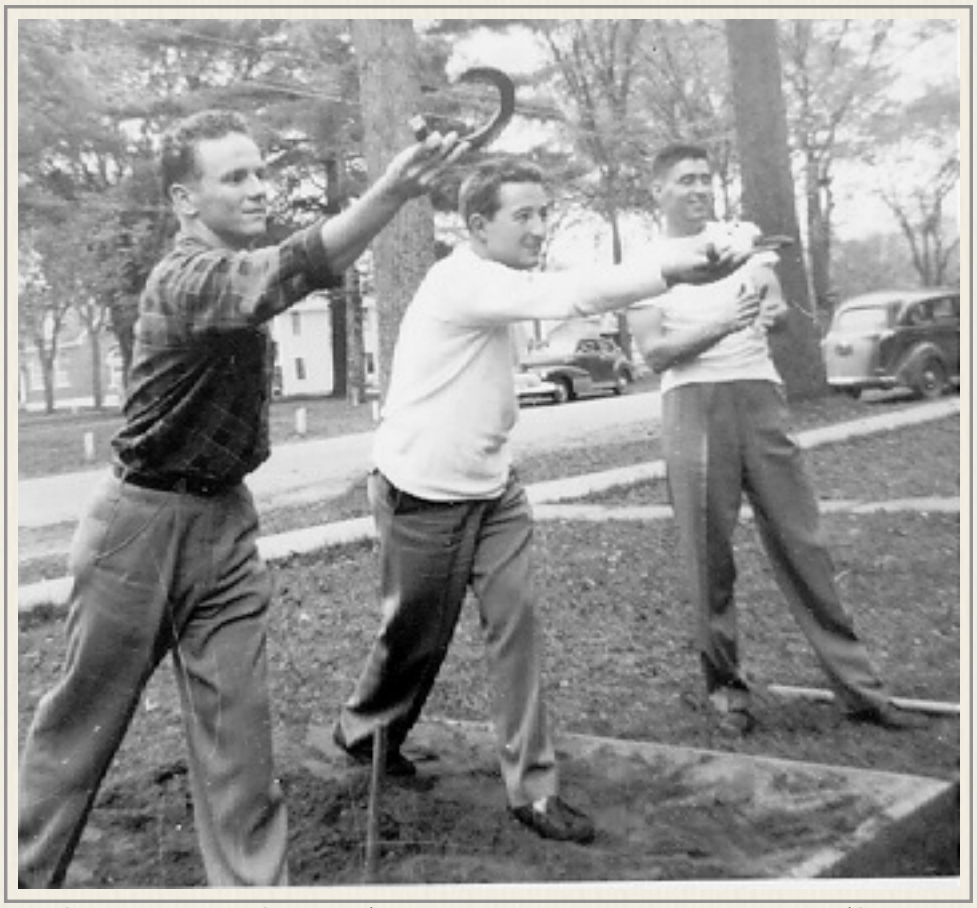


1967 track diagrams in engineering report by Thomas K. Dyer Inc. Note: Cog rail now supported by two timbers instead of one to allow rack to clear ice and snow

A Jitney Hired

George Trask of Rochester, Vermont was first employed by the Mount Washington Cog Railway owner, Col. Henry Teague, as his driver in 1943 when the trains were not running due to the war. George came back and worked from 1947-1957.

George worked as a fireman, brakeman and engineer. He took me *(Norm Lewis)* to the Base Station in early May 1950. George and I were roommates at Lyndon Teachers College in Lyndon, Vermont.



Coggers Jitney, George Trask and Joe Fillion pitch shoes at LTC (1949)
- Lewis Family Collection

Entering the "Hut" we stopped at the bottom of the stairs to the second floor. A large rope, like you would find as part of a ship's rigging, strung up the right side of the stairs served as a banister and guide to the Colonel's bedroom.

"Hello Colonel, George Trask here to see you" he shouted.

A deep loud, labored growl filled the air, "Come on up George."

Following George to the top of the stairs, we entered a large room. The Colonel, a big man, lay propped up with pillows in a big bed. He had a clear view of his mountain through a large window. Field glasses lay within his reach on a bedside table.

Ch. 1 - A Jitney Hired

I later learned the Colonel, in his final years (he died October 2, 1951), would spend sick days in bed watching the men work his mountain. It was not unusual for him to muster strength, get in his car and be driven to Marshfield to meet the work train at quitting time. One day, the Colonel called Col. Arthur Teague to the side of his green Oldsmobile convertible and told him, "Arthur, fire that man in the red sweater. He's been sittin' - not working on my mountain all afternoon."

"George, how are you?" asked Teague in a low strained voice.

"Fine, Colonel, I brought Jitney over to see about a job."

"What's your name young man?"

"Norm Lewis, usually called Jitney."

"What kind of work have you done?" the voice asked low and strained.

"I grew up on a farm…." before I could finish a very loud, deep throated voice rang out.



"The Skipper"—Colonel Henry N. Teague, President of the Mount Washington Cog Railway.

"Bring him over, George."

Thus, I was hired to begin work as part of the track crew in June, 1950.

1950 Wages

Track Crew – 85-cents an hour
Fireman – 90-cents an hour
Engineer - $1.30 an hour
Brakeman - $90 a month plus room & board - $100 a month bonus stay through Labor Day
Room & Board - $3 per day
Bonuses to Engineers, Firemen, etc. depended on season's profit and work habits
Break the record for number of passengers carried on one day – receive one day's pay
Train crews during July and August worked 7 days a week – averaging 80 hours per week
(note: Farm work – 6 days a week haying, milking, etc. about 70 hours a week $20 room and board)
Financial ledgers show Jitney's first paycheck was cut on June 24, 1950 for $20.

The "Old" Colonel - "Big, Busy, Brusque"

Henry Nelson Teague was born on June 2, 1875 on Mount Desert Island, Maine - the youngest son of a sea captain and a Southern belle. The Mount Washington Railway was in its sixth year of operation, and eight years after Teague's birth, another cog railroad would be built there on the Maine island using the same design as the mountain railroad in New Hampshire.

Henry's father, George E. Teague was born in 1835 in Bangor, Maine. The Census for Bangor recorded that on July 10, 1860, 28-year old George was living with his father, Nathaniel and mother, Philomelia G. (Staples) Teague. George's profession, like his father, was master mariner. Eight days later, the 1860 Census enumerator for the Jacksonville, Florida area listed 27-year old George E. Teague as living there with his Georgia born, 18-year old wife, Martha Cornelia (Dunham) Teague and their 4-month old son, George L. Teague. The schooner captain's personal estate is valued at $300. Baby George dies before the year is over in Jacksonville. The couple returns to Maine. A daughter, Georgia Lenora is born on February 7, 1861. In June 1863, Capt. Teague is skippering the schooner *Kate Stewart* on a run up the East Coast from Key West to Philadelphia. His pregnant wife Martha, and two-year old daughter are on board, when his ship is boarded by Confederate raiders commanded by Capt. Charles W. "Savvy" Read. Martha Teague is sent to retrieve her husband's revolver left behind in their cabin. The presence of Captain Teague's family, and other women and child passengers keeps those aboard from becoming prisoners of Capt. Read of the CSA. *(see Appendix: A Teague Confederate Encounter)* The couple sails into safe harbor, reports the attack, and then welcomes son George Dunham Teague to the family in October 1863.



Southwest Harbor, Maine today
- Acadia National Park

In March of 1872, the *New York Herald* reports that Capt. George Teague and his wife, Martha are on board the schooner *Summerville* bound for Boston from Surinam when the ship runs into a cyclone off Cape Hatteras on the 9th. The *Summerville* reportedly lost its deck load of cedar and limes and suffered split sails in the storm. The Teagues were passengers on the *Summerville* coming back to the States as Capt. Teague's vessel, the bark *May Queen* had burned in Surinam.

Henry's mom had another close weather call during a spring storm while pregnant with her seventh child in 1873. The *Boston Journal* reports: "At Southwest Harbor, Mt. Desert, Me., on the 24th May, the store of R. F. Keene & Co. was struck by lightning and Mrs. George Teague and Mr. W. Keene were among four people struck senseless. Mr. K's legs were in a paralyzed condition for some hours after. Mrs. Teague "had one of the shoes upon her feet torn to pieces." The people in several houses nearby were stunned. H. J. Anderson received a shock on the head and his wife and child were struck senseless." The lightning strike did not deter Edward Fisher Teague from being born on September 21, 1873.

Ch. 1 - Henry N. Teague

Henry Nelson Teague comes into the family nineteen months later at Southwest Harbor. Henry is approaching his second birthday, and his mother is pregnant with her tenth child (Mary Millicent) when his father, Captain George is lost at sea in March 1877 at the age of 42.

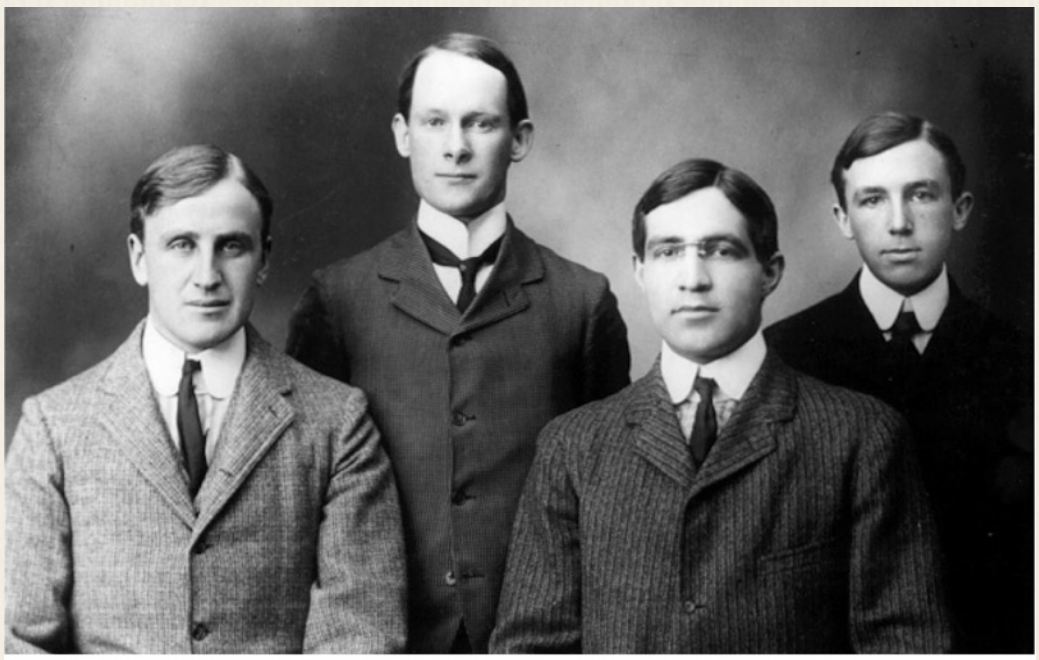
Ernest Hopkins, who met Teague as a student at Dartmouth College and later bought the Teague family homestead in Maine as Dartmouth College's president in 1923, told an oral historian Henry's father "was drowned at sea." But Hopkins went on to say, "here you get into the indefinite zone because Henry's story and his mother's story was, as you would expect it to be, that he died a heroic death trying to save his ship in a storm. The local story is that they threw his father overboard because he'd been such a taskmaster. And I have no way of knowing which is right. [Laughter] But I would guess, knowing Henry, that if his father was anything like Henry, why he would have been thrown overboard. [Laughter]." Whether or not weather played a role in Teague's father's death, storms would definitely buffet many of Henry's later business ventures.

Internet records dealing with the Captain's widow and their son after his 1877 death are scarce. First to surface, Henry graduating from Gloucester High School in Massachusetts in 1896.

Dartmouth College

Henry Teague told Ernest Hopkins he "had never seen a railroad until he got on a railroad train to come to Hanover" to go to college in the fall of 1896.

When the Spanish-American War started in April 1898, Henry left Dartmouth to serve as a private in Company E, First New Hampshire Volunteers. He got as far as Camp Alger near Falls Church, Virginia and fell sick. "He came back to Dartmouth, having lost something over fifty pounds," said Hopkins, "and he never recovered it." Teague's "health was irreparably ruined..." and according to Hopkins, "he was never a well man after that." Hopkins found Teague odd - even more so after the Spanish War. "He had peculiarities and along with that - a rather extraordinary degree of ability."



The Tuck School's first class, 1901: *front, from left,* Henry Teague, Walter Blair; *rear, from left,* Oliver Foster, William Edwards. Courtesy Dartmouth College Library.

Teague earned his bachelor's degree in 1900, and was in the first graduating class *(left)* of the Amos Tuck School of Finance in 1901.

The graduate stayed in Hanover for most of the start of the 20th Century, taking a newly created job at the college. President William Jewett Tucker explained in his 1919 memoir, *My Generation*, "Fur-

ther demands for (college) superintendence arose in connection with the management of the Commons, after the erection of College Hall, and also of the *(Hanover)* Inn after the Trustees decided to take direct charge of it rather than to lease it. Mr. Henry Teague, just graduated from the first class in the Tuck School, was made Controller of the College Club, including the Commons, and Mr. Arthur P. Fairfield, a graduate of the class of 1900, who had had successful experience in hotel service, was made business manager of the Inn." The 1902 *Taps* yearbook of Gloucester High School proudly notes "Teague, a graduate of Dartmouth, has been made comptroller of the dining association at that college."

Teague also got involved in politics off campus. A 1905 Manual prepared for the General Court lists Henry N. Teague as a member the New Hampshire Democratic State Committee representing District No. 61 - Hanover. Towards the end of the decade, Henry pulled up stakes and headed south when the Tucker Administration reorganized Dartmouth once more.

In a 1909 Report to Dartmouth Alumni, President Tucker said "the position of the comptroller of the College Commons, originally held by Mr. Henry N. Teague of the class of 1900, (is) now combined with that of manager of the Hanover Inn, the two positions being held by Mr. Arthur P. Fairfield, class of 1900."

New York Hotelier

According to classmate Ernest Hopkins, Teague worked at the Gotham Hotel on Fifth Avenue in New York City for several years, and invested everything he had in the operation. Hopkins said a hurricane tore the hotel's roof off, destroyed all the furniture and put Teague into bankruptcy. But it appears from other research Henry's first hotel in the city was the New Weston.



A 2016 scan of *Newspapers.com* finds 35-year old Henry N. Teague managing the New Weston Hotel at 49th and Madison Avenue in May 1910 - "Just far enough away from the center of things to allow quiet and rest; near enough to permit the enjoyment of all the delights of Broadway, when you want it, in two minutes' walk." According to the *Dartmouth Alumni* magazine, Henry also became treasurer of the Dartmouth Club of New York, and secretary for his class keeping track of the Class of 1900's movements and achievements for the alumni newsletter. The Dartmouth Class of 1909 held its first reunion at the New Weston on October 16, 1909, and Henry Teague was the host. Whether or not Ernest Hopkins' mis-remembered the New Weston as the Gotham Hotel, Henry had left the Big Apple by 1911.

He went to Williamstown, Massachusetts that year to lease and operate the Greylock Berkshire Hills hotel owned by Anthony D. Bullock. The Greylock was located within a short walk of

the Taconic Club's tennis court and golf course spread over seventy acres and advertisements made it clear - "Guests of the hotel are welcome to avail themselves of the club house and green, without expense."

Teague's Taconic Touch

Journalist, humorist and writer Charles Walton Morton, Jr. recalled Teague's time at the Greylock in great detail. Morton's family would spend summers there while visiting his aunt, whose husband was the organist and choir director of Williams College. Morton had been associate editor of the *Atlantic Monthly* for 25 years and, like the *Cog Clatter* publisher, in his mid-sixties put his early teen-age memories of the Greylock and its proprietor in a 1966 book, *It Has Its Charms*.

"Life at the Greylock Hotel," he wrote, "was much to my taste: a tranquil, well-kept place, with shuttered as well as solid doors for the bedrooms to catch the drafts on a warm night, and always a raffish desk clerk or two who could be persuaded to sell cigarettes to me and my cousin at an outlandishly early age. The meals were typical of the better New England summer hotel, where the guests came to stay and not to go dusting off in a new move every few days: practically everything the region afforded in foodstuffs at noon and evening, after a breakfast menu that always listed beefsteak and lamb chops in addition to all else, and even on occasion wild strawberries.

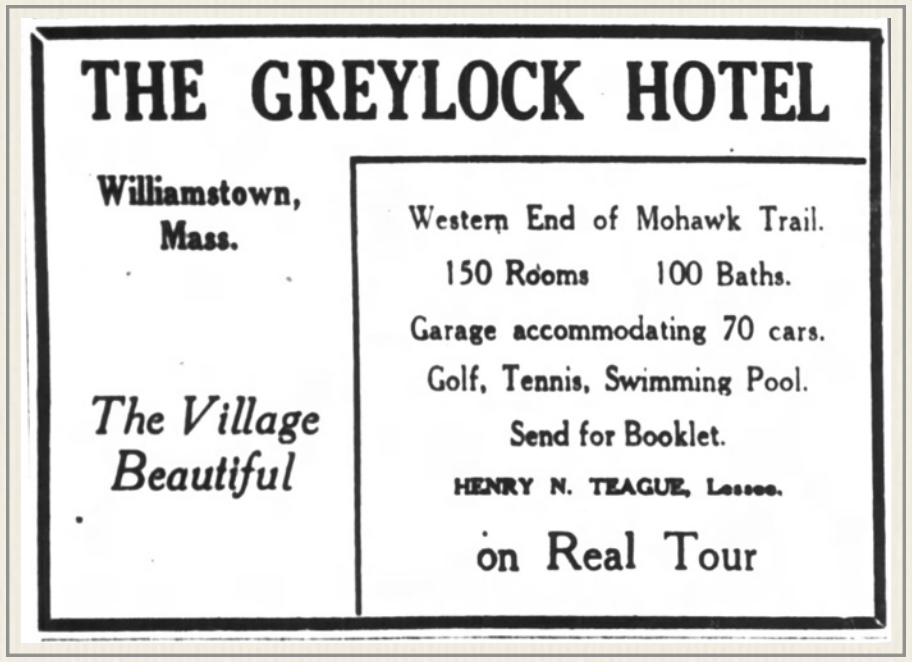


Greylock Hotel with touring cars (1915)
- A Day in Williamstown Guide

"The proprietor of the Greylock, Henry N. Teague, was a Down-East Yankee who spoke that dialect so rapidly as to be barely intelligible. He was just coming to grips, around 1911, with the touring motorist, and the half-dozen pioneers who came to Williamstown daily in this pursuit usually lunched at the Greylock or spent the night there. The hotel had an "auto entrance" with a high step at the front of its stair leading to the verandah; an arrival or departure here meant a great flurry of bellboys and chauffeurs and, not least, the intrepid tourists themselves in their linen dusters and goggles, the ladies with swathings of veils and the men with large driving gauntlets - not merely for show, if one recalls the exposure to rain in cars that sometimes had neither top nor windshield.

"The luggage was usually wrapped in a kind of black oilcloth, as a protection against rain and dust, before being strapped on the running boards and a "trunk rack" at the rear. The vehicles themselves, at a time when a large car that could tour dependably without breaking down was only for people of considerable means, represented the cream of American and European design,

scarcely any two alike, and each an object of gaping and wonderment for the small fry such as ourselves.



- New York Times advertisement - June 10, 1917

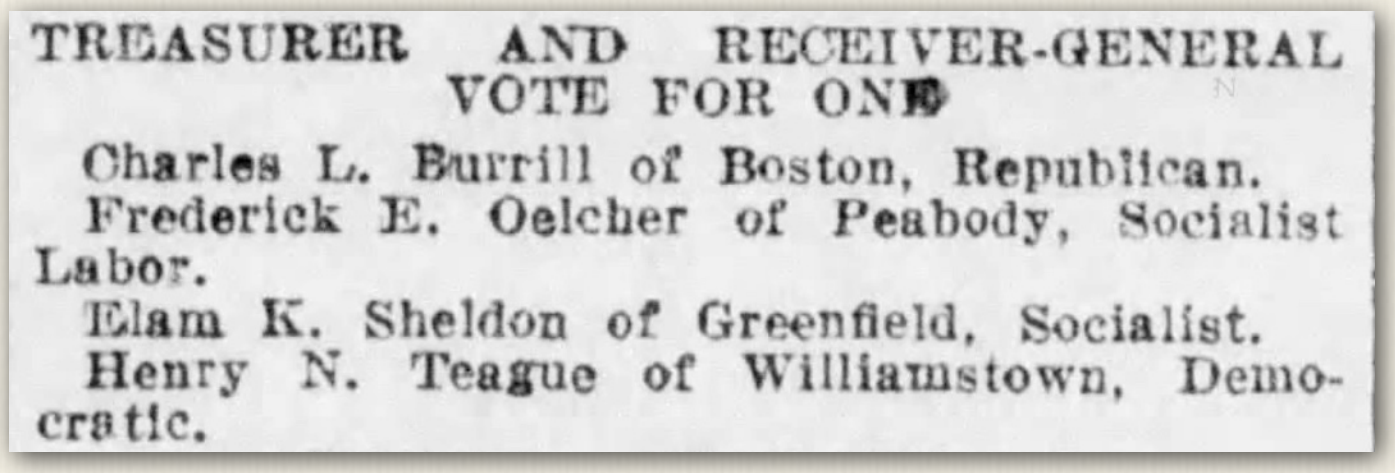
"Tourists in their cars, then, were not only good business for Henry N. Teague but a promise of more to come in the years ahead. He had a keen sense of public relations, and it occurred to him that a bit of handshaking and exchanges of hospitality with the proprietors of other hotels like the Greylock ought to build up new revenues of this sort. He began a series of one-day trips to the better hotels nearby - the Red Lion Inn at Stockbridge, the Curtis House at Lenox, the Idlewild at South Williamstown - and, as I was watching his departure with his senior clerk one morning, he invited me to come along as a back-seat passenger. Teague was so tall and so florid that my mother referred to him as "Mr. Teague' without her customary diminutive, and she was quite willing to entrust me to his driving; so began for me a wonderful survey of summer hotels.

"Teague's car was a 1911 Chalmers "30" touring car, a rather too bulky body for absurdly short hood and too small a four-cylinder engine. I remember it particularly because the first pressure on the clutch pedal activated the clutch, while pressure more than halfway down began to apply the foot brake, leaving the right foot free at all times to use the accelerator. It was a tough little car, the model on which Chalmers-Detroit was to found its relatively ephemeral reputation for durability. Aside from the clincher tires - "fabric" tires not unlike old-style garden hose in construction - which punctured easily, our travels were free from troubles. By the end of our Grelock interval in the following summer, Teague had lengthened his trips to two or three nights on the road, and I was the beneficiary of many stops in the White Mountains and Maine, and even at the awesome infinities of the Grand Union, at Saratoga Springs. Certainly, without the auspices of Henry N. Teague I should never have seen the interior of Richard Cranfield's defunct gambling house at Saratoga, or experience the marvelous hospitality of Ekwanok, at Manchester, Vermont, this last having seemed to me far and away the most charming and elegant of them all. From Ekwanok, I recall a youngish chap whose name I believe was Freddie Martin, a distinguished amateur golfer and son of the proprietor, who dined with me and answered all my questions about the hotel with the greatest urbanity while his father played host to Teague. I never saw Teague again in later years, but I believe he lived to a great age, always active in New England's tourist business, and when I last heard of him he was the proprietor of the cog railway on Mount Washington."

The Massachusetts Pol

Beyond running the hotel in the Berkshires, Henry Teague became a member of the Massachusetts Democratic State Committee. Six years after he arrived, the 41-year old Dartmouth edu-

cated hotelier was ready to try winning a statewide political office. Henry N. Teague of Williamstown was the Massachusetts Democratic Party's pick for treasurer in the 1916 election. An August 17, 1916 story in the *Fitchburg (MA) Sentinel* says, "The observant reader will note the extreme care with which the race balance has been preserved on the tickets, so that old stock Yankee, Irish, Hebrew and French are recognized. The Swedes might feel neglected, but they are not strongly Democratic. The ticket is a work of art, as well as of politics and it is to be expected that all loyal Democrats will carry out its purposes by endorsing the above list with Charles H. Cole for governor." General Cole did not win the primary. Teague did and faced Republican Charles L. Burrill of Boston, Socialist Elam K. Sheldon of Greenfield, and Socialist Labor party candidate Frederick E. Oelcher of Peabody in the General Election.



TREASURER AND RECEIVER-GENERAL
VOTE FOR ONE

Charles L. Burrill of Boston, Republican.
Frederick E. Oelcher of Peabody, Socialist Labor.
Elam K. Sheldon of Greenfield, Socialist.
Henry N. Teague of Williamstown, Democratic.

According to an October press statement issued by candidate Teague, he was not ignoring his primary business back in Williamstown. "More than a quarter of a million dollars is to be spent in making alterations and enlargements at the Greylock Hotel," reported the *North Adams Herald*. "(T)he work will be begun this fall so as to have part of the new building ready for occupancy next spring when the hotel will be opened." However, in order to do the work the hotel would close early on November 7th - the week of the election. Plans called for a new dining room to seat about 300 persons, 50 additional rooms and new quarters for the hotel help and chauffeurs along with a new modern fire-proof kitchen which Teague told the paper "will be second to none in the country."

Days later, Republican Gov. Samuel W. McCall *(Dartmouth '74)* came to the Berkshires on a campaign swing, and the *Boston Post* reported Democrat Henry N. Teague "Gives up Rally to Entertain."

"The story is a rather humorous one," writes *the Post*. "The Governor... reached Williamstown about 5 o'clock. State Treasurer Candidate Teague had a Democratic rally scheduled for Great Barrington, 20 miles away, but as host of the Greylock Hotel in Williamstown he would not see the Governor and his party entertained by any other than himself. There was nothing to it. Mr. Teague entertained royally. Seated at the head of a table, his own rally forgotten for the nonce, he entertained the Governor and those with him, and did not give way until no less a personage than John Hays Hammond of Gloucester came to take his place. The millionaire sat at the table and Mr. Teague managed to slip out and fulfill his engagement in Great Barrington, not, however, until he had wished the Governor the best success and the governor had reciprocated."

On November 5th, 1916, Teague joined the State Democratic ticket for a whirlwind tour of Boston's city wards just two days before the vote. A dozen rallies between 7 and 10:30 pm that Sunday with 4000 people at Day square in East Boston and Pemberton - 600 voters assembled in the open air at Allston. The ticket rode in a dozen automobiles with drivers. The *Boston Post* called it "a masterpiece of organization" with Mayor Curley introducing Frederick W. Mansfield as the "next Governor of Massachusetts." Henry Teague and every other member of the State ticket made his appearance and talked to the crowds. Even former Adjutant-General Charles H. Cole, beaten by Mansfield in the democratic primary, toured with the group and asked voters to support Democrat Mansfield. Massachusetts Republicans had reunited for the 1916 election after splitting their votes in 1912 between former Republican President Theodore Roosevelt running as third party candidate against Republican incumbent William Howard Taft. That split let Democrat Woodrow Wilson claim the state and the White House. Now four years later, Republican Charles Evans Hughes at the top of the ticket would beat Wilson in Massachusetts by four percentage points, but nationally Democrat Wilson would beat Hughes, becoming the first Democrat to win two consecutive presidential terms since Andrew Jackson.

It was a tough election night for Teague. He lost. Teague's 187,969 vote total was nearly 93-thousand votes short of Republican winner Charles Burrill. Teague may have lost by nearly 20 percentage points (58% - 39%), but his instinct to be a good host at the Greylock Hotel back in October paid off. Republican Governor Samuel McCall named Democrat Henry N. Teague as the only non-legislative member of the state Sheep-investigation Commission.

When 6-foot 1-inch blue-eyed, brown haired, Henry applied for a passport on February 20, 1918 in order to sail to Nassau Bahamas "within two weeks" time to conduct "commercial business," he pulled some Republican strings in the nation's capital. Leland Talbot, the secretary to Rep. Treadway (R-MA) vouched for him. Henry explained he was going to the Bahamas to "investigate property on Bay and Myrtle Streets and also to represent George Bullock *(of the Bullock family - owners of the Greylock)* in connection with property he owns there." Massachusetts's Republican Congressman Allen Treadway of the House Ways & Means Committee wrote a letter of support as did Congressman Wilfred W. Lufkin (R-MA). Lufkin had gone to school with Henry at Gloucester High. "I remember distinctly," wrote Rep. Lufkin, "that he often told me about being born at Mount Desert, Maine, and coming to Gloucester to complete his education." Democrat Teague apparently delivered the application personally to the D.C. passport office that day as Rep. Lufkin also wrote of letter of introduction saying, "Mr. Teague is anxious to secure a passport. As he is leaving town *(D.C.)* tomorrow, I shall appreciate very much anything you may be able to do to expedite the issuance of the passport."



Teague Passport Application Photo
- February 20, 1918

Later that year, Republican Governor McCall appointed Democrat Teague to a committee of Massachusetts men in

charge of a November 26, 1918 reception for Major-General Clarence R. Edwards, the former commander of the 26th Yankee Division that fought all through the U.S. portion of the Great War. The reception had a $3,000 appropriation and would allow "General Edwards to meet the parents and families of the boys who served under him in the 26th Division" at the State House.

In January 1919, the Sheep Commission recommended more "stringent dog control" in certain counties as the panel said the dog problem "is largely responsible for the fact that in recent years there has not been a revival of the sheep industry in Massachusetts." The Commission thought dogs should be licensed by the state, and demonstration sheep farms should be established in every county except Suffolk, farmers should receive instruction in sheep husbandry as well as help obtaining "the right kind of sheep at cost," and soldiers returning from the Great War should be settled on land already available to the state.

Federal Appointee

Finding work for soldiers mustering out was a national problem and the Wilson Administration tapped Henry N. Teague to be an "associate federal director for labor problems" - specifically the "associate director of construction development" at the U.S. Department of Labor. Teague would travel the country studying conditions and reporting his findings for solving the labor crisis. The *North Adams Transcript* reported Teague told Massachusetts Governor Calvin Coolidge in January 1919 no special work programs were needed to create jobs for soldiers if the states merely moved forward on $100-million dollars worth of public school projects (some 800 large school buildings) that had been held in abeyance owing to the war. Teague noted some western states were handling the labor problem by building roads whose construction was delayed by the war effort. He suggested Massachusetts do the same to bring "a great deal of business into the Bay State, not only from automobilists touring for pleasure, but also from the growth of motor-truck transportation."

Democrat Henry N. Teague hit the road for six weeks traveling for the Democratic administration from Boston to San Francisco and Seattle to New Orleans calling on all governors and mayors of major cities with the same message and observing what was underway. In March Teague told the *Washington Post*, "during the next six months I am convinced the public improvements program for 1919 will equal the program of any five years in the country's history and the road building activities from the Atlantic to the Pacific once under way are going to be tremendous. New Orleans is spending $14,000,000 on the municipal docks. More than 10,000 men are employed in this undertaking."

March 3-5, 1919 found Henry Teague in the East Room of the White House as the President and the Secretary of Labor hosted governors and mayors to promote public works projects as a way to combat Bolshevism. Gov. Coolidge presided at the Tuesday morning session. Tuesday evening, Henry helped his boss, Labor Secretary John Hays Hammond host and entertain the governors and mayors at a reception at Hammond's home at 2301 Kalorama Road.

Back home in Massachusetts, Teague told the North Adams Elks Lodge, "the three greatest safeguards against Bolshevism in this country are the Catholic church, the returned soldiers from overseas and the labor unions (American Federation of Labor)." The *North Adams Transcript* said Teague declared the menace of Bolshevism is greater in this country than most people are aware. "Every lawless man," said Teague, "every shiftless man and men who are without employment and with no hope of obtaining work will soon demand a living," and Teague said the I.W.W. (Industrial Workers of the World or "Wobblies") and Bolshevism are the same thing. Teague blamed the recent Seattle labor strike on "a Russian Jew who had been in this country for only about eight months," and he said building 800-thousand new homes in the U.S. would be a good idea because "a man who owns his own home will never be a Bolshevist, will never put the 'red' flag over his own door but will fight to defend that home."

At the same time, Teague championed the construction of a new road over Berlin Mountain on the Mohawk Trail to link the highways of Massachusetts and New York bringing tourists to Williamstown on a wonderful scenic highway. That included pressing his case on some of his more influential guests as former Speaker of the Massachusetts House B. Loring Young recalled in 1961 for the State Historical Society. "I speak as a politician," former Rep. B. Loring Young *(left)* declared. "It has often been said that in American public life a statesman is a politician who is dead. I wish to refute that statement. While admitting that I am a politician, I consider *(Rep. Henry L.)* Shattuck *(right)* a statesman, and I would illustrate the difference by an incident which took place many years ago. Shattuck and I, after a walking trip in the Green Mountains, stopped for several days at the Greylock Inn in Williamstown, of which Henry Teague was proprietor. He insisted on driving us along a mountain road headed for New York State and suggested that an extension of the Mohawk Trail would greatly benefit his hotel business. He *(Teague)* was then secretary of the Dartmouth Alumni Association, and, when we left the hotel, he had already departed for Hanover. The clerk at the desk said, "Your accounts have been double checked. Mr. Teague wishes you to accept his hospitality as his personal guests." We insisted on paying, and as we drove away, Shattuck said, "It's a good thing we paid our bill, because if any legislation comes up next year to extend the Mohawk Trail to help Mr. Teague's hotel business, I should feel obliged to vote against it." I remember saying, "Harry, that's the difference between a statesman and a politician. You are a statesman and would feel obliged to vote against such legislation. I, as a politician, would feel obliged to vote for it!"



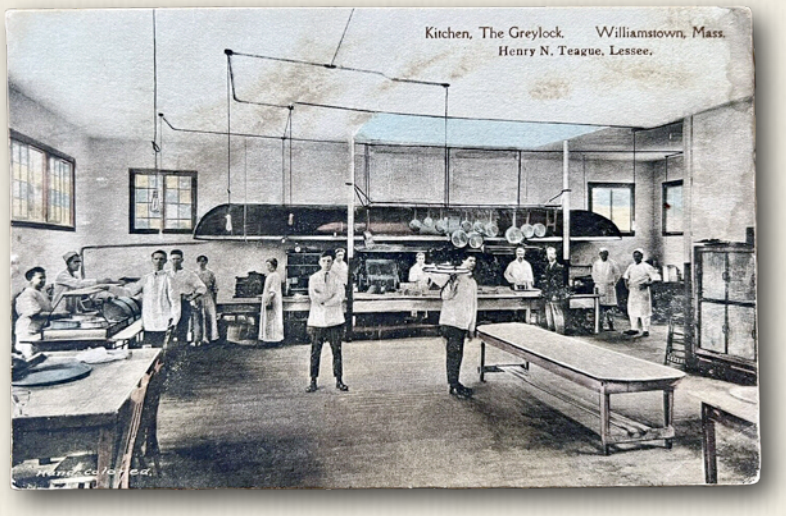
Rep. B Loring Young - Wikimedia



Rep. Henry Shattuck (1920) - Wikimedia

When letters to the editor against the project appeared in local papers, Teague pointed to a Williamstown Board of Trade vote of 58 to two in favor of the road to steamroll the opposition during his testimony at the State House in Boston.

Ch. 1 - Henry N. Teague



Teague was apparently doing his part to provide private employment as the *Transcript* reported "a large gang of men" were cleaning the Greylock hotel in preparation of the opening, May 24th." The workmen were repairing and re-painting the facility. However, there are no reports of additional rooms being added or any of the grand quarter-million dollar renovations Henry had announced back in October before the election. The man in charge of the rehab project, C.O. Chapman told the newspaper repairs and alterations (exterior painting and new wallpaper and paint on the inside) would cost about $15-thousand dollars.

Gentleman Farmer

During the summer of 1919 contractor C.O. Chapman was reported building an eight-stall horse barn for Henry Teague on his Shadow Brook Farm along the shore of Harmon Lake in Williamstown, and Teague was expanding his holdings taking a lease out to operate the Whitehead Farm on Oblong Road. When motormen and conductors went on strike against the Berkshire Street Railway company, Teague was one of four Williamstown men at a conference August 19th to discuss "measures for obtaining some sort of service on the lines." Teague finally drew the line at taking on more responsibility when he was first nominated to be moderator at Williamstown's town meeting that year. He declined to serve. In the fall of 1919, Teague hosted a formal banquet for all of the young men of the north Berkshire region returning from the war. Teague's "personal friend," ex-Gov. Samuel W. McCall, who said good-bye to them as they left on July 6, 1917 came to the Greylock to welcome them home on October 20th.



Dartmouth President Ernest Hopkins

When Teague suggested his former Dartmouth classmate, Ernest Hopkins and his family spend some time on Mount Desert Island in 1922, Teague was in his eleventh year running the Greylock Inn in Williamstown, Massachusetts, and Hopkins was president of their alma mater. When the time came to negotiate the purchase of the Teague homestead a year later, Mrs. Hopkins told her husband, "you're dealing with a hotel man who has access to the wholesale prices in the linen market and... why don't you include a provision that the house shall be provided with linen and pay him? She said, I think you'll get out of it better that way. So I did."

Hopkins said, "when we got down here, the house was provided amply with linen and towels and everything of that sort, but they were all marked Greylock. [Laughter] The result of that of course was that every visitor we had for the next decade said, 'Oh, I see you've been staying at the Greylock.' [Laughter] The assumption was entirely unjustified but quite reasonable."

Florida Snowbird



In late 1922, Teague applied his Tuck business training to a hotel in Miami. The Miramar on Biscayne Bay *(above)* was "dedicated to the comfort and pleasure of a superior clientele," and was to be ready for a 1923 New Year's Day opening. A *Palm Beach Post* society page note a year later reported Henry N. Teague had motored from Miami to Palm Beach to call on friends at The Breakers hotel. The blurb predicted Teague's Miramar was "sure to have a successful season" as a "novel feature (of the hotel) is the employment of all white servants." In late December 1924, the paper reported the "very well-known boniface" Mr. Henry Teague was motoring to the Breakers for a luncheon along with John Walsh.



It was during this period Teague may have become acquainted with another Maine native, Harry Oakes. Oakes was born roughly six months before Henry on December 23, 1874 at Sangerville near Moosehead Lake in northern Maine. Oakes had literally struck it rich by discovering a Canadian gold mine in Ontario, and became a naturalized British subject in 1915. Harry was knighted by the crown for his charitable bequests, and was one of the world's wealthiest men in the 1930s and 40s with a net worth estimated at $200-million dollars. Oakes made his primary residence in Nassau, the Bahamas but had a home in Palm Beach as well. Henry Teague and Oakes would reportedly be discussing building an electric railway up Mount Washington when Sir Harry was murdered in his island home in August 1943 - bludgeoned and burned in his bed as the Allies were invading Sicily. Sir Harry's friend, Edward - the former King of England living in exile in the Bahamas, brought his former American bodyguards - two Miami detectives to the island to help local authorities with the investigation. The Duke of Windsor's wife, Wallis Simpson was "an intimate" of Sir Harry's wife. Oakes' killer was never found.



Sir Harry Oakes (1925)

Ch. 1 - Henry N. Teague



Teague at the Miramar: *"If you have not yet heard of the Miramar hotel you surely will before the season is over. For the proprietor of this new hotel – which will be ready to receive its first guests about January 10 – is Henry Nelson Teague, one of the most noted hotelmen in this country. Mr. Teague has leased the Miramar for ten years and will operate it on a most luxurious scale. He will cater to the same clientele as the Flamingo and will charge approximately the same rates. For the last twelve years Mr. Teague has operated the Greylock in Williamstown, Mass., a hotel which has the reputation of serving probably the best meals in New England. People come from all over the country to eat at the Greylock, and Mr. Teague says they will do the same thing here, as he is bringing his entire staff from his summer hotel to the Miramar, including his chef and baker. He will, he says, have the finest dining room in the south. One of the features in connection with Mr. Teague's operation of the Miramar is the fact that he has leased an entire hotel for his employees. This is the Columbus hotel on Biscayne drive, with a few blocks of the Miramar. Mr. Teague states that the Miramar will be most beautifully furnished hotel in Florida, the entire arrangements being in charge of a famous Fifth Avenue firm. A distinction of which Mr. Teague is justly proud is that he is the holder of the first college degree ever given to a businessman in this country. This is the degree of Master of Commercial Science, bestowed on him by Dartmouth college, of which he is a graduate. Another distinction of which Mr. Teague is proud is that he owns the finest herds of Holstein cows, and Berkshire hogs in this country. These are bred on his 2,000-acre farm in Massachusetts. Mr. Teague has been a director of the New England Hotel Men's association for the last ten years and has been active in politics all his life. He was associated with Roger Babson, the statistician during the world war, and was also the personal representative of Secretary of Labor Wilson. He has been coming to Florida as a visitor for the last ten years."* *(1922)*

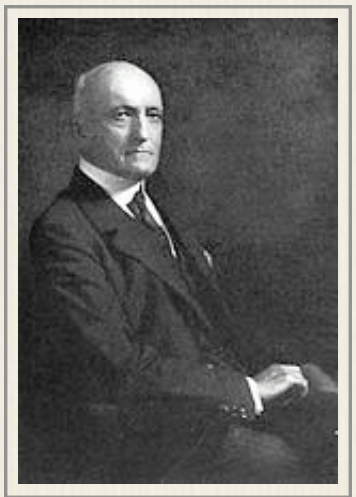
- Eric Collin photo / Miami Herald - Tue, Dec 19, 1922 pg. 1



Henry N. Teague

All that intrigue was more than 15 years in the future. In 1925 the Florida land boom was slowing. The real estate bubble in Florida burst as a September hurricane hit Miami causing damage that forced many real estate developers into bankruptcy. Henry Teague was not one of them at first. He continued to invest in his properties - banking on a turnaround that never happened.

The Florida financial downtown did not deter the Dartmouth alum from making a splash during June1926 commencement activities in Hanover. Henry Teague, a Kappa Kappa Kappa brother gave the fraternity two paintings "of their brothers who had distinguished themselves in the affairs of the state" in Massachusetts. One was the late Governor Samuel W. McCall and the other of ex-Governor Channing Cox. Both were Republicans - both attended Dartmouth and both were described as close friends of Teague. Their portraits would not be the last works of art Henry Teague would bring to Dartmouth College.



Gov. Channing Cox



Gov. Samuel McCall

Heavy Weather & Liquidation

A month later, a severe wind and rain storm "swept down upon Williamstown" late in the afternoon. The *North Adams Transcript* said the July 22, 1926 storm brought "temporary relief from the heat scourge of the past few days" while "doing considerable damage to property about town." Included in the list of property receiving the brunt of the storm was the William E. Harmon property near the Oblong road leased by Henry N. Teague. "The roof of a side porch on the Teague home was lifted clear of the house," the *Transcript* reported, "and carried a distance of about 100 feet, while the shingles were stripped from the roof of a small cottage on the place. A magnificent elm tree adjacent to the house was felled by the violent wind while a number of other trees... were torn down and many limbs were wrenched from still others." The Williamstown Outing Association was holding its clambake on the Harmon property, but the newspaper said "those attending were not inconvenienced by the storm for more than a few minutes, the wind and rain lasting but a short while."

Eight years after the Massachusetts Sheep Commission recommended more "stringent dog control" and incentives to boost the industry, commission member Henry N. Teague had a dog problem at his sheep farm in New Ashford. According to the *North Adams Transcript*, Teague had summoned the county commissioner to his place in late June 1927 to investigate the killing of sheep the weekend before. Teague was keeping a flock of 79, and when Commissioner Tillotson arrived two dogs were attacking the herd. Four sheep were already dead, 16 had been bitten and three of those would later be destroyed. The two dogs were shot, and Teague told the newspaper "that had it not been for the sheep killings at his farm he would now have a flock of 1000" instead

of 79. In August of 1927, the 52-year old Teague would be elected president of the Williamstown Board of Trade. The hotelier/farmer started getting out of the agriculture business at the start of 1930. "All stock, fixtures and implements on Henry N. Teague's Shadowbrook farm, Hemlock road" were sold at auction at the farm on Thursday morning, January 30th as a result of a mortgagee's foreclosure. The *North Adams Transcript* reported "several head of Holstein cattle, mules, sheep, hens, pigs, a tractor, plows, wagons, harnesses, milking machines & equipment and 50 tons of hay" would be on the block. Shadowbrook Farm had provided fresh vegetables and meat for Teague's Greylock Hotel *(below)*.



Some 60 days later, Henry Nelson Teague filed a voluntary bankruptcy petition in Miami, Florida. The *North Adams Transcript* reported Teague listed liabilities of $230,418 and assets of $40,042. Assets included mortgaged real estate - the 30-acre Shadowbrook farm in Torrey's Woods, near Williamstown, and a lot in the Miramar subdivision in Miami each worth $20-thousand. For the remaining $42-dollars, Teague declared a set of golf clubs worth $15-dollars and $27.50 in cash. Liabilities included $700 due in federal taxes, another $4,532.08 in state, county and city taxes with $139,552.66 in secured claims, and $85,734.22 in unsecured claims. The unsecured claims seemed to indicate Teague had intertwined his Florida and Massachusetts operations. The list included "advertising accounts with nine Massachusetts newspapers, open accounts for hotel provisions and supplies, *$54,000 to Miramar Holding company for rent of the Greylock hotel payable over a period of 10 years (emphasis added)*, and $15,000 listed as balance of the purchase price on Miami shore real estate contracts which have been foreclosed." Teague's Florida holdings had been damaged by hurricanes in 1927 and 1928.

Teague had now managed the Greylock for 18 years, and the 54-year old bachelor was known for hosting noted persons there while providing and underwriting an annual banquet with "Uncle Henry" at the hotel for the Williamstown Board of Trade. A so-called "pioneer advocate for the construction of the Taconic Trail over Petersburg mountain," the *Transcript* reported recent state and town road construction in the area had "seriously affected" the hotel's business. Closing the Mohawk Trail in the summer of 1929 for repairs reportedly reduced tourist traffic to Williamstown such that the Greylock experienced a $30-thousand dollar operational deficit. Teague was bankrupt, but he was not without work. By the middle of the month, Teague was installed as the resident manager of the Landlord's Inn at Templeton, Massachusetts. This facility was jointly owned and operated by an association of leading New England hoteliers. The *North Adams Transcript* reported the association was paying an unusual tribute to the long-time board member of the New England Hotel Association by hiring him - saying in a statement, "Of the twenty-five landlords... not one is so well qualified to represent the group as 'Henry.' The fact that he is not driving a Rolls Royce today is not because of his lack of ability in operating hotels."*

A New Challenge

The Boston & Maine Railroad was also in heavy financial weather in 1930 and wanted to cast its little summertime mountain climbing railroad in New Hampshire over the side of its portfolio. A very public return of the Cog's first engine, *Old Peppersass* the year before had ended badly when the restored 60-year old machine broke a gear on the way down and crashed below Jacob's Ladder killing the photographer the B&M had hired to take publicity pictures *(see Appendix - A Hero's Journey)*. The question was who would want to buy the three and a quarter-mile line now that automobiles were becoming the primary way for tourists to make it to the Base Station.

B&M's sales agent, Laurence F. Whittemore asked Crawford House owner Col. William A. Barron *(right)* whether hotels in the tourist area would like to band together and buy the Cog. According to F. Allen Burt's *The Story of Mount Washington*, the answer came quickly and emphatically - "No!" Instead Barron told Whittemore, "What you need is a circus promoter; a man who can run the road, increase services, stir up new business, publicize the railway to get more people interested in taking the trip up Mount Washington." Whittemore found Henry Teague at the Landlords' Inn and opened negotiations. Col. Barron approved. "Henry is a real promoter," Barron told Whittemore. "And he has energy enough to do the job as it should be done."



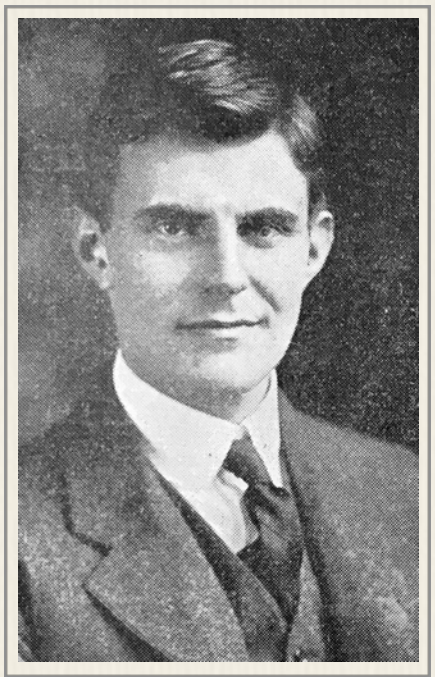
Col. Barron (1939)
- White Mtns Remembered

* Not everyone agreed. Henry W. T. Dutton, who purchased the Greylock Hotel in 1930 after the Teague bankruptcy, wrote a scathing letter to the editor of the *Transcript* when Col. Teague commented on the hotel in the paper on April 22, 1936 during one of his visits to Williamstown. "How successful that operation (of Teague's) was may be inferred from the fact that with the purchase... we inherited no good-will," wrote Dutton. "(T)he condition of the property (was such) that we were forced to expend a great deal of money before it was possible to open the house. I am rather proud of the fact that during these years of business depression I have not reduced the wages of those who worked here. Our (financial) trouble here was largely due to the fact we were for the past three years almost blockaded because of road construction. Of course we might have thrown the Greylock into bankruptcy, thus passing part of our loss on to someone else, but that is not the Dutton way of getting out of a hole. I would rather take a licking myself than pass it on to the other fellow."

Ch. 1 - Henry N. Teague

Energy yes - money no. Henry told the B&M he was broke. They offered him a $100,000 mortgage on the railroad, all the land and buildings at the Base, the whole summit of the mountain and the two hotels there. The B&M even put $10-thousand dollars in the bank for Teague for start-up operating expenses. (Arthur Teague would later say when Henry needed $10,000 to start another season, he would dress up to ask local banks for a $20,000 loan which they would decline before giving him the amount he really wanted.) The deal was publicly announced on Thursday, April 23, 1931 and promoter Teague said work would begin in the fall on a new hotel at the top of Mount Washington that "would double the capacity of the two present hotels, and make possible the accommodation overnight of 250 or more persons. The hotels at the summit would be operated as part of a program to attract an even larger number of persons to New England, and especially to the White Mountains." The change in management from B&M to Teague was a step to present New Hampshire attractions "in a more progressive way than has been possible under the previous conditions of divided operation."

"He was enabled by the Boston & Maine to buy the Mount Washington Railway," his college classmate Ernest Hopkins said years later. "He began a very successful career there, and built up quite a personal fortune, most of which he left to Dartmouth." The state of New Hampshire, which had viewed the Mount Washington Railway as a key part of economic development in the White Mountains since 1875, approved of the deal as well.



Gov. John G. Winant (1932)

Private Henry Nelson Teague - Dartmouth '00 & '01 had bought a railroad, and according to legend his military rank came up at a meeting between the new railway owner, New Hampshire Governor John Winant *(left)* and Col. William Barron at the Crawford House. "Billy" Barron joked that he was a colonel, but Teague was not. Governor Winant immediately put Teague on his staff with a rank of colonel.

Col. Teague governed "his" railroad operation accordingly. When a female tourist dropped a banana peel on the ground at the Base Station, the Old Colonel whacked his cane across her derriere and said "pick that up and get off my mountain!" He then proceeded to chase her down to her car to make sure she left. When his first summer of operations came to an end, the bankrupt Teague was in the black. His railroad had carried 15,124 passengers *(3,793 more than the B&M had carried in 1930)* and revenue outstripped expenses by $3,197.49. He made sure those back in Massachusetts knew it by pointing to a recent Granite State newspaper editorial.

PROFIT SHOWN BY TEAGUE'S ROAD
Operates Line to Top of Mt. Washington
IN NEW HAMPSHIRE
Former Williamstown Hotel Operator, Highly Praised
for Efficient Operation of Railroad.

Ch. 1 - Henry N. Teague

"The Hoosac Tunnel and Wilmington Railroad is not the only railroad in the country which was operated at a profit during the past year *(1931)* for it has been discovered recently the three and a quarter mile Mount Washington Railroad up Mount Washington in New Hampshire operated by a company of which Henry N. Teague, the former lessee of the Greylock Hotel in Williamstown is president came through the current season with a small profit after operating expenses were paid.

"Mr. Teague never ran a railroad before but he had operated hotels. It was a good little railroad and Mr. Teague took it over from the Boston & Maine last spring when he acquired the managership of the Summit and Tip-Top Houses on the top of the mountain. He figured he might as well have the railroad together with all the grief and woe that goes with the management of a hotel in a dull summer but he inaugurated some new rules and regulations, cut a few corners here and there and the small deficit of last year was turned into a profit.

"Mr. Teague has finished his season and was here, and in Williamstown this week for a brief visit, stopping at the Williams Inn.

"He is pretty well liked up in New Hampshire where he stirred things up a bit with the thorough business methods he employed about the hotel and the *Concord Daily Monitor and New Hampshire Patriot,* a newspaper printed in Concord, N.H., had good things to say about Mr. Teague in its editorial pages. Under the heading "Big, Busy, Brusque" appeared the following editorial regarding Mr. Teague and his activities:

"The Mount Washington Railroad Company has a new president, and passenger traffic up the famous cog-road, the first half of this month showed an increase of more than 30 per cent over the same period last year.

"That is coldly statistical, but the real cause of the increase - Henry N. Teague, the first man to receive a diploma from the Tuck School of Administration at Dartmouth, is anything but cold. 'The Old Man of the Mountains,' he has been dubbed by his intimates, including President Hopkins of Dartmouth since he bought the 61-year old line and started operating it this year.

"President Teague is a six-footer and better, of considerable weight, though not fat. A big man and a bachelor of between 50 and 60 years, he has had more to do with hotels than any one thing, though for the first four years it was opened, he operated the Commons at Hanover, and that isn't exactly a hotel as the last generation of Dartmouth men know.

"Brusque describes Henry Teague best of any single word. He shakes your hand in greeting and the next moment he may have thought of something else and he turns to do it. And then he turns back to you with a "pardon my abruptness" said briskly. And if you know him, you know his mind is at once on something else. You don't mind the brusqueness, unless you are especially sensitive, for his way is one of non-affectation, and almost everyone likes a man who is natural – who is himself.

Ch. 1 - Henry N. Teague

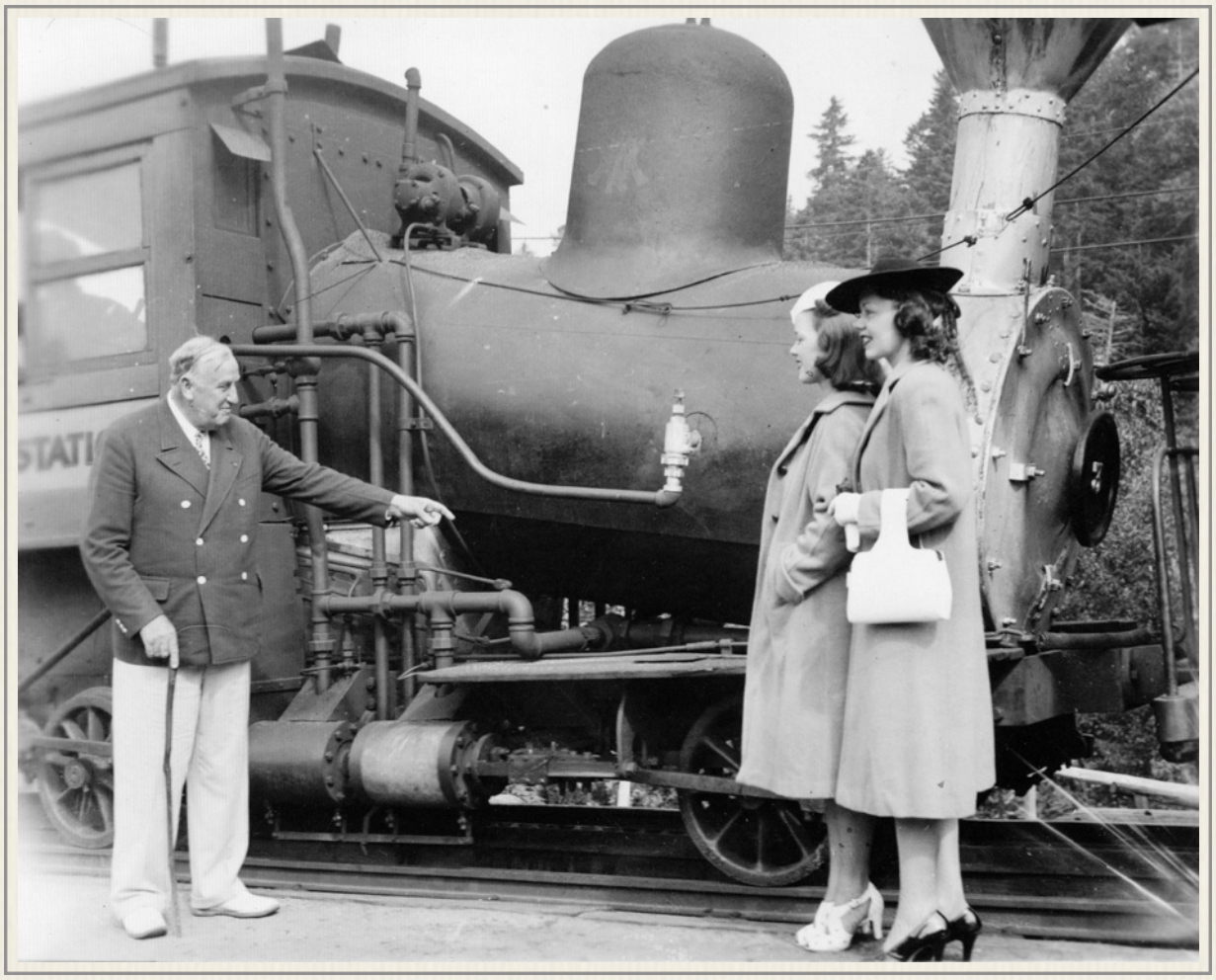
"President Teague is obviously all taken up with his new possession, and hotels and other things come second in his thoughts this summer, although that does not mean that he is not alert to other opportunities – not at all. Of course the cog road is not a very big railroad system as railroads go in this country, but it is unique and therefore absorbing. There are only three and a quarter miles of track, but in that distance the road climbs about 3,700 feet from the 2,500 foot elevation base station six miles from Bretton Woods, almost directly to the summit of Mount Washington. In one piece the grade is 37.41 per cent and that is something to wonder at.

"The year before President Teague took possession, the road lost a little money *(Ed note: $3,426.71 operating deficit was reported by B&M to the State for 1930, although the balance sheet closed with $6,618.23 profit)*, despite its record of never having had an accident involving a passenger in its three score years of operation. That perhaps is why President Teague is proud of the increase in traffic he has made the road show in 1931, not exactly the best year to be recalled in any line of business and a year in which the weather at Mount Washington has been particularly unfavorable as far as encouraging sight-seers to take the tip up the mountain. And may be provides some of the incentive for the genius he is showing in a business at which he lacked experience.

"You sit and talk with him, and you smile with him. He has ideas and they are revealed always in his brusque way. Moonlight trips by cog-wheel railroad up New England's highest mountain is just one of them. It's never been done despite the age of the railroad. He heard some of the boys and girls teasingly mention the possibility, and has it all figured out.

"For the first time the double drive horizontal boiler locomotives on the line are going to have headlights. But President Teague is not going to put any lights in the small observation cars which the locomotives push up the mountain on moonlight nights. They are not needed and he does not think they will be missed either.

"When you travel through Crawford Notch and come into view of Mount Washington any clear day this year you are very apt to see a "train" going up or coming down the mountain.



Col. Henry Teague points to cog gear of the No. 3 for Hellin & Marjorie Corbin (Aug 1939)
- courtesy Littleton Historical Society

The trips have been increased in number to three each way during July, and soon a new schedule is expected to space them two hours apart during daylight.

"President Teague worked out a way. The line is single track all the way. A train cannot go up and return in two hours. But if one train comes down from the top and meets a train going up half way, where the passengers get out to see the view anyway, why it can be done.

"At present the proprietor is doing one little thing which illustrates how he not only builds traffic on his line but keeps an eye on the costs. The property includes the Summit and Tip-Top houses run jointly as an up-to-date hotel, besides a plot of land extending 825 feet in all directions from the highest rock.

"It requires coal to heat the house, to provide electricity and to furnish other conveniences for the guests. This coal has always been brought up the mountain by special trainloads until this year. Now, however, each tender is loaded full, and the surplus, perhaps a ton remaining when the summit is reached, is dumped there. That saves a lot of trips.

"President Teague noticed some litter about the hotel, and ordered his employees to burn it up one evening. They built a fire on the rocks near the summit, and it attracted the guests. The latter added what fuel they could find, and remained about the fire until bed time. So there are to be bonfires on the top of the mountain on dry evenings during the season hereafter. Employees have been instructed to gather the replaced ties of the cog road, dry refuse and other fuel to feed them, that those who stay overnight may have the enjoyment of an out-door fire, with its friendliness and warmth atop New England before retiring to await the sunrise bell.

"New Hampshire has a vast variety of scenic attractions, but it requires the genius of man to make them attractive to man. Lost River and Franconia Notch have the genius of Philip Ayers of the Society for the Protection of New Hampshire Forests. Crawford Notch has its Colonel Barron. And Mount Washington now has Henry N. Teague, big, busy, brusque.

"Hotels, railroads, shore resorts don't just run themselves. Where they are successful, there is in the background an individual with courage, conviction, imagination and the will to work. Man-power is all that New Hampshire needs recreationally to make thousands more enjoy the natural assets of the Granite State. With man power the details will be taken care of."

- The North Adams (MA) Transcript – Thu, Nov 19, 1931 – pg. 9

The Rest of the Story

Despite the 1930 bankruptcy Henry still owned property back in the Williamstown area. However, he failed to pay his 1933 property taxes, and in June 1935, Teague's real estate was part of part of a 28 parcel tax title sale. Judge Clarence M. Smith placed bids on the Teague holdings on behalf of the mortgage holder, the Williamstown Savings bank. The bank reclaimed 187 acres with buildings on Torrey's Woods road; 36 acres with buildings on Oblong road; 14 acres with buildings on Oblong road; one half acre on Oblong road; and one half acre with buildings on

Ch. 1 - Henry N. Teague

Hemlock road by paying the $186.30 in back taxes Col. Teague owed, according to a story in the *North Adams Transcript.*

18 years later a September 1949 article in the *North Adams Transcript* detailing Teague's regular fall visit to his old Massachusetts stomping grounds when he managed the Greylock hotel in the Twenties was headlined "H.N. Teague, Bluff, Hearty Landlord, Is Still Found Colorful Character" and proceeded to lift portions of a profile in the *Boston Herald* written that day by "Roving Eye" columnist Rudolph Elie. *(see Appendix - Roving Eye for complete piece.)*

"How did I get to own the top of the mountain?" Henry Teague roared (over a lunch of Welsh rabbit in his restaurant at the base station.) "Blankety blankety, I bought it, that's how!"

Later Elie describes his interview of Teague. "The colonel sits in his big leather chair in what he whimsically calls his 'hut' below the base station. Out of the picture window of this beautiful chalet, he commands a view of the railroad all the way up the mountain, keeps track of every movement on the mountainside with binoculars, and shouts orders through his telephone to every employee he can reach. Most of the employees are college undergraduates (in Earl Blaik's day the whole Dartmouth football team worked for him summers) with a smattering of railroad presidents' sons and nephews; the rest are engineers and firemen, some of whom have been on the road for 30 years or more."

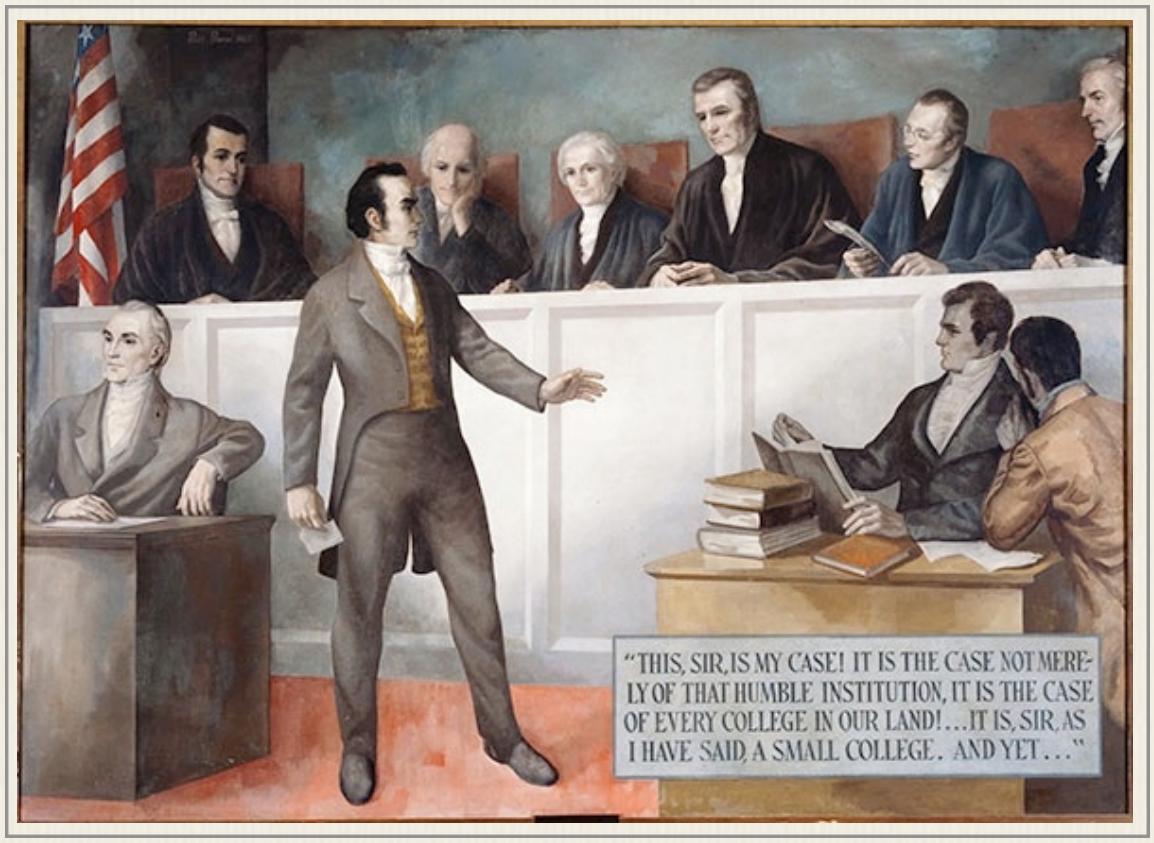
"In his lustiest years, so they say," writes Elie, "the bachelor colonel lived on Scotch and cigars and was one of the great hosts. Anybody who wasn't invited to his Miami parties might as well have packed up and gone home. He was also - and probably is - a considerable political influence in Massachusetts, counting among his friends most of the big cogs in the state. 'I'm a State of Maine Democrat,' he says, 'the only one in captivity."

"But like most who have made fortunes," concludes Elie "the colonel keeps his eyes on pennies. 'You know how much it costs me to pump water up that mountain?' he cried, pounding the floor with his ivory-headed cane. 'Seven cents a gallon! Every time somebody goes to a toilet up there they use three gallons of water and cost me 21 cents. I put dime machines on the doors, but I'm still losing 11 cents every time somebody has to go."

Teague was driven from place to place throughout his life - around the White Mountains and up and down the East Coast. While motoring through Bethlehem, New Hampshire where many in New York City's Jewish community would spend the summer, Teague observed, "There's not enough foreskin in this town to bait a fish hook." Towards the end of his life, Teague's health was not good. He traded his Nash hard-top in for a 1948 Oldsmobile convertible, and not because he wanted to ride in the open air. Instead, the top would be lowered so he could easily step into the car and sit in the front seat - then the roof was put up until the destination was reached where the roof was lowered again for the ailing Colonel's easy exit.

After his death, Teague's body was driven back to his Maine birthplace. Col. Henry Teague was laid to rest in the Teague plot at the Mount Height Cemetery in Southwest Harbor alongside his mother, Martha and under a stone noting the death at sea of his father, Captain George.

In his will, Dartmouth's first Comptroller of the Commons made a final artistic bequest to his alma mater. The painting *(below)* hangs in the Thayer Dining hall where Dartmouth students now eat. "Painted by Robert Clayton Burns in 1962," a college description explains, "this painting depicts Daniel Webster's argument of the famous Dartmouth College Case. It was given to the College by Henry N. Teague, Class of 1900. It is a dramatic and powerful painting nonetheless, including the beginning of Webster's immortal words: "It is, sir, as I have said, a small College. And yet..." Webster's full quote concluded, "And yet there are those of us who love it."



Hood Museum of Art, Dartmouth College, Hanover, N.H; gift of the Estate of Henry N. Teague, Class of 1900

Dartmouth College forester Robert S. Manahan '29 summed up Teague's tenure at the Mountain this way for the College's Alumni Council meeting at the Summit House in June 1953. "(T)he late Col. Henry Teague '00... ruled this domain with an eccentric hand from 1931 until his death in 1951. With a timely assist from the College, the good Colonel kept the operation running despite the Depression; the Hurricane of 1938, when much of the track was left a shambles; and World War II, when coal and manpower were needed elsewhere. His bequest of the summit property and the railway to the College dramatically identified Dartmouth with the future development of the mountain in whatever direction that may take."

Ch. 1 - Henry N. Teague



STEAK FOR BREAKFAST

Reminiscences of Col. Henry N. Teague by a Bacon & Eggs Colleague

(L. G. Treadway, director of the "Real New England Inns" with headquarters at the Williams Inn in Williamstown, writes charmingly of his friend, fellow alumnus and one-time business neighbor)

"Hen" Teague, as he as affectionately called by his Dartmouth friends, was a resident of Williamstown, (MA) from 1911 to 1930. The citizens of the "Village Beautiful," an expression coined by Mr. Teague who lived here during that period, will always remember his eccentricities and his kindly nature. He was constantly doing something unusual and different and always something for the advancement and prestige of the town he adopted in the spring of 1911, when he took over the Greylock Hotel.



Lauris Goldsmith Treadway (1908)
- Dartmouth College Aegis

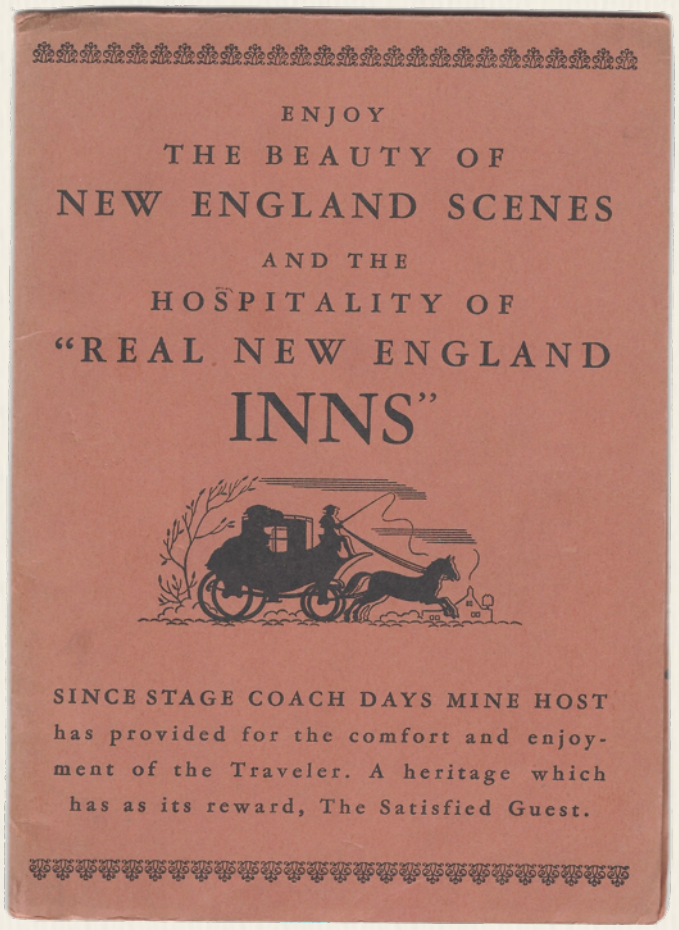
I first met Henry Nelson Teague in the fall of 1904 when I entered Dartmouth College as a scared freshman. Having arrived in Hanover, N.H. with only enough money to make a down payment on my tuition and room, my problem was to earn money for food. I applied to Mr. Teague, who was comptroller of the Dining Association who hired me as a waiter at 17 cents per hour. After a few weeks I shifted to washing dishes because the pay was 20 cents per hour. Shortly after that I took up cooking at 25 cents per hour early demonstrating to me the economic axiom that the more I earned the better I could eat. Mr. Teague fired me once because I didn't show up for work, but when he found I was in the hospital as a result of a freshman-sophomore fight he reinstated me at 30 cents per hour. He was quick of temper but as fair a man as I ever knew.

Some years later I was his assistant at the New Weston Hotel in New York. In the spring of 1911, the hotel was sold and Henry and I were looking for jobs. I landed a job as manager of the Idlewild Inn at South Williamstown, which was owned by Plumb & Clark, who operated the Maplewood and New American in Pittsfield. The day I signed up with them, Mr. Teague wired me at my Boston home: "Have taken over the Greylock at Williamstown - Report May 1." I reported May 1, but not at the Greylock.

Henry was a Spanish war veteran and always marched proudly in the Memorial Day parade. He was an ardent Democrat and had a good political following in Boston. One example of his political influence (and I could list many) that helped to put Williamstown on the map was his having placed at Harvard Square in Cambridge a sign "Williamstown 142 miles." These signs were so placed at five-mile intervals across the state that the motorist traveling west was always reminded of his "Village Beautiful." Bear in mind that there were then no number markings and the motorist of the day, in his linen duster and goggles, had to follow the "Blue Book," which said, "At fork bear left, then across railroad tracks 12 miles to white church, then turn sharp left, etc., etc." As one of my guests at the Williams Inn from Cleveland said, "I suppose there are some in-

teresting things to see in New England, but I'm the pilot and I don't dare to lose my place in the Blue Book."

In 1912, Henry got behind the movement to construct the Mohawk Trail. I believe $50,000 was originally appropriated by the Legislature, not that they thought very highly of the idea but because they thought they had to do something for the Berkshires. On Oct. 22, 1914, the Mohawk Trail was dedicated with 1800 people at the ceremony. Henry Teague was on the platform with the dignitaries. Parked roundabout were 300 automobiles - a big day for Berkshire County. One year Mr. Teague was elected Williamstown road commissioner and really did a job on the town roads. He didn't accept any salary and spent a lot of his on money on the work. I complimented him on his fine job, expressing the hope he would run again. He said, "Don't quote me, but I couldn't afford to do that again."



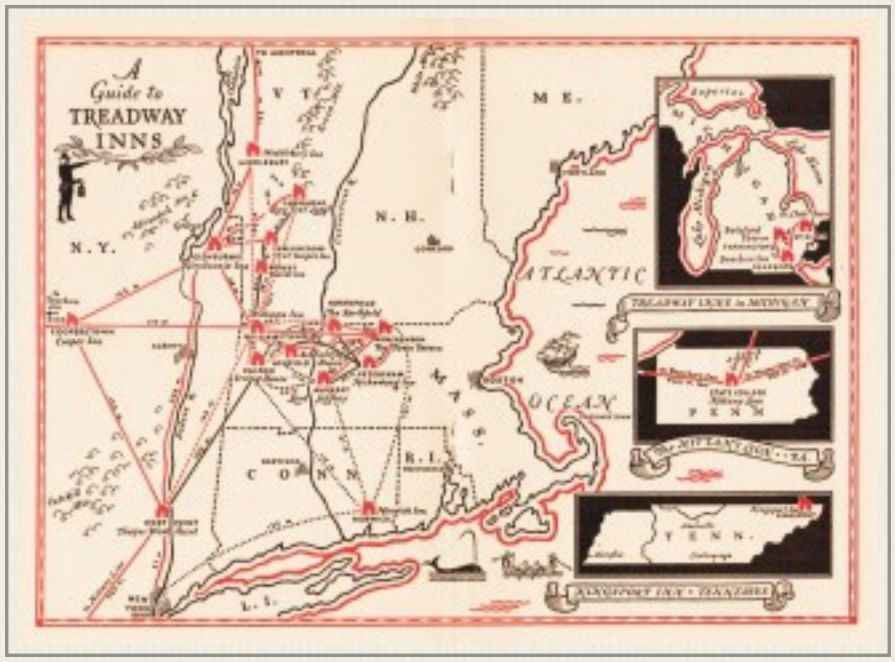
1930s promotional pamphlet produced by the L.G. Treadway Service Corporation (1930)
Ed's Eidtions.com

It was 1923 when he had a brain storm about the Taconic Trail and entertained (and I mean entertained) a joint committee of the House and Senate to consider the feasibility of building a state road from Williamstown over Petersburg Mountain to meet New York State's proposed highway. Once he got Massachusetts lined up, he headed for Albany and told the politicians that Massachusetts was out to get their road to the summit first. Then back to Boston to tell the governor that New York would finish their job first and hoped Massachusetts wouldn't stall. During World War I, he was appointed by President Wilson to call on the mayor of every city in the U.S. of over 100,000 population collecting ideas. So all over the country he was talking about his boarding house in Williamstown.

Mr. Teague was born at Mt. Desert, Maine, and as he frequently said, "Never saw a train of cars 'till I was 14." He never married so was always free to come and go as he pleased, and it surely pleased him to go. He had a great memory for names, he always said, "Any one can remember faces, but it takes concentration to call a man by his name." After making and losing several fortunes he found himself president of the Mount Washington Railroad. The Boston & Maine had originally owned it but couldn't make it pay, so they sold it to Henry Teague. By hard work and many ingenious schemes he put it over. One publicity stunt was a race up Mount Washington between two one-legged men. This story was news all over the country. Old *Pepppersass*, the engine that carried the cars up the mountain was featured in his ads and written up to such an extent that thousands of visitors from every state in the Union felt that they hadn't seen New England till they had visited his Tip Top House on Mount Washington.

How he did chuckle when I visited him a few years ago, and he showed me all the passes that had been issued to him by every railroad in America. "You see, I send them a pass on my railroad and common courtesy requires them to reciprocate," he said, and with another chuckle, "and do I use 'em!" One of the great things he did was to help poor boys get through Dartmouth. I know of dozens, sometimes it was only a $10 gold piece (He used them for tips if he liked the service of a waitress). Sometimes a check for $100. Frequently, he would pay tuition for four years. All he asked was that the boys behave themselves and pass their subjects.

When I took over the Williams Inn in the fall of 1912, Henry had had two summers' start on me at the Greylock and really had the business rolling. For a few years, I had to live on his overflow and he sure was a friend. He sent me a lot of business and with his great philosophy would say, "I spend the money to get 'em to Williamstown and I want 'em to stay here." I remember when Kelton Miller that great man of *The Berkshire Eagle*, who did more for the Berkshires than anybody, was founding the Berkshire Hills Conference. It was at an organization meeting that Henry Teague, though no orator, got up and said, "Here is a check for $1000 and Treadway of the Williams Inn will give $500, that's what the northern part of the county will do." Of course, after the applause I had to swallow hard and say I was glad to go along. But to tell the truth I was scared to death because $500 was a lot of money.

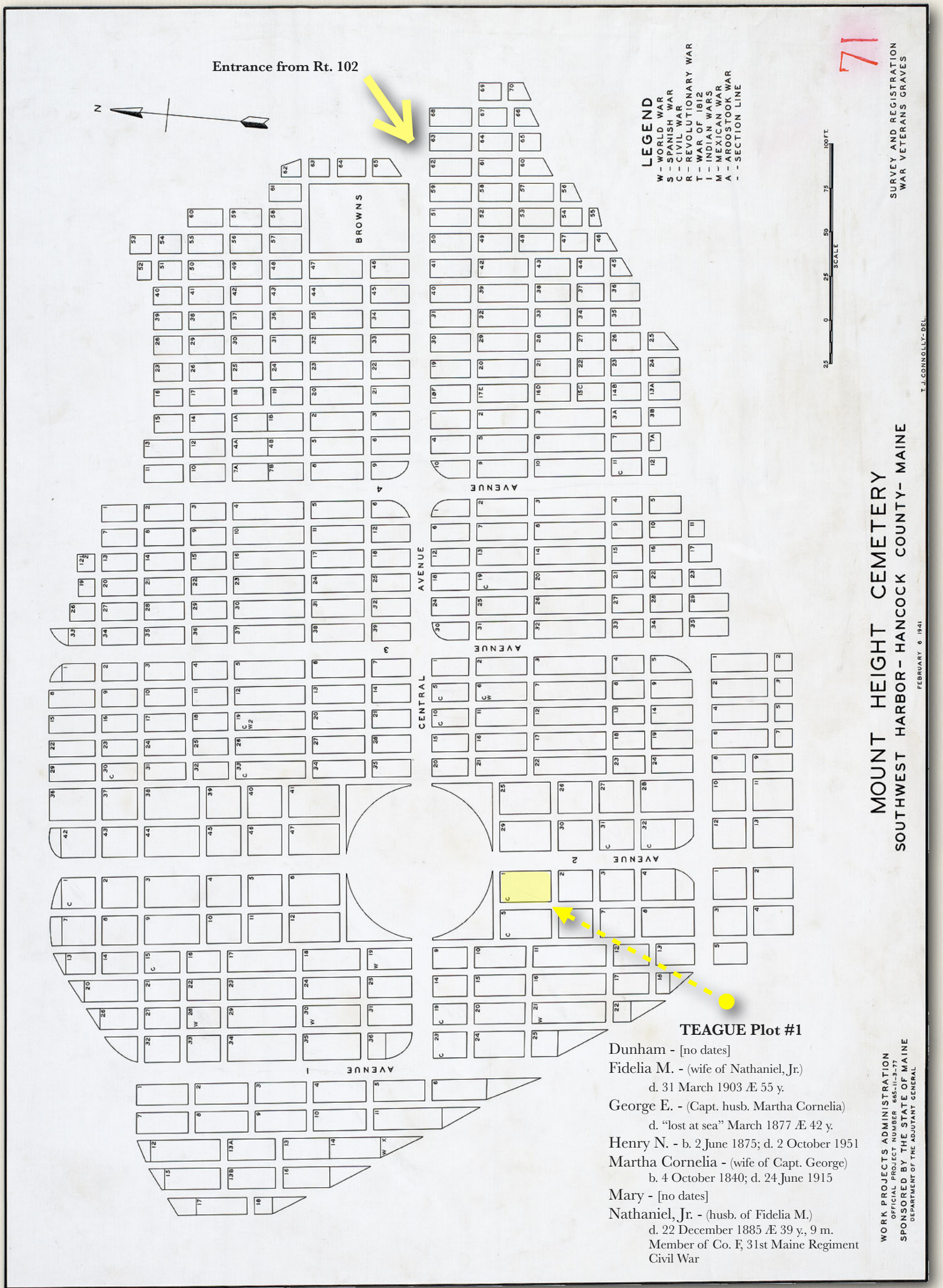


I never had but one real quarrel with Henry and that was when I first took over the Williams Inn. I decided to simplify the breakfast menu which in every American Plan house in the country offered broiled chicken, lamb chops, steak, broiled fish and at least two kinds of potatoes. I changed it to bacon and eggs, ham and eggs, etc., but no other meats and no potatoes. Henry said I was crazy and there were times when I thought I was. But I stuck to my guns and have lived to see the majority of the traveling public fall in line. Henry was a big eater and he hated to see me make a fool of myself with such new-fangled ideas.

Here in Williamstown, I frequently hear old-timers refer to the banquets we had at the Greylock, always as the guests of "Uncle Henry." Then there were the barbecues at his farm - all you could eat and then some. There has passed on a great man with a heart of gold. I am sure, wherever he is, he is still selling the Berkshires, and his beloved Mount Washington.

- L. G. Treadway - The Berkshire Eagle - Mon, Nov 5, 1951 pg. 14

Ch. 1 - Mount Height Cemetery



TEAGUE Plot #1

Dunham - [no dates]

Fidelia M. - (wife of Nathaniel, Jr.)
d. 31 March 1903 Æ 55 y.

George E. - (Capt. husb. Martha Cornelia)
d. "lost at sea" March 1877 Æ 42 y.

Henry N. - b. 2 June 1875; d. 2 October 1951

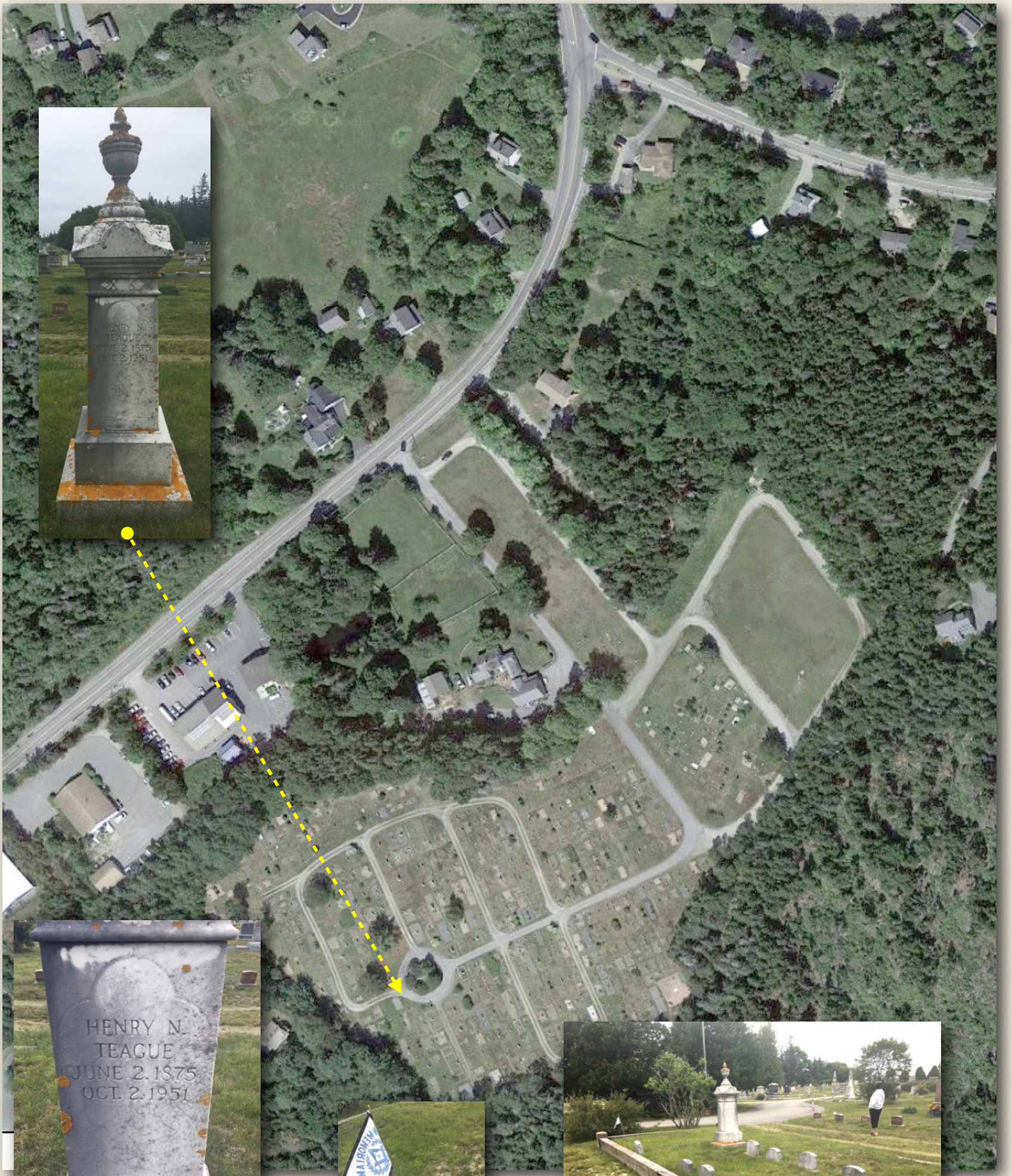
Martha Cornelia - (wife of Capt. George)
b. 4 October 1840; d. 24 June 1915

Mary - [no dates]

Nathaniel, Jr. - (husb. of Fidelia M.)
d. 22 December 1885 Æ 39 y., 9 m.
Member of Co. F, 31st Maine Regiment
Civil War

Ch. 1 - Mount Height Cemetery

Directions. *From the intersection of Routes 3 and 102/198 at the north end of Mount Desert Island (just after you cross the bridge from Thompson Island), go straight ahead (south) onto Routes 102/198. In 11.3–11.4 miles (0.8 miles of which are south of the blinking light in the center of the village of Southwest Harbor), is an intersection of Routes 102 and 102A. Continue straight on Route 102 and the entrance to the cemetery is on the left in approximately 0.1 miles.*



CHAPTER 2

The Cog from a Safe Point of View



Cog train going by Halfway House - passenger transfer platform used before switches installed (July 1946)
Photo by Roy Stevens/The LIFE Images Collection/Getty Images

The best safety record ever compiled by any railroad in the world has not been accomplished by happenstance. In about one hundred years of operation, no passenger lost their life on the Mount Washington Railroad.

However, accidents, slight in nature, cost the Company many dollars each year. Many of these mishaps could be avoided if careful attention is given to the safety rules.

SECTION 1

Authorized Personnel Only

The **Engineer** has the responsibility for running a safe train, but only with the help of a skilled **Fireman** and an alert **Brakeman** is this possible.

It might be mentioned that strict observance of safety rules gives the public confidence in our ability to operate the most difficult railway in the world. Only with increased patronage can the Cog continue its safe climb to the clouds.

Before you can qualify as a trainman you must know and practice the following rules of safety. After you have qualified as a trainman, NOT practicing these procedures of safety will result in assignment to other types of work if you wish to continue working at the Cog.

1. Only authorized personnel will perform in, on or around trains.

2. Only authorized personnel will ride in or on the engines. No girls shall ride in the cab. (A broken water glass would be extremely serious in a crowded cab)



The Number 3 Crew: Engineer Jim Gordon, his fireman & brakeman pose alongside No. 3 Base Station & switch (August 1965)
Photo by Elvira Murdoch - Lewis Family Collection

Moving Train



Brakeman signals a train safely through Skyline Switch (Summer 1953) - Lewis Family Collection

1. Trains will be moved only when a proper signal is given.

2. Trains moving through areas traveled by the public must have a trainman WALK, preceding the moving train. Note: At the Summit, the **Brakeman** tightens one brake at the tank, dismounts at the beginning of the platform, walks the train to a stop and assists passengers from the train.

3. No one should be allowed to mount a moving train.

4. No one will be allowed to mount a train other than from the side and the proper entrance – no mounting over the front rail of the car.

5. Train personnel will not run beside a moving train – (**Brakeman** will not run down to "the rock" at Gulf Switch to get aboard.)

6. The **Brakeman** is responsible for alerting the **Engineer** to any object or obstacle on the track while the train is in forward motion, i.e.: improperly set switch.

7. The **Engineer** and the **Fireman** are responsible for any object or obstacle on the track while the train is reversed, i.e.: improperly set switch.

8. Lights will be used in the clouds and the **Brakeman** must increase his attention to the tracks.

9. The trains will be run at a slow rate across all switches at all times.

10. Trains should not be run faster than necessary to give a smooth ride and make proper meets.

11. Proper distance will be maintained between trains at all times. Other than at the switches, at least 700 feet on the ascent and at least 1000 feet on the descent between trains, i.e.: on descent – top of Long Trestle and Curve at the bottom – top of Jacob's Ladder and Halfway House – top of Cold Spring and where hill flattens out at Monkey Tree.

12. If the engine should pull away from the car, the **Brakeman** will:
    a. Set the brakes
    b. Drop the ratchet
    c. Wait for the engine to return to the car.

Note: A signal from the **Brakeman** that the car's ratchet is up and he is ready to proceed is a must when the engine is against the car again.

13. Ringing of the bell is the emergency signal for stopping the train.

SECTION 3

Mechanical Difficulty

1. In case of mechanical difficulty passengers will remain on the train until other directions are given.

2. The mechanical difficulty or delay of a train will be reported AT ONCE to the Ticket Office via track phone.

3. No engine with serious mechanical difficulty will be moved without permission of the Master Mechanic and/or Colonel Teague.

4. All mishaps or passenger complaints of injury and/or damage to personal property will be reported immediately to the Ticket Office and pertinent information should be noted. (**Brakeman** should carry pencil and paper.)



On the track phone at Waumbek as the train takes on water (~1940s)
- FB Mt. Washington Cog Railway: We Were There

Precautions

1. Engines and cars will be inspected by the **Engineer** at the Base, water stops and Summit.

2. Use the yellow marks on the ties and/or rail for stopping on or near switches. (Back engine wheel and/or tender wheel)

3. Freight loaded on trains must be carefully placed so no injury or damage will occur.

4. No one shall throw coal or other objects around or near trains.

5. Broken windows will be completely removed if they present a hazard.

6. Care should be taken to remove spilled grease, oil and coal, as it could turn ankles and/or cause needless dry cleaning bills.

7. All fires on track and right-of-way must be extinguished at once and reported to the Ticket Office.

8. One man will be in the cab at all times on the mountain.

9. Brakes will be set and ratchet engaged at all times when stopped for greasing, repairs, etc.

10. The **Brakeman** will never leave the car unattended on the mountain.

11. Do not allow persons to dangle feet over the front platform.

12. Assist passengers whenever needed or necessary and caution them that this is a rough, rugged mountain which demands one's attention when walking.

13. Do not open the stand pipe valve enough at the Base when taking water to cause the pressure to flip the hose out of the tender.

14. Do not throw water on the fire in the firebox without the blower on – then only with extreme caution.

15. Do not wash the ash pan without the blower on – steam is generated when water hits fire and the steam will propel hot coal and ashes on you.

16. Treat every poker, shovel, valve, pipe as if it were "red hot" – burns account for many painful injuries.

17. Do not attempt to use any machinery that you have not been checked out on – and given permission to use.

Ch. 2 Sec. 4 - Precautions

18. Use great care when lifting. Report any and all injuries to Colonel Teague or Mrs. Teague.

19. Telephones should be connected under the side piece (not over the rail) and used when standing beside the track. The telephone wires run on either side of the side piece - insulation has been stripped from wire at regular intervals for easy connection with alligator clips.

20. *"Do not thaw water pipes in a severe thunderstorm when it is snowing"* – Jitney.

Remember: Rules Should Only Complement Common Sense



Waumbek switch after 1941
- Cog Railway: We Were There FB

SECTION 5

Clothing & Grooming Count in Safety

1. Rugged, well built, steel-toed shoes will protect feet and provide sure footing.

2. Well fitting, clean bloused coverall or overalls will provide protection from hot cinders and steam.

3. A cap will help protect the head from burns, bruises, etc., and the cap visor will shade the eyes from cinders and sun to give a better field of vision.

4. A handkerchief properly tied or pinned about the neck reduces burns from cinders.

5. A warm jacket and rain gear will aid in keeping trainmen warm and dry, so they may perform efficiently and safely during the sudden and extreme weather changes which occur frequently on Mount Washington.

6. Gloves correctly fitted will protect hands and allow safe, efficient and accurate work around the boiler. Grease and oil soaked gloves are dangerous.

7. Short haircuts and daily shaving are an advantage if the treatment of cuts or burns is necessary.

8. Frequent changing of socks and careful attention to washing and drying the feet will prevent foot discomfort, common to mountain men.

9. Hands and face should be washed frequently during the day.

Remember: You are a Railroad Man
Dress like a Railroad Man
It is the Safe Thing to Do.

CHAPTER 3

Brake - Fire - Run



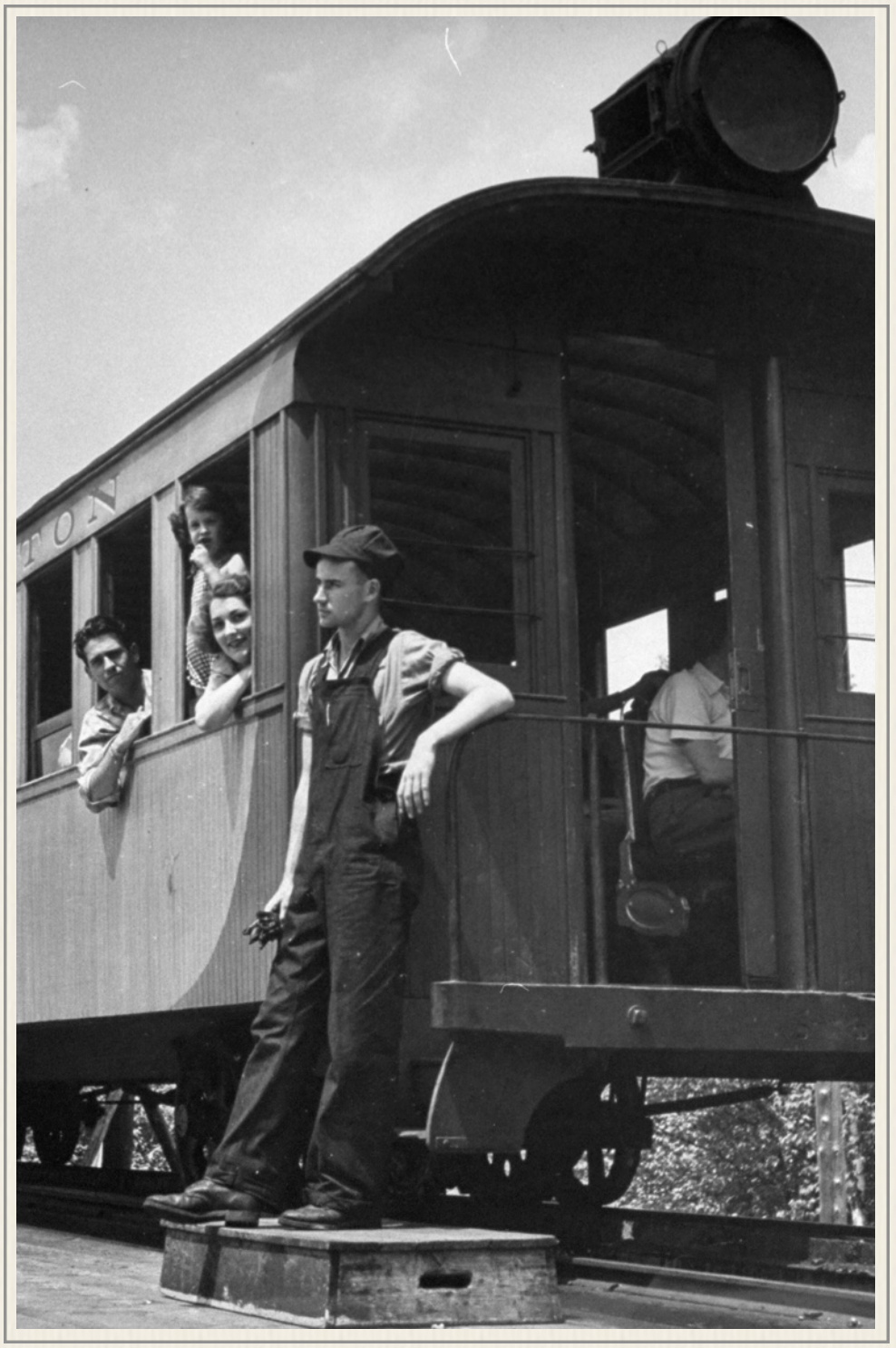
The No. 6 steams up Jacob's Ladder pushing the new "Chumley" passenger car as part of a double-header circa 1958-59
- Lewis Family Collection

The previous chapter, *The Cog from a Safe Point of View*, and this chapter, *Brake - Fire - Run*, were written, reproduced and distributed to train crews in the mid-1960s and appear here as written then. Illustrations added to enhance content and readability.

SECTION 1

The Brakeman

No member of the Mt. Washington Cog train crew must be more serious about his job than a **Brakeman**. Anyone could stop the car in an emergency (the brakes on the cars are much more powerful than needed to stop the car anywhere on the mountain) but to brake the car in such a manner to provide a smooth ride requires skill and fine coordination.



A **Brakeman** must be understanding and polite with passengers at all times. He must know how to talk to people in order to give them confidence in his ability to safely handle the cars.

Responsibilities

1. The brakeman is responsible for watching the track and giving the proper signals for the train's safe progress.

2. The brakeman is responsible to properly set switches.

3. The brakeman is responsible for delivery of all materials loaded on his train.

4. The brakeman is responsible for proper passenger seating.

5. The brakeman is responsible for acquiring sufficient knowledge on the points of interest and mechanical principals of the engine and car.

6. The brakeman is responsible for having a properly working track phone aboard on all trips.

7. The brakeman is responsible for having clean windows, dusted seats and swept floor in his car.

The Passengers - the Brakeman's First Concern

1. The brakeman will assist passengers off and on the trains.

2. The brakeman will answer questions and give a prepared, accurate description of views and historical notes of the Cog Railway at the Waumbek stop.

3. The brakeman will obey and help enforce all safety regulations.

4. The brakeman will report to the ticket office all passenger complaints, injuries and/or damage to property.

5. The brakeman will be courteous at all times.

Procedures

1. **At the Base** the brakeman will:

   a. Ascertain the color of the tickets from the ticket office before loading the passengers.

   b. Keep the office informed of empty seats when passengers have finished loading.

   c. Not give the signal to leave the Base until he receives the "go" signal from the ticket office.

2. The brakeman will sell tickets on the 7:30 AM train.

3. The brakeman will require tickets or a proper pass from all persons (other than employees) riding on trains.

4. **At the Summit** the Brakeman will:

   a. Call the ticket office upon arrival at the Summit

   b. Follow the directions carefully from the ticket office.

   c. Notify the crew and passengers five (5) minutes before the train is to leave the Summit.

   d. Keep the ticket office informed on overload.

5. The brakeman will relay all messages promptly and accurately.

6. The brakeman will assist with other work at the Base when not needed on his train. He will inform his engineer when he is leaving the train for other work.

7. Sign in advance at the ticket office for days off and be sure they are approved.

Qualifications

1. College student or equivalent ages.
2. Have approval from Colonel Arthur S. Teague to apprentice under a Brakeman.
3. Be qualified by the Brakeman and recommended by the engineer.
4. Receive final approval from Colonel Arthur S. Teague.



Up mountain look at Skyline Switch set for safe main line travel - five clear channels for wheels, cogs and gears to pass are seen - the two flags on the right platform parallel to the roadbed
- Lewis Family Collection



Down mountain look at Waumbek Switch set for a train to take the siding - the five channels for wheels, cogs and gears to pass now lift the train up and over the roadbed- the two flags on the platform in the upper left are perpendicular to the mainline
- Kent Family Collection

The Fireman

A fireman's job on the Mount Washington Cog Railway is not for the "faint of heart." The **Fireman** must place a ton of coal in a roaring firebox every trip up the mountain while standing on an inclined floor, with the care similar to that a cat must exercise in a flower pot.

He must be ready to assist with all types of duties from loading freight to helping with mechanical maintenance.

A chance to perform a task which hasn't changed much in the last hundred years, in today's world, is certainly a job of distinction.

Assists

1. The fireman will assist the engineer in running a safe and efficient train.

2. The fireman will assist with other work at the Base when not needed his train. He will inform his engineer when he is leaving the train for other work.

Responsibilities

1. The fireman is responsible for maintaining proper steam pressure.

2. The fireman will be responsible for cleaning the ash pan and checking for any build-up of ashes which would damage the grates.

3. The fireman is responsible for filling the tender to the proper level at water stops.

4. The fireman will be responsible for trimming the coal in the tender and preventing the loss of coal by keeping the floor and apron clean while firing.

5. The fireman will be responsible for lifting and lowering the ratchet at the direction of the engineer. **Note:** A ratchet is NEVER dropped while an engine is in reverse motion.

Procedures

1. The fireman will inform the engineer of any information which will aid the operation of the train.

2. The fireman will obey and help enforce safety regulations.

3. The fireman should strive to gain knowledge in the operation of the train and all Cog procedures.

4. The fireman should know how to stop the train if an emergency should arise.

5. The fireman should become aware of proper water levels which must be maintained in the boiler.

6. Sign in advance at the ticket office for days off and be sure they are approved.

Note: Every Good Engineer was once a Good Fireman

Qualifications

1. Perform successfully the duties of a brakeman.

2. Display an interest and knowledge of the train operation.

3. Have approval from Colonel Arthur S. Teague to apprentice under a fireman.

4. Be qualified by a fireman and recommended by an engineer.

5. Receive final approval from Colonel Arthur S. Teague.



Fireman Ken Saccosia loading coal at the bunker for the next run up the mountain
- Paul Saunders Collection

The Engineer

An **Engineer** on the Mount Washington Cog Railway is a man with a unique occupation. The skills required for this work and the majestic surroundings will keep "RUNNING" vivid among memories no matter what other vocation or avocation he might later engage.

The Engineer's primary duty is to operate a safe, efficient train. The **Engineer** has the responsibility to supervise himself and his crew in a manner which will guarantee the most pleasant and enjoyable ride possible for every passenger.

Responsible for Supervision

1. The Engineer will direct the work of his crew. (i.e. the Engineer will, when the train work is done, make his crew available to other work details).

2. The Engineer will discuss and clarify the Safety Regulations and procedures with his crew.

3. The Engineer will enforce all Safety Regulations.

4. The Engineer will supervise his crew at the Summit so they will in no way hinder the operation of the Summit House.

Responsible for Preventive Maintenance

1. The Engineer is responsible for ALL lubrication.

2. The Engineer will inspect the engine and car at all stops.

3. The Engineer will keep all nuts and set screws properly tightened.

4. The Engineer will maintain proper water levels in the boiler at all times.

5. The Engineer will not allow the spur gear to come in contact with cinders or dirt.

6. The Engineer is responsible for the cleanliness of the train.

Responsible for Maintenance

1. The Engineer is responsible for lubrication lines and fittings.

2. The Engineer is responsible for cleaning the flues and smoke box.

3. The Engineer will:

    a. Replace and shim gibs as necessary

    b. Replace and add packing as necessary

c. Keep cross-head bearing tight by adjusting the keys.

Responsible for Procedure

1. The Engineer will provide daily mechanical reports for the Master Mechanic.

2. The Engineer will report all mechanical difficulties at once.

3. The Engineer will place his train on automatic schedule in case of phone failure (20 minute wait at the Summit.) He will have his Brakeman call after a 5 minute wait at Gulf or Waumbek Switch if there is no sign of an approaching train.

4. The Engineer will maintain his proper "spot" in the lineup, unless otherwise directed.

5. The Engineer will secure the engine after the last run of the day.

6. Sign in advance at the ticket office for days off and be sure they are approved.

Note: AN ENGINEER MAY DELEGATE HIS WORK TO HIS CREW BUT NOT THE RESPONSIBILITY FOR THAT WORK.

Qualification:

1. One must display mature judgment, mechanical dexterity, knowledge of train operation and sound common sense.

2. Be a qualified **Brakeman**.

3. Perform successfully the duties of **Fireman** for two years.

4. Have approval from Colonel Arthur S. Teague to apprentice under an Engineer.

5. Be recommended by an Engineer.

6. Understand maintenance requirements to the satisfaction of Master Mechanic.

7. Demonstrate skill and knowledge of "running" under the supervision of the Qualifying Engineer.

8. Be recommended to Colonel Arthur S. Teague by Qualifying Engineer.

9. Receive final approval from Colonel Arthur S. Teague.

CHAPTER 4

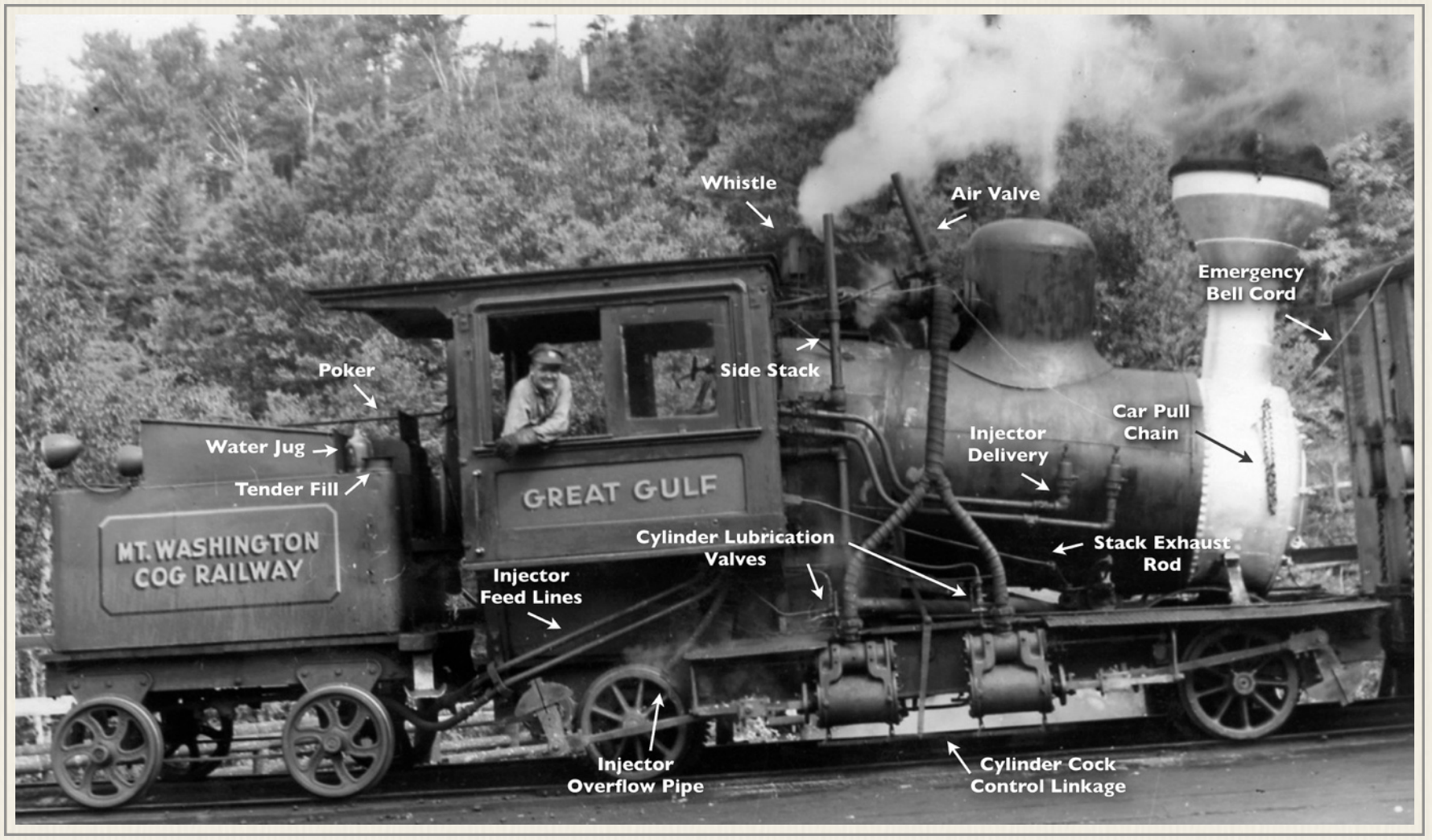
The Engine

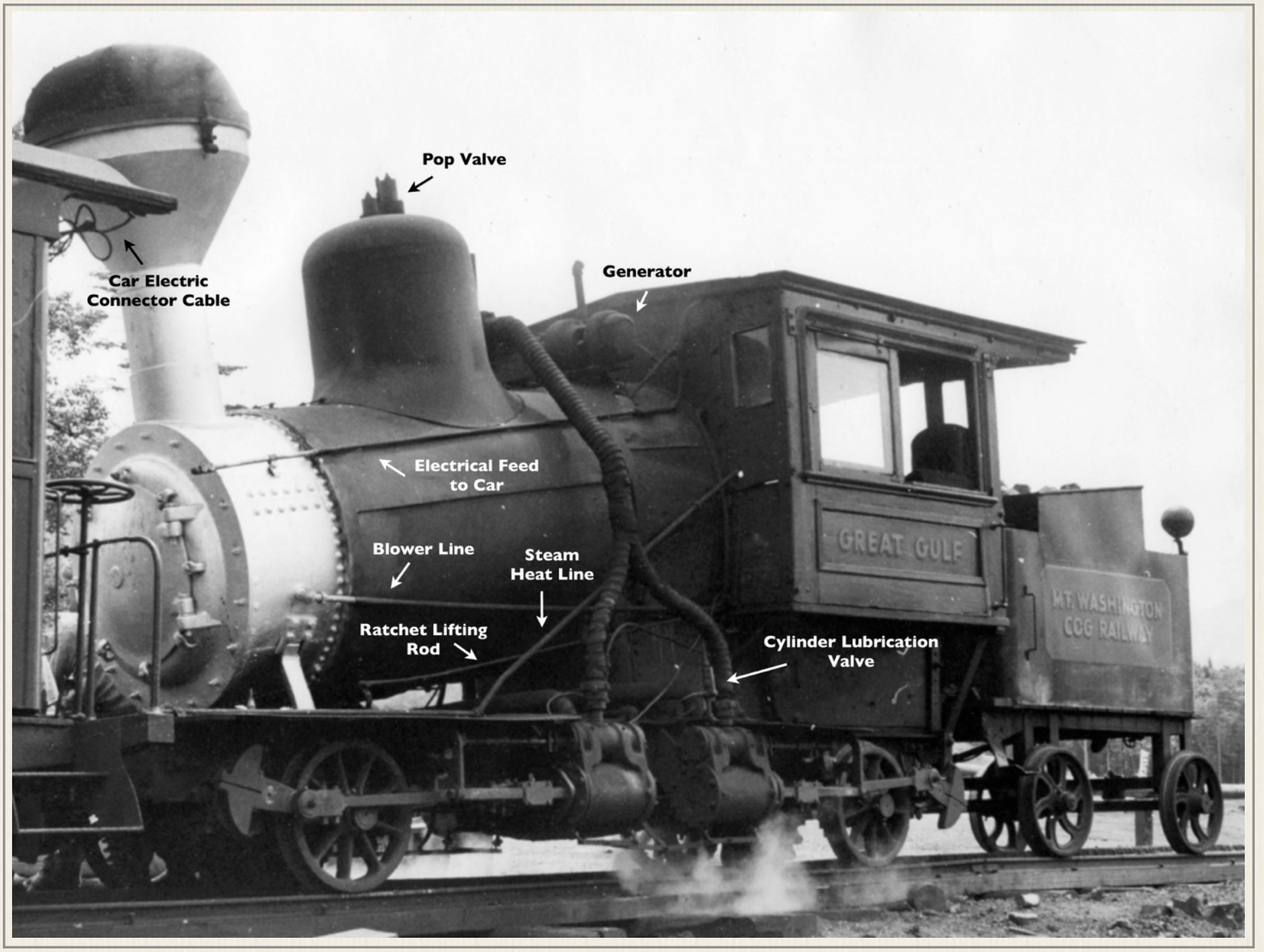


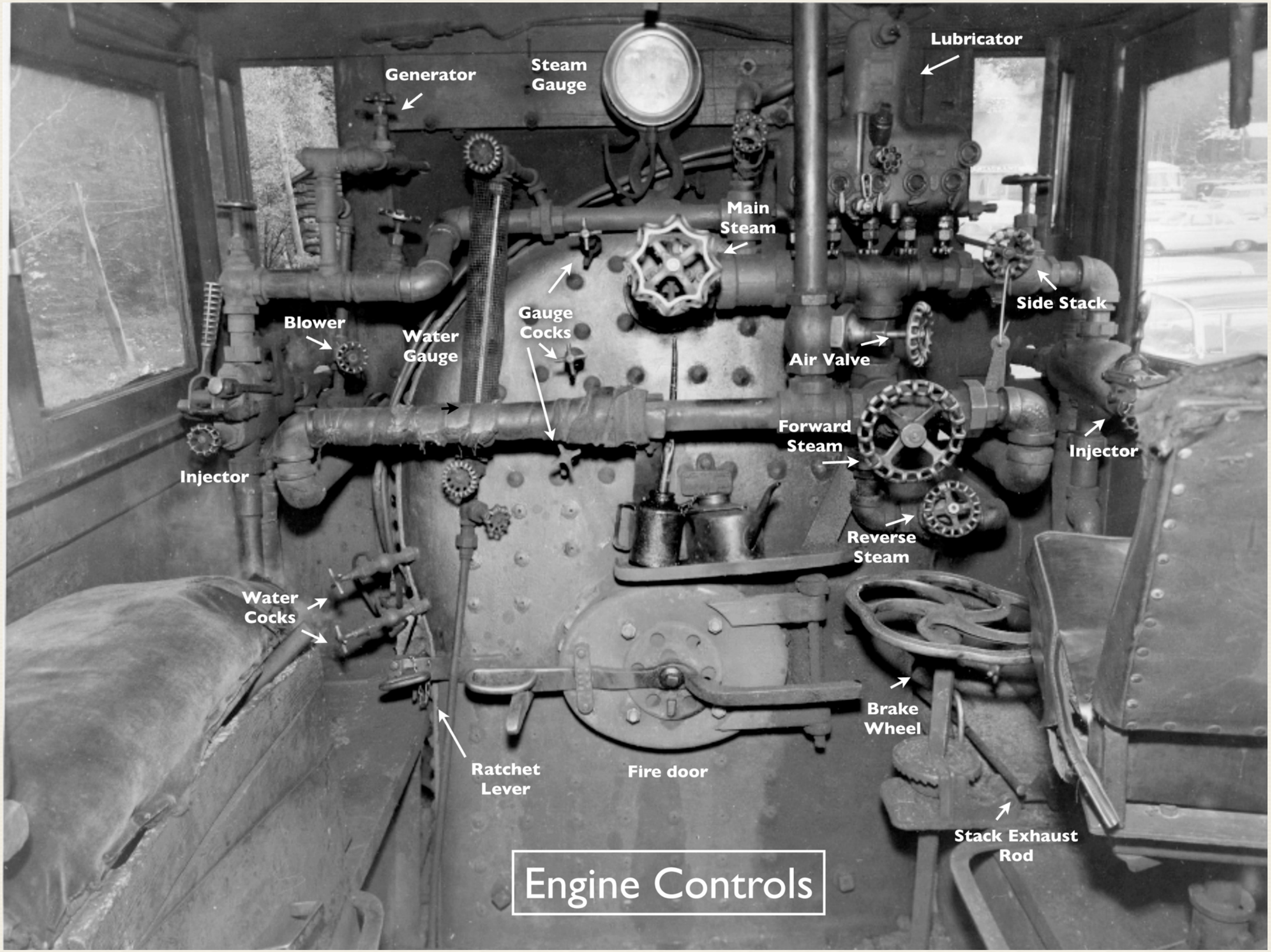
Engineer Jitney poses next to a freshly scrubbed No. 6 at the wash rack next to Base switch
- Lewis Family Collection

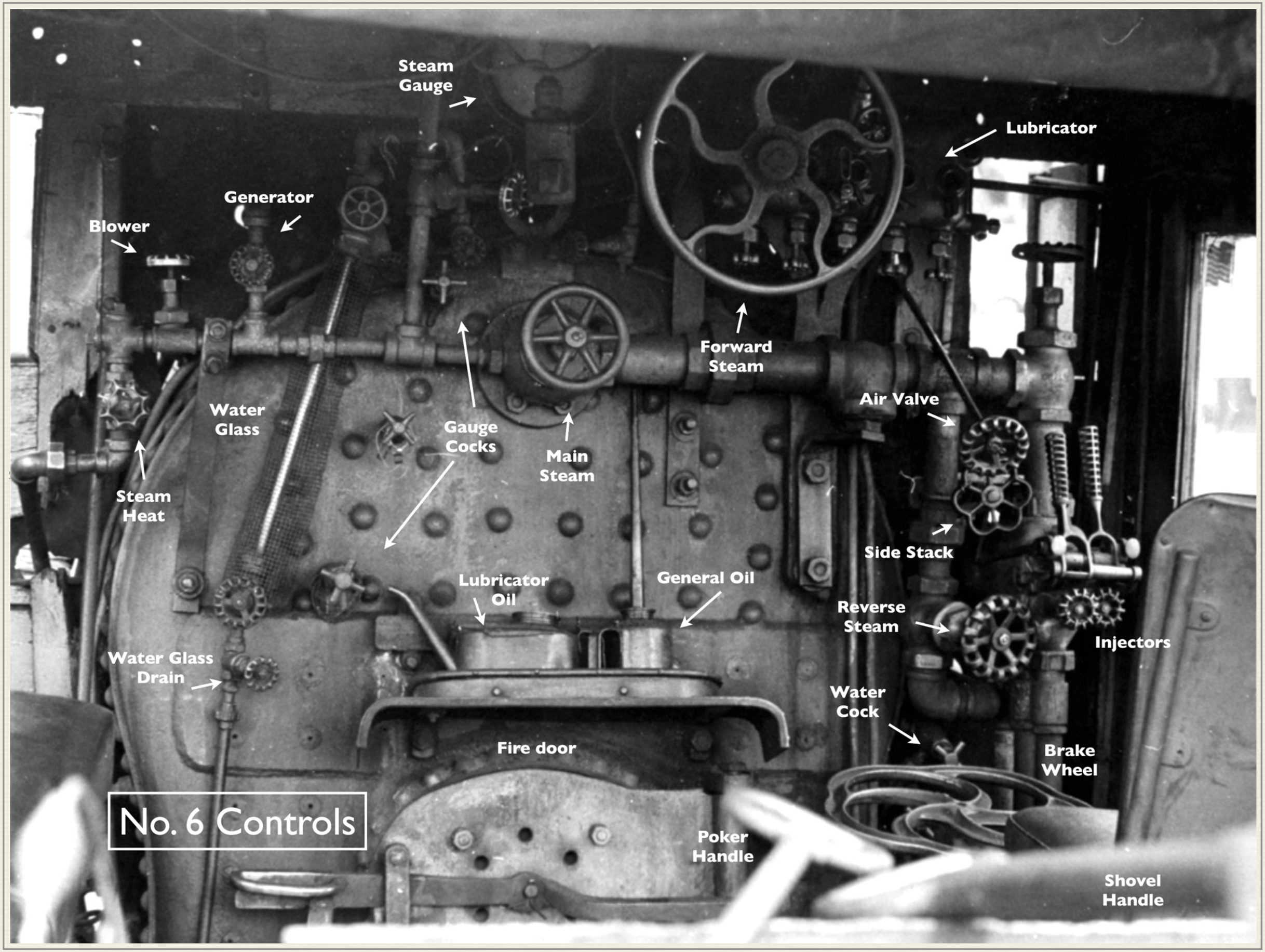
The creation of the *"Operating Details & the Mechanism of the Steam Locomotive of the Mt. Washington Cog Railway"* for publication as a book began in 1962 with the backing of Col. Arthur S. Teague. Editor Norman L. Lewis wrote a Walnut Creek, California man in the fall of 1963 that the book "will be ready for publication in 1964," although "no contract with a publisher had been secured."

What follows is that material as first written a half-century ago, lightly edited and illustrated for 21st Century readers.

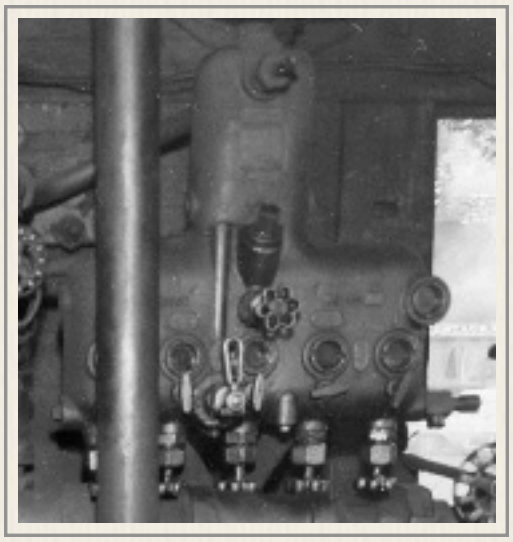

Whistle
Air Valve
Emergency Bell Cord
Poker
Side Stack
Water Jug
Tender Fill
Injector Delivery
Car Pull Chain
GREAT GULF
MT. WASHINGTON COG RAILWAY
Cylinder Lubrication Valves
Stack Exhaust Rod
Injector Feed Lines
Injector Overflow Pipe
Cylinder Cock Control Linkage


Pop Valve
Car Electric Connector Cable
Generator
Electrical Feed to Car
Blower Line
Steam Heat Line
Ratchet Lifting Rod
Cylinder Lubrication Valve
GREAT GULF
MT. WASHINGTON COG RAILWAY


Generator
Steam Gauge
Lubricator
Main Steam
Side Stack
Blower
Water Gauge
Gauge Cocks
Air Valve
Forward Steam
Injector
Injector
Reverse Steam
Water Cocks
Brake Wheel
Ratchet Lever
Fire door
Stack Exhaust Rod
Engine Controls


Steam Gauge
Lubricator
Generator
Blower
Forward Steam
Air Valve
Water Glass
Gauge Cocks
Main Steam
Steam Heat
Side Stack
Lubricator Oil
General Oil
Reverse Steam
Injectors
Water Glass Drain
Water Cock
Fire door
Brake Wheel
Poker Handle
Shovel Handle
No. 6 Controls

Hydrostatic Lubricator



The hydrostatic lubricator is used for lubricating the interior of the valves and cylinders. Four oil feed valves are used on Cog engines – one to each cylinder. "Main Line" locomotives use extra feeds for air pumps, feed water pump and stoker. As most of the lubricators on the Cog engines are "main line" variety (Detroit), one can find the four feeds being used by checking the oil lines at the back of the lubricator.

TO FILL THE LUBRICATOR: (use only clean valve oil)

"A Cold One"

1. Check that all valves to the lubricator are off

2. Open drain cock

3. Remove filling plug (this plug is always removed carefully to prevent being splashed with hot oil and water if there is pressure)

4. Close drain cock when all water is drained

5. Fill to the filling plug opening and replace plug

Note: Lubricators are made of brass, don't torture with a pipe wrench. Do not move engines under steam with drain plug out – steam from cylinder will create a volcano of oil.

"A Hot One"

1. Close all valves from the lubricator to the boiler. If enroute close just before arriving at the Summit or Base

2. Open drain plug carefully; drain all water and all oil

3. Remove fill plug with extreme care

4. Close drain plug

5. Fill slowly and carefully – the hot lubricator may cause oil to boil out

6. Fill lubricator to the filling plug opening; if there is not sufficient oil, clean water should be used to make up the required quantity. This will displace the air and enable the lubricator to start feeding quicker.

7. Replace fill plug

ADJUSTMENT OF LUBRICATOR:

1. Turn steam valves on full from the boiler to lubricator. (A "cold one" should be turned on at least an hour before departure)

2. Open condensing valve; be sure sight feed glass are filled with water.

3. Turn oil control valve to open

4. Adjust oil feeds. Slow engine - a drop about every twelve seconds. Fast engine - a drop about every eight seconds (a second – count – one thousand one, one thousand two, etc.)

5. An engine should make three trips on one filling of a proper adjusted lubricator – (don't forget to turn the lubricator off when the engine is not running)

"You May Have a Few Problems"

CLOUDY FEED GLASS – open blow valve into can or shovel - close and wait for water to condense full – Didn't clear up? Do it again.

OIL PARTIALLY FILLS SIGHT FEED GLASS – Check chokes on top of cylinder, loosen nut on pig tail and see if steam is going through choke – no steam – remove choke and clean; if the choke has a blow down try blowing out choke first. (Ten minute job with luck – carry a sharp wire to push through choke)

DROPS DO NOT FORM – turn off and on steam several times. Sometimes oil will sneak down side of oil nipple and up the side of the bull eyeglass unnoticed. Time to clean.

TO CLEAN INSIDE LUBRICATOR – fill with water; add strong soap. Do not turn oil feeds on. Turn on steam and allow water to boil. Drain soapy water out and refill with clean water, boil again and drain. Fill with clean oil.

Note: The lubricator may feed smaller drops than usual for a couple of trips - adjust accordingly. Several times during the season, Mike added a few slivers of ivory soap when filling the lubricator. He always had clean sight feed glasses. Engineers often asked, "How come Mike's feed glasses are always clean?"

DARK, DRY PISTON RODS – indicates poor or no lubrication and extreme wear and damage is being done to the valve and piston. Immediate correction is necessary. Rods and stems should be bright and shiny and covered with an oil film.

Note: When new packing is added you may have dark graphite deposit on the rod for a trip or so.

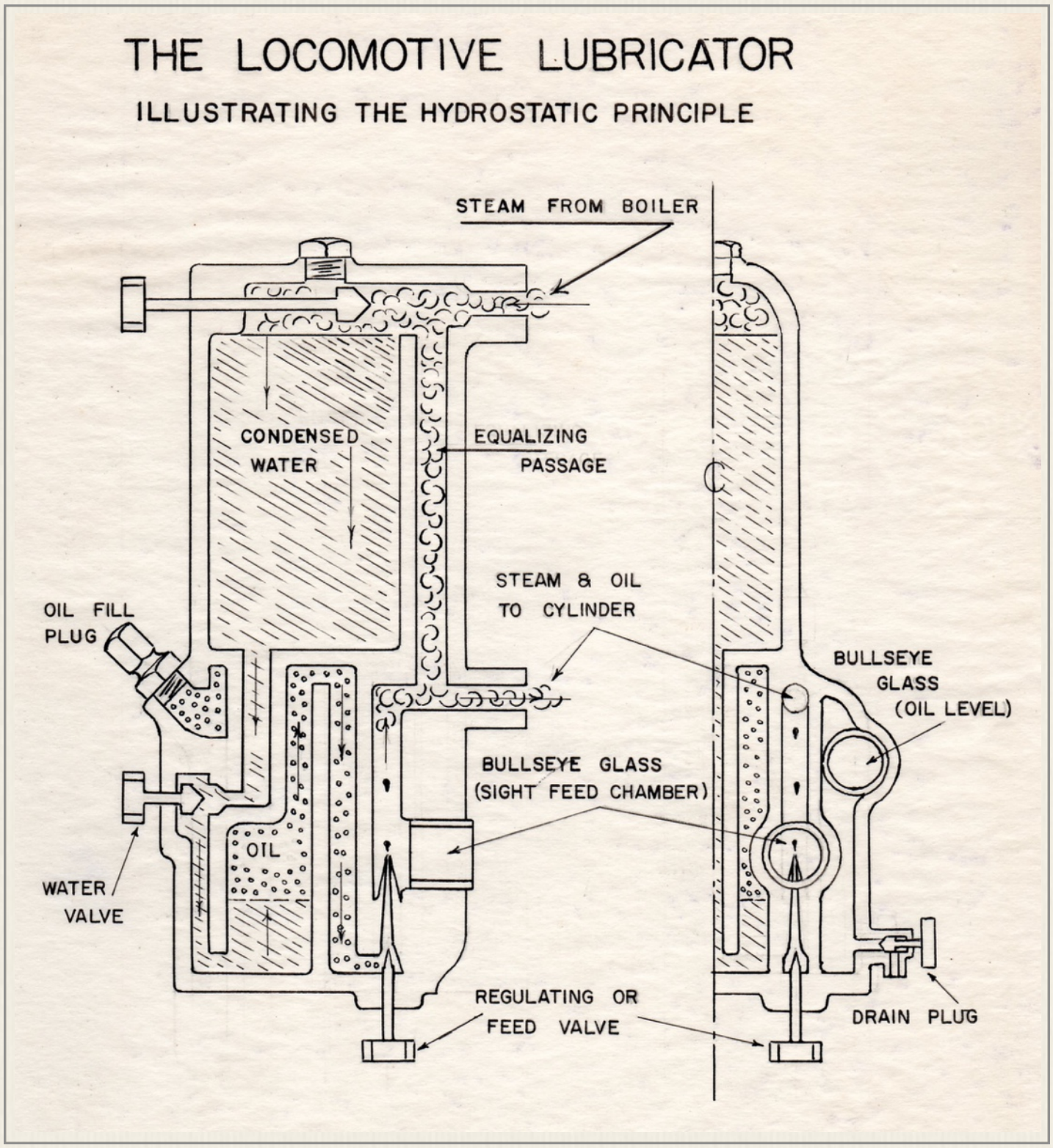
LUBRICATOR CONTINUES TO FEED – some control valves are worn and you must check carefully to position the handle to a point which stops the oil from feeding. This point may not coincide with "off" marked on the lubricator.

Ch. 4 - Hydrostatic Lubricator

OIL LINE BREAKS – if an oil line breaks enroute and cannot be repaired, valve oil can be poured into the side stack on the way down and into the air valve on the way up when stopped. However, to get oil down the air valve might be like squirting water into the wind – it may come back. If the pig tail breaks the three way cocks and the exhaust line, leave the three-way valve "up" position for the trip down. This introduces the oil into the main steam line but as the compressed air rushes back into the cylinder fair lubrication is achieved. (Be prepared someone may tell you, you forgot to turn them at the Summit) Valve oil on valve and piston rods keeps packing oiled.

IMPORTANT: If it is not possible to achieve good lubrication to the cylinders report the condition to the master mechanic immediately. Dry – burnished valve and piston rods are tell-tale signs the lubricator not working – the engine is being damaged.

Mike says, "Why burnt rods? Cuz' ya outta oil and don't like to fill a hot lubricator."



Greasing the Engine

Proper greasing of the engine and car cannot be over emphasized. Even though the best lubricants available are provided, poor greasing practices will result in excessive wear, damage to bearings and surfaces, decrease the efficiency of the engine and set up conditions for breakage of other running parts.

1. Wipe each fitting clean

2. Pump only enough grease to show from the bearing surfaces. Often a "pop-like sound" will indicate enough grease. No sound – 3 to 5 pumps or until grease appears around bearing.

3. Grease at the Summit and the Base each trip. If on busy days a down-coming train has to wait at Waumbek for upcoming train then grease the engine there and not at the base will save time.

4. Wipe fittings after greasing.

5. Check to be sure all grease lines are intact.

6. Oil may be placed on dry guides; however, grease usually gives adequate lubrication.

7. The car should be greased each morning, this is done by the car-knocker but must be checked by the engineer.

8. Engine oil is used on surfaces where grease fittings are not attached. Care should be given to valve linkage.

9. Oil cans or grease gun should not be over-filled as the heat in the cab will cause the lubricants to expand and cause a housekeeping problem.

10. Excess grease should not be allowed to accumulate anywhere on the engine or car, as it interferes with checking the engine, collects cinders, and results in dry cleaning bills.

11. To clean engine: before greasing, use paint brush dipped in kerosene and brush on running parts and hose down with water.

12. If a crank pin, box or other bearings get hot, valve oil will be the best lubricant. Pour it on often; sometimes it will be necessary to stop the train for greasing hot boxes. Water may be used to cool bearings before greasing.

13. Check with the master mechanic for greasing instructions on engines coming out of the shop with new parts or repairs. Automatic greasers are attached on new bearings; they must have

a safety wire attached so they won't be lost. Vibration may cause greaser to come loose and drop off.

Note: Don't forget engine and tender wheels.



Engineer Mike Boyce captured greasing the No. 6 at the Summit (between 1949-1951)
- Boyce Family Collection

Care of the Spur and Pinion Gear

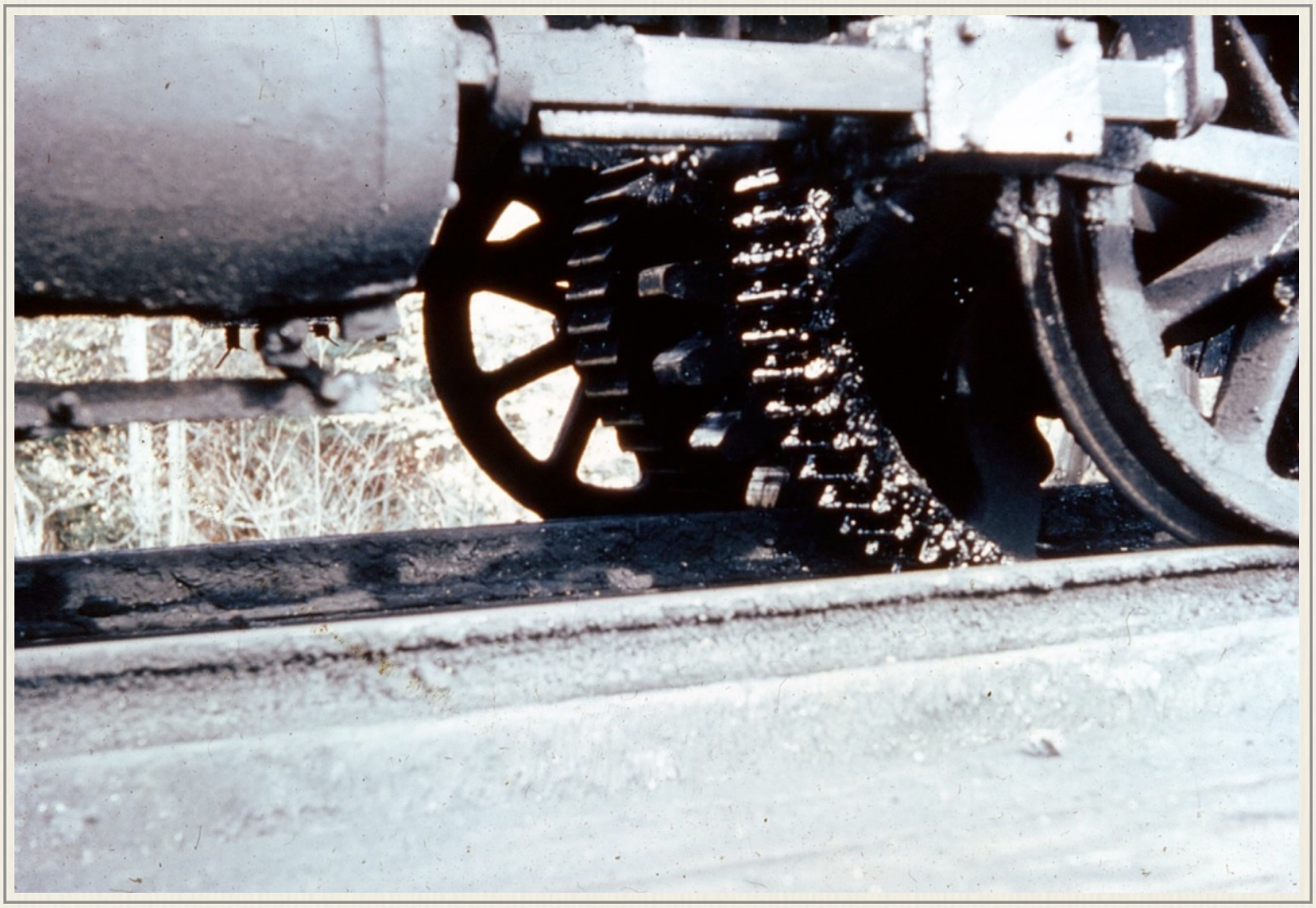
The large spur gear and pinion gear are exposed because there is not sufficient clearance at switches and road bed for housing. There is no practical means to provide continuous lubrication.

Extreme care must be taken so spur gear does not come in contact with ashes, coal, dust, dirt or other foreign matter. A fouled spur gear requires hours with putty knife and kerosene.

The spur and pinion gears must be lubricated systematically at the Base, Waumbek and Summit, or undue wear of gears will occur.

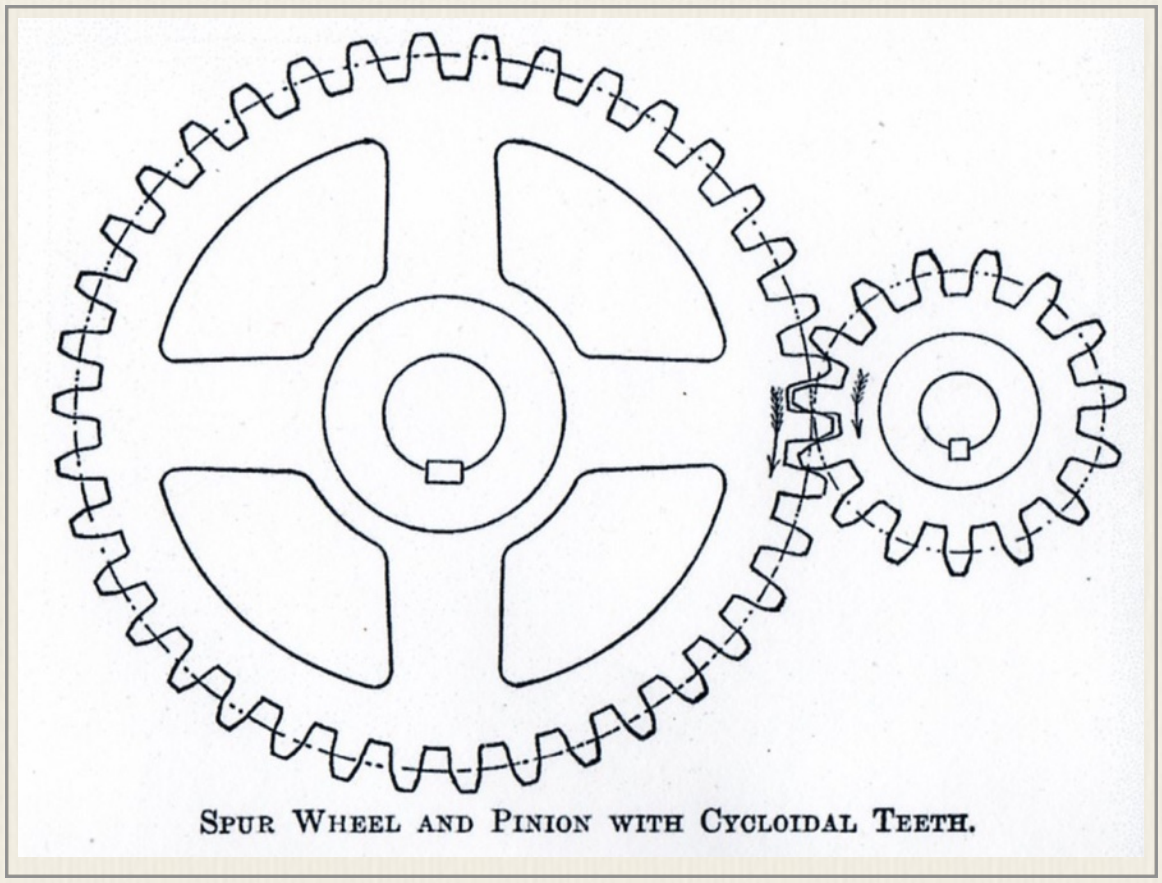
Gear grease, a thick lubricant, is placed with a 'cog paddle' in the valley where the small pion engages the large spur gear. About one-third to one-half cup of grease is adequate. Larger amount of grease will be squeezed off the gears and deposited on the ties.

Gear grease on ties must be cleaned due to fire hazard and/or tourist may step in, especially at the Summit. Messy shoes make for unhappy travelers.



View of well-greased front spur gear just inside wheel with cog and ratchet gears beyond.
- Lewis Family Collection

Note: Bob Kent supplied engineers with hand-crafted paddles to apply the cog grease. He also gave one to "Cog mothers" for discipline. The threat of a cog paddle produced better behavior by "the kids of the Cog."



SPUR WHEEL AND PINION WITH CYCLOIDAL TEETH.



A Bob Kent cog paddle - (12.5 inches by 4 inches) slightly used
- Lewis Family Collection

Ch. 4 - Greasing



Lubricating Cog Rail

The center rail spools that engage the front and rear cog gears needs to be lubricated to prevent wear of spools and cog gears.

The engine cab floor has a square hole over the top of the back cog gear.

A "cog bucket" is made of steel and holds about 4-5 gallons of 'hot' grease. Cog grease is very thick, tar-like lubricant. The cog bucket has a steam coil to heat the grease to a temperature which allows the grease to flow through the bucket spigot.

The **Engineer** and **Fireman** receive an extra hour of pay for running the cog bucket.

The shop crew provides, when requested, full cog buckets to the crew. The cog bucket (covered) can ride to the summit on the back platform of the car or in the cab.

At the Summit the cover over the hole in the cab is removed. The bucket is placed with its spigot directly over the exposed cog gear.

The steam coil is connected and steam is turned on. The cog lubricant should heat sufficiently to flow during the stop at the Summit. Check carefully; too much heat can cause grease to splatter over the cab.

Usually one train crew does the summer cog greasing. Responsible for the entire rail 'top to bottom' receiving an even application of cog grease.

Five to six 'buckets' with spigot properly adjusted should give the center rail a good greasing. Too much lubricant causes grease build-up on center piece and wastes lubricant; too little grease causes wear. Visual inspection is required to know where and when to run the bucket.



Center Rail Cog Grease / Snow and Ice

On sections of the track, where the center cog rail is mounted on one piece of timber, cog grease can build up between the spools. Compacted, dry cog grease can cause the cog gear to bottom and not properly engage. The built up cog grease must be removed. The switches should be checked especially for this problem.

Snow can be compacted to form ice between the spools of cog rails mounted on one piece of timber which needs to be removed or the cog gear bottom out. Again, special attention should be given to switches.

Compacted snow forms ice on the cog gear. The ice freezes and builds between the teeth of cog gear and can lift the engine as the cogs engage the spools.

The engine must be stopped when cog gear icing occurs. After a short wait the ice can easily be poked from between the cog teeth.

Many sections of track especially on and near the Summit now have cog rail mounted on two separated pieces of timber as the old one piece timber is replaced.

The separated center pieces allow cog grease, snow and water to fall through.

Ch. 4 - Greasing

The snow and ice problem is usually above the tree line under certain conditions in early and late season operation after a snow storm.

When snow conditions indicate the ice problem may exist just an engine, without car, is sent to the top and back. Other trains will not experience the problem.



The Fire

The boiler works to near capacity to supply the efficient 140 lbs. of steam needed to push the loaded passenger car up Mt. Washington. (Approximate weight of engine is 18 tons and loaded passenger car seven tons)

The Railway purchases premium bituminous coal (soft coal) with low ash content. Soft coal provides quick heat. Low ash content means over filling the ash pan on a trip is not a problem.

First Fire

The initial coal fire is built on a wood fire. Dry kindling placed on the clean grates, next large wood, a little kerosene and light. Continue to add wood until a hot wood fire is established. As the fire burns down gradually add coal. A hot coal fire should be burning in an hour or so.

Continue spreading small amounts of coal on the fire. Easy shakes of the grates will improve the draft.

Poor Draft

Poor draft can be due to fly ash, soot, etc. plugging the bonnet of the smoke stack. Use a broom or stick to rap the wire netting to dislodge the particles to permit the air and smoke to flow. This problem often occurs when using wood to start the fire. Caution: Don't rap hard enough to damage netting or punch holes through the thin netting. All holes in the netting must be patched or fires will be set on the mountain.

Turn on the blower when enough steam pressure.

Note: In a hurry at the shop? An air hose can be hooked into blower line to create a draft.

Poor Draft Due to Plugged Flues

A coal fire burns all season unless the fire has to be dumped for repairs, low water or the fire bank goes out, etc.

Punching the Flues

Unable to maintain steam pressure on the hill could mean plugged flues. Boiler flues plugged with fly ash, soot, coal, etc. may reduce up to 30% of a boiler's heating surface. The engine with plugged flues is taken to the shop where compressed air is available. Open the front end of the boiler, take out the petticoat and clean the fly ash from the smoke box. Using a flue rod, punch each flue to the fire box accompanied with bursts of compressed air. Be sure the fire box door is closed or a messy cab will result.



View of flues through firebox door
- FB Cog Railway We Were There

When all flues are clean replace petticoat at the same level. Changing the height of the petticoat can dramatically change draft.

Machine fitted doors to smoke box are air tight when properly tightened. Doors not machined, require breaking up solid asbestos, adding engine oil to make a thick paste. The paste is placed in the channel around the smoke box opening to form an air tight gasket when the door is tightened into place.

Be sure to clean old gasket material from the channel before applying the asbestos and oil paste. The heat in the smoke box will dry and burn oil to form a firm gasket.

To do the job right the procedure with compressed air and front end access to all flues is required. The portable air-compressor may be used, but the shop compressor does the best job.

Cleaning flues on the switch or line without compressed air – a flue rod may be run from the fire box through to the smoke box. Turn the blower on full.

Only the flues in front of the door opening can be punched. Cleaning the center flues in the boiler will give some more draft and exposed heating surface.

If the boiler has a machine fitted door, open the smoke box, take out the petticoat and use the flue rod. It will require many, many runs through with the rod to get flue deposits free.

Replace the petticoat and secure the door.



Fireman Hap Williams applies a coat of silver paint to the stack
- Lewis Family Collection

Run the blower with full head of steam opening and closing fire box door. Uneven draft will blow loose material out of the flues.

Painting the Smokestack

To paint front end stack: Brush surface with wire brush. Great care should be taken as the aluminum paint easily spatters on surfaces not to be painted. Don't paint when it is windy.

Cog Pride in Banking

The care of fire procedures has kept the writer's record intact of never losing a fire.

If an engine needs wood in the morning to help a coal fire or build a new fire, it means a couple days of other trainmen "puttin' the wood to you."

It also reflects on your ability to judge coal, amount of coal, the position of the fire door, temperature of the fire, the wind direction and shift of direction before morning, technique of banking, and breaking out a poor bank to have a good fire in the morning.

Banking Fire and Securing Engine

1. Wind brake and drop ratchet (engine should be on brake) so ratchet can be lifted to move engine back.

2. Bank fire by placing about one to two bushels of coal on one side

3. Run injectors until they break due to the boiler being filled with water. (Caution: be sure engine has arrived at its track position for the night before filling boiler full and decreasing steam pressure below 100 lbs.)

4. Close all steam and water valves

5. Leave fire door open, braced with the shaker bar and drop damper. Some engines have no dampers. (There will be times due to coal or other conditions when the fire door will be left in other positions. Example: fine coal and light fire leave on latch)

6. Close all windows and remove any material near the door which might be a fire hazard

7. Check windows and doors in car

Building Fire from Bank

1. Clean grates; the burned out side

2. Roll and break bank to cover the grates

3. Gradually spread coal over the fire

4. A good night bank – in the morning the boiler pressure should be 15-30 pounds pressure to run the blower

Bank at The Summit

1. Extra care with fire and engine when train staying overnight at the summit

2. Extra water – tender filled to least ⅔ and extra coal taken at Gulf tanks

3. The train should be set about where the front end of double header – on the level – set too far over, more steam will be required to back off the summit. Engine check, lubricator, etc.

4. Brakeman assists passengers with bags, etc. and cleans car

5. Boiler pressure should be about forty pounds when injector breaks

6. All brakes, car and engine are set

7. Engineer should have an alarm clock or have the Summit House night watchman wake him to check the engine and car at least once during the night.

8. A careful bank should not blow off engine during the night. Hotel guests won't be happy overnighters' with a series of steam wake-up blow-offs.

9. The train leaves to meet the 8:00 train at Waumbek.

10. Steam pressure of about 80 lbs. will back and pull car to where a single section stops to load passengers

11. Load passengers

12. Often a bank will not need to be totally spread out to maintain 100 lbs. pressure on the way down.

Care of Fire: On the Way Up

Coal should be spread on fire hot spots in small amounts, black smoke 'ya' hit the hot spot. Grey smoke 'ya' building a bank, or a hole in the fire. The fire should be shaken gently at Waumbek, Halfway House and Skyline Platform. The ash pan should be checked at Waumbek, Skyline Platform and the Summit. If the ash in the pan is close to the grates, some ashes should be hoed out using the poker. Caution: ashes removed from ash pan must be watered down to prevent fire.

The fire should be hooked only when necessary and the poker worked from the flue sheet to fire door. The fire should be shaken before hooking or dead ash may be mixed in the fire causing clinkers.

The fire door should be opened only when necessary. The cold air rushing in the fire door will cause cooling and the loss of steam pressure.



Do not allow the boiler to blow off, this wastes water and fuel. The side stack should be adjusted so that the steam pressure remains near the blow off point. The fireman can control steam pressure by leaving door on latch or open at times like when the injector is being primed. It is better to have fire door opened once in a

while to control steam pressure than opening and closing the side stack. Opening and closing the side stack decreases and increases draft thus holes and banks in the fire may be created.

The grates are kept cool by the cool air coming in through the ash pan and up through the fire.

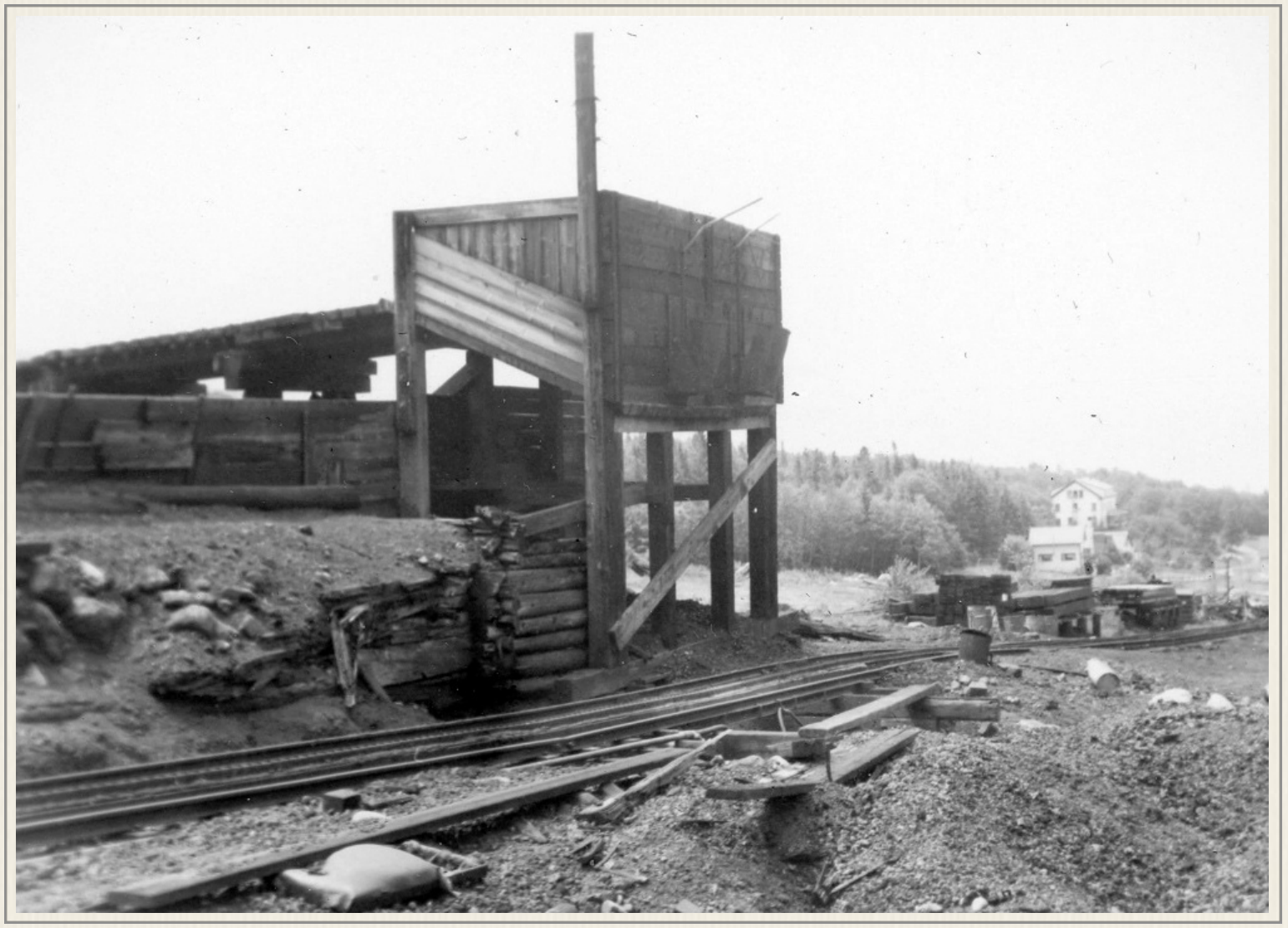
When the ash builds up to the grates and fire is below and through the grates, the grates melt and burn. Holes in the grates allow fire to drop to the ash pan if the engine is run. Fire in the ash pan could cause stress on the boiler's mud ring seams.

If a hole is burned in the grates and a fire is required, a thin flat rock may be found beside the tracks to put over the hole in the grates.

The fire door has a baffle plate with holes. The engine should not be run without it. The baffle plate protects the seams around the fire door from direct flames, allows cool air to come through holes in door in around these seams of the boiler. If the baffle plate is not in place the seams around the opening could expand and contract; when the boiler cools the seams could leak.

Washing Ash Pans

The blower should be on when the ash pan is being washed otherwise water hitting hot coals could generate steam which might blow into the face. Also the draft keeps the fire "alive" in case water splashes up through the grates.



- Paul Forbes Collection

Ch. 4 - The Fire

The ratchet should always be down. Never crawl under an engine without ratchet down and brake on.

The ash pan should be washed thoroughly. Special care should be taken to see that the back corners are clean. After washing always check to be sure washed out ashes will not come in contact with the spur gears.

The coal bunker operators tend to cleaning the ash pit as needed. Daily cleaning is required on busy days.

Dumping Fire

If a fire should have to be dumped on the mountain due to low water in the boiler turn the blower on and throw water onto the fire, avoid hitting side sheet of the fire box and flue sheet. Step back, quickly turn your back as you close the fire door because steam is generated and can blow ashes and the fire into the cab.

If it is known or have reason to believe the ash pan is full, avoid use of the blower with the door closed. However, care must be taken when opening the fire door at all times, especially with no blower on and a wind blowing.

Filling Tender

WATER – Do not open the valve full. Pressure will flip hose out of filling hole; wave like an elephant trunk dousing everything within 15 to 20 feet at the Base.

COAL – Do not over fill tender. Trim coal so coal does not vibrate off. Tenders with cargo space under tender can transport material to and from the Summit House. Care should be taken in loading items and securing cargo door.

Important: Remember to load and unload cargo.



The No. 9's under-tender compartment for carrying cargo to and from the Summit
- Lewis Family Collection

The Inspirator/Injectors

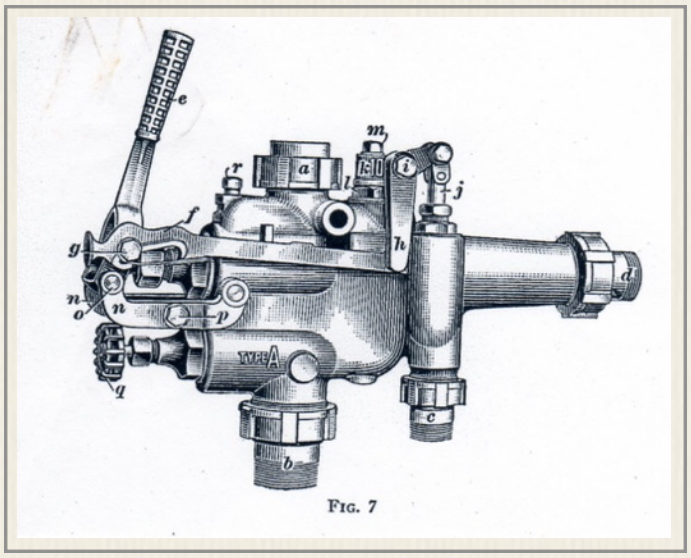
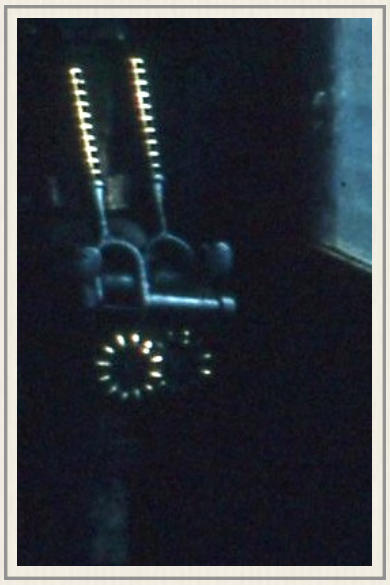
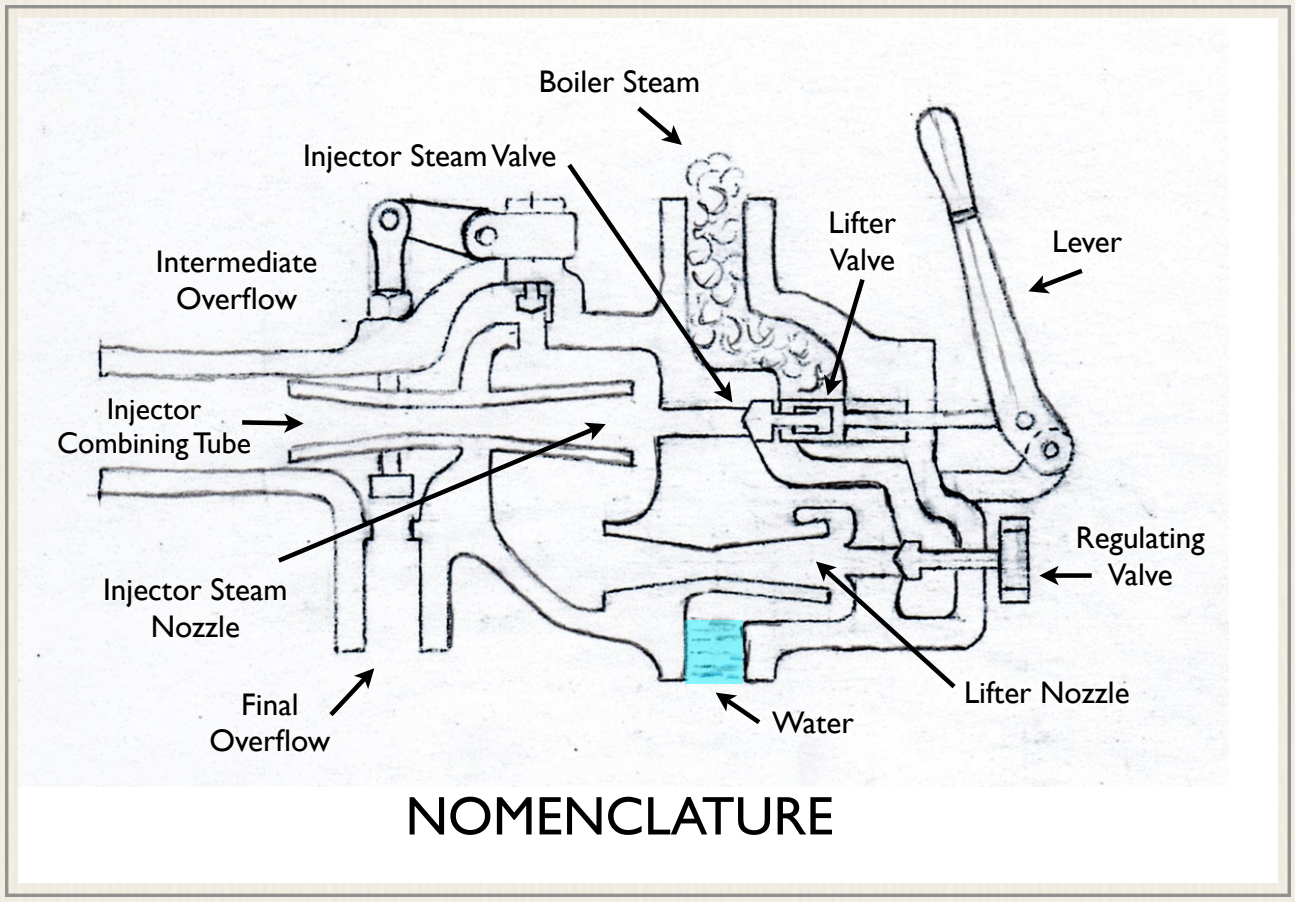


Fig. 7

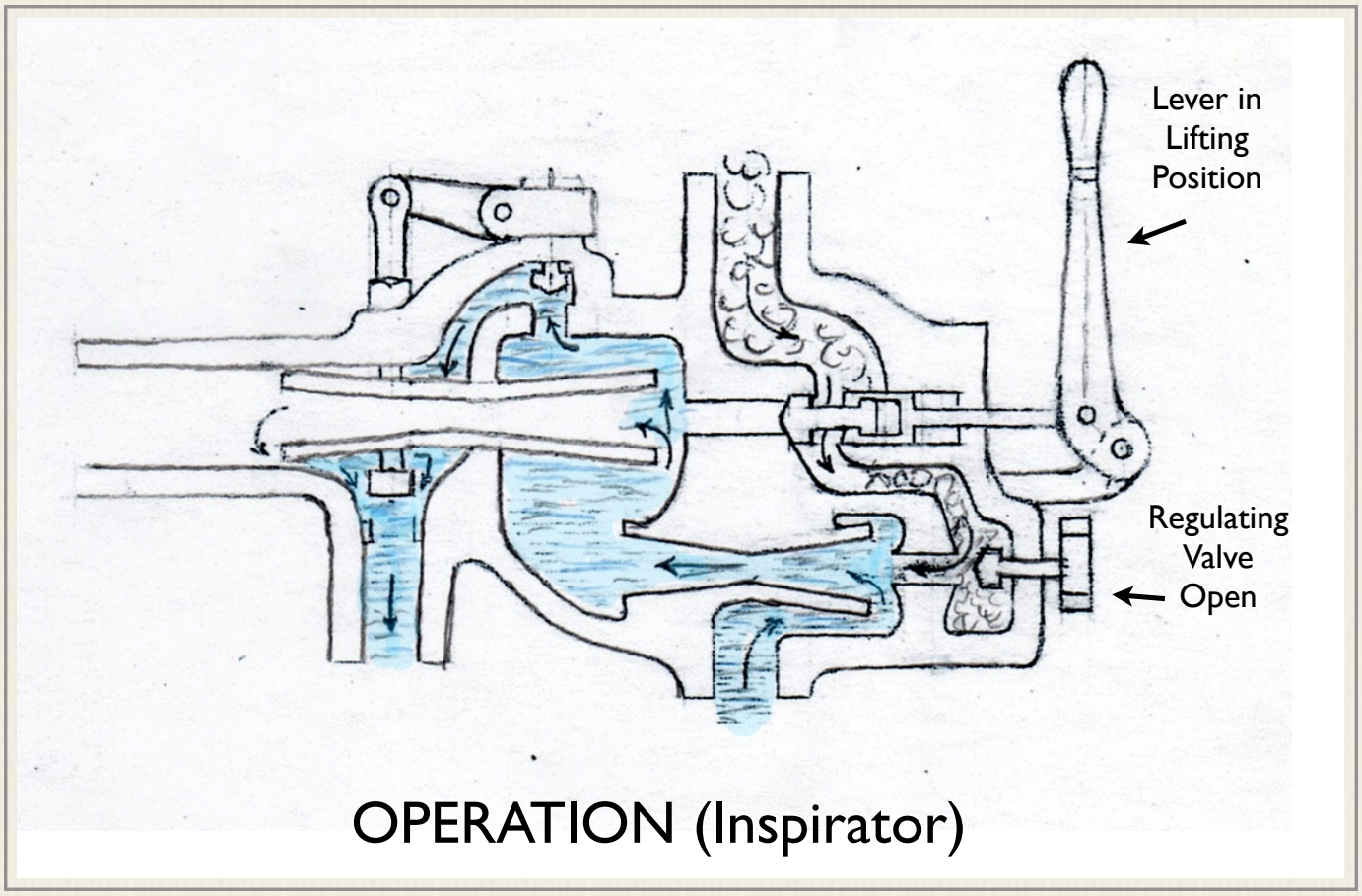


The inspirator/injector maintains the correct water level in the boiler. If the boiler is to be used the injector must be in working order.

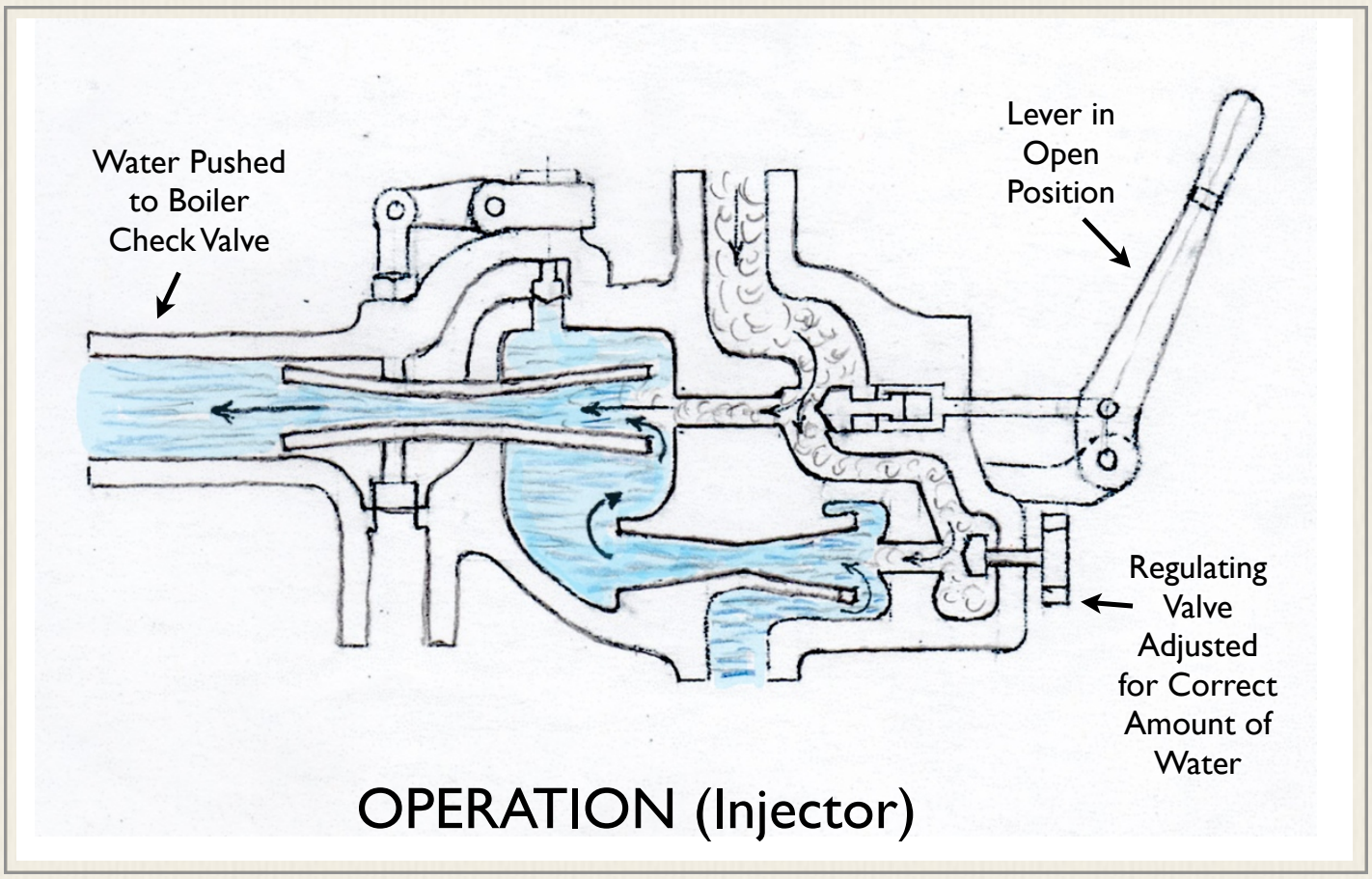
Cog locomotives have either single injectors *(above)*, one on each side of the boiler or a composite injector *(right)*, two injectors cast in a single housing side by side. The inspirator lifts water to the device. The injector part accelerates the water to a speed sufficient for the inertia of the water to force the check valve open and enter the boiler.



- Lewis Family Collection



Priming the injector *(above)* is accomplished by opening the steam valve located just below the injector handles. Pull the injector only slightly to lifting position; this begins the process of steam flowing through the nozzle, into the lifter tube, lessening the pressure on the water from the suction line. When the water starts to flow through the overflow valve, the injector is primed. The steam moves rapidly through the injector steam nozzle; expanding, cooling and condensing steam keeps the water flowing.



Now pull the handle back slowly, this allows more steam to enter the injector forcer nozzle. The velocity of steam moving through is sufficient to impact an inertia to the water which forces the boiler check valve open and feeds water into the boiler.

The high velocity of steam gives water kinetic energy. As you might throw a wooden ball at a pail of water, it would go below the surface and then bob back up to float. At the time of impact the wooden ball had enough kinetic energy to go below the surface due to its inertia. The check valve in the injector pipe to the boiler prevents the water from back flowing. If water does not have sufficient kinetic energy to overcome boiler pressure or if the boiler is full the injector breaks and the check valve closes.

The amount of water flowing into the boiler may be adjusted with the regulating valve located below the handle. An engineer might help his fireman maintain steam pressure by reducing the amount of cold water being injected into the boiler.

The injector can be used to keep the water from freezing in the suction line and tender by pulling the heater rod back to the second position stop and pulling the handle back to the open position and adjust the flow up steam.

The flow of steam back into the tender should keep the water above freezing. Care should be taken especially when tender is near empty to not heat the water to a temperature that affects the operation of the injector.

A hot injector will not prime. The injector can overheat when several unsuccessful tries at priming are done.

The injector may be cooled by pouring cold water over the injector.

Injectors often break. The cause may be a leak in the tender suction line or a problem inside the injector.

Note: Injector won't work – always check first to be sure tender has water.

The injector must be checked constantly to be sure it is delivering water to the boiler.

The engineer can check injector operation by touching the lift line to be sure it's cold and looking out to be sure water is not escaping through the overflow valve.

On most days condensation will form on the lift line when the injector is working.

Water Levels

The importance of correct water levels cannot be over emphasized. Too much water in the boiler cuts down the efficiency of the engine as water will cut the volume of ready steam and water taken into the steam lines to the cylinders causes the engine to surge. If the engine surges, open cylinder cocks, move slowly to clear cylinders. Water is not compressible – water in front of a piston could blow the cylinder head – pounding would be heard. Low water will cause damage to the boiler and could cause injury to the crew.

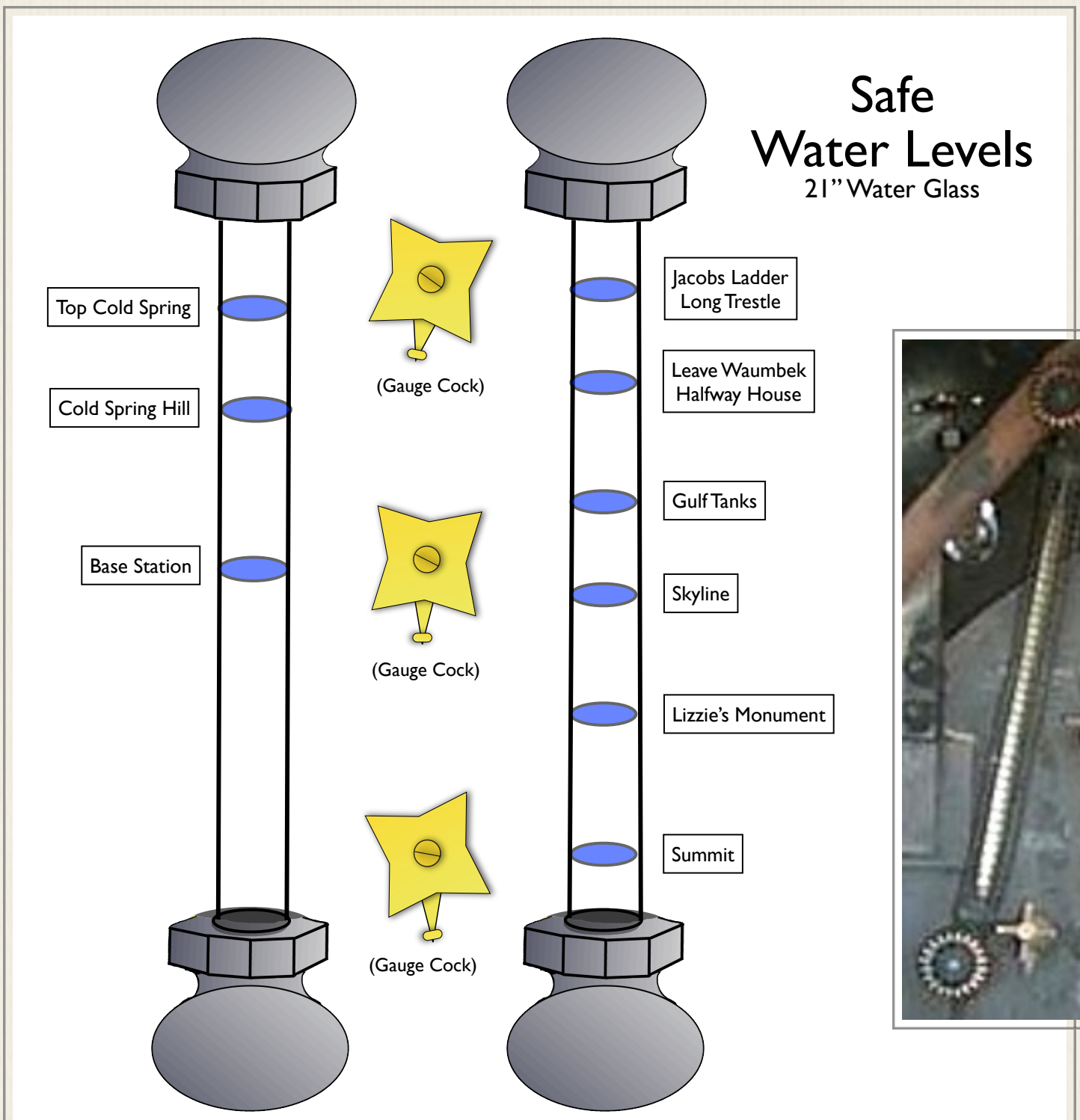


Diagram 1

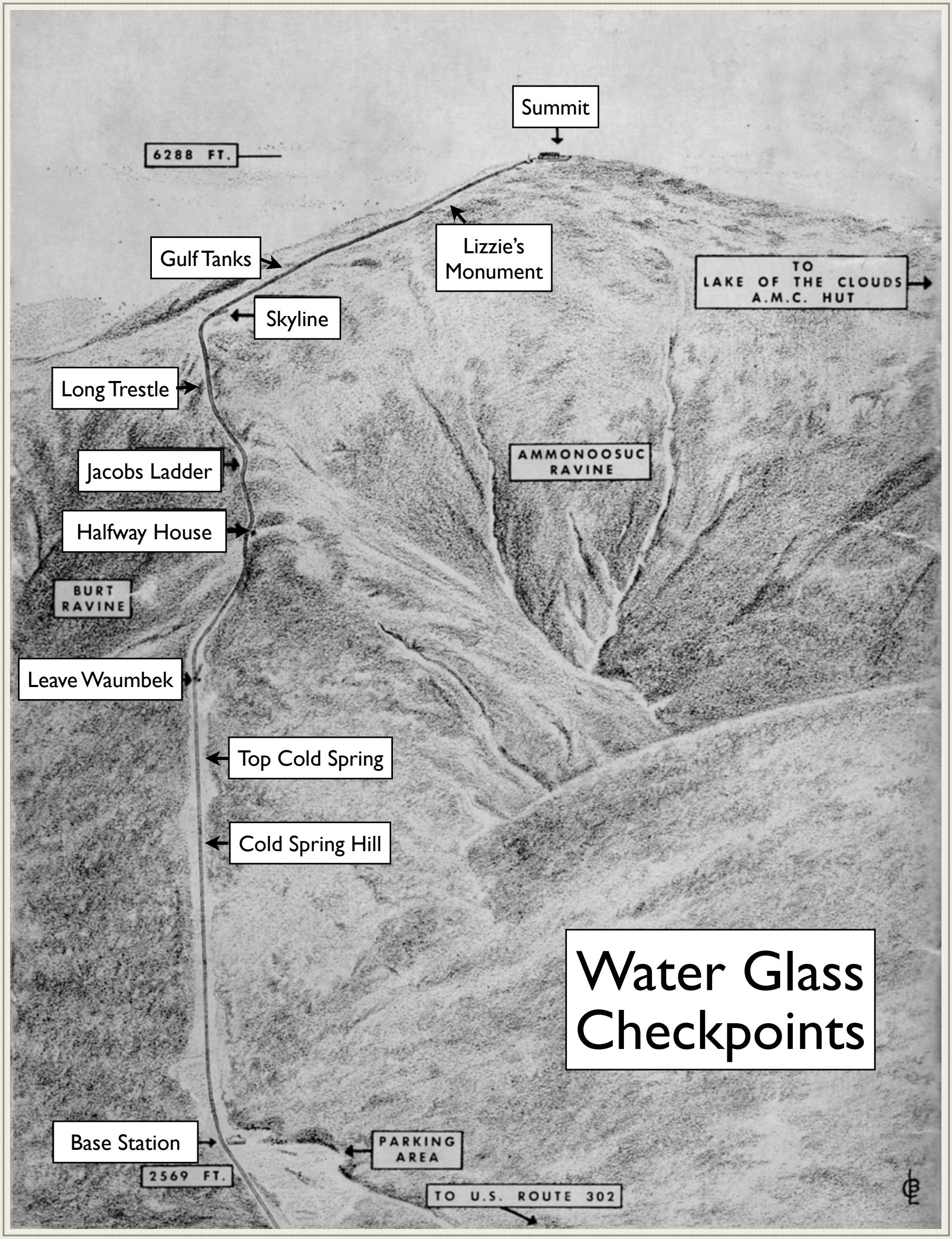

Summit
6288 FT.
Gulf Tanks
Lizzie's Monument
TO LAKE OF THE CLOUDS A.M.C. HUT
Skyline
Long Trestle
Jacobs Ladder
AMMONOOSUC RAVINE
Halfway House
BURT RAVINE
Leave Waumbek
Top Cold Spring
Cold Spring Hill
Water Glass Checkpoints
Base Station
PARKING AREA
2569 FT.
TO U.S. ROUTE 302

Diagram 2

The incline of the Cog Railway requires the train crew to have the knowledge of where the water level is and where it will be when the angle of the incline changes.

A rule of thumb for water is two gauges on the "flats" – three gauges on the "hills." Under all conditions water takes precedence over steam pressure and steam. If the water levels fall below the indicated levels on diagram 2, the train should be stopped and the water level returned to its proper height. If it is not possible to maintain a safe water level report the difficulty to the shop immediately. Dumping the fire instructions are given under care of the fire.

Note: There are slight water level variations on engines.

Running low on water can disable the engine causing more shop work, one less engine to run and costs money.

Low water exposes flues. Flues not covered with water on the steep incline expand in the front flue sheet. When water again covers the flues, the flues contract, allowing steam to escape. This will require the flues to be rolled. Rolling the flue is done in the shop on a cold boiler. An expander is placed in the flue end in the flue sheet. Rotated by air drill to expand the flue to be steam tight.

Under certain circumstances, i.e. engine must go back up the mountain, the front end is opened with boiler still hot and flues are rolled by hand.

A leaking flue may be blocked off, plugged on both ends; cutting heating source but engine can run.

Note: An engine coming down passing Mike's engine on the switch one day at Waumbek prompted Mike to say, "Jitney, see the white steam coming out the stack, they ran low on water."

Cross Head Bearing

The cross head bearing is a two piece brass bearing which is kept tight by a tapered key.

Checking and Adjusting Cross Head Brass

Take the shaker bar, place in engine wheel under side rod, the side rod should not have vertical play on the cross head journal.

To tighten: This is something referred to as "taking up" lost motion

1. Loosen set screws on tapered key
2. Tap key down until the side rod's vertical play indicates the bearing is snug
3. Tighten set screws

If the rod is still loose and the key has no take-up because the two pieces come together, remove and file the surfaces that come together. This will allow the key to "snug" the bearing to reduce the size. Place the two pieces of the bearing - grease hole up back on journal in strap. Bolt and install key and "snug-up."

Worn brass and loose keys allow the rod to pound and damage the bearing and cause unnecessary stress on other working parts of the engine. It could increase the travel enough so the cylinder head may be damaged by the piston.

If a key is lost enroute and no other key is available, drive a piece of sturdy wood into the key way and tighten set screws. Replace this wood with a proper key as soon as possible.

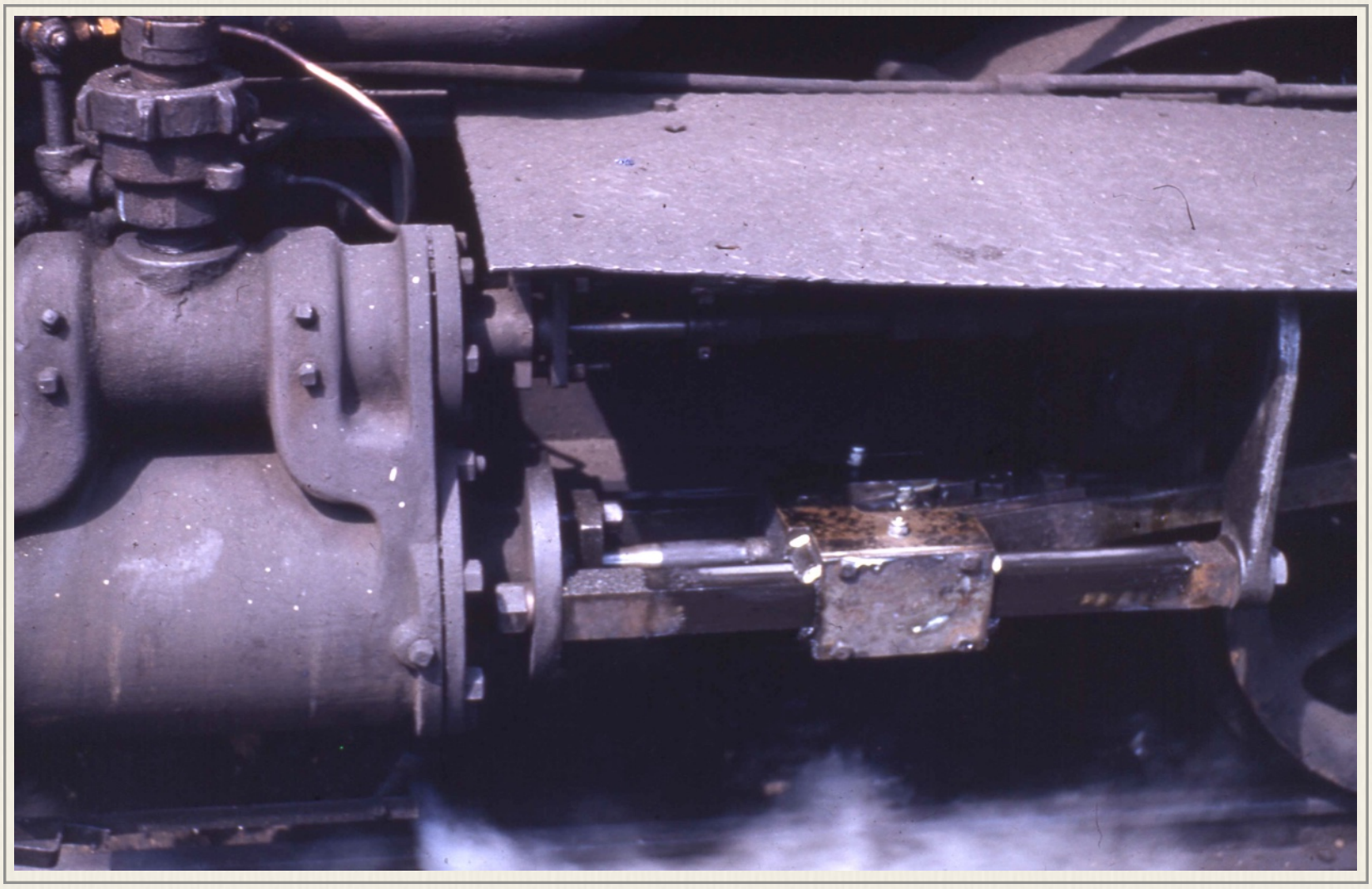
Don't forget there are one inch tapered keys and one-half inch tapered keys; be sure a replacement is the correct taper.

Mike says: "The key to lost keys is loose checking."

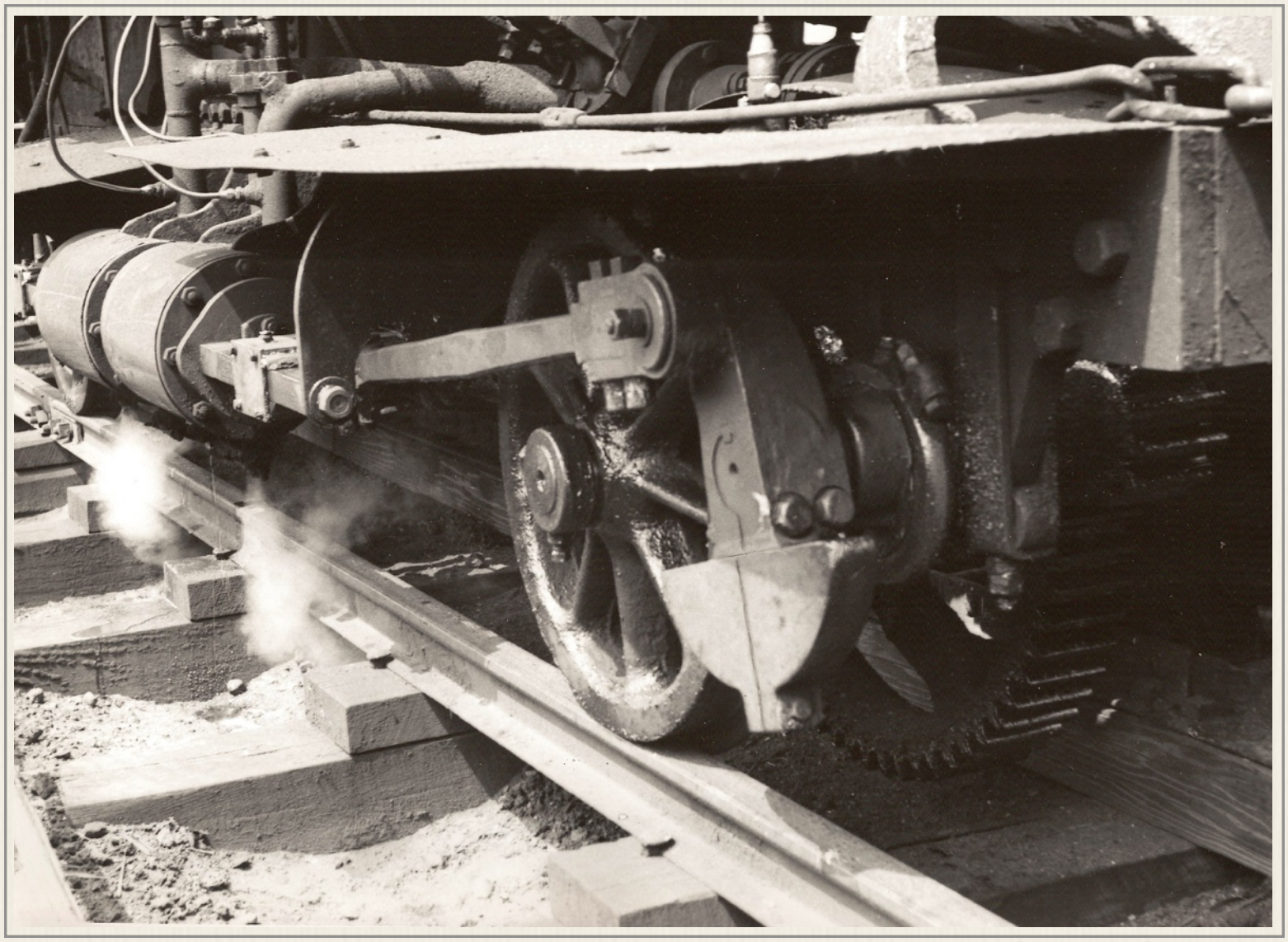
Bump Marks

The points at which the piston hits the cylinder heads are marked on the guides beside the gib plate. These marks are known as the bump marks.

These bump marks are used as reference points to shim the cross head brass to be sure the piston travel is center of the cylinder. The usual clearance between the piston and cylinder head is about one-half inch. If at anytime a pound is heard in the cylinder which gives any suggestion that the piston is bumping the head, report this at once and a check of the cylinder should be made for loose nut. Shims of various thickness are placed on the ends of cross head brass changes the travel of the piston in the cylinder.



Remember shimming the cross head bearings can change the travel, check with the master mechanic when you have a problem with these bearings. Piston valve *(above)* - D-valve *(below)*



How to Check Engine Valves

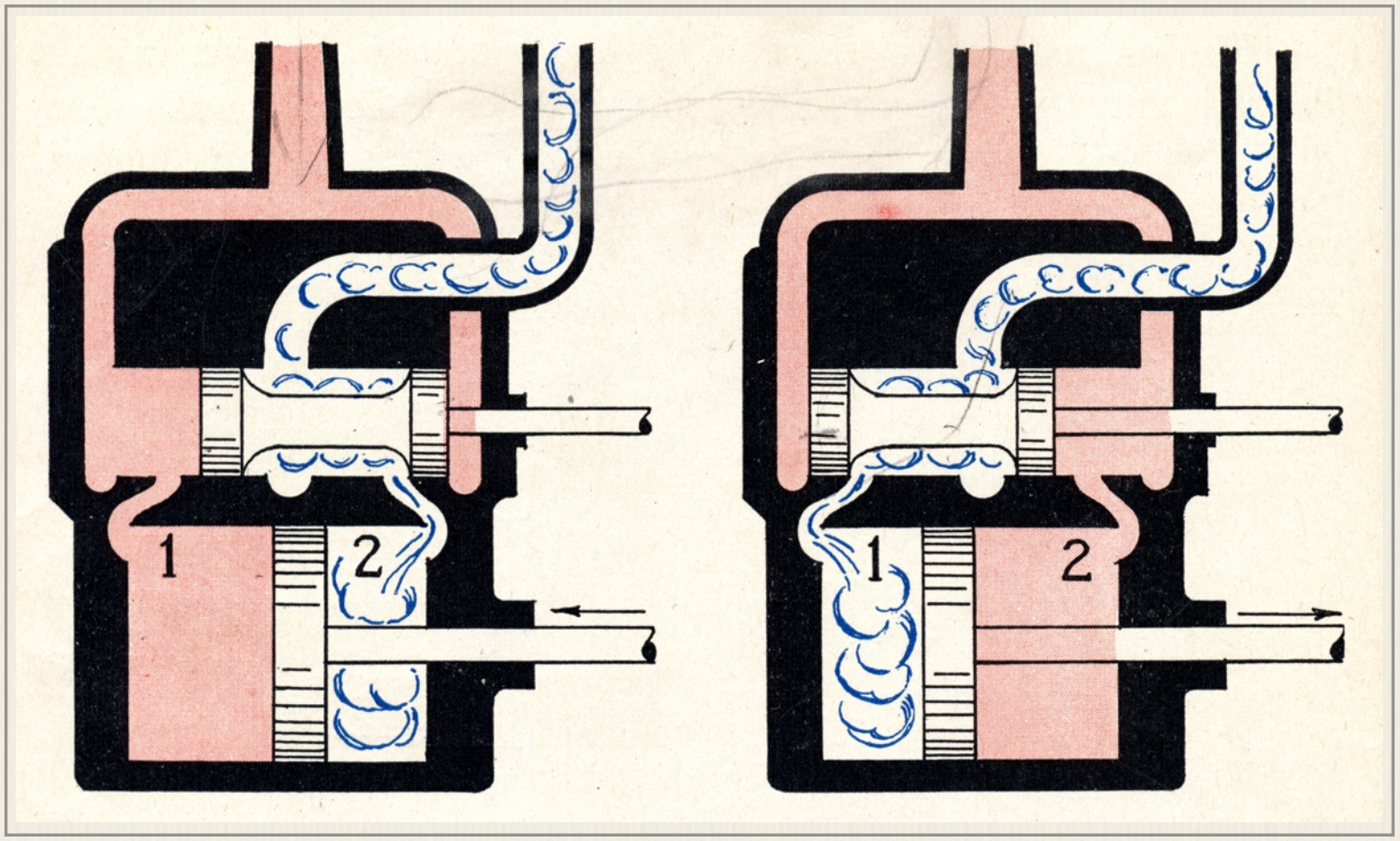
The function of the valves on a steam engine is to open and close the steam ports to direct steam into the cylinders to push the pistons back and forth and open exhaust ports to allow the used steam to escape. These valves must be set to emit and exhaust steam with correct reference to the position of the piston. A multi-cylinder locomotive must have cylinder valves synchronized.

Two types of valves are used on the Cog Railway; piston valves and D-valves.

In 1949 the No. 6 *Great Gulf* was the first Cog locomotive converted to piston valves and dome steam.

Dome steam was piped directly to new 9" cylinders down over the barrel of the boiler.

The direct steam from the dome was drier, and by increasing the pistons diameter from 8" to 9" made the No. 6 the most efficient engine on the mountain.



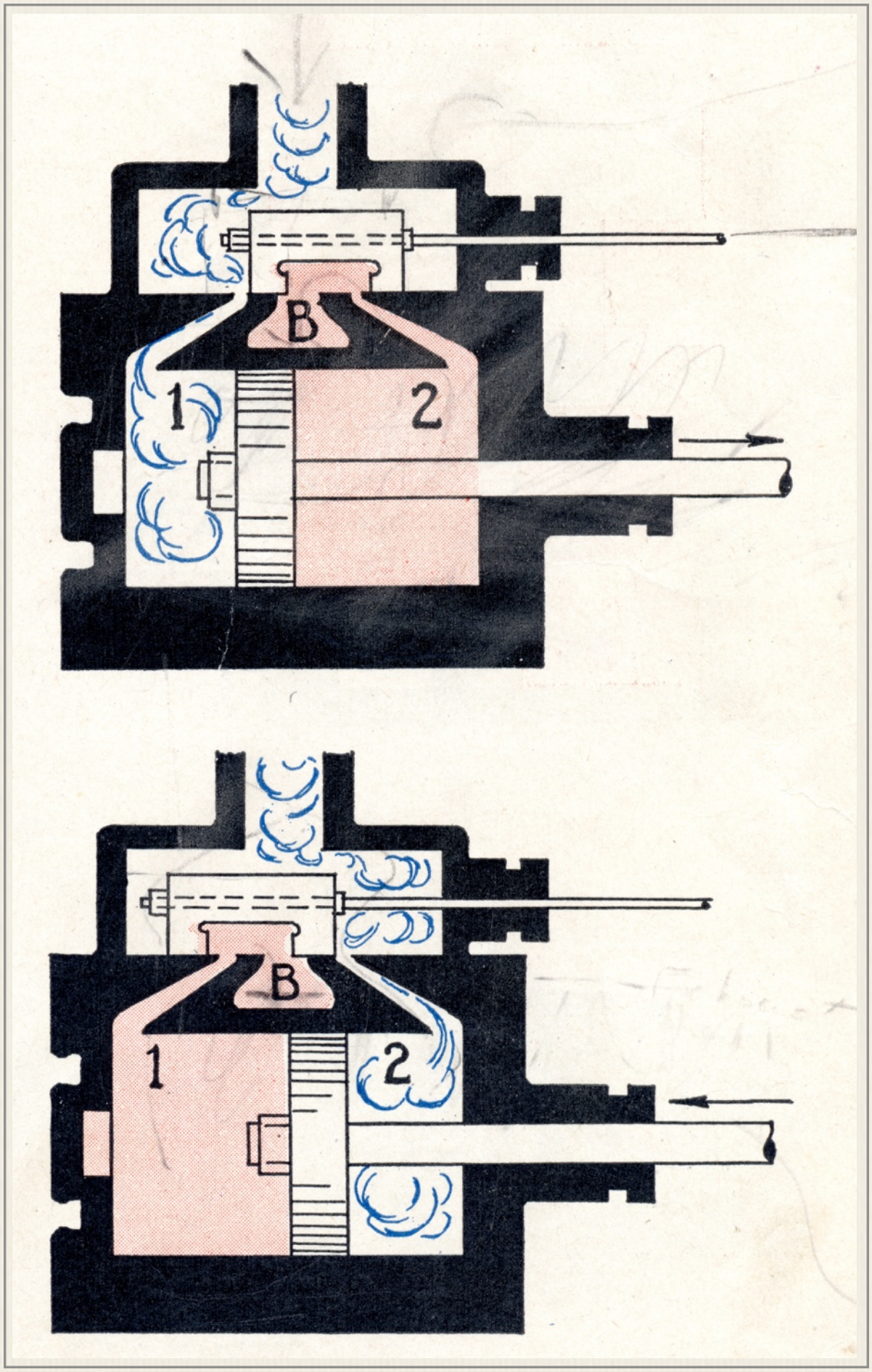
Piston valve diagram directing dome steam (blue) into and exhaust (pink) out of cylinders
- Lewis Family Collection

Note: The No. 6's approximate running time to the Summit was about 50 minutes. She could go faster, but these locomotives geared 5 ⅓ to 1 on rack and pinion principle, under normal operation, should run about 4 miles an hour. After running an engine for a length of time you will

feel and hear when the engine is running in its "comfort zone." Running too fast or too slow puts extra strain on the frame and running gear.

Wear on piston valve rings resulted in poor compression; "Becomes a little slippery on the way down." Rings had to be replaced. D-valves could be adjusted.

Note: Small piston valves were later fitted into the D-valve steam chest on the 8" pistons.



D-valve operating diagram
- Lewis Family Collection

Ch. 7 - Engine Valves

The Cog engines have two cylinders on one side set together and on a quarter turn with the other two cylinders on the opposite side of the engine. Therefore, their action is similar to a horse that is a good pacer; each side working together. If a valve should have its setting changed, the engine reacts as the horse when it breaks stride and a rough or swaying motion is produced.

Malfunction of valves due to slipped cam (eccentric), linkage change or problem with the valve itself will cause the engine to buck, ride rough or it may stop completely. The engineer, to avoid long delays and inconvenience, should be able to check immediately and determine if the mechanical difficulty is a valve and which of the four it is.

When the valves are set in the shop a line is painted across the cam and counter balance. The counter balance is keyed into the crank shaft and cannot slip or change position.

The cam however must be moved when the valves are set therefore the cam is secured to the crankshaft by set screws and with unusual strain or loosening of the set screws the cam may slip. If the cam slips the valve setting is changed.

If the cam should slip the painted lines would indicate the slipped cam and a quick means of resetting.

Note: Be sure the half-moons are free on the cam and both set screw loose otherwise the cam will not move easily. (Parts are stamped A-A, X-X, etc.)

When the mechanical difficulty is in the linkage or in the valve itself the painted cam marks will be in line. If an inspection of the linkage shows no problem, give the engine a little forward steam and check the cylinder cocks. The two cylinders on one side should exhaust about the same volume of steam out the two adjoining cylinder cocks or the two extreme cylinder cocks. The side that does not have the steam coming out of the cylinders as mentioned refer to the other side and you will be able to tell which valve is not functioning.

After locating the valve, remove the valve head or cover and investigate.

If a cam should slip and there are not painted lines to reset the valve, give the engine forward steam and turn the cam to the point where the steam exhausted from the cylinder cocks is like the pattern described above.

To Blank Off a Cylinder

1. Disconnect and remove the cam strap

2. Give her a little forward steam and move the valve very carefully to a point where no steam comes out of the cylinder cocks.

3. Tighten one of the packing nuts to hold the valve stem from moving (be careful with the "big wrench" the packing glands are cast iron). The packing gland will be at an angle snubbing the stem.

4. The inside rod may be left connected if no problem exists in the cylinder. If the piston and side rod are not free to operate, the side rod must be taken off and the piston moved to either end of the cylinder and a board braced and tied between the crosshead and the guide bracket. This will keep the piston from moving if the valve should move. (Always carry correct length of board and haywire in engine.)

Operating a Locomotive on Three Cylinders

1. The locomotive will generally not move forward (except on some flatter sections of track, it may move forward enough to pick-up the ratchet.)

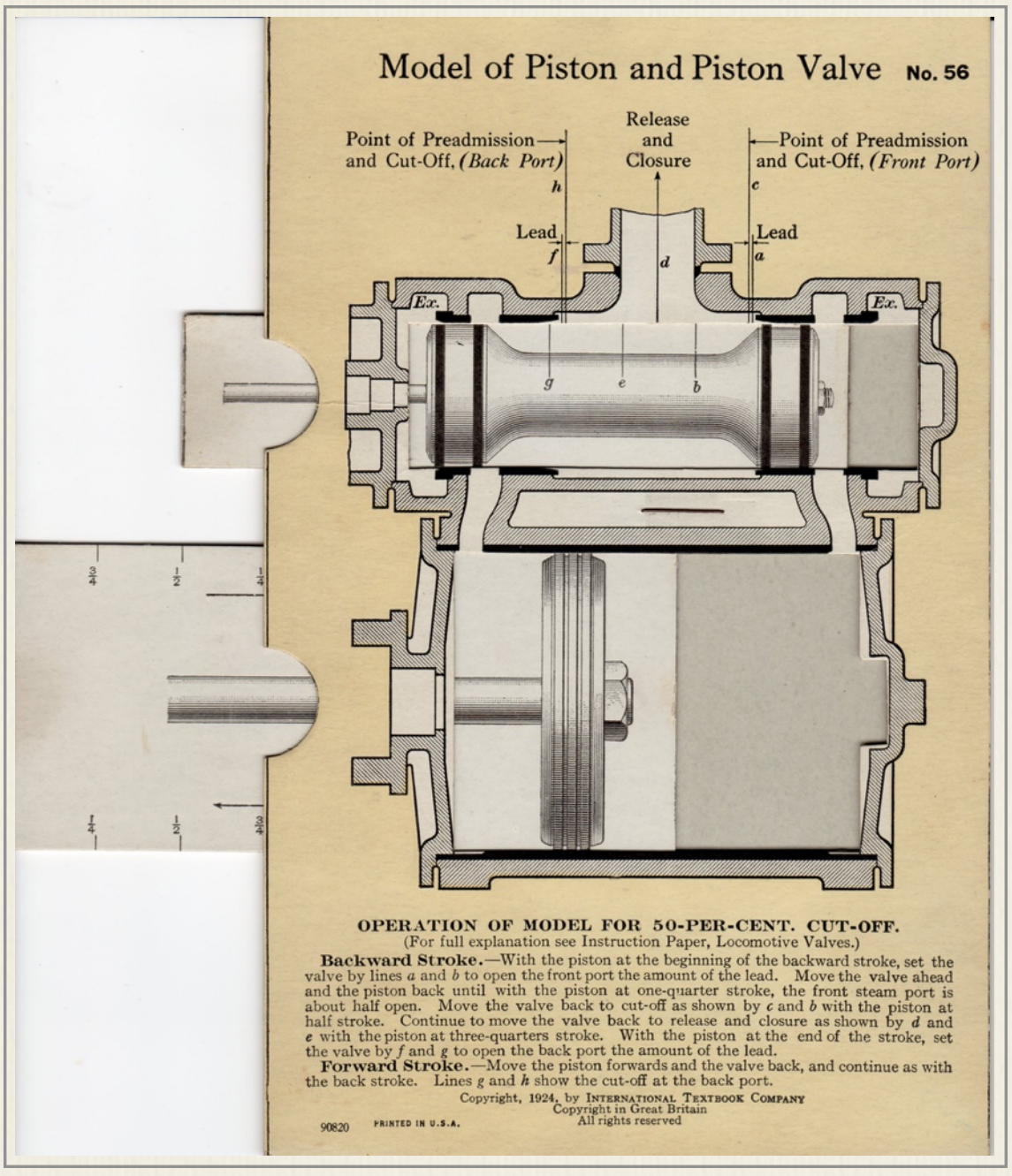
2. The locomotive will ride a little rough on three cylinder compression during the descent

3. Use only the brake to stop (forward steam could be used in an emergency)

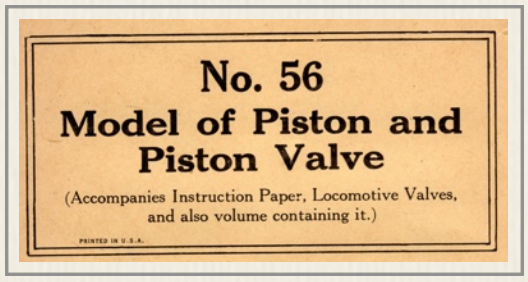
4. The brakeman keeps the car from pushing the engine

5. Other running procedures are the same as on usual descent

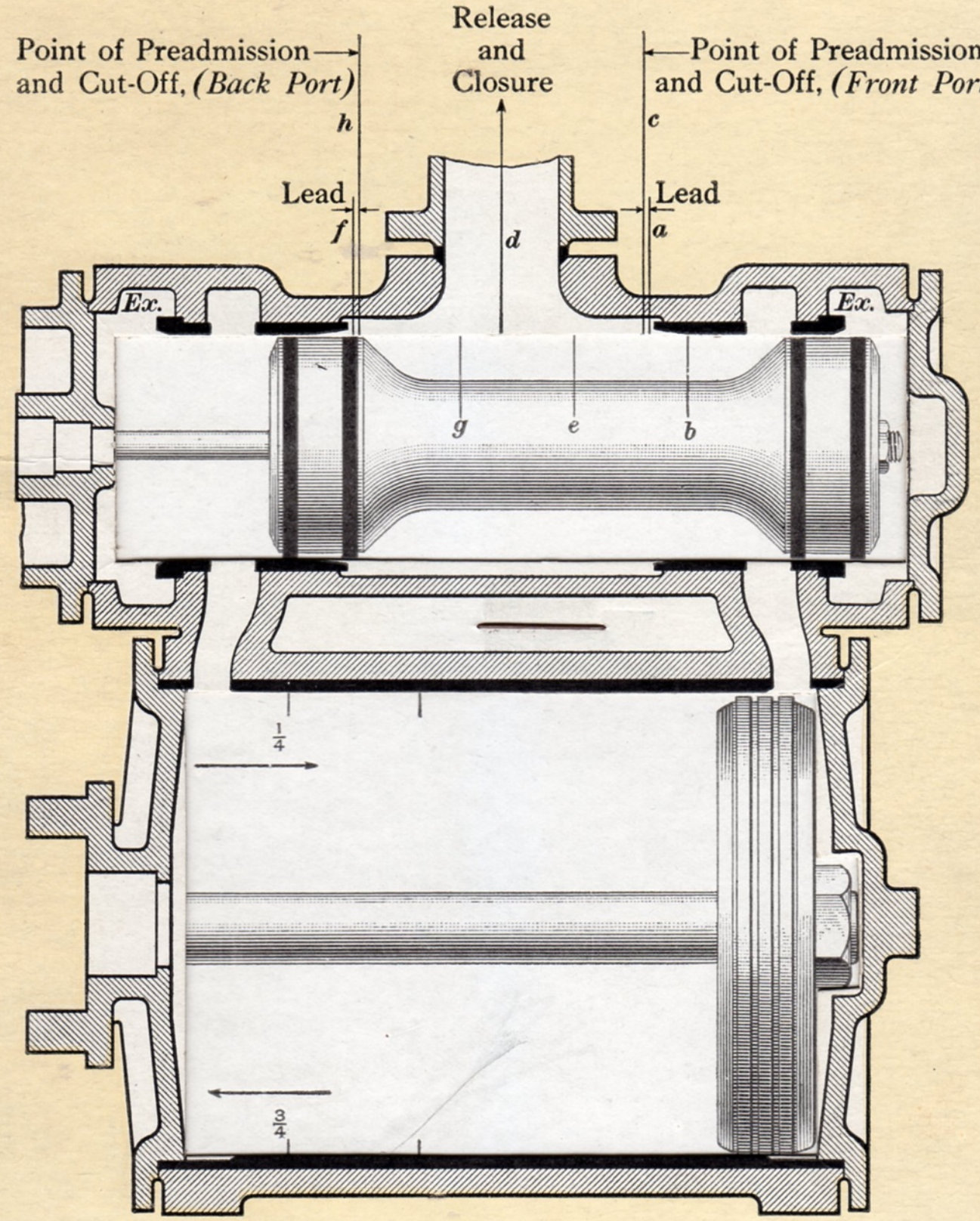
Note: While Jitney learned this procedure from Mike Boyce, he never had to bring an engine down on three cylinders during his eighteen summers at the railroad.



Training card model of Piston and Piston Valve with tabs (left) to allow students to move cylinder and valve back & forth to better understand their relationship (1924)
-Lewis Family Collection



Model of Piston and Piston Valve No. 56



OPERATION OF MODEL FOR 50-PER-CENT. CUT-OFF.

(For full explanation see Instruction Paper, Locomotive Valves.)

Backward Stroke.—With the piston at the beginning of the backward stroke, set the valve by lines *a* and *b* to open the front port the amount of the lead. Move the valve ahead and the piston back until with the piston at one-quarter stroke, the front steam port is about half open. Move the valve back to cut-off as shown by *c* and *b* with the piston at half stroke. Continue to move the valve back to release and closure as shown by *d* and *e* with the piston at three-quarters stroke. With the piston at the end of the stroke, set the valve by *f* and *g* to open the back port the amount of the lead.

Forward Stroke.—Move the piston forwards and the valve back, and continue as with the back stroke. Lines *g* and *h* show the cut-off at the back port.

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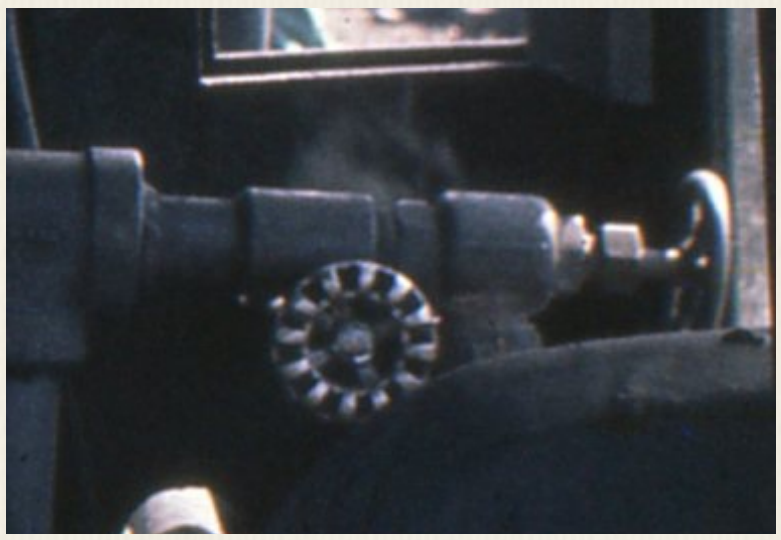
Packing



- Lewis Family Collection

Graphite impregnated fiber (packing) is used to make a steam seal around moving parts, i.e. - hand valve stems, piston and valve rods. When packing nuts on valve stems or packing glands on piston and valve rods are tightened and do not create a steam seal the packing has to be replaced.

Pictured clockwise starting upper left is roll of string packing, two circular pieces of piston rod packing, a brass piston rod packing gland, and an eight inch long wrench that fit the packing gland nuts of the No. 6 *Great Gulf.* Jitney found the pitted wrench amongst the cinders alongside the track, drilled a hole to hang it in the cab and lightly filed the grasping area of the wrench. The railway was running cast iron packing glands when Jitney arrived in 1950. Paul Philbrick found the brass gland pictured and a brass D-valve during a shop clean-up in the 60s, and gave Jitney the brass parts for his collection.



- Kent Family Collection

Hand Valves

All hand valve packing should be checked periodically and appropriate string packing used when necessary. String packing replacement procedure is as follows:

1. Unscrew and slide lock nut back on valve stem

2. Remove old packing (old packing will indicate type and length of new string packing needed.)

3. Wind string packing around valve stem

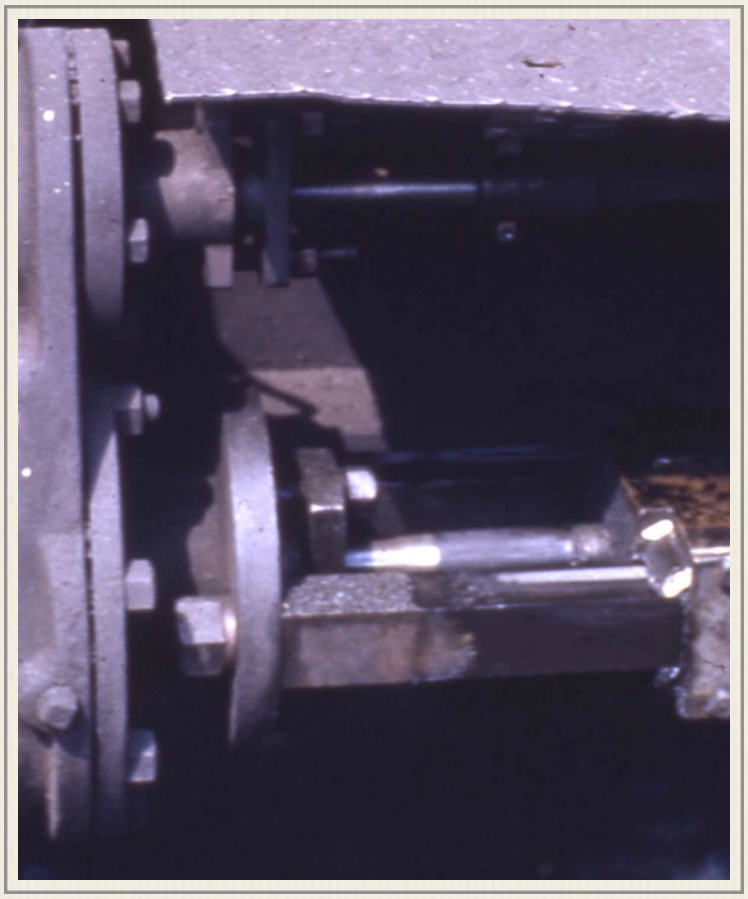
4. Slide lock nut on stem to push the wound packing into place

5. Tighten lock nut snugly against packing

Note: A hand valve should turn easily but not vibrate and turn by itself. If a hand valve is "tough to turn," check stem lock nut and packing.

Piston and Valve Stem Rods

Piston packing glands must be checked at each stop during operation. When packing nuts must be kept usually tight to keep steam from leaking, all packing should be replaced:



1. Move engine so cross heads are about three fifths of the travel distance from the cylinder

2. Remove nuts and slide packing gland to cross-head

3. Wind brake and put ratchet down

4. Apply steam cautiously until packing is blown free – pliers and wire will be useful in removing stubborn pieces

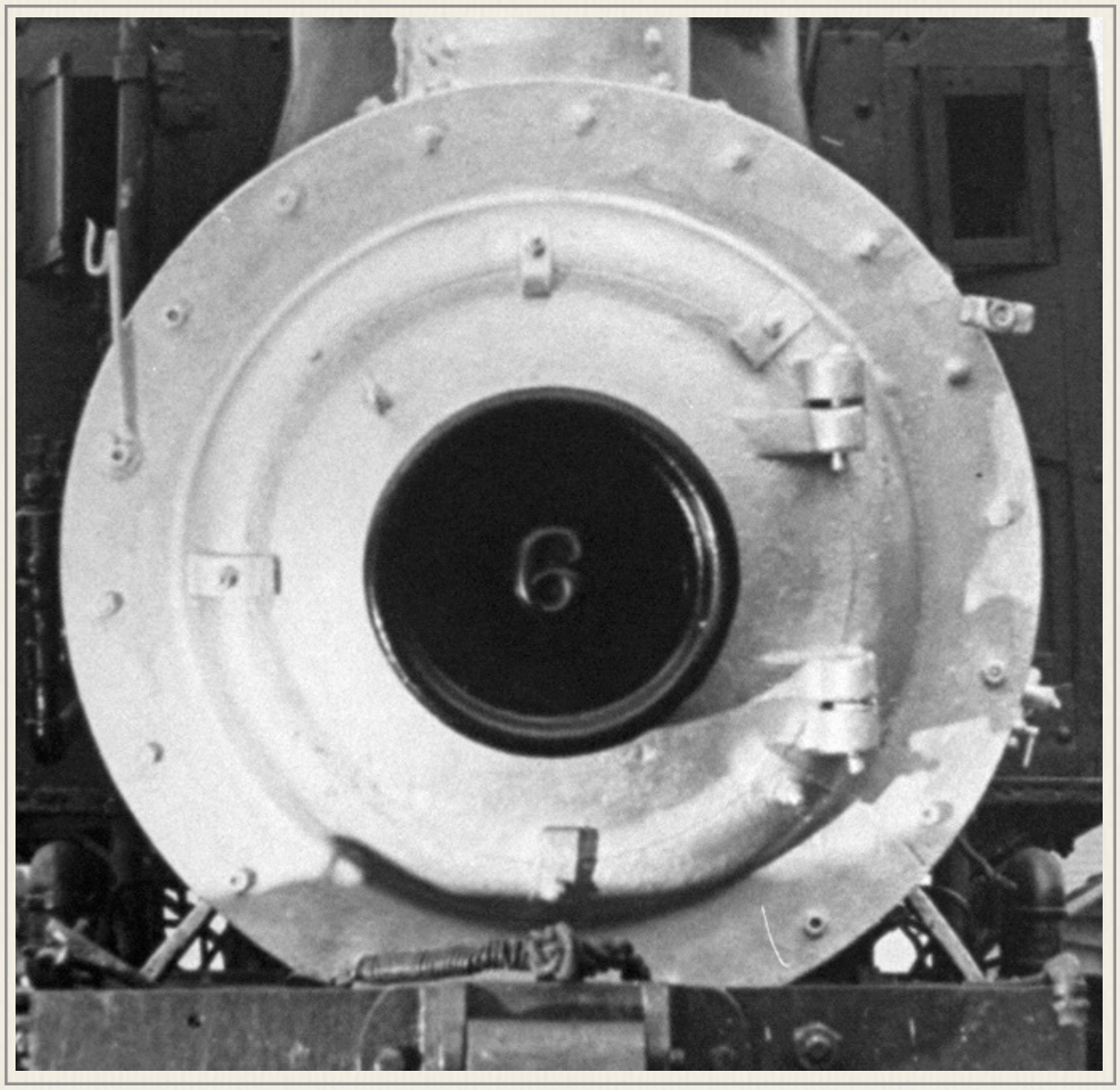
5. Five circular pieces of packing should be put in place. (Circles have a cut so they may slip around the piston rod.) Use valve oil to lubricate the rod and use the packing gland to gently tap five (5) pieces into place - one piece at a time - stagger the joints on each piece to prevent a channel for steam to leak through

6. Slide packing gland into place. Return nuts and snuggly tighten gland into place. Packing should be added to keep the adjustment space at least one inch. The gland should be checked at every stop. Nuts should be tightened a half turn or so to stop steam "whispers."

Notes: Running with a lubricator that is not working will result in colored piston rods indicating burned packing and it must be replaced.

Old packing removed will indicate type of packing and amount needed to replace.

Valve rod packing is not under the same pressures as piston rod packing thus replacement is seldom required.



Smoke Box Door

When closed the hinged smokebox door is secured by a series of clamps with an airtight seal courtesy of a hand-made gasket.

1. Mix asbestos with oil to form a paste

2. Form the asbestos paste completely into the flange around the opening of the smokebox that the door closes into

3. Close the door and tighten the clamps

4. The heat from the smoke will dry the asbestos paste and form the seal

5. When smokebox is opened the next time to punch flues or adjust the bonnet, remove old asbestos - clean the groove and repeat asbestos paste procedure when smokebox work is complete

Later, engine smokeboxes and their doors were machined such that merely closing and clamping the doors closed would provide the necessary airtight seal without using the asbestos paste.

Oil Train



The Summit House is heated by oil.

A large oil holding tank is located at the Base below the coal bunker near the parking lot road. This allows it to be filled by gravity when truck deliveries arrive.

The oil car is lined up with the delivery hose that is piped down the mountain from the oil tank. This allows gravity filling to the oil car.

The oil train is sent as needed to fill the Summit House tank.

The train is dispatched early as to not interfere with the daily passenger train schedule.

At the Summit the oil car is positioned for gravity filling of the Summit House tank.

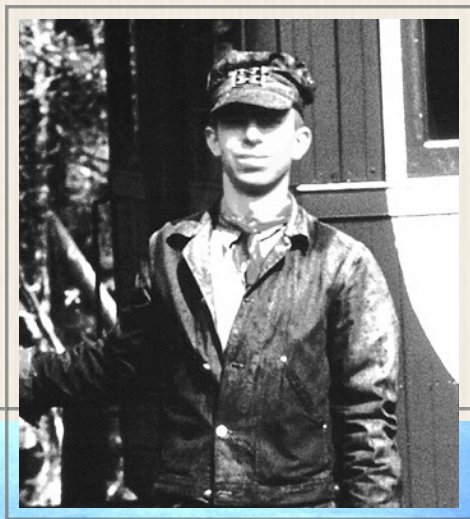
Note: The filling of both the oil car and Summit House tank is monitored continuously to prevent any spillage.



Oil delivery complete, the Deuce begins backing down off the summit.
- Kent Family Collection

1964 Oil Train Trip

60 years after the fact, Brakeman Brad Smith*(right)* posted pictures of his journey on an oil train's run up to the Summit on the Railway to the Moon! The Mt. Washington Cog RY Facebook page. That prompted memories from other Coggers who made similar trips.









Ch. 9 - Oil Train







Double Headers



The No. 6 taking on water at Base Station as passengers load
- Getty Images

Double Header Down To Base and Back Up

BACK SECTION (Second Section)

1. Engineer slowly brakes train to a stop; sets the engine brake for unloading. If the loading platform is crowded, the fireman walks ahead of the slow moving train until the train stops for unloading.

2. Fireman drops ratchet when engineer stops the train.

3. Engineer quickly checks engine; turns 3-way cocks; reports any mechanical problems to the Ticket Office to be relayed to the Shop.

4. Fireman takes on water.

5. When the brakeman signals all passengers are unloaded, the brakeman goes to the rear of the tender to walk train through switch, the fireman stops taking water and picks up the ratchet. The engineer climbs aboard and releases brake. Train proceeds below the coal bunker. **Engineer**

greases the engine, continues engine check and if a mechanical problem has been reported, Shop crew will be waiting for train.

6. **Fireman** cares for fire

7. **Brakeman** cleans car, turns seats, etc. The second section must not interfere or delay the front section.

FRONT SECTION

1. **Engineer** slowly brakes train to stop; sets engine brake.

2. **Brakeman** sets brakes on car and disconnects bell cord. (Steam heat hose, if connected, is disconnected by fireman)

3. **Engineer** quickly checks engine and turns 3-way cocks; reports any mechanical problem to Ticket Office.

4. **Fireman** picks up ratchet; releases brake. **Engineer** walks engine through switch and then reboards. **Brakeman** stays with car at platform - prepares it for return trip and begins loading.

5. From the switch to the coal bunker the fire is cleaned.

6. The engineer climbs into the tender and signals the fireman when tender is lined up with coal chute.

7. **Fireman** sets engine brakes; drops ratchet and washes ash pan.

8. **Engineer** takes on coal; returns to cab and when fireman signals - moves engine back to loading platform building steam pressure and 2-gauges of water.

9. **Fireman** walks engine to contact the car. Connects bell cord. Returns to cab to take water.

10. **Engineer** greases and applies cog grease.

11. When **Brakeman** signals the car is loaded and ready; train leaves

Note: VERY IMPORTANT: 2 gauges of water and 100 lbs. of steam upon reaching the Base

These procedures for return trip up mountain have been found most efficient when time is important. No crew member is idle.

Cogging By The Numbers

Specifications

Rack 4" spools 4" on center 1 ½" diameter	
Gauge of Road	4' 8"
Number of Wheels	4
Number of Cog Wheels Number of teeth on Cog Gear Number of teeth on Spur Gear Number of teeth on Pinion Gear Gear ratio	2 19 64 12 5 ⅓ to 1
Size of Wheels	24"
Number of Cylinders	4
Valves	D or piston
Weight of Engine	15 tons
Throw of the Eccentric	2 ¾"
Piston Size	8" and 9"
Stroke	12"
Main Shaft	5 ⅝" diameter
Crank Shaft (3 ¼" bearing - 3 ⅜" gear end)	3 ⅝" diameter
Piston Rod	1 5/16" diameter
Tubes or Flues (Length 69" No.)	1 ⅝" diameter
Grate Surface (34" x 38 ½")	4 grates
Guides	23 ½" length
Gibs or shoes	6 ⅛"
Tender Water Capacity Coal Capacity	650 gallons 1 ton
Water Glass	21"
Valve Setting	On-line

Signals

Crews used and developed non-verbal signals to pass information during train operations. No matter the variations, every crew used the universal signals to MOVE and STOP. Here are some examples:

MOVE - Brakeman facing forward on front passenger coach platform - right arm perpendicular to track moves up and down from one o'clock to five o'clock position as seen by engineer from cab. Signal may be given from other positions (alongside track/tender/switch, etc.) but must occur for engine to proceed

STOP - Brakeman facing forward on front passenger coach platform - right arm perpendicular to track moves forward and back at the three o'clock position as seen by engineer from cab. Signal may be given from other positions, and will result in immediate halting of train

LET PASSENGERS OFF - Engineer to brakeman - arm extended forward and is swept outward away from car as hand makes three up and down moves mimicking stair steps

PUT PASSENGERS ABOARD - Reverse of above - arm extended out and is swept forward towards the car as hand makes three up and down moves mimicking stair steps

GOING TO TAKE WATER - Fist to mouth with thumb extended to mouth as head tilts up to mimic drinking from water jug. Used by engineer on approach to water tank or stand-pipe to signal brakeman the train will be stopping to put water in the tender

TAKE SWITCH - Engineer to brakeman - hand forward then swings up and to the right to mimic switch as viewed from mainline

APPLY MORE BRAKES - Engineer to brakeman - arm up, palm facing up the mountain

RELEASE SOME BRAKE - Arm up, palm facing down mountain - hand beckons

GETTING UP STEAM PRESSURE - Arms at side bent up slightly at elbow with hands facing in are brought over head as if gathering and motion is repeated

TURN ON THE BLOWER - Purse lips and puff-up cheeks a' la Dizzy Gillespie

GOING TO CALL IN – TRACK PHONE - Fist with thumb and pinkie extended brought to ear to mimic telephone handset (Note: Still in use generally as signal to "call me" although handsets have been replaced by flat cellphones or earbuds)

HOT BOX - Pinch nose with thumb and forefinger to indicate the smell of a hot bearing has been detected

BANK ENGINE - Hands together to form pillow - tilt head to lay on hands

Mechanical Advantage



Boston & Maine Railroad machinist John Horne proudly told a *Boston Daily Globe* reporter about the "Joys of Cog Railroading" for a feature in the paper's December 23, 1906 edition. At that point, the 58-year old Yorkshire, England native had been working summers at the Mt. Washington Railway "for 32 years; the last 12 as superintendent." It included a deeply affectionate assessment of the locomotives.

"Our engines up there on the mountain," said Mr. Horne, "have a great deal of work to do, and they work hard; in fact, I have come to regard them all, I suppose, as a physician in regular practice regards his patients.

"They are so different from the ordinary machine that even the best and finest engineers - I mean those interested in mechanics - from all over the world, when they arrive at the base of Mt. Washington are attracted to the little, puffing engine that is to carry them upward.

"As to the power of these engines, let me give you an illustration. Take, for instance, a block of granite that, lying on the ground, weights 18 tons. Now undertake to lift it to the top of a building 3700 feet high in 70 minutes. If you succeed it would be called a great feat. We do that practically every trip up the mountain.

"On a rise of nearly 2000 feet to the mile a test has shown that the horse power transmitted to both cog wheels was 517.

"There are many things to discuss, but the Mt. Washington railway will ever possess a deep interest for me; not only from my associations with it, but as it was the road to first demonstrate the practicability of using steam on a cog railway to convey passengers to the tops of high mountains."





Engine Provenance

Those running the engines often sought to lay claim to a certain distinction for their machines. In 1958, engineer Gordon Chase wrote to L. Stewart Twombley in Watertown, MA to determine whether his No. 1 - *Mt. Washington* was also the "oldest" engine on the hill. This is Mr. Twombley's July 25th reply. It incorrectly locates the 1895 fire in Lyndonville rather than at the Base Station. It also differs from engine notes & repair logs found in Chapter 18 of this volume.

Dear Sir:

On looking through my records I have come up with the following regarding the age of the Mt. Washington Ry. Engines:

#1 "Mt. Washington" built by Manchester, N.H. Loco. Works in 1883. This engine was formerly first #7, damaged by the fire at the Lyndonville shops (editor's note: fire at Base, repairs in Lyndonville) *in 1895, rebuilt, and renumbered second #1.*

#2 "Ammonoosuc" was originally built by Walter Aiken of Franklin, N.H. in 1870 with two 10x16" cylinders and a vertical boiler. However, she was rebuilt in 1875 at Manchester with four 8x12" cylinders and a horizontal boiler. She also was damaged by the fire (ed note: ~~at Lyndonville~~) *in 1895 and rebuilt. Before the fire she was first #4. After the fire she was rebuilt as third #2. I noticed last Sunday she has "Manchester Loco. Works" on the front.*

#3 "Base Station" was built by Manchester in 1876 for the Green Mountain Ry. at Bar Harbor, Maine. Their #2. After the G.M. Ry. folded in 1891, the Mt. Wash Ry. bought the #2 and numbered her second #5. After the Mt. Wash Ry. first #3 was scrapped some 20 years ago, she became second #3.

#4 "Summit" was built by Manchester in 1875 for the Green Mountain Ry. as their #1. Presumably she was bought at the same time as the G.M. #2 and given the number 4 (second #4 on the Mt. W.)

#6 "Great Gulf" was built by Manchester in 1874 with a vertical boiler. She was rebuilt by Manchester in 1878 with a horizontal boiler.

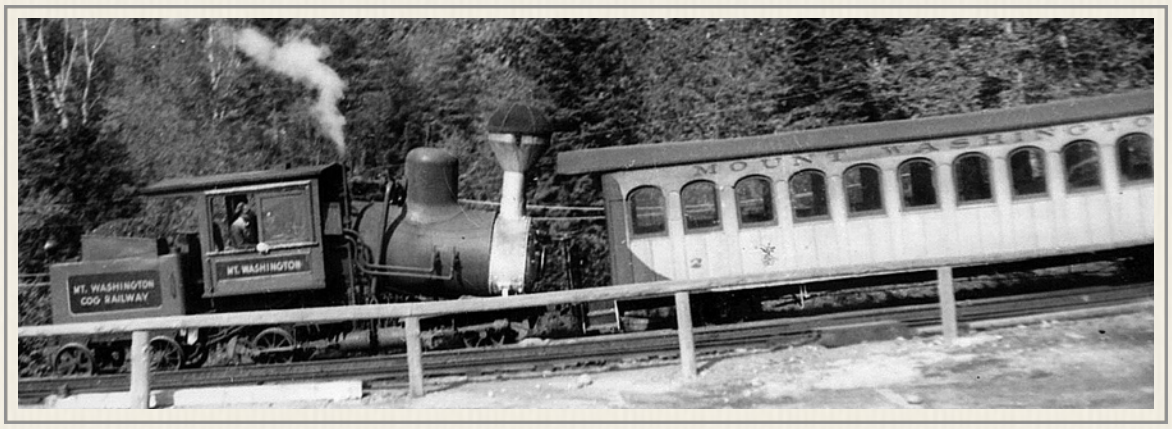
#8 "Tip Top" was built by Manchester in 1892.

#9 "Waumbek" was built by Manchester in 1908.

All these engines, except #8 and #9, have had new boilers, between 1905 and 1909. The 8 and 9 still have their original boilers. All have been completed retubed. It's pretty hard to say which engine is the oldest. Although #2 was built first in 1870, she had been rebuilt two times, so there is probably little left of her original parts. #4 is the oldest which has not been rebuilt. (And she has had a new boiler in 1908.) Hope this will be of some help to you.

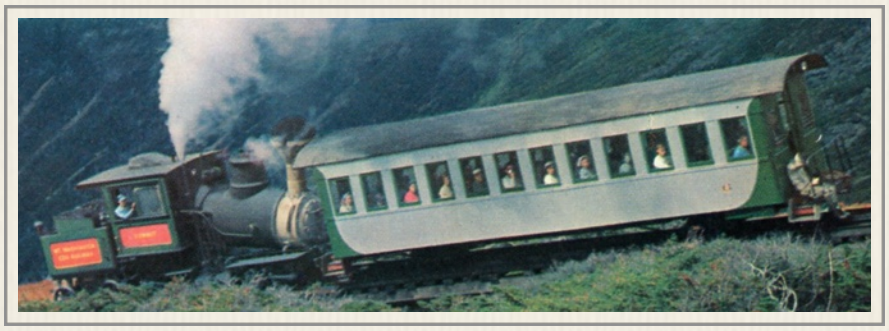
Yours truly, L. S. Twombly

Readers can find a number of MWR locomotive rosters on the internet with varying names and details of construction and in-service dates. Glenn M. Kidder's book, *Railway to the Moon* seems to have the most complete sorting out of the various locos and their configurations over the years up until the point of the book's publication in 1969.

















No. 9 - No. 9 - No. 9



Mount Washington Railway Engine No. 9 on B&M flatcar ready to ride to the Base Station (1908)
- Courtesy Manchester Historic Association

When Jitney was hired in 1950, the Mount Washington Railway's newest locomotive was 42 years old and still had its original boiler (although the barrel had been re-tubed.)

No. 9 *Waumbek* was built in 1908 in Manchester, New Hampshire seven years after the American Locomotive Company (ALCO) was formed (in part) by taking over the assets and liabilities of the company. Manchester Locomotive Works began building engines in 1855 - had closed in 1858 and then restarted in 1863 when demand for locomotives rose during the Civil War.

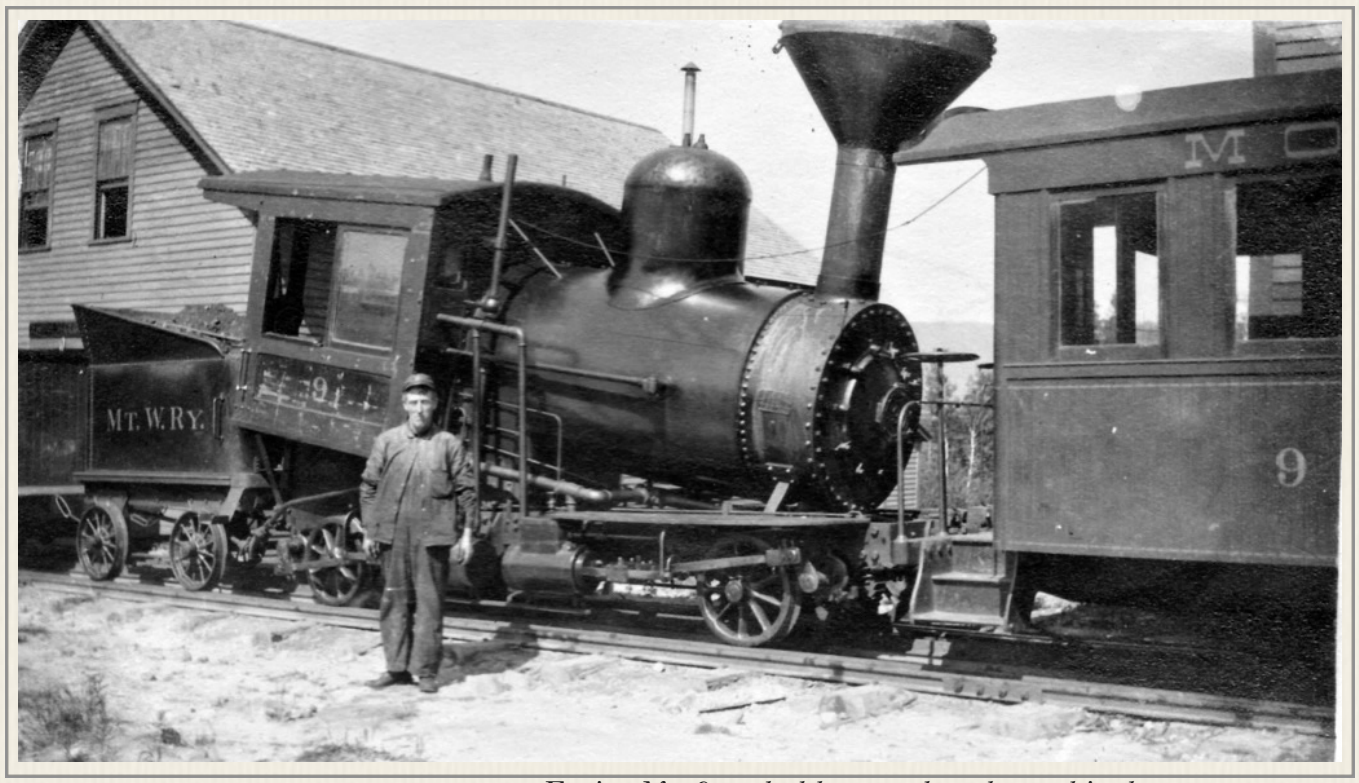


Union Leader columnist Aurore Eaton's March 2014 reflection on the local company says Manchester Locomotive Works was employing 700 men in 1875, and could build 150 locomotives a year using metal from its own iron foundry that

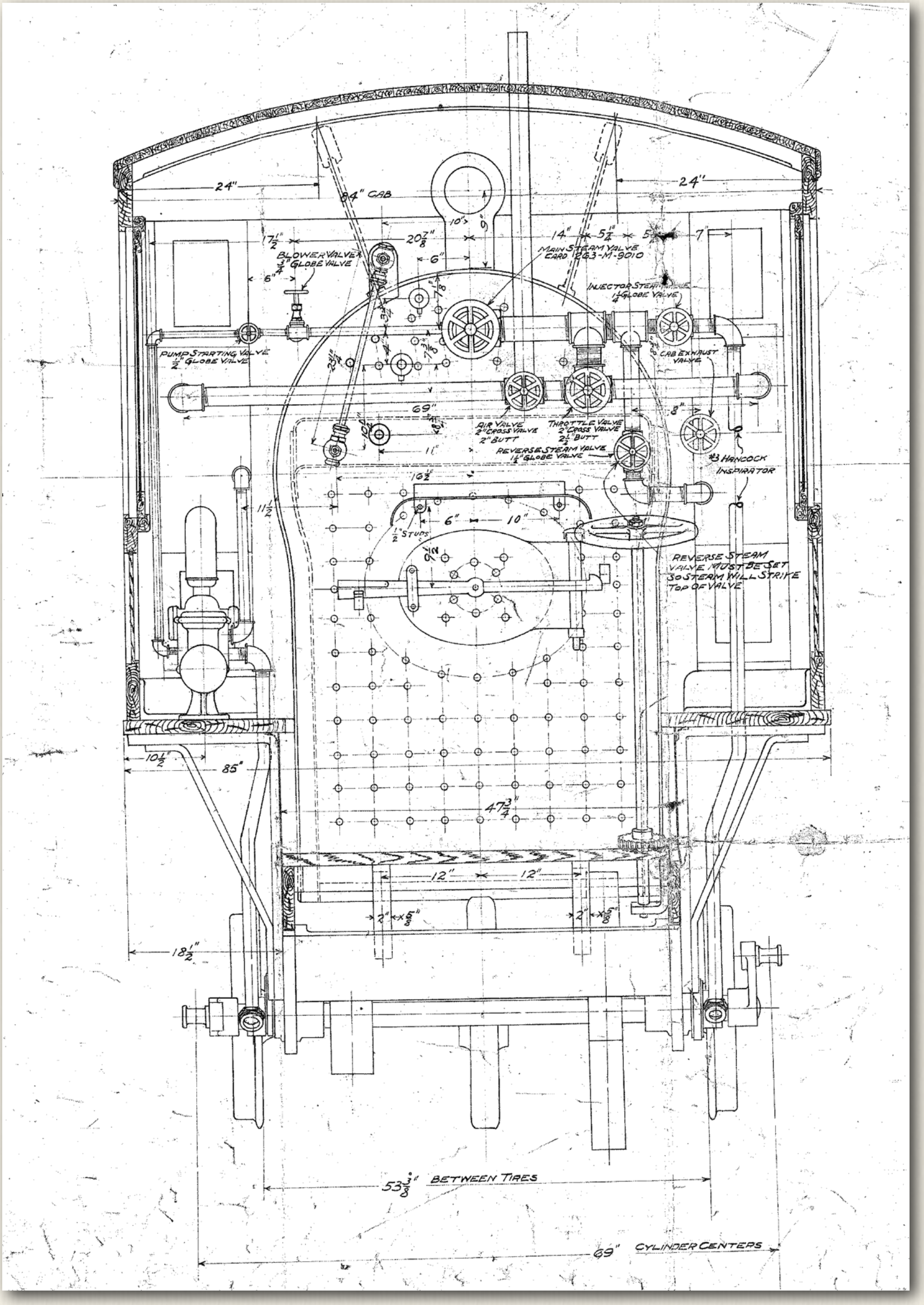


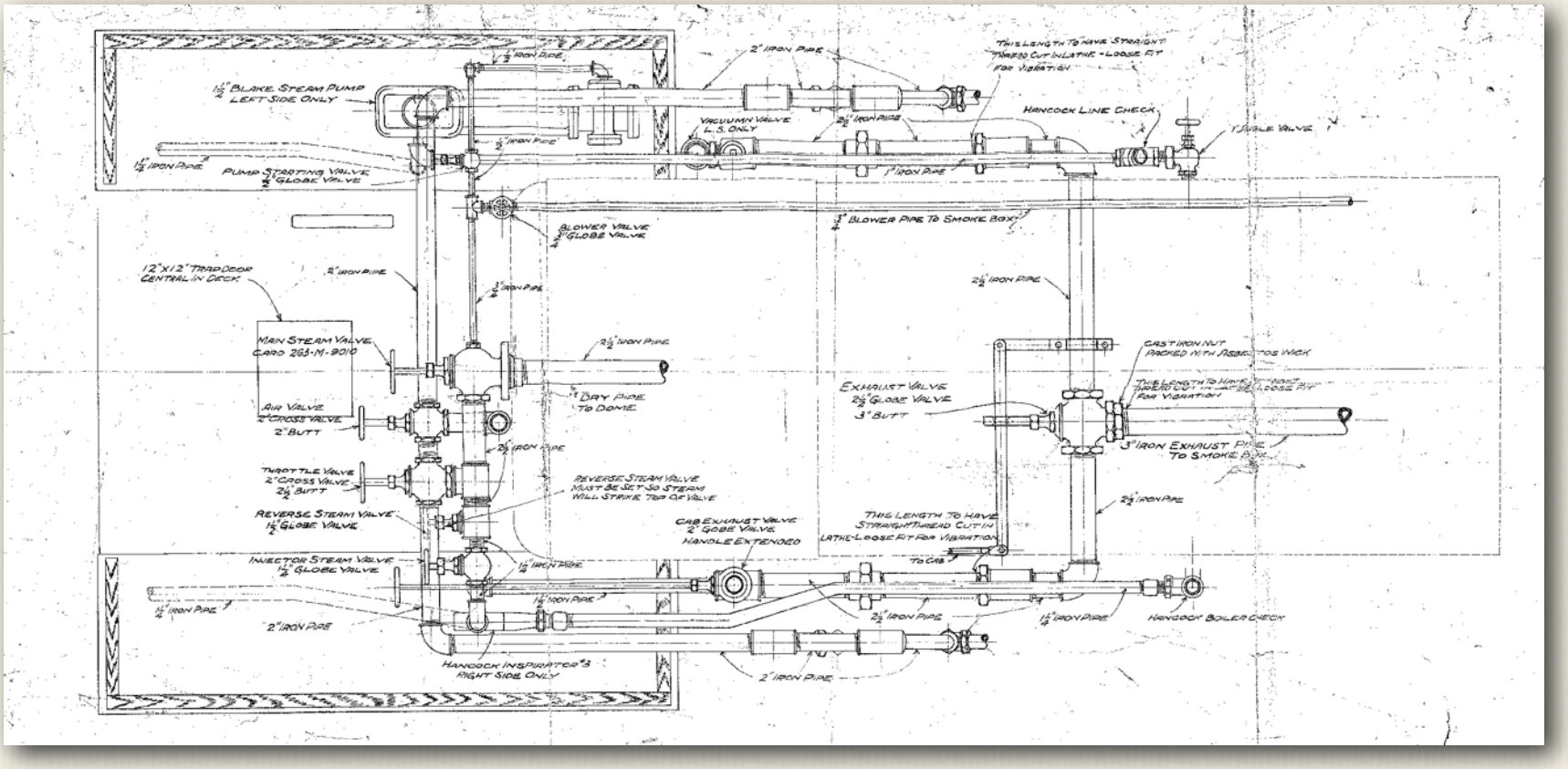
Engine No. 9, built by American Locomotive Company located in Manchester (1908)
- Courtesy Manchester Historic Association

at one point ran two furnaces 24 hours a day. By 1901, Eaton reports Aretas Blood's company had built 1,793 steam locomotive engines. Three of those were ordered by the Mount Washington Cog Railway - two additional engines wound up at Mt. Washington in 1895 after their short run on the Green Mountain Railway on Mount Desert Island in Maine. The sixth and final engine built for the Cog at Manchester under the new ALCO corporate structure was the No. 9. The Mount Washington Railway company received an erecting card blueprint along with the new engine. The drawings that follow are from a copy of that February 4, 1908 erecting card in Jitney's collection of Cog memorabilia.

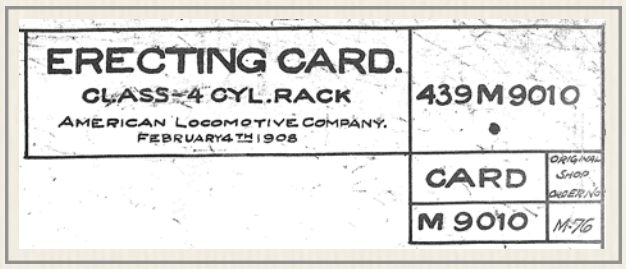


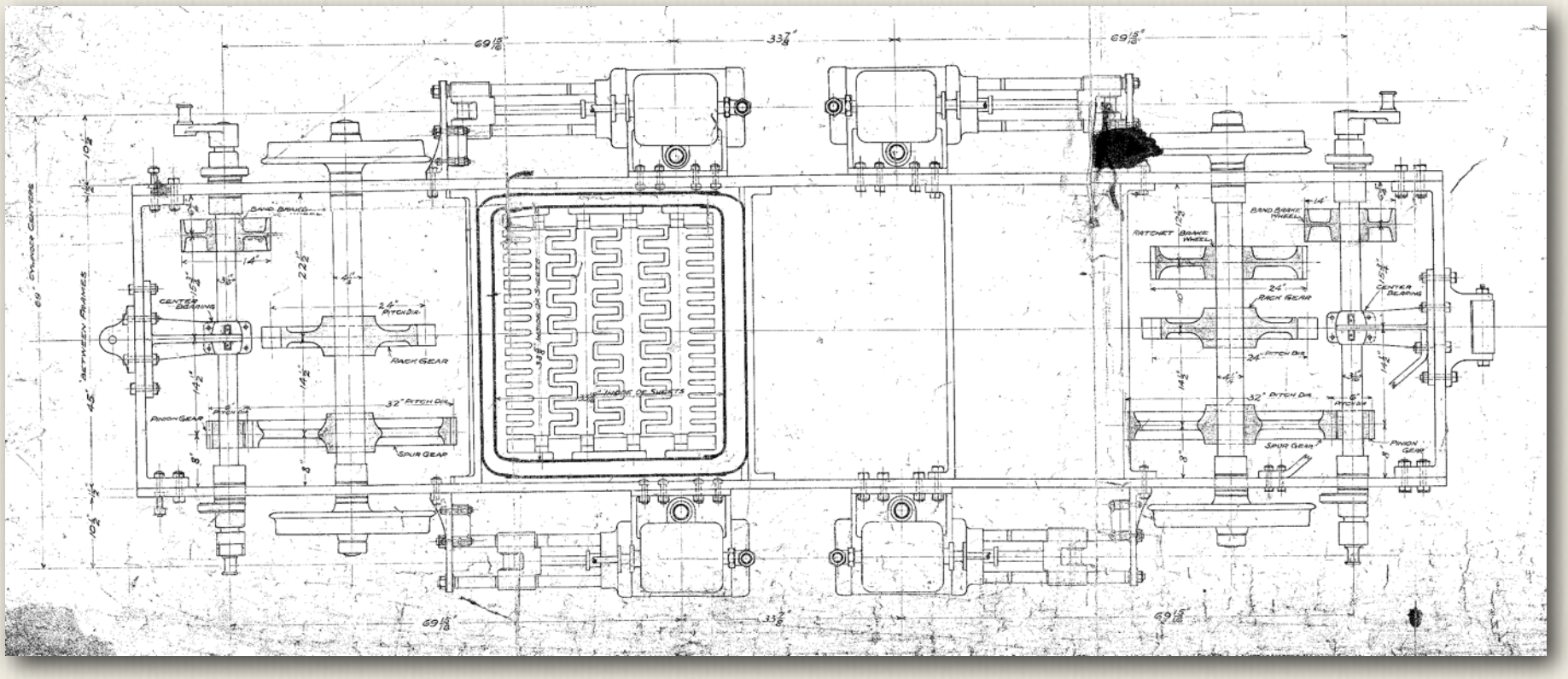
Engine No. 9 parked between laundry and ice house (July 1912)
- Robert J Girouard Collection - N.H. Then and Now


24"
84" CAB
24"
10"
9"
17½"
20⅞"
6"
BLOWER VALVE
¾" GLOBE VALVE
6"
MAIN STEAM VALVE
CARD 263-M-9010
14"
5¼"
5"
7"
INJECTOR STEAM VALVE
1¼ GLOBE VALVE
PUMP STARTING VALVE
2½" GLOBE VALVE
CAB EXHAUST VALVE
69"
8"
AIR VALVE
2" CROSS VALVE
2" BUTT
THROTTLE VALVE
2" CROSS VALVE
2½" BUTT
REVERSE STEAM VALVE
1½" GLOBE VALVE
#3 HANCOCK INSPIRATOR
16½"
11½"
6"
10"
½" STUDS
REVERSE STEAM VALVE MUST BE SET SO STEAM WILL STRIKE TOP OF VALVE
10½"
85"
47¾"
12"
12"
2" × 5/8"
2" × 5/8"
18½"
53⅜" BETWEEN TIRES
69" CYLINDER CENTERS



Erecting Card Diagrams: Cab valve controls, boiler piping, water glass, and cab cutaway *(prior pages)* includes area for installation of a single #3 Hancock inspirator on the engineer's side to complement the Blake Steam water pump on the fireman's side of the cab for putting water into the boiler. Top view *(above)* follows cab piping forward to cylinders and stack exhaust, while frame view *(below)* reveals cylinder placement, firebox grate assembly, crank and main shafts with cog, ratchet, spur & pinion gears as well as brakes, push roller at front and tender connection rear. The side view *(previous page)* shows the assembled locomotive with tender on average grade of track with additional boiler, piping and installed inspirator detail to show how the No. 9's cab was the first built on the same plane as the pitched boiler.



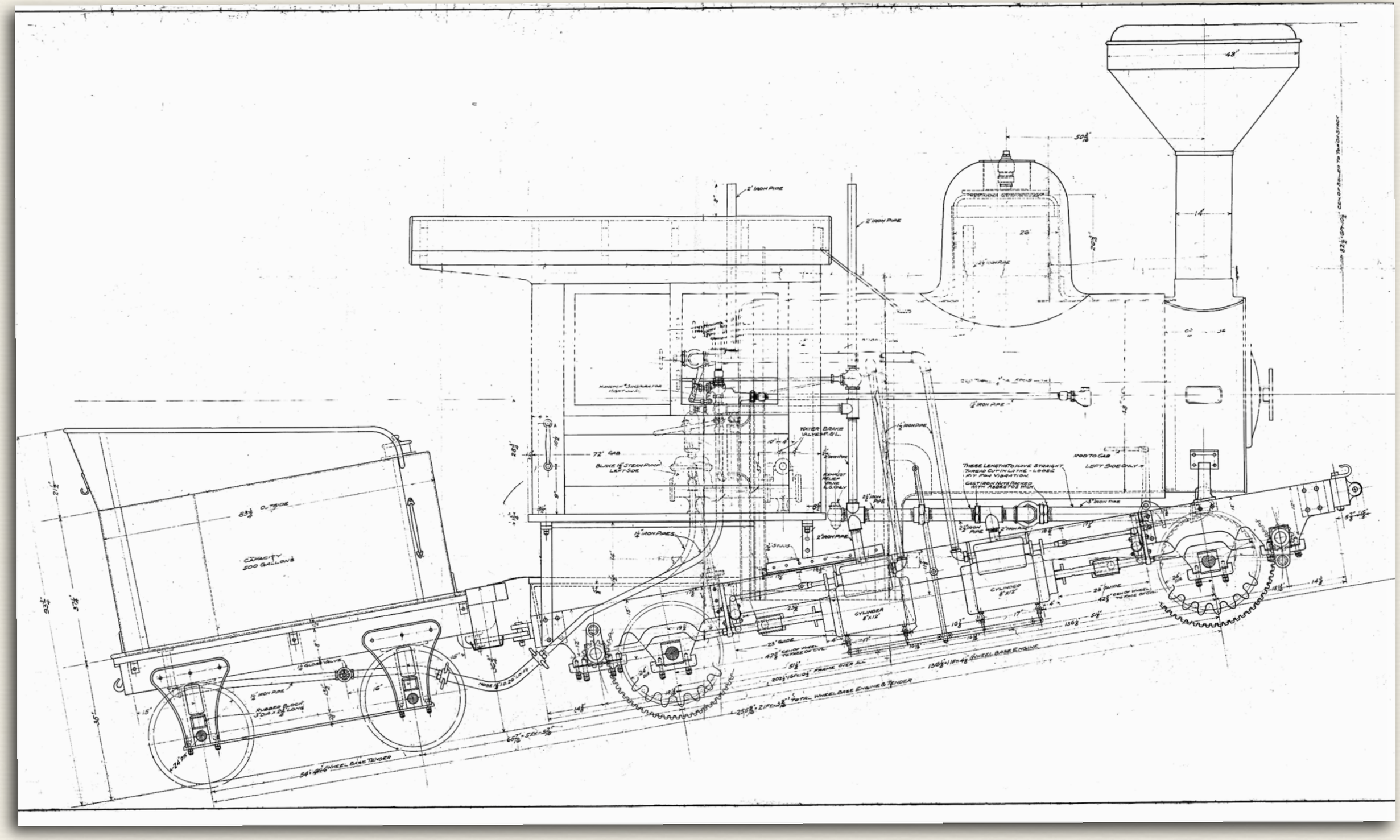






Waumbek Ready: Engineer Floyd Williams makes final adjustments *(above)* on No. 9 *Waumbek* before running the engine *(right)* up to pick-up the passenger car at the Base Station in 1937.

- Photos from the Beverly Williams Decato Collection

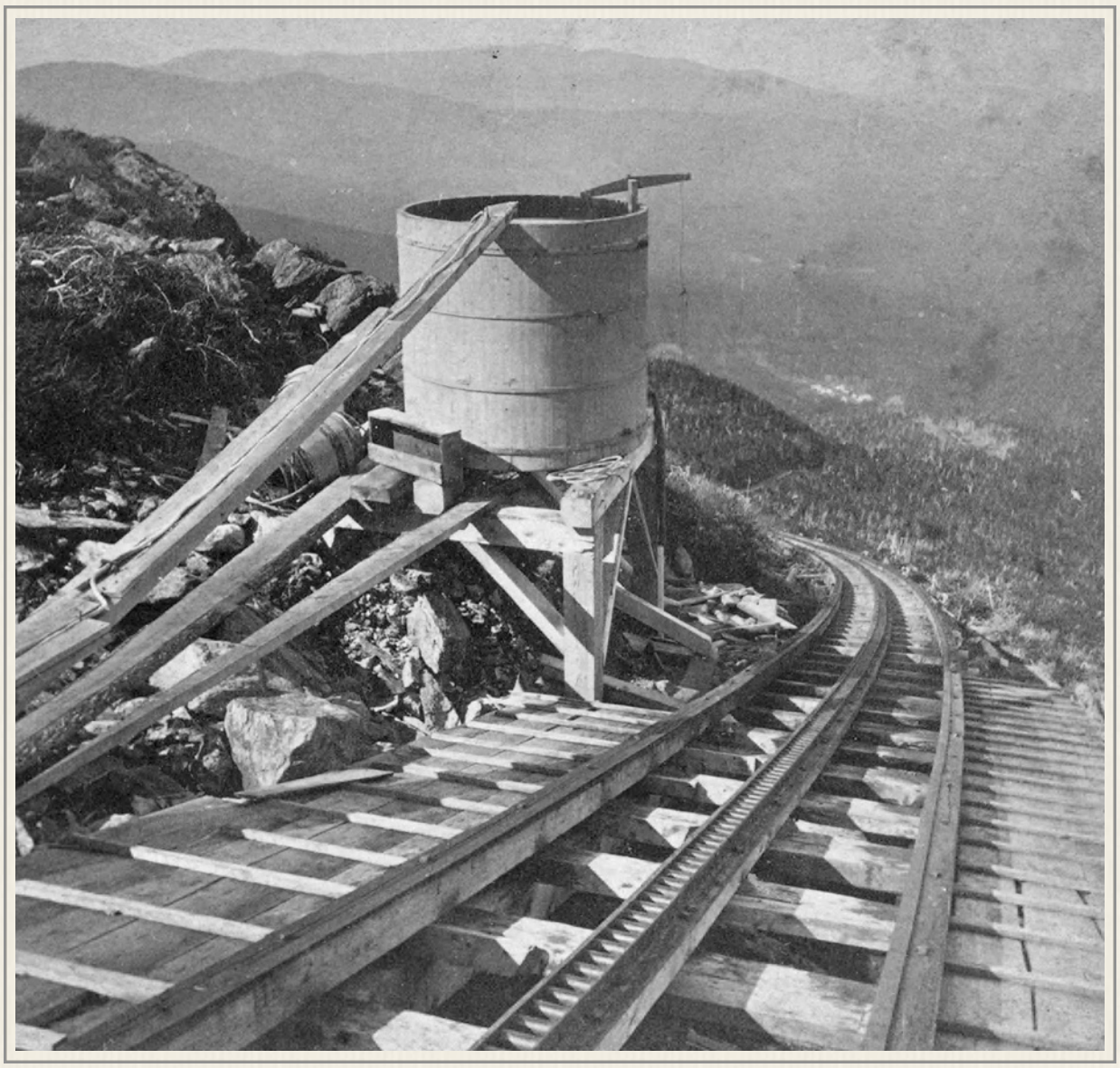


48"
14"
26"
2" IRON PIPE
2" IRON PIPE
72" CAB
BLAKE 1½" STEAM PUMP LEFT SIDE
WATER BRAKE VALVE R.&L.
EXHAUST RELIEF VALVE L.S. ONLY
1½" IRON PIPES
2" IRON PIPE
1½" IRON PIPE
ROD TO CAB
LEFT SIDE ONLY
THESE LENGTHS TO HAVE STRAIGHT THREAD CUT IN LATHE - LOOSE FIT FOR VIBRATION.
CAST IRON NUTS PACKED WITH ASBESTOS WICK
3" IRON PIPE
2½" IRON PIPE
2" IRON PIPE
CYLINDER 8"X12"
CYLINDER 8"X12"
23" GUIDE
42⅝" CEN OF WHEEL TO FACE OF CYL.
23" GUIDE
42⅝" CEN OF WHEEL TO FACE OF CYL.
136⅜"=11FT=4⅜" WHEEL BASE ENGINE
202½"=16FT=10½" FRAME OVER ALL
255⅝"=21FT=3⅜" TOTAL WHEEL BASE ENGINE & TENDER
54"=4FT=6" WHEEL BASE TENDER
83¾" OUTSIDE
CAPACITY 500 GALLONS
1½" GLOBE VALVE
1½" IRON PIPE
RUBBER BLOCK 3" DIA x 2½" LONG

SECTION 16

Fuel

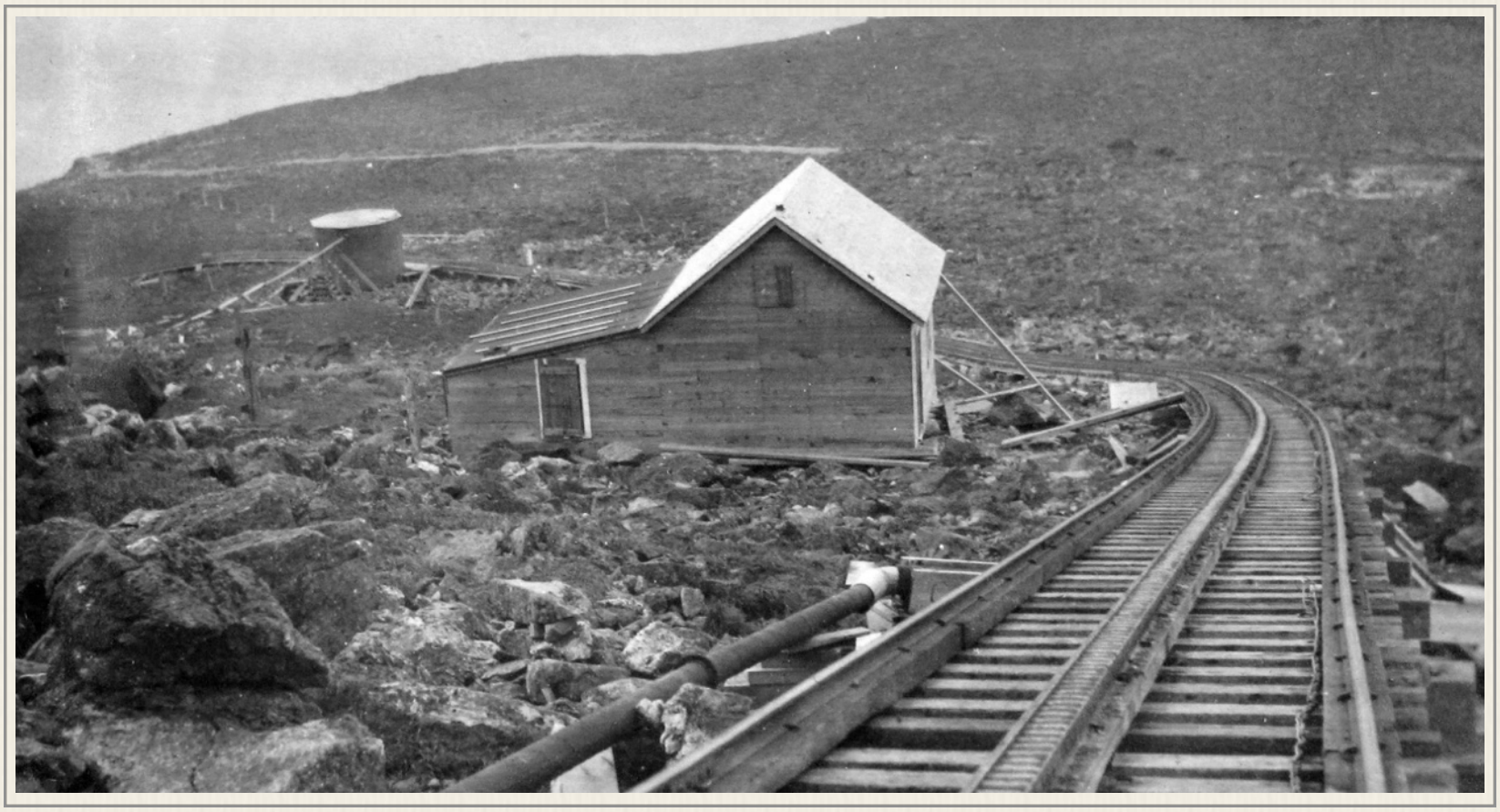
Steam engines require heat be applied to water, so the water enters its gaseous state in an enclosed container generating pressure that can be harnessed into motion. Thus a steam powered railroad needs an ample supply of water, and the fuel for a fire to heat that water. Sylvester Marsh chose to build his base of operations alongside the Ammonoosuc, so water from that river and hardwood from the surrounding forest might be used to create steam in his *Hero*. But No. 1 was originally designed without the ability to add water to the boiler as steam was produced and used. The engine known as *Peppersass* was filled, fired, then run until water ran low - the process was then repeated. "It was a crude affair," wrote Walter Aiken in September 1877, "having neither pump nor tender, but it answered the purpose of testing the feasibility of the scheme. Afterwards, a pump and tender being added to it, *(Peppersass)* proved a good engine and was used on the road until it was completely worn out." As the railroad went up the mountain, water stops were built and the tanks filled from nearby springs, and the collection of run-off. The August 20, 1892 *White Mountain Echo* described those stops for tourists contemplating a ride up. "In ascending the mountain by its novel railroad the train commences a sharp rise, with a grade of 1,700 feet to the mile and passes through a wide clearance in the forest. Three hundred feet onward the grade becomes easier and when three-quarters of a mile have been accomplished the engine pulls up for refreshment at a water tank near Cold Spring. It is then subjected to a stiff climb to a point named Waumbek Junction (the spot where the old Jefferson and Fabyan bridle paths united), and here, 1,242 feet above Am-

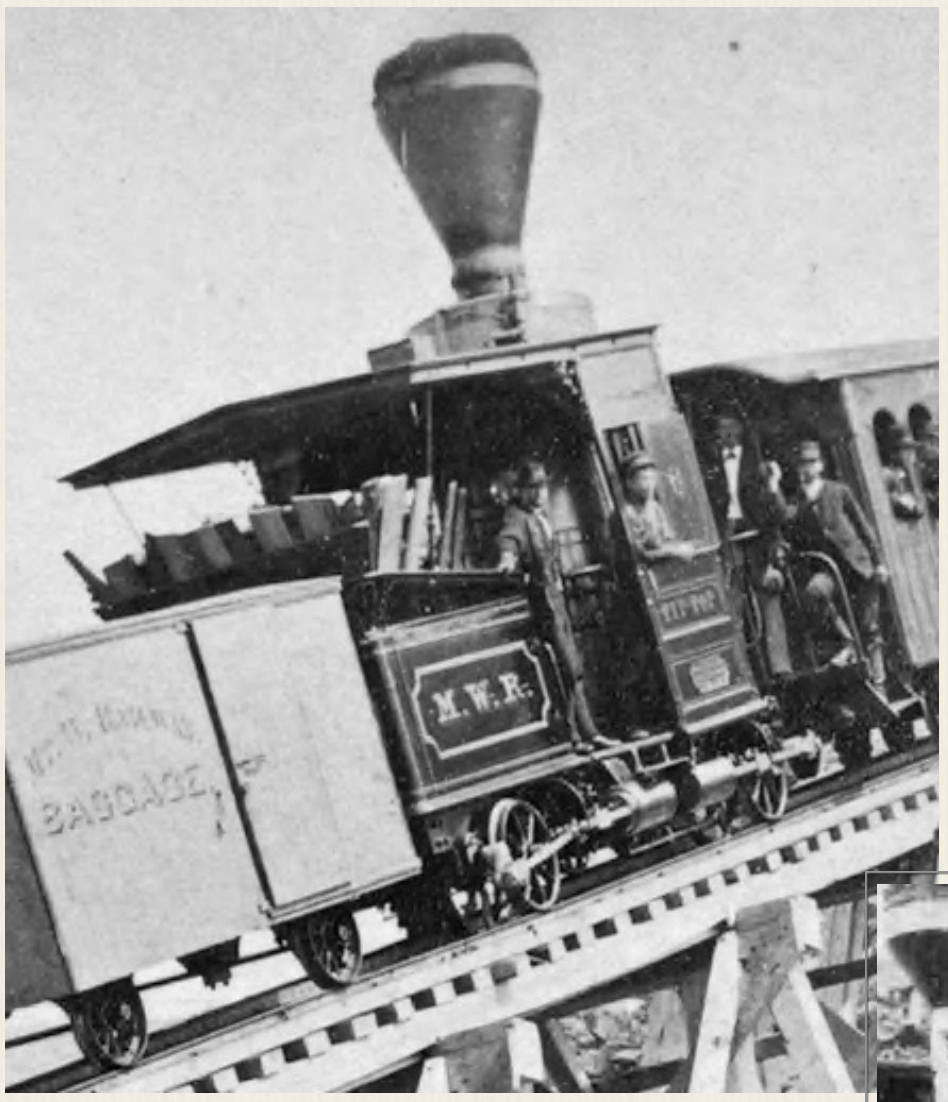


monoosuc, the thirsty soul takes another drink. This spot past, the trees become smaller and the line makes several short curves. When Jacob's Ladder, 2,905 feet above Ammonoosuc, is reached *(prior page)* the little giant stops for another draught of the crystal fluid. The train makes its last stoppage for water at the Gulf tank *(below)*, 5,800 feet above the sea, and 3,132 feet above Marshfield. From this point the rise is less steep, there being but 800 feet to overcome in one mile of travel, from Jacob's Ladder to the Summit House."



Three Trains - Three Tanks: Image of the summit *(above)* taken from beyond the Great Gulf in 1900 captures three Cog trains on descent from the top - each is near a water supply. From right to left - the two Gulf Tanks, and on the horizon another large water tank just below Lizzie's with an out-building. That tank is still seen *(below)* in 1914 just below Lizzie's with a new building constructed closer to the Summit after the Great Fire of 1908.







Tender Travelers: Using wood gave some passengers a unique seat on the way down the mountain during the first 41-years of operation - a ride in the tender that Mike Boyce told Jitney led to some pretty good tips for trainmen and a thrill for the riders *(See Vol. 3 Aggregated Timeline 1909).* Taking tourists down in the tenders *(right)* stopped in 1910 when coal became the new fuel source for the entire fleet, and its residue threatened to darken and dirty their garments.

Fuel Cost & Quantities: The Mount Washington Railway Company files its first detailed expense report with the state in 1880 with numbers from its 1879 summer season. The $1,282.50 spent to feed the locomotives was $27.84 more than the company spent to feed its employees. Salaries would not outstrip fuel costs for the locomotives until 1887 - the same year they reported buying 612 cords of hardwood to power the engines. The Railway reported paying between $190 and $250 for labor to cut wood in three reports. Coal first appeared in 1891, but the three tons are hauled to the summit to heat the Signal Corps station during the winter. Other coal was hauled to warm the Summit House during the summer season, but hardwood remained the primary fuel to power Cog engines.

The Railway had experimented with coal over the years. A July 1890 *Among the Clouds* article says a coal trial was made in 1876-77 “without success.” The July 18 blurb was written just

as another experiment was about to begin. "The engine *Atlas* has been converted into a coal burner," reports the paper, "and some new features adopted, and it is expected that this will prove successful. If this engine proves a success it will make a considerable saving, as the wood prepared for use costs nearly $5 a cord. The engine will be ready in a few days to make its first trip."

Saturday, July 26, 1890, *Atlas* fired its boiler with coal and according to the newspaper, "made the trip from Base to summit, and return, without any difficulty. So far it works with entire satisfaction. The coal is being weighed to ascertain how much is used on each trip and in this way the difference in cost of the two kinds of fuel will be determined."

The tests were conducted by Massachusetts Institute of Technology students Charles W. Aiken, Robert S. Ball and F. A. Cole. Charles' uncle, Walter Aiken - the president of the railway gave his nephew permission to conduct the tests. Master mechanic John Horne permitted them "to run the engine with the regular trains, thus affording them an opportunity of testing it under the usual conditions."

However, a follow-up story on August 7, 1890 no longer mentioned coal as part of the MIT tests. "It takes a half cord of wood and 15 barrels of water to make the trip of three miles up the mountain. The test was very thoroughly done and reflects credit upon those who made it." Results *(right)* ran a year later in the August 11, 1891 edition of *Among the Clouds.*

But the newspaper wrote in its first edition of the 1891 season, "Three more engines have been changed from wood to coal burners, and thus far they have given good satisfaction. It is thought there will be a saving of expense and much hard work in preparing the wood for use."

This tidbit raises further questions about the Cog's conversion from wood to coal as Mike Boyce told Jitney wood was still the main fuel source when he first arrived at the mountain, and the railroad's 1909 fuel consumption report to the state of New

TESTING MT. WASHINGTON ENGINES.

Charles W. Aiken, of the Massachusetts Institute of Technology, made a series of tests of the Mount Washington engines last year, the results of which are embodied in the following tables :—

NO. TEST.	Duration of tests in minutes.	Mean horse power.	Wood burned in lbs.	Wood per hour.	Wood per sq. ft. of grate surface per hour.	Wood per horse power per hour.
2.....	71.5	84.49				
3.....	67.5	94.40	1871	1663	183.0	17.7
4.....	76.5	95.50	2378	1865	205.2	19.5
5.....	86.5	58.08	1571	1090	120.0	18.8
6.....	73.5	91.58	2210	1804	198.5	19.7

NO. TEST.	Total water evaporated in lbs.	Water evaporated per hour.	Water per horse power per hour.	Water per hour per lb. of wood	Estimated load in lbs.	Maximum horse power developed on test.
2.....	4916	4131	47.3		29000	128.39
3.....	5506	4873	50.3	2.93	30 00	116.92
4.....	5669	4107	41.1	2.20	31000	122.11
5.....	3347	2615	43.3	2.40	20000	78.80
6.....	5046	4103	43.3	2.27	30000	124.15

DESCRIPTION OF TESTS.

No. 1 was incomplete and was not recorded.

No. 2 was made with a freight car loaded with wood and ice ; noon trip.

No. 3 made with a passenger car and baggage car; 25 passengers ; evening train.

No. 4 made with passenger train, "big car ;" 54 passengers, but no baggage car ; morning train.

No 5 made with engine alone ; noon.

No. 6 made with passenger car, baggage car and 27 passengers.

Tests were made on the down trips on tests 4 and 5. The mean horse power developed on test 4 was 81.84, and on test 5, 38.24.

On test No. 5, 1633 pounds of wood was burned on the round trip. On test 6 2743 pounds of wood was burned on the round trip, including a trip back to "Lizzie's" for water and building the fire in the morning.

Ch. 4 - Fuel

Hampshire lists hardwood as the only fuel source burned for its passenger revenue service.

The handwritten thesis finally submitted by Walter Aiken & Robert S. Ball on February 25, 1892 for a Bachelor's degree in Mechanical Engineering (https://dspace.mit.edu/handle/1721.1/28188) also does not deal with coal or the performance of *Atlas*. "This thesis is the report of some tests made on the Mount Washington locomotive *Cloud* under the various running conditions. The locomotive on which these tests were made, resembles somewhat in appearance, an ordinary locomotive, but is in reality quite different. The boiler is of the locomotive type, designed to burn wood."

In 1893, *Among the Clouds* reports another coal-burning locomotive had been added to the Mount Washington Railway's fleet. "The new locomotive, *Pilgrim*... reached the Base Station yesterday *(7/19)* from the Manchester Locomotive Works. It is built upon the same general principle as the other locomotives, but has several minor improvements. It is constructed to use coal as fuel and will make its initial trip in a few days."

For whatever reason, the coal burning locomotives hinted at in the newspaper in the early 1890s apparently stuck with wood for another seventeen years. Standard Boston & Maine coaling equipment was installed when the switch to coal was finally made. Car builder/engineer Doug Taylor says "The coaling station below the Shops was built by the B&M. The design featured a jib crane that hoisted large tubs of coal up and could swing them out, over the tenders to dump. It was a common design for an early coal loader, seen on many railroads in smaller engine terminals. The standard gauge engines that pushed the open cars up the branch to the Cog also coaled up there *(thus the additional fourth rail seen in some pictures of the shops and shed)*. I don't know how they got the coal from the hopper cars into the building - probably just dumped it between the tracks and wheelbarrowed it in." Hand shoveling was involved as Mike Boyce told Jitney workers might take a break in the coal car by just making the noise of scooping for nearby supervisors while taking a breather.

Water

The Railway Company began accounting for water supplies for locomotives in the 1897 annual report. $208.74 for the 1896 summer season. For the next six seasons, the water costs for locomotives are under $75 - ranging from $15.48 to $73.44. The last two years reported *(1903 and 1904)* are over $400 likely due to water supply improvements. Fuel cost data from annual reports is graphed on the following pages.

1909

Consumption of Fuel by Locomotives—Entire Line in State of New Hampshire.

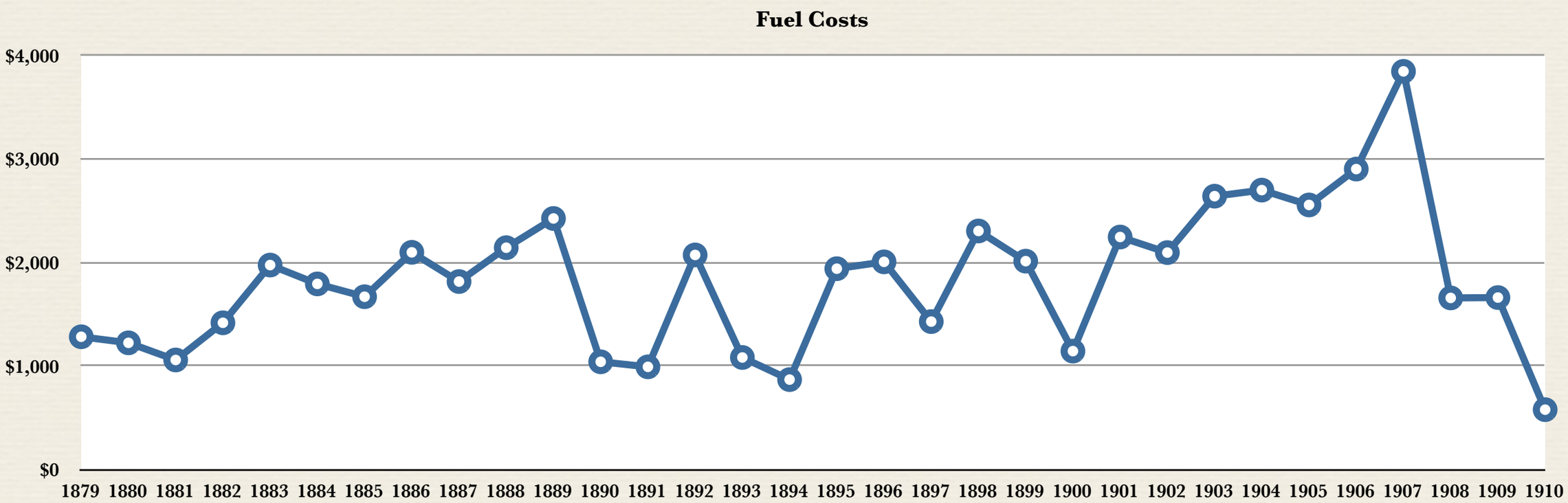
Locomotives.	Hard wood —cords.	Total fuel consumed —tons.	Miles run.	Average lbs. consumed per mile.
Revenue service:				
Passenger	247	165	1,565	$210.86
Nonrevenue service.	30	20	190	210.53
Totals	277	185	1,755	$210.83
Average cost at distributing point....	$7.00	$10.50		

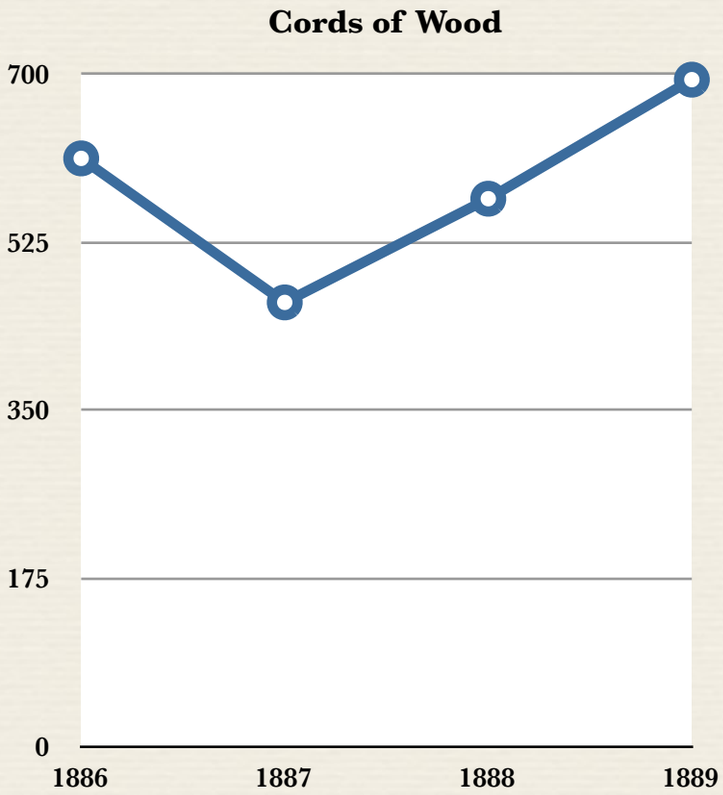
From Wood to Coal: Mount Washington Railway's last annual report to the New Hampshire Railroad Commissioners in 1910, and its first annual report to the New Hampshire Public Service Commission in 1911 detail the numbers driving the fuel conversion. The chart *(above)* for fuel use in the 1909 summer season, where nearly 1800 miles were run up and down the line, shows 277 cords at an average cost of $7.00. The chart *(below)* for 1910 shows both fuel sources were used during the conversion, but soft coal, on average, was clearly cheaper by more than $2.00.

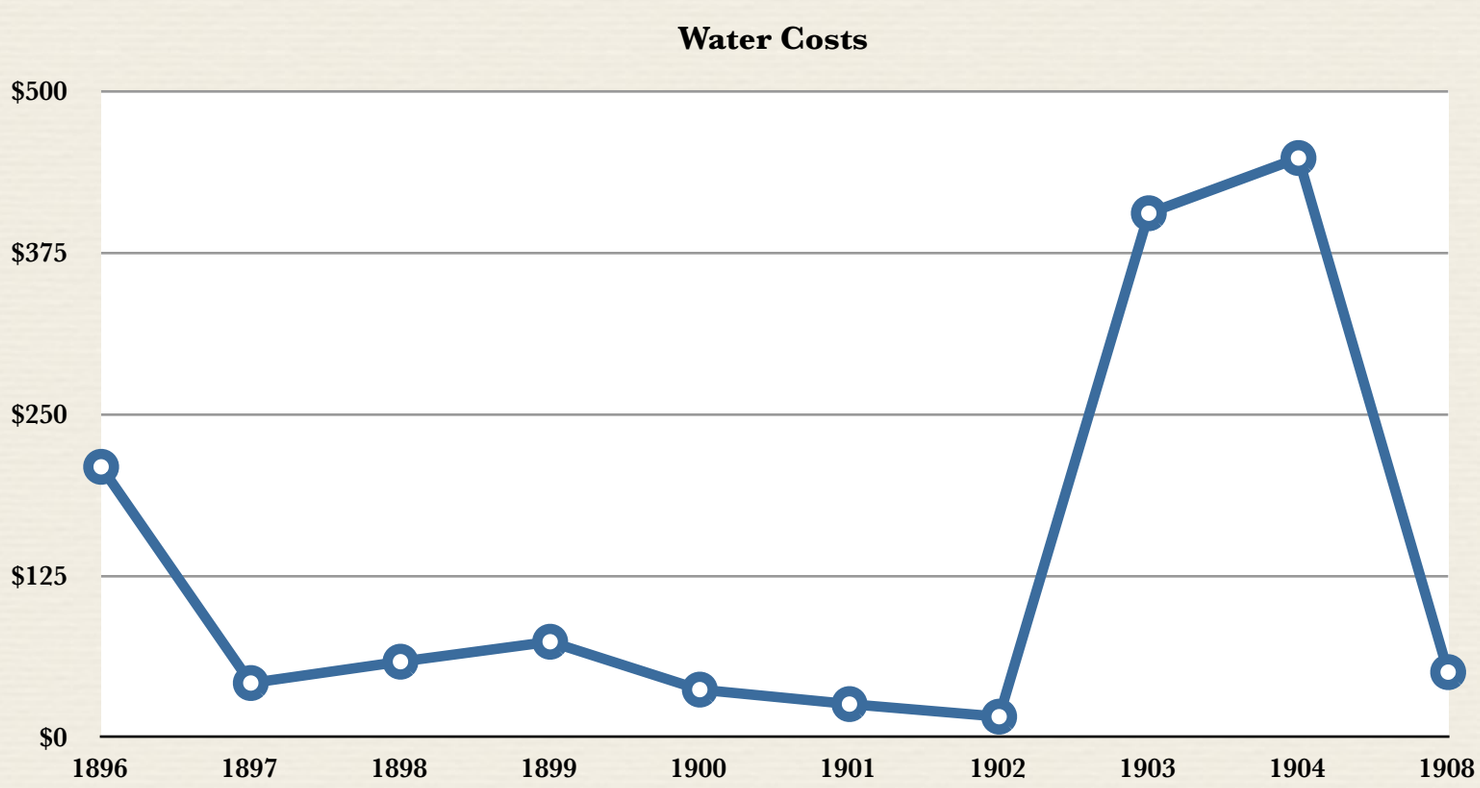
1910

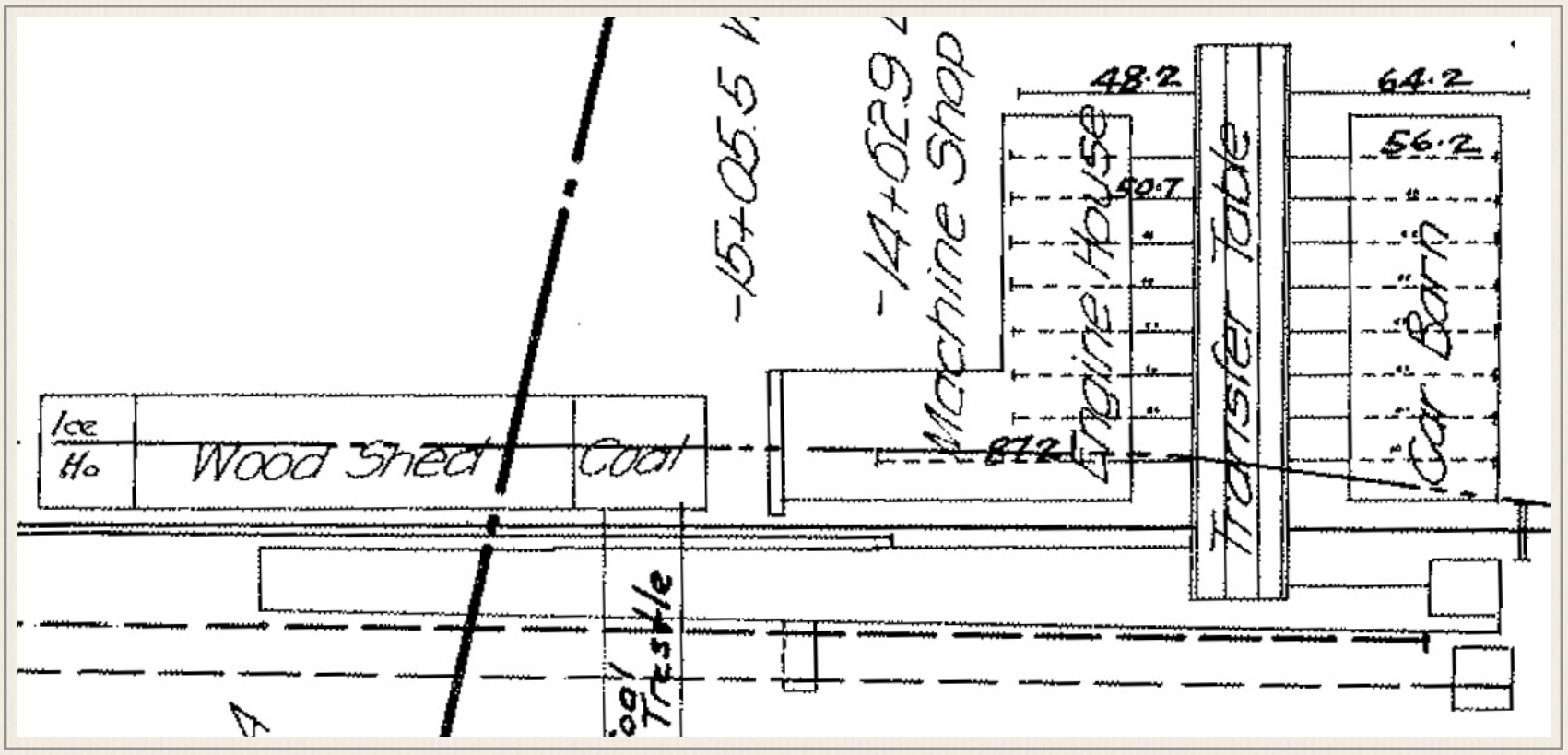
Consumption of Fuel by Locomotives—Entire Line in State of New Hampshire.

Locomotives.	Bituminous Coal—Tons.	Hard wood —cords.	Total fuel consumed —tons	Miles run.	Average lbs. cosumed per mile.
Revenue service:					
Passenger	65	144	161	1,631	197.42
Nonrevenue service .	50		50	426	234.74
Total	115	144	211	2,057	205.15
Average cost at distributing point	$4.75	$7.00	$7.36		


Fuel Costs
$4,000
$3,000
$2,000
$1,000
$0
1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910

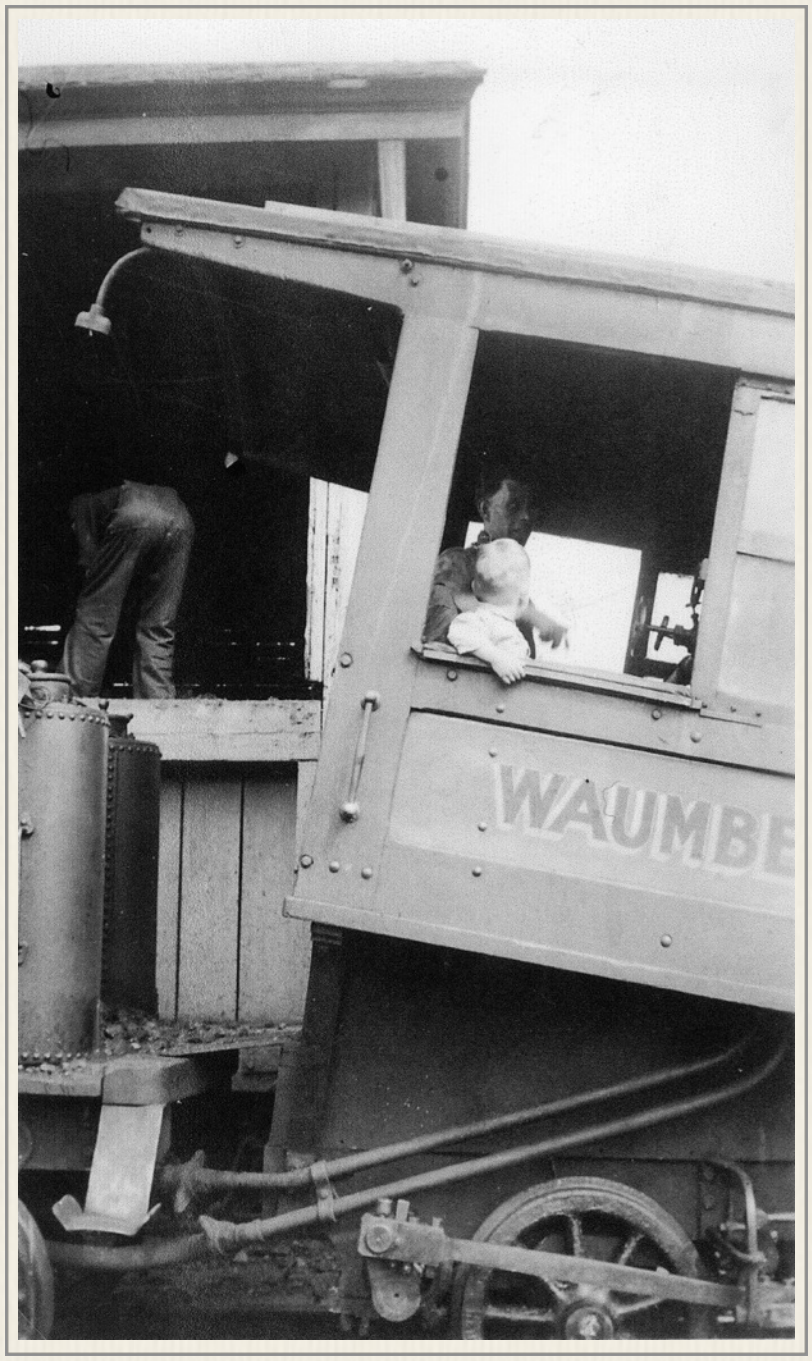

Cords of Wood
700
525
350
175
0
1886
1887
1888
1889


Water Costs
$500
$375
$250
$125
$0
1896 1897 1898 1899 1900 1901 1902 1903 1904 1908

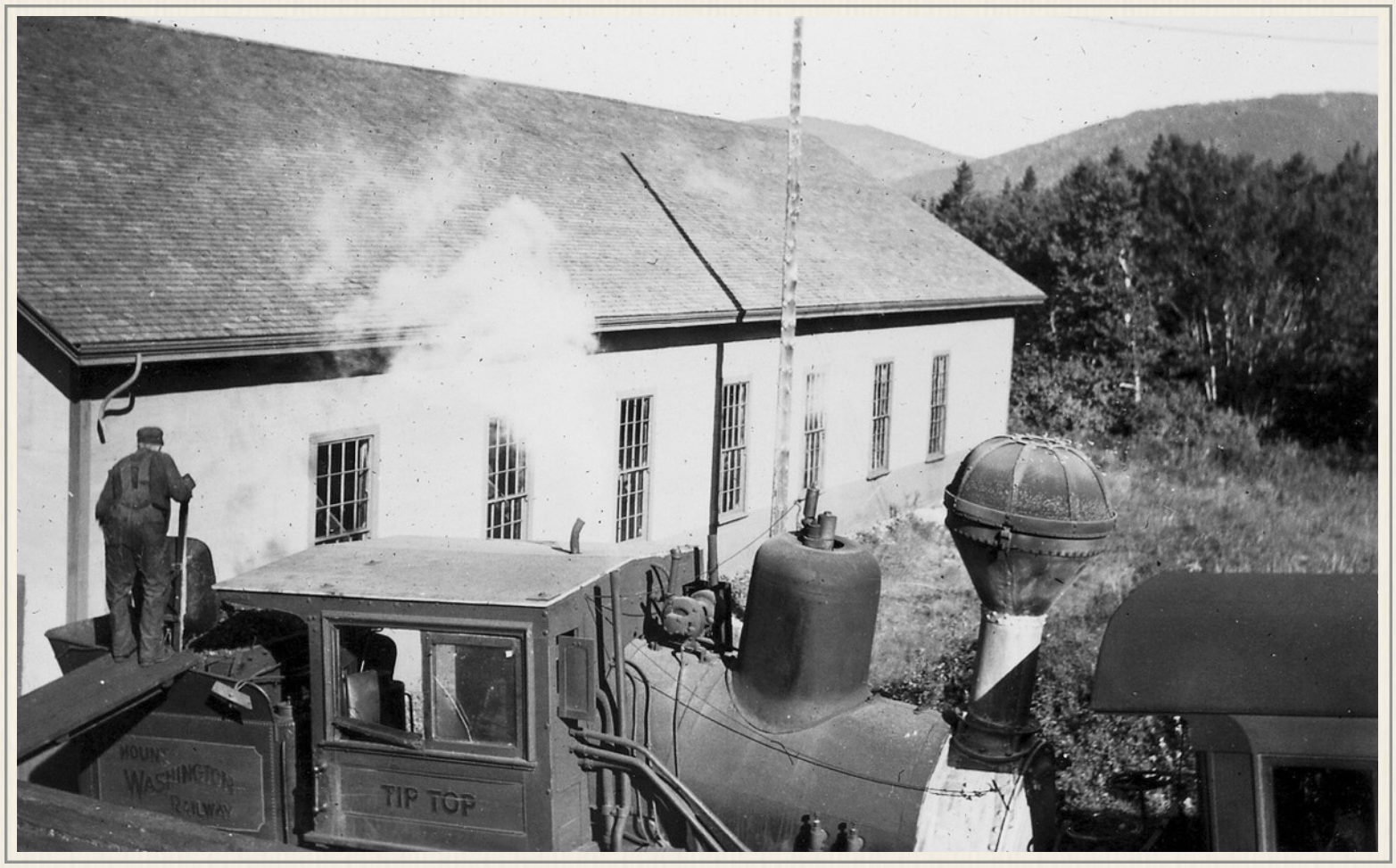


Coaling Up: With soft coal (bituminous) as the primary fuel source, the wood shed built in 1895 was converted for storage, and the B&M coaling station that handled the earlier hard coal (anthracite) supply for summit heating became the place where engines would go to fill their tenders. A new water column was erected next to the facility *(below)*. In 1937, young Floyd Williams Jr. *(next page upper left)* is in the No. 9 cab with his dad as the fireman fills the tender. A year later, the hurricane would destroy the woodshed, the coal trestle and the ice house (that had been converted into employee housing) and a new bunker was built just above and across the tracks from the car barn. A tourist snapped a photo of the facility *(next page upper right)* and the tender of the No. 8 *Tip Top* being filled on September 3, 1941. While smaller emergency bunkers were built along the track, the main fueling occurred at the shop even after the new Marshfield Base Station was finished in 1939. George Trask says trains had to back all the way down to the shops, and that took a lot of time. Trask was part of a Pliney Granger led team that installed a new gravity fed coal bunker and coal storage area just below the end of the base switch spur in 1949.



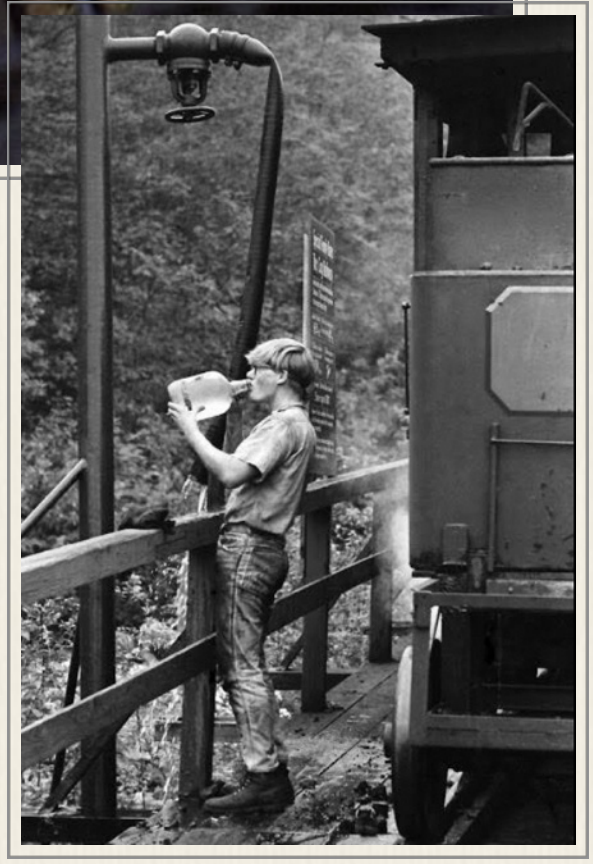

WAUMBE




MOUNT WASHINGTON RAILWAY
TIP TOP

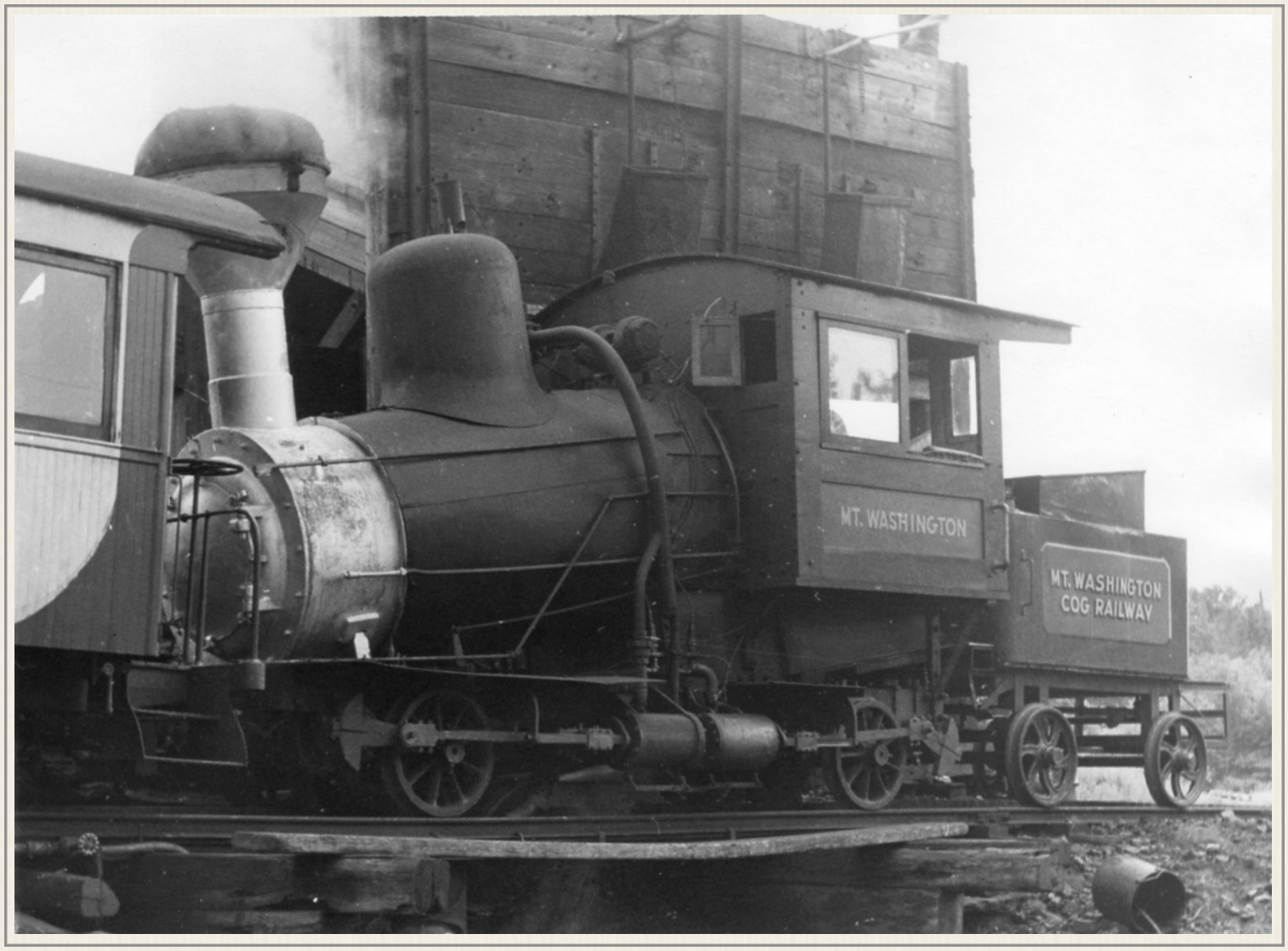


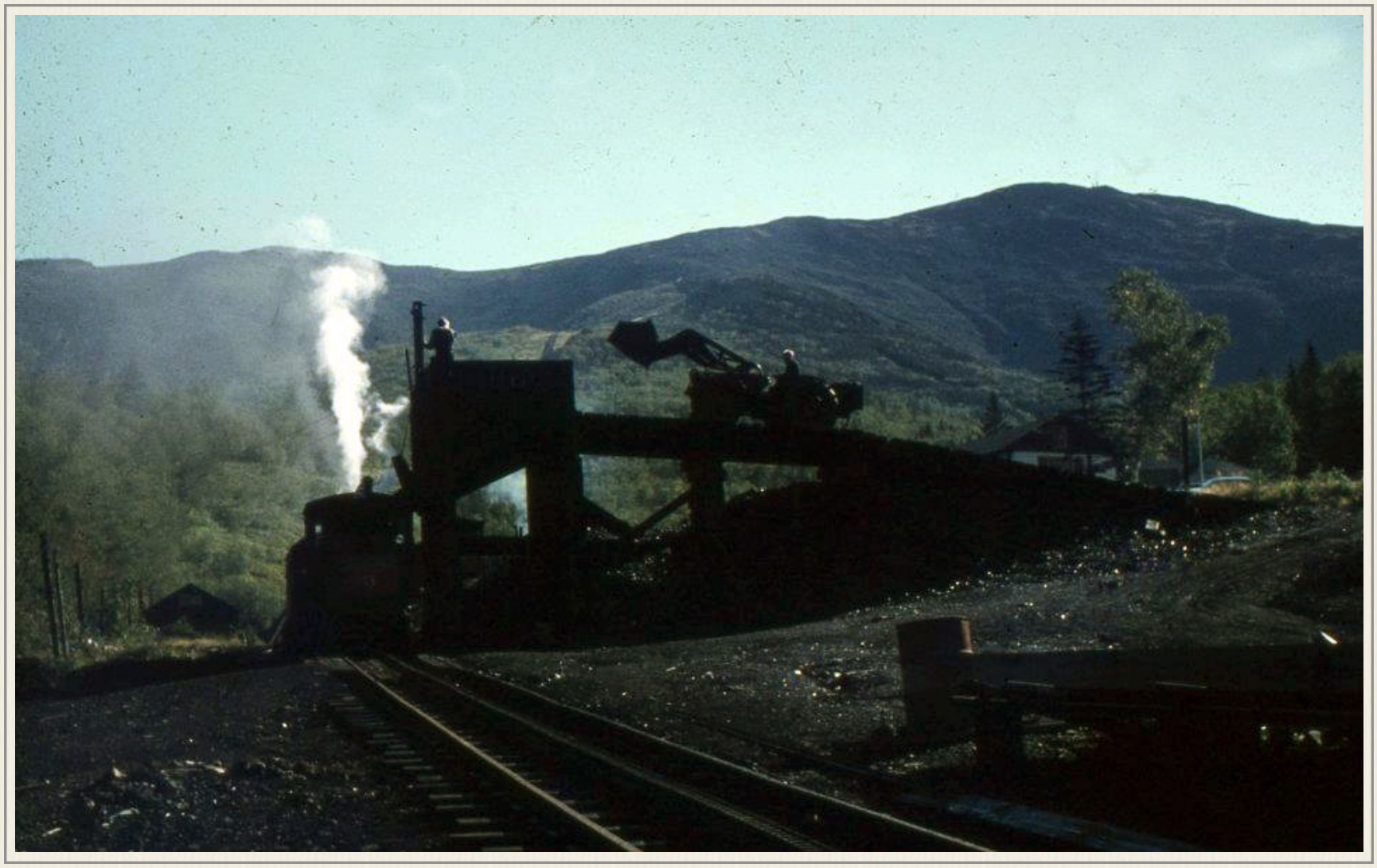




The Bunker & The Elephant: The 3-year old bunker can be seen *(top)* in this Dartmouth College picture from 1952. The old shop bunker & ramp remain but is no longer the primary fuel stop. Honeymoon Cottage can been seen across the tracks. The newlyweds Mr. & Mrs. Jitney lived up-stairs. The sawmill next to the cottage would burn one night, and not appear in Jitney's down mountain view of the facility *(above)* in 1953-54. The primary water column *(right)* would be installed as the new Marshfield Station developed in the mid-1930s. It would fill tenders and occasionally douse train crews and tourists due to inattentive operation throughout the Jitney Era and beyond.




MT. WASHINGTON
MT. WASHINGTON
COG RAILWAY

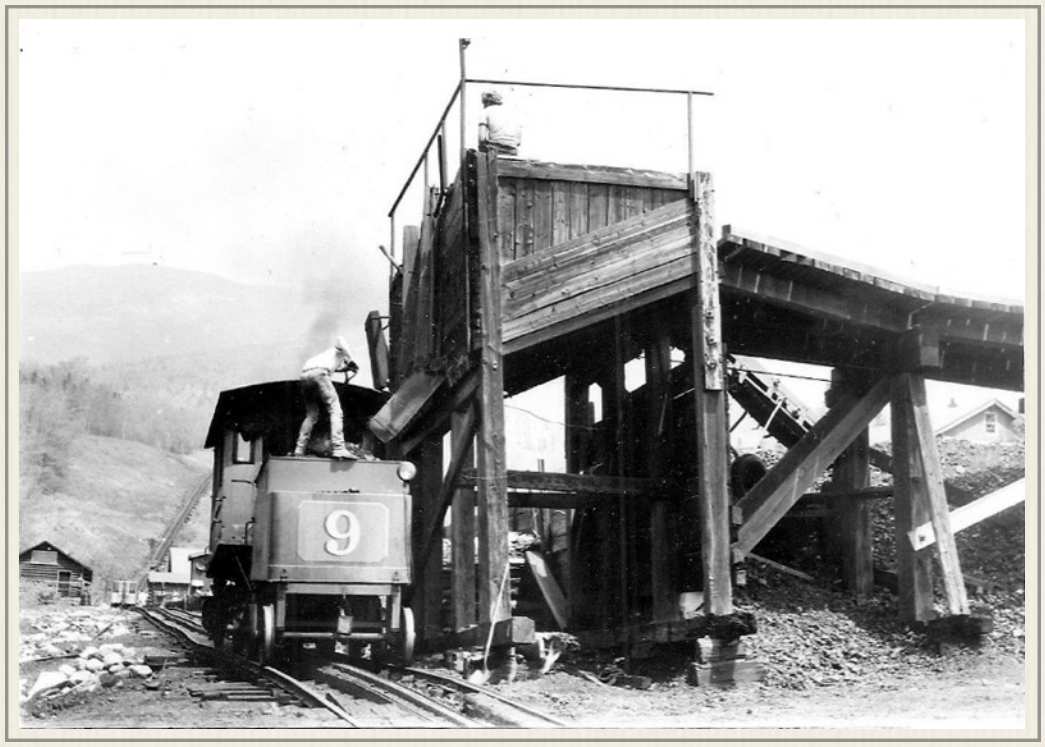


Five Decades - One Ton at a Time: The coal bunker built in 1949 and its companion wash pit for cleaning ash pans after each trip *(above & prior page)* would operate throughout the Jitney Years, the Teague Years and fifteen years into the new ownership group's operations.

The narrow ramp for the tractor to climb to deposit the fuel for loading kept drivers on their toes, and their friends anxious. "(T)here were no sides to the dumb thing," says Anne Teague Koop. "Why they only had a ramp way up and if you were not careful backing... it wasn't that broad... you could catch a wheel and flip over and it used to make me so nervous." 16-year old Tom Fillion did just that when his brother, who was tending the bunker, let him drive the tractor. The incident became part of Fillion's 2016 novel, *New England Book of the Dead*.

"It was my day off from washing dishes in the (Marshfield) restaurant for the old Polish cook who ran the kitchen. My brother ran the coal bunker that summer. Coal was trucked in and dumped next to the bunker. He drove a tractor with a front loader up the wooden ramp and dropped a bucket of coal. He backed it down and went for another scoop of coal. The trains pulled up below a chute, and he filled the tender with a ton of coal that would later rain down as grayish black sprinkles alongside the track. One day he showed me the controls for working the front loader, the gears, and the brakes. I had no problem going up the wooden ramp and dropping the load of coal. A cloud of black dust rose up when the coal hit the pile. I slipped the gear into reverse, and the tractor picked up speed going back down the ramp. The tractor went faster than I anticipated. I panicked and tried to stop the old contraption, stomping on the brake pedal, but it kept coming down the ramp. In my confusion, I turned the wheel so the tractor veered to the edge of wooden ramp. There was an embankment on the side where the road dropped to ground level. At the bottom was a small shanty where the engineers and firemen kept barrels of cog grease and lubricant for engine fittings. The old man, Rouleau, who took care of the fire place in Marshfield Restaurant... watched with broom in hand as the tractor toppled over the side of the coal bunker and rolled down the embankment.

Ch. 4 - Fuel



"My brother stood helplessly as the tractor careened over the edge. I was overcome by a powerful force that I surrendered to. I didn't try to save myself. I don't know why. There was a serene calmness all around me. I fell down the embankment and split seconds later the tractor toppled on top of me. I felt encased in a metal casket. The sky became dark. The tractor continued its tumble down the embankment. The ground shook. One of the large back wheels broke off as it flipped over on itself. I was sixteen years old. I wasn't sure what I had just experienced. I should have been dead...

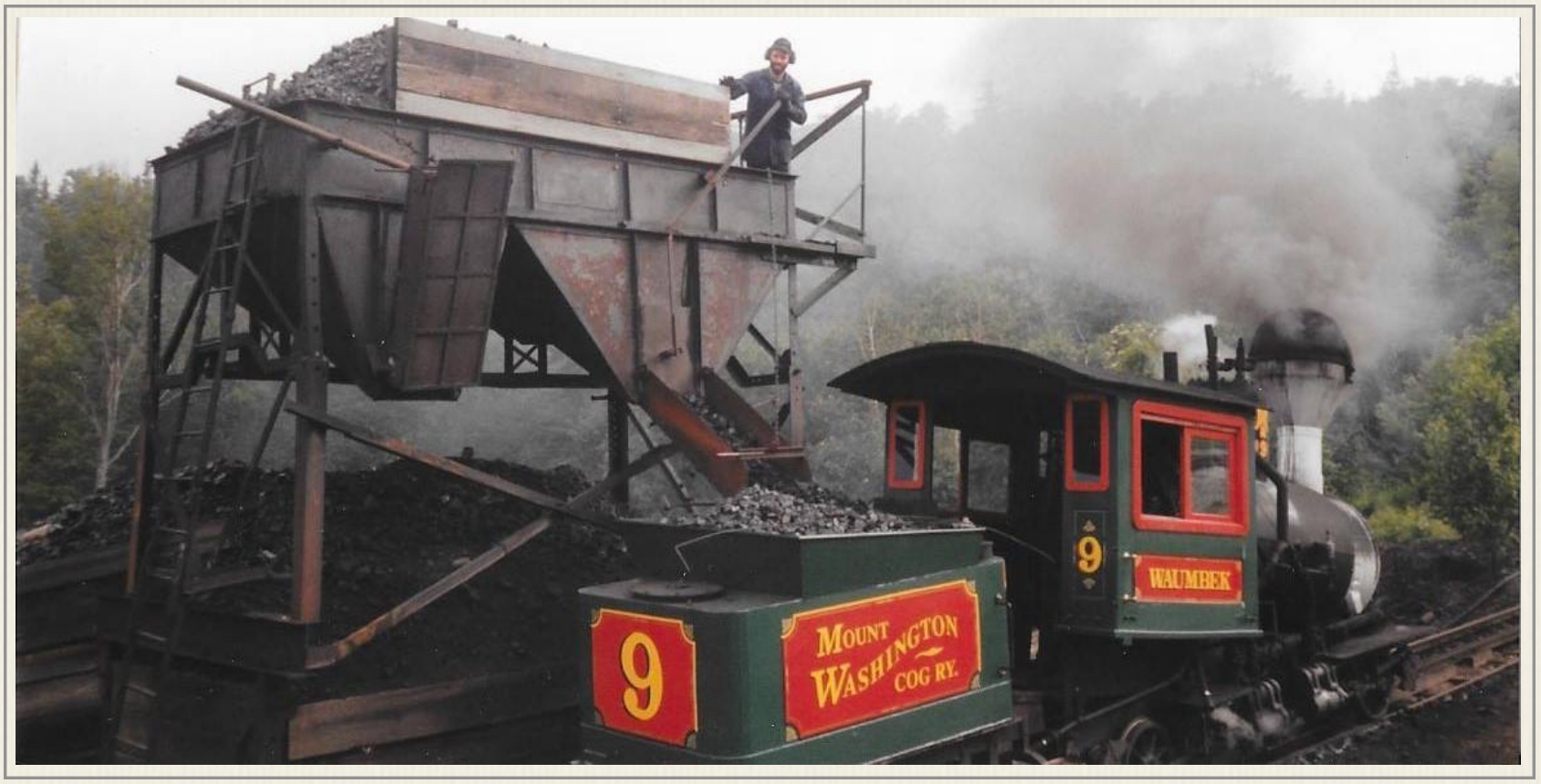
"It took weeks for the guys in the engine shop to fix (the tractor). My poor brother, besides thinking he had almost killed me had to use a wheelbarrow and a shovel to load the coal bunker until the tractor was back in service. I was somehow forgiven for my naiveté and invited back for three more summers."

A coal conveyor and safety railing was later installed around around the very top of the bunker *(above)* to help prevent falls during tender loading. In 1998, New Hampshire's Governor and Executive Council approved funding for a new coal delivery system that would be built on the other side of the tracks, and the old system was torn down *(below)* to make way for the new.



The coal to fuel Cog locomotives arrived at the Base by rail until the spur line from Fabyan was abandoned in the early 1930s. Then the railroad cars of coal would be parked at siding in Fabyan, unloaded onto a truck for a trip to the base. Those railroad cars would arrive through the end of the Teague years operating the Mount Washington Railway.

Brett Hall: "I believe it was an '83 or '84 when a Cogger single-handedly derailed an empty coal car and a full coal car. There was a trough between two wide spaced ties under the siding at Fabyan's. There were two conveyors at that location. One slipped under the siding rails and collected the coal from the bottom dump hoppers. The second conveyor lifted it up into a Cog-owned dump truck. One conveyor was 240 volt and the other conveyor was 480 volt. Both had the same plug on them. The Cogger plugged the wrong conveyor into the wrong outlet and fried one of the motors. Deciding there should be a faster way to transload the coal he got a small, one-yard loader from the Cog, drove it to Fabyan, and proceeded to dig a much larger hole under the siding. The unloading and loading did indeed go much faster. However, when he released the brakes on the empty car to roll the loaded car over his newly created bunker, the light car moved across the opening quite well. The heavier loaded car stretch the rails all the way to the bottom of the hole leaving the car listing to one side precariously. The railroad *(Maine Central)* was called and informed that the car had fallen into the trough. The section foreman indicated that he had noticed the ties were a bit rotted on his last inspection and that he wasn't surprised. He was not informed of the additional excavation work. He told us that his crews were too busy attending to a derailment to get to us and to have our track crew make the repairs and send him the bill. The Cog ended up with a nice large concrete bunker with steel beams supporting the siding. The new bunker was capable of being serviced by the 4-yard loader. The cog probably even made a profit on that one. There were a few times during the "service as needed" period when we received 18 wheelers of coal. On one occasion the driver didn't have the truck on level ground and when he went to dump the truck fell off to the side. Good times."



The new Cog ownership group decided to replace the timber bunker of the Jitney Years with a new coal loading structure. They received a state grant to help fund the project. Loxley Ness was in charge of its erection and it reportedly fell over at one point. It was still loaded by tractor, and it too, was the site of a roll-over.

Ch. 4 - Fuel

Jon Sykes: "I remember that day well. I was running trains that day when Robbo *(Rob Maclay)* flipped the Trojan on the ramp. Used to scare the bajesus out of me when you had a full load of coal in the bucket and just as you got to the hopper, you'd raise the bucket up high, and at that moment you knew, I better not make a mistake here. It wasn't getting hurt that worries me, it was the heckling that I would inevitably get from Moody and others if I screwed up. All





part of being a Cogger. That day when Robbo flipped the loader, he wasn't even fazed by the incident." ***Emma White Westcott*** *(Maclay's daughter)*: "Oh my goodness, yes!!! THANK YOU for taking the time to post this!! I've been telling this story to so many and was dying to get ahold of any pics or memories/stories from others of dad flipping the Trojan that day to show some family. Whoops is right, ha! My favorite part is that anyone and everyone who has ever told me this story (usually always when I'm standing next to dad) ends with, "and ya know what, it didn't even seem to phase your dad, he was his normal calm self." Sykes just did it above - I can literally count on that as the last sentence of the story every time. I love it. There was no getting dad riled up, and believe





me I tried a few times!" ***John F. Kurdzionak:*** "I didn't see it (I do know that much!), but I heard about it so many times, that feel like I saw it. I don't know if I was there that day (but on the mountain), or, if I wasn't there that day." ***Ian Murtaugh:*** "Filling the *(old wooden)* coal hopper was my task summer of '75. We were gathered by Ed Clark on one of the first days and he yelled out "Who knows how to operate a front end loader?" No one answered so I raised my hand and he selects me. A few minutes later I asked some slightly older fellow (I was 17) if he could show me and he winked and said "Sure, no problem it's easy." The ramp took some getting used to, but after a couple of days it became routine. A great summer!"

The Road In

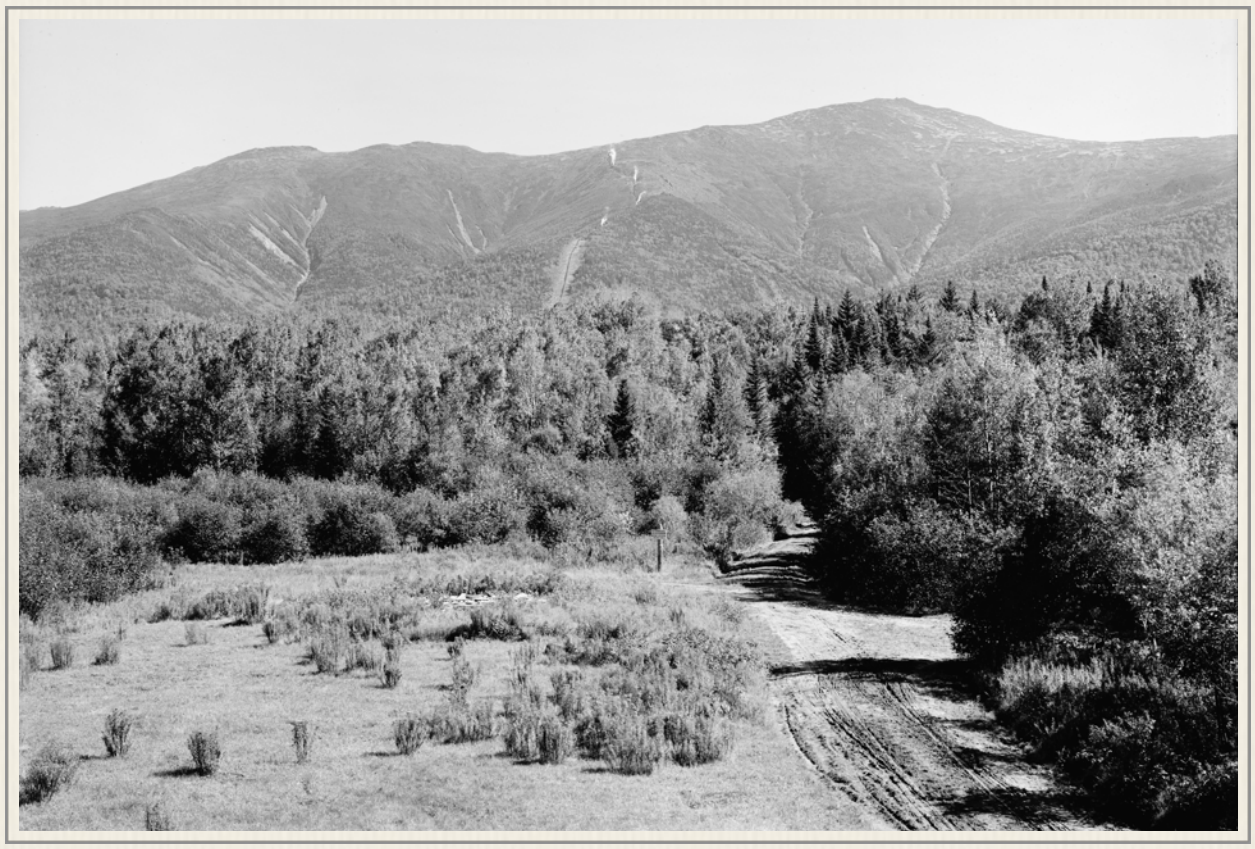


In the spring of 1866, Sylvester Marsh and his team had only a bridle path to travel to get close to the place where he would test his mountain-climbing concept. They had to build the final mile before they could construct their Base and test track. But once it was clear Crazy Marsh could take passengers safely up and down a mountain, the "bridle path" was turned into a toll road by the Mount Washington Turnpike Company chartered in 1867.

The toll road trip was described in the 1872 *White Mountain Guide* starting at page 108: "Carriages leave the Crawford House and the Twin Mountain House at 8 o'clock in the morning. From the Crawford House, the road for the first five miles is over the highway towards the Profile House. At the old Fabyan place, just after crossing the Ammonoosuc, the highway is left with an abrupt turn towards the south. This is a turnpike, but the tolls are included in the fare, which is paid to the proprietors of the hotel. This turnpike, which has now become a very good road, presents the appearance of being, as it really is, the most travelled road in the mountain region. It is also one of the most pleasant. The ride is taken in the early morning or late in the afternoon. For nine miles, you follow a winding road, which is gradually taking you into the very heart of the mountains. On the one side there rises, in regular and gentle slopes, the southern boundary of the pass, made up of the mountains, traversed by the bridle-path from Crawford's, while on the other there brawls and bubbles a mountain brook, which, ever and anon,



dashes across your pathway, assuming always some new phase of loveliness. About three miles from the turnpike gate you reach the Upper Ammonoosuc Falls. These deserve a separate visit. The teams usually stop here on the return to afford an opportunity for a cursory examination. It is a scene of exquisite beauty. For the whole distance of the turnpike ride you are drawing nearer and nearer to the mountain fastnesses, and the great charm of the ride is that you have the full view of the mountains at all time. You gradually approach an impenetrable mountain wall, which allows no outlet, save by the narrow thread (of the railroad) which winds around the flank and up to the brow of Mt. Washington." The *Keyes Travel Handbook* of 1873 painted a similar picture: "Winding along the base of Mount Washington and up to the station of the railway, you are made sensible of your approach to the great central attraction of the mountains. The burly forms of the surrounding peaks swell up on every hand, seeming at times to stand as an impenetrable barrier to your further progress, but, continuing on, Ammonoosuc Station, at Marshfield, the lower terminus of the Mountain Railway, 2,688 feet above sea level, is reached. Here are commodious railroad buildings, and a hotel affording comfortable entertainment for fifty guests."



The 1874 *Popular Resorts, And How to Reach Them* said, "The stage-ride from the Crawford and Fabyan Houses to the Mount Washington Railway Station is one of the most exciting features of mountain travel. The falls of the Ammonoosuc are passed by the way side, and they are well

worth a visit. Here the rocks have been worn by the action of the water into a thousand fantastic forms. The road leads through a primeval forest: luxuriant vines laden with fruit and berries spring from the virgin soil, often tempting the visitor from the carriage. We occasionally catch a glimpse of the grand old mountain, as it raises its granite head above the clouds. The ascent of Mount Washington was once a feat of rare occurrence, accomplished only by the daring hunter or adventurous traveller; but the industry and perseverance of man have smoothed the way; and the route has been made easy, safe, and pleasant."



"Civil engineer Frederic J. Wood told the tale of the turnpike *(left)* in his 1919 book, *The Turnpikes of New England*. "The turnpike was conceived as a means of transporting to the site of the new railroad the various supplies necessary for its construction and equipment," writes Wood, "and later to derive profit from the tolls collected from tourists on their way to the mountain. The profitable life of this turnpike was destined to be short, for summer travel to the White Mountains was growing very popular and it was unlikely that the railroads would long leave such a lucrative field unoccupied. (T)he Boston, Concord, and Montreal Railroad was completed as far as Littleton when the turnpike was projected, and it lost no time in pushing nearer. But times were hard and the construction proceeded by piecemeal. Between 1873 and 1876 the rails crept ahead a little at a time, until Fabyans was reached, after which the remaining five miles to the base was rushed, the whole length being opened for passengers July 6, 1876. But the turnpike still held on, and its rates-of-toll sign at the Fabyans end was long a familiar object to tourists with its unique spacing. The railroad must have felt the competition of the old-fashioned competitor, for early in 1882 a small block, three eighths of the total of the capital stock (of the turnpike), was bought by the directors of the Boston, Concord, and Montreal Railroad, and later purchases resulted in the acquisition of it all. In 1885 authority was secured from the legislature to extend the Mount Washington Turnpike, called in the act the "White Mountain Turnpike," to a junction with the Mount Washington Summit Road, but the plan was never carried out." Wood concludes that "even railroad managers could not make the turnpike a success and they were glad to get rid of the road. May 13, 1903, the turnpike was deeded to the state of New Hampshire." The company stopped paying the state franchise fees and its charter was finally revoked by the Legislature in June 1937 with more than

300 other delinquent corporations created by Special Legislative Acts over the years.



A week after the new railroad spur from Fabyan to the Base opened, a group of 40 journalists from central Vermont were still using the turnpike taking coaches from the Twin Mountain House. A July 21, 1876 description of the afternoon editorial excursion read, "Dinner completed, and the fixtures ready, three stages, drawn by four and six horses, came to the door to take the party to the base of Mt. Washington. The distance between the two points is said to be ten miles. The road, however, running through a county where at every turn a new picture of beauty or grandeur rises from Nature's infinite combinations, was neither long nor tedious. In due season we were all at the foot of Mt. Washington, eager for the ascent."

Tales of Coggers traveling the turnpike were featured in Walter Aiken's September 12, 1878 *Among the Clouds* article about the how the railway operated early on. "The early days of the Mount Washington railway were full of care, full of trouble, full of hard work and anxiety, with occasionally a slight mixture of fun and jollity," wrote Aiken. "With no rail communication nearer than Littleton, it was a great deal of work to transport material and supplies to the base of the mountain from that place. Whenever we wanted any repairs, to Littleton we had to go, no matter if only a bolt required turning or a thread to be cut. It was our usual custom when we wanted anything of the sort, to start a man after his day's work was done, with our old horse for that place. It being twenty-five miles each way, he had a pretty good night's work before him to go there, get his job done, and return before morning. I remember once when John J. Sanborn had charge of the road, that he expected to arrive at the White Mountain



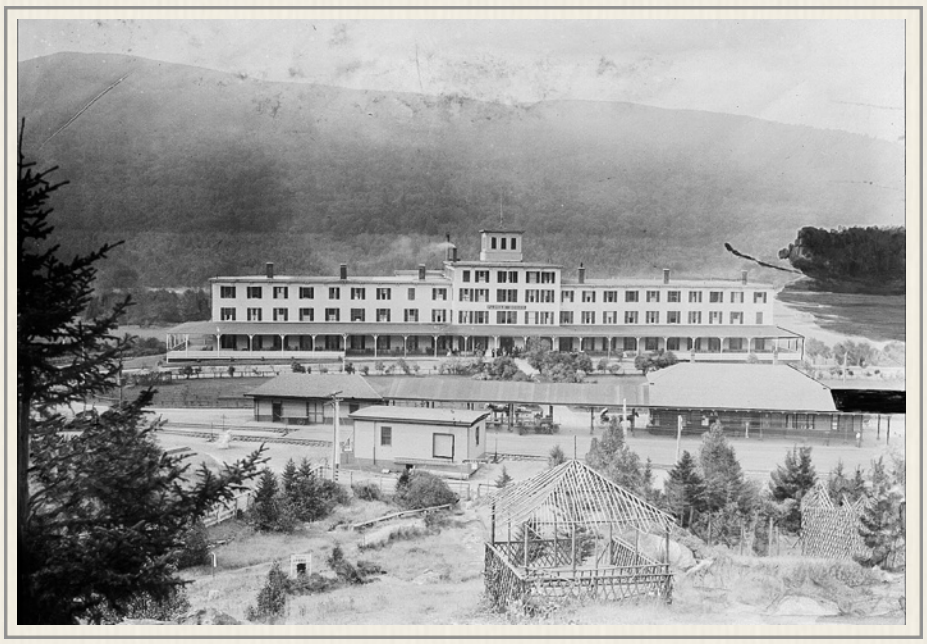
House on the nine p.m. stage from Littleton, and requested Charles L. Aiken to take the old horse and go out for him. They started for the Base, passing through the toll-gate at Fabyan's at ten pm. Sanborn passed the reins to Charles, asking him to drive, saying he would take a nap, and proceeded to do so. Charles being tired as well, soon laid the reins across the dasher, and before long both were sound asleep. The old horse knowing the road, went in as usual and stopped at the stable door at the base of the mountain. When the workmen got up in the morning there stood the old horse like a statue, with Sanborn and Charles still sound asleep in the wagon. To say that they were greeted with a round of applause would be "drawing it mild."

"Some years since I received a telegram at Franklin," wrote Aiken. "Saying that engine No. 2 had broken her main driving axle on Jacob's Ladder *(July 1869)*, and requesting me to make and forward another without delay. The forging for a new axle was taken into my shop Saturday, at twelve, noon. I telegraphed J.A. Dodge, superintendent of the B.C.&M railroad, that if he would have an engine at Tilton at ten p.m., the axle would be finished and at that place. At the given time both engine and axle were there, and away we went for Littleton. John L. Davis was the engineer of engine No. 2, and he was on hand at Littleton, which place we reached at four Sunday morning. He had a pair of old horses and a poorer express wagon, with which we started for the base of Mount Washington. The wagon would hold up nothing but the axle and gears so John and myself went on foot. We reached Bethlehem in seasons for breakfast, the Twin Mountain House for dinner and Mount Washington at five pm. My men, thinking an axle could not be made and sent in in any such length of time, had gone to the Crawford House to spend the day, so Davis and myself got together what men we could find and fired up the old engine No. 1 and started with the axle for Jacob's Ladder. We reached there safely, got our jack-screws under No. 2, raised it up, took out the broken axle and put in the new one. We then fired up No. 2, and Davis ran down one of the engines and myself the other. We reached the Base at nine p.m., and so were ready for business again Monday morning. My men were somewhat surprised when they returned from the Crawford and found everything in running order again. – Walter Aiken"



The Spur Line

Travelers had two modes of transport to the Mount Washington Cog Railway starting in July 1876 as the railroad spur from the mainline station at Fabyan's was completed. The section required special equipment as described in the Saturday, August 3rd, 1878 edition of *Among the Clouds*. "The engine *Mt. Washington*, which is used on the railroad between Fabyan's and the Base, weighs 37 tons and two hundred pounds, independent of the tender. It would haul on an ordinary road one hundred loaded cars, but from Fabyan's to the Base the grade is so steep that three loaded cars are all that it can manage. The rise from Fabyan's to the Base is 1,200 feet. For two miles the average grade is 296 feet, and the sharpest is at the rate of 306 feet. The engine, which was made especially for this work, is of the Mogul pattern. It is provided with a Westinghouse driving brake, and is under the absolute control of the engineer. It has six driving wheels and its cylinders are 17 by 24 inches."



The unusual nature of the Mount Washington Railway and its dramatic climb to the summit from the Base attracted most of the descriptive powers of early correspondents. But the "ride in" would occasionally be outlined as in this 1879 article in the *White Mountain Echo*. "Standing on the platform of the Fabyan station *(left)*, of the line that leads hence to Marshfield, at the base of the mountain, one sees at all hours a bus-

tling throng, with coat or shawl on arm and field glass thrown over shoulder. The *Mount Washington* car backs in; all rush for it, and instantly it is filled. After plunging through the woods for some distance, and ascending a lone, steep grade, over which the engine puffs with short, wheezy gasps, we reach the base of the mountain. Another scramble is made for the summit cars, and they, too, are immediately filled."



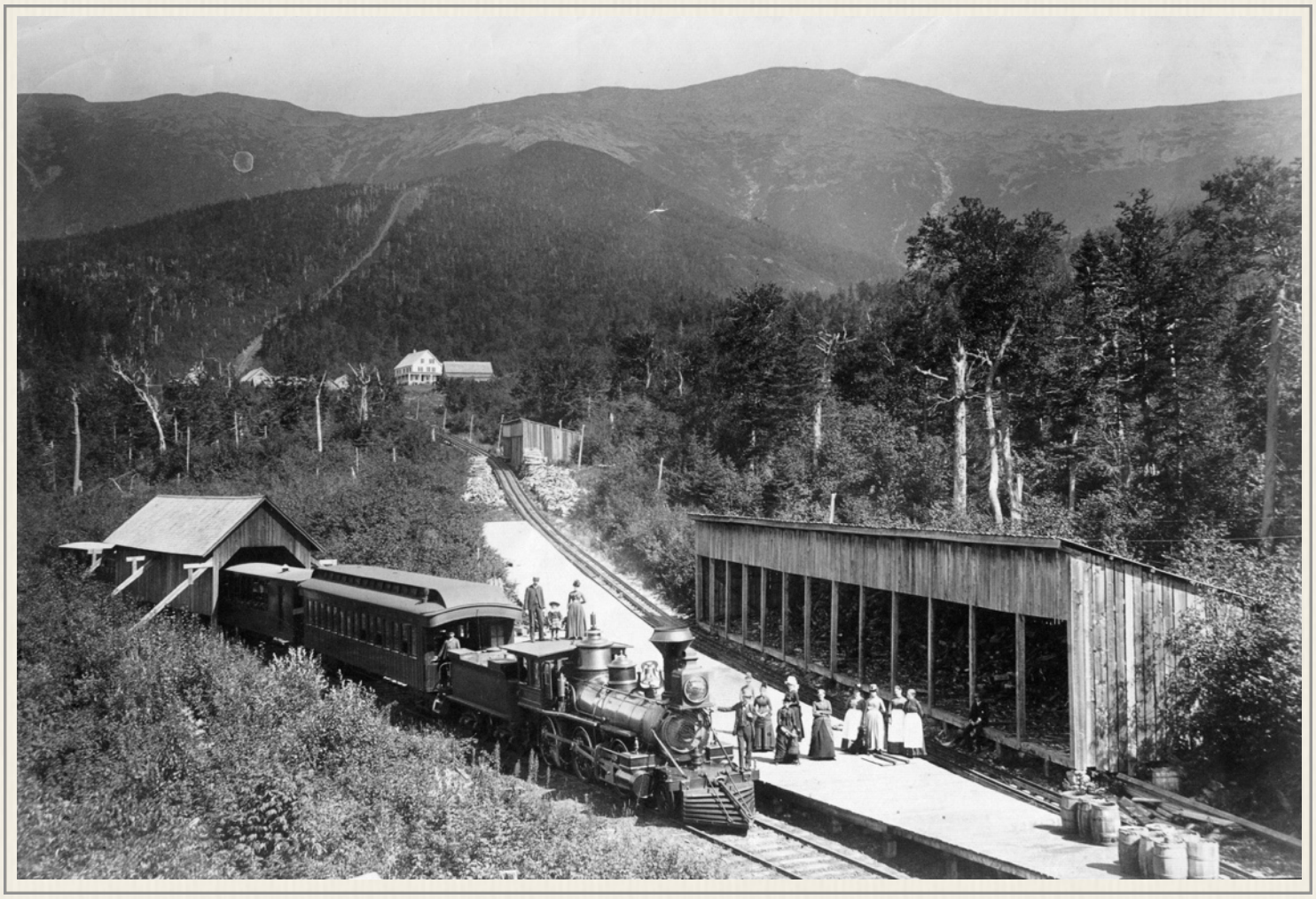
According to *Among the Clouds*, the spur train was really gasping on Wednesday, July 9, 1879. "The engine *Mount Washington (above)*, running on the passenger train between Fabyan House and the Base, had her capacity fully tested yesterday; she brought up three cars loaded with passengers, two observation and one ordinary car, making the heaviest train ever run to the Base. The engine is of the Mogul pattern, has 4 ft. driving wheels, and cylinders 17x24 inches. It weight 37 ½ tons, and requires 135 pounds of steam when fully tested. It took the load to the Base without any delay. The last 2½ miles the grade is 300 feet to the mile."



For many, the journey up the New Hampshire mountain was a religious experience. The autobiography of John Lemley *(right)*, the German-born editor of *Zion's Watchman* from 1879 to 1881 makes it clear he felt the presence. The licensed Methodist Episcopal Church preacher "with eighteen years' experience as as editor and public speaker" described a Mount Washington morning sunrise, and then the ride up the spur line. "Before us mountains lie massed against mountains, and the sparkling streamlets, for very gladness, leap down the sides of the uplifted hills, and the valleys sweetly resting in peace below are scarcely conscious that day had commenced on the summits. Amid his glory, stretching along the saffron-tinted



sky, over gilded mountain peaks, and through valleys luxuriant in foliage, how incomparably grand! And to think that from everlasting these mighty sentinels of the ages have stood in God s eternal sight, as beautiful as if but yesterday they came fresh from the hands of their Creator! It was as if God had opened the gates of heaven and suffered us to look in just for a moment, for soon the sky became overcast, the clouds came rolling up from the Franconia Notch, and, as the train was about to start, a shower swept over us. But it was thought the clouds would pass away and give us a clear day as we took the train for the mountain, and the car was pretty well filled. We felt an undertone of disappointment because of the clouds, but one precious saint, with radiant countenance, spoke out: "Well, it's clear beyond the clouds; the Sun of Righteousness always shines." "Amen," went up from several on our side of the car, and we concluded it was all right. The railway follows the Ammonoosuc river up to the very base of Mt. Washington. For six miles, though a heavy grade all the way, the regular rail is used. At times the engine labored hard to draw even the one car which comprised the train. At the foot of the mountain a change was made for the Mt. Washington railway."

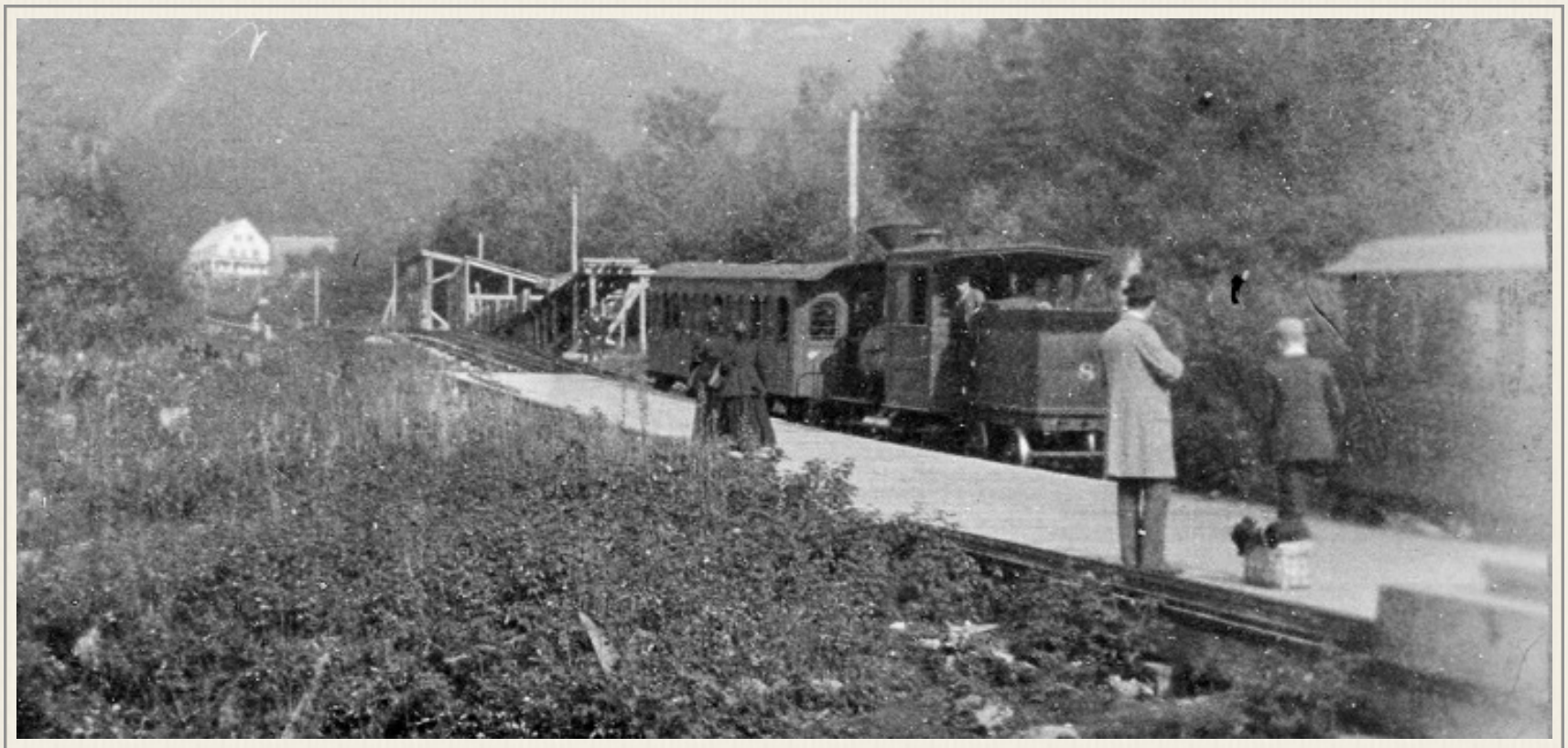




Summer spur line operations prompted curiosity about the rest of the year. *Among the Clouds* tackled those questions in its Friday, August 11, 1882 edition - "Many people wonder what becomes of the Mount Washington branch of the B.C.& M. railroad in winter. Superintendent Corning solves the problem by the information that last year seventy million feet of lumber were drawn over the road. Nine thousand feet is the capacity of a car. During the summer months the lumbering men give way to the traveling public, but for the remaining nine they furnish much of the business of the road. Nevertheless there is no danger that the magnificent forest which crown the mountain slopes will soon be exhausted, as the growth is renewed in about 20 years."

However, an August 20, 1892 *White Mountain Echo* article hints at perhaps the start of an environmental consciousness and concern. "Railroad travel to the summit may be said to commence at Fabyans, whither a line of the usual character conveys passengers for a little short of seven miles, when they change to the ingenious cog-road. The route these seven miles traverse is the reverse of attractive, and presents to view the desolating influence of the woodman's axe, which if not stayed in its havoc will in time effectually destroy the beauty of the hills."

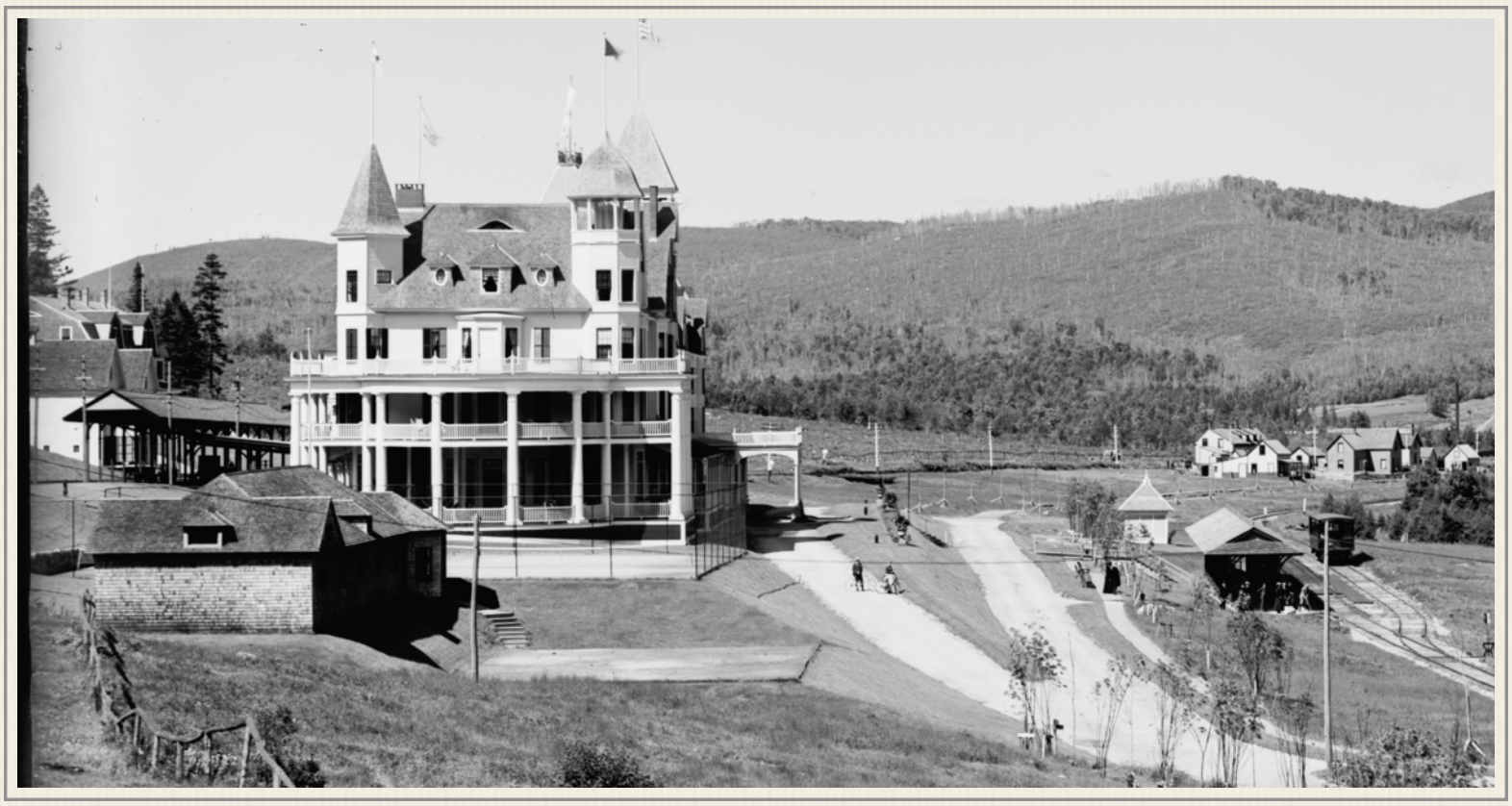
"Arrived at the end of this uninteresting ride the tourist finds himself at the (transfer)," writes *The Echo's* correspondent. "This place, Ammonoosuc or Marshfield, has a small hotel called the Marshfield house *(below)*, which in late years has been much improved and can now accommodate



about fifty guests, who are mainly in summer pedestrians and anglers, while in winter it is often made the headquarters of the vandals who rob the mountain of their sylvan dress."



An 1893 Maine Central Railroad publication, The Crown of New England discusses how tourists heading for the Base Station could board the spur line train along its route from Fabyan. "At Mount Pleasant House, the Maine Central rails pass immediately to the rear of the house, while in front extend the tracks of the railroad *(below)* to the Base Station, five miles away. The grandest panoramic view of Mount Washington and the entire range may be had from the Mount Pleasant House verandas. The view includes the entire mass of Mount Washington *(above)* from base to summit, seen across the broad Ammonoosuc plain. Besides Washington there stand directly fronting the hotel Mounts Jefferson, Monroe, Franklin, Pleasant, Clinton, Jackson, and Webster, with minor peaks to the left and rear. The Mount Pleasant is par excellence the Presidential range view point, with the ascending and descending trains of the Mount Washington Railway in full view, and the numerous trains passing in front and rear of the hotel it is never dull. Two hundred thousand persons, it is estimated, have journeyed to the summit by rail since the completion of the Mount Washington Railway, without accident to life or limb. At the Summit one is sure of comfort and safety, for the Sum-




011831. DOME OF MOUNT PLEASANT, PRESIDENTIAL RANGE
— WHITE MOUNTAINS —
COPYRIGHT 1909
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011832. MOUNT PLEASANT AND MT. FRANKLIN, PRESIDENTIAL RANGE
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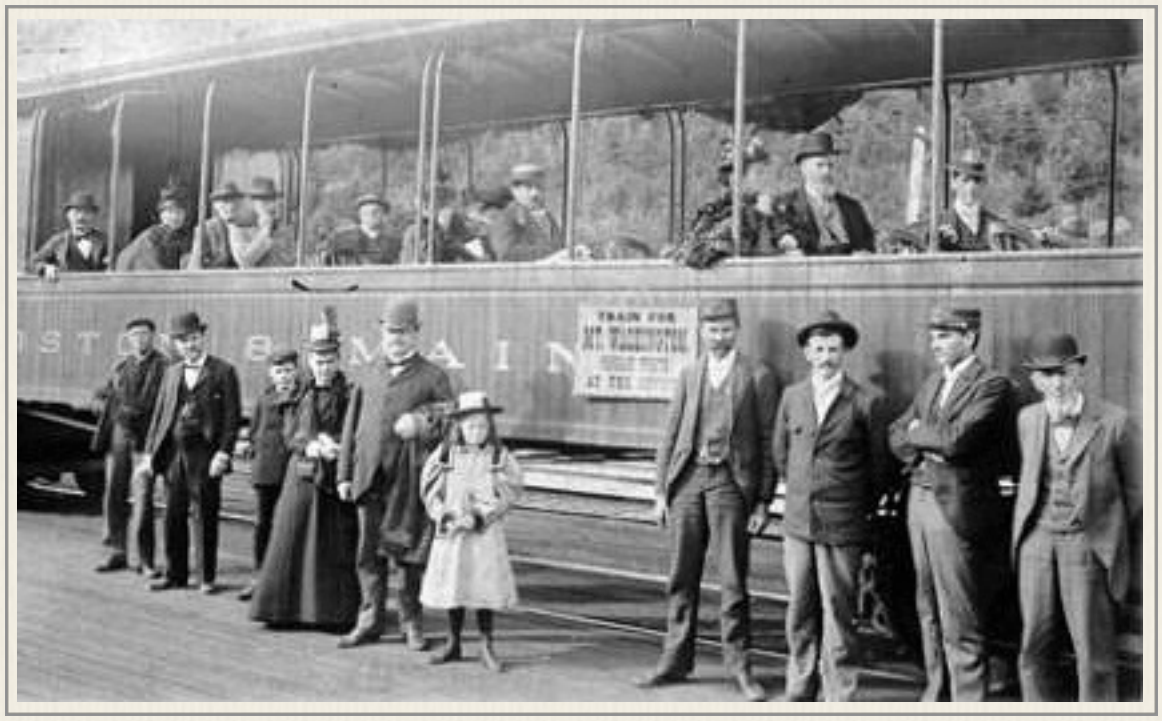
mit House is spacious, well built, and supplied. To do the White Mountains without visiting the summit would be equal to a European tour with Paris left out."

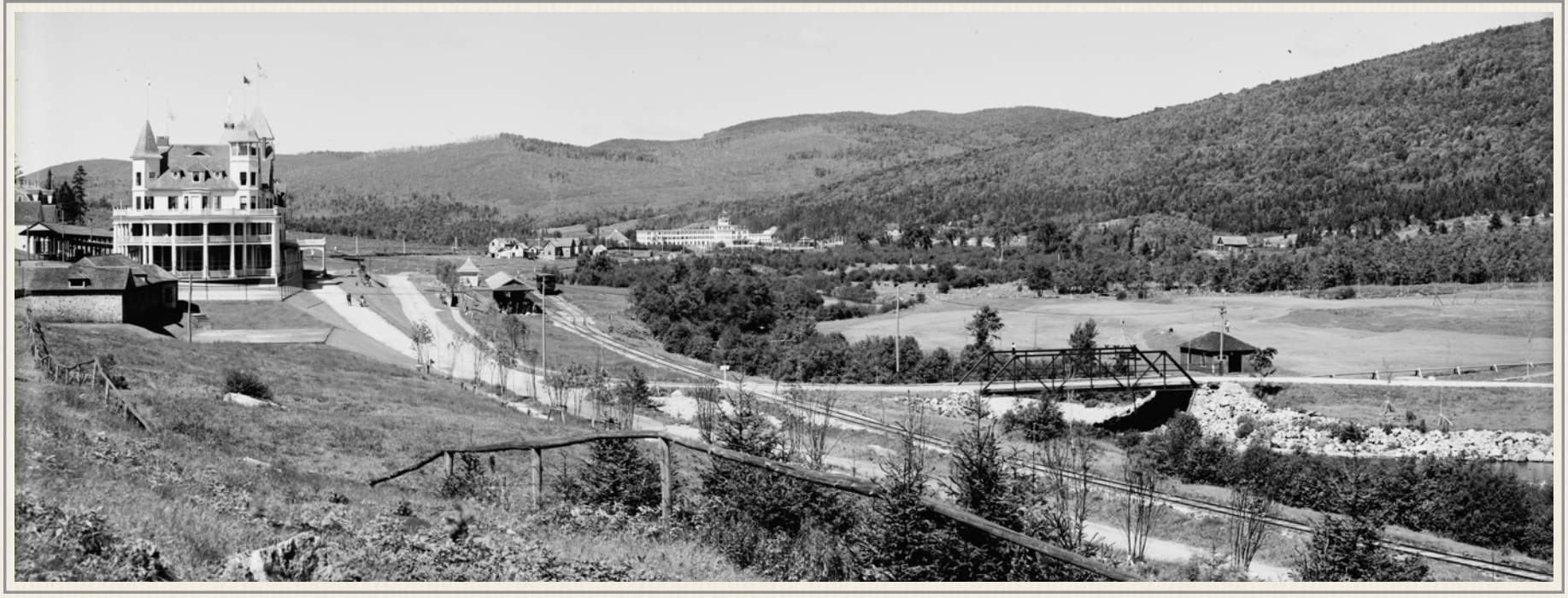
A spur line trip taken on August 20th, 1897 by "L.P.H." and described in *The (Gouverneur, New York) Northern Tribune* on Wednesday, September 1, 1897 suggests the spur line, like the steep Cog railway, could distort a traveler's sense of reality as it moved along the rails. "The train from Fabyan's to Base station consisted of a heavy six-wheel locomotive and a light observation car. Running along the valley of the Ammonoosuc the sharp grade up is soon reached. You are visibly approaching the great mountain, and its lofty slopes and towering summit become the whole landscape and and command the undivided attention. There is a curious illusion about this part of the ride. The eye refuses (my one eye refused) to believe that so towering and vast a mass can have so steep a slope. And so as you approach it up a grade of more than two hundred feet to the mile - you know this because the conductor tells you so, and because you hear the big locomotive puffing with all its might and see that you are going only a little faster than you could walk - you really feel that you are being slowly let down a sharp decline to the foot of the mountain, and that all the labor of the engine is expended in keeping you from rushing with destructive speed. At Base station is a long, level platform where you change to the cog railroad."

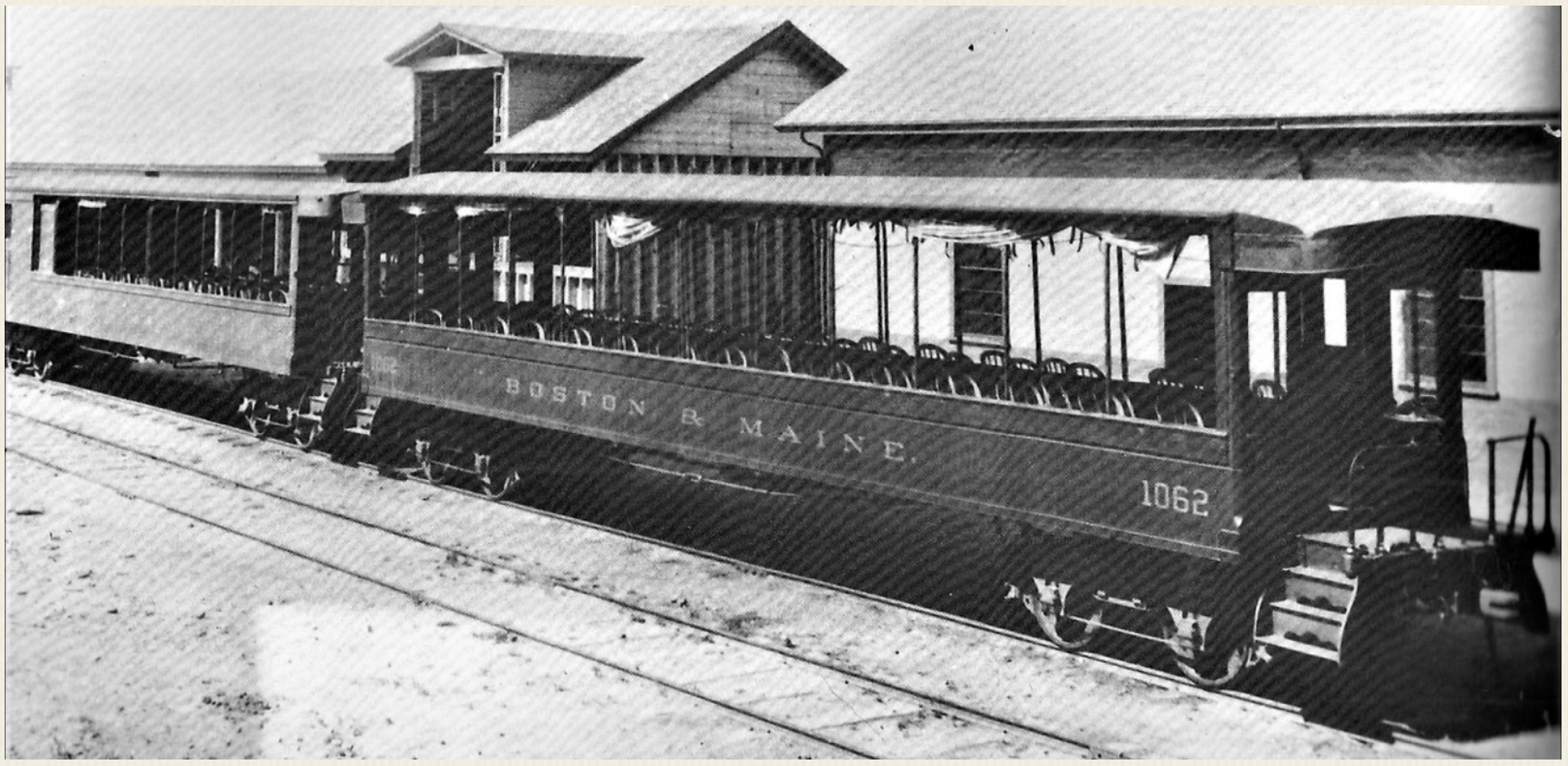
When L.P.H. took his shuttle train trip in 1897, the railroad was also running the other road in. But that turnpike, and its tolls would go away in 1903 when the base road was turned over to the state of New Hampshire and became a public highway.



Looking at the top right corner, you'll see a man and woman sitting near the front of the train; they are Joseph and Mary Armstrong. The Armstrong's were dedicated Christian Science workers who labored in Boston for many years, and Joseph was one of the first members of the Board of Directors of The Mother Church. Here, you see them on their way up to Mount Washington in the White Mountains for a summer holiday in July 1897. The gentleman standing at the bottom right is Royal D. Rounsevel, also a Christian Scientist and the owner of the White Mountain House, a hotel in Fabyans, New Hampshire. Fabyans, near current-day Bretton Woods, was situated at the base of Mount Washington.

The spur line would continue to deliver passengers. and supplies to and from the Base Station. A 1916 description of transit from Fabyan to the Summit in *Among the Clouds* reminds the tourist, "The White Mountains group themselves about the Presidential Range and all the railroad lines entering the region lead nearly to the foot of the highest mountain. Fabyan station, seven miles from the Base, is the junction of the Boston & Maine and Maine Central Railroads, and the starting point of trains over the branch railroad to the foot of Mount Washington. In this seven miles the ascent is about 1,200 feet, with a maximum grade of 216 feet per mile. The train is made up of observation cars and is backed up the grade by a powerful locomotive, so that the passengers have an unobstructed view of the great peaks as the range is approached. A stop is made at Bretton Woods for passengers from the Mount Washington and Mount Pleasant Hotels *(below)*. The trains passes the Bretton Woods golf links and follows the rocky gorge of the Ammonoosuc, where





A two-car train stands at the Mt. Washington Base Station waiting for passengers to return from the summit.
- Walker Transportation Collection - Beverly Historical Society

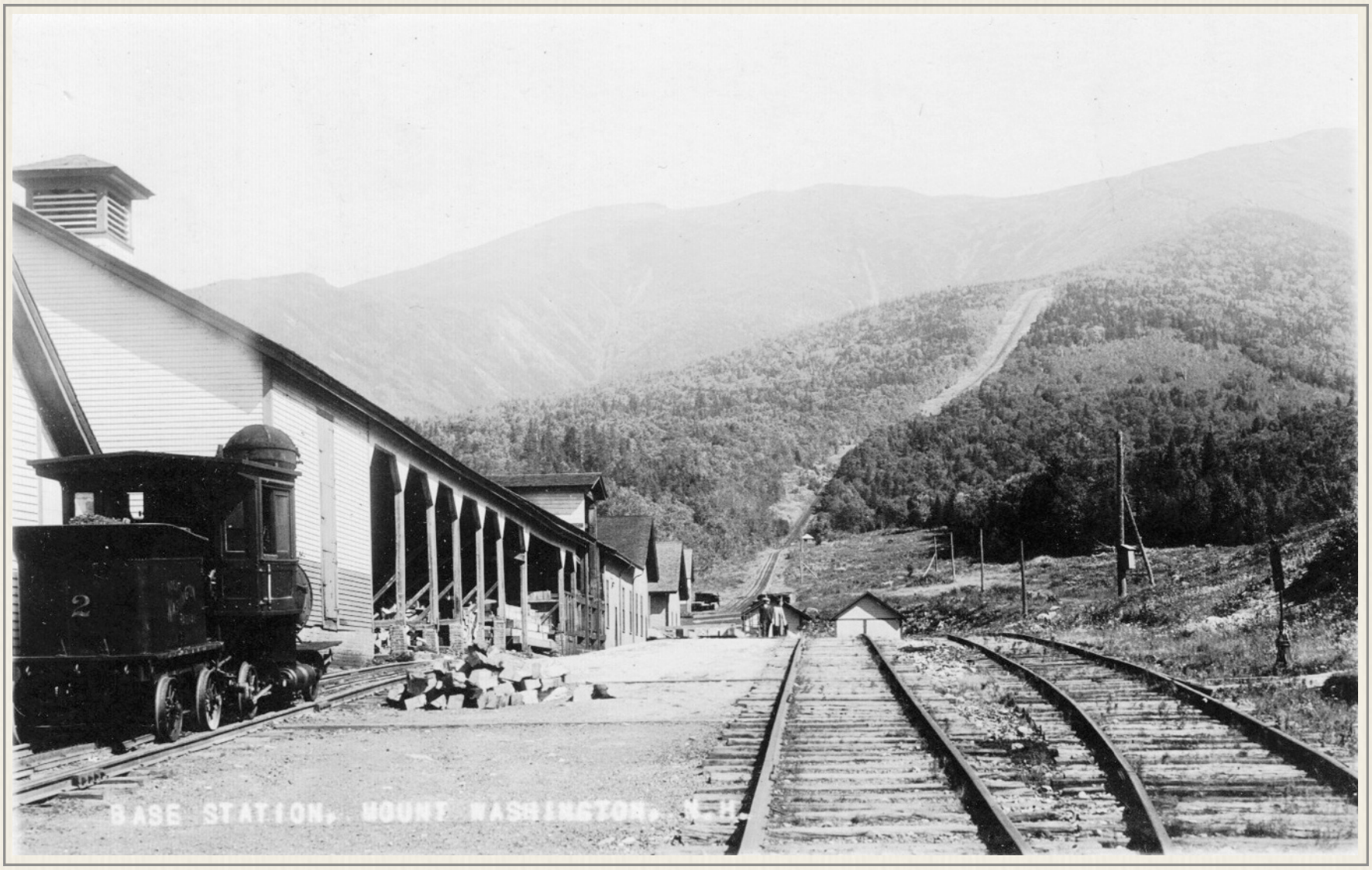
views are had of the remarkable rock formations down which the raging stream tumbles. The southern peaks of the Presidential Range - Monroe, Franklin, Pleasant, Clinton, Jackson and Webster, are seen at the right, while Mount Washington is supported on the left by Mounts Clay and Jefferson. The Base Station, which is 2,600 feet above sea level, is reached in about half an hour, and the passengers change to the cars of the Mount Washington Railway, and the real ascent of the mountain begins." When the passenger train service stopped in 1932, Col. Henry Teague began an automotive shuttle service as the Base road became the sole economic umbilical for the Mount Washington Railway.





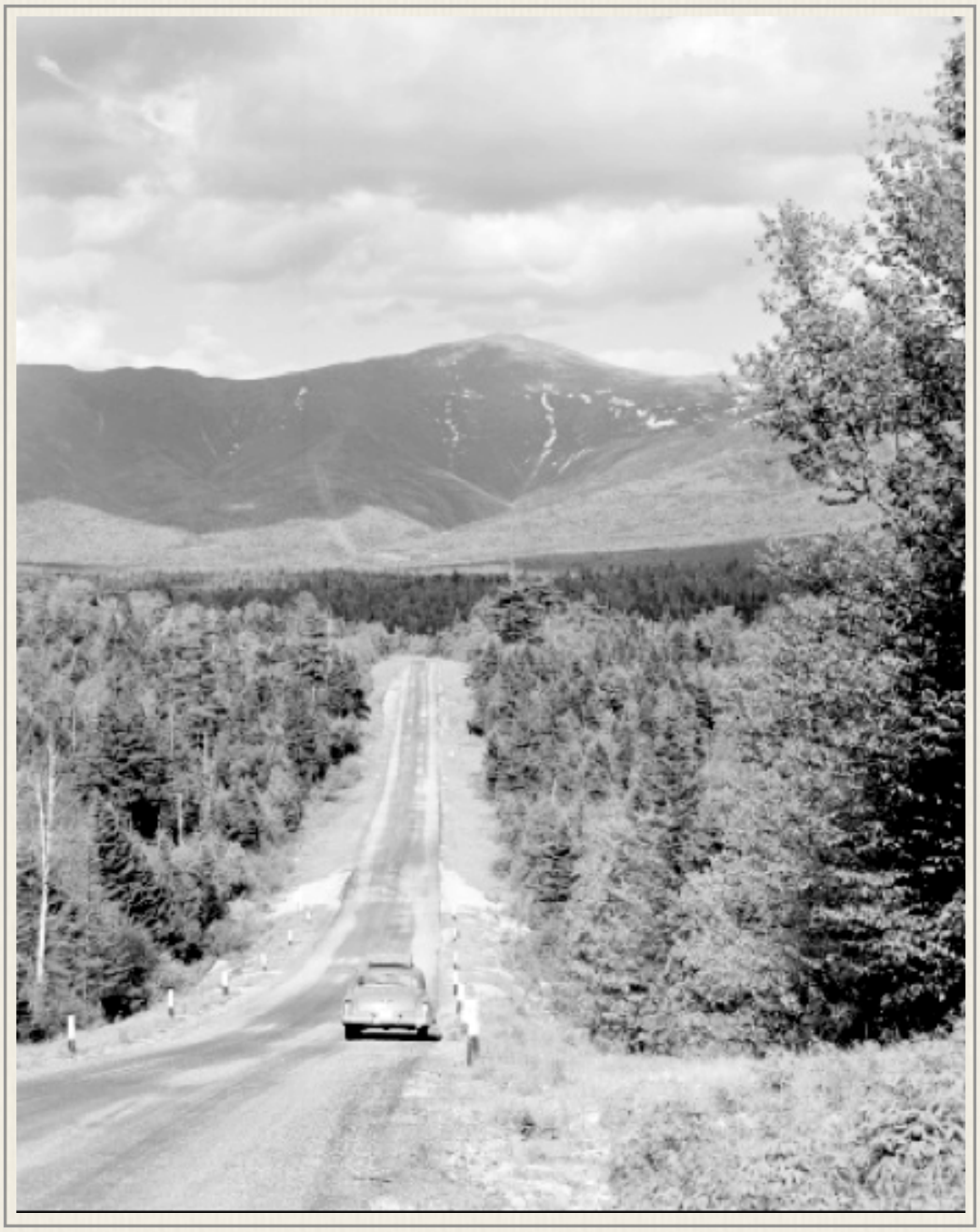


Isadore N. Lunderville - Dr. George A. Tewksbury on excursion car (1907)



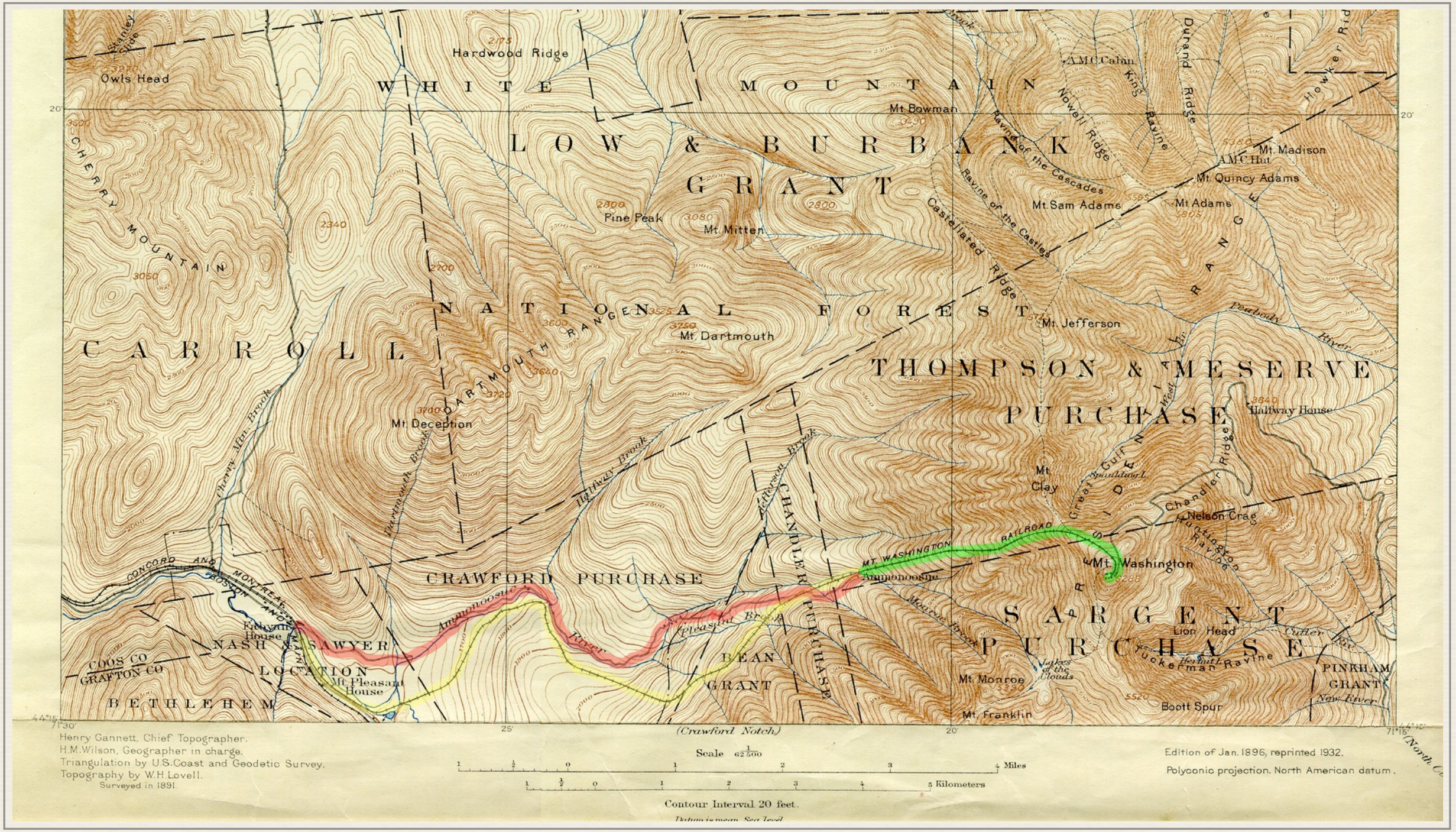


North Hampton, NH family preparing to hike up Mt. Washington. They've parked their car to the left of the Boarding House overlooking the pump house, laundry, and wood shed of the Base Station. Photo says they are putting Post board in their shoes??? (August 1924)
- Robert J. Girouard Collection / New Hampshire Then and Now



The Base Road

When Col. Arthur Teague returned home after World War II and started working to reopen the Cog after a three year shutdown, Ellen Teague writes the Base road was on his checklist. "Art made a point of stopping at the state capital office building (in Concord) where he spent a part of an afternoon visiting with Mr. Everett, state road commissioner, and Mr. Johnson, the chief engineer of state roads. They mentioned that the state was expecting to spend between $42,000 and $50,000 building 1⅞ miles of new road to the base. It would start at Fabyans Station and go straight some distance *(left)* away from the Mount Washington Hotel. It would then come out at the first opening about three quarters of a mile behind the



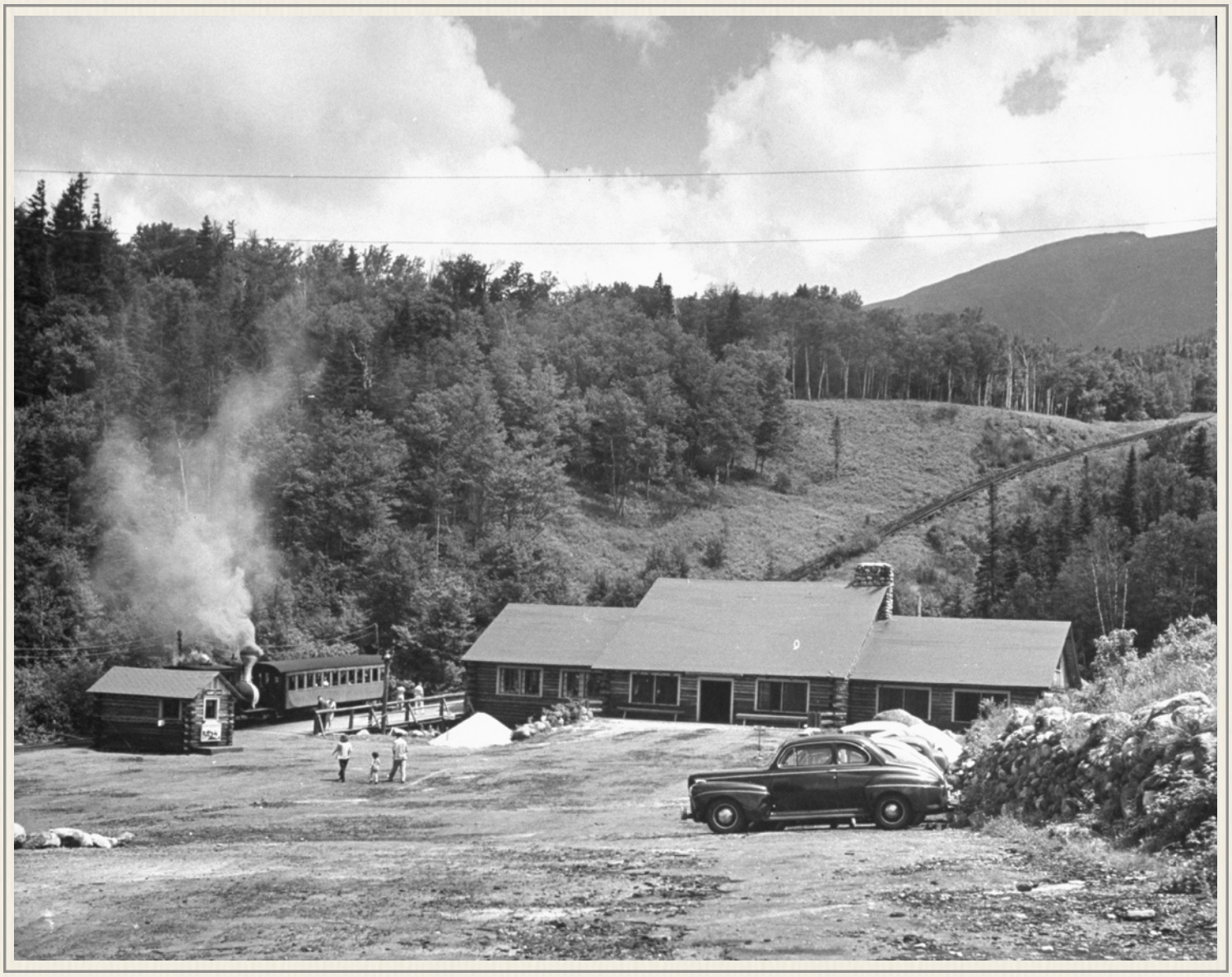
Two Ways In to the Base Station: *An 1891 survey is seen in its January 1896 edition that was reprinted in 1932. The yellow line follows the route of spur line railroad from Fabyan to the Ammonoosuc Station about a mile below the original Cog Depot. The pink line follows the stage road which would from the route for the Base road in later years. The green line indicates the route of the Mt. Washington Railway up to the summit.*



hotel where it would join the old road. About half would be completed soon, but the highway department was having difficulty getting labor."

The new stretch *(above)* would be built, but nearly twenty years later Ellen Teague was still worried about the entire highway. "As late as 1963 our road into the base consisted of four miles with twenty-two pronounced winding curves and about one mile of fairly straight highway connecting U.S. Route 302 to the base of Mount Washington on its west side," she wrote in her memoir. "Each year Art and I tried to keep track of how much money had accumulated from special funds provided by the National Forest Service for service roads. I would then write the governor and tell him the amount of money which should be available for repairs to the road into our base."





Ellen writes that it took the death of a young girl in 1963 to have a large boulder removed and improve the road's alignment at that particularly sharp curve, the scene of many accidents over the years.



CHAPTER 5

A Day's Work





First train out building steam on the Base siding (1950s)
- Lewis Family Collection

I climbed into the cab of the *Great Gulf* with an armful of "waste" from the Shop after punching the time clock in the back of the Ticket Office at 6:48am. The No. 6 being the first out, I had to go to work at 7:00 as does the second train on the switch. I lift up the fireman's seat revealing a storage box and stow the wad of tangled waste threads used to wipe grease off fittings and hands. I turn to my right and crack open the bottom and top valves of the water glass just enough to make the water level register and no more, because any damage to the water glass would require turning the valves off in a hurry, the bottom one first knowing the scalding water would come out there.

The water level is about two gauges and I confirm the level by opening the middle water cock. A quick glance at the fire reveals a glowing bank. Closing the fire door and picking up a wrench, the lubricator is next.

While I am draining the lubricator, the fireman arrives and he also checks the water and fire – a habit that must be well established. The lubricator is full and plug properly secured. As I leave the cab with the grease gun, I remark, "Have a ball last night?"

Dave replies, "Had a ball last night. I wish to hell there weren't so many guys playing the field."

The brakeman walking beside the car remarks, "I am glad I am just a spectator at this game of love – but to spectate I suppose one should look through clean windows," and with those words and his yellow can of Bon Ami™ glass cleaner, Doug disappears into the car clutching the best



Jitney and fireman Dave Woodbury
- Lewis Family Collection

rags his careful search of the rag bale in the Shop's parts room could find.

I can hear Dave cleaning the fire as I am greasing the engine. He soon pops out of the cab with the oil cans and walks towards the grease rack.

"Don't fill those so full they expand all over the cab," I called.

"I have finished three years at Penn, I know oil expands when heated," Dave called.

"But can you remember?" I chanted.

Bob Kent's crew is going through a similar routine on the switch as the No. 2 *Ammonoosuc* will be the second section of the scheduled eight o'clock run.

The shop mechanic had checked the No. 6 engine before I arrived, but as usual on the Cog we check and check and check. So I gave it the once over, finding nothing wrong, I murmured to myself, "Uncle Paul doesn't miss much." The car knocker was under the passenger coach checking the brakes and under carriage. Earlier this summer, while he was underneath the car and the *Great Gulf* was still sleeping with no steam pressure, I'd walked past and said, "Okay - move it up!" He'd tossed his tools and scrambled out from under banging his head at least five times. It was a joke that died horribly, so this morning I kept quiet and didn't say hello.

With the grease gun and cog grease bucket in hand, I meet Dave beside the coal pile coming from the grease rack.

"Don't overfill that grease gun," says Dave in passing "the damn thing will expand all over the cab." Thus making the morning work word sparring match even for the time being.

With the engine greased, the car knocker gone and the steam pressure being at forty pounds, we proceed to move the engine – "Cylinder cocks open"

"Switch set"

"Okay to move?"

Doug at the front of the car repeats, "Okay to move."

Opening the throttle slowly to throw out water condensed in the cylinders overnight, we proceed slowly up out of the switch. Doug walks the train through the switch and when we stop behind the Ticket Office, he quickly comes to the back of the train to turn the switch.

"Dave did you get time to kerosene the grease fittings?" I ask.

"Yes, and I didn't have a damn ball last night," he states.

"Want to hose her off as we go by?" I smile. The engine will pass the hose that Dave already used on the left side fittings and the kerosene can be washed off on the right side as it backs down to the coal bunker.

"Yea, I might as well get my turn at throwing cold water on things," Dave muttered.

"Ok, Jit – let her rip" fog horns Doug as the switch is now set to the main line.

"You must be a gem in that Dartmouth Glee Club with a voice like that," I bargained.

"Well, I play a mean helican," he slants.

Brake unwound – gravity backs the train down the slight grade. The air valve regulates compression in the cylinders and the speed of the descent. When mostly closed, air through the valve creates a lyrical tune in the pipe distinctive to the No. 6. That sweet sound morphs into a standard "choff-choff-choff" as the valve opens to increase our speed. At the bunker, I stop the engine with the brake at the mark on the rail, so the coal chute will line up with the tender.

"Ratchet down?" I question

"Ratchet down," repeats Dave, "and before you say it, I know 'always have the ratchet down even if the brake is on if anyone is climbing around or under the engine."

"Things are looking up, young man. Now if you can only catch some passes in that game you are playing."

Dave smiles – turns on the blower and jumps out to wash the ash pan. "That's enough coal – take only what we need – no need of carrying more than we need," I shout to Linc at the top of the bunker, while trimming the coal in the tender. He occasionally glances in Dave's direction as if keeping an eye out for something.

"The Six doesn't use quite a ton does it?" questions Linc as he shuts the trap to the chute stopping the flow of bituminous.

"Nope – she will nearly go up on an Alka-Seltzer™," I reply.

"All set to move up?"

"All set," repeats Dave as he climbs into the cab.

"Let her rip"

Ch. 5 - Day's Work

From the front of the car, Doug signals through the switch with an up and down arm motion, then gets off and walks the train to the station platform where passengers will board.

With the No. 6 at the platform, Bob Kent pulls the Deuce up out of the switch and backs down to the bunker.

As Doug disposes of the refuse he has swept up from the car in a trash can, Dave is taking on water from the stand-pipe and I am checking the packing.

People are now buying tickets at the ticket office for the first train of the day, and a nice day they have with the mountain clear and cool.

As the people are finding their seats on the car, the steam pressure is now at 125 pounds and the water at two gauges. Two passengers sound a bit disappointed at not being in the new aluminum car.

I set the lubricator feeds at one drop of oil each eight seconds. Dave turns off the blower and says, "I guess I will go get aspirin."

"Why don't you get a rule book," I comment.

The Ticket Office bell is ringing and with five minutes to go to departure, I smear a cup of cog grease on each pinion and nearly swing the bucket into Dave's head as he is down checking the ash pan. Doug has checked the color of ticket and seats to be sure the right people and right number are on this train. The second train has pulled in back of us and is loading passengers for this morning's double-header.

"Check your phone Doug?" I ask.

"Every morning – Lett'er rip Jit when ready," he replies.

"Ok, Dave?" As I looked over toward the tall, slender UPenn man.

"Yea, let's get this bird up this hill



Jitney applies forward steam to the cylinders
- Lewis Family Collection

– I feel like a little thin air will help," Dave grumbled.

"What – do you think it will help give you less resistance?" I queried.

"I stopped thinking about two last night, so open this thing up."

With a check out the cab window, Doug is signaling up the mountain. Check to be sure cylinder cocks are open, I slowly open the throttle as the No. 6 has a tendency to jack rabbit start.

The hundred and forty pounds of boiler pressure gives the feeling of confidence as the train seems to bend into the track starting the sharp incline of the trestle across the clear, bubbling water of the Ammonoosuc splashing about the boulders. Behind us, Bob Kent is pulling up to load more passengers and take on water.



The railroad right-of-way broadens and looks like grass ripples beside a lava field of cinders as the smoke produced by Dave's shovelfuls of coal thrown on the excited fire make the smoke stack take on the appearance of a small volcano intently erupting as it moves up the mountain. The cinders shower forth, and the hiss of steam echoes like lava cooling at the sea, and the green right-of-way is very deep from the fertile contents of virgin decay.

The fire has recaptured the ten pounds of pressure surrendered to start the twenty-five tons of train, and it is time to start the injector to keep the furious boiler supplied with water. Opening the valve to the injector, I slowly pull back the handle to allow steam to create the vacuum necessary to lift the water up to the injector. I look down from the cab window to see the water glide

from the overflow pipe like a silver tube and cascade upon the slow turning engine wheels. I think of how sometimes passengers mistake the priming of the injector as a method of cooling the wheels. Now pulling the priming handle slowly towards me, I faintly hear the surge of water moving into the boiler over the clattering of the ratchet, the assuring hollow whistle of the side stack, the friendly rattle clatter of the mostly wooden cab as it rides on the prime products of today's metallurgists and all of this mechanical poem is punctuated incoherently by the slam of a fire door which seems to Dave as the overtone of a rejected suitor.

Feeling the delivery pipe from the tender to the injector, I find it is cold and condensation forms little beads – beads that give visual assurance the injector is functional. We are leveling out on the flats below Cold Spring Hill and the water level drops to a little above two gauges as the inclined boiler dips its head like El Toro preparing to charge the 30-percent grade of Cold Spring – a close second to the first place grade of Jacob's Ladder further up the line.

I turn the throttle back a quarter turn and Dave opens the fire door slightly to keep the steam pressure as near to the blow off point as possible without triggering the pop valve.

We are moving effortlessly at approximately five miles per hour and an inexperienced cab rider might feel complacency, but experienced Dave watches and feeds the fire like a meticulous mother of an infant as he knows the grade we are approaching will challenge his fire and do so with no understanding of his tough night before.

"They are leaving," Dave shouts close to my ear and I glance back towards the Base.

The smoke and steam rises from the crest over which the parallel lines of the track disappear. The No. 2 engine clears its throat of condensation and breathes deep to start its ascent over the river it is named for, the Ammonoosuc.

We are moving slowly into the grade and the water class indicates two and a half gauges of water that means about 16 inches of water in a 21-inch glass tube. The beads of condensation are closely gathered on the injector pipe. Humidity is high today. Probably rain or snow tomorrow or the next day, and this "cog" front is thought of as the high cirrus clouds feather a hint of weather to come.

Dave continues his routine – spreading small shovelfuls of coal first on one side of the fire surface and then the other – leaning against the seat, gazing at the Bretton Woods Hotel in the distance, up at the smoke stack, cleaning the coal from the floor. I didn't mind a little mental activity not having much to do with the operation of the Cog Railway as it might infringe on our self-set goals of being the happiest crew on the road.

The water rises sharply in the water glass to three full gauges as we are going over the steep crest before we level into Waumbek tanks.

The No. 2 is progressing well at the bottom of Cold Spring. David throws several shovels of coals and cleans up the floor as we settle back on the ratchet at the tank twenty minutes after leav-

ing the Base. The nail on one of the supporting timbers of the water tank lines up with the window frame of the cab – an easy mark to observe by me and gives the impression to the fireman that I'm a good judge of distance as he finds the water spout lines up with the center of the opening back on the tender.

The injector has been on full since we approached the tanks and with a little over two gauges showing in the water glass, I kill the injector. David pulls the chain to fill the tender with water as I



- Lewis Family Collection

leave the cab with oil can in hand. I make a check of the engine and overhear Doug as he delivers to the passengers his version of the "Waumbek Talk"



Waumbek Talk

"Can I get your attention for a minute, folks? I'm Doug Taylor, and I'd like to welcome you aboard the world's first cog railroad, running more or less continuously since 1869, on a little over three miles of track, right to the top of Mount Washington, 6,293 feet above sea level."

Ch. 5 - Day's Work

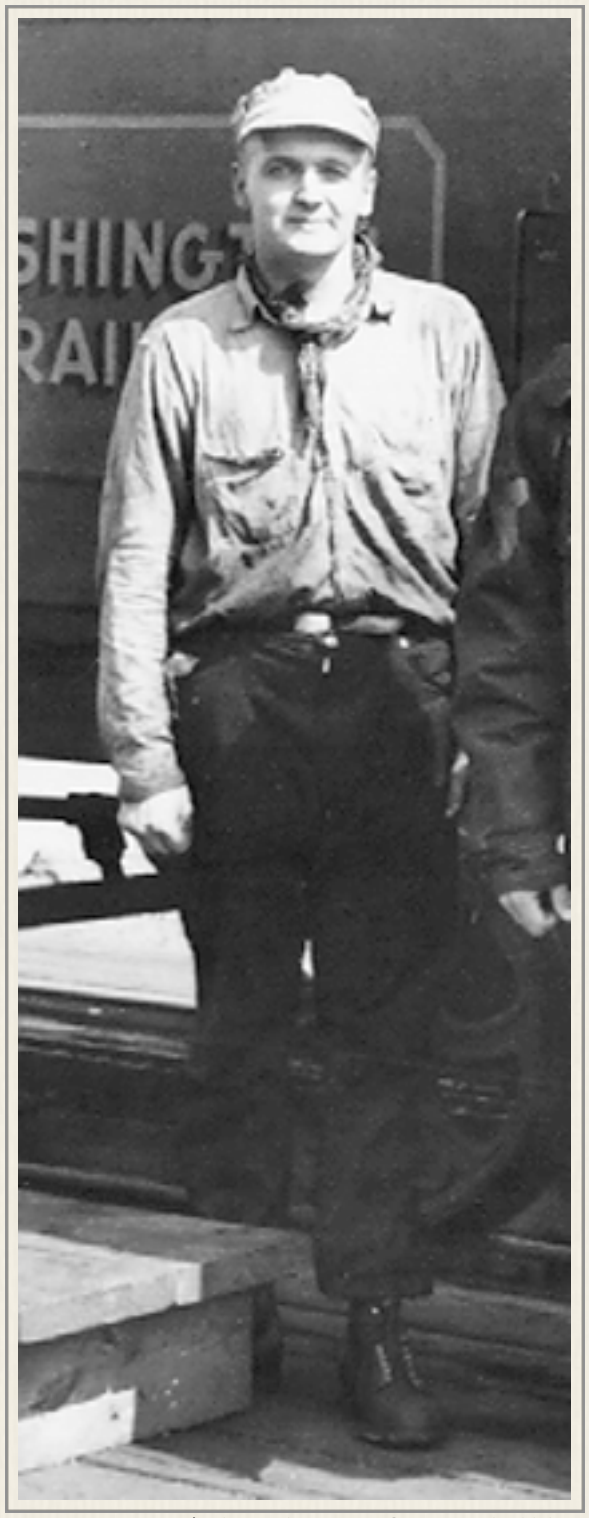
"Right now we're sitting at Waumbek, taking on water for the boiler. It may interest you to know that this engine uses up to 1,000 gallons of water, and a ton of coal to make it up the grade."

"On your right, the Ammonoosuc Ravine. That little building, sitting up there in the saddle is the Lake of the Clouds Hut, owned and operated by the Appalachian Mountain Club. Behind it is the Lake of the Clouds, which is the highest body of water on the Atlantic seaboard, and it forms the headwaters for the Ammonoosuc River, which supplies water and water power for the Base and Summit."

"Towards your left is Burt's Ravine, noted for its many landslides and dead Birch trees, which are slowly being killed by the Bronze Birch Borer – came in here about 1939."

"Got mountains around here –lots of them. Down towards the south we have Monroe, Franklin, Pleasant, Clinton, Jackson and Webster. Up toward the north, Madison, Adams, Adams, Adams, Jefferson and Clay. They call them the Presidential Range with a few hopefuls stuck in.

"What you see up there about a hundred feet is the world's most complex railroad switch. As any old railroaders know, a regular switch has one moving part. We have 'em beat – we got nine. Two flags, two cogs, and five pieces of rail – generally have to be thrown in correct sequence."



Doug Taylor - became Cog car builder
- Lewis Family Collection

"A little further on, up by the big curve, you'll come to the Halfway House. Now believe it or not, that building sits absolutely on the level. The reason it looks so cockeyed is that you're on the grade."

"A bit beyond that, up at the S-shaped kink, is Jacob's Ladder. There the grade is 37.41% or 14 inches up in every 3 feet forwards. The overall grade of the line is 25% or 1 foot up in every 4 feet forward. Another way of saying it is that when I take your tickets on Jacob's Ladder, the front end of this car will be 14 feet higher than the back end!! So that's where I collect the tickets, sure hope you got one."

"If you have any questions, any time, shout 'em out, and I'll answer them for you. (If I can't give you a straight answer, well, I'll give you the world's most interesting or crooked one!!!) We are proud of this railroad and like to talk about it."

During Doug's passenger pleasing delivery of Cog info, I have checked the engine all around looking for hot boxes – making sure the piston rods are shiny with oil – the visual indication that the lubricator is working and the cylinders are properly oiled. I use the oil can to squirt a little oil on the guides and smear about a cup of Cog grease on each pinion.

As I swing up into the cab, Bobby Kent with the No. 2 appears at the top of Cold Spring. We are the first trains out today, so we won't take the switch on the way up.

Boiler over two gauges of water, Dave has the fire door open a bit so the engine doesn't pop off.

"Dave, head hurting as much as the heart?" I inquire as I take my seat.

"I'm not answering questions today, Jit!" Dave replied loudly.

I lean my head out of the cab, and Doug is waving his out-stretched arm up and down from the front platform of the car. All clear and ready to move.

I slowly open the forward steam valve with the cylinder cocks open to clear the non-compressible water out of the cylinders – starting up quickly with water in the cylinders causes the pistons to slam water against the cylinder heads preventing a smooth stroke at the very least and cracking the cylinder head at the worst.

When the steam exiting from the cylinder cocks has no water, I reach down and pull the cylinder cocks' rod back – then look out to confirm the cocks are closed and there are no steam leaks from them.

Doug waves us slowly through Waumbek switch. The brakeman has the responsibility to check that all nine pieces are thrown so the main cog rack and side rails are clear for car and engine to move up the mountain.



Fireman's view of Jacob's Ladder looming beyond passenger coach
- Lewis Family Collection

Clearing the switch, Dave opens the fire door wide to keep the steam pressure below 140. I slowly open the forward steam valve to start operating at about five miles per hour as we pass the Waumbek upper water tank on our way to the Halfway House.

The sounds from the No. 6 indicate all is running smoothly. Burt's Ravine falls away to our left.

Dave continues to care for the fire. The steam pressure is just under 140 lbs. The side stack is still open shooting a continuous cloud of steam skyward. The cloud of so-called "steam" is actually condensing water vapor – steam is colorless.

Passing the Halfway House, the trees become smaller

and smaller - and older and older until they go away. Now above the tree line, we smoothly take the slight curve to the right to move out onto the left-bending Jacob's Ladder.

I close the side stack valve a couple of turns – giving Dave's fire more draft. His shovels full of soft coal (bituminous as opposed to the "hard" anthracite variety) have hit the right spots as black smoke belches from the stack. We maintain three gauges of water as the train climbs the steepest grade on the hill.

Up in the car, Doug moves down the aisle taking tickets. His backwards lean to stay upright on the steep left-hand curve gives passengers a visual indication of the 37.41% incline. To the right, the Lake of the Clouds and the Appalachian Mountain Club's hut on its shores are ready for picture taking. At this point in the trip, one brakeman was known to sing *"Going Up Jacob's"* to the delight of passengers.

"We are climbing up Jacob's Ladder,
Every cog takes us higher,
Higher train men of the clouds."

We leave Jacob's – bearing a little right we start up Long Trestle. Three gauges of water – 135 lbs. steam pressure as Dave continues to nurse the fire.

As we top off Long Trestle, Bob Kent's train is just starting up the trestle. Trains need to be 650 feet apart on the way up except at water stops and sidings.

Skyline Platform marks the top of the ridge line as viewed from the Base. It's taken us 30-minutes to climb from Waumbek to this point, and this is where Doug sometimes pokes his head into the car and warns passengers about condors - suggesting mothers hang onto small children and then returns to his front platform perch to keep watch of the rails with a sly grin. At one point in Cog Railway operations, Skyline Platform was a spot where passengers would transfer to another train. Before switches were installed, one train would make the run from the Base to the Halfway House platform *(seen in photograph at start of Chapter 2)*, another brought the passengers up to Skyline or Gulf Tank before



No. 6 Great Gulf moving up Long Trestle
- Lewis Family Collection

a third made the run to Summit. These days, passengers can ride the same train to the top and back.

At Skyline Platform, the track bears to the right. We cross over the Appalachian Trail that runs under the mountain's peak to the Appalachian Mountain Club's Lake of the Clouds hut. (If any "hut boys" and AMC freight - like LP gas tanks, were on board, this is where we would pause to let them disembark, and hoist their backpacks to walk over on what they consider a flat sidewalk compared to the steep Ammonoosuc Ravine Trail rising up from the Base.) I slow down as Doug waves us through the switch and onto our final leg to the Summit. I adjust forward steam to bring the engine back up to optimum speed.

On the left side of the train, the Great Gulf for which the No. 6 is named plunges to the east between Mt. Washington and Mt. Jefferson. While it is officially summer, a stubborn patch of snow on the mountain's flank above the bowl often sticks around until July.

Gulf Tanks are on the right side of the tracks. Water runoff from the Alpine Gardens is collected via a series of wooden sluiceways into the three tanks. A necessary water supply for train operations before the switches were installed in 1941 and 1942, these days the Gulf Tanks are there for backup. The new tenders carry enough water from Waumbek to make it to the Summit and back down. The tenders also carry enough coal for a complete trip, so there is no need to stop at one of several raised bunkers along the left side of the track. They, like the tanks, are there



Patch of snow on Mt. Jefferson across the Great Gulf with trail cairn markers in the foreground
- Lewis Family Collection

"just in case." The grade along the ridge is not as severe as the run from Waumbek to Skyline, so Dave has time between shovels to pause and observe the view beyond the tender.



The hiking trail to the Summit now snakes its way alongside us between the Cog track and the lip of the Great Gulf. A bit further up, the final segment of the Auto Road joins us. The 7.6-mile toll road that climbs 4,618 feet up on the eastern side of the mountain opened in 1861 as the Mount Washington Carriage Road.



Three story USAF engine test facility under construction (1953)
-Lewis Family Collection

The severe weather conditions atop this peak have attracted the attention of the Pentagon. On our left construction is underway on a series of buildings that will test the ability of jet engines, soldiers, other equipment and aerodynamic designs to survive in windy, sub-zero and icing conditions.

The injectors are adjusted on the Skyline run so there are two gauges in the boiler as we pass Lizzie Bourne's monument. This marks the spot where the 23-year old woman from Kennebunk, Maine died the night of September 14, 1855. She, her cousin and uncle tried to climb the mountain that afternoon without a guide. But night fell before they reached the top, a gale moved in, and she died of exposure just a few hundred yards from the Tip Top House. As we approach the Summit, I push the water level in the boiler to over two gauges. There are only two places on the line where there is no incline – at the Summit and at the Shop. It is imperative that at least a half gauge of water be showing as we level out in front of the Summit House. If not, I must stop immediately and adjust the train's position to keep water over the





flues and the crown sheet of the firebox. The crown sheet has soft plugs which could melt and steam would put out the fire. You should not try to add water to a hot boiler with no water showing in the water gauge. If water was added, a dry, hot crown sheet would generate instant steam which causes boiler explosions.

The water level is looking good as we pass the Summit Tank on our right. Someone has attached a "liberated" road sign to the down mountain side of the tank: "Caution: Thickly Settled." I blow the whistle to announce our arrival - two longs - two short - and one long on the mainline five-chimer that Doug has brought to the Cog for the summer.

I slow the train as the front of the car reaches the platform. Doug hops down and walks alongside as we move up to the forward unloading position in front the Summit House.

The track here is on the level. The other level spot at the Shop is where Cog trains met mainline shuttle trains from Fabyans to transfer Summit bound passengers from 1876 to 1931.

I wind the brake to stop the train and open the cylinder cocks to release the steam. Twenty minutes have passed since Skyline. Bob Kent will have space for his car and engine on the platform where the track still has an incline. Brakes are generally used to bring the trains to a stop as you don't want to settle back on the ratchet - that requires you move forward to disengage it when it's time to leave. The ratchets on both the engine and passenger car will stay down for safety during our scheduled twenty minutes at the Summit.

Ch. 5 - Day's Work

Doug assists the passengers from the car – then turns the seat backs so they face down mountain towards the engine, and checks the interior of the car for the run down. He exits onto the back platform and winds the car brakes up tight before going into the Summit House to call the Base on the track phone system to let them know we've arrived.

In the cab of No. 6, Dave has started banking the fire – shoveling a small pile of coal on one side of the firebox. The fire must maintain at least 100 lbs. of pressure on the way down, so we will be able to take the switch at Skyline, and stop and advance the train if necessary along the way. The lack of wind means no need to use the blower to keep the draft heading in the right direction (up the stack) to keep flames from coming back into your crotch when the firebox door opens. It will be the last major feeding of the fire until we are back down at the Base.

As I'm checking the engine, the Deuce arrives and stops behind us for unloading. In addition to greasing and putting some more cog grease on the gears, I turn the three-way cocks on the lubricator lines to direct lubrication into the valve exhaust ports for cylinder lubrication on the way down.



Double header at Summit during twenty minute stay on top.
- Lewis Family Collection

The cylinders will compress air to slow the engine's descent. The air valve controls the amount of compression and thus the speed. An engine with good compression will keep the speed at between three and four miles an hour on grades. Small amounts of water are introduced into the cylinders by two water cocks on the fireman's side of the boiler and two on the engineer's to cool the cylinders as they compress air. Too much water will reduce compression and cause the engine to be "slippery."

It's a beautiful morning on the highest point in the northeast. I pause briefly in the sunshine on the fireman's side of the engine to take in the view to the east. Out past the coin-operated tourist binoculars the thin silver line at the horizon is the Atlantic Ocean over 100 miles distant – passengers today have won Mother Nature's lottery – some days the clouds are so thick those mechanical viewers just yards away are barely visible.

While Bob's train had enough tickets sold to warrant the double-header, the car was not full. Supplies for Summit House operations were loaded in the back of the car. The brakemen unload the boxes of bread, cases of soda and other foodstuffs. They are hand-carried over to a set of stairs leading to a window in the kitchen and passed in. Freshly laundered linens for the guest rooms come up in large-covered laundry baskets on trains with under tender storage compartments or on the left side of the car's front platform. Dirty linen descends in the same manner.

A second phone call to dispatcher Cliff in the Ticket Office gives us our Summit departure time to smoothly meet the two trains that left the Base an hour after our double-header began its trip. Doug heads towards the dining room and hotel lobby. We have been at the Summit over 20 minutes.

As Doug walks through the public areas of the Summit House, he announces in a full voice that has been known to fill "The Hop" at Dartmouth, "Trains Leaving – Trains Leaving – All Aboard!" Standing in front of the large fireplace, a young passenger of five or so stares at the tall trainman moving through the area. As Doug passes, the boy says for all to hear, "Big mouth." Doug stops, wheels, glares and says, "Shut-up!" The boy scampers off to join his parents to prepare for boarding.

As Doug leaves the Summit House he stops in the entryway, takes a rope dropping down from the ceiling off a hook and pulls it the same way those in a church's bell tower might. But this dungaree-clad 20th Century acolyte to steam is ringing the train bell atop the entryway roof to let passengers wandering about the mountaintop know the trains are preparing to leave.

The bell stops ringing as I look out the cab window. Doug comes out through the thick Summit House door that is counterweighted, so that people can easily open it, but not the fierce winds that often sweep this area. On April 12, 1934, staff at the Mount Washington Observatory built next to the end of the rail line recorded the fastest wind gust ever at 231 miles per hour. Today's summit air movement would be considered still in comparison. Doug opens the car door and begins loading passengers.

Bob's brakeman has finished loading. A final count of seats filled, he signals Bob and appears to give his car a push as Bob releases the *Ammonoosuc's* brake. The Deuce being on the incline begins to roll, gravity will now take the train to the Base. No. 2's brakeman steps up to his two brake wheels on the back platform, and Bob's train disappears down past the water tank.

Ch. 5 - Day's Work

Doug signals brakes off – car ratchet up. He has taken a small loop of chain from a hanger on the side of the engine's smoke box, dropped it over the top of the car's bumper, and around a hook above the roller on the engine.

The car and the engine are never physically "coupled." The engine pushes the car up the mountain – the engine roller moving up and down on the car's bumper as the train negotiates the varying grade. Now that we're on the level at the Summit, we must pull the car to the point where gravity can take over.

I have closed the stack exhaust to reverse the flow of steam through the cylinders. The side stack is wide open. "Ratchet up?"

"Ratchet up" replies Dave and climbs down from the cab.

I unwind the brake and open the reverse steam valve to back the engine pulling the car to the incline. The reverse steam exhausts through the side stack in the forward steam line. Dave walks the engine to the incline and then swings aboard.

I close the reverse steam valve as gravity takes over and slide open the stack exhaust valve to put the engine back into forward steam mode. Dave and I open the water cocks to begin cooling the air-compressing cylinders. I adjust the air valve to maintain our descent at between three and four miles an hour.

At the same time, Doug has removed the pulling chain, re-hung the loop on its hook, and begun adjusting the front and rear brakes to take some of the car's load off the descending engine. He keeps one foot on the bumper's spring mounts to help gauge how much pressure he is putting on the engine. This load will change depending on the grade. At some points, the car will ride brake free resting totally on the engine over flatter stretches. At other points, the car will ride totally on its brakes - the engine on compression. The brakeman keeps his bumper in close proximity to the engine's roller. The general rule is to keep any gap between roller and bumper to just inches. If the car pulls off enough to snap the emergency clothesline bell cord to the cab, the brakeman must stop the car and wait red-faced for the engine to stop, and steam back up to rejoin the car to resume the descent.

As I look back up mountain to be sure Doug is still with us, I say to Dave, "Would a little reverse of events last night have made your Honey close?"

"Not a damn subject for this trip," Dave loudly stated.

Dave grabs the shovel and climbs into the tender. We are approaching the Gulf Tank and Skyline bunkers. The No. 6 has enough coal left over this trip that Dave can quickly put two shovels full into the bunkers for use by others in need on their climb up Mt. Washington. He clambers back over into the cab, hops up onto the fireman's seat and stares out over the tender.

A descent speed is maintained with adjustments to the air valve and Doug's braking - more open valve and less braking on the relative "flat track" - more closed valve and more braking on steeper grades. The passengers enjoy a smooth twenty minute ride to the Skyline siding.

Bob Kent has stopped below the switch giving us room to back down past the switch and then go forward to take the siding.

As we pass through the switch, Doug steps off onto the platform and as the car passes he and Bob's brakeman quickly throw and block the five rails and then slide the two cog racks as they come into view. Lastly, the two flags are thrown to separate the mainline rails. Doug checks his handiwork to make sure there are five clear lines or channels for the trains' wheels and gears to safely move up and over the main line track and onto the switch.

In the cab, Dave is down off his seat and poised over the ratchet lever ready to pull the pin that has kept the device locked in the full up position for the descent.

I close the air valve for maximum compression and the No. 6 slows as the back tender wheel approaches a painted mark on the track. I wind the brake to bring the train to the stop with the wheel on the mark. Bob has used a mark further down the track.

A quick look out the cab window and I see Doug signaling "all clear" to move. I apply forward steam, release the brake and the *Great Gulf* begins chugging back uphill.

"Ratchet down!"

"Ratchet down," replies Dave. The musical ting-ting-ting-a-ling of the metal ratchet bouncing on its gear confirms Dave's call.

I close the cylinder cocks and watch Doug's hand signals closely as we move onto the switch.

At the top of the switch, I stop the train on the brake so the engine won't settle back on the ratchet. That way when we are ready to leave the siding the ratchet can be picked up and the brake released without having to move the train forward to disengage the safety device. I open the cylinder cocks to release what steam is left in them, and turn off the lubricator as we will be sitting here for awhile. Bob brings the *Ammonoosuc* up onto the switch as Doug and his brakeman reset the switch for mainline running.

The first section of the up-bound double slowly moves through the switch. Engineer Leo Boucher yells, "How ah ya!" as he gives the No. 3 more steam to move by the siding. Passengers in our cars have their windows down, are waving and taking pictures as the *Base Station* pushes its car load of tourists past.

Steam and smoke from the second section is rising into the air as that train approaches Skyline Platform. This has been an excellent meet. We had a short wait. The double-header continued up the mountain without delay.

Engineer Frank Thompson gives a thumbs-up from cab of No. 9 *Waumbek* as he steams by.

Ch. 5 - Day's Work

The switch has been re-thrown and Bob eases the No. 2 back off the siding, picking up his brakeman on the way.

Dave checks our fire. 120 lbs. pressure shows on the gauge. He picks up the ratchet. I slowly release the brake as Doug signals us through the switch.

Clearing the switch, I stop again on the brake. Doug sets the switch for the mainline, checks his handiwork one more time, and climbs onto the car. He walks down the aisle modestly accepting a smattering of applause from passengers, including a young man who is now not only impressed with Doug's vocal ability, but with the entire switch throwing procedure. Doug slides the car's rear door open and steps out onto the back platform.

When Doug appears on brake platform, I slowly release the engine brake and we start down again. Bob's train is near the top of Long Trestle.

I turn the lubricator back on and turn to Dave. He nods and we both reach down to adjust the water cocks to allow small amounts of water to cool the cylinders which are now working with the air valve as compression chambers to keep our train speed at between four and five miles per hour.

With our attention focused down mountain, the track curves to the left. The Great Gulf ravine recedes on the right beyond the ridge line and Burt's Ravine starts to fall away on Dave's side of the cab as we approach the Long Trestle. Bob Kent's train is about one thousand feet ahead, just leaving Long Trestle. The grade here is such that Doug will brake the car so the engine's



Top of Long Trestle with Waumbek Tanks and Base in the distance
- Lewis Family Collection

roller is loose against the car bumper. It was said a "real" brakeman could hold an egg between the roller and bumper without breaking it.

We approach Jacob's Ladder, the ridge to the left drops away and we can finally see the Ammonoosuc Ravine and that river's headwaters at the Lake of the Clouds. At this point in the journey, engineer Mike Boyce would have the brake snug and his hand on the brake wheel as the *Great Gulf* moved onto the trestle. Mike put this precaution in place after "his terrible ride" in 1949 when cogs on the engine broke and the 15-tons of the No. 6 began a grinding slide down the steepest grade on the line. The large spur gears dropped down and began tearing up the wooden ties. Mike and the No. 6 did not fall off into the ravine like *Old Peppersass* in 1929. He and his fireman stayed with the engine. The No. 6 stayed on top of the track, gathering splintered ties beneath the undercarriage and finally stopped at the Halfway House – some one thousand feet after the cogs broke thus the reason for the modern day train separation descent distance.

Mike's ride in '49 mimicked an August 1878 runaway on Cold Spring Hill. Engineer John Horne was using the Cog's second locomotive, the *George Stephenson* to ease the disabled No. 5 *Cloud* back down to the Base for repairs. The 10-year old *George Stephenson* with it's upright boiler had only a single drive shaft and on Cold Spring, the cog wheel on that shaft split open and jumped the rail. The engine's drive gears dropped down into the ties and Horne reported, "She choked herself and had timber ahead to stop her. On the low trestle the men all jumped but me. I saw it keep slacking up and slacking up and by and by it stopped. It took three days to fix the track." It was the *Stephenson's* last run. The engine was scrapped in place - cut up and dropped off the side of the track with its useable parts salvaged.

But that was then, and on this day I close the air valve for maximum compression as we move onto Jacob's Ladder. The No. 6's compression is good, the cogs are stout and the engine continues down Jacobs at about 3 to 4 miles per hour.

Mike told me that if I got to Jacob's with an engine that had terrible compression with the air valve closed - that instead of using the engine's brake or forward steam to slow the descent merely close the water cocks to the cylinders and close the cylinder cocks over Jacob's. Without the escape jets at either end of the cylinder, compression would increase and without the cooling water, the heat from the compression would expand the cylinders enough to slow the engine to 3 miles an hour. Once the "slippery" engine exited Jacob's re-open the cylinder cocks and turn on the water cocks.

Passing the Half Way House, we see the up-coming trains are taking the siding at Waumbek. Bob's train is approaching the switch and will not have to stop as the third double-header of the day is on the siding.

Doug has worked the car brakes to push on the low inclines and hold back on steeper inclines to help us keep a smooth 4 to 5 mile per house descent.

Ch. 5 - Day's Work

We slow at the upper Waumbek Tank, check the switch and proceed. Passengers on the way up appreciate a wave and a couple of quick toots of our whistle as we pass. The Skyline to Waumbek descent has taken 25 minutes.

By the time we approach the main Waumbek Tank and platform, Bob and the Deuce are out of sight having pitched down over Cold Spring. As we reach the crest, the Base Station, and the Mount Washington Hotel are laid out before us. The Base parking lot a mile distant appears full. There's a crowd around the Ticket Office. At the top of Cold Spring three gauges of water are in the boiler.

Bob's train is off Cold Spring and moving towards the Marshfield Base Station. Dave checks the fire, and the No. 6 leaves Cold Spring with 2 and a half gauges of water. Doug adjusts his brakes at the "monkey tree" so the car is leaning on the engine to maintain an even speed to the last incline just before the Ammonoosuc River trestle that will take us into Marshfield. I announce our arrival with the whistle - two longs - two shorts and one long - easing into the long blasts so each of the five chimes can be heard joining the chord. Bob's train is moving to the coal bunker. Doug adjusts his brakes for a slow descent over the Ammonoosuc and approach to the Marshfield platform.

Twenty minutes after leaving Waumbek, Dave swings down from the cab to walk the train down the platform to a stop on the engine's brakes when the tender is lined up to take on water. All stopped - Dave is back up in the cab, drops the ratchet and prepares to clean the fire. Doug winds up the car brakes, sets his ratchet and disconnects the bell cord. He then heads for the car's front platform to assist passengers exiting from the car. We will be leaving the car here at the platform to speed our turnaround while the *Great Gulf* heads to the bunker for coal and a clean ash pan.

I climb down from the cab and make a quick check of the engine and turn the 3-way lubricating cocks. The No. 6 has no mechanical problems, so no need to make a report to Cliff in the Ticket Office. Dave and I are ready to make our trip to the bunker. Dave lifts the ratchet and releases the brake. I walk alongside the tender down the platform, behind the Ticket Office to the Base switch and then swing up into the cab. The blower is on to generate a strong draft to help maintain the fire as the grates are shaken to drop ash into the pan below. The hooked poker that rides on the tender is used to break up the bank and help even the fire out while sending the ash into the pan. The whole process is called "cleaning the fire."

Approaching the bunker, I climb up into the tender and signal to Dave when it is lined up with the coal chute. Dave sets the brakes, drops the ratchet, goes out the left side of the cab and into the pit to wash the ash pan. While I trim the coal that Linc is sending down the chute into a neat pile so it fills the corners of the tender but won't jostle over the side, Dave has grabbed a hose that shoots water into the ash pan under the grates and sloshes the hot embers the pan has gathered on our first trip into the pit.

The track here under the bunker has steel supports so the ash can easily fall through, and there are no wooden ties or stringers to catch fire. Dave is careful to aim the hose so the cold water does not go up into the grates or fire, but does reach and clean all corners of the pan. When he's done, Dave steps back from under the track and arcs his stream up past the cab's window to signal me he's done. As I turn off the blower, the water stream jerks quickly to the left towards the top of the bunker. Linc stumbles backwards and falls into the coal pile dry, but abashed. After both the No. 6 and the No. 2 have moved back to the loading platform, Linc will use a tractor to refill the bunker with coal, and remove the ash piled up in the bottom of the pit. The resulting cinders will be used to maintain service roads around the Base. In addition to his bunker duties, Linc will pump gas at nearby pumps for tourists also in need of fuel to continue their trip down the Base Road.

We are ready to move - two quick toots of the whistle and I ease the forward steam valve open. With no car to push, the engine quickly comes up to running speed. Dave is tending the fire - building steam pressure for the start of another run. At the switch, he swings down and walks the engine up to make contact with the car. He uses his hands to give me a visual cue as to closing distance - the forward steam is slowly closed until the engine's roller kisses the car's bumper, and I set the brake. Dave reconnects the bell cord and comes back to the cab.

Back at the platform, Doug has been busy. When all our return trip passengers had exited the car, Doug went in and flipped the seats so they were now facing up the mountain. He did a quick clean-up of anything left behind - making sure windows and doors were in good shape. Doug checked with the Ticket Office to get the proper ticket color and number sold. There's always a chance of some confusion with excited passengers and two trains loading. There was also a quick trip to the Marshfield kitchen to pick up a brown-bag track lunch for himself and Dave. Then back to the car to start the boarding process.

Dave is now standing with his left foot on the tender and right foot on the railing beside the water fill pipe - wrestling a hose that looks like an elephant's trunk into the tender fill hole. The water is coming from a dam upstream on the Ammonoosuc down through pipes made from old mainline steam train super heater tubes. The valve must be opened carefully as the water pressure can flip the hose out of the tender and wave it like an angry elephant dousing everything within 15 to 20-feet including passengers waiting on the platform.

Doug is now loading passengers while I grease the engine and Bob Kent has brought the Deuce up to the second platform loading position. After a final paddle of cog grease to the rear spur gear, I notice Mrs. Jitney moving through the crowd to bring me my dinner pail. It's good to see her, but there is little time to talk - the bell atop the Ticket Office is ringing and there's only five minutes to our eleven o'clock departure. I notice Dave has a slightly pained, slightly wistful look on his face as he watches our lunch pail hand-off.

Back up into the cab and I start the injector to bring the boiler water level to two gauges. People on the platform getting a closer look at the engine step back as the water flows out of the over-

flow pipe above the rear wheel before being directed into the boiler. Dave has topped off the tender, shut the valve and removed the hose. Steam pressure is good. We are ready to go. Dave takes a swig from the water jug, puts it back in place and grabs his shovel.

A look out the window and Doug is signaling we are loaded and ready from his point of view. Two quick toots of the whistle - I check that the cylinder cocks are open - ease open the forward steam and we are heading up the hill once more.

We will make three, possibly four trips to the Summit and back this day. Dave stays quiet about the night before although his condition improves over time. The story doesn't unfold until the *Great Gulf* has taken its spot in the line-up for tomorrow and we are putting the No. 6 to bed in the beautiful summer twilight of New Hampshire's White Mountains at 25-hundred feet elevation.

Doug moves through the car making sure any windows that have been opened are pulled up from their sidewall pockets and secured for the night - then slides the front and rear doors closed. Dave banks the fire piling coal to one side of the firebox - then props the firebox door open with the shaker bar. I start both injectors to fill the boiler and turn off the lubricator. When the injectors break I shut them off, and Dave closes the valves at the top and bottom of the water glass. We slide the cab windows closed, make a final quick check to be sure everything is stowed properly. I grab my now empty lunch pail and swing down from the cab. Dave is leaning on the fence rail like a politician waiting for reporters to settle at a news conference. Doug and I stand opposite him beside the quietly relaxing No. 6.

"There will be no follow-up questions and no answers," says Dave. "But here's what happened."

"I picked up Honey at the Crawford House and headed to the Mountain View to meet some other couples for dinner and dancing."

"I loaned my car to Linc yesterday, but he never gassed it up as he promised. About two miles out of Twin Mountain, I ran out of gas - left Honey with the car and I walked two miles back to Sleepy's. I got a dollar's worth of gas - four gallons and had to leave $2.50 deposit on the can. Sleepy has lost a couple of cans 'cause Cog guys don't return cans."

"I hiked the two miles back to the car carrying the gas, but the car and Honey were gone. So I turned around and trudged back to Sleepy's. I got my $2.50 back for the can, but no money back for the gas. Sleepy said he couldn't be sure nothing had been added to the gas."

"I started walking towards the Crawford House, but after about a mile I decided to go back to Sleepy's. He was closed and there was my car sitting in front of the station with a note under the wiper."

Dave reached into the breast pocket over his heart, pulled a coal dust smudged piece of paper out, and unfolded it. There was writing on it, but neither Doug nor I could read it from where we were standing as Dave continued.

"The note said...

Dearest Dave,

After you left to get gas, Usher and Linc came by with gas and drove both cars to the Mountain View. Spent some time visiting - had a couple of dances and a light lunch. Linc suggested we drop your car at Sleepy's. Linc is giving me a ride to the Crawford House. I'll be in touch. Your Honey"

"Driving back to the Base, I ran out of gas about a half-mile from the lower parking lot. Now, no damn questions - subject closed!" Dave said with authority.

Refolding the paper, Dave straightened up from the fence, a slight smile creeping onto his face as he turned, re-stowed the note, and started walking towards the Ticket Office to punch out. *"Wait a second,"* I thought. *"Has that mother set us up?"*

"Your Honey will be in touch?" Doug said in a loud voice to the departing Dave, "That's touching? Touching? Linc making good things happen - now that's touching!"

All in a day's work.*

* While the story accurately reflects the operational details and interpersonal relations on a Mt. Washington Cog Railway train during the 1950-1967 time period, the crew line-up described never existed. Doug Taylor broke for Jitney in 1960 *before* David Woodbury became a No. 6 crew member. The transcript of Taylor's "Waumbek Talk" is from that year. Doug fired for Jitney in 1961. Dave was Jitney's fireman in 1963, and Bob Bradley was the *Great Gulf's* brakeman that summer. A picture of the actual 1963 crew starts this chapter. When Jitney had to spend time away from the mountain for his graduate studies in education, Doug fired the No. 6 while Dave broke for engineer Davey Saunders. The photo of that actual crew is on the next page with Saunders in the center.

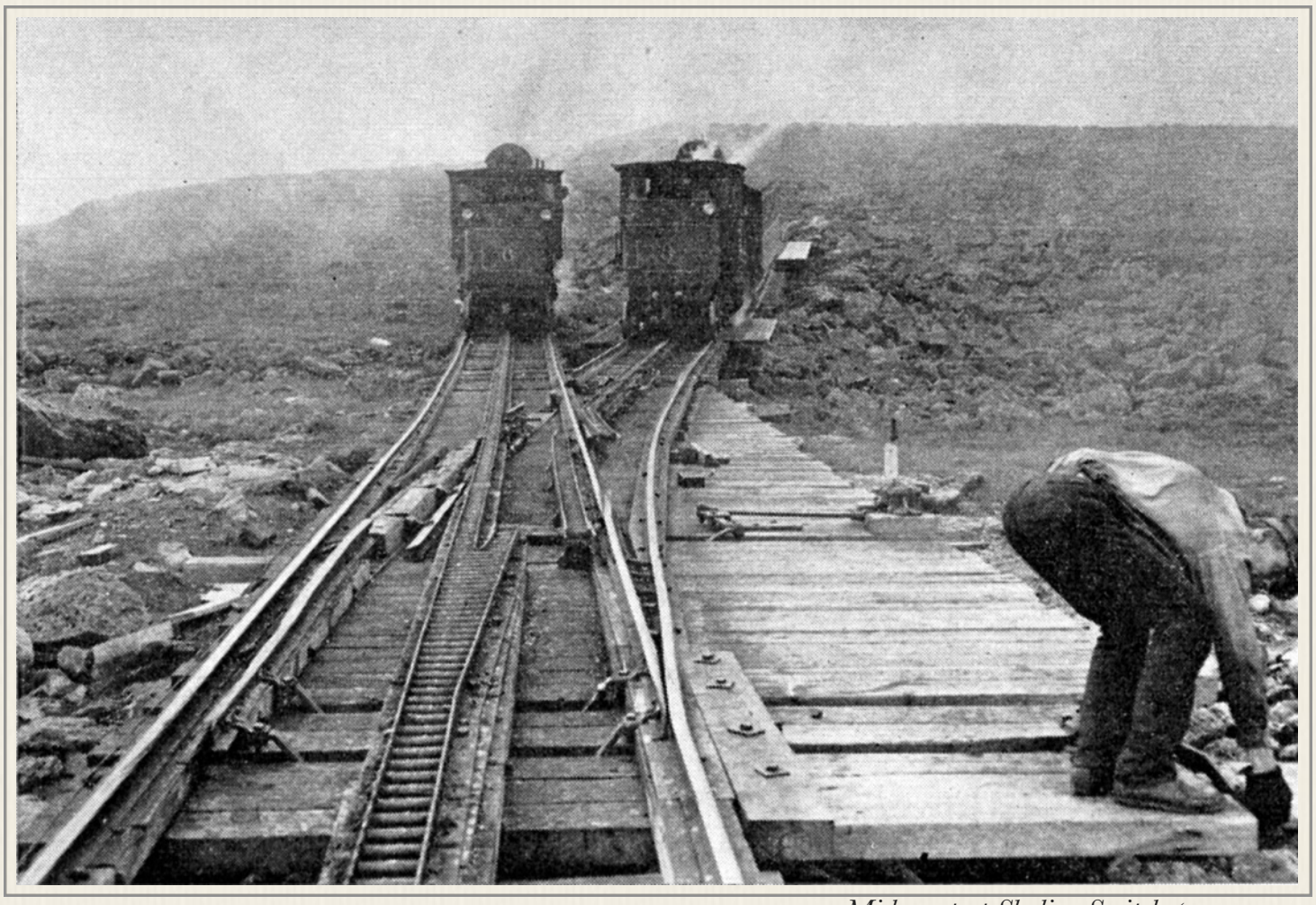


Fireman Doug Taylor, Engineer Dave Saunders and Brakeman Dave Woodbury with the No. 6 at the Base Platform
- from the Doug Taylor Collection

Taking the Switch

There were nine items on a Cog switch thrower's checklist: two (2) cog rails to be slid and pinned; two (2) flags to be thrown to move the outer rails to guide outside wheels and allow the spur gear to pass (they were called flags because of the yellow panels of the mechanism that pulled or pushed the rails rotated to indicate whether the rails were in a mainline or siding position). The end of the metal handle to move the rails and rotate flags was cast with a roughly 4-inch square top block with a groove for fingers to grasp for the throw. The heavy weight helped move the rail assembly over after the handle passed the 12 o'clock position; and five (5) rails to be thrown (one would be propped with a short board between the outer mainline rail and the switch rail to keep the rail from falling back when the car & engine's wheels rolled over it.)

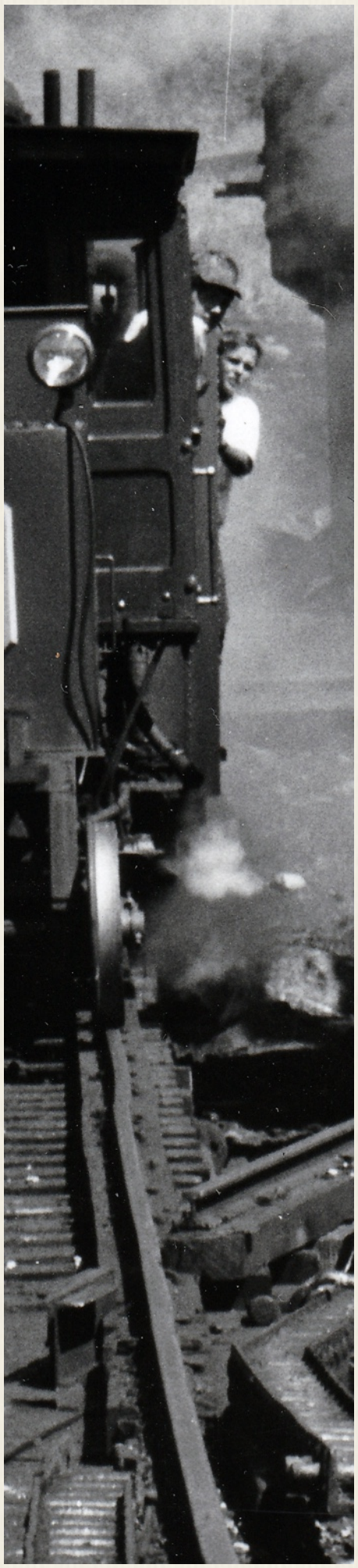
There was a final safety check - look for five clear channels for the wheels, the cog and spur gears and brake drums to pass either on the mainline OR crossing up and over onto the switch. In the picture *(from the NH Profiles magazine)*, the No. 6 *Great Gulf* (with engineer Jitney at the throttle) has gone through the switch heading up the mountain. The brakeman below is about to throw the first flag that will move the first rail piece to the left to allow the No. 2 *Ammonoosuc* to back off the switch heading back to the Base Station.



Mid-meet at Skyline Switch (August 1955)
- F. F. Zimmerman photo / NH Profiles magazine

Facebook Discussion

"I threw this switch (at Skyline) many times," wrote Next-Gen Cogger Roger Clemons. "Note that long cog rack section on the right (mainline) has to be thrown to allow the second flag to be



Engineer Bud Nye & brakeman Tim Bemis keep a close eye descending through Waubmbek switch (1966)
- Elvira Murdock photo / Root Family Colleciton

thrown. Also, anyone remember losing the pin for the long cog rack? I didn't, but I came close once!"

Morris Root says the "pin was not a problem, but... some folks weren't too careful where they put (threw) the block for the last rail when opening the switch for the mainline. Remember when on "slow" days, there would be "brakemen trials"... who could throw the Base Station switch the fastest?"

"I remember that you had to do it in 90 seconds," recalled Clemons.

"Sounds slow... I think the record was 20 seconds," replied Root. "Needed arms of a gorilla and legs of a giraffe."



Base switch being thrown. Brakeman's position indicates this was not for time.

Finesse

As the summer wore on and the train crews became more adept at working together and operating their equipment as a team, a choreography of task and a mastery of their 19th Century tools led to demonstrations of crew expertise - be it the rapid and smooth turnaround of a double-header at the Base on busy days, or "taking the switch." The *Cog Clatter* publisher never ran a stopwatch on a switch change *(the Facebook discussants thought perhaps he had)*, however on a number of occasions he witnessed the following on a train descending at Skyline needing to take the switch. "The brakeman stepping onto the little platform above the switch, waiting for the car to pass - then stepping onto the mainline and following it down - stepping from tie to tie. As the train backed slowly through the switch, the brakeman would drop each rail into position just as the car's front platform would pass - then move a bit faster to slide the racks and flip the flags. If the engineer went through the switch at Jitney (not

Chase) speed the train would never stop on the brake but merely pause at the yellow stripe below the switch as forward steam was gradually applied - slowing downward progress and then seamlessly start back up as the brakeman threw the last flag and signaled the engineer to proceed. In the cab, the fireman waited with ratchet lifter in hand and unpinned for the engineer to call "ratchet down" when forward progress began, and then confirm the drop with a "ratchet down" call of his own. I initially described this in the *Day's Work* story, but Jitney told me to take it out because such a smooth "rolling down and start back up without going to brake" was not the proscribed procedure, but I saw it happen from positions in the cab, in the car and on the up mountain car platform of both the train doing the maneuver and the stopped train that the upper train's tender would first roll towards (prompting a sitting Jitney Jr to lift his legs back onto platform) and then move away from the lower train under forward steam. A switch throw to the mainline position could also occur in the time it took for the train to safely back off the switch. Jitney Jr also saw brakemen signal to proceed at the Waumbek platform then run up and throw the switch - completing the procedure in the time it took for the train to travel from the tank to the switch. "Now you have a Cog kid's observations as to length of time passing on a switch throw, all you have to do is calculate train speed and distance traveled to determine how far the second hand might have traveled on a watch (that I didn't have!)"





Roger Clemons confirmed the finesse moves occurred after the Jitney Years concluded. "It wasn't kosher, but it was done - though I remember looking back at the train after I threw the switch and they stopped until I started waving them through. I also remember looking at the trackwork and switch to see if all clearances were there for the train to proceed. As interesting as the switch was, I'm glad they've gone to a transfer table system."

"Having been one of those brake-people," wrote Root. "I remember the Waumbek Olympics" of beating the train to - and setting the switch before it arrived from the platform.

Ch. 5 - Taking the Switch

Next Gen Cogger David Huber recalled one other feature, specifically of the Base switch. "Don't forget splashing the goofers with the flag weights after the rain storms"

The Waumbek and Skyline switches were built so a train had to go forward to take the switch. The rocky terrain meant the switch where the rails were moved by the flags was built on a platform *(previous page)* and the flag weights would land on a timber at the height the weight needed to be to close the switch. The Base switch was built so trains backed down onto the siding, and the track and the mechanism were built on the ground *(previous page)*. There was only dirt, no timber under the falling flag weights. Over time, the Base landing weights would make larger and larger impressions in which rain water would gather, and that could make a lasting impression on both brakeman and interested observer too close to the apparatus. "I remember a young kid close to the track watching a brakeman throw the flag and he got coated with so much s#@t that his mother started yelling at him," wrote Clemons. "Those weights would bury themselves in the ground if someone didn't fill the holes in once and a while."



Shuffle

The Base switch provided a way to rotate the early train duties through the fleet during the summer. Generally, six trains operated daily with a spare engine at the shop - either being repaired or parked in case of breakdown of the other trains. As the trains completed their work day they would fill their tenders, go to the bunker for coal and clean the ash pan, then proceed to their overnight parking positions to bank the fire and close up the train.

There were three positions on the Base Switch. Position 3 at the end of the rails closest to the coal piled next to the bunker east of the ramp. First train done went there. Position 2 middle of the switch for number two. Second done parked there. Position 1 for the "first train out" was clos-

est to the switch, so the third train crew done for the day (mid to late afternoon) had the early run the next day.

The rest of the trains parked below the bunker. Fourth finished closest to the shop next to where stringers were stacked next to the track. Fifth finished just ahead of that, and the Sunset Special that got down around 9 pm was just below the bunker, and the crossing used by the tractor to go scoop cinders from the ash pan pit below the coaling station.

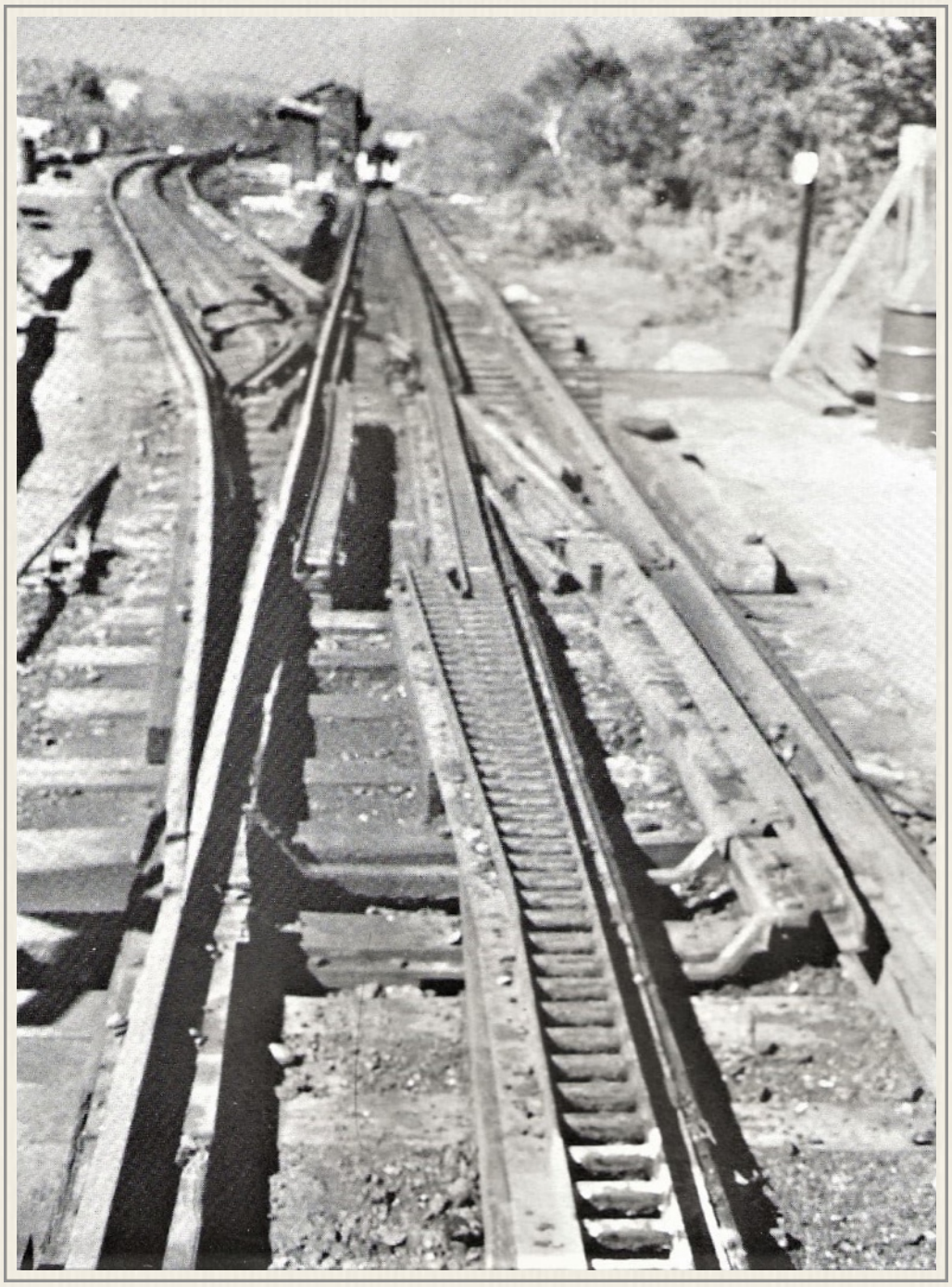
The rotation meant no two trains were together for double-headers all the time, and the early morning run (7:30 am) to collect hotel guests did not fall to the same crew. An oil train scheduled for the next morning would park on the switch in the afternoon, and move forward to let the first two trains behind it on the Base switch. The rest would fill the slots below the bunker.



Bob Campbell (L) observes new brakeman Bob Kent's switch throwing technique as work train heads for the bunker (Jun 16, 1957)
- C. G. Parsons photo / Woody Thompson Collection

Sunset for the "Most Complicated Railroad Switch in the World"

A March 2022 conversation from the *Railway to the Moon! Facebook* page sparked by the posting of a photo *(next page)* of the Base switch by page creator Conrad Ekstrom Jr. led to a discussion of the switches and their disappearance from the mountain: ***Ekstrom Jr:*** "One of the most intricate RR switches ever invented. They required 9 different movements to switch the switch. Developed and added to the line in 1941-42. These last until 2014 when the last one was pulled." Cog-



gers on the site were quick to point out the switches went away in 2012. ***Jim "Chaga" Glidden:*** "In the summer of 2011, Charley Kenison sent you *(Adam Kendall)* 'n me up to the Skyline switch to exercise it, and I took a video of you throwing the switch back 'n forth. If I remember right you were singing that song, *"I've been working on the railroad..."* 9 moving parts and the death rail was kind of important. The last time the switch was used was in the late season of 2011 when a steamer was delayed on top, and Ryan Mooney and I were going up and had to throw the switch 4 complete times. 1) to get on the side, (2) to let the steamer to go down, (3) for us to get off the side track, and (4) so we could go to the top. There was no talk of taking the switch out but some speculation of changing things at the top in the future. For 2012 we had new speakers and Fritz Weatherby was doing the *(recorded)* narration based on a GPS system. When we got to the Skyline switch area with the first trains to the top everything was changed. The narration was awesome, the passengers were confused, and we were told not to speak at all. Dave Moody and his crew had taken out the switch, the long side track with room for 2 complete trains and there was no stopping." ***Daniel Day:*** "Why did they remove the Skyline switch? I don't see any reason to take out an extra siding, especially when it could be useful some day. Would have been cool opportunity to preserve one of the classic switches without affecting railroad operators, not that the ownership cares a ton about history!" ***Paul Forbes:*** "Daniel - I don't think there is a Cogger who didn't rejoice when the last one was gone, especially Skyline!" ***Dave Moody:*** "We removed it because we were done using it. It was adding 5 minutes to the schedule because we had to come to a complete stop, and be flagged through by the brakeman. The train would then proceed through the switch slowly as switch pieces and engine parts made for a "tight fit." Nothing to do with any press mumbo jumbo! *(about doing passes "on-the-fly at the Waumbek passing lane.")* ***Thomas Lane:*** "I remember having to actually do work as a dispatcher back then instead of the modern iteration of being a radio repeater and planning departures lol "call back in five" ugh. I think the press thing was just what

we were told to tell people at the ticket office who asked. 2012 makes sense though, it would've been the 29th *(anniversary of the Teague sale of the railroad to new owners)* and that aligns with my memory of the removal." ***Shawn Foss:*** "As someone who worked there when it was all steam and only those older switches, I most certainly love history but this is not a "heritage" railway that is intended to be a historical look back. The cog railway is a thriving business that is very much living in the present, which is probably in its best years, business-wise, in its history. One of the things about those switches was the fact that there were many moving parts and a failure of any of them could be a lengthy repair considering trains were now prevented from passing. I tend to use the antique car/ modern car comparison. We love seeing the beautiful cars of yesteryear at car shows etc, as they have that charm, but they weren't classics then, only now looking back. They were just the cars of the day with flaws like anything else. Do I love antique cars? Yes, but on a vacation where I don't have to worry about my car mechanically? I'll take my modern car." ***David Huber:*** "I remember my first year '72, throwing switch at Waumbek *(Ed. note: More likely at Base as Waumbek flags were off the ground)* and splashing a couple "goofers" when throwing the up mountain flag weight into the puddle. The goofers *(tourists)* had their backs turned and watching the down coming trains. I was lucky I didn't have to pay for cleaning their light colored clothing." ***Alan Warner:*** "Those switches were always providing thrills. I remember watching Frank Thompson passing downhill and derailing the 9. Too much play in one rail, and the engine pushed it out so the right rear wheel dropped onto ties. Frank just shrugged and got out the jack we all carried. Jacked up the engine & we trigged the rail back into position. Just another day's work. The siding at Waumbek was tight for 2 trains. Marks for correct positioning were painted on the stringers. One day I was on the bottom end on a humid day. As we entered the siding, there was so much vapor from the cylinder cocks that I couldn't see the mark. So afraid of overshooting and knocking the train above right off the end! I must have held in place on steam for 2 minutes hoping it would clear. Was about to send my fireman out to guide me when Charley Teague came by & helped." ***JimBob Crowell:*** "That Skyline switch was a pia *("pain in the ass")* - period. Most complicated switch in the world. Who cares. Ha. I left one small piece undone one time in many trips and it stopped the engine cold as well as lifted up a few inches. Lucky for me the railway had it's safety procedure going thru it learned from the past that saved the trip and day." ***Eric Cunningham:*** "Daniel - Those switches were dangerous, plain and simple. Too many moving parts. What ever reason you believe the cause was; the state of one of them caused an awful painful accident." Cog Owner ***Wayne W. Presby:*** "I went to Switzerland



A dapper duo of Cog brakemen begin throwing the Skyline Switch (2010)
- MJ Kein -We Blog the World website

in 1987 and visited most of the operating "cog railways" they had. Rigi, Brienz, Gonnergrat, Glacier Express, Pilatus, Jung Frau and others. Most of them had books published on their history and I bought all of the books and brought them back with me. At the time, to the best of my knowledge, I was the only person working at the Cog who had visited another cog railway anywhere in the world. Most of the railways I visited had been completely steam at one time or another and they had all made the switch to diesel or electric. From their ridership information, which was detailed in most of the books, it was obvious that they saw huge increases in ridership after the switch to another fuel. In 1982 the year before I became an owner of the cog the ridership was down to 26,000 people. This past year *(2021)* we took up 168,985. For four days during foliage we averaged over 2000 people a day. We now have the same uphill capacity that Pikes Peak had since 1986-87. Before they closed down for their recent major renovation they were carrying 306,000 passengers every year. So we still have growth opportunities. But without the improvements we made to switches, locomotives, coaches, track, etc. this wouldn't have been possible. We will always keep some steam operating because it is still very popular and I like keeping our history alive. However, you never lose your history, but if you are lucky you get to make some new history."



John Colarusso: "Threw those old switches many times. Kinda sad they're history but from a safety perspective probably for the best. No death rail. Anyone have a pic of the new switches? ***Wayne W. Presby:*** "Here is a picture of the new base switch *(left)* being tested with air *(in*



Dave Moody says "3rd photo with the excavator bucket is Steve Comeau facing the camera and Joe Lovely." (2004)
- Wayne W. Presby Collection



Dave Moody says "The first pic is Rob Maclay(closest to cameraman) Al Laprade and John Watkins." (2004)
- Wayne W. Presby Collection

2002)... (and) pictures *(previous & this page)* of New Switch installation at Lower Waumbek."



Dave Moody says "2nd photo-I can't identify the closest two Joey Orlando taking a picture and then Mark Coulter in welding jacket." (2004)

The new switches designed by Al LaPrade are based on a Sylvester Marsh concept. In May 2002, LaPrade told the *Littleton Courier* his switches incorporated features from Marsh switches installed in 1890 on Mount Rigi in Switzerland. "More than 30 years later, we're still using some of Sylvester Marsh's idea," LaPrade said. Because so many people ride the cog railway for its old-world charm, "We're trying to modernize it without having it look like it was modernized." But Marsh never went to Switzerland, died in 1884 and the Marsh switches on Rigi were dated to six years af-



Dave Moody says "On Engineer side -unknown, then me, then Dave Gooden. Fireman side is closest Steve Comeau and then Mark Coulter .On the train is John Anthony with his arms crossed with Rob Maclay sitting down next to him (hat on backwards) and unknowns (2004)
- Wayne W. Presby Collection

ter his death. Historian Rob Bermudes contacted Marsh descendent, Dick Joslin about the discrepancy. "He dug up a slide presentation on Marsh and the Cog," Bermudes wrote to Jitney Jr, "where he (Joslin) did indeed state that Marsh "invented" a sliding switch and that the Swiss picked it up." That prompted Bermudes to review the Gruninger Report, written in June 1869 from Otto Gruninger (located at the MW Cog) to Niklaus Riggenbach on the design on the MW Cog. *(Ed note: Marsh welcomed Gruninger to Mount Washington, explained his designs so they might shared for Rigi railroad.)* Bermudes found in that report (Gruninger) describes a "middle station" (aka halfway house) that was to be built (at Mt. Washington): "in such a way as to allow simultaneous operation of the upward- and downward-moving trains. This will be made possible by a sliding platform with two tracks, which are likewise to be 40 English feet long. For example, when an upward-bound train run on to the platform it will immediately be shunted to the side and re-establish connection to the line on the second track, thus enabling the downward-bound train to pass the station." While Gruninger does not specifically state that Marsh designed it (nor does Gruninger provide a drawing of it), it is probably a safe bet to assume Marsh had his hand in the concept and whatever design existed at the time. In Joslin's inimitable style, he stated that Aiken probably tossed the idea (and any design that existed) into the trash," said Bermudes. "I would state that Marsh designed the switch for the MW Cog—which did not use it—and the Swiss were the first to use that design *(left & below)*."



The Swiss Approach



Mt. Rigi cog train approaches the Swiss railroad's switch based on Sylvester Marsh concept (above) and (right) frame grab of second switch point from a SwissTouristSpots.com YouTube video (2014)
www.youtube.com/watch?v=zVZBMzs9uig
by Ernst Dittmar

Test Your Knowledge

You have now reviewed *Brake, Fire & Run*, *The Cog from a Safe Point of View*, and read how those "hard and fast rules relating to the duties of (Cog) crew members" and the operation of a Mount Washington Cog Railway steam locomotive are incorporated into "a day's work."

Are you ready to test your knowledge? Written examinations for potential brakemen, firemen, and engineers were put in place after 1967. The following questions for each position are taken from copies of exams sent to the New Hampshire Public Utilities Commission's Railroad Division in 1974. They encompass the questions that would've been asked by senior engineers during oral examinations of candidates for qualification to work on the trains in the various positions in the prior years. Good Luck! *(You may refer back to the text at anytime.)*

BRAKEMAN'S EXAM

1. In the manipulation of the brakes on the way down the mountain, what is the aim that should be strived for?

2. What are the general requisites for becoming a brakeman?

3. When a train is moving through the Base Switch, to the loading platform, what responsibility does the brakeman have?

4. Describe the correct procedure a brakeman should follow in the moving of a down-coming train from mainline to the Skyline Siding when a switchman is not present. Include times when the ratchet is to be raised or lowered.

5. What is the purpose of taking up a slight amount of brake on an up-bound train as the Summit is reached?

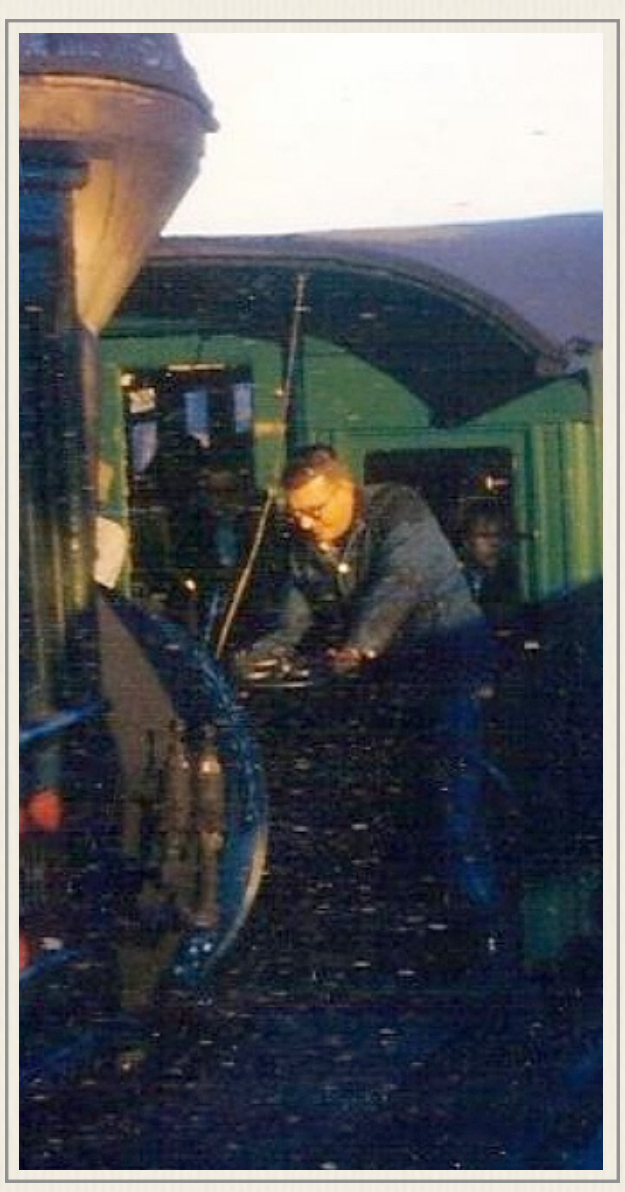
6. How should one brake be kept when not in actual braking use coming down the mountain? Why?

7. How often should your track phone be checked? What could cause a defective phone?

8. Describe how you would connect a track phone on the mountain? Why is this procedure used?

9. Describe the procedure a brakeman should follow in moving an upward train from the mainline to the siding and back at Waumbek.

10. What should be done by the brakeman to stop a train



if an emergency is noted:

a. With the track
b. With the car in either direction

11. What is the warning to tell the engineer that a stop may be necessary shortly, but not immediately, due to an obstruction in the track ahead?

12. What should be done to get the engineer's attention in the event of an emergency and the bell signal is not working?

13. What should be done if a stopped train is noted in the fog ahead or if a train ahead seems to be having difficulty which would affect the speed of a following train?

14. What is the proper distance between two trains going up –
a. Feet?
b. Landmarks?
c. How would you inform the engineer that he is too close

15. If a brakeman pulls off more than 2 feet from the engine what should be done? Why?

16. What should be done on the way down if any unusual speed change or movement by the engine is noted by the brakeman?

17. If a train stops on the track in any place other than the usual points and the engineer doesn't immediately direct the brakeman that the problem is minor, what should be done
a. Going up?
b. Coming down?

18. What should be done before leaving any car on the mountain? What is the brakeman's responsibility and place in the event of an emergency, unless otherwise directed by the engineer or a superior?

19. Describe all instances when the car ratchet should be lowered

20. Who is allowed to ride with the brakeman on the platform going up or down?

21. What should be done when an accident occurs to any passenger?

22. After unloading the car and changing seats at the Summit and setting the brakes and ratchet, what is the brakeman's next responsibility?

23. Describe what should be done by the brakeman when the leave-in-five-minutes signal is given.

24. What should be done with all messages received by the brakeman?

25. What are your responsibilities at:
a. Base, prior to run:
b. Base, just prior to departure

c. Base to Summit (general)
d. Waumbek Switch
e. Summit Approach
f. Skyline, coming down and taking switch

26. What are the responsibilities of a brakeman in loading and unloading passengers from a train at the Base:

a. On a single
b. Top end of a double
c. Bottom end of a double

27. Describe the various hand signals and what they mean

28. When are tickets to be collected? Why?

29. If there is any question concerning procedure, with whom should the brakeman consult?

30. It is the brakeman's duty to remind the engineer, should he forget, to call into the Base in case of delay. After how much time should a call be placed?

31. How many and which brakemen, in the case of double-headers, are allowed on the switching platform while a train is going through the switch?

32. In case of a delay or an unscheduled stop on the mountain, after receiving your instructions from the engineer, what should a brakeman do, once he was carried out his instructions?

33. Whom should the brakeman be sure has seen his coach in the morning before any up-mountain movement? If he hasn't arrived, what should the brakeman do?

34. What is the procedure when riding a train through the switch? (Which brake should you have your hands on?)

35. What does your passenger car inspection consist of?

36. Identify these parts of your passenger car – describe briefly what they are for and tell where they are located.

a. Ratchet wheel
b. Ratchet Bar
c. Dog
d. Brake Beams
e. Governor (if applicable)
f. Bumper Block
g. Steam Heat Line
h. Steam Heat Valve
i. Bearing Block
j. Turnbuckle
k. Return Spring

Ch. 5 - Test Yourself - Brakeman

l. Collars and Set Screws

37. Describe the procedure for washing out the ash pan at the Bunker. What unusual conditions should watch for –

a. In the grates

b. In the ash pan

38. What change in your braking procedure might have to be made in rain or dense cloud cover?

39. What information should you include in the announcement made before leaving the Summit?

40. At the Summit, you are unable to open the front door of your coach. What should you do?

41. If you are on the bottom end of a double at the Summit, what special action should take after your passengers have boarded?

42. Your train is stopped at Skyline platform waiting for the down coming train. What three things should you be prepared to do?

43. If the Skyline area is in the clouds, what should you do after your down coming train has taken the siding?

44. You are meeting a down-coming train at Waumbek. As you approach the tank, how do you determine whether your train will stop for water or proceed directly to the siding

a. On a clear day

b. When clouds are below Waumbek curve?

45. When should you allow passengers to get off your coach?

46. Coming down Long Trestle, you notice that there is no emission from the air valve. What should you do?

47. How would you expect the engineer to get your attention on the way up?

48. What would you consider a reasonable overload? Would you accept more standees on the Thelma or #2 cars, than on the #1 car?

49. What are the water cocks? Why are they cracked open during descent?

50. How can you tell when the water cocks are open or closed? If they are closed, what should you do?

51. What is meant by "even emission" from the cylinder cocks?

52. If you are braking for the #10 or #2 engine and notice uneven emission, what should you do?

53. Using the following landmarks as guidelines, describe the braking procedure of a complete descent, indicating which brake you would use, at what points you would take up slack, when you would begin braking, and when you would let off brake.

a. Leaving Summit
b. Whole rock
c. Lizzie's
d. Flat above Skyline
e. Skyline Switch
f. Skyline platform
g. Top of Long Trestle
h. Bottom of Long Trestle
i. Top of Jacob's
j. White Board
k. Rock above Halfway
l. Flat out of woods
m. Waumbek curve
n. Waumbek switch
o. Above Cold Spring
p. Cold Spring
q. Monkey Tree
r. Sand Pit
s. Bridge

54. How much attention should pay to the speed of the engine?

55. When the roller rises on the bumper block, what should you do?



From January 3, 1974 letter to the N.H. Public Utilities Commission from Robert L. Kent, Crew Supervisor - Mt. Washington Railway that contained copies of the written Brakeman, Fireman, and Engineer Examinations put into place in the early 1970s.

About The Examination: "The examinations we use were prepared by several experienced engineers, firemen and brakemen and are based upon the kinds of problems and situations we have encountered, as well as all manner of other information we felt competent qualified personnel should know. There is no answer key per se, we *(2-3 people)* who evaluate the completed examinations know what we are looking for and make judgements as to the correctness of the responses based on our experiences.

The examinations themselves are worthless to anyone who does not know the mountain and the operation. These examinations are used as teaching tools also. If a trainee is unsure about a few of the questions we will instruct him. On the other hand if he simply does not know a large amount of the material he will not achieve qualification. We do not have a very definite pass/fail system.

As you are well aware this is not the kind of operation that you can bring in someone off the street to run, safely. You must have good men, well trained with a sense of dedication to their job. They must be so qualified as to instill in the traveling public the feeling that they are in complete control of the engine and car, 100%."

Ch. 5 - Test Yourself - Fireman



FIREMAN'S EXAM

Respond to the following situations giving your procedure for correction of the problem. If you do not know what to do in the situation, so indicate.

1. What is the function of the arch bricks?

2. What do you do for a dropped arch on the way up? On the way down?

3. What reasons can be given for burning grates?

4. What serious damage does dropping the grates pose to the boiler itself?

5. How can you possibly remedy dropped grates while on the mountain?

6. Explain the way the fire gets its draft on the way up the mountain?

7. What should you, as the fireman, do at the switches in the event you are coming down the mountain at night with no lights or in heavy fog?

8. What is the fireman's chief responsibility coming down the mountain, besides handling the ratchet and his water cocks?

9. When should the ratchet be lowered or raised?

10. Why should you crack the blower before opening the firebox door at the Summit on a windy day?

11. What is the "rule of thumb" before hooking a fire? Why?

12. Where should you check your tender water before going to the Summit?

13. Why should you always lift the firebox door latch when closing it?

14. What is the purpose of the water cocks?

15. When should the fireman crack his watercocks open?

16. What is the least steam pressure you should have at any one point on the way down the mountain?

17. How far open should you turn the water glass valves? Why?

18. In the event of a water glass breaking, which valve should be shut off first? Why?

19. What two things should you check before breaking the bank in the morning?

20. Your blower does not function. What could be the cause of this?

21. What should you never do when filling a lubricator and you have to leave to get more oil? Why?

22. If you have a hot bank at night, what two procedures and precautions can be taken to cool it?

23. Which way should the way cocks be turned to go up the mountain? Down? Why?

24. The crank bearings are equipped with automatic grease fittings. Why?

25. What would you do with the water glass in the event of a rainstorm? Why? How would you then check the water level in the boiler?

26. What things should you check before washing out an engine at the pit?

27. A lubricator line in the cab breaks going up

28. A lubricator line in the cab breaks coming down

29. As you leave Waumbek going up, your water glass breaks

30. If you have steam trouble from a poor fire (too much coal). Due to repeated shaking you suspect a full ash pan – and find it to be very close to the grates.

31. You have a broken pigtail at the Summit. With no flaring tool what can you do? Should you notify the Base?

For Questions 32-37 DESCRIBE THE PROCEDURE FOR:

32. Shimming a crosshead. Include how you would determine that it is needed.

33. Filling a hot lubricator

34. Correcting a problem with the lubricator line that fails to give a good drop or has a clouded bulls-eye.

35. Correction for blowing cylinder cocks:

a. Blowing out (side)
b. Blowing down

36. Determining proper lubrication of the cylinders and proper lubrication of the running parts.

37. Checking for loose shaft in the box or loose box in the jaw.

38. What is the approximate running time between:

a. Base and Waumbek going up
b. Waumbek and Skyline going up
c. Skyline and Summit going up
d. Summit and Skyline coming down
e. Skyline and Waumbek coming down
f. Waumbek and Base coming down

39. With these times, what should your lubricator setting be?

40. What water level should you have at:

a. Base
b. Flat before Cold Spring
c. Middle of Cold Spring
d. Waumbek (going up)
e. Halfway
f. Jacobs Ladder
g. Long Trestle
h. Skyline Switch (minimum)
i. Gulf Tanks
j. Lizzie's
    i. Single (min)
    ii. Head of double (min)
    iii. Bottom of double (min)

41. What should be the crosshead position for shimming? Why?

42. What are the approximate running distances between two trains going up?

43. What are the approximate running distances between two trains coming down? In addition to feet, give specific points.

44. What must be done prior to proceeding through a switch?
    a. Going up
    b. Coming down

45. Who is authorized to ride in the cab of the engine?

46. Describe "blowing out" packing and putting in new packing.

47. What other method of obtaining draft can be used if the blower does not work and there is no compressor near? (assume you have some steam)

48. Describe how your steam locomotive works from water in the boiler to steam at the cylinders and motion.

49. How is reversing (using steam) accomplished?

50. What is the function of the side stack?

51. What is the function of the stack exhaust?

52. How is compression on the downgrade achieved?

53. What is the purpose of the water cocks and lines to the cylinders?

54. There are two pop valves in the dome. What is the purpose of each?

55. Describe your procedure for getting your engine ready in the morning for the first run up the mountain.

56. What does the engineer do at Waumbek on the way up?

57. Describe your procedure at the Base when your train gets down and must go right back up.

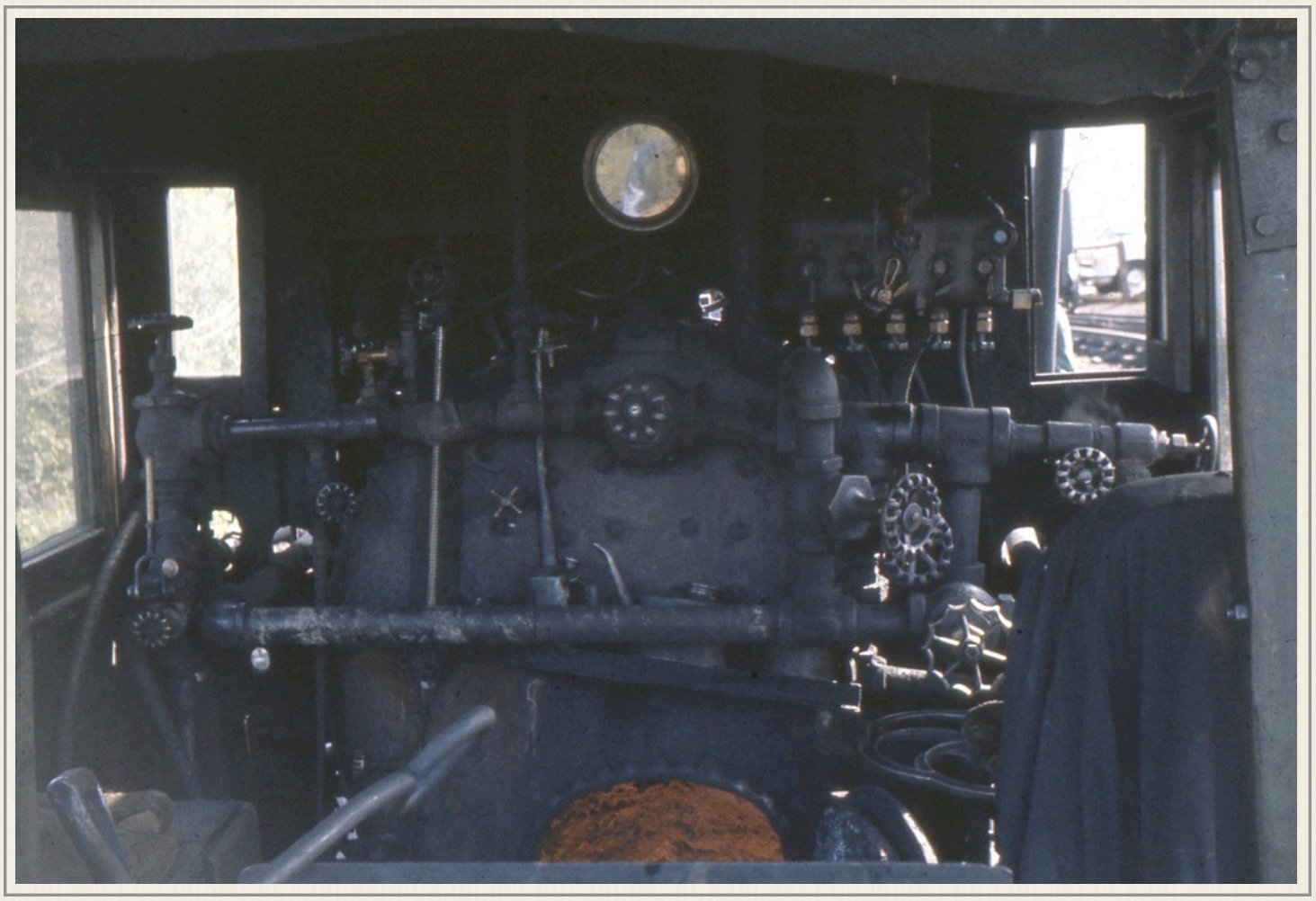
58. How do you check to determine how much grease is left in your grease gun?

59. Describe what is meant by "working water." What might cause this? How do you remedy it?

60. Describe the arm and hand signals used by the brakeman and tell what they mean.

61. Describe the procedure for putting your engine away at night.

Ch. 5 - Test Yourself - Engineer



ENGINEER'S EXAM

Respond to the following situations giving your procedure for correction of the problem. If you do not know what to do in the situation, so indicate.

1. The morning inspection reveals a possible cracked frame.

2. You are going up Cold Spring Hill and the injector breaks. Upon inspection, you find an empty tender (water). Your glass reads three gauges.

3. At the white board the engine suddenly stops. The problem proves to be a slipped cam.

4. You are the head end of double and arrive at Lizzies with 1½ gauges of water. The cloud cover is dense. The bottom train has been within proper running distance all the way.

5. You are a single and find that you are held over an hour at the Summit. You have low water and cannot top in. Your tender is empty.

6. Your injector breaks and will not prime. You have plenty of water in the tender.

7. The water in the boiler is very low and there is none in the tender. Your fire is hot and you are on the grade.

8. As you pitch off the Summit, you find no water vapor escaping from the cylinder cocks and cannot detect the clear exhausting of compressed air. You notice that your stack exhaust has been left open. What might be the cause of the lack of emission? How would you remedy the situation?

9. A lubricator line in the cab breaks going up.

10. A lubricator line in the cab breaks going down.

11. As you leave Waumbek going up, your water glass breaks.

12. On Long Trestle going up, the right front exhaust line breaks just out of the cylinder.

13. You blow a cylinder head going up. What might be the cause of this breakdown?

14. A crank box heats excessively. What might be the cause of this? What might you do about it?

15. You have steam trouble from a poor fire (too much coal). Due to repeated shaking you suspect a full ash pan – and find it to be very close to the grates.

16. You have a broken pigtail at the Summit. With no flaring tool, what can you do? Should you notify the Base?

17. You arrive at the Summit and find no telephone communication. You know you must go on "automatic." Describe this procedure.

18. You derail the passenger coach at Skyline going up.

19. You are assigned a new engine for a day. What should you do prior to the run up the mountain?

20. You are coming down at night in the dark and find your generator does not work. This happens at around Gulf Tanks.

Describe the procedure for:

21. Shimming a crosshead. Include how you would determine that it is needed.

22. Stripping and blocking after a broken crankpin.

23. Reporting a passenger accident.

24. Filling a hot lubricator

25. Correcting a problem with the lubricator line that fails to give a good drop or has a clouded bullseye

26. Correction for blowing cylinder cocks:
    a. Blowing out (side)
    b. Blowing down

27. Determining proper lubrication of the cylinders and proper lubrication of the running parts.

28. Checking for loose shaft in the box or loose box in the jaw.

29. Engine check at the Summit. What do you check and what do you look for?

Ch. 5 - Test Yourself - Engineer

30. Steam blowback through the line to tender in extreme cold weather to prevent freezing.

Miscellaneous

31. What is the approximate running time between:
    a. Base and Waumbek going up
    b. Waumbek and Skyline going up
    c. Skyline and Summit going up
    d. Summit and Skyline coming down
    e. Skyline and Waumbek coming down
    f. Waumbek and Base coming down

32. With these times, what should your lubricator setting be?

33. What water level should you have at:
    a. Base
    b. Flat before Cold Spring
    c. Middle of Cold Spring
    d. Waumbek (going up)
    e. Halfway
    f. Jacobs Ladder
    g. Long Trestle
    h. Skyline Switch (minimum)
    i. Gulf Tanks
    j. Lizzies
        i. Single (min)
        ii. Head of double (min)
        iii.Bottom of double (min)

34. What should be the crosshead position for shimming? Why?

35. What are the approximate running distances between two trains going up?

36. What are the approximate running distances between two trains coming down? In addition to feet, give specific points.

37. What must be done prior to proceeding through a switch?
    a. Going up
    b. Coming down

38. Who is authorized to ride in the cab of the engine?

39. When may you take your engine to the Shop?

40. What should be done for each of the following?
    a. Leaking flue
    b. Dropped arch going up
    c. Steam leak in the cab

41. Describe "blowing out" packing and putting in new packing.

42. What other method of obtaining draft can be used if the blower does not work and there is no compressor near? (assume you have some steam)

43. Describe how your steam locomotive works from water in the boiler to steam at the cylinders and motion.

44. How is reversing (using steam) accomplished?

45. What is the function of the side stack?

46. What is the function of the stack exhaust?

47. How is compression on the downgrade achieved?

48. What is the purpose of the water cocks and lines to the cylinders?

49. There are two pop valves in the dome. What is the purpose of each?

50. Describe your procedure for getting your engine reading in the morning for the first run up the mountain.

51. What does the engineer do at Waumbek on the way up?

52. How long should the engine be at Waumbek going up?

53. Describe your procedure at the Base when your train gets down and must go right back up.

54. How do you check to determine how much grease is left in your grease gun?

55. Describe what is meant by "working water." What might cause this? How do you remedy it?

56. Describe the arm and hand signals used by the brakeman and tell what they mean.

57. Describe the procedure for putting your engine away at night.

58. What are the general requirements for becoming an engineer?

ORAL

Identify each of the following by telling (or showing) where they are and what they are used for.

Gauge cock	Water Cock	Mud plug
Cam	Cam strap	Cam rod
Valve pin	Rocker arm	Turn buckle
Pad	Pad bolt	Crank pin brass
Stirrup	Cylinder	Pinion gear
Nipple	Throat sheet	boiler brace
Safety strap	set screws	ash pan

Ch. 5 - Test Yourself - Engineer

Arch
Spark arrestor
Crosshead key
Guide
Packing glands
Crosshead brass
Spur gear
Ratchet gear
Boiler checks
Shims
Head
Stack exhaust
Belly plug
Front sheet
Dome
Boiler support
Grate
Barcos
Chokes
Bumper block
Water line

baffle (smoke chest)
valve stem key
gib
guide bracket
crank pin
counter balance
flue
center bearing
crown sheet plate
studs
cylinder cock
blow down valve
smoke chest
crown sheet
dry line
binder
strainer
bonnet
way cocks
pig tails
mud ring

automatic greasers
piston stem key
gib plate
valve guide bracket
side rod
piston
collar
cross brace (frame)
safety hooks
valve
side stack
pop valves
petticoat
side sheet
barrel
roller
baffle (fire door)
ratchet lifter
apron
lubricator lines
generator

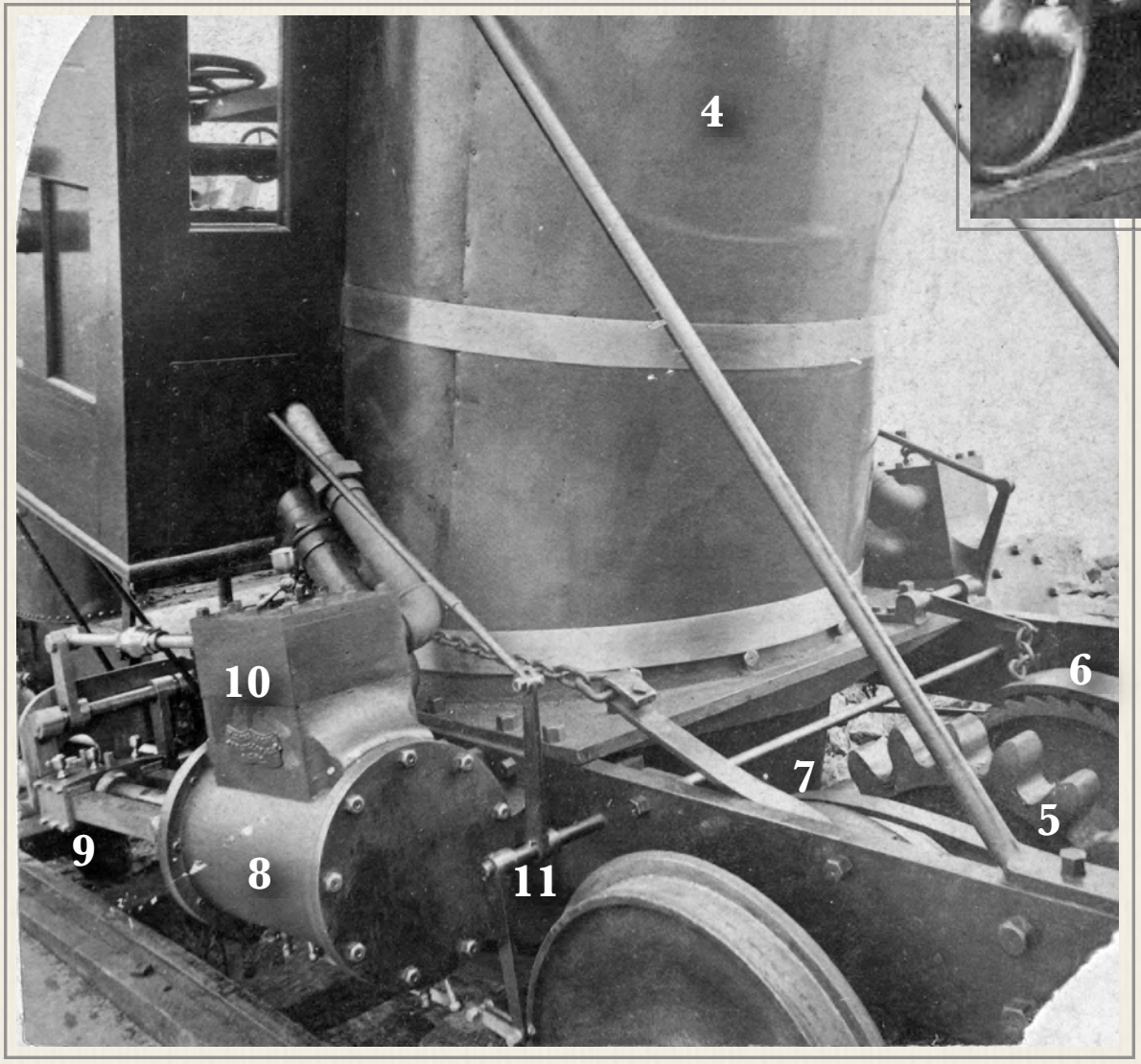


The 1870 Exam

Mastered the 1973 qualification exams? Now apply that knowledge to the *George Stephenson* and see if you really know your mountain climbing locomotive - match numbers with nomenclature *(answers below)*

Engineer ___
Cross Head ___
Steam Gauge ___
Boiler ___
Cog Gear ___
Gauge Cocks ___
Ratchet ___
Cylinder ___
Valve Box ___
Brake ___
Emergency Bell ___
Cylinder Cock Control Linkage ___





1) Steam Gauge
2) Emergency Bell
3) Gauge Cocks
4) Boiler
5) Cog Wheel
6) Ratchet
7) Brake
8) Cylinder
9) Cross Head
10) Valve Box
11) Cylinder Cock Control Linkage
12) Engineer

CHAPTER 6

Trouble on the Line



Fireman Dave Woodbury (center) walks a passenger down to the No. 6 while boilermaker Ray Gilman (l), master mechanic Paul Philbrick (r) and brakeman Bob Bradley atop the No. 4's tender observe
- Lewis Family Collection

By August the wear and tear of a summer season is taking it's toll on man and machine. For man, the seven day - 80 hour work weeks have put them well into the "grumpy season." For machine, the strain of moving 18 to 20 tons of rolling stock up nearly 4-thousand feet day after day seeks out and tests weak parts. On August 28, 1963, the main rear shaft on Engine No. 4 *Summit* broke just as the train was pushing up towards the Halfway House.

Ch. 6 - Trouble on the Line

"Breakdown!" was the last thing anyone wanted to hear on the track phone. But it was the rallying cry that brought everyone out to bring the paying passengers, and the broken engine safely back down the mountain.



First Things First: The No. 6 - *Great Gulf* arrives with an empty car & rescue team.



"Father Goody" *(right)* moves under the trestle to find some building materials.



A Transfer Platform: To safely transfer passengers, a temporary walkway is built along the trestle past the broken engine, 10-feet above the rocky, cinder strewn slope. The man in the white shirt *(left)* is no tourist - he owns the railroad, Col. Arthur Teague.

Ch. 6 - Trouble on the Line



A Careful Walk: With the temporary platform in place, the transfer begins. Each passenger is escorted by a train crewman. Here Doug Taylor leads the way. Shop foreman Paul Philbrick stands in front of Doug with back to camera. Brakeman Bob Bradley stands waiting by the rear platform.

Ray to the Rescue: As Doug completes another walk down the planking with a tourist, Boilermaker Ray Gilman heads up the ties to the broken engine. A veteran of the main line, Ray was part of Philbrick's mechanical rescue team.



The Colonel's Personal Service: A tall trestle by tourist standards, the ten-foot elevation was short by traditional Cog standards. Knowing the last step is sometimes the most dangerous, Col. Teague makes himself the final safety rail as his guests board the down mountain railcar for the trip back to Marshfield Station.



Safely Down: Ken Randall captures the final moments of a successful recovery. Tender removed from the disabled engine, the No. 8 uses the oil car as a bumper to ease the broken train down. Every brake wheel has at least one man helping take the load off the *Tip Top's* cylinders.



Ch. 6 - Arthur S. Teague

Col. Arthur Simpson Teague

Col. Teague's appearance on the mountain that day in August 1963 was not unusual, and was a direct departure from the Old Colonel's management approach. The story goes that when a breakdown occurred during his regime, Henry Teague would find "a bottle of scotch and disappear" leaving his right-hand man, Arthur to handle the problem. The hands-on approach of the South Carolina-born, Clemson-trained electrical engineer was just part of his character.

Arthur Simpson Teague was born May 25, 1910 - the youngest of three children born to Dr. Charles Arthur Teague and his wife, Margaret James Simpson in Graniteville, South Carolina - a town about 62 miles southwest of the state capital, Columbia and just 15 miles northeast of Augusta, Georgia across the Savannah river. The only boy in the family, his sister Lucy Elizabeth was eight years older - sister Fannie Mae five years older. Dr. Teague had graduated from the New York University Medical School and began his career as local surgeon for the Southern Railway Company. He practiced medicine in Graniteville for 25 years before dying of a brain tumor at age 52 in 1916 as Arthur approached his sixth birthday.

Henry Teague met Arthur in the fall of 1931 at Clemson A&M when the new owner of the Cog Railway was visiting college campuses looking for recruits to come work summers at his mountain. Their common last name with no apparent family relationship got the 56-year old Colonel and the 21-year old senior talking. (*The Story of Mt. Washington* says later research would reveal their immigrant ancestors who arrived in the United States before 1800 were the Irish brothers - Isaac and Newton Teague.)

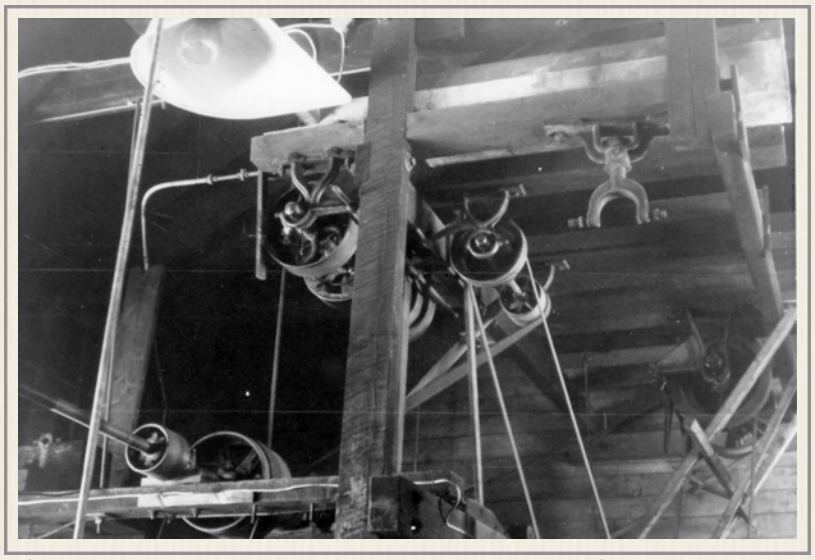
Arthur Teague started work at the Cog in 1933 in the ticket office, and enrolled in a masters program at the University of South Carolina that fall. Arthur kept heading back to New Hampshire each summer. Records show his winter work in 1934-5 was as an assistant in the engineering department at the Federal Land Bank of Columbia, which was expanding its footprint with a five-story "fireproof office" structure.

To help keep his crew together through a long summer, and then return the next year, Col. Henry Teague established an early form of profit sharing at the railroad. A "bonus" was paid out of profits at the end of the season, and there was a cash incentive for employees to come up with ideas to help the railway run more efficiently.

The younger Teague suggested a Pelton water wheel be installed to provide electricity at the Base and pump water to the Summit House. Originally designed in the 1870s by Lester Pelton, the very efficient turbine extracts nearly all the kinetic energy from a high pressure low flow water source - exactly what would be coming down the pipe to the Shop from a dam on Franklin Brook.

Doug Taylor remembers the set-up from his time at the shop in the 1960s. "The Pelton wheel had a series of v-belts that transferred power to the water pump(s) for the summit and belts that went to a former B&M diesel motor that was reverse wired, so *(the motor)* became a generator of D.C. power for the machine shop and the Base. At the end of the day, Paul Philbrick would use a

shaker bar to disconnect the belts to the water pump, and then adjust the water (flow) to the wheel so the voltage would not go up so high that all the bulbs and electrical equipment would fry. He'd come back later at night and further adjust the water wheel as the power demand lessened." Jitney remembered that "Arthur would sometimes plug in toasters at the Hut (where he lived) in order to help maintain a balanced load on the system."



Still used in the early 1970s, consultant Lee Carroll noted the Shop's pulley driven power transfer system now violated new occupational safety (OSHA) laws
- Doug Taylor Collection

The Pelton wheel reportedly saved Henry Teague some $2-thousand dollars a year because he could mothball the old B&M steam pump house. 31-year old Arthur Teague was managing the railway for the Colonel when Henry introduced him to a 27-year old Philadelphia area debutante and trained nurse in February 1941. "I have always been eager to be successful. I have wanted to work and get ahead." Ellen M. Crawford writes in her biography, *I Conquered My Mountain*, "I am persistent. I have tried to the best of my ability to apply the talents which God has bestowed upon me."



Col. Arthur S. Teague (1945)

Ellen says her summer romance with the newly enlisted 2nd Lieutenant included a night at the Mt. Washington Hotel - a lamb chop dinner at the Base (perhaps cook Stubby Welch's creation favored by the Old Colonel?) with a train ride to the Summit for dessert. Ellen had another suitor at the time, but says a fraternity pin sealed the deal for Art, and they married June 6, 1942 in Augusta, Georgia as Teague was training with his unit.



ANNOUNCE ENGAGEMENT

Mrs. E. Druitt Crawford, of 417 South Carlisle street, Philadelphia, formerly of Penllyn, has announced the engagement of her daughter, Miss Ellen MacLean Crawford, and Captain Arthur S. Teague, Company "G" V. S. 22d Infantry, Motorized.

Daughter of the late Dr. Crawford, Miss Crawford was graduated from the Agnes Irwin School and the Jefferson Hospital Medical College School of Nursing. She made her debut in 1931.

Captain Teague, son of Mrs. Charles Arthur Teague and of the late Dr. Teague, of Columbia, S. C., was graduated from Clemson College. An electrical engineer, he is assistant manager of the Cog Railroad of Mt. Washington, N. H.

Front page announcement in the Ambler Gazette of Ambler, PA on April 16, 1942

Arthur Teague's narrative of landing on Utah Beach exactly two years later, and the three days of fighting that followed *(see Appendix)* contains many examples of his ability to go to the site of a combat problem - size up the situation and use the expertise of the men around him to solve it. Battalion surgeon Capt. Walter E. Marchand's *D-Day Doctor's Diary* recounts several snapshots of Teague's leadership - pausing rather than pressing his troops forward into Montebourg under heavy artillery fire when a German retreat seemed immi-

nent. The wait worked, Teague's battalion easily captured the objective after the enemy had left. Teague standing on a hillside with General Theodore Roosevelt (the President's son) watching Allied dive bombers pound Cherbourg and later bluffing the surrender of nearly 1100 enemy soldiers on the peninsula during talks initiated by one of Teague's captains.

Dr. Marchand says on the eve of what became known as "The Battle of Hedgerows" breakout in July 1944, some 26 days after the landing - sixty percent of the enlisted men in the unit were replacements. "Col. Teague and all the Battalion staff officers talk to the enlisted men," writes Marchand. "A pep talk – sensible and clear."

Teague told Jitney of how one of his men came up with the idea of welding prongs on the front of a tank to break through the hedgerows of Normandy, and Teague helped expedite the idea. Teague believed good ideas to solve problems can come from anywhere within the ranks.

Marchand's diary summed it up this way, "Col. Teague is a great leader and we all look up to him – clear headed and not foolhardy – brave and never demanding the impossible."

Back at the Cog after the war, busy days sometimes found an extra train late in the day short a brakeman. The Colonel would climb aboard and act as brakeman up to Waumbek. He'd then have a brakeman from a down-bound train switch with him at the siding, and Colonel Teague would brake the passenger car back to the Base Station.

One day, Calijah was on the brake platform coming down the mountain on his last trip with big plans to start an evening's entertainment shortly after arriving at the Base. He spotted the Colonel on the front platform of the train coming up. Calijah signaled his intentions to stay with his train by pointing down the mountain. Arthur signaled to him to take over the late train by pointing up the mountain. Calijah answered by pointing again down the mountain. Arthur stared hard at the young brakeman and emphatically pointed up the mountain just once. Calijah dismounted, meekly switched trains and headed up the mountain. Track foreman Larry Gooden who saw the non-verbal exchange later told Calijah, "Ya' realize Arthur's pointer works better than yours!"

Arthur was the 41-year old manager of the Cog Railway when Col. Henry Teague died in October 1951 at the age of 76. The old Colonel's financial juggling to repair the hurricane damage to the track and buildings in 1938 had resulted in Henry Teague's alma mater inheriting a mountain climbing railroad as well as the summit of Mount Washington and the buildings upon it.

"Well, there was no doubt in our minds that we didn't want to go into the railway business [laughter] any longer than we had to," Dartmouth president John Sloan Dickey recalled in the late 1970s. To keep the property functioning, Dartmouth College entered into a 10-year management contract with Col. Arthur Teague. The contract appears to contain some of the old Colonel's profit-sharing components. Teague will be paid $10-thousand dollars per year with an annual bonus of 15% of the consolidated net income of the Summit House and Cog before application of corporate federal income tax. There would be an additional bonus of $10-thousand dol-

lars in 1961 to the extent of net earnings remaining for the last five years after salary, bonus and taxes had been deducted.



Col. Arthur Teague and President John Sloan Dickey pose for a photograph in June 1953
- courtesy Dartmouth College

Dartmouth president Dickey also said, "There was little room for doubt that the top of Mount Washington was no great credit so far as its operation and buildings and other things to the State of New Hampshire, let alone to the College as the owner of it. It was a pretty cheesy, low-grade tourist operation on top of a magnificent mountain. And we very quickly were clear that whenever we could find a buyer or whatnot, we should sell the railroad off or do something to dispose of it. And also we were increasingly clear that we didn't want to get into the development of the top of Mount Washington. It was something that we might have done if we'd had a lot of money we didn't know what to do with. But it didn't seem to us this was our function."

Late in 1955, Governor Lane Dwinell organized a committee to evaluate the status of the entire mountain and make recommendations so "the people of New Hampshire may be assured of the greatest benefit from Mount Washington, from the recreational, scientific, commercial, scenic and sentimental standpoint."



The Dartmouth Alumni Council contemplates the college's future role in Mt. Washington's development during a break in a meeting held at the Summit in June 1953
- courtesy Dartmouth College

The state's economic review tested Col. Teague's tactical skills on a political battlefield that would decide the future of the mountain and the railroad that had been part of his life for over two decades, and Arthur Teague was committed

to keeping steam as the motive power.

While steam was good, the fuel source to produce the steam was problematic for some members of the public. The Governor's Study Committee engaged Boston University's College of Business Administration's research bureau to conduct a scientific market research survey of all aspects of the Mount Washington area. During the summer and fall of 1956, over 21-hundred personal interviews were conducted and some six-thousand mail questionnaires collected. Fifteen graduate and undergraduate students spent seven days *(August 1-7)* in the Base Station parking lots interviewing visitors to the Cog as they left.

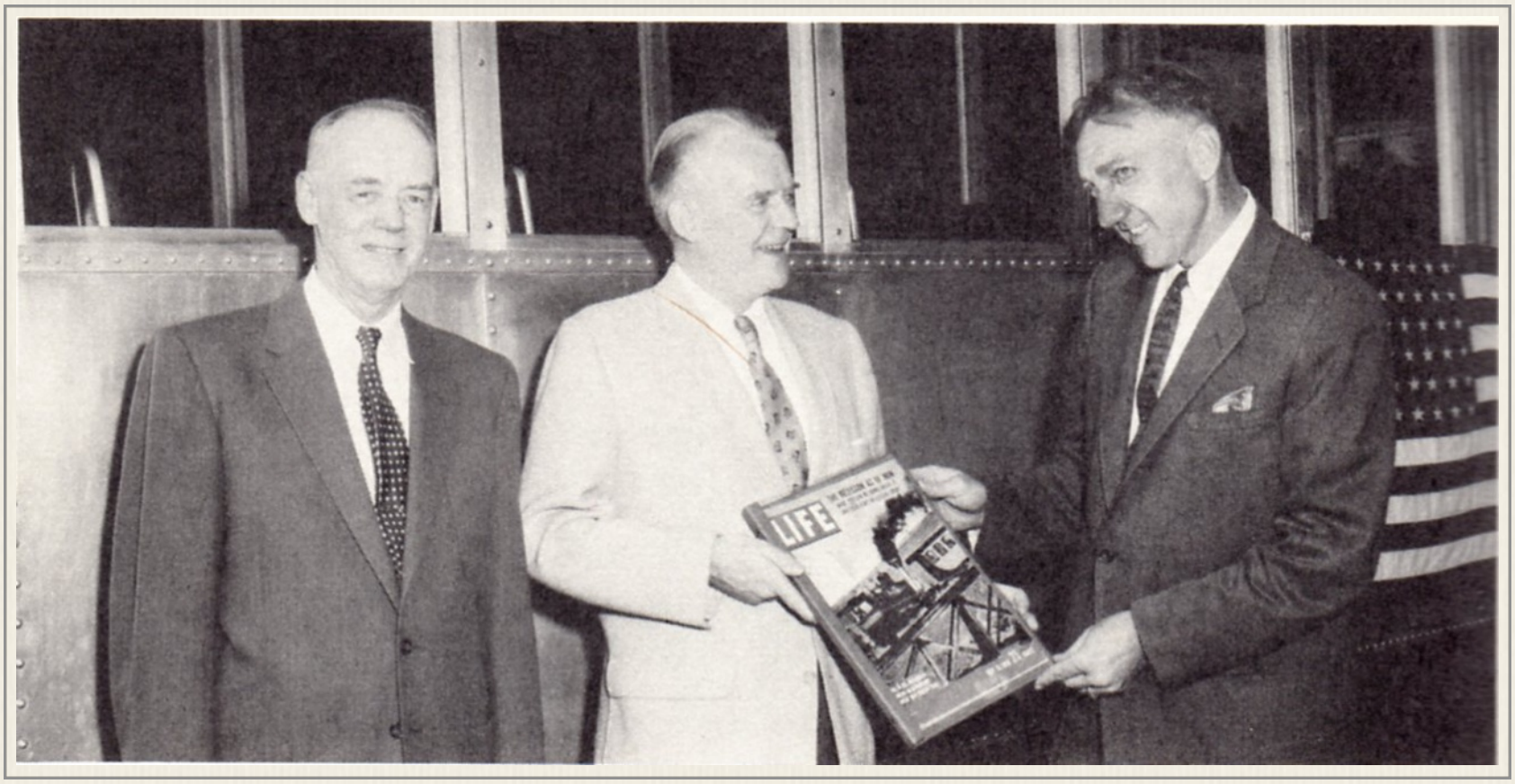
The market research results report issued in December 1956 recommended that the Railway needed to have lower ticket prices; increased passenger carrying capacity; quicker round trips; a cleaner, quieter and more comfortable ride; and better facilities for observation and description of landmarks. Quoting interview subjects, researchers said the facts are clear, "(t)he Railroad is 'uncomfortable', 'dirty', and 'over-priced' and can be classified as a novelty rather than an efficient facility for carrying passengers to the Summit."

"To contend that the Cog Railroad is the only steam engine in the country; is one of the few cog railroads left in the world; is evidence of past engineering genius; or... a trademark of the White Mountains does not mean that more people will want to ride it," the report said. Researchers said if visitors just want to see the steam-powered Cog Railway, then "the engine and cars could be preserved perhaps in a base station museum."

The report said the "bold step" of replacing the Cog with a faster, more modern device with more comfort at a lower cost should be a possibility. Perhaps an electric train and new passing tracks could be built to replace time-consuming switches. But any change of Cog operations needed to be coupled with improvements at the summit including a "new" Summit House with 100 modern hotel rooms, and an Exhibition-Foyer that would accommodate 150 to 200 visitors.

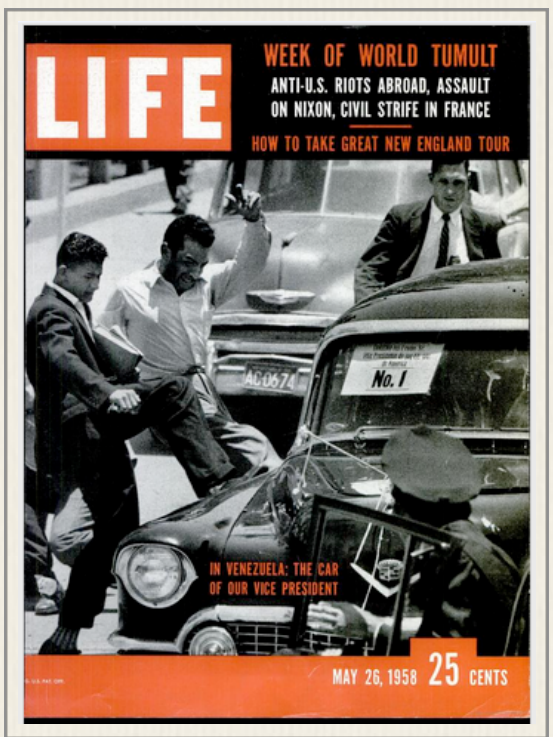
With publication of the market research report, Col. Teague began addressing the concerns. The rails could be double-tracked from Waumbek to Halfway House for between $50 and $60-thousand dollars to eliminate delays of trains meeting at the switch. Monorail, Inc. told him a single rail electric device could be built to the top. It would cost $3-million dollars. A year before the research team had arrived at the Base Station in 1956, Edward Chumley had started building a new aluminum 56-passenger coach with large windows that did not open to keep cinders out and tourists cleaner. The *Chumley* car would debut Memorial Day 1958 four months before the Study Committee's final recommendations, and there was another marketing blitz in the works.

1958 was poised to be a good season publicity-wise as the Cog Railway was to be featured on the May 26 LIFE Magazine cover. New Hampshire Governor Lane Dwinell *(center above next page)* posed with Col. Teague and Chumley in front of the new aluminum car holding an advance copy of the issue which contained a visual tour of New England attractions to visit that summer. There would be another Cog train photo inside. The crew of the No. 6 was excited the *Great Gulf*









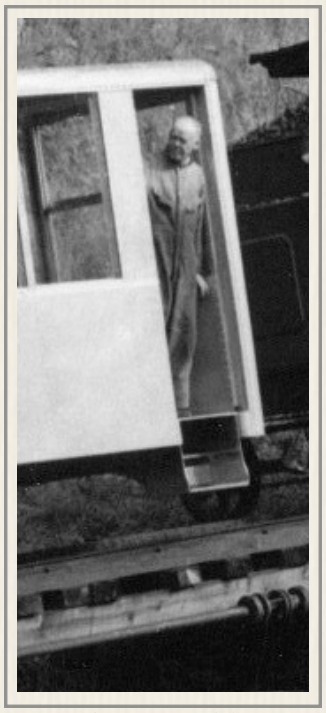
had made the cover after spending quite some time carefully posing on Jacob's Ladder the prior season for LIFE photographer Dimitri Kessel and his attractive female assistant. When Vice President Richard Nixon's motorcade was attacked that week in Venezuela during anti-U.S. rioting, the Cog cover with Jitney hanging out the cab window was scrapped, and Nixon's limo fronted LIFE. It may be just one of the reason's Jit never supported Nixon in the future.

While Chumley's new car would keep cinders off riders, finding a cleaner fuel to create the steam for power continued to be a technological challenge. The original wood-burning engines had finally been converted to coal in 1910. Like the original wood fire, the smoke from a coal fire continued to burn through the flues producing heat in the boiler's tubes as it headed for the smoke stack.



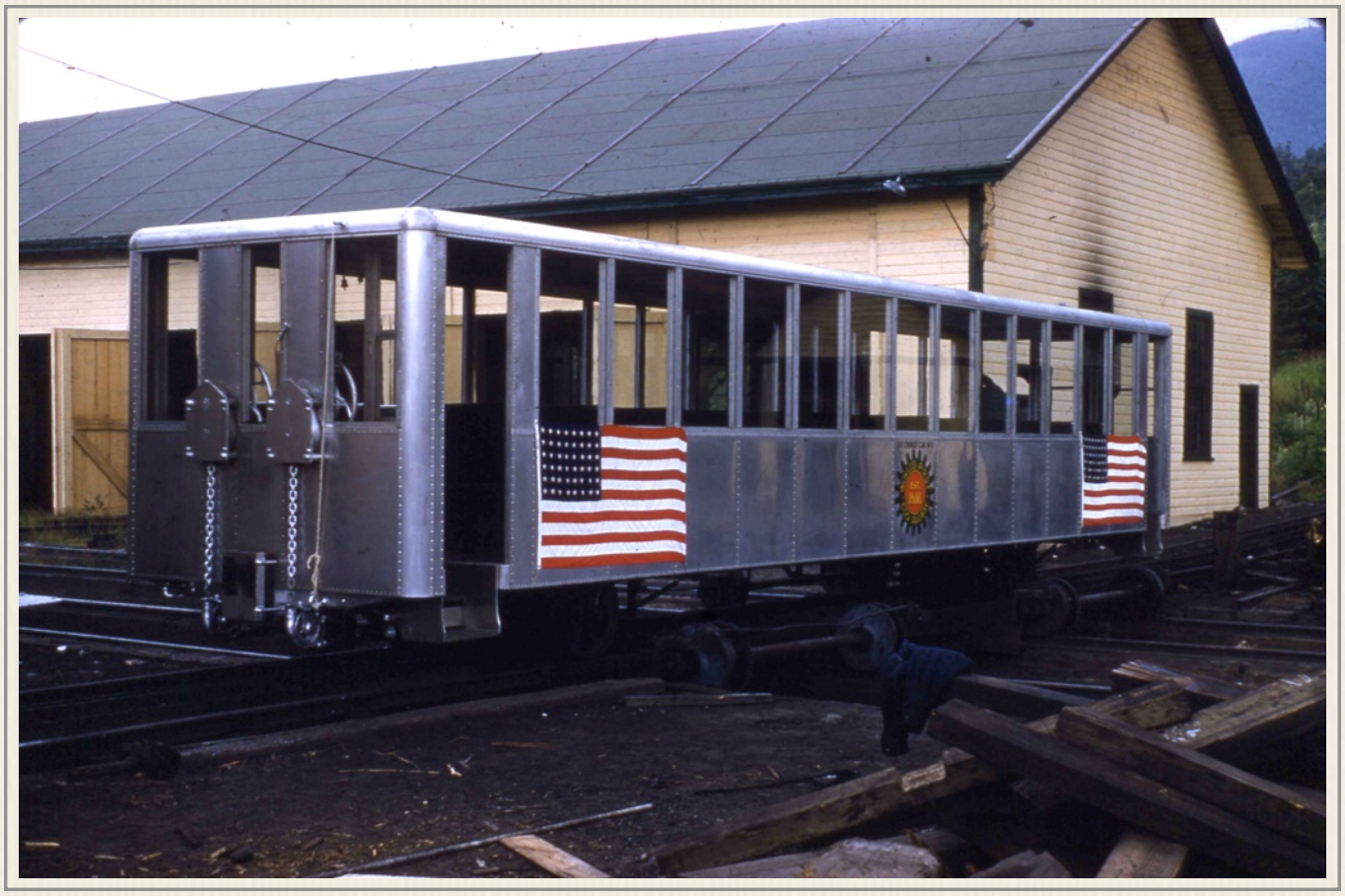








(L-R) Col Teague takes the new car out for a test drive over the Ammonoosuc River with wife, Ellen & friends, builder Ed Chumley and waiting above in the No. 1 - engineer Gordon Chase (1958)
- courtesy Mike Dickerman



The brand-new Chumley car on the transfer ready for its debut in 1958
- Lewis Family Collection

Other fuel types had been tried since 1910. The Boston & Maine Railroad Historical Society archives in Chelmsford, Massachusetts hold a set of plans for a Mount Washington Railway "oil burning loco with proposed tender" dated February 25, 1930. In 1939, Col. Henry Teague asked his mechanics to develop a heating oil device that could be installed in the small firebox of a Cog engine "the same way an oil-burner will fit into a coal furnace." During tests in 1940, according to a history paper written two years later by Dartmouth student Robert J. Varney '43, "the burning oil had a habit of leaking out of the firebox, and one day, it was noted with horror that every tie between Marshfield and Waumbek Tank had been set on fire by this flaming monster." That ribbon of fire put the whole idea on the back burner. A new tubing system was tried in 1942. Steam came up quickly, but could not be sustained as there was no continued combustion in the exhaust beyond the firebox, and the idea was scrapped.

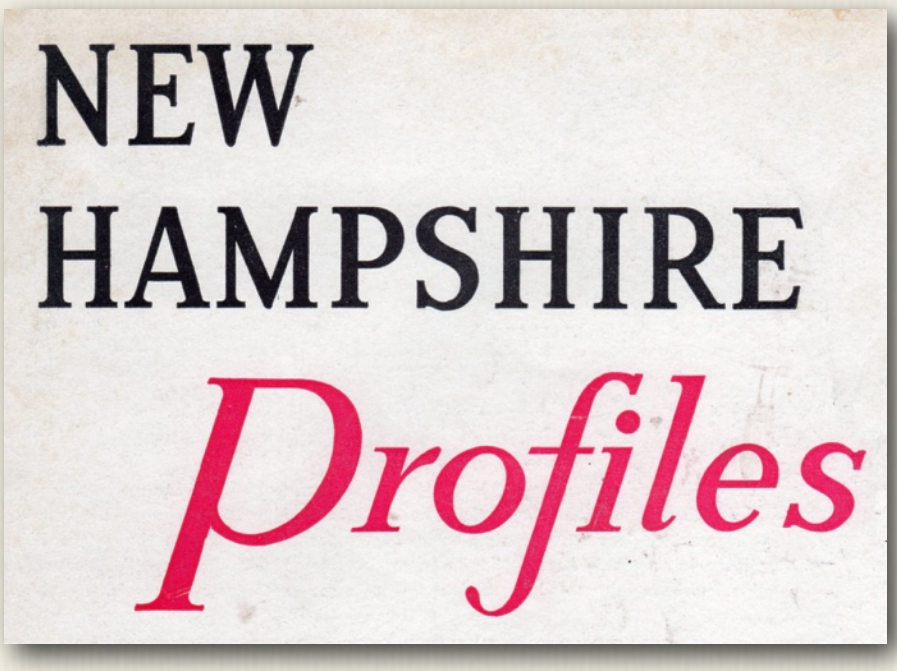


No. 3 Base Station's tender filled with water and a fuel tank ready for an oil-fired test run (1950s)
- Joe Geronimo Collection

In another experiment, LP gas tanks were placed in a metal box filled with water on the back of the tender. Steam was piped into the water in the box to keep the cylinders warm, so the liquid propane could change to gas without freezing up as the gas was piped to burners in the firebox. Again steam could be made quickly, but once the engine moved forward the powerful draft from the stack sucked the flames out.

In 1946, General Electric offered to build three diesel cog locomotives for $100-thousand dollars each. The offer was rejected as the debt load would be too heavy for a railroad that had such a short season, and there was concern the engines themselves would be too heavy for the track.

So in the 1950s, coal was it, and according to market research, it was a problem for many tourists. The publication of the Mt. Washington survey at the end of 1956 made it a public relations problem for Col. Teague. "The ride up the mountain by Cog Railway was very dirty," wrote one respondent. "Smoke from the engine blew in our face the entire time and we were filthy when we arrived."



Then in October 1957, *New Hampshire Profiles* - a semi-official tourist magazine ran a poll about the future of the Cog - to modernize or not? Two years before, the magazine had polled Granite Staters about whether or not the great stone face - the

Ch. 6 - Arthur S. Teague

Old Man of the Mountain should be illuminated. The answer to that 1955 poll was no.

The 1957 Cog poll results were released just before Thanksgiving. The November 24, 1957 *New York Time*s reported "Soot and Cinders Win Out" in the *Profiles* poll with plenty of pithy comments on both sides of the issue. "Isn't it bad enough to scrap all the steam locomotives on standard gauge (mainline) railways in the name of efficiency, must we destroy one of the last strongholds of the steam engine lovers in New England?" wrote Elizabeth Foley of Lowell, Massachusetts. "The true mountain lover is not concerned with comfort." Some in the middle asked "Why not have both?" There is no hard evidence that tactician/steam promoter Arthur Teague might have influenced either the *Profiles* decision to run the poll, or coaxed coverage from the Old Grey Lady, but the old political reporter the *Cog Clatter* publisher became is struck by the timing and the Thanksgiving 1957 results.



- Lewis Family Collection

In October 1958, the Governor's Mount Washington Study Committee recommended the state of New Hampshire purchase the summit, the Carriage Road and the Cog Railway. The Committee determined that from 1953 to 1957, the Cog Railway had generated $705,400 in income with expenses of $640,200. The Summit House had taken in more money than the railroad ($712,800) but had higher expenses ($704,900) - even so both were operating in the black.

The report also included details of Dartmouth College's offer to the state of New Hampshire for the property. The proposed sale price would be $275-thousand dollars, but the College would keep the 8.2-acres of land under the Yankee Broadcasting building *(above)* and the income from the long-term lease of up to 66 years that Henry Teague negotiated with broadcasters in 1944. The College would also hold onto the Observatory building *(next page)* the Old Colonel built in

1937 (along with its lease monies), and 10-thousand square feet of land northwest of the Tip Top House adjacent to the northeast side of the broadcast parcel.

Dartmouth may not have wanted to run a railroad or develop a mountaintop, but President John Sloan Dickey wanted to make sure the College received full value from its inheritance from Henry. "We just couldn't be in the position of making a gift of the top of the mountain to the state when we'd received it as the gift of an alumnus who very understandably felt this was all he had to give to his college, and he was going to give it to his college," recalled Dickey. "Colonel (Henry) Teague thought he had done something for the College. He'd given us this property to further the purposes of Dartmouth, and (Gov.) John King was not very anxious to pay the College a handsome price for it."



- courtesy Dartmouth College

Dartmouth College did exit the railroad business before it disposed of the summit. The railway, rolling stock, Base Station land, restaurant, gift shop, tourist court and maintenance buildings as well as the right-of-way up the mountain was sold to a family corporation headed by Col. Arthur Teague in late 1962. A long term lease of the Summit House was also part of the deal. Col. Teague told the *New York Times* the lease and other arrangements meant an over-all price of the deal could not be given, but "you may state that it was over $100,000." Arthur told Jitney in the 1962 Teague Christmas card, "I really put my neck in the yoke!" but said some investors had already stepped forward to offer money "provided the Cog was staying steam."

Eighteen months before the sale, Col. Teague told *Cincinnati Enquirer* reporter Dave Roberts that he would never convert the Cog to diesel or electric power. "Part of the attractiveness of our mountain railroad are the white steam puffs from the stacks of our oddly shaped locomotives," said Teague. "And I mean to keep it that way."

Teague had told *New Yorker* reporter at large, Phil Hamburger the same thing in 1959. "I'll never give up steam," said Teague. "Out west, on Pike's Peak, there's a cog railway that has diesels, but never on Mount Washington. No, sir! It wouldn't be the same without steam, even if there is some soot and noise. That's part of the charm and the thrill. We use a ton of coal for each trip to the top. It costs me seven dollars a ton at the mine, in West Virginia, and nine dollars a ton to ship it here."

Ch. 6 - Arthur S. Teague

According to Roberts' July 1961 article, $30-thousand dollars was spent each year repairing and rebuilding sections of the Cog's mainline and trestle. Steam heat was maintained at the Summit House throughout the summer into September. Roughly 150-thousand postcards and letters are cancelled at the Summit post office each year and some 40-thousand passengers ride the railway. The Roberts' article closes by alluding to sections of the recently published book, *The Story of Mount Washington* by F. Allen Burt saying "Men have fought, maneuvered and connived to push each other in and out of control of this unique railway project. Marsh, the man who started it all, eventually was shoved right out of the picture - and he was bitter about it."

In April 1964, after much maneuvering and negotiation the State of New Hampshire finally purchased 59.09 acres of the summit from Dartmouth College including the Summit House (and the Teague lease), Tip Top and the Observatory. The $150-thousand dollar deal does not include the Auto Road. Dartmouth would hold onto the final eight acres under the broadcast properties until 2008 when the broadcasters' long term lease expired. New Hampshire would pay $2.1-million dollars that year for the final piece to its Mt. Washington State Park.



Summit Park Plaque - N.H. Parks Director Russell Tobey kneels at left of marker - Col. Teague stands at right (1964)
- Koop Family Collection

CHAPTER 7

Cog Party

While an engine might find an August renewal of spirit in the Shop, the crew looked forward to a party - any party. Some of those parties, like Leo *"I'd sooner Lipton"* Boucher's Skyline Switch twilight barbecue (that wound up at Waumbek Tank) became legendary without ever being repeated. Others occurred late at night, off-campus attended by a self-selected few. The main event was a late summer gathering of the entire Cog Family at Marshfield - the train crews & Shop personnel, the Summit House workers, the Base staff, family & friends (perhaps a Hut boy or two!)

A guest list in Jitney's files indicates that one year, 47 Mt. Washington Railway Co. employees, 36 Marshfield Base employees and a half-dozen Summit people were on hand to share a meal, swap songs & stories, and celebrate their collective summer of work. Off-times that celebration included tokens of appreciation.

At the 1959 "Cog Party," Colonel Arthur S. Teague was given a watch by members of his crew. Jitney Lewis made the following presentation remarks:

"What crew is this I see before me? Are these the Coggers, waitresses, machinists, cook, engineer, cabin girl, fireman, mechanics, ticket vendor, brakeman, gift shop manager, gas boy, counter tender, bookkeeper, welder – as varied as the very rocks which strew this mountain side; each of these Coggers with an unforgettable story, saying, personality – is this "the land of Calijah," or is it not "she'll go! Put the baling wire to it."

The memories of the Cog burns deep as the cinders, which spew forth from the bonnet of the crouched panthers of steel. This Cog has breathed over the ninety years by the very lungs of its crew.

How many memories have come and gone is speculation, like how many bubbles in the Ammonoosuc River. What draws to this purveyor of loafers this kind of crew? Is it the spirit that kept the Aborigines at bay from this mountain of challenge? Who can tell all that has gone before? Who can guess of what's to come?

But tonight you are the Cog, a controllable mob. You are the "Uncle Paul" who can fix it. The Prince Bill – "lucky if the bloody thing fits."

"Good night Rouleau" - "Who needs a brakeman?" - Grumpy Club - song of the loud Bird - Mister Jesus - Jug-Jug - Swim at Waumbek - House Detective - Granger's Gold Mine.

Ch. 7 - Cog Party

"See-ch here, boy" - "No breakfast after eight" - "What colored film do you want?" - "We hit a bump up there, father" - "Who was the brakeman on that train?" - "You know what I mean, huh? Huh? You know what I mean" - "Got to be a teacher" - "Them boys in Whitefield jail."

What a motley gathering! What a conglomerate formation! Who could be in charge of such as these? Colonel Arthur S. Teague on behalf of your crew I present this token of caring and appreciation for how you WATCH out for us - all the TIME.

Cog Party presentations were meaningful. When the track crew gave their gruff foreman a gift, Larry Gooden's eyes grew misty and his heartfelt thank-you in mountain vernacular - "Ah, you sons-of-whores shouldn't have" touched all those in attendance. Some were more humorous in nature as the *Cog Clatter* reported in its July 27th, 1966 edition: "A well known plumbing duo around the Base for several years was the late Leo Boucher and Gordon Chase. Ones who remember Leo can't forget his laugh and witticisms. Along with their plumbing duties, Gordon and Leo carried on a good-natured verbal battle. To gain a strategic advantage in this vociferous warfare, Leo had a certificate presented to Gordon at the l959 Cog Party. The following is how the citation read:

Certificate of Proficiency

By this certificate let it be known that Gordon Chase has earned the T.T. rating from the Boucher School of Plumbing. This Toilet Technician's rating qualifies the bearer to repair and maintain flush toilets up to ten gallon storage tank capacity with head not exceeding 28 pounds per square inch.

Personal comments by the instructor: Mr. Chase has at all times shown a desire to become acquainted with the many faucets of the plumbing trade. Although he has done little sweating during the course and has had some difficulty with getting half tight in joints at his night classes; and has handed the dirty end of the wrench to his instructor from time to time, during his formal instruction he has spent half his time on flush toilets which far exceeds the number of hours for T.T. rating.

Mr. Chase has also been given seminars in the Boucher safety techniques --taping, mopping, bailing, swimming, skin diving and artificial resuscitation.

I hereby give Mr. Gordon Chase my water tight seal.

Leo Boucher, Professor of Plumbing
Base Station, Cog Railway



Parts?: In 1966, engineer Peter Poltrack *(right)* presented bookkeeper Bob Eastright *(center)* a chrome-plated piston valve. Eastright had no idea what it was, but graciously accepted the gift and the good-natured ribbing that came with it.



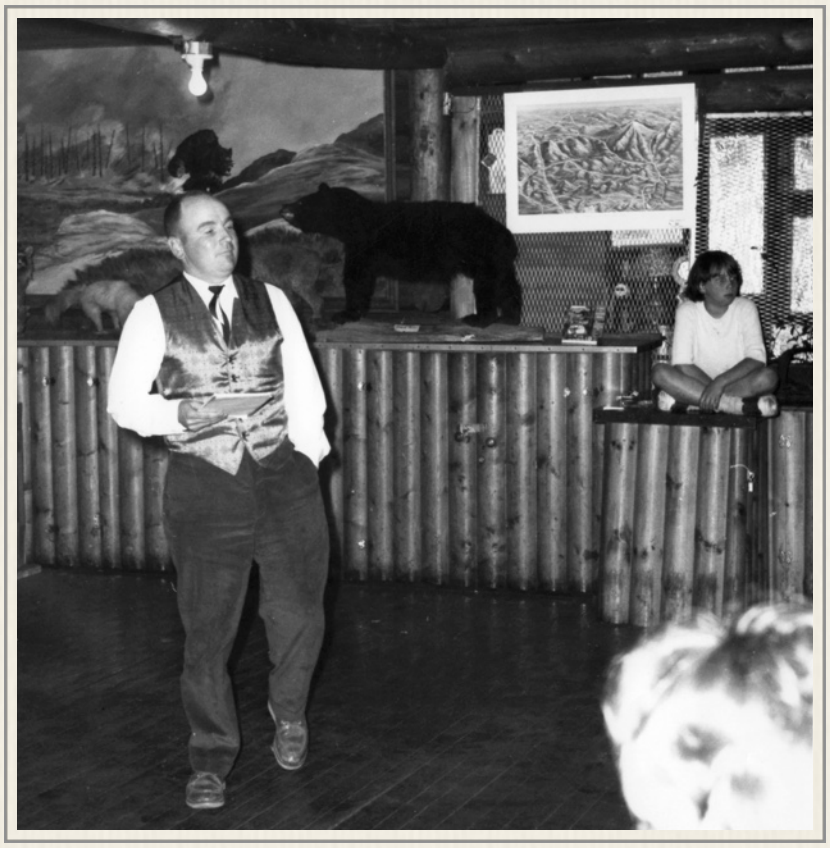
A Night Out: For Pete & Grace Rusinski *(left)* the 1966 Cog Party meant a night out of the kitchen - a chance to be catered to. For those who worked the trains, it was a chance to see what everyone looked like freshly scrubbed and semi-formal. *(Below from L to R: Norm "Jitney" Lewis, Shirley & Bob Kent, Peg & Hank Lahey, Dave Saunders, and Barbara "Mrs. Jitney" Lewis at the 1961 event)*



Ch. 7 - Cog Party



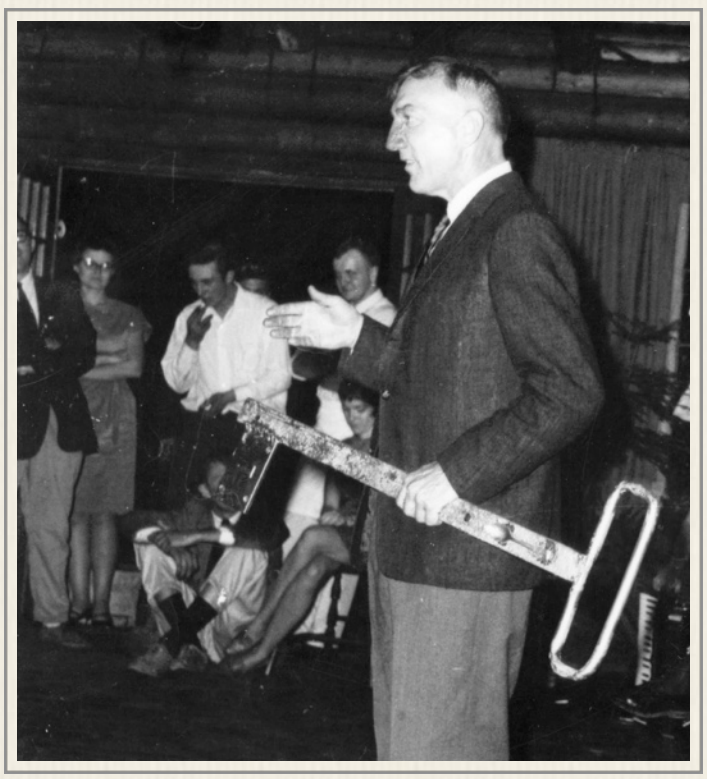
The Teague's: Col. Arthur and Ellen Teague *(center)* were the hosts for the evening. The Railway Company paid for the food, and the band, but no alcohol. Employees chipped in $2-dollars a piece to cover the libations. Cass White, cabin rental manager *(right)* hoists a paper cup, while Brad Knight, Jitney Junior's cousin visiting from Ohio *(left)* considers the spectacle of the 1964 Cog Party.



Entertain Yourselves: Master of Ceremonies Jitney begins the after dinner entertainment, as a stuffed bear & Lucy Teague look on from a counter seat in 1962.



And One for the Colonel: there was always a gift for the Col. The "Key to the Cog" was a hand-made token welded up and gilded with spray paint by Paul Philbrick for the 1963 soiree.



The Key to Mountain: The Colonel gives thanks for the key that included pieces and parts representing every segment of the operation - from a spoon from the Summit House to a gib plate from an engine.



In Harmony: A quintet of Cog wives (plus two kids on the way) do barbershop versions of *"I Feel a Song Coming On"* and *"Red Red Robin"* to entertain the 1962 Cog Party audience. *(left to right)* Shirley Kent, Gail Bird (with child), Peg Lahey, Mary Harris (with child) and Mrs. Jitney.



Mountain Dew Crew:
Tim & Cindy Lewis (now old enough to stay up late) serenade the 1965 Cog Party with a rendition of that *"Good ole Cogger Crew"* (sung to the tune of *"Mountain Dew"* they debuted two years earlier) with impromptu back-up from the Katahdin Mountaineers.

(**Verse 1**)
Frankie in the nine
Was doin' mighty fine
Till the flats before Lizzie's he came to.
He stopped with a jerk
His injector, it don't work
'Cause the tender is full of Mt. Dew.

Chorus:
Oh, they call us that "good old Cogger Crew"
And them that can stand us are few.
But they keep the trains a-goin' for
they're all a-knowin'
That they've got a bonus comin' due!

(**Verse 2**)
Two rails laid un-thrown
The reason was unknown
As Gordy came howling down the line
The clatter of the gears
Shot the eagle full 'a fears
And set the schedule off an hour behind
Chorus

(**Verse 3**)
Donny in the three
Was fast off the tee,
Trying to push Harris up the grade.
Harris looked mean
He gained 20 lbs. of steam
From then on the three began to fade.
Chorus

(**Verse 4**)
Gordy in the one
Was havin' some fun
Trying to break the record of the hill.
The brakes they were free
He was havin' a spree,
And came down in thirty-three!
Chorus

(**Verse 5**)
Bobby in the deuce
Was really cuttin' loose
When he finally got Jordan off the seat.
He wound up the brake –
But it was too late, Fanny was ridin' number eight!
Chorus

(**Verse 6**)
Jitney in the six
Was really in a fix
When the grade at Lizzie's he came to.
He stopped for some steam
Yelled. "It must be a dream!
The first time in fifteen years!"

Final Chorus
Oh, they call us that "good old Cogger Crew"
And them that can stand us are few.
But they keep the trains a-goin' for
they're all a-knowin'
That they've got a bonus comin' due!



The Cog Whiffenpoof Song

From the tables down at Dubey's
To the place where Stubby dwells,
To the dear old Fabyan House we loved so well.
Sing the engineers assembled with their bottles raised on high
And the magic of their drinking casts its smell.
Oh, the magic of their drinking - of the beer we loved so well,
Miller High Life, Ballentine and all the rest.
We will serenade our Colonel while coal and steam shall last,
Then we'll *Peppersass* and be forgotten like the rest.
We are scared little brakemen who have pulled away –
Bump, bump, bump!
We are poor "black" fireman who have lost their fire –
Ssst, Ssst, Ssst!
Engineers, Firemen off on a spree, strewn from here to St. Johnsbury.
Arthur have mercy on such as we –
Bump, Ssst, Baah!

Ch. 7 - Cog Party - Parodies

Whiffenpoof Notes

The Whiffenpoof song parody became a staple of August Cog parties and was sung for so many years that it became necessary to change some of the characters named in it as the crew roster turned over and characters faded from the collective memory.

So in the 1960's, "the tables down at Dubie's" (a reference to Emile Dubey, manager of a drinking establishment in Twin Mountain frequented by Coggers) became "the tables down at Hattie's" to honor the matriarch of the Evans family that lived in a railroad section house and took care of the track men who worked on the line running through Crawford Notch. Their story is outlined in Virginia C. Downs' 1983 book, *Life by the tracks: when passenger trains steamed through the notch.*



These tourists are most comfortable on railroad timber close to the tracks as this is the Evans family visiting the Cog in the late 1920s. Clockwise: Enola Evans, Forest?, Aunt Nora, Hattie Evans & Mildred Evans. Nora & Hattie seen at right.
- photo from the Raymond W. Evans collection c/o Robert J. Girouard.



The line "to the place where Stubby dwells" (a reference to Stubby Welch, long-time Boarding House cook and inventor of the onion sandwich) became "to the place where Peter dwells" to recognize the culinary skills of Peter Rusinski, who started preparing all of the Cog crew meals after Welch's departure. In 2018, Jitney Jr. asked the Yale Whiffenpoofs to record the Cog parody version of their theme song so he could use it in his Jitney Years presentations. They did and it now provides a fitting soundtrack to a final video in the talk.

King of the Cog/Road

(**Verse 1**)

Cabins for sale or rent
Bulldozer seats – fifty cents
No sheet, No blanket, No bed,
Cass White rents space instead.
He'll have a record year
Toilet seats – one to two rears,
He's a man ahead, it seems,
King of the Cog!

(**Verse 2**)

The grill is charred and bleak
Where is Grace? Go call Pete!
No breakfast, No dinner, No lunch,
The crew is a miserable bunch.
Stomachs empty – Growing pain
Unbearable gas – Stops the train!
Grace and Pete, we must repeat,
Kings of the Cog!

(**Verse 3**)

Gift shop is neat and swept.
All marked up 500 percent.
No cuff, No slip, No swap,
Mike Haney's golden spot.
He rings sales – twice at once:
Half the price you earn a month,
But it's a paying job, swindling the mob,
King of the Cog!

(**Verse 4**)

Engine is twisted and bent,
Boiler leaking – there she went!
No stays, No rivets, No flues.
Paul and Ray are coming with tools,
Too late to run or jump
Go get Harold, Put him up front—
Weld and peen and bolt and screw,
Kings of the Cog!

(**Verse 5**)

Cog summer nearly spent.
Sorry it's over – some lament!
No cinders, No grease, No smoke.
Christmas time recall the jokes,
We're New Hampshire's favorite crew
Colonel Teague's a Vermonter too!
He's the King of the Cog!



- Koop Family Collection

Ch. 7 - Cog Party - Poetry

A Yarn of a Cogger

Come to the land of Calijah
To *Peppersass* by the Trail.
Come and hear a yarn of a Cogger,
The bender and toter of rail.

Now Roger, the lodger, was as handsome
As shaker bars and clinkers are gold.
And the girls, who, judged by the story,
Can believe what Calijah told.

When taking a drink from the bottle,
Or driving a "geetar" at bars.
He'd boast of his past reputation,
A "Merchie" surrounding the Spars.

There was his try as a braker,
To qualify one trip a must,
Because surely a man like Calijah
Could not be lesser than tough.

Off the summit they came pounding
The Engine, the car and all.
"Wind up the brakes," said the instructor
And Calijah started carrying the ball.

He wrapped the brakes like a savage,
The iron and wood felt the strain.
Forward motion ceased at an instant –
The engine made up all of the train!

The Instructor then took over
When the engine came back for the car –
And Calijah just stood there a-yodeling,
"I'm handsome! I'm handsome! Hurrah!"

After a turn as a "brakie,"
Firing echoed hot in his mind.
So Calijah started shoveling on the switch
Just urging to try on the line.

Short-handed one day, the Colonel finally
Gave eager, shoveling Calijah the Call,
And Calijah responded magnificently
Filling firebox, flues, front end, pantcuffs and all!

So *on turn* the valves on the Mountain,
The spikes are driven firm
And the Spirit of old Calijah
Is like a cinder that continues to burn!



REMINISCENCES

(1966 Cog Party Poem)

Oh, 'tis laughter here tonight
Beneath the mountain side.
'Tis a milestone here tonight
And hearts are opened wide.

To show the thought we're hiding
The comradeship untold
For the "old Cog" acquaintances
Be their service, new or old.

And prayer tonight I offer
To the Maker of this hill,
To keep her steep and crumbled side,
Her bubbling water crystal clean,
Her cinder trail and her bosomed carpet green.

And let us linger, linger tonight
To foretell what's to be.
For there will always be a ***Cog Crew,***
A Colonel Teague and we.



CHAPTER 8

A Tribute to Mike Boyce



Engineer Mike Boyce poses with Col. Henry Teague for Life Magazine series (July 1946)
- Photo by Roy Stevens/The LIFE Images Collection/Getty Images

In his first Cog season (1950), Jitney of Lunenburg, Vermont was assigned to fire for Michael P. "Red" Boyce of Keene, New Hampshire, an engineer with over 30 years experience on Mt. Washington. Mike had also worked on the main line with the Grand Trunk and B&M railroads.

The young college kid kept quiet and listened to the 70-year old engineer. He learned that Mike had fired and ran trains when clean wood was replaced by dusty, soft coal at the mountain in 1910; had witnessed the Boston & Maine Railroad proceed to sell the unprofitable Cog Rail-

way to Col. Henry Teague in 1931; saw the feeder rail line from Fabyan to the Base abandoned as bus and autos brought tourists to Marshfield Station when the "Old Colonel" took charge.

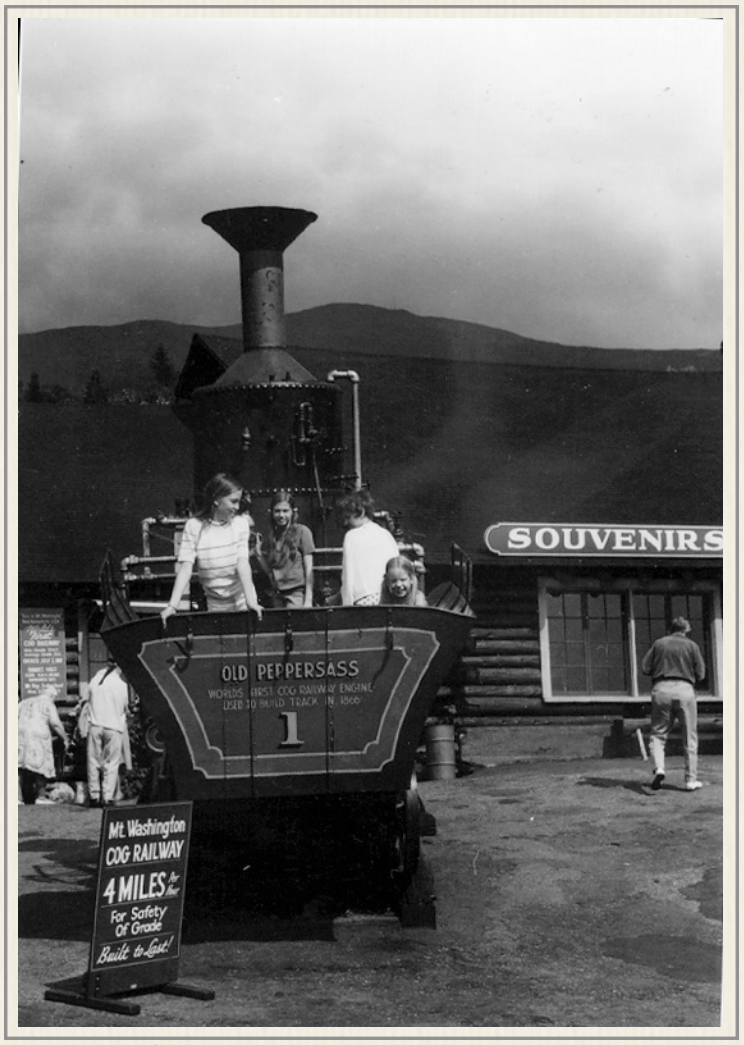


'Red' Mike Boyce (right) next to one of the Cog Railway's engines
- Catherine, Mary, and 'Mike' Boyce collection

Boyce had observed souvenir hunters being kept away from the wreckage of *Peppersass* after her last run, July 20, 1929; had helped bring the remains of *Old Peppersass* down the mountain from Burt's Ravine to be shipped to repair shops in Concord, New Hampshire; and in 1933, he watched while *Old Peppersass* was returned to the Base and put on display in its own house.

Mike Boyce was involved with the repair of Jacob's Ladder after the 1938 Hurricane; and took a scary slide with his fireman, Neal Hathaway of Troy, New York from the top of Jacob's Ladder to the Halfway House when cogs broke on the engine on July 13, 1949.

The engine destroyed hundreds of ties along the same section of track the runaway *Peppersass* had traveled twenty years before, but the No. 6 *Great Gulf* did not leave the tracks. Brakeman Joseph Burke of Syracuse, New York safely stopped



Old Peppersass on display at Base (late 1950s)
- Kent Family Collection

Ch. 8 - Mike Boyce Tribute



Crew ready to bring the No. 6 down the mountain from area near the Halfway House "minus the tender and rear shaft" with extra ties and cribbing indicates this was after "Mike's ride" in July 1949. The Cog would resume service to the Summit just 8 days after the runaway occurred.
- John Thompson - Mt. Washington Cog Railway: We Were There FB page

the coach with its 40 passengers aboard at the top of the track's steepest grade as Mike's track grinding slide began. Jitney says that on every descent after that, Mike always took the slack out of the hand brake at the top of Jacob's Ladder and kept his hand on the brake wheel all the way to the Halfway House - the section of track that was torn up that day when Mike took what he termed "was a terrible ride."

Jitney says, "Firing for Mike was a lucky assignment, that provided an historical perspective and a learning opportunity" that he coupled with knowledge handed on by "young" Pliney, and "old" Pliney Granger.

Mike showed Jitney how to…

• Care for a fire; including banking

• Shim crossheads, keys & gibs and replace packing

• Fill a hot lubricator & keep it clean internally with Ivory soap slivers



Fireman Jitney takes a breather at the Summit (Summer 1950)
- Lewis Family Collection



Engineer Mike Boyce and fireman Jitney with the No. 6 on Base siding (1950)
- Lewis Family Collection

• Start a hot injector

• Block off cylinders and bring an engine down

• Clean fires

• Set water and cylinder cocks on slippery engines

• Put a car back on the iron with blocking

• Use wood for keys

• Lubricate - tighten & check engines

• Distinguish sounds while running which meant trouble on the line

• Dump a fire

• Turn off a broken water glass

• Determine if the track needed blocking and/or repair

Mike told Jitney about…

• Taking rides on a flat car after work, rolling down the feeder-line to Fabyan, "Jeez,with some fool on the brakes, it was a scary ride - had to walk back."

• Letting passengers ride down from the Summit in a clean tender "when we burned wood - got good tips - coal ruined that."



• Ideas to improve the railroad or the engine that failed

• How a burnt piston rod shows the engine was run with the lubricator not working

• How steam out of the stack on the way down shows the engine had been run with low water and the flues were burned

• How white or gray smoke indicated a poor fire, etc., etc.

Due to Mike's evaluation, Pliney Granger recommended that the Colonel (Arthur) permit Jitney *(right)* to qualify as an

engineer by the end of his first summer of 1950. His qualifying solo run was an early morning oil train, then he fired four trips for Mike. In 1951, when Jitney was assigned his own engine a woman asked "if this boy (Jitney) was going to take us up the Mountain?" An older, more mature looking fireman (Ray Summers) was then assigned to Jitney's engine.

Mike Boyce was not the only member of his Irish family to work at the Mount Washington Cog Railway. Mike did not talk about his family with Jitney, but a 2015 search of *Ancestry.com* revealed he was one of 13 children (11 sons / 2 daughters) born to Michael and Mary (Sullivan) Boyce in St-Sylvestre, Quebec, Canada.

There were two sets of twin boys in the family. Mike and his brother, Edward were the second set born in 1880. Mike was eight years old when his 22-year old brother, John Boyce died while working at the Cog Railway on September 10, 1888. His death record indicates John "was crushed by cars."

An online timeline for Mike created by his third cousin, Tom Boyce of Colchester, Vermont also links to a genealogy website authored by Dr. Michael Laughrea of Montreal called "*An Irish Family in the New World: Genealogy and History of the Loughrey Family of Canada."* Mike's first cousin was Professor Laughrea's grandfather John, and thus engineer Mike Boyce's family connection to the many Camden's who worked at the Cog.

On page 63 of *An Irish Family in the New World*, Laughrea notes "Four Boyce and five Camden family members worked at the Cog Railroad of Mount Washington between 1869 and 1952, including 2 sons, 2 grandsons and one son-in-law of Bridget Loughrey, 4 cousins of my grandfather JOHN Laughrea (1860 - 1946), and one husband of his cousin Annie Boyce."

Combining details from *An Irish Family* and other research, here is a chronological look at the Camden-Boyce legacy at the Mount Washington Railway that begins in its first year of operation and concludes in 1952 with Jitney's mentor, Michael P. "Red" Boyce.

- **John Camden**
  (19 May 1827 S. Agathe - 11 August 1913 S. Agathe)

John, the father of Patrick, was Cog road master from 1874 to 1892. A July 4, 1926 *Boston Daily Globe* article says John Camden originally came to Mount Washington with his son, Patrick to work on building the second Summit House in the 1870s. Author Frank Burt (of the *Among the Clouds'* Burts) wrote "Uncle John was of French and Irish parentage, with the strong and kindly characteristics of both races intermingled in his nature." The August 1, 1877 edition of *ATC* notes "The old Tip-Top House is undergoing slight repairs, under the supervision of 'Uncle John'" and later that month when President Rutherford B. Hayes visited the summit via the



Roadmaster "Uncle" John Camden
- Boyce Family Collection

Mount Washington Railway, the paper wrote "...at 5:30 the (Presidential) party, after looking at 'Uncle John' and another workman slide down the track on a board, left for Fabyan House, where they were to spend the night."

Census taker Thomas Carleton found the 52-year old widower living at the Base "dwelling house" on September 29, 1879. The dwelling house was run by Charles and Mary Charlton. The 45-year old Charles cooked for the crew, while 38-year old Mary worked as housekeeper and mother to their 14-year old daughter, Accie and 12-year old son, Charles.

Fifteen other railway workers were at the dwelling that September day besides Uncle John, including a 38-year old Thomas Camden, and John's two sons; 29-year old Patrick and 19-year old John Camden Jr.

- **John Camden, Junior**
  (~1861 S. Gilles / baptized 1888 S. Agathe - 29 Jun 1914 buried in S. Patrice)

At age 38 during the 1900 Census John Camden, Jr. is again reported working at the Base. This son of Cog road master "Uncle John" would die of a heart attack at the Base Station on June 29, 1914 at the age of 54, suggesting that he worked 34 summers for the Cog Railroad. After his death, Dr. Laughrea says it makes sense that the body of John Camden, Jr. was speedily dispatched by train to S. Patrice, Quebec to be buried there, according to official records.



Roadmaster Patrick Camden
- Boyce Family Collection

- **Patrick Camden**
  (7 March 1850 S. Patrice – 31 December 1922 S. Patrice)

Patrick, son-in-law of Bridget Loughrey, worked at the Mountain every summer from 1871 to 1922. He married Bridget's daughter Ann (Annie) Boyce-Camden (15 Mar 1843 - 31 Oct 1930) on November 5, 1872. Annie Boyce and Patrick Camden had 4 children between 1873 and 1885, 26 grandchildren, 80 great-grandchildren, 160 (g.)2-grandchildren and 187 (g.)3-grandchildren.

Patrick succeeded his father "Uncle" John Camden as road master of the railway and served in that position from 1892 to 1922.

On June 19 and 20, 1900, census taker Zeb Howe notes the now 49-year old Patrick J. Camden is one of fourteen English-speaking railway workers at the Boarding House run by 29-year old New Hampshire native Edward Sheehe. Sheehe is also an engineer on the railway. His 39-year old wife, Margaret is the housekeeper. This is at least the second marriage for the mother of six, who was related to the Boyce clan. Margaret's sons, 21-year old John J. Seymour and 19-year old Joseph A. Seymour are also liv-

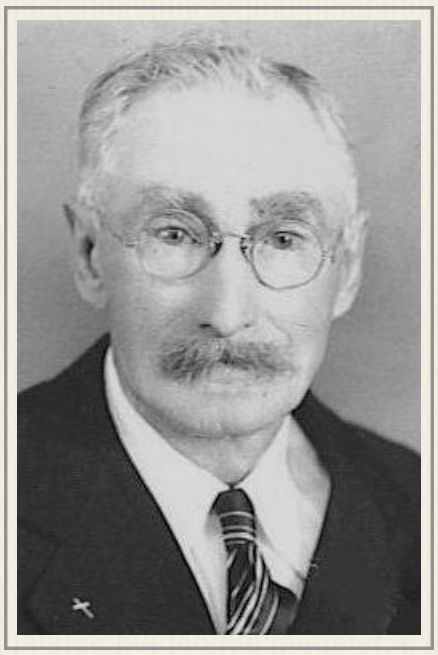


Annie Boyce Camden
- Boyce Family Collection

ing at the Boarding House. Joseph is a fireman. John is a day laborer.

There are five Camden's on the 1900 Census report for Thompson & Meserve Purchase, New Hampshire (the unincorporated town the Base is located in); Patrick, his 39-year old brother John, a 23-year old John Camden, Jr., a 31-year old Phillip Camden, and 19-year old fireman Patrick Camden, Jr.

In 1919, a cottage haven for exhausted skiers and mountain climbers, was erected by Patrick at the summit of Mount Washington. Every fall, Patrick Camden would equip it with firewood, matches, provisions and blankets, to save the life of climbers caught by the sudden storms at the summit. After Patrick died in 1922, a bronze tablet honoring him was placed on the building, thereafter named Camden cottage. As a memorial to Patrick Camden, railroad officials maintain it and each fall carry on the Camden practice of equipping it with life saving essentials. The *B&M Employees* magazine noted "Camden cottage" is a well-known landmark, near the summit terminus of the Cog Railroad.



John Camden
- Boyce Family Collection

• John Camden
(1873 S. Séverin —1962 S. Patrice)

The son of Patrick and grandson of Bridget Loughrey, was apparently a laborer at the Cog Railway in 1900. Both John Camden Jr. (b.1861) and John Camden (b.1873) were listed as "single" in that 1900 New Hampshire census, though they both had married in Quebec in 1881 and 1896 respectively. *An Irish Family in the New World* suggests the census status of single "probably meant that (the two men) lived alone rather than as a family during their seasonal work in New Hampshire. There are often loose understanding of the questions and loose answers in censuses, which is why they sometimes contradict each other from one to the next. John Camden was 26 at the time of census, which is not that different from 23."

• Patrick P. Camden Jr.
(3 July 1880 S. Patrice - 18 October 1951 Dorchester, MA)

The son of Patrick Camden and grandson of Bridget Loughrey, arrived in the United States in 1898. After firing in the summer of 1900, he was an engineer at the Cog Railway for several years, but moved south and became a well-known Nash automobile dealer in the Boston area. He married 22-year old Annie J. Lynch from S. Sylvestre, Quebec on February 28, 1908 in Brookline, Massachusetts. She had arrived in the United States in 1903.



Patrick Peter Camden, Jr. (circa 1900)
- Boyce Family Collection

• Patrick A. Boyce
(30 November 1849 S. Elzéar de Beauce - 1 March 1942 Everett, WA)

The son of Bridget Loughrey and cousin of John Laughrea, worked at Mount Washington from 1869 to 1881 and became an adventurer who struck virtual gold in British Columbia.

Patrick is the first Boyce to be recorded as living at the Base. He is one of the fifteen railway workers listed on the 1880 Census report. He is described as being a single, 24-year old railroad trackman born in Canada. The author of *An Irish Family in the New World* found a biography of the self-taught Patrick Boyce contained within a 1926 *History of Snohomish County, Washington*.

"Patrick A Boyce, one of the substantial farmers of Snohomish county (Washington), has had a wide and varied experience in various parts of the country and has done his fair share in the development of this locality. (T)he son of Owen and Bridget (Loghry) Boyce... is of Irish, English, and Scottish descent and has exemplified in his own makeup the sterling qualities of these nations.

"He remained at home until about 17 years of age, when he went to Maine (~1866) and spent a year in the woods. Then, after a short stay at home, he went to Bethlehem, N.H., where he spent two years in the woods (~1867-1869). He next worked on the Mount Washington Cog Railroad, being employed about a year as a section hand, and afterwards for eight years in the machine shop at the base of the mountain (~1869-1878). The railroad was in operation only during the summer months, so he spent his winters at Bethlehem, N.H. where he was employed as a millwright. Eventually, he became master mechanic on the Mount Washington Railroad, retaining that position two years (~1882-1883), and then for two years he had charge of the mechanical equipment of an extensive private establishment in Florida (~1881-1883?).

"Patrick A Boyce followed mining for twenty years, having worked in the woods until 1897, when he went to Dawson, Yukon, where he established himself in business as a machinist. In 1901 he returned to the States and bought mining machinery, which he took to Yukon and cleaned up a good claim, which he later sold. From 1904 until World War I he was mining for gold in British Columbia, and during his work there learned of a molybrite claim, which he investigated and developed. He had demonstrated its value and had closed a deal through which he was to receive one hundred thousand dollars ($100,000) for it. At that time, however, the United States entered the War and Canada shut off the export of molybrite, and the deal, which was with New York parties, fell through. Mr Boyce did no mining during the war and thus lost his claim to the property, not understanding that it was necessary for him to maintain its active operation.

"In 1922 he returned to his place in Snohomish, Wash. to which he has since devoted his attention. He now has about 100 acres of his land cleared, the remaining being good pasture, but rents the place. He is a man of splendid personal qualities, genial and friendly, and throughout this community he is held in the highest measure of regard."

The other Boyce on the 1880 US Census list taken at the Mount Washington Base Station is 22-year old John Owen Boyce, another single railroad trackman from Canada. The author of *An*

Ch. 8 - Mike Boyce Tribute

Irish Family thinks he may also be a relative - specifically of Ann (Annie) Boyce-Camden (1843 S. Elzéar, Beauce - 1930 S. Patrice, Lotbinière). Michael Laughry writes, "Annie's brother John Owen Boyce (1851 S. Elzéar —1926 Websterville, VT) was 27 at the time. Given widespread age approximations in censuses, he may be trackman John Owen Boyce." Patrick A. Boyce's brother, Peter E. shows up as a Cog employee in an 1883 *Among the Clouds* article.



John Owen Boyce (1906)
- Boyce Family Collection



James Boyce (circa 1900)
- Boyce Family Collection

• James Boyce
(1853 S. Elzéar - 1935 Websterville, VT)

The son of Bridget, cousin of JOHN Laughrea and brother-in-law of Patrick Camden, James worked there probably after 1910. A 42-year old James Boyce appears on the 1900 Census as a Canadian born (Sept 1859) brakeman living in late June at the Boarding House run by the Sheehe's. Adopting *An Irish Family's* rationale of ages recorded in censuses of the time not being precise, this could be the same James.

• John Boyce
(26 Apr 1863 S. Elzéar - 10 Sept 1888 Zeeland, Coös, N.H. buried in St. Sylvestre)

Mike Boyce's brother, the son of Michael Boyce (1835 - 1918) and Mary Sullivan (1839 - 1925), cousin of John Laughrea via Mary Sullivan and grand nephew of Bridget Loughrey, worked at Mount Washington at least in 1888. He was accidentally killed while working on the Cog Railway, although his death does not seem to appear in the annual reports of the New Hampshire Railroad Commissioners who kept track of and investigated railway fatalities.



Jitney's mentor, Mike Boyce's name shows up on the census as one of four men at the Boarding House on May 12, 1910. Mike is 27-years old when census taker Richard J. Smith stops by.

• Michael Peter Boyce (1880-1952), son of Michael Boyce (1835 - 1918) and Mary Sullivan (1839 - 1925), cousin of JOHN Laughrea via Mary Sullivan and grand nephew of Bridget Loughrey

Mike Boyce *(right)* and his twin brother, Edward were born on July 31, 1880 in St. Sylvestre-de-Lotbiniere, Quebec, Canada, and grew up in that community. He told the 1910 Census taker that he came to the United States in 1899, but he was recorded as still living in St. Sylvestre in 1901 at the age of 21.

Mike was a fireman at the Cog in May 1910, but likely began working there a bit earlier *(Research for this book suggests he started as a trackman in 1903*). He starts running engines in the summer of 1913, and works on the mainline during the winters.

Mike registers for the World War I draft on September 11, 1918. The 38-year old trainman is living in Island Pond, Vermont - a village within the town of Brighton where the Grand Trunk Railway of Canada has established international connections between Montreal and Portland, Maine.



Mary Boyce

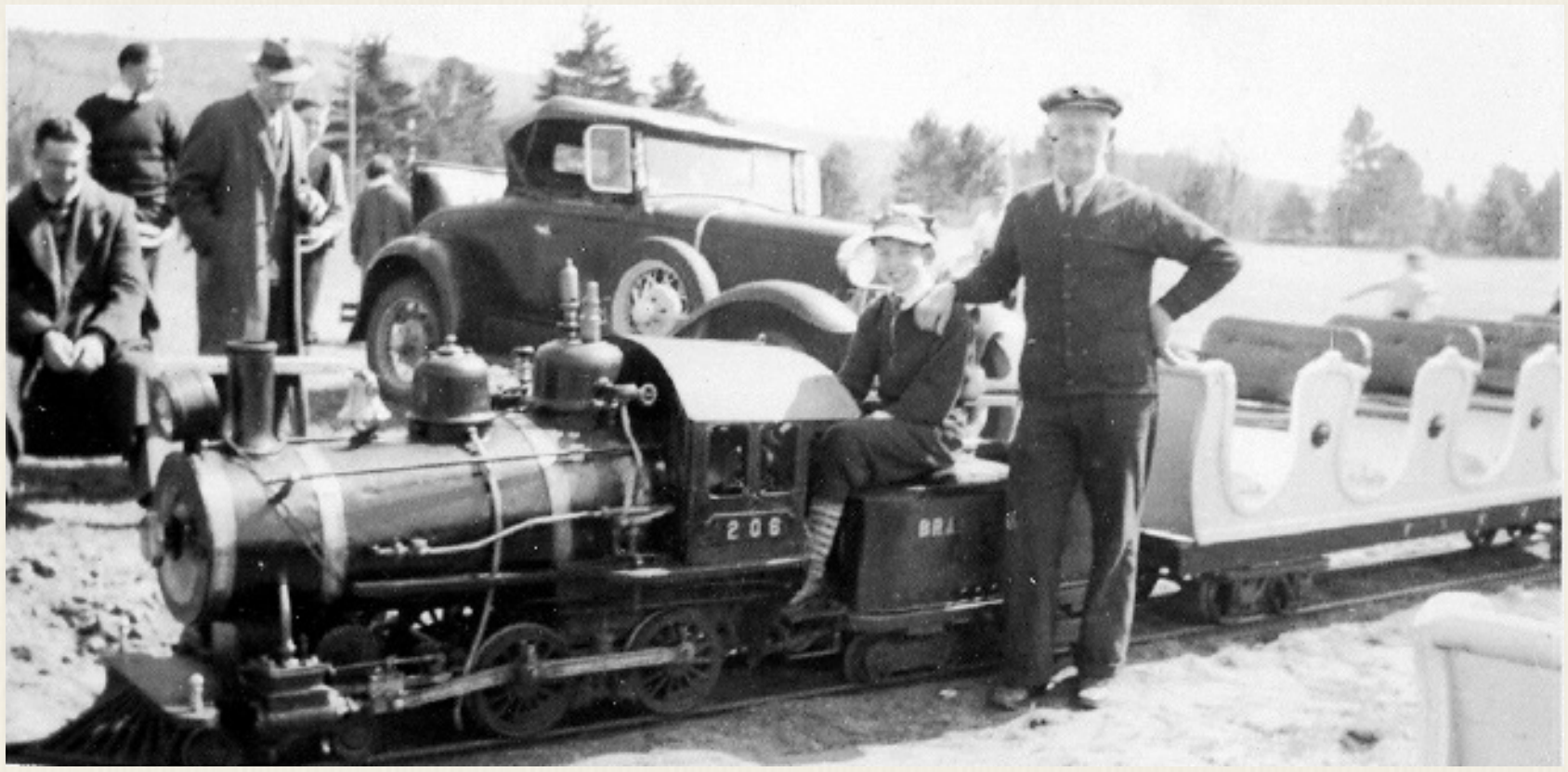
Mike was forty years old when he married 22-year old Ida Mary Gibbons on January 19, 1921 in Cambridge, Massachusetts. The Cog engineer met his bride when she was working at the Summit House on the top of Mount Washington. Their first child, Catherine Gibbons Boyce was born in Whitefield, New Hampshire just before Thanksgiving ten months after the pair tied the knot.

Daughter Mary Frances *(right)* was born on July 15, 1923 in Island Pond. Mike became a naturalized U.S. citizen in April of 1925. He was working for



Mike Boyce (far left) with his son, Clarence Michael standing in this Cog portrait. Engineer Floyd Williams may be to Mike's left, and the Cog kid in center may be Joseph Fillion with his dad, Allen to his left (~1930)
- John Thompson - Mt. Washington Cog Railway: We Were There FB page

the Grand Trunk out of Island Pond, and Ida was pregnant with their third child. Clarence Michael Boyce would be born June 4, 1925. The three would become Cog kids when Ida and Mike took up residence in the cabin the Jitneys would eventually live in. Clarence is pictured *(prior page)* in proper trainman's wardrobe next to his proud Pop (left in light colored coveralls.) A few years later, Clarence is the engineer *(below)* of another type of a steam excursion train that pulls instead of pushes.



'Red' Mike Boyce & son, Clarence Michael, sitting behind engine (1935)
- Catherine, Mary, and 'Mike' Boyce collection)

The Boyce family moved to Keene, New Hampshire when Mike started working as a machinist for the Boston & Maine Railroad - the parent company of the Mount Washington Railway. The family was there in June 1930 when a second son, Harold Edmond Boyce was born and died the same day.



Scenic Theater, Keene, N.H.

After high school, Clarence and Catherine would eventually call Keene home. Clarence was a projectionist at Keene's Scenic Theater in the early 1950s. Catherine worked for the phone company.

Keene was also the home of another Cog Railway engineer who worked for the Boston and Maine named Boyce. The *B&M Employees* magazine of October 1949 notes that "Wayland D. Boyce, former engineer on the Mt. Washington Cog railroad celebrated his 80th birthday anniversary in Keene and received many congratulatory messages." At this point it is unclear whether Mike and Wayland Duette Boyce, the son of Philander Boyce are related. However, they both knew how to run a train up the mountain.

Ch. 8 - Mike Boyce Tribute



- Boyce Family Collection

Mike Boyce's family photo album contains many of the standard scenes captured by Cog families with access to camera equipment. 16-year old Catherine Gibbons Boyce on the front platform of a passenger car *(left)* at the Summit in 1937. Catherine *(below)* in front of the family's new Pontiac in 1949. The vehicle is parked in front of the cottage they used each summer. 1938 was the year the Keene City Directory reported that 39-year old Ida was working for the Club Exchange in the city.



- Boyce Family Collection

Jitney never met Catherine, Mary or Clarence. Mike would generally arrive a few weeks ahead of Ida. Jitney remembers taking Mike shopping once. The senior engineer was always looking for a bargain and first did a price check on pork chops, then beer, then he went to another store in search of a better deal.

Jitney also helped Mike with refrigeration in at least two instances. The Boyce's cabin refrigerator required large blocks of ice be dropped into the top so cool air would descend onto items (like pork chops) put into the ice box. It was important the blocks be large, and not chipped, so they would last longer. Once, Mike and Jit had two belts around a big block of ice, and were lowering it into the top when the belts slipped - the block dropped and crashed straight through the shelves below. The second chilling incident involved beer which Mike liked, but Ida frowned upon. George Trask secured an inexpensive case of some "hard-to-sell" brew for Mike from 54-year old

Ch. 8 - Mike Boyce Tribute



Catherine Boyce atop the loading platform rail with Old Peppersass in the background. The former Kro-Flite/Marshfield Station house and mini-ticket office from the 1920s can be seen on the hill as buildings would often be moved rather than torn down
- Catherine, Mary, and 'Mike' Boyce collection



Summer friends pose at Base Station parking lot - Keene High School classmates Shirley Boucher (L) and Catherine Gibbons Boyce, along with Cog kid Laurette Fillion (R) daughter of Engineer Allen Fillion from St. Johnsbury (Jul 1942)
- Catherine, Mary, and 'Mike' Boyce collection



Catherine Gibbons Boyce in the engineer's seat (her father, 'Red' Mike Boyce was the engineer) of the Great Gulf. The picture was taken atop Mt Washington with the Summit House reflecting in the cab window.
- Catherine, Mary, and 'Mike' Boyce Collection

Emile Dubey, who managed a bar in Twin Mountain along with his 49-year old wife, Louise. George and Jitney chilled the bottles in their Boarding House toilet tank for the senior engineer, and Mike would walk up the hill from his cabin to have a beer.



Ida Gibbons Boyce

Mrs. Boyce *(right)* apparently never found out about Jit helping Mike with the beer. She was just happy that this young man was interested in learning from Mike, respected him and treated her husband well.

Mike showed his appreciation, too and stunned the Cog crew when the notoriously thrifty senior engineer went into Marshfield in between trips one hot summer's afternoon, bought an ice cream cone and brought it out to his young fireman getting steam up on the No. 6.

Mike's Ancestry.com timeline says, "Two Boyce family members lost their lives on this railway (John Boyce in 1888 and 'Red' Mike Boyce in 1952)." And like his older brother, Mike was "crushed by car" when his right leg was pinned at the hip between the engine roller and a work car's bumper. Mike had set the car and moved the engine back to work on the front of the machine. His back was turned when the brake released. Colleagues would later say they were alerted to the May morning accident by what sounded like the "cry of the wounded animal." Mike lived long enough for family members to visit him in Whitefield Hospital. He died on June 5, 1952 at age 71. Back at the Base, the June 6th paycheck

Ch. 8 - Mike Boyce Tribute



Mike Boyce captured clambering back aboard the No. 6 at Waumbek Tank in the late 1930s - N.H. Then and Now

cut for him was voided. His widow would receive monthly payments from the Mount Washington Railway for the rest of the year totaling $800.

Mike's death in the spring of 1952 due to his dedication to a clean engine, was a sad event. Because of Mike, Jitney says he felt an obligation to pass on to anyone who would listen, what Mike had taught him.

This *Operating Manua*l would not have been possible without the intellectual generosity of Michael P. "Red" Boyce of Keene, New Hampshire



CHAPTER 9

Know Your Cogger

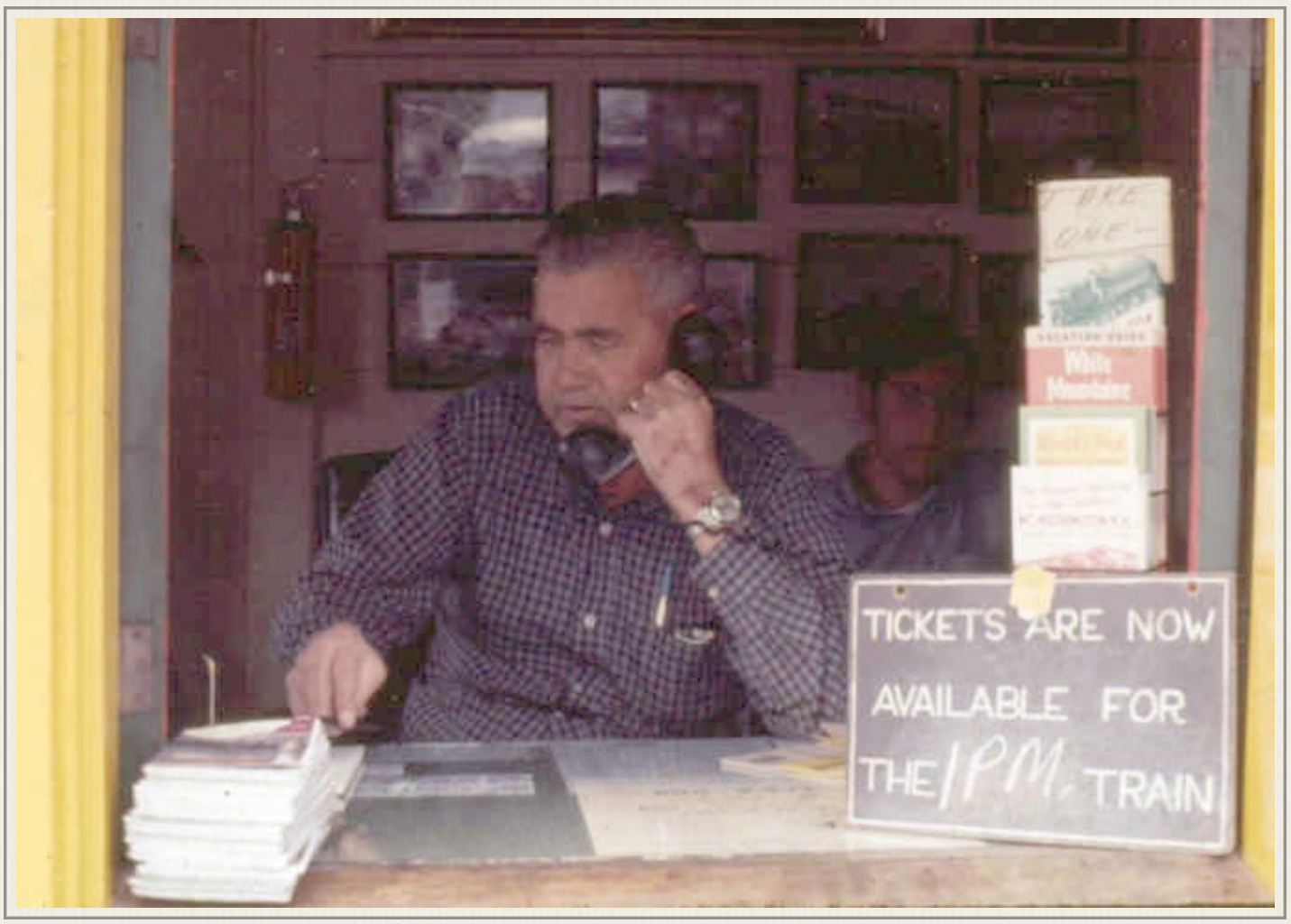


Work crew congregates next to the Base switch at the start of another day in the summer of 1953
- Lewis Family Collection

Since the start of Sylvester Marsh's railway to the moon, the tourists who take the 3-and-a-half mile trip to the top of New England are struck by the beauty of mountain; the primal power of the historic locomotion, and the gritty nature of the work.

And since the beginning, beneath the denim and dungarees, the caps and the coal dust, there have been some of the most interesting characters on the planet - individuals drawn from diverse backgrounds united only in their common goal of using steam to get from down here to up there. The partial roster that follows is drawn from *Cog Clatters*, personal recollections, and new research.

Base Station



Cliff Kenney on the track phone coordinating trains while John Klopp looks on
- Kent Family Collection

Ticket Master/Dispatcher

CLIFF KENNEY

Cliff started working at the Cog in 1946 for Colonel Henry Teague under the supervision of Colonel Arthur S. Teague.

In the summer of '46 Cliff was qualified as brakeman. The summer of '47 found Cliff a qualified fireman, firing for Mike Boyce. Cliff learned fast and became a qualified engineer in the summer of '48.

Arthritis forced Cliff to retire from "running" but has continued at the Cog in the Ticket Office.

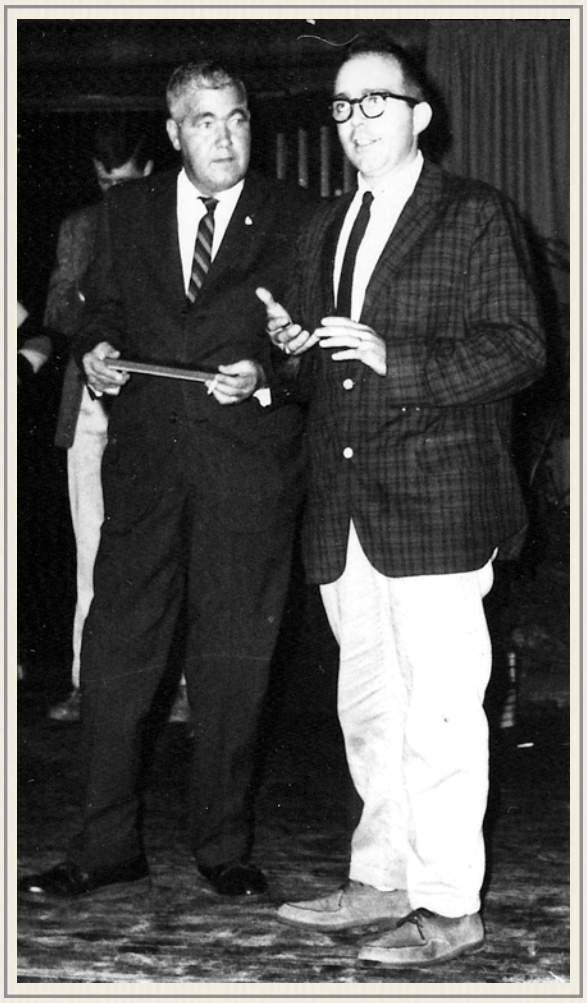
Cliff told this reporter he enjoyed the Cog and appreciated the kindness which Colonel Arthur Teague had extended to him during his long illness.



Engineer Cliff Kenney (1950s)
- Lewis Family Collection

So Cog caps off to Cliff Kenney, a consoler of irate brakemen, sympathizer of cinder-burned firemen, and big brother to bothered, bewildered and bugged engineers. *(Cog Clatter v1n1 – July 6th, 1966)*

A native of North Woodstock, New Hampshire, the only boy in a family that included five sisters, Jitney remembers the 30-year old engineer as a master of coaxing guys to do his work in 1950. Part of the crew fixing track at the start of the season, Cliff would tell one of the new employees, "Boy, you're strong - you can lift that? Can you lift another one?" Jit says he watched as sure enough the tie, or the stringer was single-handedly moved, while Cliff leaned against the work car. Cliff's gift of gab and ability to read a person came in handy when he moved from the trains to the Ticket Office, although a switch on the P-A system had to be installed while Cliff learned to adjust his salty train crew delivery of information to something more G-rated. Sandy and Mary (Lund) Stephen still remember sixty years later. "Cliff swore all the time," says Sandy. "Never forgot the day (Cliff) forgot to turn off the speaker," says Mary. "It actually electrified the whole parking lot." "He was a piece of work," concluded Sandy.



Cliff Kenney (left) listens to Griff Harris extol his virtues during 1963 Cog party
- Ellen Crawford Teague Collection

Cliff made Twin Mountain his home for 35 years raising a daughter, Judy and a son, John known as "Jack." Both would work for a time at the Cog. Cliff retired in 1978 after 32 years at the Mountain.

Clifford E. Kenney died January 12, 1982 at Littleton Hospital after a long illness at the age of 61. *(additional family details in Vol. 2 Roster)*

Base Crew

BREWSTER BARTLETT

Brewster, a two-year man at the Cog, from Lancaster N.H., has to divide his time equally between gas station, parking lot, bunker, etc. During the winter Brewster goes to Lancaster Academy and spends his leisure time hiking and skiing; in summer he likes to work at the Cog. *(Cog Clatter v1n9 – September 2nd, 1966)*



Brewster apparently adopted the



Cog tradition of using roadkill as a teaching tool (many of the stuffed animals on display in Marshfield met their fate under wheels on the Base Road.) He started teaching at Pinkerton Academy in 1972 and became well-known as "Dr. Splatt" - creator of the Road Kill project (http://roadkill.edutel.com) that has students scientifically monitoring mortality along four mile stretches of roadways.

MATT JORDAN

Matt, our mailman, Master of Terpsichore and conveyor of Pete's wagon (seen right at the 1966 Cog Party), comes from "Philly" and is going to St. Peter's Prep School in Peekskill, New York. Later, Matt hopes to go to UCLA to study law and eventually will work for his uncle in California. His magic number is now 8. *(Cog Clatter v1n9 – September 2nd, 1966) Matt not pictured.*

Policing Crew

JACKIE KENNEY

Jackie comes from Twin Mountain and goes to Twin Mountain Public School. Some of his hobbies are baseball, football, basketball, swimming and fishing. Jackie has been coming up to the Cog off and on for quite a few years. *(Cog Clatter v1n9 – September 2nd, 1966)*

John S. "Jackie" Kenney was born June 10th, 1956 - the son of Cliff and Rita (Bragg) Kenney, and with Col. Teague's approval in 1966 the 10-year old was earning some pocket money helping keep the Base Station picked up. It wasn't a full-time gig, and he would join other Cog kids (usually Charlie Teague) for adventures.

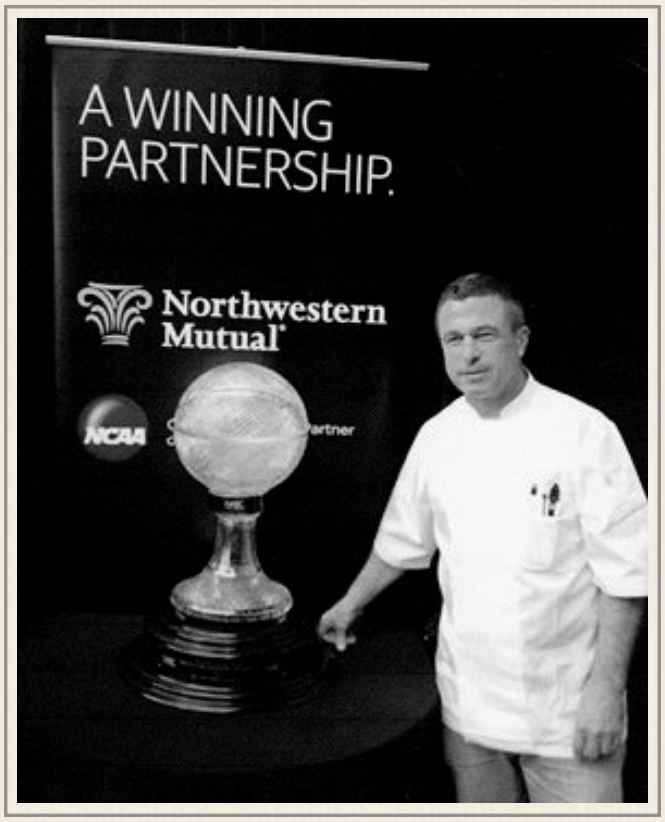


8-year old Jackie Kenney strikes a pose along the road to the Shop during a Cog kids "photo shoot" done for fun (1964) - Lewis Family Collection

Jack grew up in Twin Mountain and served as a volunteer firefighter there before moving to Lincoln, New Hampshire. He worked in construction and manufacturing jobs. At age 56, he moved to Lancaster where his sister, Judy and her husband were living. On December 31, 2013, John and his girlfriend, Mary Beth Michaud were having mid-afternoon New Year's Eve drinks with two men at an apartment at 4 Elm Street. 48-year old Steven Dupont invited Michaud next door to "roll some cigarettes." A bit later, John knocked loudly on Dupont's apartment door. Dupont punched Kenney in the face and John fell hitting his head on the floor. Rescue personnel were called, and at 4:30 pm 57-year old Jackie Kenney was pronounced dead at the scene. He was buried at Saint Margaret Cemetery in Twin Mountain, New Hampshire.

Dupont, who had a series of prior convictions for assault, argued self-defense at his trial. The jury found Dupont not guilty of manslaughter and negligent homicide, but convicted him of first-degree assault with a deadly weapon. *(additional Kenney family details in Vol. 2 Roster)*

JEFF KENT



Jeff comes from Essex Junction, Vermont, where he goes to Park St. School. He said he'd like to be a lot of things when he grows up. Some of his hobbies are gardening and rock collecting. Jeff said he liked his job very much. *(Cog Clatter v1n9 – September 2nd, 1966)*

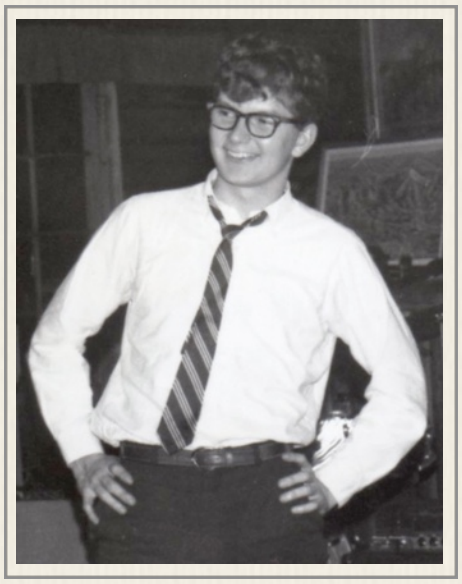
The first-born son of Bob and Shirley Kent, Jeff apparently followed the produce from his gardening hobby into a 30-year career in the kitchen preparing food. In March 2014, he signed on as chef du cuisine at celebrity chef John Tesar's modern American restaurant, *Knif*e in the Hotel Palomar in Houston, Texas.

This came after stints at *Arizona 206* in New York City (where Jeff first met *Top Chef* contestant Tesar who calls Kent a "visionary" in the industry), *South Beach Brasserie* in Miami, and the *Greasy Spoon* in Southampton, NY.

Anthony Bourdain took note of both Jeff and his current employer in his book, *Kitchen Confidential* in 2000 when he wrote that Brendan Walsh' *Arizona 206* was where "almost every '80s-era American chef... it seemed passed through those kitchen doors at some point in their early careers... a period where (Bourdain friend chef Scott Bryan said) 'everyone knew what we were doing was important. It was a team of cooks.'"

Ch. 9 - Base Station

Office Crew



BOB *"The Bookkeeper"* EASTRIGHT

Bob *(right)* comes from Norwalk, Connecticut. And goes to New England College where he majors in Marketing. He plans to go into advertising. *(Cog Clatter v1n9 – September 2nd, 1966)*

Bob "Mother" Varney

A 2016 Ancestry.com search finds that Bob's father, Thomas Zelno Varney, was born in New York City on June 3, 1885 – the son of Moses C and Louise (Saoille) Varney. Bob's grandfather Moses was born in North Danville, Vermont. At age 14, Tom was going to school, and living with a cousin in Littleton, New Hampshire.

The 22-year old Tom Varney was a "businessman" when he married a local girl - the 21-year old daughter of Alonzo M. and Barrie (Lewis) Higgins of Littleton on June 19, 1907. Julia C. (Higgins) Varney and her new husband were living with her parents when Census taker Walter N. Heald came calling three years later in late April 1910. No occupation was listed for the couple – Julia's 47-year old dad, Moses was working as a clerk in a meat market, while Tom Varney was apparently going to school.

Tom Varney was working as an auditor for the American Realty Company of Portland, Maine when he registered for the draft on September 11, 1918. He and Julia had been living in Lancaster, New Hampshire for the last four years. Just a month after Tom Varney registered for the draft, the 33-year old auditor became a widow. Julia came down with the flu and died of cerebral meningitis on October 11, 1918. She was one of the 20 to 40-million people who died during the first of two pandemics involving the H1N1 virus.



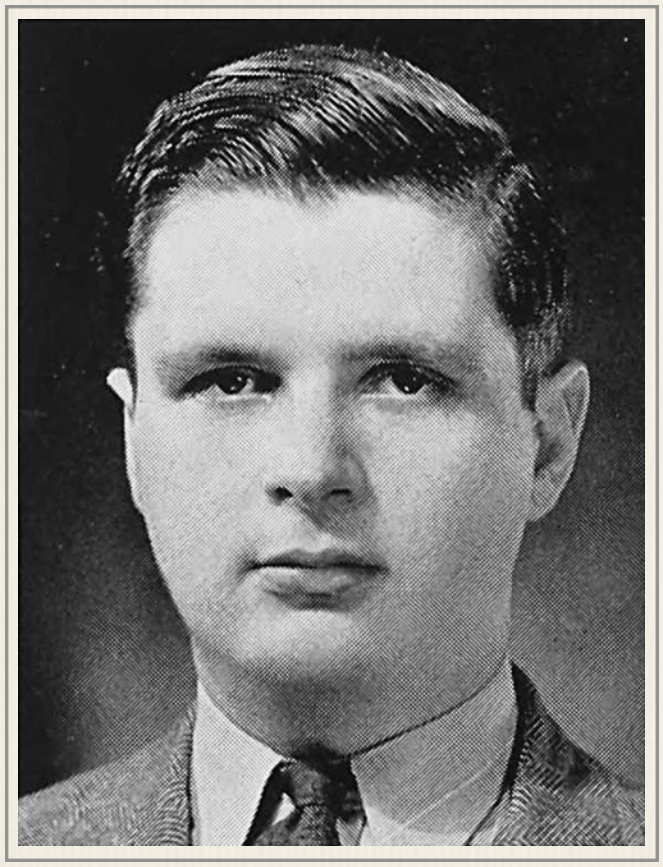
Bob "Mother" Varney (left) and unidentified Cogger at Ticket Office side window (1950s)
- Lewis Family Collection

The following spring in Concord, New Hampshire Tom Varney married Bob's mother, Elizabeth Jackson. The 30-year old Elizabeth was the third child and first daughter born to Littleton lawyer James R. and Lydia (Drew) Jackson. It was the private secretary's first marriage.

The 1930 Census found Tom Varney living in a Manhattan guest house on Eighth Avenue. His occupation listed as a cigar store company executive. Elizabeth was recorded back home in Littleton with their 9-year old son, Robert Jackson Varney.

The 1940 Census indicates Elizabeth and Tom

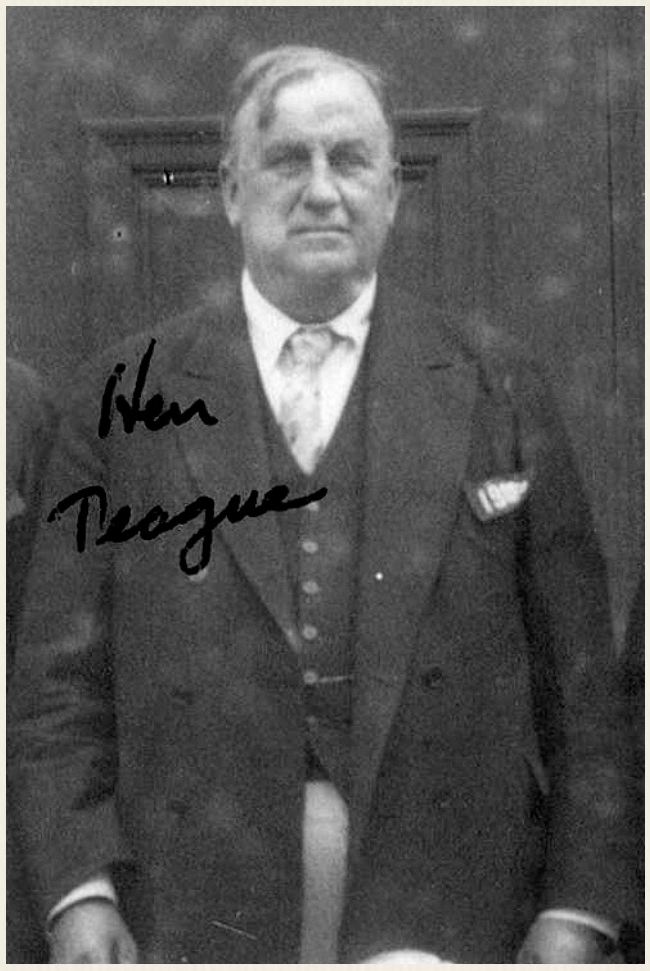
Varney had divorced at some point in the prior ten years. She was now a single head of household - working as the postmaster of Littleton and living on Loudon Street with her 19-year old son. Bob Varney had graduated from St. Paul's School, and had spent 11 summer weeks in 1939 working as an announcer at the new Aerial Tramway for a princely sum of $20. Dartmouth College and it's colorful alum, Col. Henry N. Teague (who thought the tramway was a bad idea) was still in his future.



Robert Jackson Varney (1943)
- Dartmouth College yearbook

In 1942, 56-year old Thomas Z. Varney was living in Tulsa, Oklahoma convalescent home. In August of that year, his son, Bob was writing a paper on the Mount Washington Railway as part of his History 102 course at Dartmouth for his degree in history. It is clear from the thesis that Bob "Mother" Varney was now working for the old Colonel at the Cog, and was channeling his dad's auditing skills to help tell the railroad's story.

Varney reviewed the Cog's financial statements and found during the first nine years of Col. Henry Teague's tenure revenue from passengers totaled $458,605 while operating expenses amounted to $431,462. Of that payout $157,859 was spent on locomotive and equipment repairs, and roadways and structures. The young Dartmouth historian's assessment of Teague, "He is one of the shrewdest, clear-thinking Yankee businessmen who ever lived." Varney says in the ten years prior to Teague's ownership there were no profits at all on the Mt Washington Railway. Varney says it is amazing that the railway was kept open during the first four years of the Teague regime, but also notes "paper profits… are very ephemeral" and subject to manipulation. Varney says in this particular case, the profits during the old Colonel's time were "made very small by figuring in a great deal of salary which was paid to the owner."



Henry N. Teague at 1900 Class Reunion (1930)
- Dartmouth College

While Varney's paper is very complimentary to Col. Henry, the 21-year old student found the early Cog figures – Sylvester Marsh, Walter and Herrick Aiken equally fascinating as railroad men. "The latter three are as interesting in their own way as any of the 'Empire Builders' about whom so much has been written," declares Varney. "These three men have had as many exciting feuds, and

fights for the control of the Mount Washington Railway, and later fights over who invented the original patents as any of those better known men."

Bob Varney graduated from Dartmouth in 1943 and did graduate work at Boston University where he was an instructor in public relations and economics. He served as a pilot in the aviation branch of the Navy during World War II. He became an assistant public information officer for the Naval Air Training Command in Pensacola, Florida and was released to inactive duty in the reserve as a lieutenant. In 1946 and 1947, he was director of advertising, publicity and exploitation at Paramount Pictures Theaters Corp's Western Division, located in San Francisco.

When Jitney arrives in 1950, Bob "Mother" Varney is an assistant to the president of the railway (Henry) and assistant general manager of the operation – "Col. Arthur Teague's right-hand man." Jitney says his impression at that point was that "Mother" Varney did not know much about how the engines operated. After reading his Dartmouth manuscript in 2016 Jitney says it's clear Bob Varney knew a lot about how the railroad had developed over the years. Varney's work for the Cog had him making frequent promotional trips to northern Vermont communities. He moved to Montpelier, Vermont in January 1954 and began working for the Greater Vermont Association as a field representative to serve and build the membership of the promotional group.

KEN "High Pockets" RANDALL – Bookkeeper

Harold Adams gave Ken Randall the nick-name "High Pockets." Randall's Cog career began in the dish room off the dining hall at Plymouth Teachers College in the fall of 1950. Ken had graduated from high school in his hometown of Tilton, New Hampshire, and "started working my way through college" by washing dishes.

"There was a young man in the dish department," recalls Randall in June 2016. "His last name was Moses *(Ed note: Elliott P. Moses - son of Henry Teague's bookkeeper)* - Colonel Henry's go-fer boy. This Moses was the one who did everything that Henry asked to have done and the whole bit… and he's the one that got me a job with Mike Haney" in the gift shop in the summer of 1951.

The old Colonel immediately made a deep impression on young Randall. "That was the first season that Henry was brought up to the Marshfield House once a day to do an inspection and then back down to the Hut. Everybody snapped to when he… showed up," and Randall says "it seems to me he had a daily jug of something stronger than water he consumed."

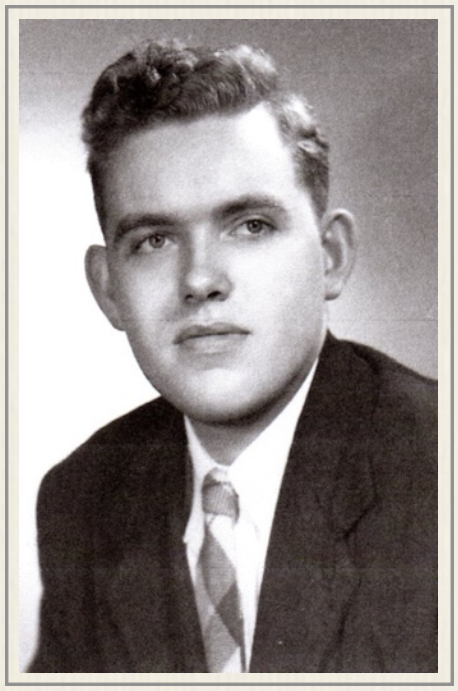




A caricature of Ken "High Pockets" Randall keeps an eye on Master of Ceremonies Jitney (left) at the 1963 Cog Party.
- Lewis Family Collection

Ken bunked in the rooms over the gift shop and had meals down at the Boarding House. "We had to walk down from Marshfield to the Boarding house and Stubby (Welch) was in there with the old big iron oven and the whole bit," remembers the 83-year old Randall. "I guess at one time, Stubby – had been a cook in some of the logging camps because you got in there and you sat down and you didn't say diddley-you-know-what as long as you were seated right there, and no one at the table talked. They just sat, ate and left and went back to work."

Randall didn't go very far on his days off from work. "Because I did not have much of a way of getting off the mountain that first summer I was up there – I would take the train up to the summit and then go to the old weather bureau hut that was up there chained to the mountain. I would go in there, and go out back where the help stayed. I got to know them – I didn't bother them and they didn't bother me, and I would sit there and read magazines for awhile just to get away from down below."



Ken Randall (1954)
- Plymouth Teachers College

Ken spent two summers in the gift shop. In 1953, he got the chance to move upstairs to work as well as sleep. "For some reason the person who had been the bookkeeper – either didn't show up or had some illness with his eyes and couldn't show up – so the job of being bookkeeper was offered to Thompson who was an accounting major or business major at Plymouth and… he very politely turned down the job.
They (realized) I was an accounting major at Plymouth State – the job was offered to me. I became the bookkeeper for the Cog Railroad." Except for a hitch in the Air Force from 1954 to 1957 with eighteen months posted in southern Greenland, Ken Randall would keep the Cog's books until the railroad was sold in 1983.

Randall says after he was hired Col. Henry's auditor – "a person by the name of (E.P.) Moses… came on board for maybe a week or so, and showed me how the books were kept and what the play between the three companies happened to be." The railroad operation was actually three different corporations – one operated the Summit House, another Marshfield, the last the railroad itself. The corporate structure designed so a lawsuit against any one company would not financially impact the rest of the operation. There was also advantages to spreading out the few full-time, year round Cog workers between the corporations. The Summit House might occasionally pay a Marshfield worker depending on cash on hand in the various accounts, but monies would later be moved to the Cog employees aligned with their proper "employer." The corporations would also provide services to one another.

The new bookkeeper began making daily financial entries in his ledgers in 1953 and answering calls on a second "track phone" system from the Boston & Maine era of the 30's. "By that point in time the tracks and everything between Fabyan and the Base had been completely torn up, but the telephone line had been left in," says Randall. "Papa Crepeau was the freight agent

and Mama Crepeau was the passenger agent" at the Fabyan B&M station explains Randall. "Vendors would call up… and get the station, and then pretty soon the station would call up to Arthur and tell Arthur so-and-so called and would like to have a reply. Given enough time, Arthur would go down to the B&M station… and call back" on Bell Telephone lines.



The machine shop (1966)
- Elvira Murdock photo

One of those vendors was a Texas company that coated their copper pipe with a compound discovered by accident in 1938 – Teflon. Col. Arthur Teague bought some to determine if the pipe would leak less on the locomotives' lubricating lines. It worked and Randall says, "after two or three years, the firm in Texas… woke up and found out their product… the result of one of the current technologies at the time was being used on engines designed in the 1800s." The company wrote asking if they could send some people up to New Hampshire to see how the pipe was being used. "Art said okay, come on up," says Randall. "We took them down… showed them the shop *(above)* and they just stood there and blanched. The power was being taken off the river in back… and they couldn't believe what they saw," Randall reports with a chuckle. "(The Teflon coated copper pipe) worked and it worked fine."

Randall's job was not limited to numbers. He learned first-hand about the items behind each number in the summer of 1962 when Arthur Teague asked Ken to take an inventory. "I'd go up to the Summit… and I would count plates, knives, forks, spoons, boilers, everything up at the Summit, and then I'd go down to the shops. I would count bolts and nuts and washers – the whole bit. No one told me why I was being asked to do all this, but I found out very quickly that it was on the basis of the inventory that I took of the whole confounded place up there that a figure was arrived at that Arthur paid to buy the whole thing."

Arthur Teague's deal with Dartmouth may have been similar to the purchase arrangement Henry Teague worked out with the B&M. Ellen Teague writes in her book that the mortgage taken out with Dartmouth College to underwrite the 1964 sale was paid off in February 1981. Ken Randall says he was not familiar with the details of the Dartmouth College deal. "This I know," he says in 2016, "at the beginning of every year, oh early June, Arthur would borrow a few hundred thousand dollars from Dartmouth and then during the course of the summer he would pay that back based upon current revenue that he'd gained."

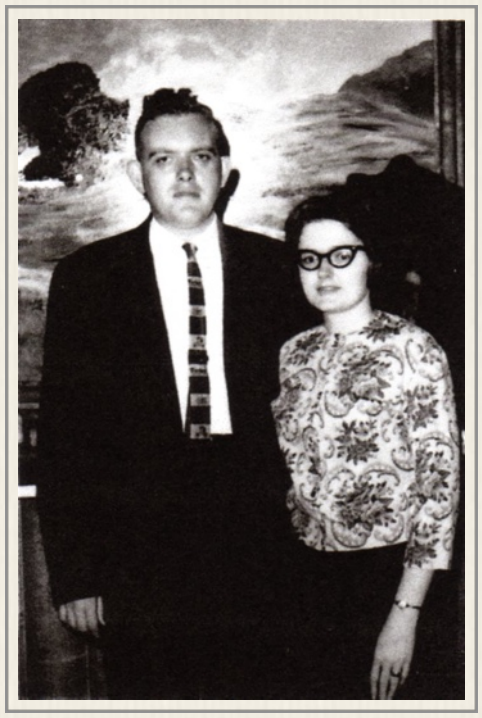
While Dartmouth College played a key role in the Teagues' Cog story, Plymouth State continued to play a major role in Randall's story.


ELAINE BONFIELD CODDINGTON
Westhampton Beach

In 1960, Elaine Bonfield "Bonnie" Coddington was the assistant librarian at Plymouth State. It was her first job after graduating *(left)* from the State University of New York at Geneseo with a bachelors degree in library education. Bonnie was born 90 miles east of Manhattan in Quogue, Long Island, and graduated from Westhampton Beach High School. Now she had a small apartment in Mary Lyon Hall on the Plymouth State campus. That summer another woman from Long Island was taking courses and living in the dorm. Bonnie Coddington and Carol Purdy became friends, and Carol, who had worked at the Crawford House as a waitress in 1959, suggested the pair take an August trip to the White Mountains. Ms. Purdy also wanted to say hello to an old boyfriend who worked at the Cog Railway. The first stop for the young women at the Base was the ticket office manned by Cliff Kenney.

"I got a call from Cliff," says Ken Randall in 2016. "And Cliff said, 'Hey, Ken last year's romance (Carol) is here and she's got somebody with her. So I folded up and made myself scarce," abandoning his office while the two young women took a $4.95 round-trip train ride to the Summit and back - a three-hour trip. "I figured they would be down on the same train they went up on," explains Ken. "So I went back to work" after the train had returned to the Base and its passengers had dispersed. But the young women decided to stay over at the top and take the next train down and then see if they could find Ken. They did. "I looked out and sure enough, the two of them came up the back stairs (of Marshfield) and there was no place I could go… they came into the office and I was introduced by last year's romance to the person with her."

Bonnie remembers "Ken immediately insulted me by saying, 'What are you doing here in New Hampshire – trying to corrupt the natives?' and my (in)famous response was 'Absolutely not, I am here to bring light and culture to this small part of the world." Of the encounter, Ken says "one thing led to another and would you believe what it led to was 54 years of marriage?" Bonnie writes in 2016 "(Carol) never had a chance for a cozy reunion." Bonnie kept her ticket stub that Cliff Kenney sold her that day and still has it today.



"After we were married," writes Bonnie. "I worked one more year at Plymouth, but the commute (to Tilton) before I-93 was done was pretty hectic. I then became the librarian at Tilton School (all boys at that time). On weekends in the spring and fall, I would go to the Mountain with Ken after work on Friday, and we'd come home Sunday night." And like every other Cog spouse over the years pitched in as necessary. "I worked with Mike Haney in the Gift Shop, I counted dimes from the women's toilets (now that was a high point of my career!!), worked at the counter and pretty much did what was needed



Ken & Bonnie Randall standing near the front window of the Marshfield Gift Shop
- Koop Family Collection

with my limited experience in running an engine or firing the boiler." However, Bonnie declined the opportunity in 1966 to do something on a Cog train that might have generated national publicity. "Ellen wanted me to deliver the baby on the train! What an experience that would have been! As it was my first delivery I opted not to try it, but as it turned out, it was such an easy birth I could have done it anywhere." The couple's only child, Kathy now works for the state of New Hampshire as a juvenile probation and parole officer in Salem. She was hoping to become a second generation Cog employee when she turned seventeen, but that was the year Ellen Teague sold the railroad to a



Ken with 19-month old daughter, Kathy (May 1968)
- Randall Family Collection

group of New Hampshire businessmen.

In 2016, Ken remains pleased he disrupted Bonnie's plans back in 1960, "She was headed for Alaska, but she never made it."

The rhythm of the Randalls' life continued with Ken teaching in the winter at the college he helped found in 1961 (New Hampshire Technical College) and keeping the Cog books in the summer. "One thing I found interesting as hell - September through June, I would be teaching computer languages here in Concord – you know Fortran and Cobol and all that happy nonsense. And then June through September, I would be keeping the books by hand with machinery - adding machines and that sort of thing - dear Lord - Just the difference in technology between the two I found extremely interesting. I basically stayed summers from '58 (end of the season) through '83 when it was sold – and the day after it was sold I was given my walking papers because I knew too much," says Ken. "I knew where everything was."



Bookkeeper Ken Randall in his office making a call on the Cog's track phone system (August 28, 1970)
- photo by John Mudrock

Ch. 9 - Base Station

Mt. Washington Railway Bookkeeper Duties

Daily

1. Collect all daily cash reports and cash.
2. Agree cash with cash reports. Inform Mr Teague of any drastic differences.
3. Prepare bank deposit slip. (Do each day separately. Do not include more than one day's receipts in any one deposit.)
4. Enter analysis of cash report in cash book
5. Prepare checks for payments of bills. Mr. Teague will give account distribution. (Also last year as a guide). Take discounts where applicable.
6. Enter disbursement from check book to cash book.
7. Enter related intra-company items in respective books.

Miscellaneous

1. Prepare record of bank balances at least twice a week (or oftener) and give to Mr. Teague.
2. Total and prove each cash book sheet as the page is completed.
3. Inform all employees who wish to draw on their a/c that they can only request one check per week.
4. Do not open any bank statement envelopes. Give them to Mr. Teague to open and review.
5. Do not charge any capital assets to Base Division/Marshfield. They must be charged to the Summit House Division.
6. See that vending machines (toilet, telescope) are emptied periodically.
7. Keep coal analysis up to date
8. Keep all state, and county tax bills & invoices Morrill & Everett together.

Monthly

1. Prepare analysis of payroll ledger and enter in cash book.
2. Close books and prepare analysis of accounts.
3. Total of "accrued wage" column in cash book must agree with "Wage Paid" column in monthly analysis sheet.
4. Intra-company debits and credits must agree.
5. In June, August, and September determine withholding and Social Security tax. Prepare check to Littleton National Bank and taxes with IBM receipt before the 15th of the month to Littleton National Bank
6. Determine Jewelry and Leather tax for Summit and Marshfield. Prepare check and mail with IBM receipt as indicated above.
7. Prepare bank reconciliation for each a/c.
8. Keep typewriter and adding machine clean and in good shape. Cover them every night. They were in good shape at the beginning of the season. Keep them that way.

Mount Washington Railway Company

MOUNT WASHINGTON, NEW HAMPSHIRE 03589

TELEPHONE 603-466-0004

MARSHFIELD, INC.
MICHAEL L. HANEY, VICE PRES.

MRS. ARTHUR S. TEAGUE, PRES. AND TREAS.
ANTHONY S. POLTRACK, VICE PRES.
JANE C. TEAGUE, ASS'T. TREAS.
JACK B. MIDDLETON, CLERK

March 24, 1968

CLAIRE DWYER

Claire Dwyer's first summer doing secretarial work at the Cog (1967) was Jitney's last summer at the Cog. Her office location was off the track regularly beaten by cub reporter, Jitney Jr. and so her bio (like many others that summer) did not make it into volume II of the *Cog Clatter*. However she was willing to tell the tale in 2016.

"I started at the Cog following my freshman year in college," writes Dwyer. "Although I did not know the Teagues, had never heard of the Cog Railway, or been to New England, I grew up just about two miles from the Teagues (in Philadelphia). My father knew of Col. Teague and the Cog through a friend. He suggested that I try to get a job up there for the summer rather than go to the New Jersey shore for the summer. He considered that too wild a place at my then age! Anyway, he called Col. Teague and inquired on my behalf. Initially, Col. Teague said they had no openings. My father gently persisted and mentioned that I was in the secretarial program in college (I was only pursuing an associate degree in secretarial science at the time). Col. Teague said they could use a secretary, so that got me in." While Dwyer's dad had secured a summer job for his daughter at a tamer(?) location, there was still a problem.

"I was reluctant to go on this adventure on my own, so my father called again and asked if they could accommodate a friend. That's how my high school friend Margie Campbell aka 'Max' got a job there. She started as a chamber maid working for Ramona (Frye).



Claire Dwyer (1968)
- Mussy Schold Collection

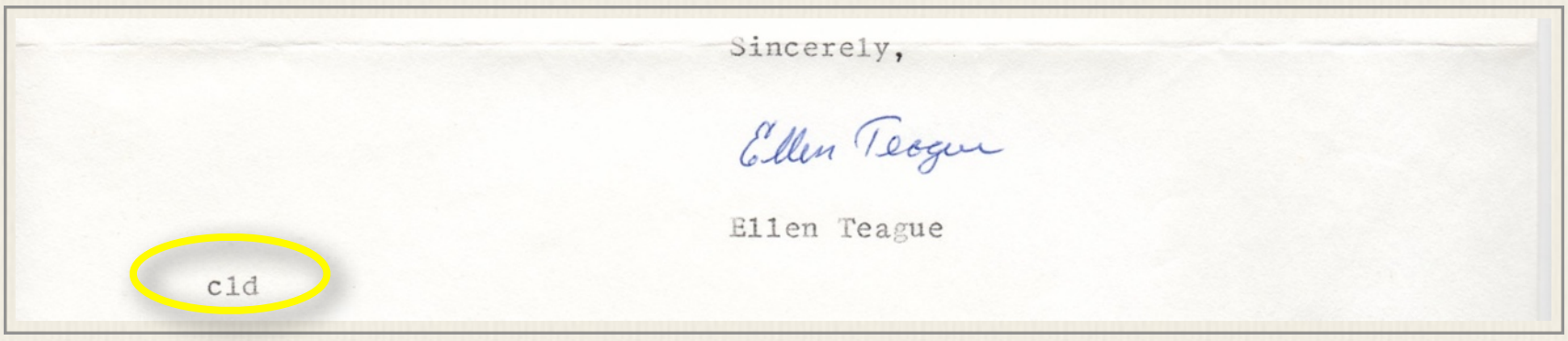
Ch. 9 - Base Station

We roomed together for two years in the girl's dorm followed by two years in (Jitney's) cabin. We graduated from college in 1970, and worked for Tony Ferrelli as waitresses at the Franconia Inn for the winter of 1970. I then returned for a fifth summer (1971) without Max. I lived at the Inn doing some secretarial work in return for a room, and commuted to the Cog six days a week and had my meals there."

"I only met Col. Teague once due to his illness," says Dwyer. "I worked closely with Mrs. Teague during the summers, of course, and then in the winters, I worked with her at her home in Chestnut Hill writing letters to employees inviting them back (unless, of course, she didn't want them back!), letters to suppliers (such as coal), other business letters, letters involving the various boards or groups with which she was affiliated. That summer of 1967 is still never too far from my mind. Col. Teague, Lucy (and your sister), and the accident. Followed by Dave Koop's death the following spring."

"Two years after graduating from college, I moved to Boston with Max and another friend sharing an apartment with them until Max and Rusty (Aertsen) married in June of 1973. I started work as a secretary in a large (for the time) law firm and ultimately decided to go to law school which I did at night while working as a paralegal for the same firm full time. I graduated in 1977 and moved away from Boston. I married at the end of 1977 (to another lawyer from the Philadelphia area), and we moved to Boise, Idaho, where we have resided ever since. I was in private practice for 6 years with a small firm. When our second child was 15 months old, I 'retired' and stayed home with the two children for 18 years. Once they went to college, one of the partners in my small firm who had been a federal magistrate many years asked me if I wanted to do some volunteer work at the federal court working on prisoner litigation cases to get my skills back up to speed and possibly secure a paying job there. Within a few months, I was hired and worked as a law clerk for 12 years for him and for a district judge. I 'retired' again when the magistrate retired and funding ran out for my work with the district judge. I still volunteer there a few hours a week."

Claire along with Rusty Aertsen have organized two Cog employee reunions *(1999 & 2014)* and if there's enough interest another could occur in 2019.


Sincerely,

Ellen Teague

Ellen Teague

cld



"Margie" Teague at '66 Cog Party
- Koop Family Collection

MARGIE TEAGUE

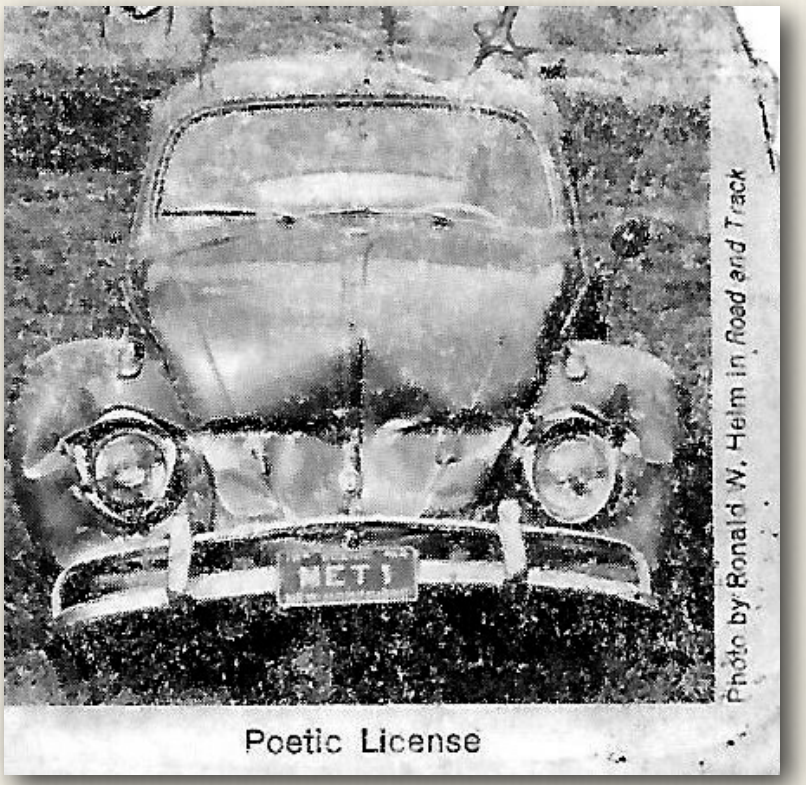
Margie comes from Philadelphia, PA where she works for Peck & Peck. Her hobbies are riding, skiing, Stickey, and music. *(Cog Clatter v1n9 – September 2nd, 1966)*

Margaret Ellen Teague was the second daughter of Arthur and Ellen Teague, and was a true "baby boomer" - the couple's first child in April 1946 after the highly-decorated Lt. Col. Teague returned home from the war. Her mother writes in her autobiography that Margie attended public school in Philadelphia with her younger sister, Fanny.



Margaret Teague (Oct 2015)
- Lewis Family Collection

Ellen Teague says all her girls (Jane, Margie, Fanny, and Anne) had debutante parties and all but Anne "came out" at the Assembly Ball at the Bellevue Stratford Hotel. The Assembly Ball is the "oldest continuous subscription dance in the country" attended by members of the most prominent Philadelphia families. Ellen writes a fortuitous upward turn in some stock she held in 1965 underwrote the coming out parties, the Parisian gowns for the Assembly Ball, and a European summer abroad for Margie and Fanny. The two Teague sisters attended Franconia College in New Hampshire and finished their degrees at Eastern Baptist in Pennsylvania.



Gary Irish was given this clipping from Road & Track as a young driver by Bedford Riggs in Ashville, Me. He kept it in his wallet for over 20 years. He scanned it and sent the image to Jitney Jr in 2019 to answer the editor's initial request

A picture of Margie's VW Beetle was published. The bug was involved in a head-on collision, and while no one was seriously injured, Margaret Ellen Teague's vanity plate, MET ONE was still attached to the front bumper and readable on the squashed nose of the car which made it one of "those" pictures that had to be printed. *(Editor's Note: If anyone has a better version of that picture at left, I would love a copy!)*

Painter / Welder

CARL NEVERS

Carl, from Lovell, Maine has been here 20 years and what a painter! Almost all the paint visible on the Cog was put there by Carl. Carl is noted for; resurrecting a shadow, for falling off a ladder when a train hit it and not losing his pipe, his paint, nor his Maine humor! - *(Cog Clatter v1n9 – September 2nd, 1966)*

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After tumbling off the ladder, Carl told people he was alright and he just "painted on the way down." Carl was always firmly in control of his tongue and the pipe between his teeth. He was a welder in the Maine shipyards before coming to the Mountain - a boat building job that would contribute to his death. He went to work one morning at the yards with his unlit pipe in place. Carl told Jitney a guy at the shipyard entrance stopped him and said "You can't smoke in here - you've got a pipe in your mouth!" Carl replied, "I've got an asshole too, but I'm not shitting" and kept walking.



Carl (R) welding switch rail - Paul Philbrick assists (1950s)
- Lewis Family Collection



Carl Nevers (1950s)
- Lewis Family Collection

Carl kept *all* of his tools and equipment in the back of his enclosed truck, so they'd be handy for needed repairs. But when he couldn't lay his hands on the needed tool, he'd drive off in search of the missing item. Colleagues suggested Carl drove around the Base just to bounce the load in back of his truck to shift the pile to aid in his search.

A good Mainer - Carl was generally quiet, but got short with those who didn't do their job or goofed off. His story-telling skills were likely honed during the winter around a box stove as part of a group of "habitual loungers" at Kimball & Walker's General Store in Lovell. A December 11, 1958 article in the *Portland Press Herald* described Nevers and long-time members of the "Lovell Loiters Club" as being pleased with recent store renovations that kept their meeting space, but there were complaints about the oil burner that had replaced the old wood stove.

Living at the Boarding House, Carl would watch with amusement as younger Coggers returned from watering holes "carrying more than they were registered for." The next morning, he would report the young men's "radiators had boiled over" during the night leaving something for the Boarding House chambermaids to mop up. Bookkeeper Ken Randall says Carl had a frustrating habit of not cashing his paychecks during the summer, so it was arranged that he would receive his pay starting in September as the season was winding down.

Florida-native Jim Gordon remembered Carl Nevers with a smile during a 2020 interview. "He painted everything," said Gordon. "I called it Mount Washington Base Station brown. I mean, everything was painted kind of a brown. One time he had his truck up on the hill *(by the cabins)* and the truck wouldn't start. So he got behind it and he started pushing it (in gear). And as soon as it started to catch, he couldn't catch *(the truck)* in time and it rolled down the hill and

slammed into the corner of the *(Marshfield)* restaurant. We all ran out there to try and help him and he says, 'I lost my pipe.'"

A 2015 web search indicated that Carlton Nevers, born January 7th, 1897 passed away in Lovell, Maine in March 1968 at the age of 71.

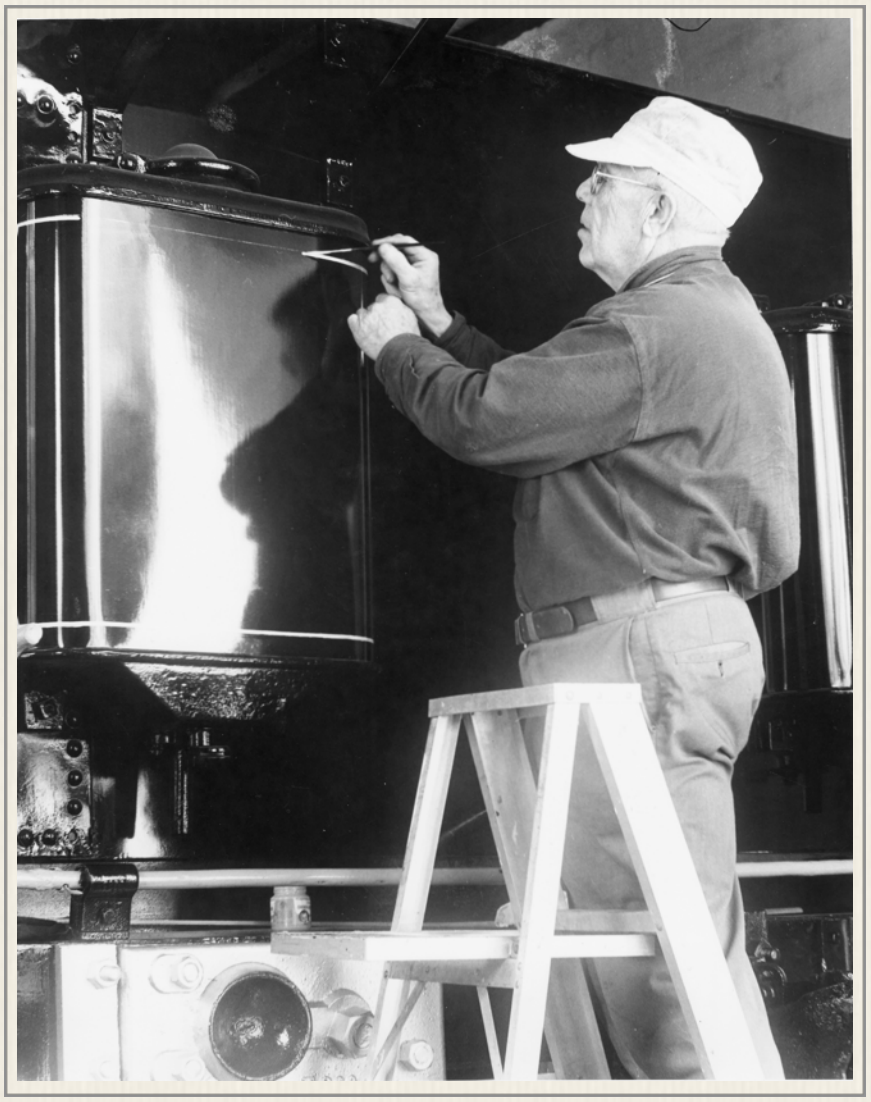


Carl Nevers poses in front of a freshly painted Old Peppersass (1950s)
- Lewis Family Collection

Ch. 9 - Base Station

Sign Painter

GEORGE A. THOMPSON



Sign painter George Thompson free hands a pinstripe on an engine at Clark's Trading Post.
- Photo by Thompson's grandson Brian Benton

While Carl Nevers spent his summers putting paint on the many flat surfaces of the Cog operation, New Hampshire sign painter George A. Thompson handled the billboards, engine tenders and all the signs needed for a tourist attraction. The pair reportedly "hit it off pretty good" as they both had worked in the shipyard in South Portland, Maine during World War II.

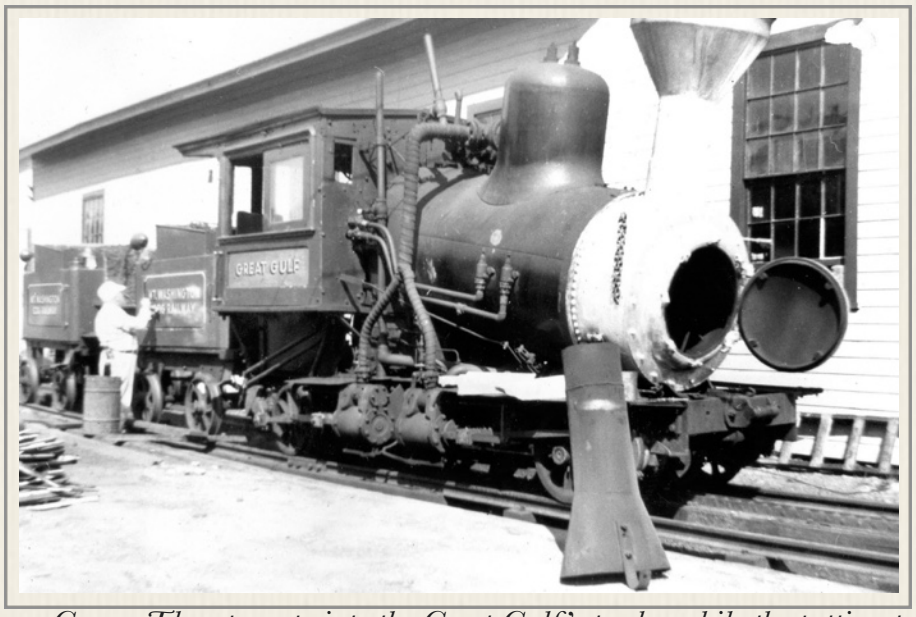
George was first hired in 1933 by Col. Henry Teague to do the railway's signage, according to Thompson's son Woodrow (Woody). "He typically spent a couple of weeks every summer doing signs for the Cog," says Woody in early 2016. "First along the roads around the White Mountains and finishing with a week or so at the Base Station. He did the lettering work on the trains (name panels on the engines, and words/numbers on the coal tenders) and *Old Peppersass*. I was his helper during the 1950s and into the early 60s. We stayed in one of the log tourist cabins at first, eating in Marshfield with the staff, and in later years parked our small travel trailer down by the engine house."

Both Woody and his older sister, Fay Benton "worked for their father from childhood through their teenage years, earning a little money by helping to install and paint signs," according to a biographical sketch of George Thompson crafted by daughter, Fay.

George A. Thompson was born in Ashland, New Hampshire in 1905. "He was a self-taught artist and enjoyed drawing from when he was a boy (and was scolded in school for it)," writes Fay. "George grew up on the shore of Little Squam Lake, where his mother's family – the Pease's – operated a farm and hotel for many years. His sisters were likewise artistic and painted as a hobby. George and his wife Bertha Monroe (1910-1998) were married in Vermont, moved to Missouri, and returned to New Hampshire shortly before their daughter Mary Fay was born in 1930.



Cog billboard alongside Thompson Family home Rt. 175, Holderness
- Thompson Family Collection

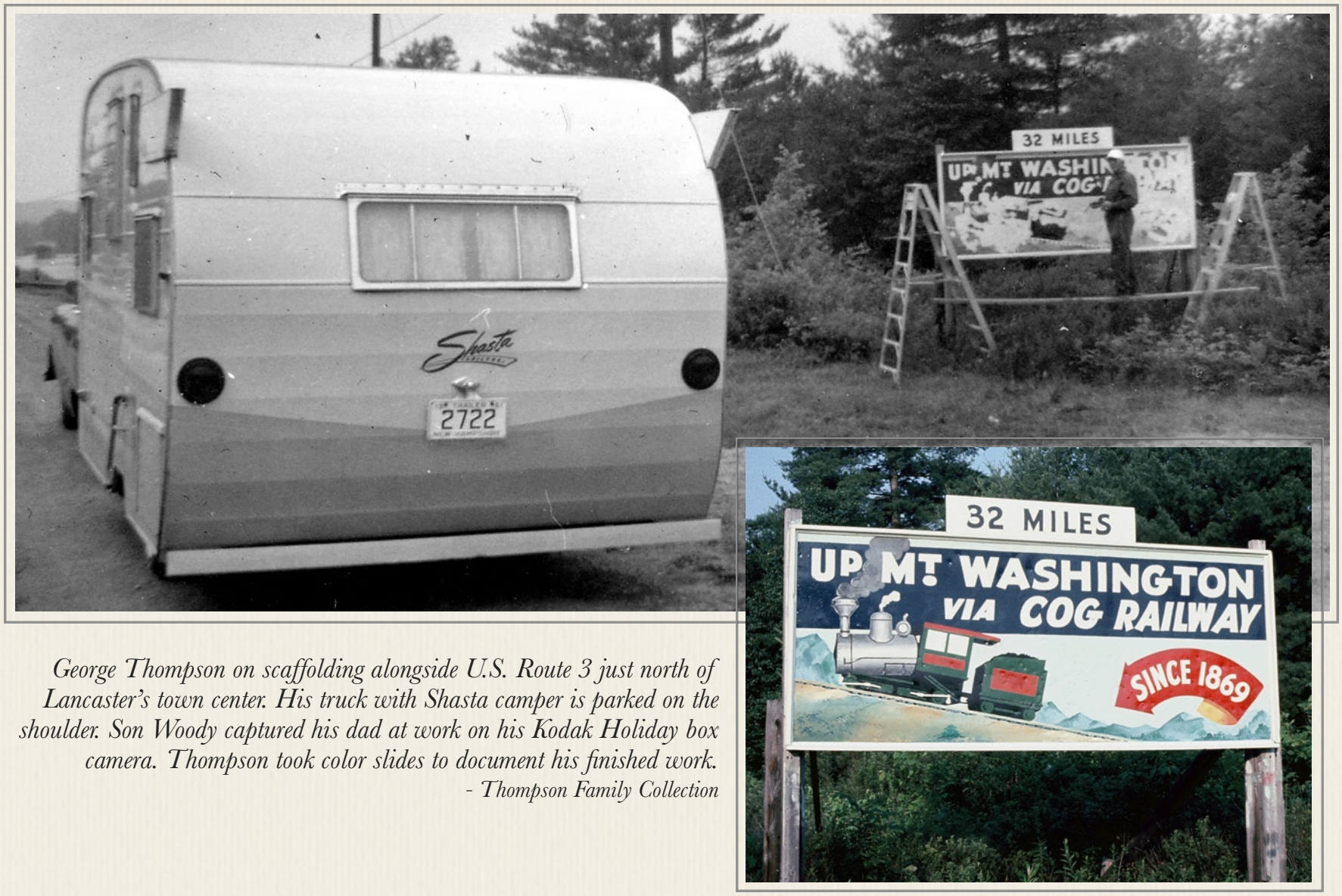


George Thompson paints the Great Gulf's tender while the petticoat awaits replacement in the smoke box of the freshly painted stack. That petticoat helped break Jitney's 15-year streak of never having to stop for steam when cinders built up under it reducing the draft and forcing a halt at Lizzie's. (~1960)
- Photo by Woody Thompson - Thompson Family Collection

In 1946 Woodrow was born. The Thompson's lived for many years in the family home that George built on Route 175 in Holderness."

"George worked as a carpenter during the Depression, and at the shipyard in South Portland during WWII. He eventually became a sign painter and used his carpentry skills to construct the signs. His clients included stores, cabins and motels, and many other businesses in New Hampshire."

Jitney was impressed with how Thompson used a chalk bag and templates made with a toothed "pounce wheel" to mark out some of the larger graphics before carefully painting them. However, George did most of his lettering by free hand - a skill that had taken years to perfect. Woody remembers his Dad telling how frustrating this was at first, and at least one failed attempt had been heaved out his shop door in disgust!



George Thompson on scaffolding alongside U.S. Route 3 just north of Lancaster's town center. His truck with Shasta camper is parked on the shoulder. Son Woody captured his dad at work on his Kodak Holiday box camera. Thompson took color slides to document his finished work.
- Thompson Family Collection

Ch. 9 - Base Station

"When I was at the Cog," remembers Woody, "he used to paint small signs in a shed right next to the car shops. Employees such as Carl Nevers would stop by to chat and we got to know some of them quite well. Painting on the active trains was often done in the engine houses when they were parked there and sheltered from the rain. I recall him painting a cog gear logo on the new aluminum Chumley Car when it went into service, and he even painted a similar design *(right)* on the Teague's horse trailer."



- Thompson Family Collection

Woody says his dad "may have followed the older layout on the trains at first, but at some point introduced the brighter red-yellow-black-green color scheme that was his hallmark, and which I think was liked by the Teagues."

Woody Thompson became a geologist, retiring from the Maine Geological Survey in 2014. He credits "his father's work at the Mt. Washington Cog Railway" for sparking his interest in the mountains, and digging lots of holes for the sign posts gave him early experience with New Hampshire's stubborn rocks and set the stage for later digging in geological mapping work.

While staying busy in geology, Woody is working to preserve his father's legacy. "I've got an important accumulation of my Dad's early large-format negatives of his sign work photos, that I need to scan and convert to positive images – along with 35mm slides likewise needing to be saved. Much of his handiwork is evident on post cards and other photos showing the trains, *Pepersass*, Marshfield, etc. Many examples can be seen in the present compendium."

"George worked for both Henry and Arthur Teague over the years, until after Arthur died and Mrs. Teague transitioned to other painters. 1968 was his last year with the Cog. He also did all the sign work and pictorial painting at Clark's Trading Post, and much of that can still be seen in places where the paintwork is protected from the weather."

George A. Thompson died in 1983. Woody will always be grateful for those weeks spent with him on the road and at the Cog. He recalls that "the unique Base Station community and its beautiful setting couldn't fail to impress this New Hampshire kid in the 1950s. It was like a small village totally removed and different from anything else in New Hampshire. There was lots of work to be done, but I spent off-hours exploring everything from the trains and maintenance shop to the beaded Indian belts and other tourist trinkets at the Marshfield gift shop! It was also great staying in the log cabins with their sunset views down the Ammonoosuc Valley. Evidently the other people staying there likewise had a good time. The exposed logs on the inside walls of the cabins were covered with carved initials, recollections, and attempts at poetry written on the logs by inspired guests.!"

Photographer

ELVIRA ROHL MURDOCK

Mrs. Murdock came from Germany and was first trumpet with D'Artega on the Coca-Cola Hour on NBC. During World War II she played with the USO and got a citation for her playing. Now she is practicing her father's profession of photography. *(Cog Clatter v1n9 – September 2nd, 1966)*

Elvira Rohl Murdock became Cog staff photographer in 1961 when her husband, tenor Richard F. Murdock began working with the Bretton Woods Boys Choir. The singing group was founded in 1911, sang regularly on Sundays, and gave concerts throughout the White Mountain recreational area in the summers. The 14 to 15 boys lived and practiced each summer at Camp Duncan - a group of cabins built just off the north side of the Base Road.

Elvira was born to Willie and Anna Rohl in Magdeburg, Germany on December 3, 1908. She "was a child prodigy playing her side-valve trumpet and appearing as guest soloist with various symphony orchestras in Germany. She came to America at age 16 to enter the field of popular music. She completed two years of college at Shreveport, Louisiana in basic education history and literature."



On May 8, 1931 at age 22, the 5-foot 6-inch tall musician with brown hair and brown eyes *(right)* declared her intention to become a U.S. citizen. She was living on Cooper Street in Brooklyn. She married cornet player Charles Battista in Greenwich, Connecticut on March 29,1933. The Italian-born Battista was 13 years older than Rohl. According to the paperwork, they had met the first of June in 1929. In November of 1931, Charles' wife, Evelyn filed for a divorce in the office of the Bronx County Clerk.

Her first marriage may have ended by the time *Albuquerque Journal* reporter Harriet Monk mentions Elvira Rohl in a June 1937 profile of the 19-year old Mexican-born Rita Rio and her all-girl dance orchestra. "The 12 girls travel in a bus, and wear shorts. Before they get off out come the skirts from their compartment and they are buttoned on before the girls leave their bus. Miss Rio travels with Miss (Orrel) Johnson (manager, co-owner and trumpet player) and Roger Moore, the orchestra's music arranger, in a large sedan. Arriving in Alburquerque in the middle of the night from Pampa, Texas, where the band played, Rita and her girls went to bed at the hotel and left calls for 6 p.m. Some of the girls took their instruments over to the music shop for repairs and adjustments, others sent out laundry or went shopping for Indian rugs and jewelry on awakening early. The girls will go to Santa Fe Wednesday. While the manager and I were chatting in the hotel lobby a couple of vivacious young girls came chattering in and stopped to talk to Mrs. Johnson (Orrel's mom). Until introductions I thought they were local high school girls from their informal attire and simplicity of speech and lack of make-up. One of the girls *(she was 28)*, Elvira Rohl, came from Magdeburg, Germany, when she was 16 years old. She plays trumpet." Rita Rio's or-



chestra played a dance at the University of Michigan during the 1937-38 school year. The orchestra cost $375. 157 tickets were sold at $2.50 a piece. Elivra's obituary reports she "played first trumpet with Ina Rae Hutten *(above)*, Horace Heidt Hairpin Harmony and Cavalcades of Music orchestras. She made several short movies while in Hollywood."

Linda Dahl's 1984 book, *Stormy Weather: The Music and Lives of a Century of Jazzwomen* says Elvirah[sic] Rohl was part of Irving Mills' 1934 Cavalcade Orchestra - a large jazz-flavored theater band made up of free-lancers and "truly integrated by sex." Dahl says the band broke up after about six months and many of the women players, like Rohl, "went on to work with all-woman swing units such as the Mills-backed Melodears." The Melodears were put together by promoter Alex Hyde in late 1934 and became "one of the best-known all-woman big bands of the swing era fronted by Ina Ray Hutton. Hutton was the stage-name of Chicago-born dancer and chorus girl Odessa Cowan who was appointed band leader after appearing in the 1934 Ziegfield Follies. Dahl writes "as with most dance bands of any duration, the personnel naturally underwent many changes." The Melodears of 1934 included a trumpet section of Kay Walsh, Estelle Slavin, and Elvirah Rohl

Elvira Rohl Murdock lived in New York City for most of her time in America. The 1940 Census found the 31-year old single musician living in an apartment at West 121st Street in New York with Minnesota native Virginia Darnell, another 31-year old single woman teaching at a private college in the city. Elvira told census enumerator Lillian Bell that she was not employed for pay nor had she worked any hours the week before the April 7, 1940 visit. Elvira said she was not seeking work, but did have income from other sources doing home housework. Rohl "went overseas during World War II with the D'Artega All Girl Orchestra *(next page)* touring Europe for 36 weeks."



One of that band's last American dates before going overseas was in Connecticut. *Hartford Courant* society/entertainment columnist M. Oakley Christopher's September 1944 profile of D'Artega band members explored the angle of romance. "I wouldn't care if a man was a musician or a policeman. If I loved him, I'd marry him," said trombonist June Carson in the article. "Love hits you like that - boom - and all the things you planned go boom, too... Musicians are romantic." Elvira Rohl heartily disagrees. "Romantic? Musicians, romantic? No!" says Rohl. "They are sweet-swing and jive but not romantic. No, they say pretty things, perhaps... They make pretty music, surely... But romance as the poets and classicists in music, dreamed it, no - today's musicians do not qualify!" Christopher writes Rohl "is almost swamped with rebuttals" after that statement. Band manager Ernest Lierman says in the article that "women are no more difficult to manage than men.... Yes, they leave the band. But not for marriage or advancement as often as from fatigue from travel." "You notice things about these girls," writes Christopher. "They are so alive... So aware of life and how it moves about them... Aware, for instance of the war because they have played many camps... They are on their way over seas as a unit - the largest unit ever to go... They wonder at the G. I.'s who think show-girls are frivolous. They are a little hurt by it... 'Fortunately,' they say, 'the majority



5th Army Mobile Radio broadcasts D'Artega performance from Italian Theater (1944-1945)
- *www.fifthharmymobileradio.com*

of the boys take you as seriously as you want to be taken' So they are glad they are to make the overseas tour... They are on their way. American girls!... Each different in temperament and looks... But strangely enough," concludes Christopher, "all interested fundamentally in the same things, love, marriage and a home. All Americans!"

Fourteen months later, the 36-year old trumpet player Elvira Rohl is one of 21 U.S. citizens *(12 women)* aboard the troopship, *Santa Paula* leaving from Le Havre, France on November 1st, 1945 bound for New York. The two steam turbines and twin screws of the 13-year old vessel could make 19 knots. Elvira Rohl's crossing lasted eight days. One of the most active troopships of World War II, the *Santa Paula* resumed passenger service for the Grace line after the war and was renamed *Acropolis* in 1960.

Back in the States, the professional trumpet player decided to become a portrait photographer and studied with Adolph Fassbender, a famous German technician and instructor. She was a portrait photographer at the Cog and at the Mount Washington Hotel.



Richard Murdock
- Courtesy Dartmouth College



Letterhead while in Yonkers, N.Y. (1966)
- Courtesy Dartmouth College

She died mid-morning on Thursday, February 3, 1983 at the age of 74 at her home in East Berlin, Pennsylvania. The *Gettysburg Times* reporting she was survived by her husband, tenor Richard Murdock *(left)* and a brother, Otto Rohl of Bremerhaven, Germany.

Before Murdock arrived, the Cog used promotional pictures captured by contract photographers like J. A. Mannix and J. L. Bradley. Murdock lived at the Base and documented the train crews, the visits of dignitaries (like the annual trip up the Mountain by New Hampshire's governor) and life at the Cog from 1961 to 1967 - selling prints to those in the pictures and doing special portrait work for families. Her images help illustrate this memoir. She broke ground for later photographers like Tom Doyle and his *CogArazzi* team today, although she never had a booth in Marshfield. The godfather of all these Cog photographers could be the man who took the well-documented images of passengers boarding the spur line in Fabyan, Peter Eddy.



Elvira Murdock (1962)

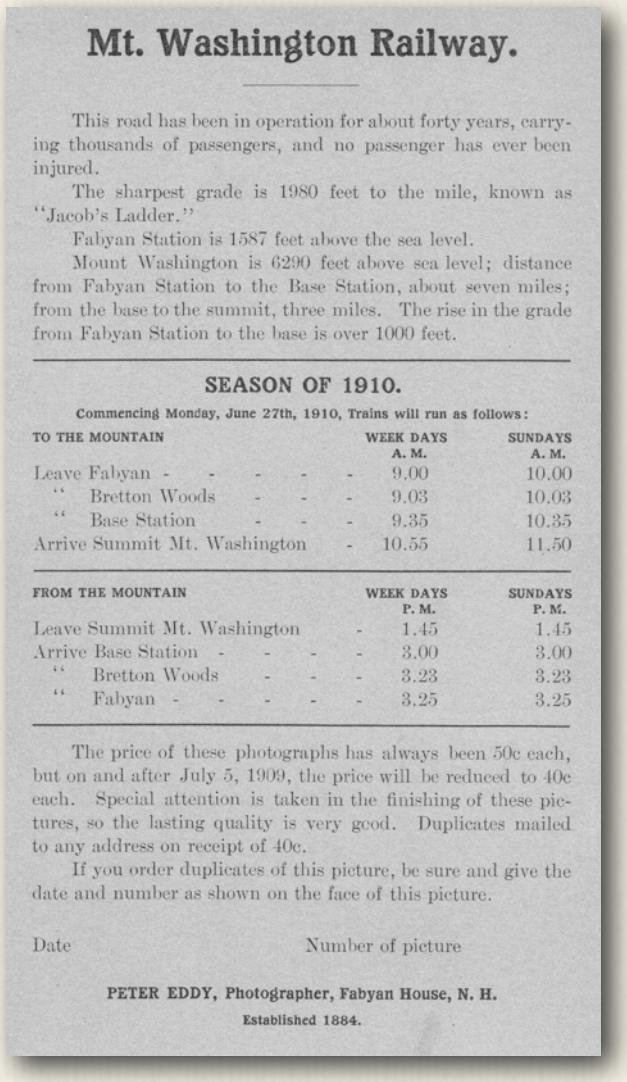
In a June 2010 *Chronicle of the Early American Industries Association* article, Roger K. Smith writes that shortly after his first wife died in March 1900, Alburgh, Vermont native Peter Eddy relocated to Carroll, New Hampshire. Eddy had "a studio at Fabyan Station where he would take photographs of the passengers on the Cog Railway car as it was preparing to ascend Mt. Washington, a two-hour trip. The passengers spent two hours at the summit, and it would take one hour and forty-five minutes to return to Fabyan Sta-



tion. This gave Peter nearly six hours to develop and mount the prints. He would have them all ready to offer for sale to the passengers when they returned."

Among the Clouds wrote about Eddy's prowess in rapidly capturing and producing photographic images in 1905, "Mr. Peter Eddy continues to furnish Mount Washington visitors with souvenir photographs, showing the cars ready at Fabyan station with the passengers ready for the journey. This year, he has added a new feature whereby every pictures shows on its face the date when taken and whether morning or afternoon. It is one of the sights of the journey to watch Mr. Eddy as with the aid of his son he captures the cars one by one with remarkable celerity. He easily holds the record for lightning photography."

Smith writes, "The date and time the photograph was taken was well documented by the sign in front of the car *(above)* so that passengers could reorder photographs according to the date taken." Duplicate prints cost 25-cents. Peter Eddy died at Fabyan on May 14, 1918 at age 70.



Mt. Washington Railway.

This road has been in operation for about forty years, carrying thousands of passengers, and no passenger has ever been injured.

The sharpest grade is 1980 feet to the mile, known as "Jacob's Ladder."

Fabyan Station is 1587 feet above the sea level.

Mount Washington is 6290 feet above sea level; distance from Fabyan Station to the Base Station, about seven miles; from the base to the summit, three miles. The rise in the grade from Fabyan Station to the base is over 1000 feet.

SEASON OF 1910.

Commencing Monday, June 27th, 1910, Trains will run as follows:

TO THE MOUNTAIN	WEEK DAYS A. M.	SUNDAYS A. M.
Leave Fabyan	9.00	10.00
" Bretton Woods	9.03	10.03
" Base Station	9.35	10.35
Arrive Summit Mt. Washington	10.55	11.50

FROM THE MOUNTAIN	WEEK DAYS P. M.	SUNDAYS P. M.
Leave Summit Mt. Washington	1.45	1.45
Arrive Base Station	3.00	3.00
" Bretton Woods	3.23	3.23
" Fabyan	3.25	3.25

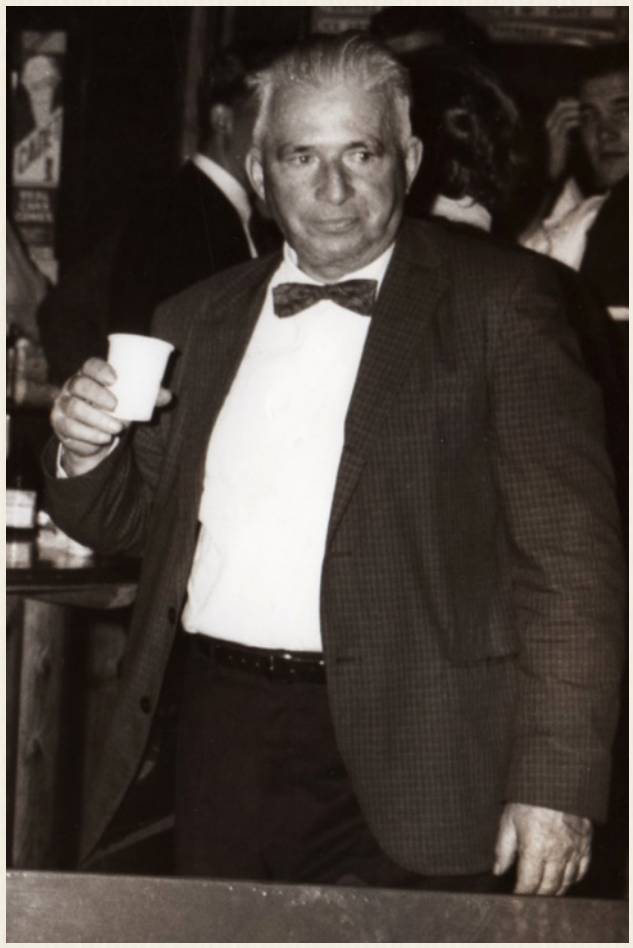
The price of these photographs has always been 50c each, but on and after July 5, 1909, the price will be reduced to 40c each. Special attention is taken in the finishing of these pictures, so the lasting quality is very good. Duplicates mailed to any address on receipt of 40c.

If you order duplicates of this picture, be sure and give the date and number as shown on the face of this picture.

Date Number of picture

PETER EDDY, Photographer, Fabyan House, N. H.
Established 1884.

- Courtesy Littleton Historical Society



Cass White
- photo by Elvira Murdock

Cabin Reservations Manager

CASS WHITE

Cass, our man with the cash box, was born in Whitefield and is now residing in Lancaster. He ran a riding stable for 42 years and spent 12 years at the Mt. Washington Hotel before coming up here. Cass said he'd always worked for himself until coming to the Cog. He called the Colonel a "great man" and also referred to the fact that he was proud to have served in the Yankee Division in World War I. *(Cog Clatter v1n9 – September 2nd, 1966)*

White's obituary revealed he served in Company D of the 103rd Yankee Division and was wounded on May 18, 1918. Lung damage from mustard gas required White be active outdoors, and thus a lifetime career as a horseman. At age 26, he married Esther Elizabeth Rines on October 18, 1924, in Lancaster, New Hampshire. He and his wife ran riding stables at the Mountain View House in Whitefield, and the old Waumbek Hotel in Jefferson. The Great Depression forced Cass to turn to dairy farming. He sold his herd in the late 40s and returned to horses, operating the Mt. Washington Hotel's stables. He was a charter member of the White Mountain Riding Club and as a Lancaster Fair director started the well-known horse show at the annual event. Cass ran the cabins at the Base until 1969.

Ancestry.com (June 2015): "When Almon 'Cass' DeweyDaniel White was born on May 14, 1898, in Whitefield, New Hampshire, his father, Carson, was 40 and his mother, Aka, was 26. He died on April 16, 1983, in Lancaster, New Hampshire, at the age of 84"

Cabin Keeper

MRS. RAMONA FRYE

Mrs. Frye has been living in Danville Vermont for 30 years although before that she lived in St. Johnsbury. She has been at the Cog for 4 years. Along with caring for the cabins, she has filled in for Cass White on his days off and controlled the cash register during the fall. *(Cog Clatter v1n9 – September 2nd, 1966)*



Ramona Frye died on November 17, 2003 in St. Johnsbury at the age of 91, outliving both her husbands - George Frye (d. Dec 1953) and Clayton Flint (d. Aug 1985). In addition to her time at the Cog, Ramona also worked for the Mount Washington Resort, Lyndon State College and the Stowe Inn. Coincidentally, the mother of another Cogger, 84-year old Ruth Paige died on the same day and her obituary appeared alongside Ramona's in the *Caledonian Record* on November 19, 2003.



Richard Paige (1962) - Ellen Teague Collection

RICHARD *"Richie"* PAIGE

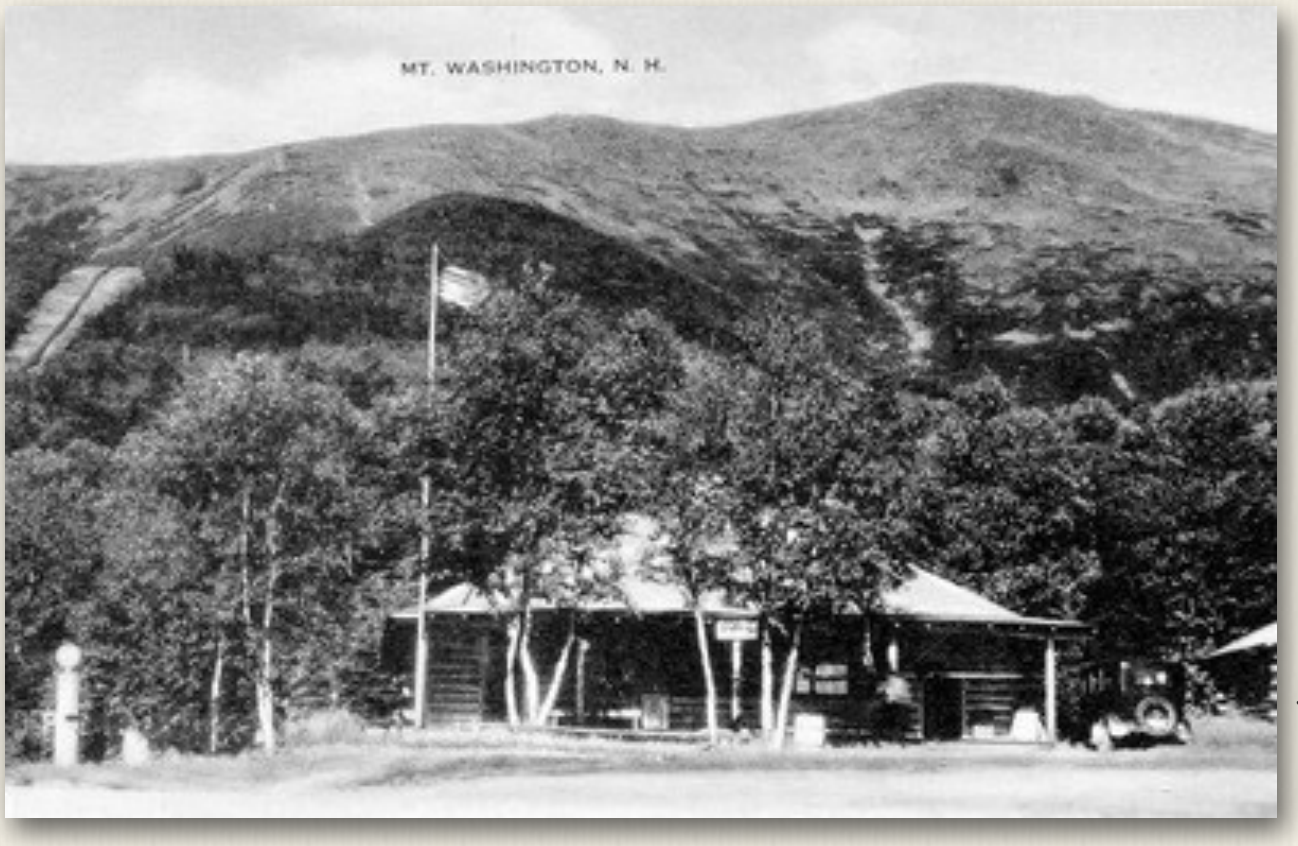
Ruth's son, Richard "Richie" Paige worked in the Gift Shop for Mike Haney. The Lewis' bought their first house from Ruth and Hobart "Hobie" Paige in 1959. Richie *(left)* drove Jitney's 1936 Buick up to the Base one year fully loaded with an uncaged house cat nervous about travel, and Jitney Jr. riding shotgun. The 3-hour trip came to an abrupt halt in Ascutney, Vermont about thirty minutes in as smoke joined the cat hair flying about the interior of the car. The big blanket box came out of the back seat, and the smoldering upholstery was doused. A hot ash from Jit's cigar had dropped during loading that morning. Richie, the cat, Jitney Jr., and the Buick survived the trip.



- Lewis Family Collection

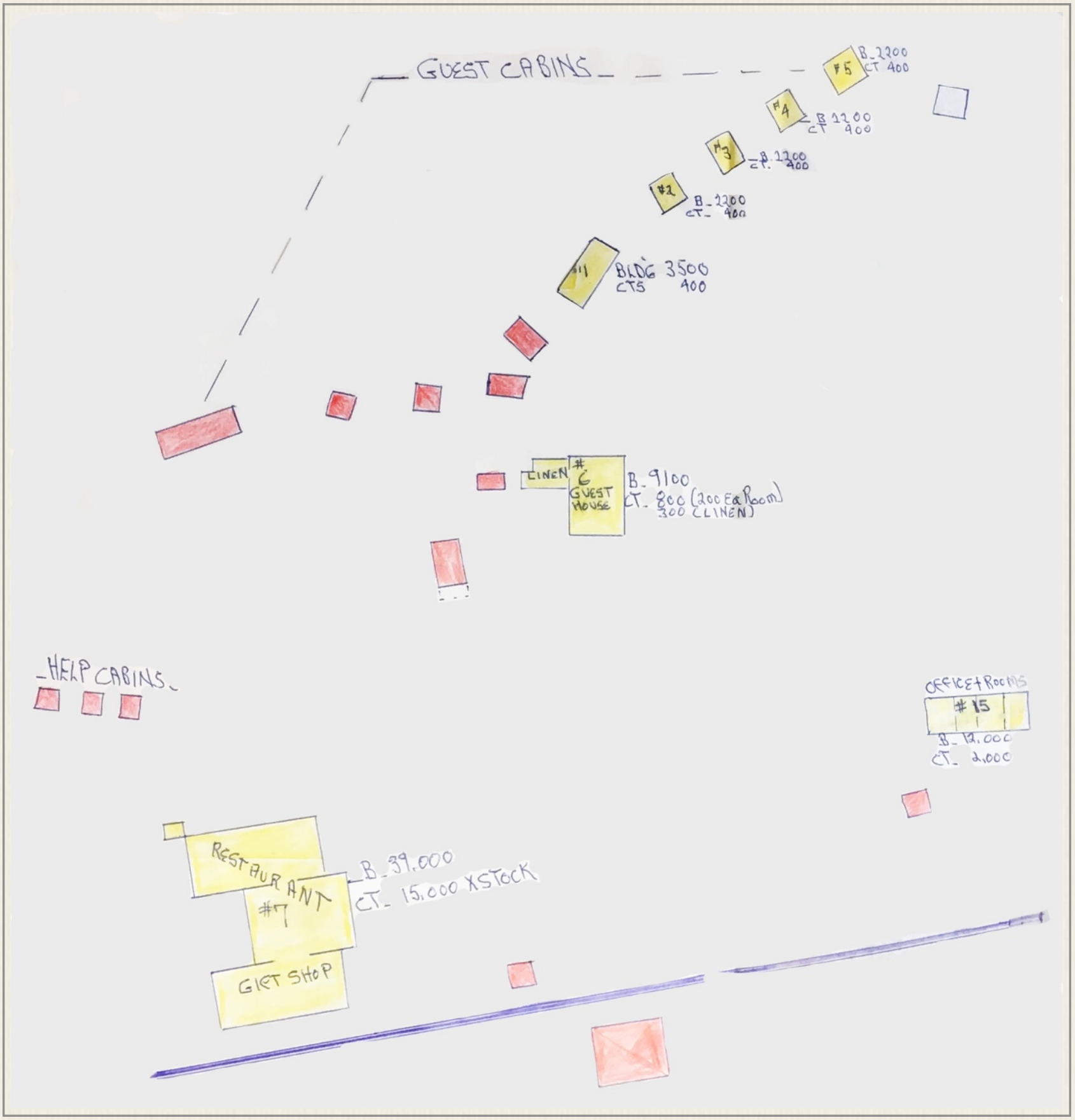
Cass White's empire of rentals was the result of the Boston & Maine Railroad trying to capitalize on the growing popularity of tourism by automobile, instead of by train.

Robert W. Bermudes, Jr. writes in the Cog Railway section of the website http://www.whitemountainhistory.org the B&M leased an acre of land to area hotelier Col. William "Billy" Barron, who built the Kro-Flite Kamps in the spring of 1925. The Kamps "included a main building that housed the restaurant, manager's quarters, and store. There were also one or two cabins during that first season, first generating revenue in early August." There was a gasoline pump, and parking was 50-cents. The B&M also builds a small station house next to the tracks by the Ammonoosuc River crossing. Briefly called "Kro-Flite Station," it becomes Marshfield Station for tourists who drove to the Base while most other Cog Railway passengers arrive by train on the Fabyan spur line.



Postcard of Kro-Flite Kamp Main Building late August 1925 - Robert W. Bermudes, Jr. collection

1968 Insurance Map



The Mount Washington Cog Railway's 1968 Lumberman's Insurance Policy contained maps of buildings that were covered *(yellow)* and those that were not *(red)*. Above is the Base Station configuration at the end of the Jitney Years. The numbers indicate coverage value in dollars for B *(building)* and CT *(contents)*. The evaluation was done by Homer Hamlin Jr. of A.D. Davis & Son, Inc.

Marshfield Gift Shop/Restaurant Replacement Cost:	$51,000
Total Other Structures Replacement Cost:	$48,100

The Boarding House

Built in 1895-96, the two-and-a-half story structure had a full kitchen, dining room, and rooms for single engineers, firemen and shop workers between 1950-1967 *(right)*. The younger brakemen were housed in the old laundry building (next to steam pump house) now known as the "Boys Dorm."

In the 1930s *(below)* a wooden walkway provided more direct access to the main station and shop area.

It was about this time that train crews started eating food there prepared by Stubby Welch.

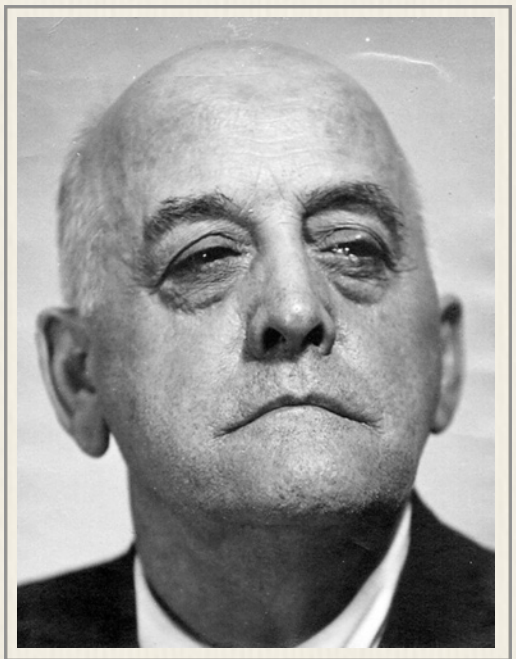


The Boarding House ready for another season with late spring snow on the Mountain
- Granger Family Collection



A Cog employee heads up the Boarding House boardwalk as the western sun casts long shadows at the end of the day (1930s)
- Granger Family Collection

Ch. 9 - Boarding House - Stubby Welch



- Granger Family Collection

ARTHUR "Uncle Stubby" WELCH

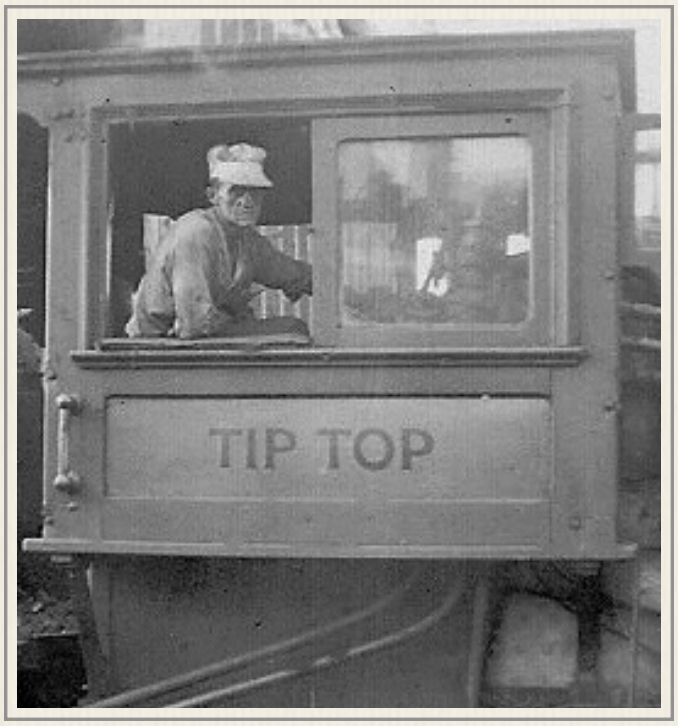
The first record of "Stubby" Welch *(left)* cooking for train crews is dated September 7, 1918. 41-year old Arthur Paddleford Welch's World War I draft registration card says he's a cook for the Boston & Maine Railroad.

Welch was born in Monroe, New Hampshire and at age 25, married Sadie S. Granger of Walden, Vermont in 1902. His occupation listed on the marriage license was butcher. Eight years later, Arthur and Sadie are farming in Waterford, Vermont with three boys; seven-year-old George, four-year-old Reginald and one-year-old Guy. Stubby's meat business took a downturn in 1912. He filed for bankruptcy in November with "liabilities of $7,547.81 and whose assets are $5,734, with $965 exempt." In March 1917, 15-year old George would be noted in the local paper for perfect attendance in the Grammar room. A Welch boy would be in the *Caledonian-Record* in December 1921 under less happy circumstances. Guy Richmond Welch died suddenly on Sunday, November 27. "He had been ill of diphtheria, but that had cleared and apparently he was making a rapid gain to health, when complications developed and his heart was too weak to resist them. Always quiet and reserved, he could be found ready to help whenever he was needed. He was a Boy Scout and had proven himself worthy of his membership."

George Welch *(right)* would grow up to be a Cog Railway engineer working with his Granger cousins.

A railroad cook in 1918, Stubby Welch is listed in records as a wood trimmer in 1930.

The Granger family believes Uncle Stubby was cooking at the Cog in the 1930s for Col. Henry Teague starting at the Summit House, and then coming down to the Boarding House kitchen. At 73, Stubby was still there cooking when Jitney arrived at the Base in 1950, and Jit remembers the old Colonel was especially fond of Stubby's lamb chops which Welch would cook and personally walk up to "the Hut" where Teague lived.



George Welch in the No. 8 (1930s)
- Granger Family Collection

Train crews were treated to Stubby's legendary onion sandwiches in their track lunches – a half-inch thick, round slice of a big Vidalia large enough to go from crust to crust between two slices of buttered bread.

According to the Barnet Directory, Stubby's winter employment from 1931 to 1938 was the Roy Brothers Croquet Factory in East Barnet. The factory, "the largest in the U.S. employing a



Roy Brothers Croquet Factory, East Barnet VT (circa1935)
- Fred Langevin Collection - www.nekg-vt.com

score of men and women, was destroyed by fire Saturday morning (Sep 10, 1938)." The *Littleton Courier* reported, "the fire was discovered in the basement of the large wooden building by the night watchman at 2:30 o'clock, and swept rapidly through the mill. The loss, estimated at $50,000 was partially covered by insurance." Consequently in 1939, the directory lists Arthur Welch as a cook.

Stubby and Sadie started spending winters in western Massachusetts where Stubby was chef at the Alpha Delta Phi Fraternity House *(below)* at Williams College in 1946. He was still there in 1951 when Col. Arthur Teague asked him to find a cook in the Williamstown area that might run the Base restaurant in Marshfield, while Stubby handled the Boarding House kitchen that summer. According to financial records, 1953 was Stubby's last summer at the Cog. When Stubby left, the Boarding House kitchen was shut down, and Pete Rusinski consolidated the Cog employee food service operation at the Base. As the nearly 60-year old kitchen was decommissioned with some equipment moved to the Marshfield kitchen and the rest being



The Alpha Delta Phi Fraternity House at Williams College
- www.alphadeltaphi.org

tossed, the Boarding House's vintage barber chair went to the dump, too - much to the chagrin of constant collector, Jitney who thought the chair was something that should be saved. *(See Appendix - 1936 Food Service for more about the barber's chair)*

Stubby's death certificate reports he was diagnosed with a congestive heart failure problem in 1953. Arthur Paddleford Welch died December 17, 1957 in Passumpsic, Vermont at age 80. Heart disease also claimed Sadie Granger Welch. She died August 6, 1969 in Passumpsic at the age of 87.



Stubby takes a break from the kitchen with 1940s-era Cog kid, Beverly Williams (July 1950)
- Beverly Williams Decato Collection

Boarding House Chambermaid

RUTH HARTFORD

Ruthie's home is in Rochester, New Hampshire. Her job of caring for the Boarding House is one which takes much time and patience. Ruthie works hard to keep the Boarding House a home away from home for 30 employees. *(Cog Clatter v1n9 – September 2nd, 1966)*

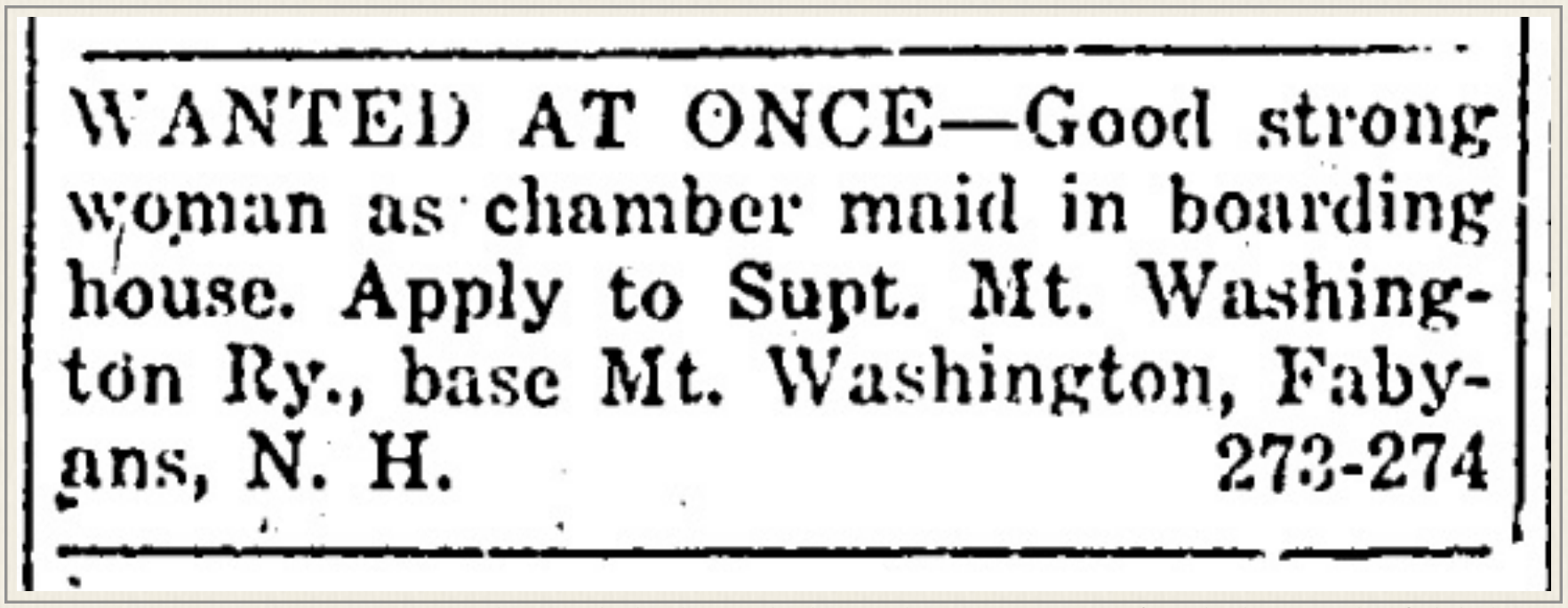


Ruthie outside Marshfield
- Granger Family Collection

"Since I wasn't allowed in the Boarding House," says Dale Ann Granger Eckert, "I only know the good stories of Ruthie second-hand though I spent many hours sitting outside Marshfield with her and her little dog, too."

"Ruthie was a sweetheart and had such bad eyesight, mostly cataracts," Roger M. Clemons recalls, "that she held the paper close and pinched her eye to read. And I remember the white poodle in spring and the gray poodle in the fall.....same poodle...."

Clemons started working at the Cog in 1969, and the next year moved into a second floor room at the Boarding House. "(Ruthie) was there when I was staying in the Boarding House," he recalled. "You couldn't throw a paper clip away. She'd go through the trash and it would be on your table when you got home. Ruthie lived just down the hall," remembers Clemons "and we would buy her soft candies when we went to Littleton. If Ruthie found a penny on the floor she would pick it up and place it on the nearest table. I can remember her using her hands, pushing her eyes around to stare at me and asking: "Are you a new boy?" I also remember riding up to Marshfield for supper and seeing her running up past the cabins as fast as she could go."



WANTED AT ONCE—Good strong woman as chamber maid in boarding house. Apply to Supt. Mt. Washington Ry., base Mt. Washington, Fabyans, N. H. 273-274

Help wanted advertisement in the Monday, May 19, 1919 St. Johnsbury Evening Caledonian - Lewis Family Collection

MRS. GREEN

Before Ruthie, Mrs. Green took care of the Boarding House in the early 1950s when Jitney roomed there. She religiously listened to the Billy Graham Crusades and sent money to Reverend Graham's organization to the point that Cog employees chipped in to buy her new teeth. She couldn't bring herself to say the words "toilet paper." Rather, when making her rounds, she would reportedly first ask the male boarders if they needed towels, then lean over and quietly whisper "do you need paper?" Brakeman Linn Knight remembers she would sing "Jesus wants me for a sunbeam" while she worked.

Jit's fireman, Hap Williams spent one summer gathering moths and other flying insects for use in the classroom. The Lyndon Teachers College student returned to the Boarding House one day to find his entire entomological collection gone, and Mrs. Green apologizing to him profusely for letting the dead insects pile up in his room. Hap thanked her, and never said a word about the real reason the bugs were collecting there.

Anne Teague Koop remembers Mrs. Green lived in the corner room on the second floor of the Boarding House - a room that overlooked both the road coming in past the Hut from Route 3 and the horse pasture alongside the building. "My father used to say you shouldn't be going into the boarding house," recalls Koop in 2018, "but... I'd just go down and see her all the time. She would pick me up and rock me in her lap. She'd just sit there and just sing - and she'd listen to this broadcast and she'd start saying 'Oh that's young Billy - Billy Graham.' I'd just sit there - it was just names and I had no idea except for now understanding where she was with her faith. Afterwards realizing that she was the first person that sort of took me in. I would be her shadow when I was younger because I just loved being with her."

Financial ledgers reviewed for this manuscript indicate a Grace E. Green worked at the Cog Railway from at least 1950 to 1957. The rest of her story remained an unsolved mystery until Jitney Jr started combing the *Littleton Courier* in 2019. See Grace E. Green Roster entry.

Ch. 9 - Rouleau

Woodsman/Groundskeeper

Monsieur ROULEAU

Another one of the large Cog Railway characters of the 1950-67 era was known merely as "Rouleau" - an impeccably dressed and highly-skilled woodsman who spoke with a lilting French accent, tended the Marshfield fireplace and used a hand-scythe to mow the tall grass all around the Base Station.



Monsieur Rouleau raking up (1966)
- Anne Koop Collection

Emile Rouleau was born on January 30, 1899 in Saint-Éphrem-de-Beauce, Quebec. At age 23, Rouleau entered the United States through the border port at Jackman, Maine on September 5, 1922. Nine years later, he married Albena Fortin in Holland, Vermont. The Certificate of Marriage indicates his bride was roughly half his age of 32. There is no record of children from this September 7, 1931 union, although Jitney remembers that Rouleau was familiar with the area around the Derby Line, Vermont border crossing. After Jitney left the Cog, he would work as a school administrator in the same area overseeing the construction of a new elementary school in Holland.

Anne Teague Koop says Rouleau came to the Cog Railway with a team of oxen to help build the log structures around the Base Station - particularly Marshfield in 1938. "He was the one who worked with wood," says Jitney, "And (I) helped (him) put in the new timber underneath the Ladies' Restrooms" in the mid-60s. Jitney says he and Rouleau were jacking up the toilet building, when he told Rouleau that if the building fell and crushed him - Rouleau should take Jit's body up to



Col. Teague, Rouleau and Father Goodie below the Bunker
- Kent Family Collection



Monsieur Rouleau on tractor
- Kent Family Collection



Monsieur Rouleau pausing to whet his scythe
- Granger Family Collection

Jacob's Ladder and throw it off because Jitney didn't want the headlines to read "Killed under the Ladies' Toilets." Jit told Rouleau he'd rather have the story say Jitney died helping repair Jacob's Ladder.

"I always looked forward to Memorial Day and going back to the Base," says Lincoln Handford, who spent seven summers at the Cog, and the "first thing I did every year was to have a smoke with Mr. Rouleau." Rouleau carried his tobacco in a brown drawstring bag in the front pocket of his shirt. He would pause, lean on his scythe and carefully roll a cigarette. Then light it and resume the back and forth work of cutting the long grass. Periodically, the hard-working Rouleau would disappear down the mountain on a bender. Col. Teague would organize the search to bring him back to the Base.

Upon his return, Jitney said Rouleau would cup his hand over his mouth and say his disappearance was due to a toothache and he could not let people look at him in that condition. "Oh I had an awful toothache," he explained in his heavily accented English. "I had to have it pulled - I didn't want to come back and scare everybody."

Ellen Teague recalled Emile Rouleau in her autobiography as "our unique Belgian" who could speak French but could not read.

"I enjoyed reading his letters to him in French. I can't remember a day when Rouleau wasn't here. He helped at whatever job was asked of him and was everyone's friend," wrote Mrs. Teague, "but he had two bad habits. He drank and he loved his women. Before coming to work for the Cog, Rouleau had been a woodsman and could



- Kent Family Collection



The Elms, Lancaster, New Hampshire "has a long history as a Governor's home,bar and local eatery." (2010)
- photo by Jeff Woodburn - Coös County Democrat

do the work of ten men. How can one ever forget Rouleau?"

M. Rouleau's obituary in August 1977 said he "was associated with the Cog Railroad for more than 40 years" and "made his home at the Elms Hotel" in Lancaster, New Hampshire. A Coös *County Democrat* article prior to the structure's demolition in September 2010 said the Elms' main building was built in the early 19th Century and was home to New Hampshire Governor Jared Williams, who also served as a U.S. Congressman and U.S. Senator for New Hampshire before the Civil War. Governor Williams died there in 1864. A boarding house during World War II, it later became more of a restaurant. An internet review said the Elms Hotel was "a restaurant first... and hotel SECOND" - the "rough crowd of loggers and hunters, along with Budweiser and whitetail deer pictures really makes this place feel special - wear your best flannel and work boots and stop in for a drink and fine meal."

Rouleau died at Weeks Memorial Hospital Saturday afternoon, August 6th, 1977 at the age of 78 after a brief illness. His family, according to the obituary, included cousins. He was buried in St. Brendan's Cemetery in Colebrook, New Hampshire after a Mass of Christian burial was celebrated in St. Brendan's Catholic church.



Monsieur Rouleau checking in at the Ticket Office
- Walter Aiken Collection



Monsieur Emile Rouleau (August 1965)
- Photo by Elvira Murdock - Teague Family Collection

Summit House



The third Summit House was built in 1915 (1935)
- www.cowhampshireblog.com

ED GRIFFIN - Manager

Ed, our Summit House manager, has been with the Cog for two years. He has worked his way through the ranks of staff from waiter to his present position.

Ed hails from Albany, Georgia, and during the winter goes to the University of Georgia and is in Pre-Med with his major being chemistry. He likes to water ski and hunt.

Being up here in the Yankee Kingdom, some Yankees are concerned about his Rebel drawl. But quick-thinking Ed says, "I'm a Yankee! It's the altitude that gives me the drawl!" *(Cog Clatter v1n2 – July 13th, 1966)*

Hotel

BORIS BAUER - Reservation's Manager

Boris comes Due North from Due West, South Carolina and is going to Erskine College. He doesn't know what he is going to do and with compass directions like that I'd be confused, too. *(Cog Clatter v1n9 – September 2nd, 1966)*

A 2015 web search found that Boris earned a BA in History from Erskine, spent two years as a US Army pilot, and went into education. He earned advanced degrees from the Universities of South Carolina and Utah and has been at Berea High School in Greenville, SC for the last 33

years. His school bio says his favorite quote is from Confucius, "When music and courtesy are better understood there will be no war." http://www.greenville.k12.sc.us/bereah/Departments/Faculty/bauer.html



Tourists at the Summit seen through the engineer's forward cab window (1950s)
- Lewis Family Collection

Chambermaids

BARBARA HALLMAN

This Barbara doubles as a hostess and chambermaid; comes from Philadelphia and goes to Ursinus College; after this she plans to be a librarian. In the fog, Barbara studies the Dewey decimal system. *(Cog Clatter v1n9 – September 2nd, 1966)*

BARBARA BOUCHER

A graduate of Southeastern Massachusetts Institute of Technology (SMIT), Barbara plans to go into Graduate School for eventually becoming a teacher. She comes from Swansey, Mass. *(Cog Clatter v1n9 – September 2nd, 1966)*

Porters



David Broadbent
- Tom Norcott Collection

DAVID BROADBENT

Dave, brother of Chuck (the seagoing one), comes from Abington, Pennsylvania, where he goes to Abington High. He is undecided on his future although his brother may let him carry baggage to the boats! *(Cog Clatter v1n9 – September 2nd, 1966)*

TOM NORCOTT

Here is a home state man coming from Berlin where he is a junior at Berlin High. Tom is a ski team letterman, too. *(Cog Clatter v1n9 – September 2nd, 1966)*

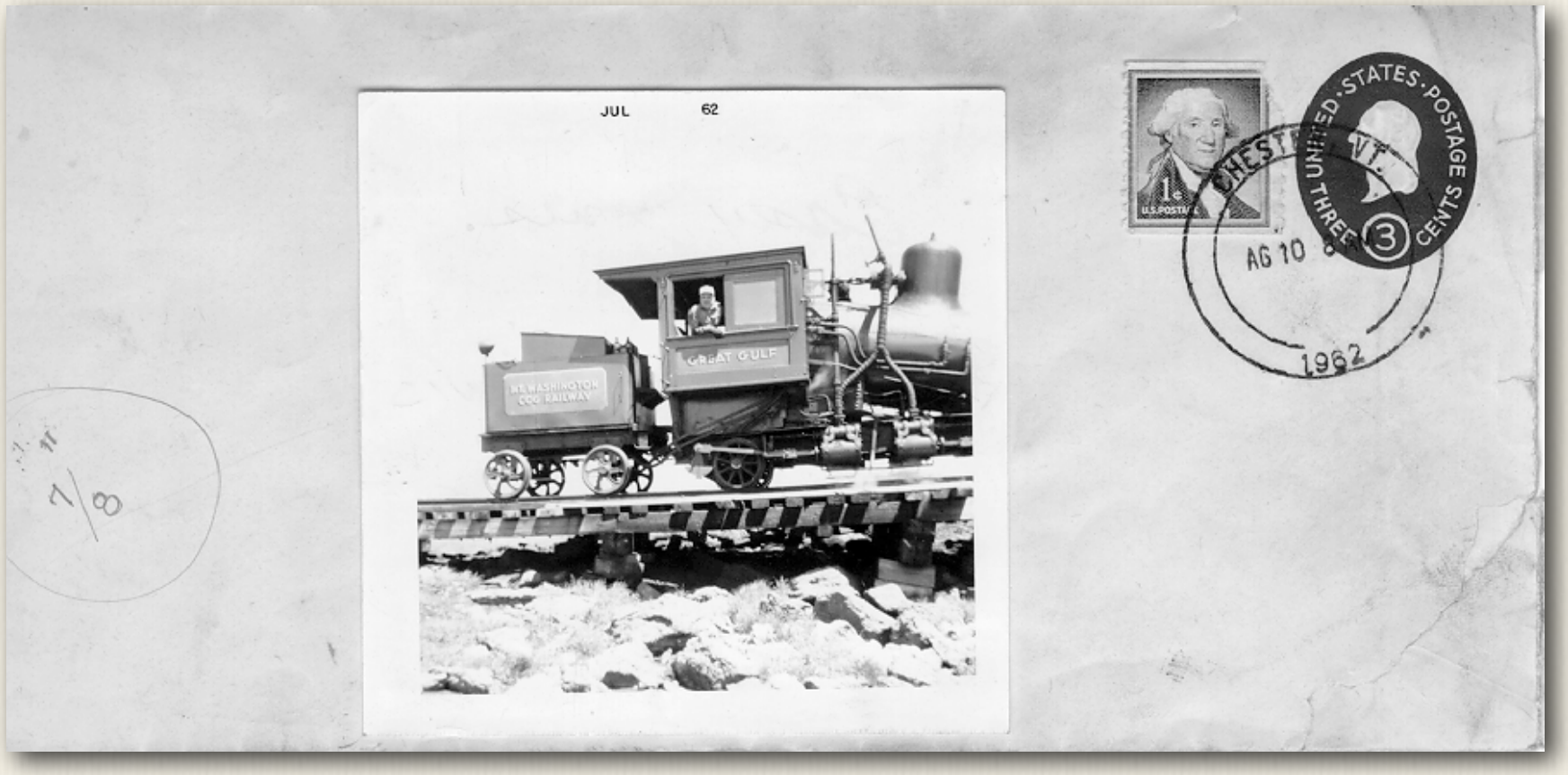
Ch. 9 - Summit House - Post Office

Postal Clerk

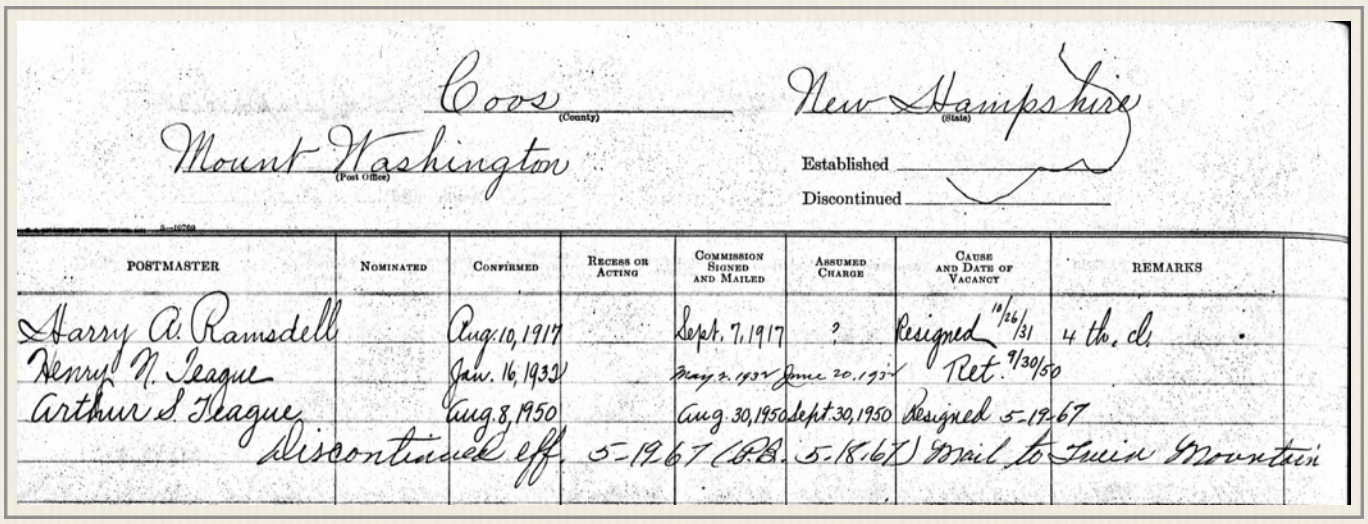
WALTER MITCHELL

A three-year man at the Cog from Tiverton, Rhode Island and goes to SMIT (Southeastern Massachusetts Institute of Technology). Walt finds licking stamps and long, lonely nights becoming bearable. He is undecided on what to do but will have a light lunch while he is cogitating. *(Cog Clatter v1n9 – September 2nd, 1966)*

In 1990, the US Postal Service ran an advertisement that said "We Deliver for You." In 1962, the lack of automation at the post office, and the fame of the Cog Railway was such that this letter was sent from Chester, Vermont with only a photo for an address in August and safely arrived at the Base Station in the mail for Jitney from his neighbor, Wayland Peck.



Walter Mitchell eventually decided to extend his run working as a postal clerk on top of the Mountain into the 21st Century even though the Summit's postal commission was discontinued in May 1967.



Coos (County) New Hampshire (State)

Mount Washington (Post Office)

Established

Discontinued

POSTMASTER	NOMINATED	CONFIRMED	RECESS OR ACTING	COMMISSION SIGNED AND MAILED	ASSUMED CHARGE	CAUSE AND DATE OF VACANCY	REMARKS
Harry A. Ramsdell		Aug. 10, 1917		Sept. 7, 1917	?	Resigned 10/26/31	4 th. cl.
Henry N. Teague		Jan. 16, 1932		May 2, 1932	June 20, 1932	Ret. 9/30/50	
Arthur S. Teague		Aug. 8, 1950		Aug. 30, 1950	Sept. 30, 1950	Resigned 5-19-67	
Discontinued eff. 5-19-67 (P.B. 5-18-67) Mail to Twin Mountain							

Mt. Washington postmasters Harry Ramsdell (Aug '17-Oct '31), Henry Teague (Jun '32-Sept '50) and Arthur Teague (Aug '50-May '67) - downloaded from Ancestry.com

Mitchell's longevity at the Summit meant he was there when the US Postal Service issued a postage stamp in 1995 honoring the Cog Railway. The man who designed the stamp in 1989, Dick Sheaff recalled in December 2014 "it was the first time I had used my spanking new first computer in the process, a Macintosh II... combined with some crisp type from a Boston typesetting firm. (Remember typesetters?) Typesetting was a large industry, employing craftsmen whose specialized professional occupation disappeared very soon after the introduction of personal computers."



Dick Sheaff's original design for the Cog stamp (left) and (right) the black & white line artwork by Boston artist Bob Brangwynne which government engravers used to produce the final steel printing plates for the stamp. The final denomination was 20-cents. from *http://www.ephemerasociety.org/blog/?p=2553*



When the longtime Summit postal clerk died in 2010, word of Walter Mitchell's passing would spread over the internet - the modern technology that spawned email, and put the US Postal Service's "snail mail" into decline.

"I just learned of the death of Walter Mitchell from Mass. Walter worked at the Cog for more than 40 years. If you bought a stamp or mailed a letter from the Summit of Mt Washington, you probably met Walter. Walter was a collector and historian. I am glad steam was still running when he worked at the Cog last fall. Godspeed, Walter" *(by cogger » Tue Mar 23, 2010 railroad.net forum)*

"A good man. He was postal clerk on the summit of the mountain (and an employee of the Cog RR) for nearly 30% of the years the Cog RR has been in existence! When he began work on the RR in the early 1960s, there were still a couple guys around who had worked there since the 1920s. He spent the 1960s, 70s, 80s, 90s, and a good deal of the 00's on the summit, selling stamps and handling the mail. Up on the first train, down on the last, every summer for close to 50 years. I'll never forget the hours and hours I spent with him in the little summit Post Office, 10-20 minutes at a time, 2 or 3 times a day for the several years I worked there. Another era comes to an end. Thanks Walter, and we'll catch you again someday, from your friend John K." *(by JohnK » Wed Mar 24, 2010 railroad.net forum)*



- Brian McMinn Collection

Ch. 9 - Summit House - Gift Shop

In the fall of 2015 on Facebook, Charles Morrill remembered a prayer Walter crafted during his numerous trips up and down the mountain - "Hail Mary, full of grace, please keep the heavy toothed wheels in place, and please have the crew bring us safely down, back to Marshfield's hallowed ground."

Gift Shop

BENJY BROWN – Manager

A graduate of the University of Georgia with a degree in Chemistry and studying medicine, Benjy should know the right ingredients to make a stay at the Summit a healthy experiment. *(Cog Clatter v1n6 – August 11th, 1966)*

FRAN DRAKE

Fran is an English Explorer at Bridgewater State College - seems I have heard that name before. *(Cog Clatter v1n6 – August 11th, 1966)*



Fran Drake
- Tom Norcott Collection

CHERYLE GRIFFIN

I understand third cousins are marrying cousins south of the Mason-Dixon line - not true, however, I bet all fellows will enjoy English in some school soon. *(Cog Clatter v1n6 – August 11th, 1966)*

LYNN ZIMMERMAN

Kalamazoo direct to you - sister too, Janet. Lynn you should be able to paint some real sketches after this summer. *(Cog Clatter v1n6 – August 11th, 1966)*

NICK CHAYKOWSKI

Even with a name such as his, Nick is no foreigner to the Summit, coming from Berlin, New Hampshire, Nick is going to Berlin High and plans to be a doctor. *(Cog Clatter v1n9 – September 2nd, 1966)*

Food Service

MR. AND MRS. HANKE - Summit Chefs

Mr. *(Hans)* Hanke has been a cook since 1953. He comes from Berlin, Germany, and this being his first year on the Cog, has provided the Summit guests and crew with good food and good morale.

Mrs. *(Sophie)* Hanke *(right)* was born in Saskatchewan, Canada. They have a son, Larry, who was also born in Canada. *(Cog Clatter v1n8 – August 24th, 1966)*



- Tom Norcott Collection

Kitchen

BRUCE FOX

Bruce is an assistant cook in the kitchen and hails from Ann Arbor, Michigan. Bruce is enrolled at Cornell and plans to be a psychologist. *(Cog Clatter v1n8 – August 24th, 1966)*

JEFF HOWARD



Jeff Howard
- Tom Norcott Collection

Jeff is an assistant cook, who comes from Littleton, New Hampshire. He is going to the University of New Hampshire and is also going to be a "head shrinker." *(Cog Clatter v1n8 – August 24th, 1966)*

DAN MACE

Dan *"The Dishwasher"* Mace goes to Goffstown High, and will be a senior at his hometown school. He is known as the philosopher of the kitchen. *(Cog Clatter v1n8 – August 24th, 1966)*



Norm Timberlake
- Tom Norcott Collection

NORM TIMBERLAKE

Norm is from Fall River, Massachusetts, and was valedictorian of his class at Southeastern Massachusetts Technical Institute. He is going into business. *(Cog Clatter v1n8 – August 24th, 1966)*

A 2015 web search indicates that the business Norm went into may be Timberlake Imports in Fall River.

RAYMOND McKENZIE

Ray is from Berlin, New Hampshire and is said to be motorcycle-crazy. He's going to go into the Navy, after which he plans to be a professional welder. *(Cog Clatter v1n8 – August 24th, 1966)*

Waiters

GEORGE OUELETTE

George is from Berlin, New Hampshire, not far from this mighty mountain. He is attending George Washington University with plans of either being a lawyer or a teacher.
(Cog Clatter v1n8 – August 24th, 1966)



- Tom Norcott Collection

TOM HILSMEN

Tom *(left)* is one of quite a few up there on the Summit, who hail from Albany, Georgia. Tom also goes to the University of Georgia where he is in Pre-Med.
(Cog Clatter v1n8 – August 24th, 1966)

JIM STUART

This fall, Jim will be at the University of Georgia studying to become a doctor. He comes from Greensboro, Georgia. *(Cog Clatter v1n8 – August 24th, 1966)*

BUDDY SMITH

Buddy is going into the Air Force this fall. Last year, Buddy, who is from Albany, Georgia, was enrolled at Auburn University. *(Cog Clatter v1n8 – August 24th, 1966)*

Ch. 9 - Summit House

MAURICE SARAGOUSSI

Maurice comes from Brooklyn New York, and is enrolled at Pratt Institute. He plans to be an architect. *(Cog Clatter v1n8 – August 24th, 1966)*

A 2015 web search revealed the firm "Maurice Saragoussi Architects" was established on Varick Street in New York City in 1992.

Counter

CHUCK BROADBENT

Chuck who is an English major at Ursinus College is noted at the Summit for his boat excursions to the Lake of the Clouds (Chuck, it is not unusual for fantasy to overpower reality at this altitude.) *(Cog Clatter v1n6 – August 11th, 1966)*

JAMES MORRIS

James, who is an Art student at the University of Georgia, is known for painting with long, slow strokes and talking the same way, too. (Watch these Yankees, Jim - they may try to frame you.) *(Cog Clatter v1n6 – August 11th, 1966)*

TESE LEFEBVRE

Tese is at Northeastern University with a future planned as an English teacher. Two years at the Summit is nearly at least a good average - Tese you will have to reverse your English to capture Chuck and Koop. *(Cog Clatter v1n6 – August 11th, 1966)*



Theresa Lefebvre
- Tom Norcott Collection

DAVE DEXTER

We find Dave at Aurora College planning to teach English and Drama. Counter experience at the Summit should give you some good lines in case you decide to write plays. Dave - I understand lines go way out to the gift shop on busy days. *(Cog Clatter v1n6 – August 11th, 1966)*

ROGER MILLER

Roger is at Albington High and doesn't know what he plans for the future - that's OK Roger, I know another Roger Miller who wasn't sure what he would do and turned out to be a King and a Star who did skating as a pastime. *(Cog Clatter v1n6 – August 11th, 1966)*

Maintenance

JOE CROZACK

From White Plains, New York, Joe finds that being a Princeton Pre-Med student helps him to work on the inside of a submarine. (Appendectomy on a yellow submarine ?) *(Cog Clatter v1n9 – September 2nd, 1966)*

TERRY TINER

Terry, from Macon, Georgia, plans to put a symphony aboard the sub. He goes to Agnus Scott College with music in the future, I assume. *(Cog Clatter v1n9 – September 2nd, 1966)*

PETE MARTELL

Coming from Goffstown, New Hampshire, and going to Goffstown High. Pete knew a little more about New Hampshire and is the navigator for the Lake of the Clouds trip. *(Cog Clattter v1n9 – September 2nd, 1966)*

JACK KILGORE – Night Watchman

Jack readily agrees that the land of Cotton and this mountain are two separate environments. He comes from Deluth, Georgia, and attends the University of Georgia with his future undecided. Jack is known for his skill on the accordion. So it is pleasant to know - Kilgore was here! *(Cog Clatter v1n9 – September 2nd, 1966)*

Other Summit House Personnel

"Albert" - Maintenance

Albert is another classic Cog character whose last name has gone missing over the last six decades, while his exploits have been passed down in the oral tradition of the mountain.

Summit House maintenance often involved fixing frozen or broken water pipes. Albert's plumbing technique did not involve removal of the offending pipe, but rather putting a new pipe around the leak. The water would flow but an increasingly intricate web of metal tubes developed in the various crawl spaces under the Summit House. When his successor decided it was time to strip out the old pipe and re-plumb the facility, Albert's handiwork filled a flatcar to overflowing.

Albert didn't have a car. One day, Albert used the Summit House phone to book a cab to meet him when the train arrived at the Base Station and take him to his destination. The nearest cabbie would have to drive quite a distance just to make the pick-up. The fare promised to be quite lucrative. On the way down the mountain, a fellow train passenger agreed to give Albert a lift. The train and the taxi arrived at the Base. Albert told the driver he didn't need him - that he'd found another ride and left the cabbie fuming at the platform.

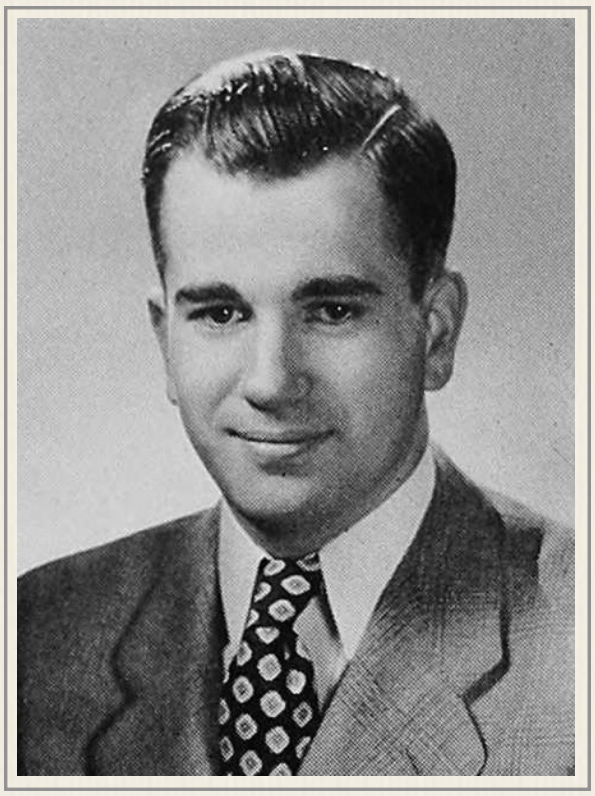
The last straw for Albert may have involved a a feminine hygiene product that had apparently clogged a toilet in a Summit House women's restroom. Albert fished the clog out and marched through the crowded lobby with the offending tampon dripping onto the floor at the end of the coat hanger snake held before him - loudly and profanely complaining about the female gender.

Clyde Philbrick - Maintenance (1952 - 1954)

Clyde Philbrick of Mexico, Maine was 17-years old when he worked taking care of the Summit House the year Hank Lahey managed the facility. His younger brother, Paul would follow his Clyde to the mountain in 1953 and eventually become the Cog's shop foreman. Construction of the military cold weather test facilities just down from the mountaintop may have influenced

Clyde's decision to enlist in the U.S. Air Force. He died in February 2009 in Biloxi, Mississippi at age 73.

Henry C. "Hank" Lahey Jr. - Manager (1954)
Margaret "Peg" Malloy Lahey



Henry C. Lahey, Jr. (1952)
- Boston College Yearbook

Hank found the Cog Railway when he was attending Boston College and hiking on Mt. Washington with some friends in 1951. They drove to the Base Station and climbed up the Ammonoosuc Trail to the summit. When they reached the top, the weather soured quickly and visibility became zero. They panicked. They started hiking down the Auto Road which was more visible in the murk, but the group quickly realized that route would bring them down to the wrong side of the mountain.

Then they decided, not very wisely, to go off trail with a compass and head west. Not knowing the mountain they did not realize they were very close to the Great Gulf - a glacial cirque with a 1600-foot headwall. Fortunately, they did not end up in Great Gulf, but came to the rail line near the Skyline platform when they heard a train coming down.

As it came into sight the group frantically waved the No. 3 *Base Station* down. The engineer stopped and they told him their plight asking if they could get a ride down. He said ok, but they were to stay on the front platform of the coach, and he would slow down just before the Base Station where they were to get off before the train reached the platform.

That day was Hank's first encounter with the Cog Railway and he loved it. He had loved trains since he was a small child, so love at first sight was not surprising. Later that season, he returned to the area on a foliage trip with his family, Henry Senior and mom, Frances. They drove up to the Base so Hank could see it again. Lahey was also hoping he might be able to get a job there the following summer. He asked about jobs at the ticket office and was directed to Arthur Teague who gave him his address and told him to write him in the spring. Hank wrote that next spring and Arthur offered the 20-year old college student a job

Hank spent many summers at the Cog beginning in 1952. During his first summer he worked around the grounds and trained as a brakeman. He broke for Cliff Kenney on the No. 2 *Ammonoosuc* and Leo Boucher on the No. 3 *Base Station*. In 1954, he served as Manager of the Summit House with Bob Kingston as his assistant manager.

Summit House management that year included trying to keep track of Nome, the weather observatory's dog. Hank remembers Nome's reputation of eating children's ice cream cones at the Base, while jumping through open windows to gain entry to the Summit House - never using the



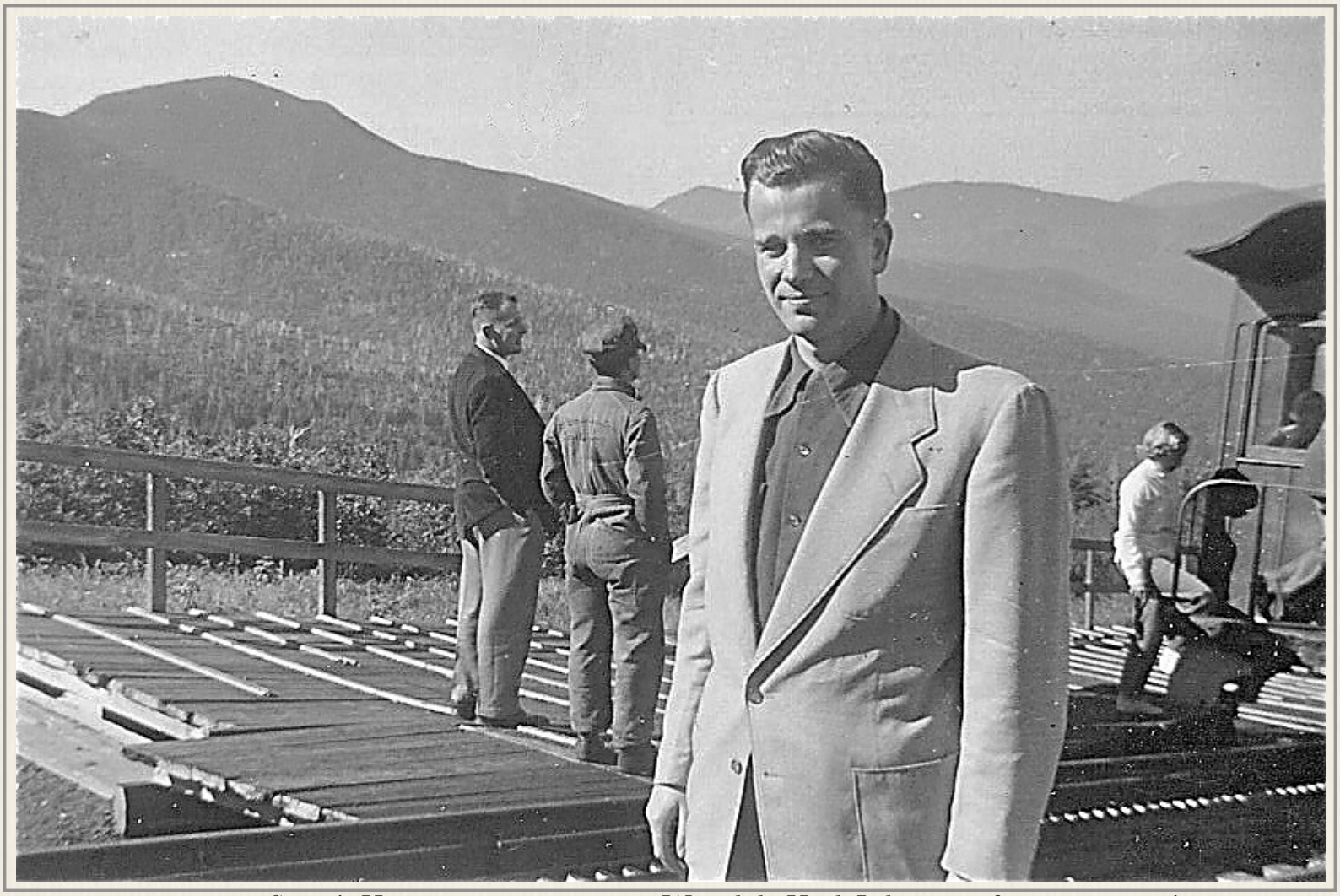
- New Hampshire Then and Now FB page

door. The large malamute *(left)* was a direct descendent of Admiral Byrd's Antarctic dog teams.

Paul Philbrick's older brother, Clyde handled the maintenance and janitorial chores and Bob Purdy was doing the cooking at the start of the season. He left after a short time. Kingston arrived after Purdy's departure, but did not cook.

During one summer thunderstorm, Hank remembers a lightning strike punching a hole in the large coffee urn situated next to a window creating a fountain of java spilling onto the floor.

Lahey also recalls being awakened in the middle of a stormy night by the watchman who told him there was a fire in the Summit House fireplace, but they couldn't figure out how it started – lightning perhaps, but "they never determined what happened."



Summit House management team at Waumbek: Hank Lahey poses for camera as assistant manager Bob Kingston (far left) talks with brakeman as passengers board coach (1954)
- Lahey Family Collection

Ch. 9 - Summit House - Hank & Peg Lahey

Lahey came down to the Base in 1955 and worked in the Ticket Office with Charlie Griffith, while also traveling to local businesses bringing them Cog information to help drum up business.

Hank was drafted into the Army in the fall of '55 as a psychologist. He finished his commitment to Uncle Sam in the late summer of 1957 and then made another commitment by marrying Margaret Mary "Peg" Malloy on August 17th. The couple had met two years before as graduate students at the University of Iowa. At the time of their marriage, Peg was working as a speech pathology instructor at the University of Connecticut while living with her parents, George and Jeannette (Wall) Malloy.

Mr. and Mrs. Lahey returned to the Cog in 1958. That first summer they lived in the cottage next to the Jitneys, and ate in the Marshfield kitchen with other crew.

The 26-year old Peg worked in the office above the Gift Shop answering Arthur's mail, typing documents, making calls for him and working with the new accountant.

That fall, Peg went back to teaching at UConn and Hank started teaching at Manchester High School while picking up his guidance counselor accreditation. They lived in an apartment just outside Storrs, Connecticut.



Mrs. and Mr. Lahey at Cog Party (1961)
- Lewis Family Collection

1958 was the only year that Peg worked at the Cog as the next summer the Lahey's were joined by their first daughter, Diane Marie, who had been born in the spring.

Hank was in the ticket office in 1959, this time with Cliff Kenney, and he was also named Assistant Manager of the Cog. This job meant spending time, not only in the ticket office, but also overseeing advertising and helping Arthur with other administrative tasks. Lahey designed and wrote a new brochure *(next page)*, and travelled to many local businesses encouraging owners to send tourists to the Cog.



Hank Lahey open & ready for business
- Lahey Family Collection

That year, the young family moved into the "*Peppersass* House" while Harold and Gladys Adams moved in next door to the Jitneys.

Hank continued to work summers as Assistant Manager. Education was his focus the rest of the year moving from Manchester High to Director of Guidance in the nearby Hebron, Connecticut school system. Their second daughter, Denise Louise, was born in 1962 and came to the Cog that year.

Peg now wonders if the Teague horses in the meadow across the road influenced their daughters. "Maybe our

Did You Know That . . .

M — Mt. Washington is the highest summit in the northeastern part of this continent and is located in the heart of the White Mountain National Forest.
T — Darby Field, of Exeter, N. H., is the first man known to have reached the summit of Mount Washington in the year 1642.
W — Mt. Washington has become one of the most famous resorts in the world.
A — A continental ice sheet once covered Mt. Washington.
S — The summit climate is similar to that of 50,000 to 100,000 years ago.
H — There is an 1100 foot well on the summit.
I — This well must be electrically heated to transport the water through 200 feet of permanently frozen ground just beneath the summit.
N — The lowest recorded temperature at the summit was 49 degrees below zero; the highest, 74 degrees.
G — The temperature falls below zero on over 65 days every year.
T — Helicopters and ski-planes have landed near the summit.
O — Your locomotive is using a ton of coal and 1000 gallons of water on this ascent.
N — The food for the winter inhabitants of the summit is brought up in an eight months' supply each fall.
C — The average annual snowfall is 177 inches.
O — The average annual wind velocity is 37 M.P.H.
G — Hurricane wind velocity of 75 M.P.H. is attained on over half of the days during the winter months.
R — The highest wind velocity ever recorded was on Mt. Washington—231 M.P.H. in April, 1934.
W — The present Summit House was constructed in 1915.
Y — The oldest building on the summit is Tip Top House, built in 1853.
N — The Lakes of the Clouds is said to be the highest body of water in the eastern part of the United States.
H — You gain twenty minutes of daylight on the summit.

THE PRESIDENTIAL RANGE
HIGHEST PEAK, MT. WASHINGTON
In order of position from North to South

Madison	5,380	WASHINGTON	6,293
Adams	5,805	Monroe	5,390
Quincy Adams	5,470	Franklin	5,028
Sam Adams	5,585	Pleasant	4,775
Jefferson	5,725	Clinton	4,275
Clay	5,553	Jackson	4,012
	Webster 3,875		

The Biggest Treasure in New England!

MT. WASHINGTON, N.H.

3¼ MILES FROM TOP TO BOTTOM!

6293 FEET UP!



SEE and RIDE ON WORLD'S FIRST COG RAILWAY!

This is the story of your trip up Mount Washington on the World's First "Cog" Railway, invented and built by Sylvester Marsh of Littleton, N.H. This unique railway, after three long years of construction, was opened on July 3, 1869 and has operated continuously since that time except for one year in the first world war and three in the last.

Weather permitting, trains will leave the Base Station every time the clock strikes the hour from nine in the morning until six in the evening (9 a.m. to 6 p.m., D.S.T.). When traffic demands, extra sections are run on the regularly scheduled trips and this causes the trains to get off schedule. In June and late September trains run at 11 a.m. and 2:15 p.m.; others as traffic demands.

WEAR A TOPCOAT.... while others Roast!

The cog train has many safety devices and can stop and start at any place on the track. Should the train stop at any point between stations, all passengers are requested to stay in their seats until the trainman gives instructions. Please do not run or hurry at any time when you get off the train on the mountain side as the platforms are inclined.

Special overnight rates have been arranged with the Mount Washington Summit House (open June 20 to late September, weather permitting). Dinner, lodging and breakfast at the Summit House and round-trip fare on the railway is $12.00 to $16.00 per person. Overnight passengers may go up the mountain on any train and return the next day on any train. If you wish to see the accommodations, please ask the clerk at the desk and he will gladly arrange for your inspection. Anyone desiring to contact the summit for reservations or information may telephone Gorham, N. H. 04.

As one ascends the mountain, pushed by the sturdy engines with automatic safety devices on both car and engine, one feels a perfect sense of security.

Almost immediately after starting we cross the Ammonoosuc river and some of the many falls of the Ammonoosuc. Here is the beginning of the turbulent river which bears this name.

Soon appear the vistas, originally cut by the C.C.C. boys, which give a wonderful view of the ravines and the mountains, until we reach Waumbek tank, 3800 feet above sea level. (Take notice of the birch trees which are being killed by the birch borer.) Here you see an elevated view of the Mount Washington Hotel, and far beyond are the villages of Bethlehem, Twin Mountain, the Franconia range, and on a fairly clear day the Green Mountain peaks of Mansfield and Camel's Hump.

If you are on the 10 a.m. train, your train continues on to the Summit. If your train is a later one, it goes on a side track while the down-coming train passes you. Then you continue on your upward trip.

On the right now appear the Lake of the Clouds Hut, a camp of the Appalachian Mountain Club, and a view of Mount Monroe, Franklin, Pleasant, Clinton, Jackson and Webster mountains. After leaving Waumbek, on the left is Burt's ravine, made picturesque by the numerous landslides which scar the surface of the mountain. To the left there is a view of Mount Clay, Jefferson and the Adams group, northern peaks of the Presidential range.

Soon the half-way shelter is reached, at an elevation of 4,600 feet. Believe it or not, this house is level. A short distance beyond, in front of the white board, is a small profile of the old man of the mountain. (Please stand up or watch some one walk up the aisle and you will see gravity defy your eyes by a rather funny sensation.) As we leave the timberline, comes Jacob's Ladder, the steepest part of the railroad with a grade of 37.41% (an elevation of 14 inches for every three feet forward). This reaches into the region of Arctic Vegetation and Light.

At the left, far over the depths of Burt's ravine, are seen the villages of Jefferson, Whitefield and the gleaming waters of Cherry pond and many peaks in northern Vermont and Canada.

Arriving at the skyline, you see, marked by pyramidal piles of stones (cairns), part of the Appalachian foot trail that runs from Maine to Georgia. A short distance above this point the Appalachian foot trail crosses under the trestle. Here at the skyline you normally pass the down-coming train on the second side track.

From here we continue on to the Summit, passing the Great Gulf water tanks where locomotives sometimes stop for water. On the left is the Great Gulf ravine which has a sheer drop of almost 2,000 feet to tiny Spalding lake. Farther in the distance is the Androscoggin valley and river. Near the track are several large oil storage tanks for the Channel 8 TV Station located on the Summit of Mt. Washington. The large building has been used as the Armed Services Ice Research Base.

The Mount Washington Summit House is now in sight. On the right we can see the Lizzie Bourne monument erected in honor of the first woman to die while climbing Mount Washington. A short distance beyond on the left there is a bronze plaque marking the spot where Chadwick and McAdams died in the winter of 1932 while attempting to climb to the summit.

We now arrive at our destination, the Mount Washington Summit House, which has city conveniences on a mountain top. Here will be found rest rooms, a gift shop, post office and counter service (help yourself style).

You may also be greeted with glimpses of noble peaks in New Hampshire or the island-studded waters of Lake Winnipesaukee. P. T. Barnum said, "The second greatest show on earth." President Grant said, "Man seems so small when you look at the universe."

Located on the Summit of the mountain is a small year round colony of about 20 scientists who operate the U.S. weather station, TV transmitters, Mt. Washington Observatory and others engaged in icing research, due to the fact that the weather is considered the worst on the North American continent. The fastest wind ever recorded by man, 231 M.P.H., was recorded at the Observatory in April of 1934. Passengers are invited to visit the exhibit room at the Observatory, where they will find weather instruments and other items of interest. Behind the Observatory is located television station WMTW-TV which covers the widest territory of any TV station in New England.

The return trip gives you different views and is equally as enjoyable as the trip up.

The Mount Washington Railway Co.
Arthur S. Teague, Pres. & Gen. Mgr.
Henry C. Lahey, Asst. Mgr.

girls picked up their love of horses from watching the horses in the paddock across the street in front of that house?" she writes. "As a camp counselor in her teens, Diane helped teach horseback riding. Denise retired early from a successful career in Silicon Valley, and now breeds and raises horses who will be trained to compete in eventing horse shows."



Diane & KC (Kitty Cat) on porch steps (1962)
- Lahey Family Collection

Besides raising children there were other memorable events for the family at the Cog. "Hank reminded me of the party at Waumbek one summer - a cookout - and I got to ride down in Jitney's engine. My only ride in a cog engine and it wasn't even my birthday!!"

In 1962 the Avon, Connecticut School system asked Hank to sign a 12-month contract as Di-



"Peppersass House" built in the 1930s to display the original Cog engine. Later moved to provide housing. Seen here with Denise Lahey likely in the carriage on porch, a white screening material protecting the newborn from the black flies. (1962)
- Lahey Family Collection

rector of Pupil Personnel Services. Thus, summer work at the Cog was no longer possible. "1962 was our last summer at the Cog," recalls Peg "It was hard to leave."

They left the mountain and both got their PhD's - Hank first while working and studying for three years at UConn. Peg next in New York City where Hank had begun working at the Bank Street College of Education.



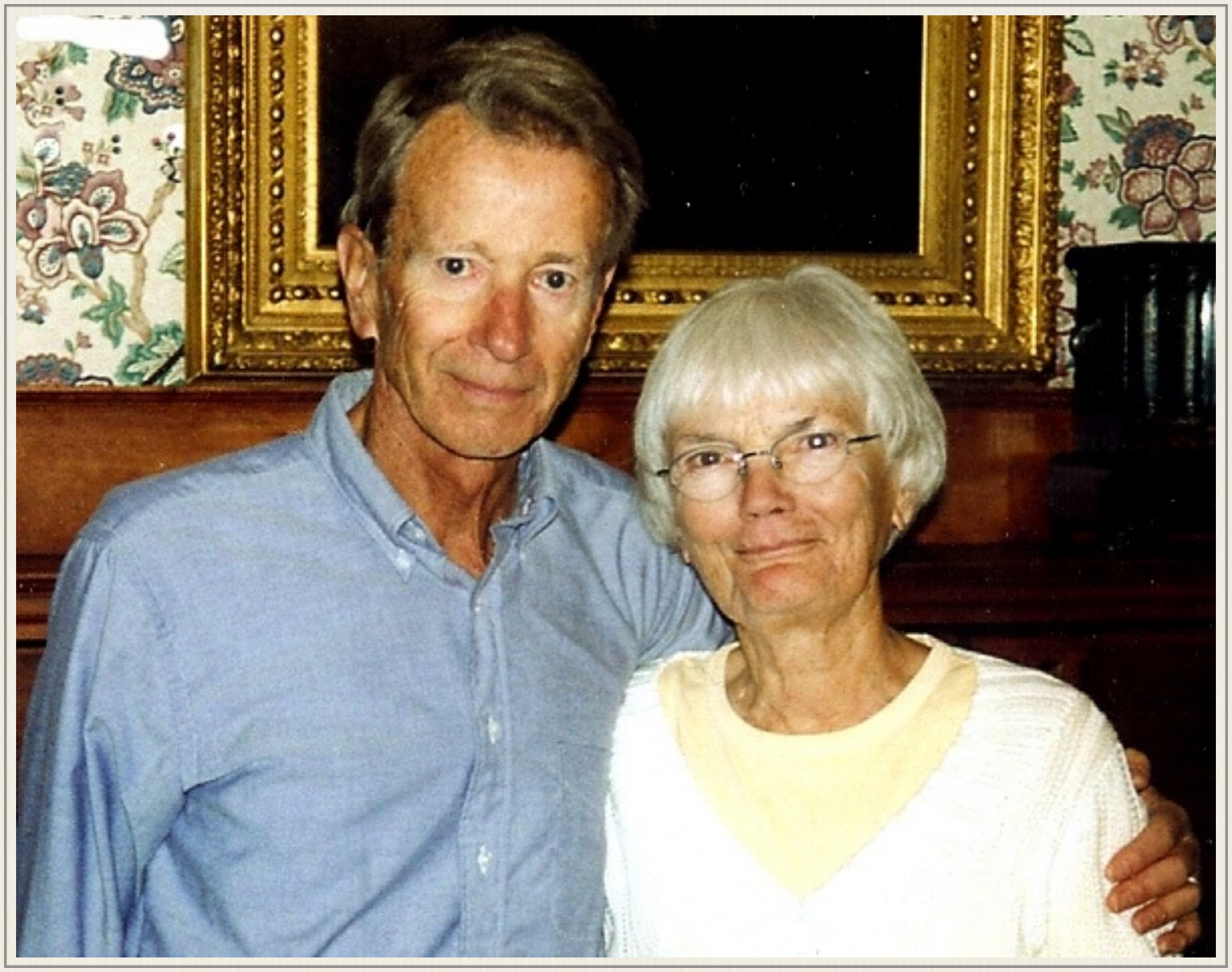
Dr. Lahey (1999)
-Ashafoundation.org

Her study and research throughout the rest of her career focused on early child-language development, and how information about what and how children learned language might be useful to professionals working with children who had problems learning their first language. According to a report on the web, the 1978 text she co-authored with Lois Bloom, and the revisions she wrote in 1988 revolutionized clinical treatment in child language such that practitioners using the approach used to say they had "Lahey'd the sample."

While living in New York City, they missed the mountains and first built a hill-top vacation home in Gilford, New Hampshire - then a "self-sufficient house" in Orford.

Finally retired, the Laheys sold the Orford property, and spent summers on Cape Cod and winters in Monterey, California (close to daughter, Denise who was then living in San Francisco). Moving back east, they tried North Carolina for winter warmth, but finally followed their hearts back to New Hampshire.

Hank and Peg Lahey have been at the Riverwoods Continuing Care Retirement Community in Exeter, New Hampshire for over 10 years ("Someone else to do the work and someone to care for us if needed," they note). They usually manage to get up to the White Mountains at least once a year and still do visit the Cog. The "*Peppersass* House is no longer where it was, the steam is

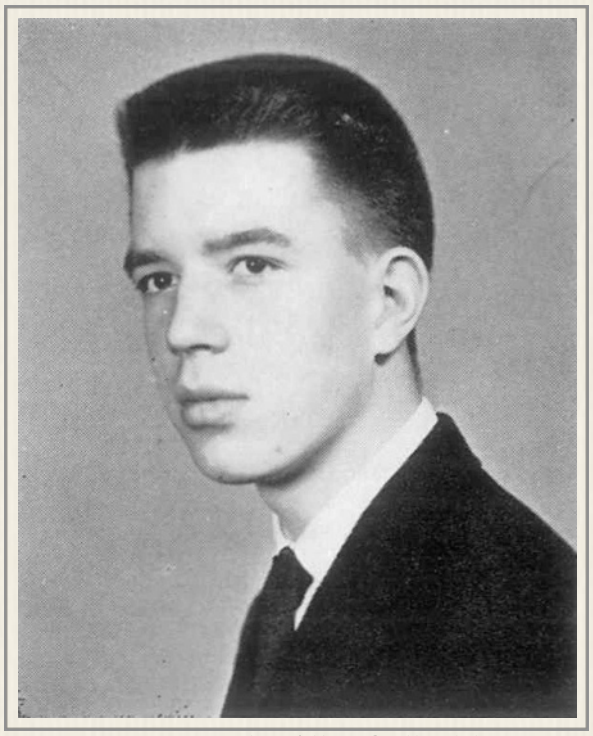


- Lahey Family Collection

gone (well almost), and things have changed," writes the pair in late 2015, "but it is still a beautiful place with many fond memories."

Alan Galbraith

John Alan Galbraith was born in July 1941, the first of four sons to John Kenneth and Catherine (Atwater) Galbraith. Alan's dad was working in Washington, D.C. for the government. The family was living in Cambridge, Massachusetts when the 17-year old Phillips Exeter Academy student *(right)* came to the Summit House to work at the hotel's soda fountain in 1958.

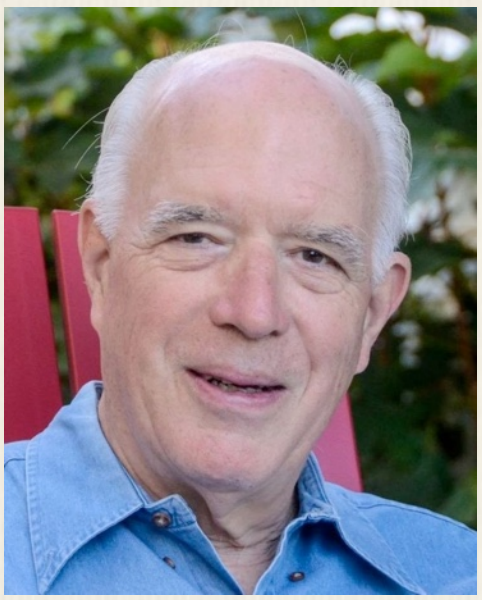


John Allen Galbraith (1959)
- The Dean yearbook

1958 was also the year his father's book, *The Affluent Society* was published and Jitney thought he might obtain a discounted copy for his continuing education through the Galbraith family connection. Jitney had been talking with the teenager as tourists roamed the summit, while the engineer waited to be dispatched back down the mountain. He found the young man to be "a great guy." However, rather than getting a copy of the book, Jitney learned about the inside of the publishing business. Jitney says Alan told him "even I have to pay for it."

Alan Galbraith doesn't recall that exchange in late March 2016, but he does remember using the Summit House 'pool' - taking "a dip in the water tank at the top (once was enough; the water was cold)."

Alan was managing the gift shop on top in the summer of 1959. In addition to the bracing memory of his summit tank swim, Alan remembers he and couple of other summit employees "walking down the line early one morning, in time to take the first train back up. I recall being marginally anxious about the grease on Jacob's Ladder. It was not a place where one could risk a slip."



Mayor Alan Galbraith (2016)
- LinkedIn

Galbraith went to Harvard and graduated in 1963 with a degree in Political Science and Government. Then a law degree from the University of Michigan in 1966. He went to California, taught legal writing, provided assistance to the northern California Indian community before clerking at California Supreme Court justice Stanley Mosk. In 1968, he joined the prominent Washington, D.C. law firm, Williams & Connelly and was with them as a partner for 39 years.

Alan Galbraith retired to California and in 2009 began being involved in the civic affairs of the City of St. Helena in the Napa Valley - first as a planning commissioner, then tackling groundwater is-

sues, chairing the Napa County grand jury for a year before being elected mayor of the City of St. Helena on November 4, 2014.



"This brass circle embedded in rock is the U.S. Geological Survey marker indicating the exact summit of the mountain, 6,288 feet above sea level. This is the highest point in New England. The cat in the background is the pet of the observatory staff and adds one homey touch to the bleak and rocky scene." Picture and caption prepared by Ellen Teague for museum display (1980s) - Bencosky-Desjardins Collection

Tale of the Tape - Changing Elevations

Articles in the Aggregated Timeline indicate how Mount Washington's "official" elevation fluctuated between 6,300 feet to 6,285 feet. Here's the National Geodetic Survey's Control history from a July 30 1997 retrieval found at http://www.peakbagging.com/BM%20Data/NH.TXT

Mount Washington (1983) 6288.2 (feet)

Superseded Survey Control - Station Description
Bench Mark Disk set in a boulder - may hold, but of type commonly subject to surface motion

Described by US Geological Survey 1958 - On the summit of Mount Washington and is on land owned by Dartmouth College. The mark is a standard U.S. Geological Survey bench mark disk stamped 6284 ft., is

cemented in a drill hole in a sharp-topped boulder which marks the highest point of mountain. It is 1.4 feet northeast of the northeast side of water tank.

Superseded Survey Control - Station Description
Bolt set in rock outcrop - most reliable - expected to hold position/elevation well.

Described by Coast & Geodetic Survey 1849 - The apex of mountain may be about 3/4 acre in extent, a mass of loose rock. Within the space are 2 small elevations about 50 feet apart and nearly the same height on the southwester one a drill hold in the depression of a large flat rock contains a copper bolt

Recovery note by Coast & Geodetic Survey 1871 - A signal was erected on Mt. Washington. McDonnells station was not recovered, but a new copper bolt was set, not on the very highest part of the mountain but in crevice near the summit.

Recovery note by Coast & Geodetic Survey 1874 - In 1868 Mt. Washington was visited and the station found, the copper bolt in place as in 1860. It is perhaps 6 or 8 feet below the highest point. But there should be no great difficulty in finding it.

Recovery note by Coast & Geodetic Survey 1879 - The position is marked by 2 semi-circles, one upon each side of roof, the center of the two being 13.67 feet from the front end of building and 11.50 feet from the eaves. Three 4-inch screws are set in the circumference of the circle, forming an equilateral triangle.

Recovery note by Coast & Geodetic Survey 1897 - The bolt marking the Mt. Washington station was found, after the removal of a portion of the plank floor of the observatory, and considerable rubbish underneath. The bolt is copper, 1 inch in diameter, projects about ¼ inch above the rock and has a top in the form of a truncated cone which is but slightly marred, It is imbedded in a solid depression (not a crevice) of what at first appears to be bedrock but which is probably only a very large rock judging from the outside appearance of the summit. The depression where the bolt is located is 2 ½ feet below and about 5 feet WNW from the highest point of the rock which projects above the floor into the observatory.

Recovery note by US Geological Survey 1921 - An attempt was made to recover this station, but it was impossible to find positive evidence of its exact position. Two iron pins such as were found on Mt. Moriah were in place and a hole in the rock that may have contained the station mark was seen. The copper bolt supposed to mark the station was not found. A large water tank now covers the top of the mountain and there is a possibility that the summit was blown off to make a suitable foundation for (the tank).

Recovery note by Coast & Geodetic Survey 1933 - The station is within a few feet of the highest point of the mountain and may be reached by a private toll road on the east side of the mountain, or by a cog railroad on the west side. The road, 8 miles long, is usually passable for automobiles from about June 1, until it is blocked by snow in the fall, and the railroad is in operation during the summer months only. Near the highest point of the mountain is a wood water tank, about 22 feet in diameter and 116 feet high, supported on heavy timbers. These timbers rest of the rock and on heavy blocks, between two of which the bolt can be seen about 2 feet under the tank. The bolt appears to be firmly in place and a cross is still discernible on its rounded head. A U.S.G.S. bench mark, stamped 6284 feet marks the highest point of the rock and the bolt breas a little south and west from the bench mark, distant an inch or two more than 5 feet, measured along the slope, the elevation of the bolt being some 2 ½ feet below the bench mark. These measurements were made only roughly, because of the present of the tank. The view from the vicinity of the station is obstructed by buildings and by the tank, except from about WNW through N to about ENE. In the general vicinity of the station I found several iron bolts, which appeared to have once served as anchor bolts for the old observatory or for other structures. At the

time of my visit, June 4, 1933, the following buildings were on the summit -- Summit House, a wooden hotel. Tip Top House, with walls of loose stones and wooden roof, connected with teh Summit House by a covered passageway. Camden Cottage, a wooden building used as a camp by climbers. Stage office, also of wood, used by patrons of the auto road and also occupied as a meteorological observatory in 1932-3, during the international polar year. There is also a garage just below the summit. All these buildings have been built since June 1908, when a fire swept the summit and destroyed everything but the stone walls of the Tip Top House. (ed note: Tip Top was not burned at that time). The observatory, or tower, which was situated over the station for many years, is said to have been pulled down in 1902.

Recovery note by Coast & Geodetic Survey 1934 - The copper bolt marking teh station was found as described in the note of 1933. The bolt checks the description of C.C.Y., in 1897 the only exception noted was that it seems to be more nearly W than WNW (as stated in note) from the highest point on the mountain, however, on account of thick weather an accurate direction could not be determined. The bolt is now under a wooden water tank. The tank is about 22 feet in diameter and 16 feet in height and is supported by a cribbing of 12-by-12 inch timbers. The bolt is about 2 feet under the NW side of the tank and plumb-bob string suspended over it can bee seen from several places about the tank. The bolt is 1 inch in diameter, with slightly flattened head wnad with cross marks still visible on it. It projects about 1/3 inch above the rock and is in a depression int he rock 4 ½ feet nearly due W from the highest point of the mountain. A USGS bench mark, E1. 6284 marks the highest point, a sharp-topped boulder as described by C.C.Y., in 1897. The top of the mountain consists of a mass of boulders of various sizes and at no place is one able to distinguish solid ledge. To preserve the center of the copper bolt 3 standard reference marks were installed, each one in a large boulder imbedded in the ground. From these reference marks the center may be reproduced by the angles and distances as shown on the following sketch. It is likely that a more permanent water tank may be built on the summit and the station mark covered of destroyed. In that case reference mark no. 3 can be occupied as an eccentric station, it is not possible to reproduce the center and occupy it. A 25-foot tower on reference mark no. 3 would clear the buildings and tank on the summit. a clear view ftom the ground at reference matk no. 3 may be had from about @ to ENE. The top of the tank gives a clear view all around the horizon. The summit of the mountain is readily accessible during the months June to October by private toll road and cog railway. No toll was charged for our visit.

Recovery note by US Geological Survey 1943 - Recovered as described in original and various recovery notes. The reference marks established in 1934 were also recovered and distances checked. A tack was placed in the decking over the top of the tank directly over the station, but the point was occupied only for turning angles to the USGS station Mt. Washington 2, which is the steel radio tower on the summit.



Recovery note by Coast & Geodetic Survey 1958 - The station mark and all three reference marks and the USGS BM were recovered as described in the 1934 description. All marks were found to be in good condition. Due to a second water tank which has been built just west of the water tank mentioned int he 1934 description, the marks are now useless. Since none of the marks could be used a Mt. Washington 3 was established at a point from which a tie could be made to the old station. A traverse connection was made from triangulation station mt. Washington 3 to triangulation station Mt. Washington 1877, distance being 81.54 feet southeast of station Mt. Washington 3.

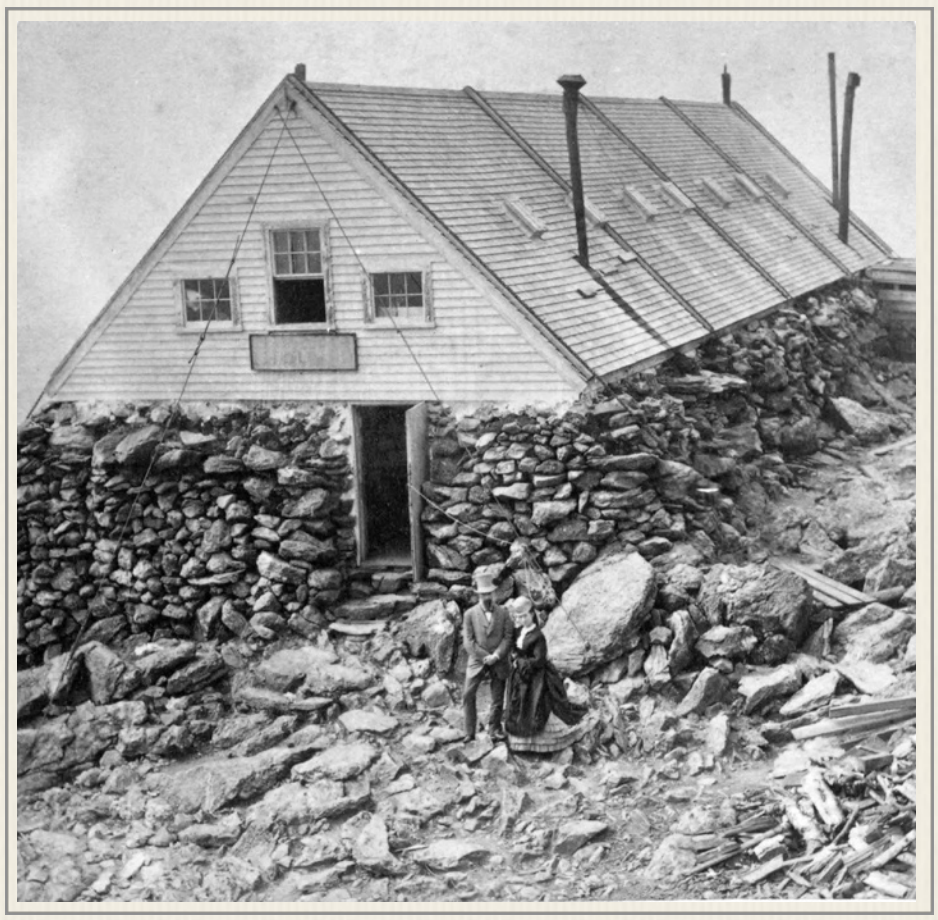
Summit Houses

(real and imagined)



Visitors pose in front of the first Summit House in 1852
- by John P. Soule - Story of Mount Washington

A structure at the top of Mount Washington catering to travelers pre-dates construction of the railroad. The first Summit House opened on July 28th, 1852 when only hikers from both sides of the mountain, and riders on Horace Fabyan's bridle path came up the eastern side along the route Ethan Allen Crawford laid out in 1821, visited the top.



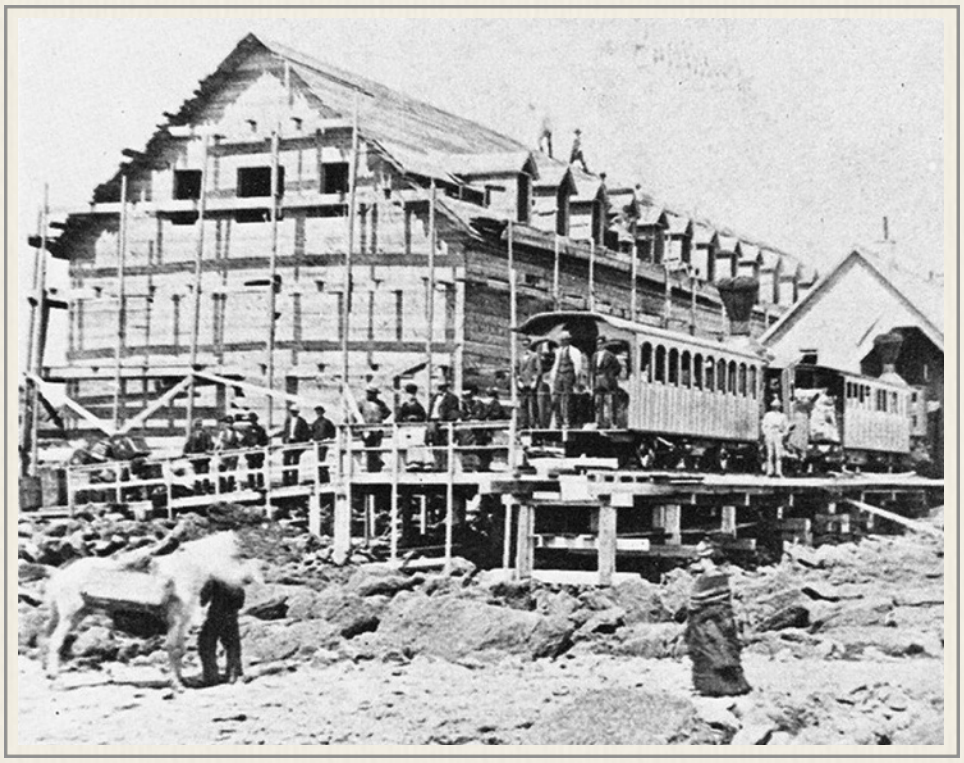
A couple pose for a stereoscopic view of the Tip Top House (circa 1875)
photo by C.L. Dakin - Dennis Collection, New York Public Library

According to *The Story of Mount Washington*, 53 people stopped by that opening day, and a dozen spent the night. The next year, the building's footprint was expanded to 24 feet by 64 feet and a gable roof was added for a second floor. Two-inch cables ran over the roof and were cemented to rocks to help the building withstand the wind and weather at the Summit.

As the Summit House was being expanded in 1853, another structure - the Tip Top House *(left)* was going up next door. Like the Summit House, rocks from the summit were used to build it as everything else had to be hauled up the mountain. Tip

Top is the only one of the original mountain top buildings still standing. Left unoccupied in 1968, Tip Top was restored to its original condition and opened as a state historic site & museum in 1987.

The two hotels were ready when the Mt. Washington Carriage Road (later the Auto Road) opens in 1861, and the Cog Railway arrives eight years later. When Walter Aiken and John Lyon spend $70-thousand dollars to construct a 100 room hotel in 1873 to be run by the railroad, the first Summit House and Tip Top would provide housing for employees of the new Summit House and the railroad.



"The second Summit house was built *(left)* during the summers of 1872 and 1873," according to the Facebook site *New Hampshire Then and Now.* "It is said annually it received more than 10,000 visitors. At the time of this photo *(below)*, it was run by Barron, Merrill, and Barron.

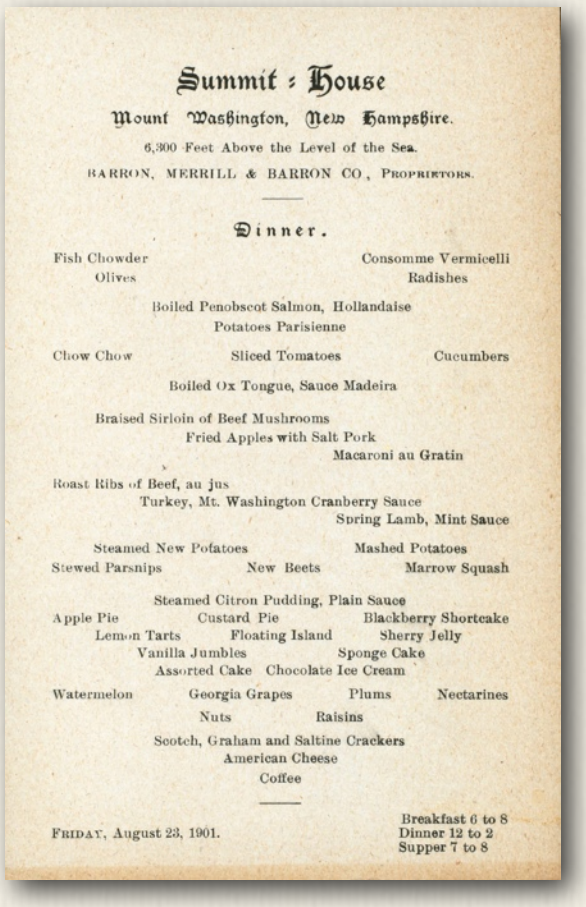
"The Summit House was a three story plain building. It could hold up to 150 guests. Two steam heated stories were for sleeping rooms. The lowest story contained parlors, a large dining room, and hotel office. There also was a telegraph





Visitors descend from Cog Train in 1899. This photo from the Boston & Maine Railroad files was sent to a newspaper and printed on July 9, 1929 (11 days before Old Peppersass' last trip). T. F. Joyce, Assistant Vice President of the B&M Railroad typed some words about this photo... "Winter at the Summit. A vacation party 30 years ago disembarking at the mile high peak of Mt. Washington, garbed for the cool mountain air while they view northern New Hampshire, broad stretches of Maine and Vermont and a bit of Canada spread before them. This was in the rare old days of full skirts, mutton-leg sleeves and heavy shawls- none of which are seen today at the summit."

- Photo from the Robert J. Girouard Collection. www.facebook.com/NewHampshireThenAndNow



Summit : House

Mount Washington, New Hampshire.

6,300 Feet Above the Level of the Sea.

BARRON, MERRILL & BARRON CO., PROPRIETORS.

Dinner.

Fish Chowder — Consomme Vermicelli
Olives — Radishes

Boiled Penobscot Salmon, Hollandaise
Potatoes Parisienne

Chow Chow — Sliced Tomatoes — Cucumbers

Boiled Ox Tongue, Sauce Madeira

Braised Sirloin of Beef Mushrooms
Fried Apples with Salt Pork
Macaroni au Gratin

Roast Ribs of Beef, au jus
Turkey, Mt. Washington Cranberry Sauce
Spring Lamb, Mint Sauce

Steamed New Potatoes — Mashed Potatoes
Stewed Parsnips — New Beets — Marrow Squash

Steamed Citron Pudding, Plain Sauce
Apple Pie — Custard Pie — Blackberry Shortcake
Lemon Tarts — Floating Island — Sherry Jelly
Vanilla Jumbles — Sponge Cake
Assorted Cake — Chocolate Ice Cream

Watermelon — Georgia Grapes — Plums — Nectarines
Nuts — Raisins

Scotch, Graham and Saltine Crackers
American Cheese
Coffee

FRIDAY, August 23, 1901.

Breakfast 6 to 8
Dinner 12 to 2
Supper 7 to 8

and post office. In the center of first floor was a generously filled coal stove."

The second edition of *Among The Clouds* on Saturday, July 21, 1877 said "It took five hundred trains over the Mount Washington Railroad to bring up the material for building the Summit House." The hotel's manager that summer, Mrs. J.W. (Harriet) Dodge advertised in that same paper that "The table is first-class, and no pains will be spared to make its patrons feel that they can pass a day or a night above the clouds with as much comfort as they can below. No one should leave the Mountains without having passed a night on the Summit, and witnessed a sunrise unequaled in America, and never to be forgotten. The view from the Hotel is superior to any in the country, and the Summit of Mount Washington is now the objective

point of every visitor to the Mountains."

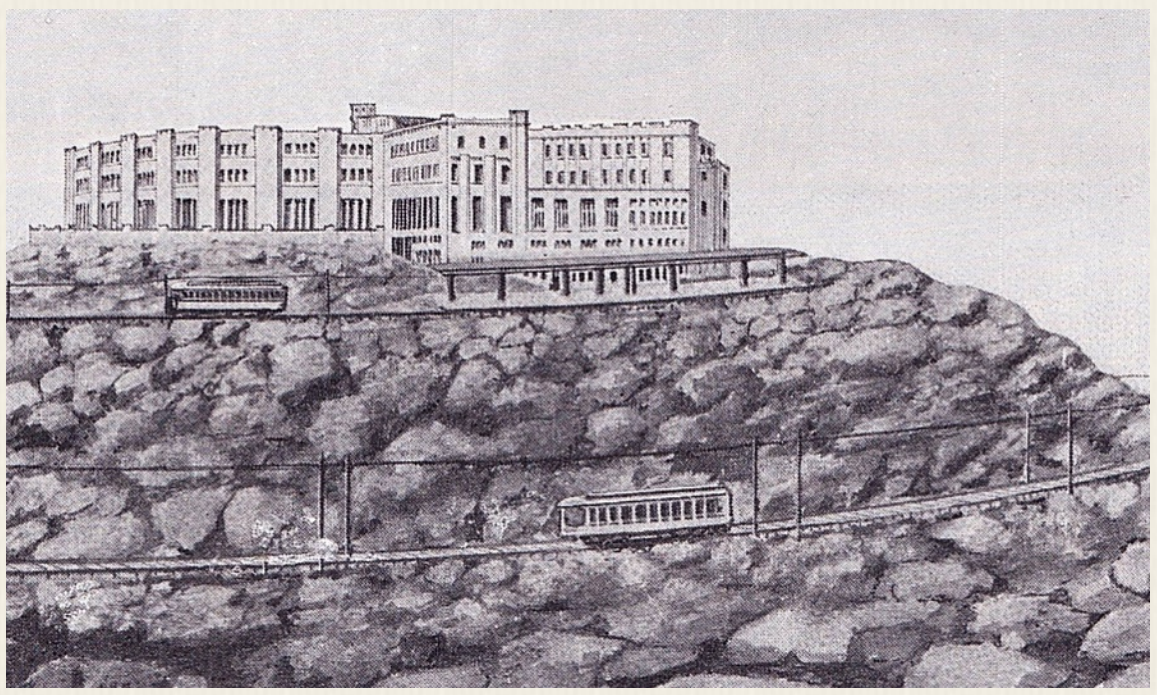
The hotel opened on July 2nd in 1877, and it appears that the widow Dodge, like the Teagues 53 years later, turned to the school system to staff the operation. "It takes 25 employees to run the Summit House," reported the July 31st edition of *Among the Clouds*. "Of this number two are from Vermont, three from Canada, nine from Massachusetts and eleven from New Hampshire. Eight of the whole number are teachers and students."

In June 1908, railway employees were busy preparing the facility for its opening. The work crew had finished for the day and departed for the Base Station on slideboards and the work train. Later, an unusual flickering from the top of mountain in the summer sunset was noticed by people in the valley. The hotel was ablaze. The fire spread to other structures on the mountaintop. Only the Tip-Top House was spared. The Railway declared the Summit House alone a $26,000 loss.

Follow the link to a slideshow of the Great Fire of June 18, 1908 with photos by Guy Shorey produced by White Mountain History.org. *(See also Volume 3 - Aggregated Timeline)*

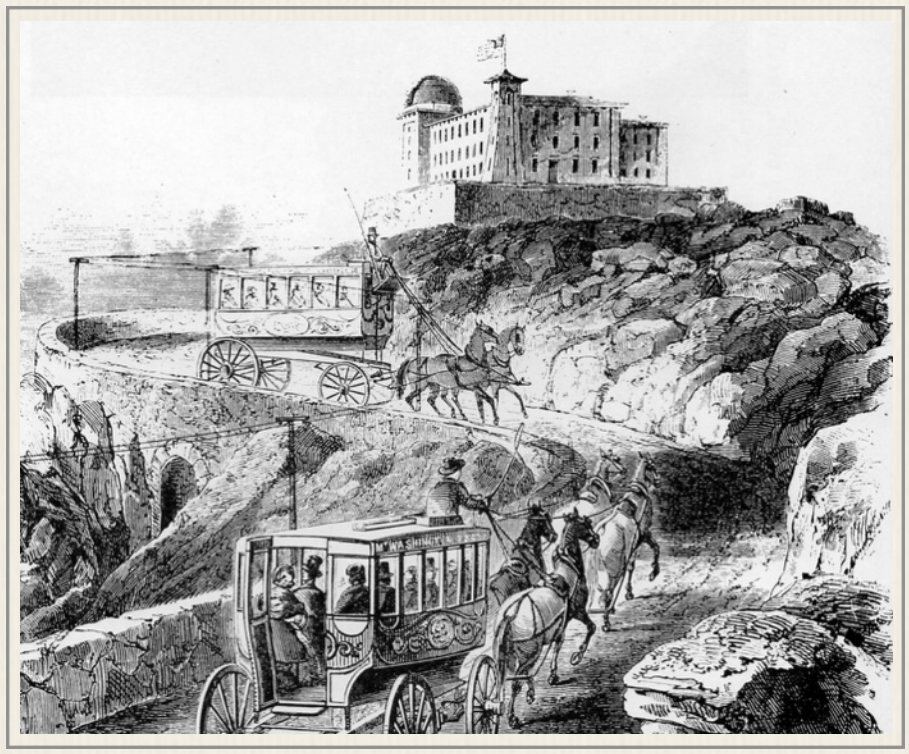


http://photos.whitemountainhistory.org/FullScreeenSlideShow.aspx?gallery=368825&mt=Photo



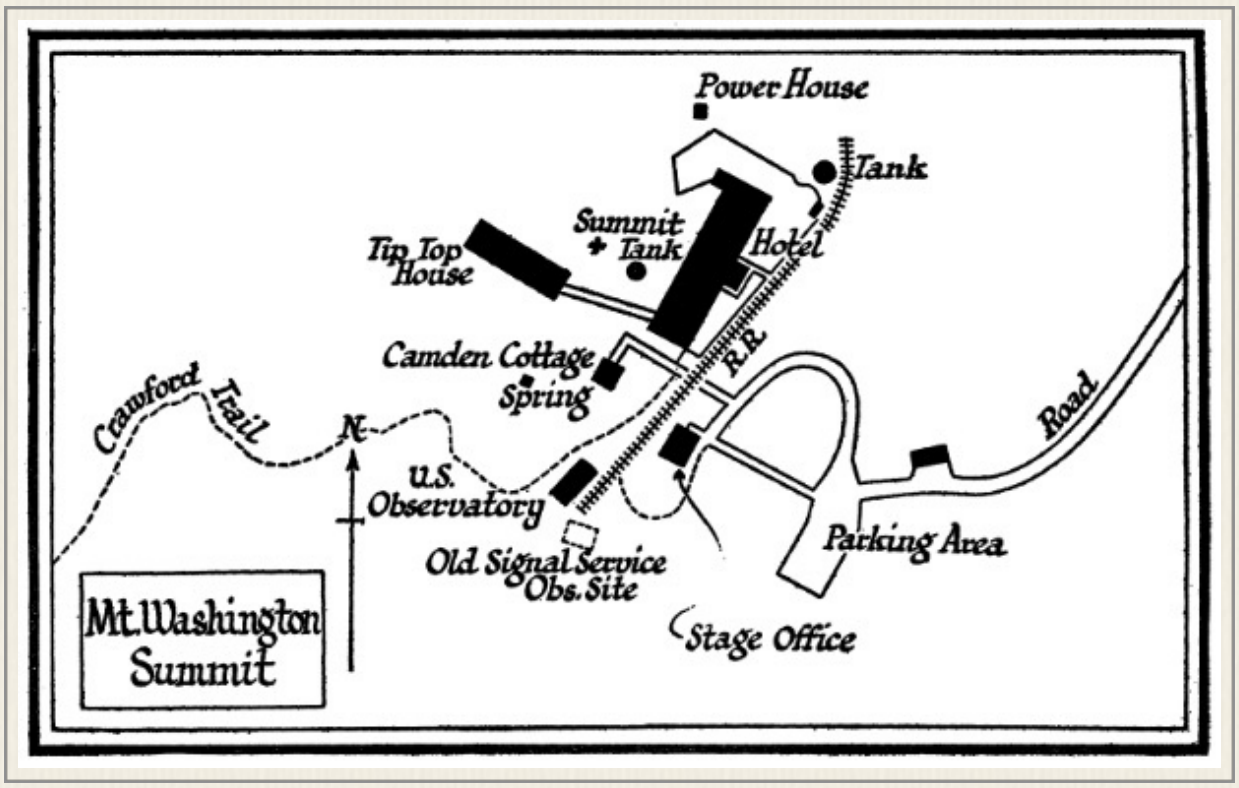
The fire gave the B&M Railroad, now the owners of the Summit an opportunity to ponder what's next? With electricity the hot new technology, the railroad began seriously considering an electric trolley to a grand new Summit House *(left)*. The footprint of a new powerhouse behind and to the north of the Base Station

spur line transfer point appeared on plots. They started mapping a new route with a maximum 6-percent grade that involved a tunnel, several switchbacks, three mountains and several circuits around Mt. Washington's final cone. One man on the survey team became lost in the clouds near the summit and died. Finances proved the plan's undoing much in the same way, General David O. Macomber's plan for a carriage road on the east side of the Mountain leading to a palatial hotel fell apart in the mid-1850s.

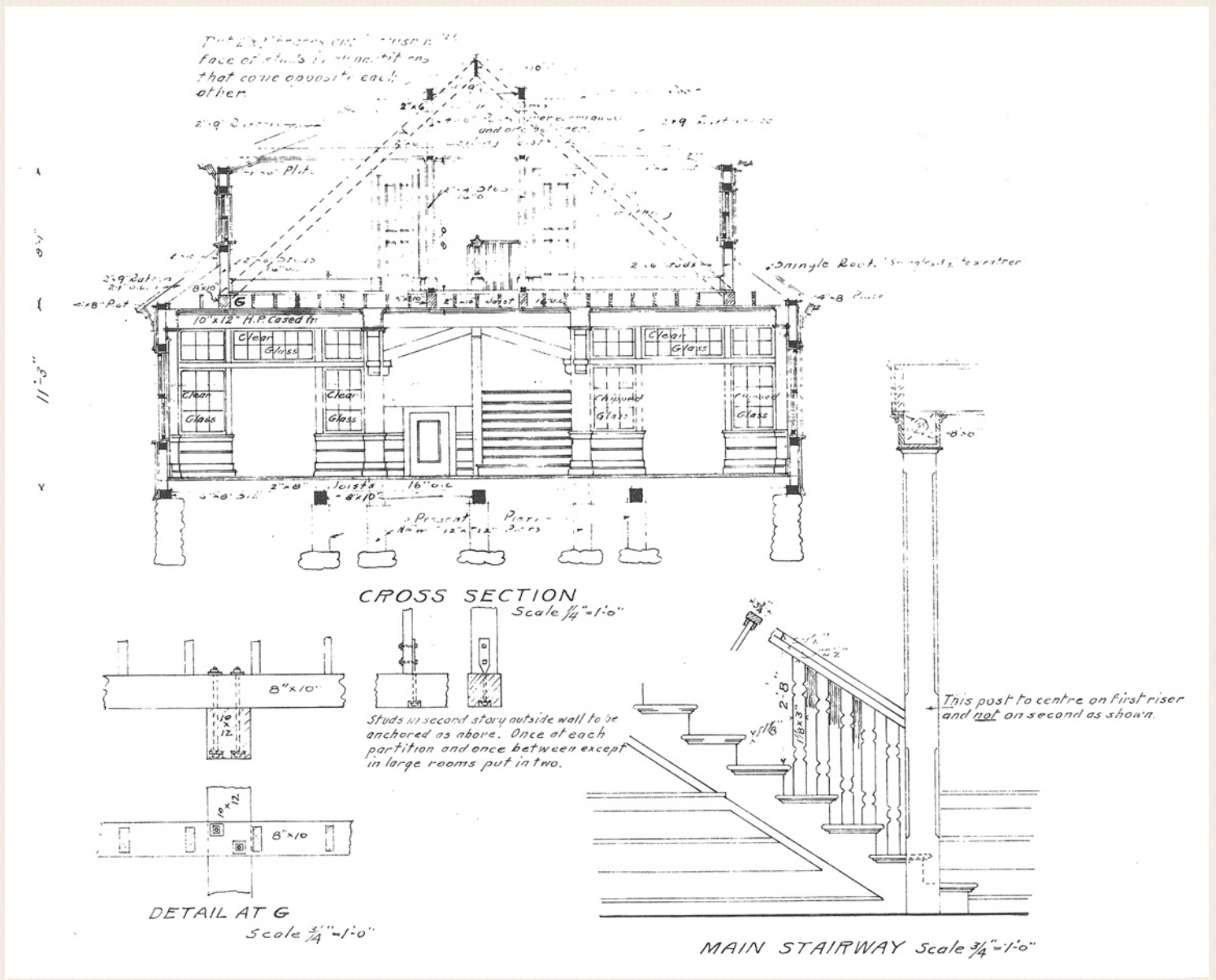


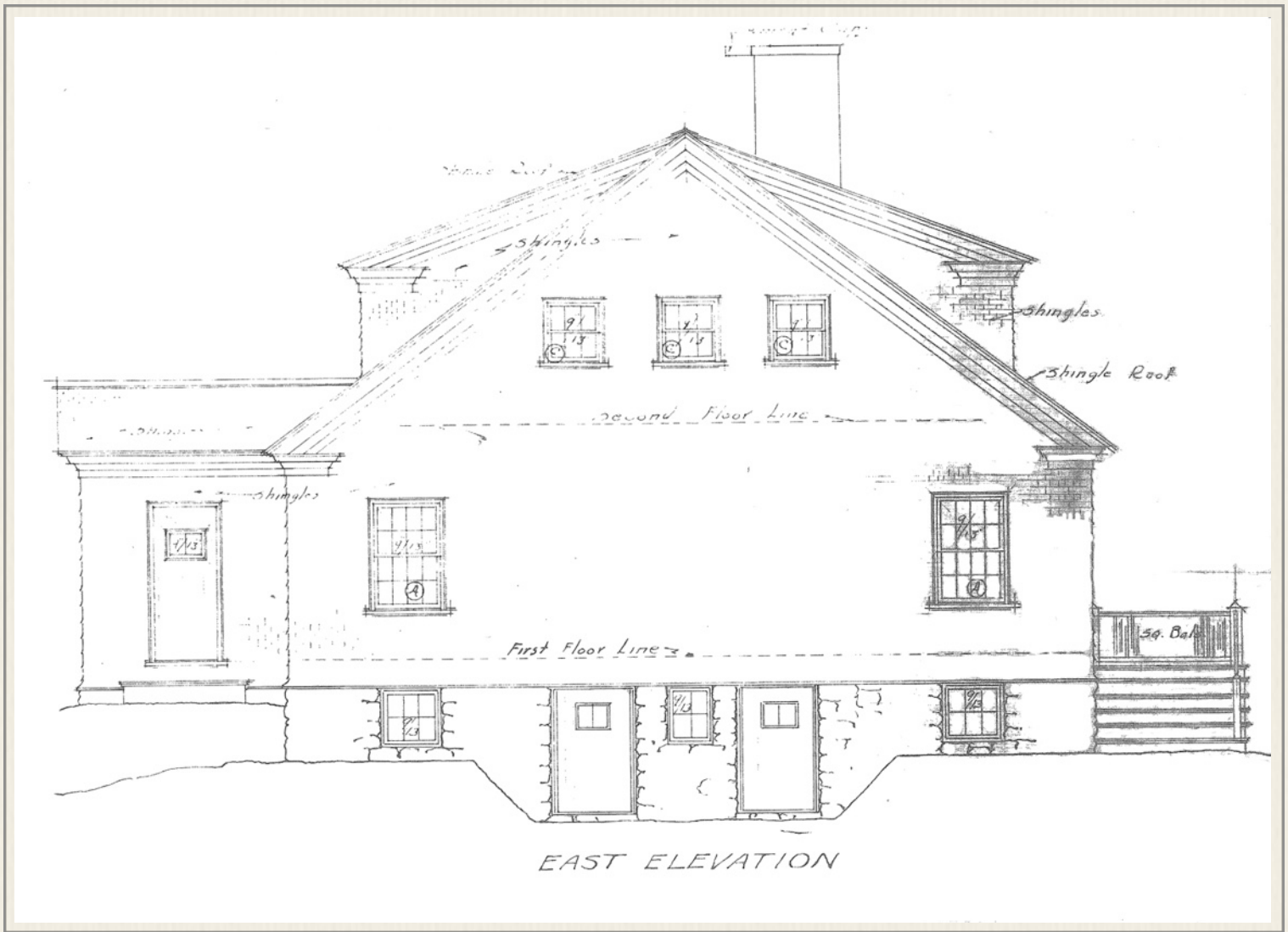
The drawing illustrating the B&M's early 20th Century idea for a new hotel served by an electric trolley echoed the mid-19th Century drawing *(right)* of General Macomber's vision for horse-drawn "omnibuses" bringing visitors up the carriage road to a grand hotel with an observatory atop Mt. Washington. The idea of an electric train to a new hotel would be revisited by Col. Henry Teague. Burt's *Story of Mt. Washington* says the death of Teague's potential partner in the venture, Canadian mining magnate Sir Harry Oakes brought planning to a halt. Sir Harry was murdered at his home in the Bahamas in 1943.

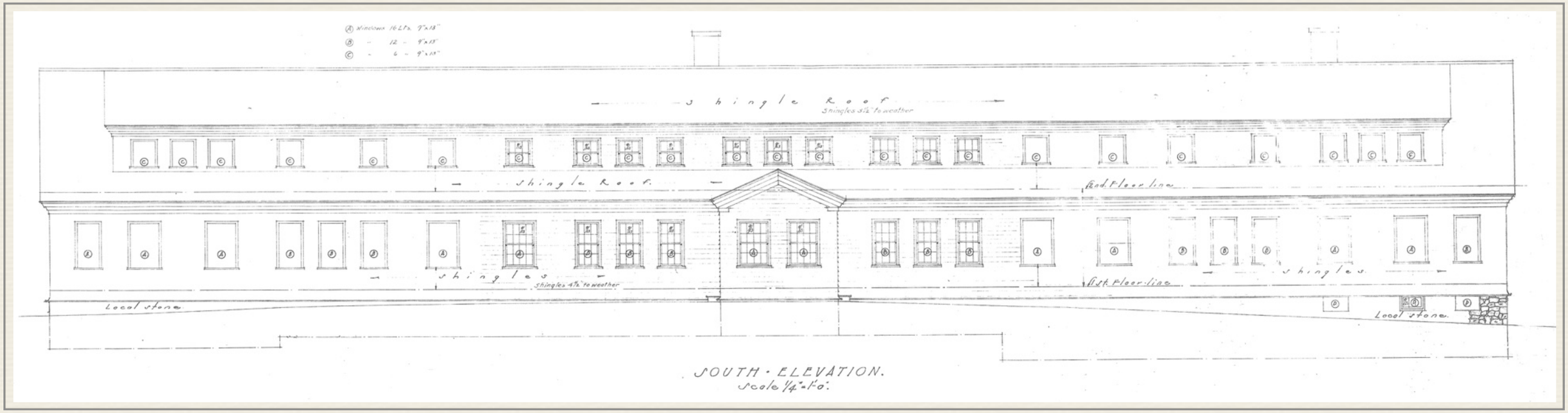
The actual third Summit House was built along more modest designs *(next several pages)* and opened on August 21, 1915. That did not stop the B&M from waxing eloquent about the accommodations in a 1917 tourist book. "Arriving at the summit by the cog-railway, one enters the New Station directly from the station platform, through an ample vestibule, into a large room, in the center of which is the office. At the right will be found the commodious dining room for eighty guests, while to the left is the lounging and rest room, filled with comfortable chairs drawn up around a big, old-fashioned fireplace. Here, also, at the southern end, is the writing room, while along the west side is the souvenir stand, which always attracts so much attention on Mt. Washington. Up stairs there are eighteen guests' rooms, with twin beds, together with lavato-



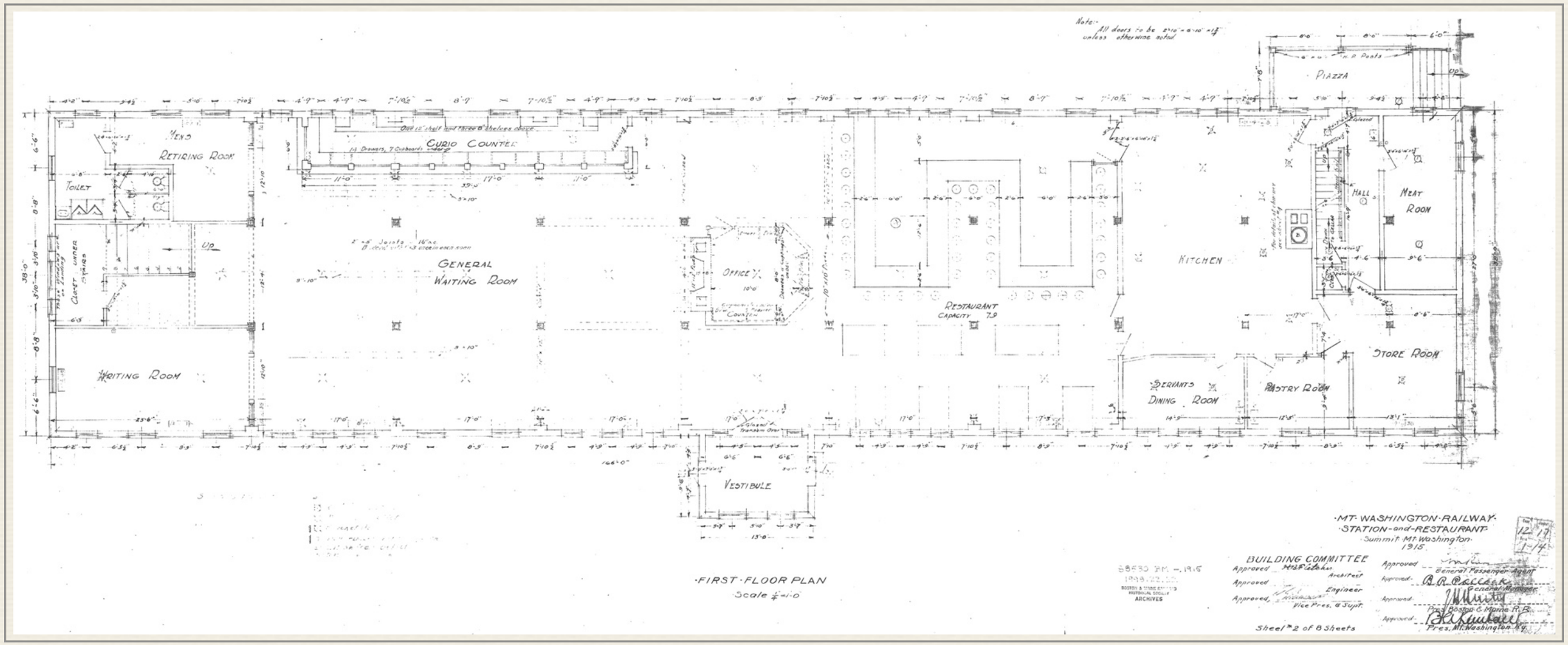
Summit diagram from New Hampshire: A Guide to the Granite State (1938)


CROSS SECTION
Scale 1/4"=1'-0"
Clear Glass
Chipped Glass
10"x12" H.P. Cased In
Shingle Roof
Joists 16" o.c.
Present Piers
8"x10"
Studs in second story outside wall to be anchored as above. Once at each partition and once between except in large rooms put in two.
This post to centre on first riser and not on second as shown.
DETAIL AT G
Scale 3/4"=1'-0"
MAIN STAIRWAY Scale 3/4"=1'-0"


Shingles
Shingle Roof
Second Floor Line
First Floor Line
Sq. Bal.
EAST ELEVATION



SOUTH · ELEVATION.
Scale 1/4" = 1'-0".



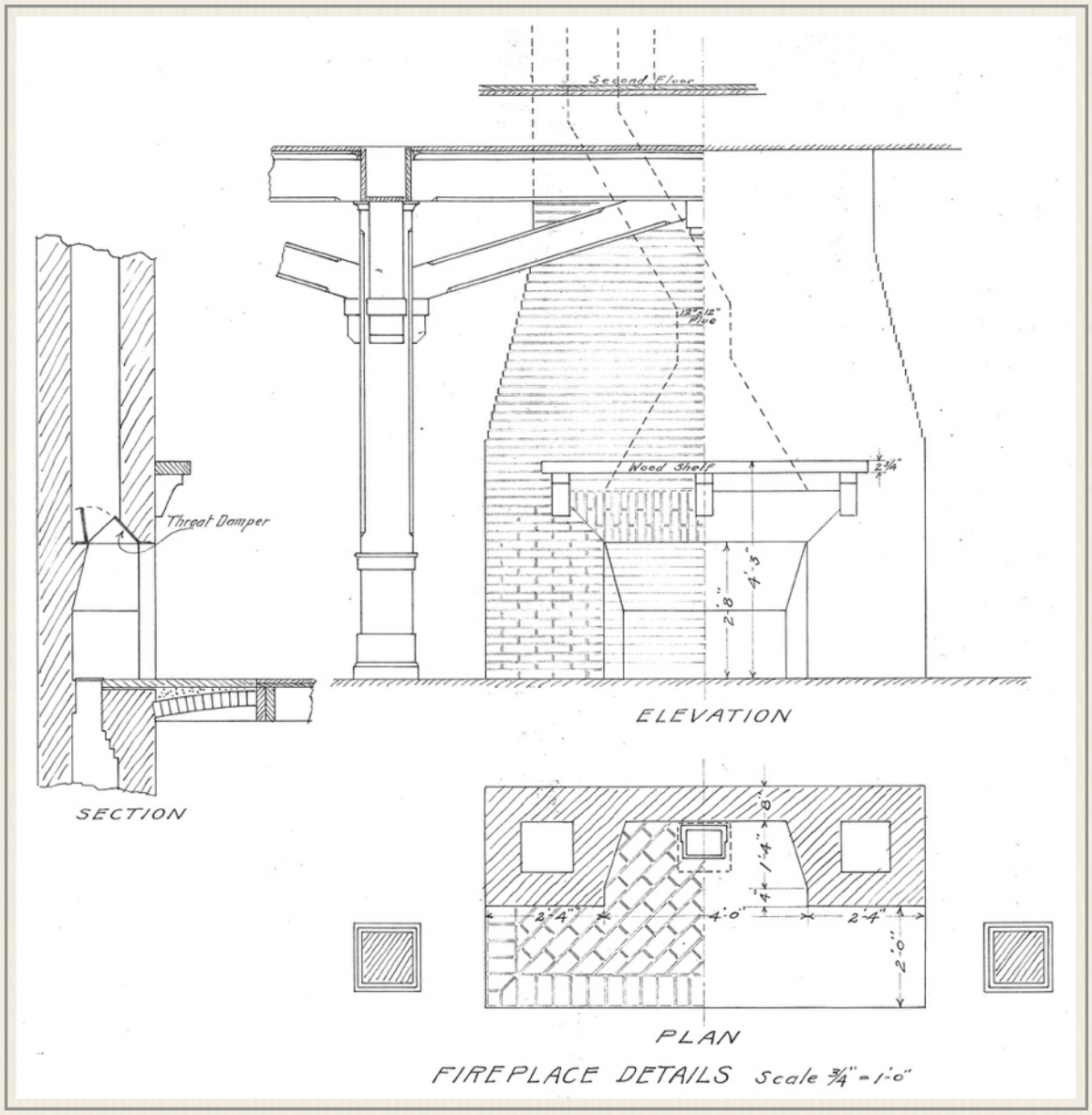
·FIRST·FLOOR PLAN
Scale ¼"=1'-0"

·MT·WASHINGTON·RAILWAY·
·STATION-and-RESTAURANT·
Summit·Mt·Washington·
1915

BUILDING COMMITTEE
Approved H. F. Fletcher Architect
Approved Engineer
Approved Vice Pres. & Supt.
Approved General Passenger Agent
Approved B. R. Pollock General Manager
Approved Pres. Boston & Maine R.R.
Approved Pres. Mt. Washington Ry.

Sheet #2 of 8 Sheets

58530 BM - 1915
1998.22.22
BOSTON & MAINE RAILROAD HISTORICAL SOCIETY ARCHIVES



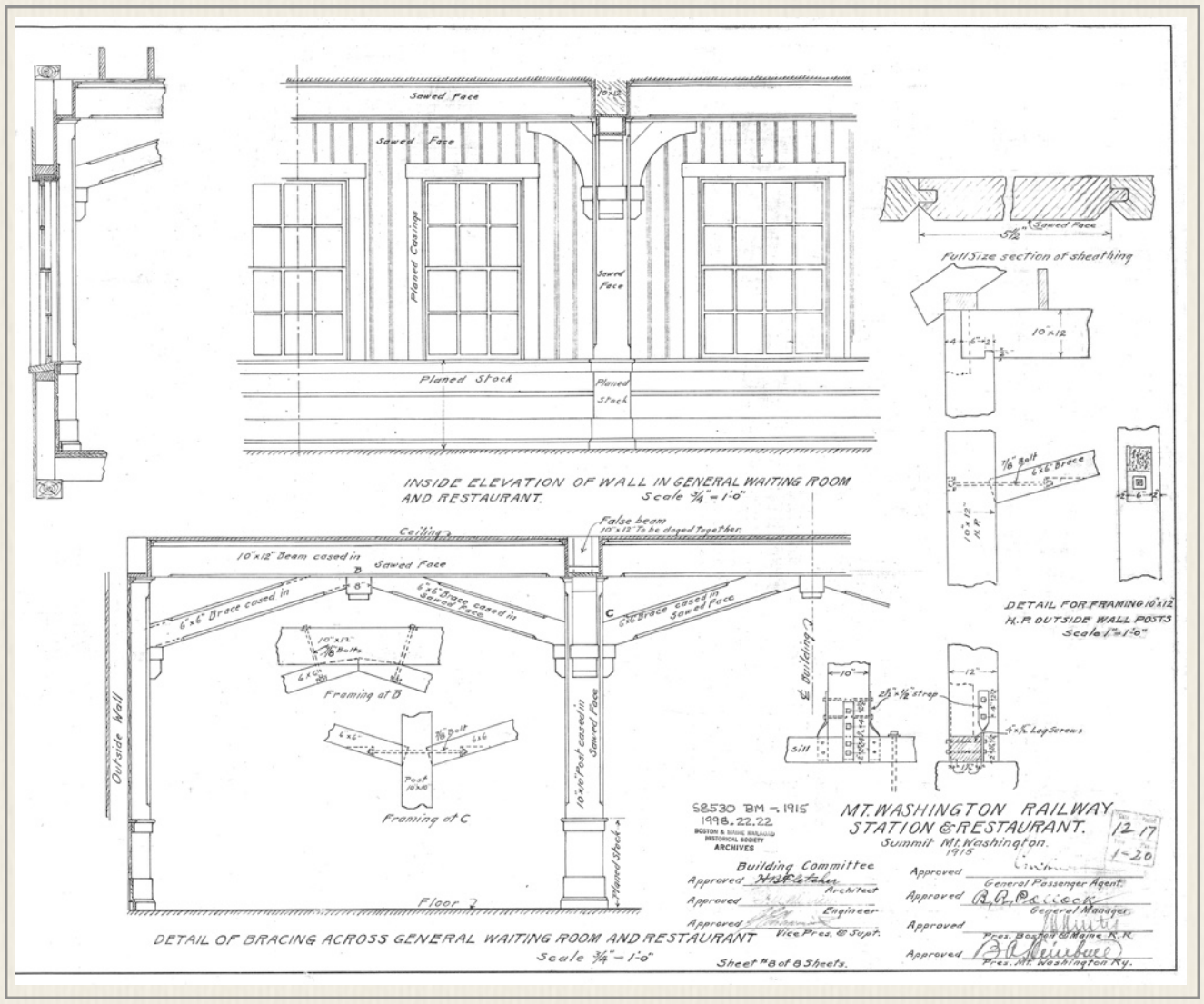
Interior Detailing: *The open waiting area on the first floor included exposed columns and bracing and large fireplace (left). The design element was continued (below) through to the restaurant.*

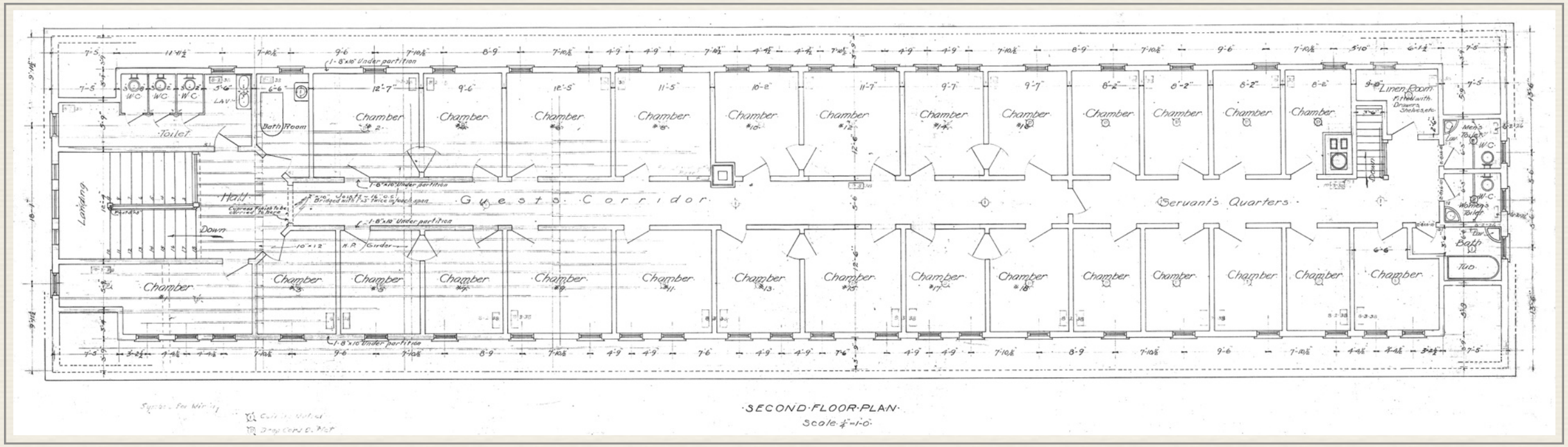
Access to second floor guest rooms was via a wide staircase (next page upper) flanked by the writing room (left) and lobby restrooms (right).

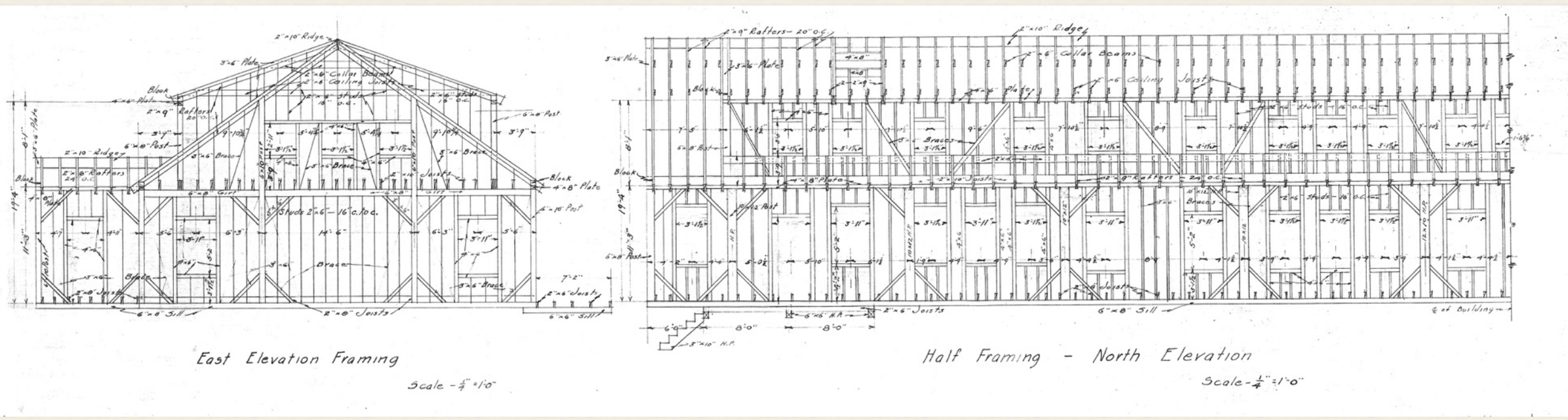
A 29 x 38 foot cellar was built under the kitchen area in the north end of the building and housed the building's boiler, generator, a soft coal and a cooking coal pit, as well as water closet and men's room.

Access was gained through two doors on the East Elevation (next page lower). The new building sat upon 36 interior brick piers left from the second Summit House that burned in 1908 along with 17 new brick piers.

There were stairs to a piazza on the west side of the first floor with a door giving employees access to the kitchen, the stairway to the second floor and a "meat room" and storage area.







Mt. Washington Railway Station & Restaurant Plans *(1915)*

Previous Page: Upper - Trackside exterior facing east. Lower: First floor layout with stairs to sleeping chambers on left.
This Page: Upper - Second floor layout with guest quarters & bath, servant's quarters and stairwell to kitchen area. Lower: Framing diagram - plans also outline intricate procedures to strengthen the building against the rigors of the mountaintop weather using bolts and other methods to anchor & brace structure.

- Documents part of Boston & Maine Railroad Historical Society archives

ries and bathrooms. The new building *(below)* is in every way a credit to New Hampshire's grandest mountain."



The New Summit House

Over the years, the third Summit House was used by train passengers, auto road drivers & riders, and hikers during the summer to stay overnight or pause and refresh.

Visitors arriving either before or after the Summit House's season were off-times frustrated in seeking relief, in part because once the Tip-Top House closed there was no where else to go at the top of the mountain unless the Weather Observatory crew could be convinced to permit the use of their limited facilities.

The Summit House did not open between 1941 and 1945 because of the war. It's return to service in 1946 was difficult due to a lack of available labor. The accommodations in the summer of 1946 drew customer complaints that made their way to the New Hampshire State Planning and Development Commission, and were passed on to the Mount Washington Railway Company. Vice president Arthur Teague acknowledged the problem in an August 22, 1946 letter to the State.

"I realize that there is quite a bit of room for complaints about the top of the mountain, as well as the base of the mountain," wrote Teague. "On top of the mountain now, I have about ten

employees, and I would like to have twenty-five. At the Base I would also like additional employees. The condition on top is far from the way we desire to have it. But with the labor situation as it is today, there is not much I can do about it. If you can hire me a half dozen men as general laborers @ $.85/hr. I will guarantee them 8 hours a day for 7 days a week, rain or shine. I will put these men to work on top of the mountain, and clean the place up, so it will at least be a little more presentable. I would also like about four dishwashers at $125/mo, plus room and board; four table waiters at $50 a month, plus room and board."



Double header at the Summit
- courtesy Mike Dickerman

"Personally, I feel that the public is very fortunate to have a chance to see this "Show Place" of the White Mountains this year, after the Summit House was closed for four years, and the Railroad for three years. We have had more business than we could possibly accommodate this summer. By 11 o'clock in the morning, trains are sold out to 4 and 5 o'clock in the afternoon. So this is the reason why so many people have had to wait. Mrs. James Langley was here yesterday, and she waited from 1 to 5:30 before she could get a train up the mountain."

"Thanks for your letter, and I would appreciate the names (of the complainants), as I will either go to see them or write them a personal letter. No one would like to have the Public pleased better than I, but with the labor situation as it is today, it simply can't be done."

Arthur Teague went on to say in a hand-written P.S. - "I might add that the Summit House was quite a wreck this spring. The hikers broke or tore up every door that had a lock on it, broke 50% of the china, floor was about 2" thick in all types of paper and every toilet in the house had

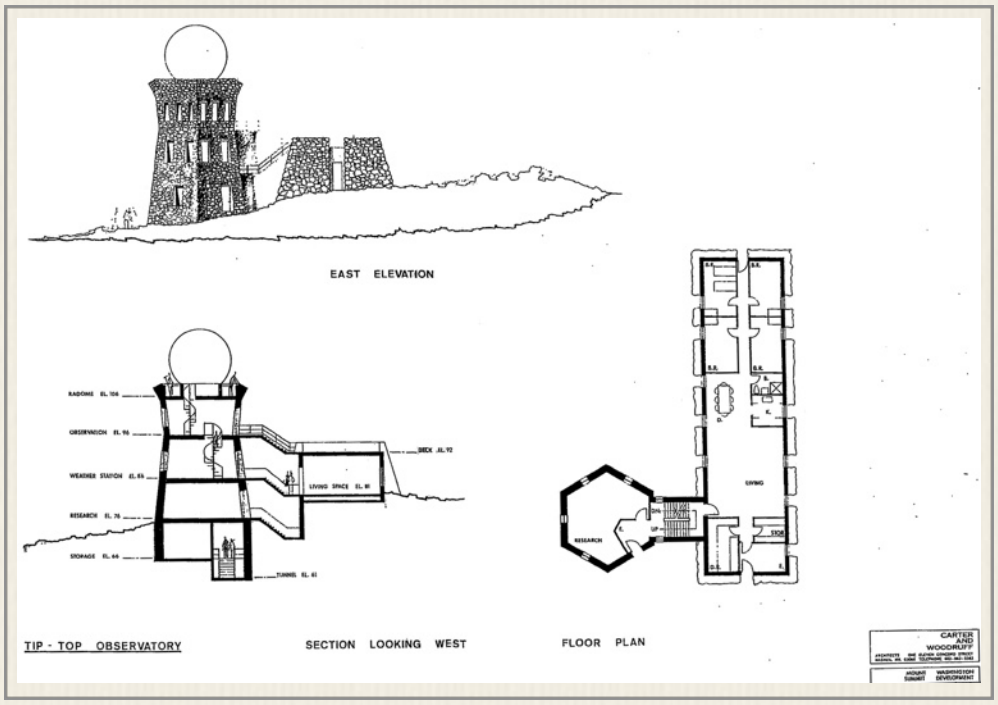
been used. They even went so far as to go down in a 50,000 gallon water tank and use that for a toilet."

"We had to put in a new boiler and 1000 feet of sewer pipe plus having repairs so we were unable to open the Summit House until 15th July. As far as I can tell the accident *(on August 10, 1946)* has not hurt our business. AST"



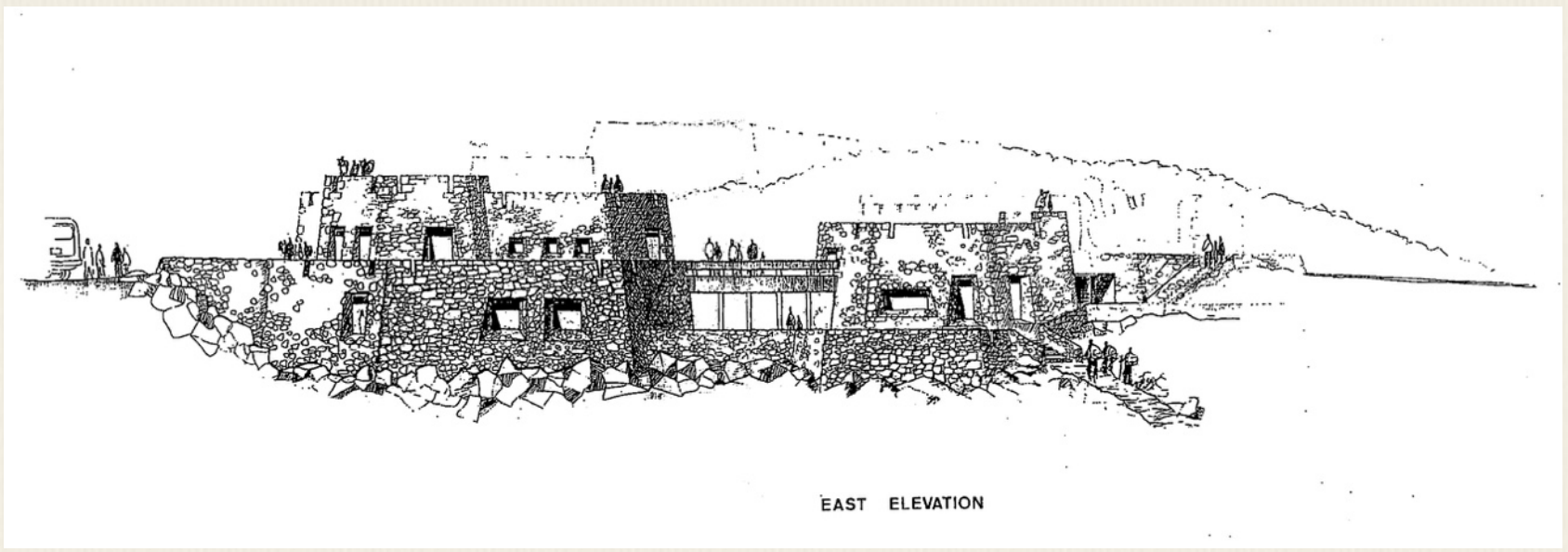
Gene Evans and the Evans 1932 Ford on top of Mt. Washington. To the right is one of the Ford Station wagons #10 that were used to bring visitors up to the summit if you didn't want to use your own auto. Real photo from the Raymond W. Evans c/o Robert J. Girouard.
www.facebook.com/NewHampshireThenAndNow

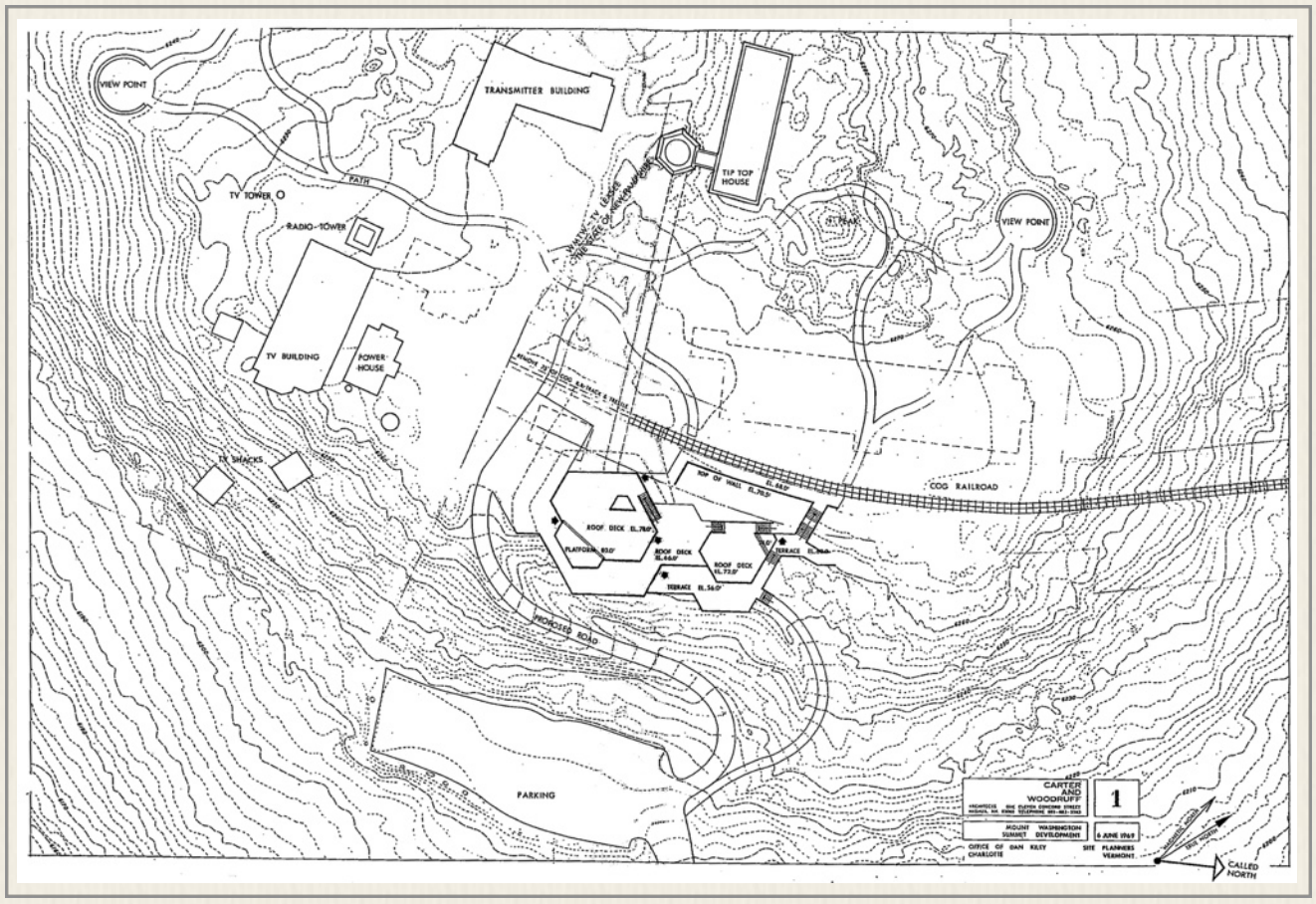
Ch. 9 - Summit History



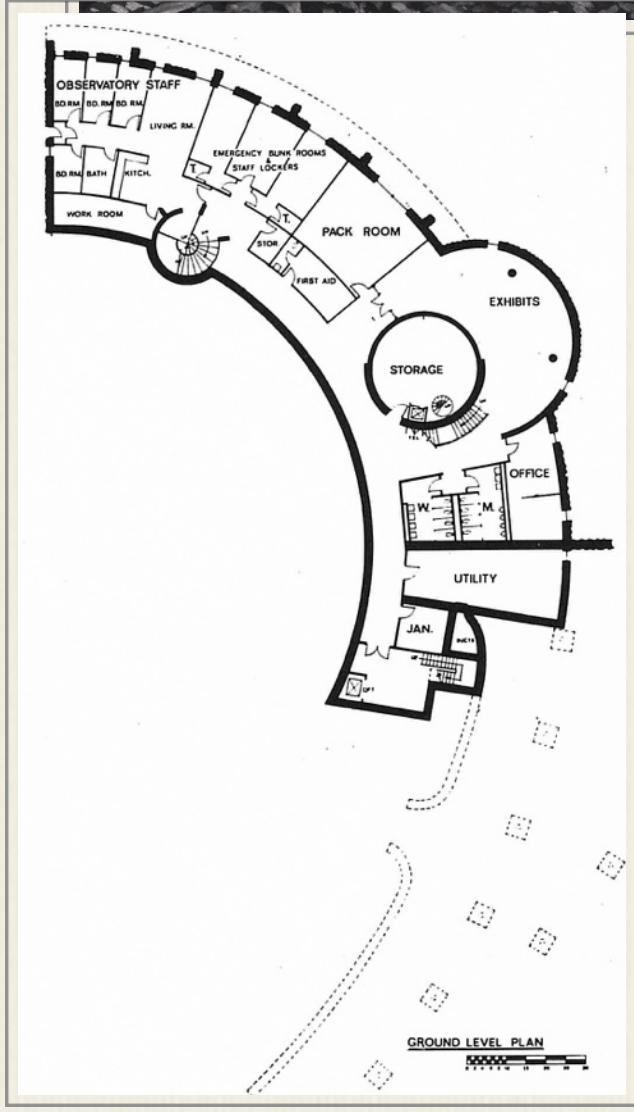
The first proposal for the fourth Summit House in 1969 attempted to make the "natural Summit the dominant element" by building the structure into the mountain to the east of the Cog track so the panoramic experience gives one a sense of being close to nature. A tunnel would be built to a renovated Tip-Top house with a new weather observation tower mimicking two 19th Century towers that were erected. The estimated 1970 price tag for the 14-thousand square foot complex is nearly $3-million dollars.

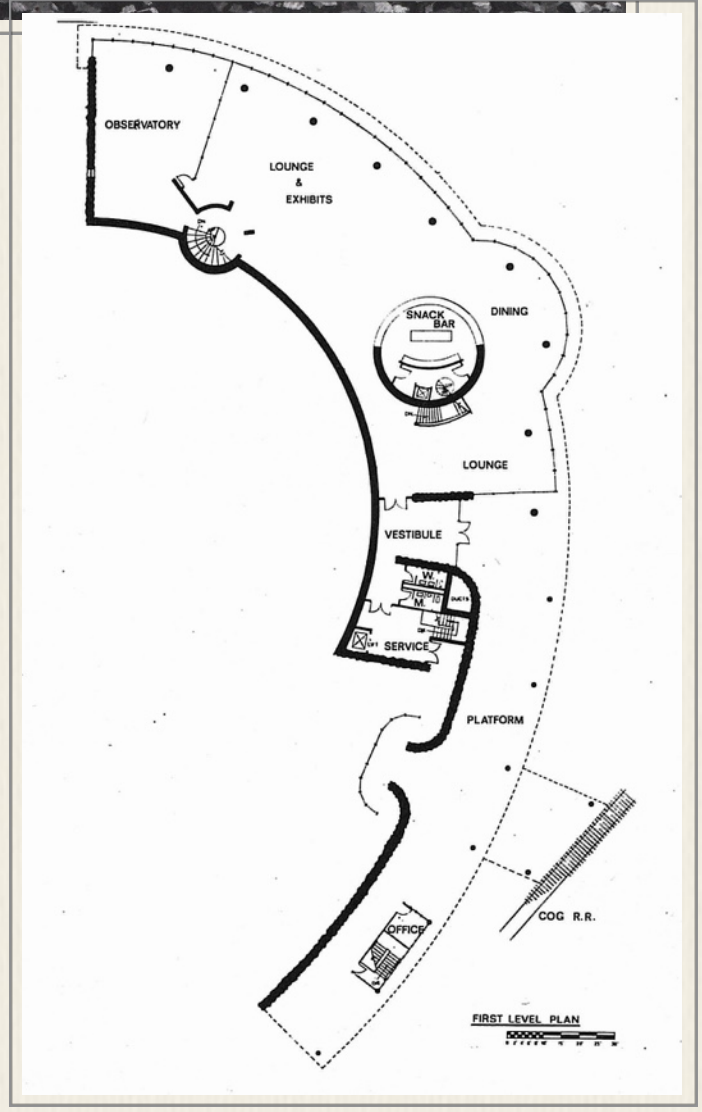
Cool concept. It wasn't built.








OBSERVATORY STAFF
BD. RM.
BD. RM.
BD. RM.
LIVING RM.
BD. RM.
BATH
KITCH.
EMERGENCY BUNK ROOMS & STAFF LOCKERS
WORK ROOM
PACK ROOM
STOR.
FIRST AID
EXHIBITS
STORAGE
OFFICE
W.
M.
UTILITY
JAN.
GROUND LEVEL PLAN


OBSERVATORY
LOUNGE & EXHIBITS
SNACK BAR
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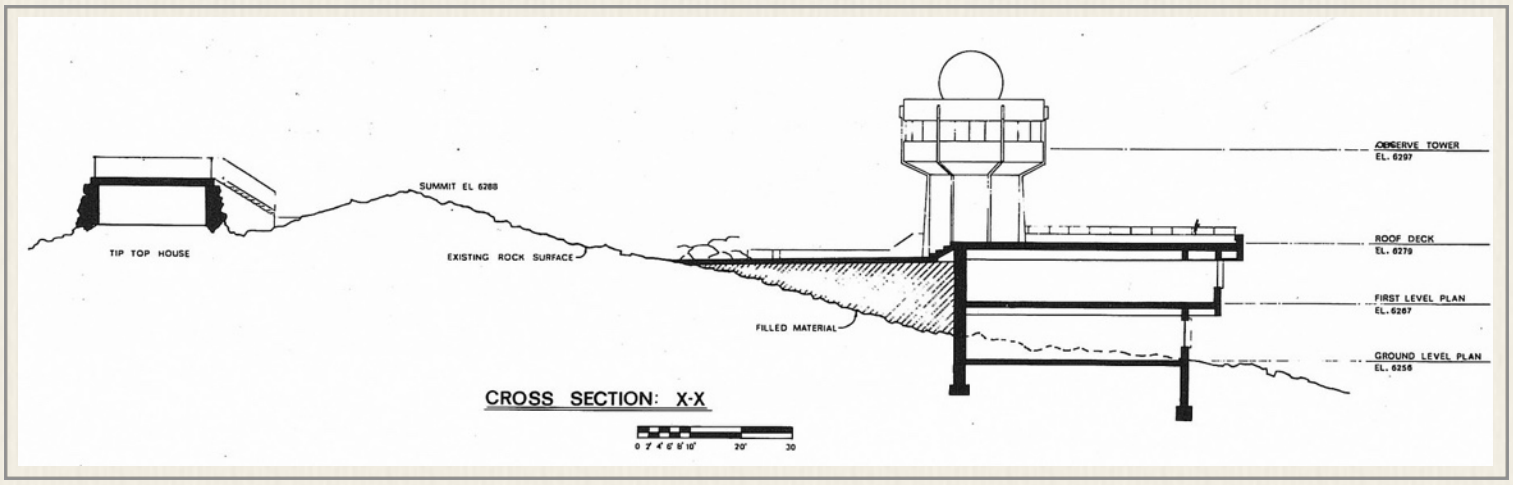
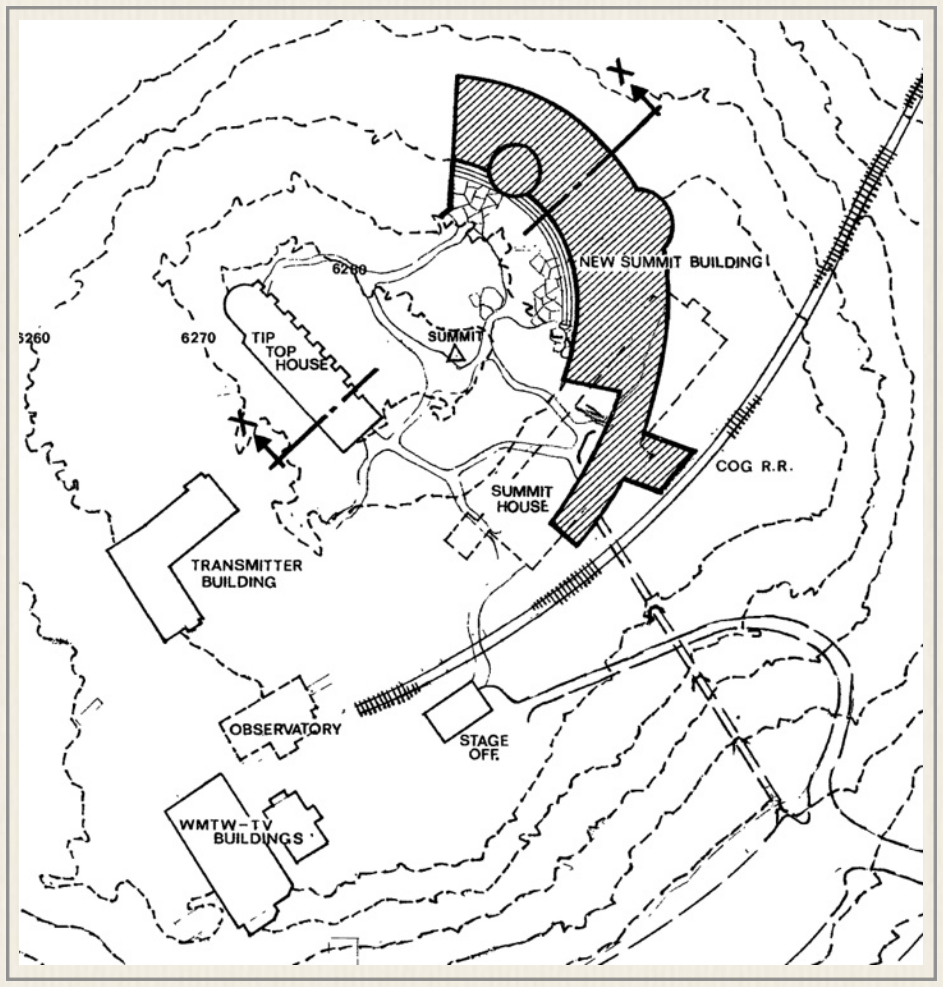
M.
SERVICE
PLATFORM
OFFICE
COG R.R.
FIRST LEVEL PLAN


SUMMIT EL 6288
TIP TOP HOUSE
EXISTING ROCK SURFACE
FILLED MATERIAL
OBSERVE TOWER
EL. 6297
ROOF DECK
EL. 6279
FIRST LEVEL PLAN
EL. 6267
GROUND LEVEL PLAN
EL. 6256
CROSS SECTION: X-X

Sherman Adams Building



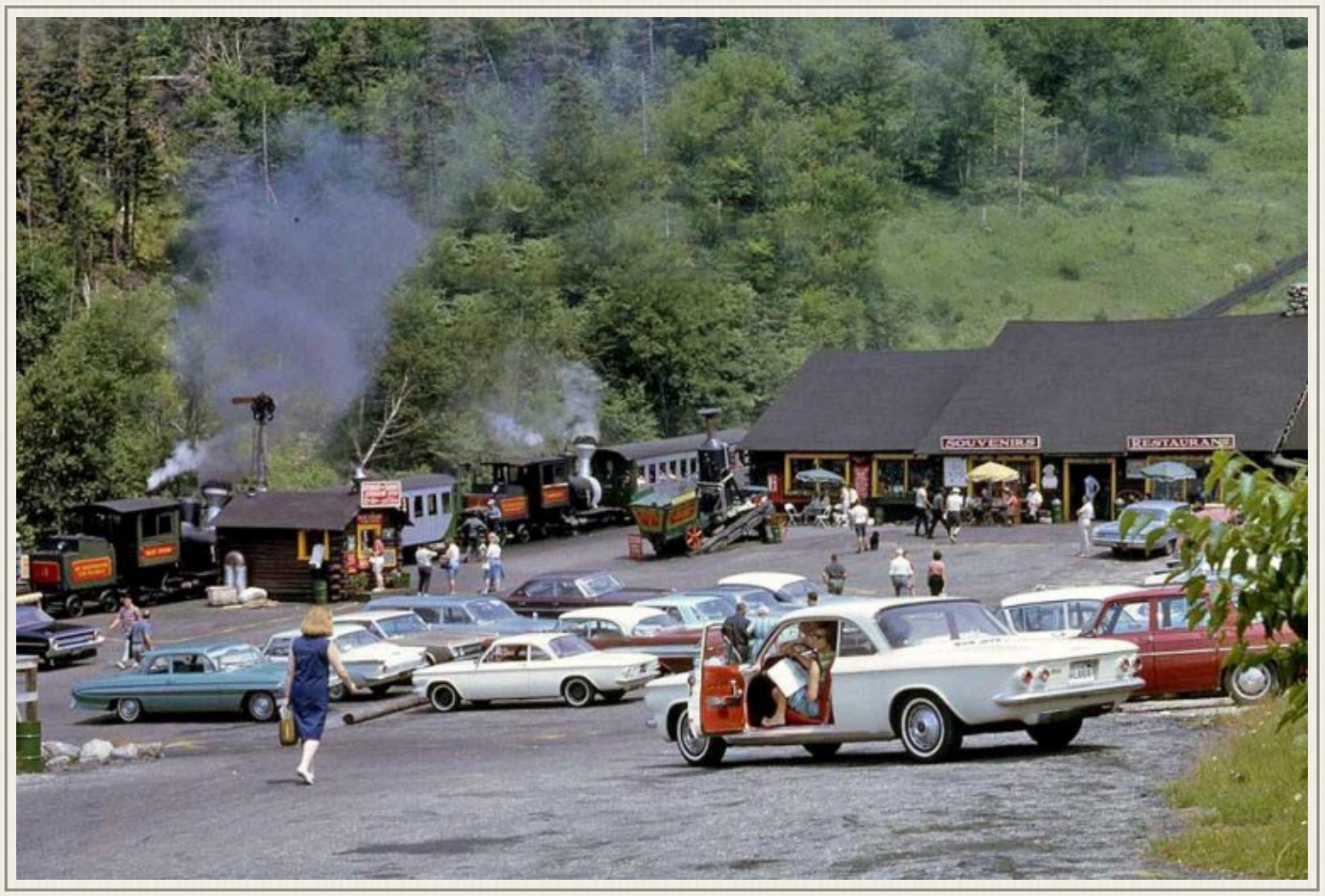
The New Hampshire Legislature asked that a Master Plan for the mountaintop be drafted. Received in 1971, the plan called for a new 22-thousand square foot Summit building with a $1-point 9-million dollar price tag. *(previous page & right)*

"When the Sherman Adams Summit Building was constructed and finished *(below)* in 1980, it was built for withstanding some of the worst weather this planet knows," writes the Mt. Washington Observatory. "This concrete and rebar reenforced building encompasses the northern upper slope of the summit."

The Triple-A says the Summit House "offers a 360-degree view of the northern Presidential Range. Visitors can see the restored 1853 Tip Top House, one of the oldest mountaintop buildings in the country and the first hotel on Mount Washington. The summit building honors Sherman Adams, a former governor of New Hampshire and one of the state's best-known political, civic and business leaders."



Marshfield Station



No. 3 and No. 2 line up for a double-header on a busy day at the Base
Fifties and Sixties Kodachrome Images - theoldmotor.com

Gift Shop

'MIKE' HANEY – Manager



If it takes 21 years of working at the Cog to become of age, Mike Haney has accomplished it. Mike, a Princeton man from Doylestown, Pennsylvania, has managed the Marshfield Gift Shop since 1946. During this time the Gift Shop has been enlarged and the selection of gifts so fine that it has become the outstanding gift center of the White Mountains.

He skillfully and successfully answers all questions; such as, "What colors do you have in your colored film? - How come this is 75¢ and the same thing is 50¢ at the Summit? - Can I swap all my days off this week? - Mike, this woman wants to pay only 50¢ for this article because she found it on the 25¢ display - Where's the ladies room? - What, no tax? - Where's the stamp machine?"

Ch. 9 - Marshfield - Gift Shop

If it's the finest food in the East you are seeking, ask Mike. He can direct you to the best places. *(Cog Clatter v1n3 – July 20th, 1966)*

Mike has been "King of the Gift Shop" for shall-we-disclose? Twenty-two years. After leaving Doylestown, Mike went to Princeton and later traded in his desk for a counter full of sundry items - everything from giant salad forks to stamps. Since his reign, the gift shop has witnessed the Midas touch and its fame has permeated the White Mountains.

This little incident will show Mike's diplomacy with customers: Last Columbus Day, a prospective lady buyer entered the shop. After wandering around the counters for several hours, she approached Mike and asked, "When do you close for the season?" Mike's reply? "In about an hour, madam - I'd thought you'd never ask!" *(Cog Clatter v2n1 – June 29th, 1967)*

Michael Haney was born in Tinicum Township - the son of Levi and Alice Huber. In addition to running the gift shop, Haney served as vice president of the Mount Washington Cog Railway. "Uncle Mike always stopped in at our house in Stamford on the trek from Doylestown in the spring and on the trek to Doylestown in the fall," remembers Art Poltrack whose dad, Tony was the Cog's corporate bookkeeper. "He was always a fixture at Thanksgiving at our house, too. He loved to clean the china, silverware and glassware after the meal as it wasn't rugged enough for the dishwasher. He vacationed with us in Maine." Money did not appear to be an object to Mike. Long-time bookkeeper Ken Randall says Haney was always on the look-out for $100 bills. When one would turn up during the accounting, Randall would give the bill to Haney. Randall says Mike would then carefully wrap the bill around the wires that suspended the gallery of photographs in his living quarters above the gift shop and next to Randall's office. Ken says Mike usually had quite a collection of wrapped and wired Franklins hanging by Columbus Day.

"Mike was a great guy to work for, and work with," recalls Maureen Driscoll Kennedy in August 2017. She worked in the gift shop from 1967 to 1971. When tourists entered the door off the platform, Mike's counter was to the right side of the walkway leading to Marshfield's main lobby, fireplace and lunch counter. "Mike would always stand with his arms crossed (across his chest) with his back against the cash register and he could survey the whole situation," says Driscoll. "Up front (near Mike's counter) you had the better stuff – dishes or pictures – the raisin drying racks with decoupage or a print to hang on the walls. There was one guy from Littleton that would come in, and when you saw him coming you



Mike Haney, Marge Bargar, Shirley Kent & Maureen Driscoll behind Mike's counter (1969)
- Maureen Driscoll Collection

would just direct him to all the new ones that were up there because he liked to purchase them, and he bought many of them."

Driscoll says "One of the things that was always fun when you came on duty would be the challenge that Mike would have saying, 'I sold something today. Can you figure out what I sold?' If there was a big item and we would go around and it would maybe be there for a while and then all of sudden somebody bought the long wooden ornamental spoon and fork that would be hanging up on the wall… and that would be gone. He might have sold it off the late train the night before, or in the morning before you got in there, so he would have a challenge for you to figure out what was sold."



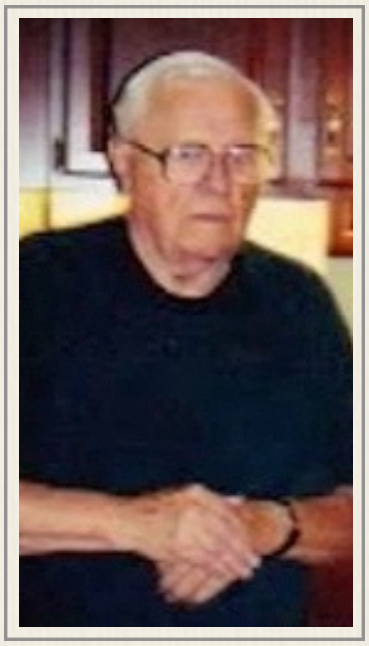
Norm & Dave Koop's sister, Betsy "on the warpath" in the gift shop. The door to the platform at right (1970)
- Maureen Driscoll Collection



Dwight Merrill vacuums the front aisle. Mike's cash register to the right (1968)
- Maureen Driscoll Collection

"He always wanted the gift shop to be looking spiffy. If we weren't waiting on customers we were going around with that duster to make sure everything was polished," says Driscoll.

Mike Haney left the Cog in October 1969 after 24 seasons, and a month later started managing the New York City office and showroom of C.R. Gibson, book publishers of Norwalk, Connecticut - a maker of journals, baby books and gifts founded in 1870. It was the company where Cog colleague, Anthony "Tony" Poltrack was working and would work for thirty years. Tony's son remembers "when Uncle Mike decided to 'retire' from the railway in 1969, Tony got him the job as the 'NY Showroom' salesman."



"I have given up the Cog Railway," Haney wrote to the Jitneys in January 1970. "It was most difficult to even finish last season with the state of affairs at the Base. I did, however, and vowed I would not return for another season."

Mike said he was enjoying the city, living at the George Washington Hotel, and his new job. "It is very interesting work," he wrote. "I'm still in contact with people in the gift shop business. I know many of the people in the other showrooms in the building as I used to do a lot of spring gift shop buying there myself for the shop at Mt. Washington. I work 35 hours a week - 5 days. This seems like a vacation to me in comparison to the hours put in at

the Base. I spend weekends in Doylestown at home and that is a change from constant city life."

"I was in business school when he retired," remembers Art Poltrack, "so that was 1980-1982. From there, I think he moved into assisted living. I know upon his demise, his friend from Doylestown, Jim(?) and his wife, took Uncle Mike's ashes and spread them at the Base."

Mike Haney died in his home in the Rockville Mennonite Community in Doylestown, Pennsylvania on October 3, 1999 at the age of 85.



ANNE TEAGUE

Anne, daughter of Col. and Mrs. Arthur S. Teague of Philadelphia, is attending Stevens High School and in the future plans to be an elementary school teacher. Anne is an experienced and capable horsewoman, having entered her first horse show competition before the age of six. *(Cog Clatter v1n7 – August 17th, 1966)*

Would you believe Anne was born in Philadelphia? It's true - and besides she lives and goes to Stevens School there in the winter. When the "King" gives Anne a day off, she is usually out riding, sometimes oil painting, and always racing around looking for a koop. Could she perhaps be raising roosters? *(Cog Clatter v2n1 – June 29th, 1967)*

Anne married Norman Koop, and earned a B.Ed. from Eastern University, a M.Ed. from Saint Joseph's College plus three courses to acquire endorsement for administration at Castleton State College. In 1990, she was hired to be the special educator at the Barnard, Vermont Elementary school. In 2003, Anne took over as the school's principal. She works there with Paula Whitney Tortolano, the niece of Barbara Whitney Lewis (Mrs. Jitney.) Anne Koop's profile on the school's website says her father "did not want her working on the trains, because train work was for men. But when she was fourteen, Anne began to sneak onto the train. The crew would allow her to work the switches and give speeches to the visitors. She also got to know the conductor of the Boston and Maine Railroad, and would take the train to school in Whitefield, New Hampshire." Anne told Jitney Jr., "The conductors all knew us of course. I mean I lost one of my teeth that way. I had this loose, wiggly tooth. Janey said 'I'll tie a string around the tooth' and then tied it to the bathroom door and shut the (railcar's) bathroom door. Some of the things we did." Koop says her first "unofficial" Cog job was in the cabins. "I was too young to be really working, but my father would give me some spending cash." she remembers. "I worked with Ramona Frye and we'd clean the bathrooms and do the beds and clean the cabins. We all had to learn how to be part of the business. I thought it was so neat and then there was the guest house that had four rooms and big center part with a fireplace *(the original Kro-Flite Camps building)* and that was a cool place." Anne finally found her "official" job in the gift shop working with a male colleague at the counter in the ell to the left of main entry off the platform. Skirts were the uniform of the day for young women and that drew the eye of the young man. It proved to be problematic for Anne. "I finally said to (gift shop manager) Mike (Haney), 'Mike you gotta get him out of here because I'm



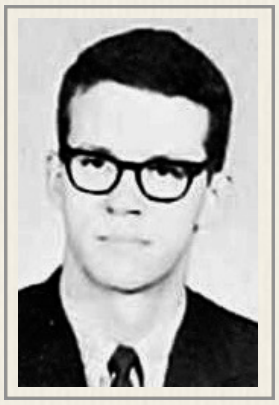
Nick Lucker
- Teague Family Collection

not going to wear skirts anymore if I have to work with him.' If I had to bend down to get a cedar block and I'd say 'Nick, turn around!" Nick was moved over to work on Mike's counter.

NICK LUCKER

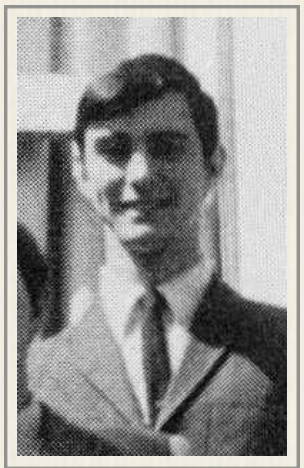
Charlie's friend indeed, Nick *(left)* hails from Annapolis, Maryland. He is now at the University of Maryland with English being his major. Although undecided on what to be, he is well known by his movie associates to think up a poem which makes the trip to the Midway more fun than the movie! *(Cog Clatter v1n7 – August 17th, 1966)*

DAVE CURETON



David L. Cureton (1966)
Maryville College

Attending the counter and going to school are two different things and Dave readily agrees. With Maryville College in Tennessee being his winter abode, Dave is undecided on what to do. *(Cog Clatter v1n7 – August 17th, 1966)*



Wayne Howland (1968)
-Keene State College

WAYNE HOWLAND

From the Whitefield area, Wayne is used to tourists and has many ready answers for them. We only hope he has many ready answers for the professors at Keene State College.

(Cog Clatter v1n7 – August 17th, 1966)

Wayne is a sophomore at Keene State and a junior at the Cog. He was born at Whitefield, N.H., and said he started life as a very young man. Arizona and Florida occupied five years of his life. His hobbies include music and theater.

(Cog Clatter v2n2 – July 7th, 1967)

DOTTIE KLOPP

She started life in White Plains, N.Y. and completed Rollins College, Florida, in December, 1966. Her hobbies include skiing (both kinds), needlework, reading, motor-scootering, in fact, anything to do with sports (Perhaps that's why she married the "Big Sport," John!)

(Cog Clatter v2n2 – July 7th, 1967)



BARBARA LEWIS

Alias "Mrs. Jitney" *(left)* she comes from Chester, Vermont and has been coming for 15 summers. She has worked before in the Gift Shop, but this reporter has kept her out of action until now.

(Cog Clatter v1n7 – August 17th, 1966)



SHIRLEY KENT

Another Vermonter, but from Essex Junction, Shirley *(right)* serves with "Mrs. Jitney" as one person.

Ch. 9 - Marshfield - Gift Shop

Her husband, Bob, usually an engineer on the Deuce, is going to school in Ohio.

(Cog Clatter v1n7 – August 17th, 1966)

VIRGINIA MERRILL

Ginny, a commuter from Jefferson, N.H. will be a freshman at New Hampshire College of Accounting and Commerce the fall. She plans to become a Certified Public Accountant or a business education teacher. *(Cog Clatter v1n7 – August 17th, 1966)*

Ginny is a native, hailing from Jefferson, N.H. The gift shop has been her summer home for three years while winters were spent in Berlin High School. Among her hobbies, hiking and swimming hole first place. By the way, what is the price of Magic Rocks for fellow CPA.'s? *(Cog Clatter v2n1 – June 29th, 1967)*

PAUL MERRILL

Paul was born in a bowling alley in Lancaster, N.H. - what is now the bowling alley used to be a hospital. Air Force blue has suddenly become his favorite color and therefore, he will only be with us for one week. Better meet him now for tomorrow may be too late! *(Cog Clatter v2n1 – June 29th, 1967)*

LORNA MERRILL

Lorna this September will be attending Freewill Baptist Bible College in Nashville, Tennessee and her future is undecided. She graduated from Berlin High School.

Upon leaving the Cog this fall, Lorna will be following the birds south but will have to leave her cash register behind and take up more academic matters. (Lorna, this is double coverage to make up for last year.) *(Cog Clatter v2n1 – June 29th, 1967)*

MAUREEN DRISCOLL



Maureen was born in Colchester, VT is a recent graduate of Essex Jct. High School *(right)* and plans to attend Trinity College, majoring in education:

She has worked here two summers and is a very special friend of Jeff, Kellie, Karyl and Kristin Kent. *(Cog Clatter v2n2 – July 7th, 1967)*

ESTHER WHITE

Mrs. White, with her husband Cass, has been coming to the Cog for a number of years. She had but two comments when questioned. She was tired and she can't find her way around the Gift Shop, so she can't spend her $5 certificate. *(Cog Clatter v1n7 – August 17th, 1966)*

It seems that the gift shop has a fetish for Lancasterians. Mrs. White is also among their ranks. Cass' wife has been with the Cog for seven years and she enjoys her work almost as much as horseback riding. If you can enjoy fine jewelry, observe Mrs. White's fine collection. *(Cog Clatter v2n1 – June 29th, 1967)*

Esther Elizabeth Rines White was born on April 17, 1903, in Lancaster, New Hampshire. She married Almon "Cass" DeweyDaniel White on October 18, 1924, in her hometown. Together

they operated a riding stable and dairy farm on Stebbins Hill, and from 1944 to 1960 they operated the stables at the Mount Washington Hotel in Breton Woods. She was a communicant of All Saints Catholic Church. They had one daughter, Sally. Her husband, "Cass" passed away on April 16, 1983, in Lancaster, New Hampshire, at the age of 84. They had been married 58 years. In 1992, Esther R. "Tess" White died in Lancaster, New Hampshire at the age of 88 on the same day in April *(the 16th)* that Cass had died nine years before.



Food Service

PETE & GRACE RUSINSKI – Head Cooks

Grace and Pete Rusinski, who prepare three meals a day for an average of 75 employees plus providing a full menu for a restaurant and lunch counter are key personnel of the "Cog" operation.

Grace and Pete winter in Florida and have been summering at the Cog for fourteen years. Fourteen years has seen a neat kitchen with an increase in quality and quantity of food.

The Cog Railway has become known as serving the best meals to the employees of any employer in the White Mountains. Grace and Pete have had much to do with establishing this fine reputation. (Pete quit cooking once to go do construction work as a mason's helper - twenty-four hours later Pete decided to continue his career in the kitchen.)

Pete and Grace raise toy poodles as a hobby.

Ch. 9 - Marshfield - Food Service

It might be noted that with better meals and food prices doubled - the Colonel has increased board and room only one dollar in the last 20 years. *(Cog Clatter v1n4 – July 27th, 1966)*

You've heard that Cogmen cannot live by bread alone and thanks to Grace and Pete Rusinski, they don't. For 15 years, Grace and Pete have been filling the hungry stomachs of active Cogmen and Cogwomen with three hearty meals a day.

Besides keeping the Base personnel running, they provide a full menu for the restaurant and lunch counter in their spare (?) time.

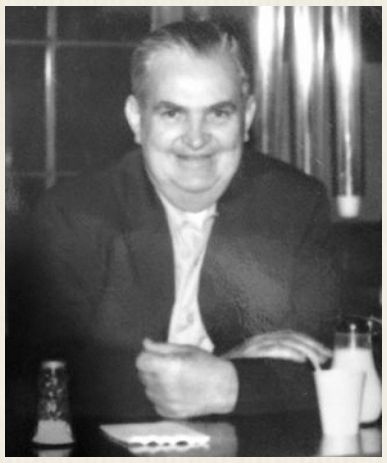
Winter finds the Rusinski household which includes three toy poodles and Mickey in Florida. *(Cog Clatter v2n1 – June 29th, 1967)*

George Trask's son, Robert worked for Pete and Grace, and on Facebook years later said, "it was an eye opener. His famous saying to me was 'Get your a**hole and elbows on that mop handle. Ruthie used to come down with her dogs all the time and Peter made me walk them after dumping the honey bucket. But I would always find a treat in the walk-in without their permission." Jitney says Pete was equally brusque with suppliers. He would poke the side of beef with his thumb before it came into the cooler, and if it wasn't to his liking, Pete would reject it. Jit also says the crew meals improved in quality and quantity when Rusinski took over.

Anne Teague Koop remembers that "Pete and Grace made special... cakes for Jane (Teague) and me as our birthdays were in the summer." At the end of the 1968 season as Anne was preparing to marry Norm Koop, Grace made a special cake *(right)* for a bridal shower. "She took a Barbie doll and turned it into a bride to be," remembers Koop. "It was beautiful. It was Grace's cakes that she decorated that had me go and take multiple Wilton cake decorating classes when I was home raising kids."



Grace Rusinski, Bride Barbie & Anne Teague (Aug 1968)
- Maureen Driscoll Collection



Peter Rusinski (1966)
- Anne Koop Collection

1960s era Brakeman Jack Lynch recalls, "Pete would go on a drinking binge once a summer. He said in the 1950s he woke up from one of these discovering that he had a wife, named Grace, who was still with him working in the kitchen in the 1960s." The wife Peter R. Rusinski "woke up" with was the daughter of Ruth Alice (McIntire) Hartford, who was known at the Cog as "Ruthie."



Grace Rusinski
- FB We Were There

Ruthie was born in Maine in August 1898, the youngest of three daughters born to New Hampshire natives,

Frank and Ruth McIntire. Ruthie's father Frank was a railroad laborer living in Lebanon, Maine in June of 1900 when that year's Census was conducted. 19-year old Ruthie was working as a clerk when she married 22-year old box maker Samuel A. Hartford in Rochester, New Hampshire on February 24, 1917. Daughter Grace Isabel Hartford was born in Rochester April 16, 1918.

The family was still in Rochester in mid-April 1940, and Sam's 70-year old mother, Minnie was living with them. 43-year old Sam was now employing his carpentry skills as a building contractor, while 40-year old Ruthie was employed as a housekeeper. 22-year old Grace had graduated high school and was working as a "general maid" for a private family when the 1940 Census was taken.

32-year old Grace Isabel Hartford would request her Social Security identification be changed to Grace Isabel Rusinski in October 1950 indicating Pete's annual bender occurred that year in the fall. The Ancestry.com database did not yield any marriage documents for Pete and Grace in December 2015, but the Rusinski's would spend many winters in Dover, New Hampshire in the 1950s - then start heading to Florida in the 60s. Grace's dad, Sam Hartford would die in December 1971. Ruthie died in Florida on June 6th, 1986 at age 87. Grace died in Broward County, Florida on May 10th, 1998 at age 80, some eight years after Pete Rusinski died in Fort Lauderdale in March 1990 at 88.

Kitchen

PAUL DRAPEAU

Paul comes from Berlin, N.H., and is not planning to continue with school. This is his first year here. His hobbies are skiing and swimming. He is hoping to join the Navy. *(Cog Clatter v1n8 – August 24th, 1966)*

BOB GODDARD

Bob also lives in Berlin and has no plans for school in the future. This is his first year at the Cog and his hobby is cars and hopes to become a machinist. *(Cog Clatter v1n8 – August 24th, 1966)*

CHARLIE *"Sparerib"* KENISON

Charley lives in Berlin and goes to Berlin High. This is his first year, too. He hopes to work in electronics. *(Cog Clatter v1n8 – August 24th, 1966)*

RICHARD TIRRELL

Richard lives in Boston, Mass and is going to go to Stonehill College. His hobbies are reading, writing and bicycle riding. This is his first year and he likes it. *(Cog Clatter v1n8 – August 24th, 1966)*

ARTHUR BROWN

Arthur, a grille man, is from Newark, VT, and attends Lyndon Institute where he is a senior. Undecided about his future, his hobbies are rocks and stamps. *(Cog Clatter v2n3 – August 2nd, 1967)*

Ch. 9 - Marshfield - Food Service

FANNY TEAGUE



- Concord College Yearbook 1967

Fanny *(right)* lives in Philadelphia, Pa. and is going to Concord College in Athens, Virginia - where she will be a sophomore. Her hobbies are singing, horseback riding, and skiing. She has come here ever since she was born; started work at 15 which makes it four years that she has worked at the Cog. *(Cog Clatter v1n8 – August 24th, 1966)*



Fanny Teague
- Anne Koop Collection

Fanny would continue working summers at the family-owned attraction for another seven years. She graduated from Concord College, and found her true love in nearby Twin Mountain, New Hampshire. She married Robert J. Blaggie on May 24, 1974 at Saint-Martin-in-the-Fields with a reception at the Philadelphia Cricket Club. Her proud mother wrote in her biography, "Fanny looked beautiful and her wedding could not have been nicer." Ellen Teague found it "was a festive affair with loads of her friends present, and it was gratifying to see many of Fanny's former school pupils sitting in the church."



Fanny Teague Blaggie (2015)
- Lewis Family Collection

Fanny and her husband headed south to Florida where they still live. She says she has been there so long she has lost her tolerance for the cooler temperatures of the North Country, although she was back at the mountain in 2014 for a Cog employees reunion.

CLARENCE BRYANT

Clarence, from Rochester, N.H., washes dishes in the kitchen and drives a hard bargain when it comes to trading cars as proved by his latest swap. Clarence, during the winter, attends Spaulding High School. *(Cog Clatter v2n3 – August 2nd, 1967)*

BOB BRYANT

Bob, brother of Clarence, also a dishwasher, comes from Rochester, and also works on a farm there. His hobbies are models, alive or otherwise. *(Cog Clatter v2n3 – August 2nd, 1967)*

MARK FILLION

Mark, from Tampa, Florida, was born in Vermont, but is a true "Floridian." He is the grandson and son of former cog engineers. Perhaps by the end of the summer, Mark, you'll be able to handle the fat better. *(Cog Clatter v2n3 – August 2nd, 1967)*



Becky Morgan
- Granger Family Collection

BECKY MORGAN

Becky is from Greenfield, N.H., and goes to Greenfield High where she will be a junior. She is not the first Morgan to work here; John, her brother, is now flying helicopters in Vietnam. Becky likes to listen to Roger Miller or maybe throw Rocks at him.

(Cog Clatter v2n3 – August 2nd, 1967)

JANE TEAGUE - Counter and Dining Room Manager

Jane comes from Philadelphia, PA, where she goes to Drexel Institute of Technology. Some of her hobbies are riding, cooking, Boys' Choir *(Cog Clatter v1n9 – September 2nd, 1966)*



Jane manages the Marshfield counter and dining room and has been coming up since she was eight. During the winter, Jane gives riding lessons. She likes to sing or is that listening to someone sing? Oh, Well! *(Cog Clatter v2n3 – August 2nd, 1967)*

Jane Crawford Teague was born July 7, 1943. At age six, she was diagnosed with diabetes which put her in a coma for a month. She recovered but would spend the rest of her life dealing with the disease. Her mother's biography describes an October 1969 fall down the stairs that sent Jane to the hospital. A stroke and another coma occurred early that November. Ellen Teague's book describes Jane's recovery in detail such that Jane was able to return to the Cog in 1972 and 1973 to help the family manage the operation even though she had lost her eyesight. She died October 14, 1973 at age 30.



Sharon Riff, Fran Conkey and Carolyn Poltrack (L-R) line-up for a picture outside the Marshfield Dining Room (1966)
- Poltrack Ashley Family Collection

Ch. 9 - Marshfield - Food Service

Dining Room Waiters & Waitresses

SHARON RIFF - Lancaster, N.H.

Sharon's future is at University of Mass. in the Public Relations - wow - practicing already. First year at the " Cog " and her hobby is horseback riding - would you believe ice hockey ???? *(Cog Clatter v1n5 – August 3rd, 1966)*

Sharon Anne Riff, 60, passed away suddenly on Thursday, November 20, 2008, of a massive heart attack at the Peabody Home in Franklin where she has resided for the past four months. Sharon graduated from Lancaster Academy, she attended the University of Massachusetts, Amherst, the University of New Hampshire and St. Paul's School in Concord where she studied advanced math. She grew up around flowers and truly loved them as her parents owned and operated Riff Flower Shop for many years. She also enjoyed gardening and riding horses at the Lancaster Fair. Sharon was devoted to her mother, who she took care of for two years due to failing health. (www.baileyfh.net/obituary.aspx?MemberId=51077&MName=Sharon+Anne+Riff)

FRANCES CONKEY - Philadelphia, PA

Chatham College in Pittsburgh will find Fran among its students. As a psychology major she should bud into an interesting career. *(Cog Clatter v1n5 – August 3rd, 1966)*



Peter, Fran & cat in San Francisco (1975)
- Lewis Family Collection

Fran, from Philadelphia, is a sophomore at Chatham College, a women's liberal arts college. Her second year here in the dining room, Fran especially enjoys flowers that Bud!
(Cog Clatter v2n3 – August 2nd, 1967)

Fran did marry a doctor, orthopedic surgeon Peter Trafton *(left)* and they hosted the *Cog Clatter* editor during his 1975 post-college graduation cross country trip at their home in San Francisco. At the time, they were preparing to move to Alaska. When her mother died at home in Hanover, New Hampshire in 2012, the obituary indicated that Fran was living in Providence, Rhode Island and her sister, who also worked at the Cog, Jane Fairbank Conkey *(left)* was residing in Falls Church, Virginia. Jane spent three summers working at the Cog (1964-1966). She graduated from Coe College in June 1967. Married and twice divorced, Jane had one child with her second husband.



Jitney Jr. with Clatter typist Fran in San Fran
- Lewis Family Collection



Jane Conkey at '66 Cog Party
- Poltrack Ashley FamilyCollection



Carolyn Poltrack
- Granger Family Collection

CAROLYN POLTRACK - Stamford, CT

Carolyn is going to school at Redford, Virginia, but hates cats. (Hang down your head, Matt Dooley, as we understand he's a real cat!)
(Cog Clatter v1n5 – August 3rd, 1966)

KATHY FRENCH

Kathy is a sophomore at Hollius College in Virginia and would like to major in French-English literature. Kathy enjoys field hockey and is a Champion room cleaner. *(Cog Clatter v2n3 – August 2nd, 1967)*

FRANCES (Honey) KROPP

Honey is a senior at U.S.C. where she is majoring in English. She would like to teach in the American schools in Europe (hopefully, Germany). Her hobbies are reading, music, and tickle-snap bugs. She misses a radio and record players in this her first trip north. Honey finds Northerners friendly - not what she expected - and wishes for some sloppy clothes. *(Cog Clatter v2n3 – August 2nd, 1967)*

ANNETTE BRELAND - Bamberg, S.C.

Bre is attending Winthrop College, S.C. and enjoys water skiing, reading, and talking to Bill Whiteley; has promised to get a Confederate flag to fly in the island. *(Cog Clatter v1n5 – August 3rd, 1966)*

Counter

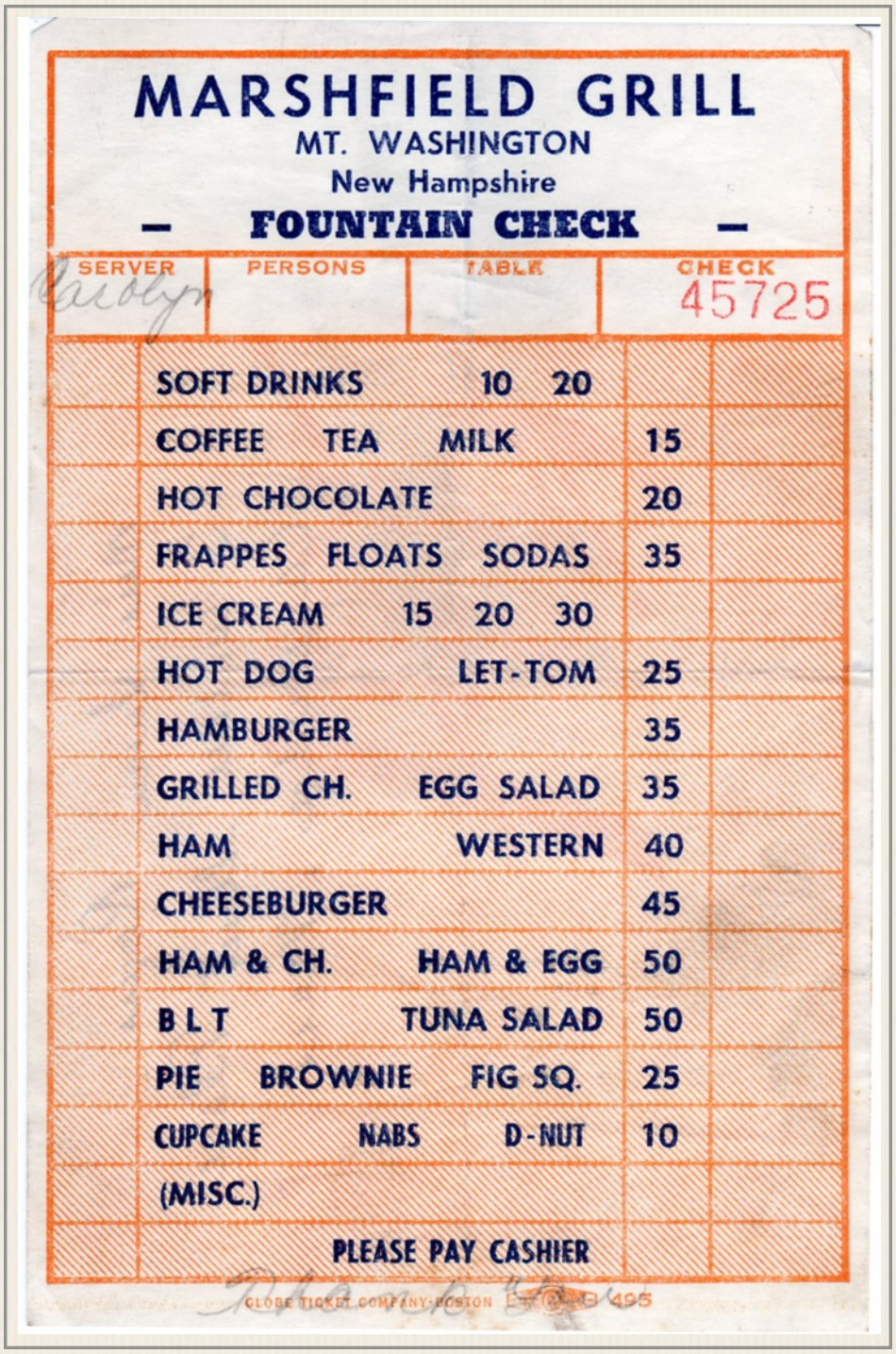
LINDA HARTMAN - Greencastle, PA

Juniata College is not as interesting as wading in Upper Falls, but one does have to go to school. Linda, you just can't go through life Klippety Klopp. *(Cog Clatter v1n5 – August 3rd, 1966)*

Linda, a two year veteran, this year graduates from Juniata College, after that will be cooking on a computer. She says after this year's Cog party she won't be found in the Ammonoosuc, *(Cog Clatter v2n3 – August 2nd, 1967)*

WILLI MARDEN - Andover, MA

Next year Willi will be Mrs. Kopp. She enjoys snow and water skiing and is look-


MARSHFIELD GRILL
MT. WASHINGTON
New Hampshire
– FOUNTAIN CHECK –

SERVER	PERSONS	TABLE	CHECK
Carolyn			45725

SOFT DRINKS 10 20		
COFFEE TEA MILK	15	
HOT CHOCOLATE	20	
FRAPPES FLOATS SODAS	35	
ICE CREAM 15 20 30		
HOT DOG LET-TOM	25	
HAMBURGER	35	
GRILLED CH. EGG SALAD	35	
HAM WESTERN	40	
CHEESEBURGER	45	
HAM & CH. HAM & EGG	50	
B L T TUNA SALAD	50	
PIE BROWNIE FIG SQ.	25	
CUPCAKE NABS D-NUT	10	
(MISC.)		
PLEASE PAY CASHIER		

CLOBE TICKET COMPANY-BOSTON

Order slip torn from Carolyn Poltrack's book (name and "Thank you" pre-written) Prices seem reasonable - Lewis Family Collection

ing forward to keeping house. *(Cog Clatter v1n5 – August 3rd, 1966)*



Counter Crew (L-R): Fanny Teague, Marcia Gilbert, Babbie Landreth, Jane Conkey (1964)
- Teague Family Collection

DWIGHT LAWRENCE - Philadelphia, PA

Louisiana State University will be Dwight's abode next school year. He enjoys tennis and hunting. With his hair-do he may be a "Mountain Man." *(Cog Clatter v1n5 – August 3rd, 1966)*

RUSTY AERTSEN - Philadelphia, PA

Rusty's name will appear on the class roster at Harvard next school year. He enjoys sailing and skiing and sour milk. *(Cog Clatter v1n5 – August 3rd, 1966)*

MARE JAMISON - Drexel Hill, PA

This reporter doesn't know the Dean at Green Mountain College but that is where Mare will be next year. Horseback riding is one hobby. *(Cog Clatter v1n5 – August 3rd, 1966)*

JUDY KENNEY – Twin Mountain, N.H.

Judy was born in Natick, Massachusetts and has been at the Cog for 14 summers. As for the future, Judy hasn't decided on her occupation. Judy loves being a waitress. *(Cog Clatter v1n6 – August 11th, 1966)*

MAUREEN DRISCOLL

Maureen comes from Essex Jct., Vt. where she goes to Essex High. She plans to be a nurse. She is no newcomer to the Cog for she has been a valued member of the Kent family for three summers. *(Cog Clatter v1n9 – September 2nd, 1966)*

DIANE FERLAND

Diane comes from Whitefield, N.H., and will be working here this fall on weekends. She has enjoyed the work, although undecided on her future she now attends Whitefield High. *(Cog Clatter v1n9 – September 2nd, 1966)*

BOBBI MAWHINNEY

Bobbi comes from Brookline, Massachusetts and goes to secretarial school in Boston. Her hobby is swimming. She plans to be an airline hostess. Bobbi is eating carrots so her vision will be better at night. *(Cog Clatter v1n9 – September 2nd, 1966)*

MARGIE (Max) CAMPBELL

Max was born in Philadelphia, PA. She goes to Temple University in Philly. Her future is undecided. Her hobbies are boys, drawing, skiing and swimming in that order. She likes to make



brandy and she can make excellent frappes. She is hoping to come back next year. *(Cgo Clatter v2n2 – July 7th, 1967)*

LARK CHRISTY

Lark was born in Shreveport, LA. She will be a senior next year in the Airline High School. She would like to go to LSU or perhaps a northern school. This was her first trip to New Hampshire and she likes it very much, although she thinks a Confederate flag should be placed with the others! *(Cog Clatter v2n2 – July 7th, 1967)*



Peppersass became the backdrop for Marshfield crew shots. This is the 1964 Counter Girls' Christmas card image
- Lewis Family Collection

DAVE WIDING

Dave was born in Philadelphia, PA. He is now going to the College of Artesia, New Mexico. His future is undecided. His hobbies are surfing, wrestling, tennis and riding a motorcycle (when it's running, that is.) *(Cog Clatter v2n2 – July 7th, 1967)*

GAY CROZER

Gay will be a sophomore at Briarcliff College and has plans to transfer to a co-ed (hmmm) college. She is interested in marine biology and social work. Her first summer here and she loves the counter. She enjoys driving, swimming, tennis, and painting. She says she picks up practical application of social work by suiting a customer's whims. *(Cog Clatter v2n3 – August 2nd, 1967)*



The Peppersass and waitresses 1968 group shot
- Granger Family Collection

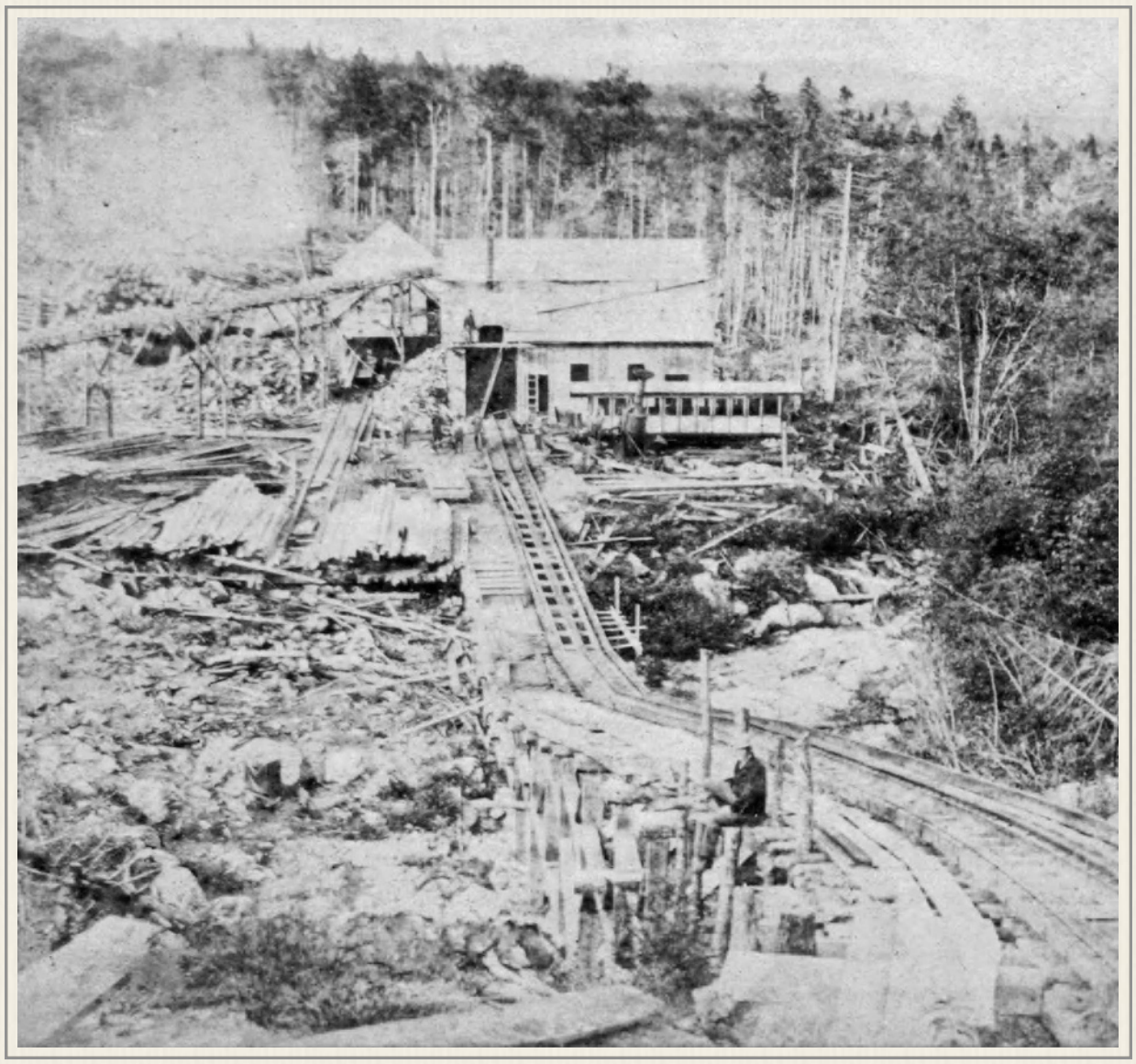
BILL LAPIERRE

Bill is a senior at St. Stephens CCHS. in Worcester, MA. Bill hopes to attend Catholic University of America, Washington, D.C. His hobbies are golf, trombone, and drama. Bill says he enjoys working behind the counter during this, his first year here. *(Cog Clatter v2n3 – August 2nd, 1967)*

The Marshfield Location

In 1866, Sylvester Marsh began cleaving his railroad out of the woods next to a bend in the Ammonoosuc River at the base of the ridge that Ethan Allen Crawford and Horace Fabyan had used for their paths to the summit. Ox teams hauled equipment and supplies along Fabyan's "bridle path" to the site. A log cabin and sawmill powered by an overhead sluiceway from the river were built from trees harvested from the area.



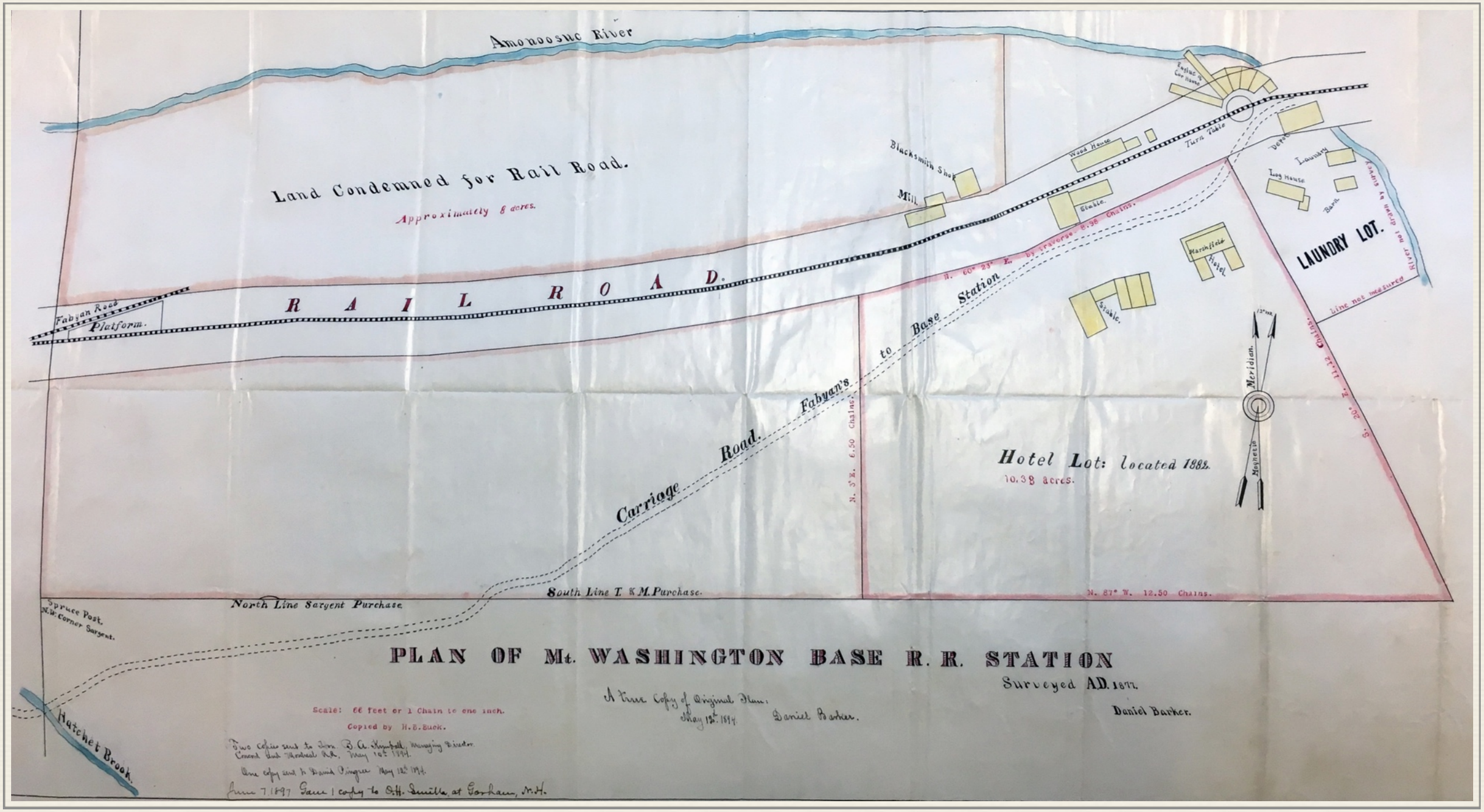


The sawmill run by Charles Aiken produces the timber for track construction and an engine house. A turntable is installed and the railroad's first enclosed passenger car and No. 1 *Hero* can be seen on sidings in front of the building.

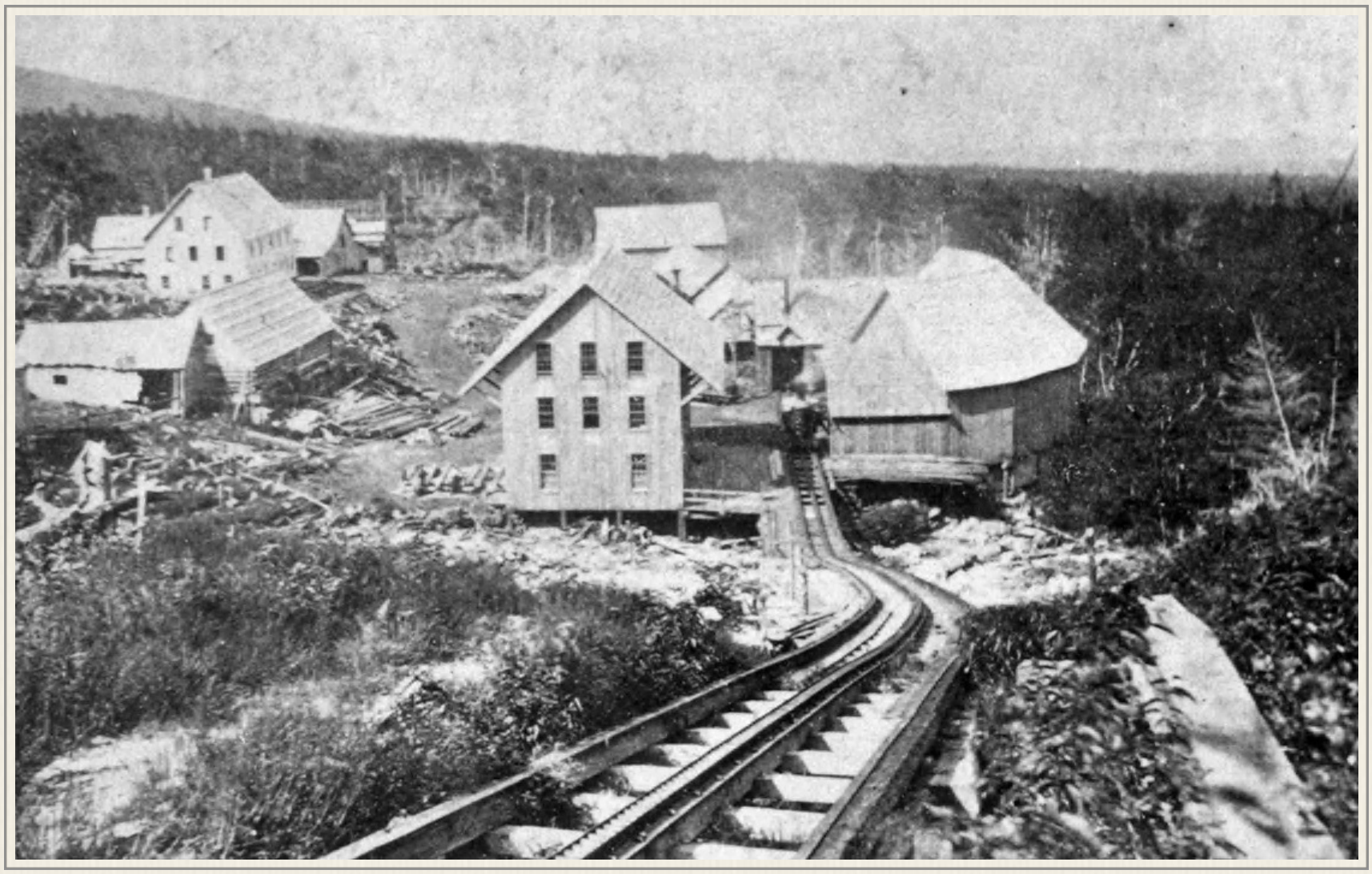


The sluiceway came down, a steam powered sawmill, a roundhouse and 3-story depot building to house workers with a passenger waiting area on the first floor were built. Carriages and coaches would arrive over the toll road to take trains to the Summit. Sylvester Marsh built stables to house the horses.



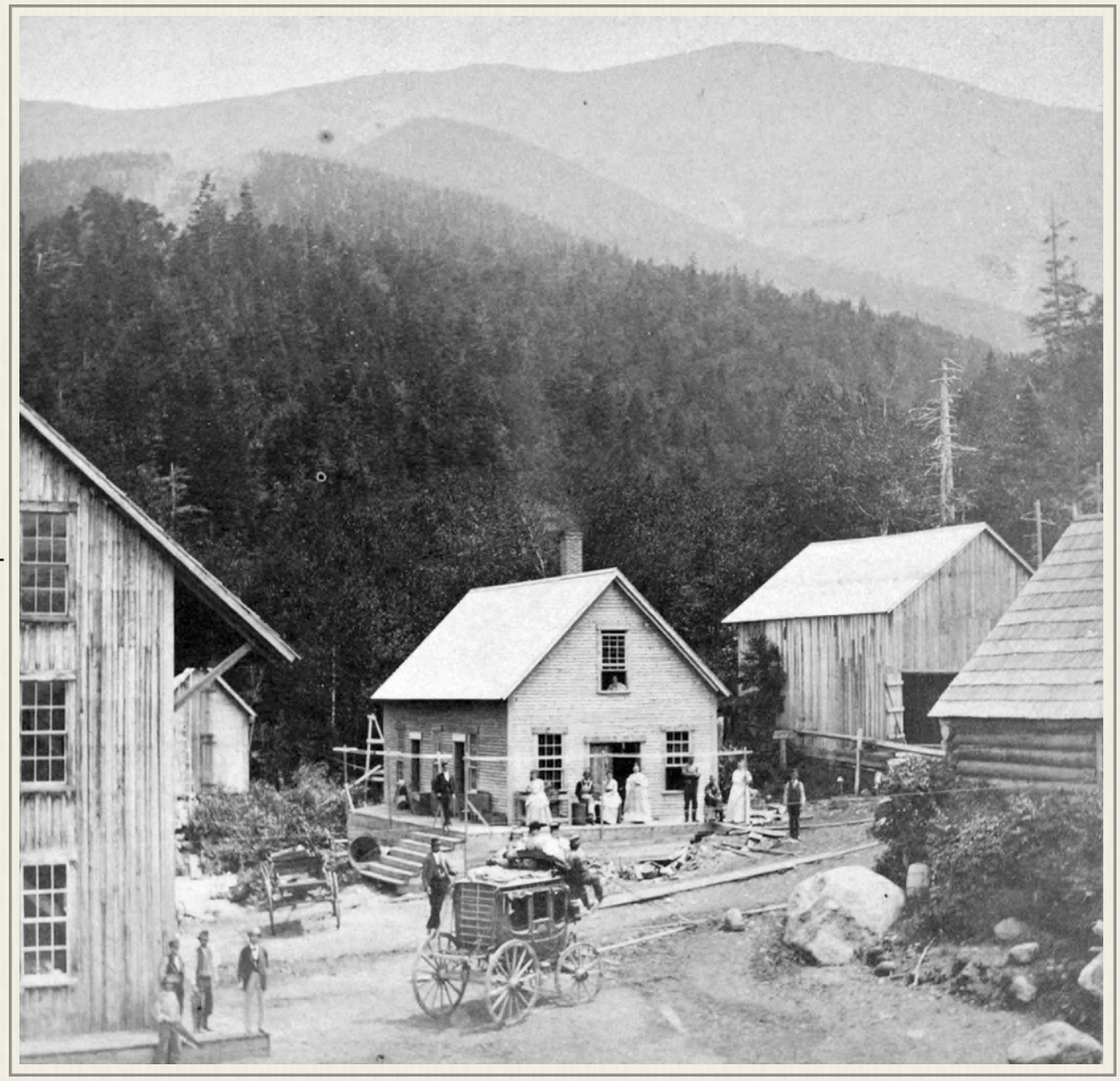


1877 Survey of Mt. Washington Railway Base Station *by Daniel Barker showing hotel lot located in 1882 where Marshfield House and Aiken stables were built - See image next page.*
"A true copy of Original Plan made on May 12, 1894 by Barker." Copies of this plan were given to the Concord & Montreal Railroad and Daniel Pingree then in a dispute over summit holdings.
- Peabody Essex Library holding / Robert Bermudes Collection



On the other side of the toll road to the left of the Base complex *(above)*, the Marshfield House and more stables were built by Walter Aiken.

This became part of the quiet Marsh-Aiken dispute. Sylvester Marsh wrote, "The RR Co built a barn on land condemned for RR purposes & allowed Mr. Barron proprietor of Twin Mtn House to occupy it for transient custom and run in opposition to my own private barn built for the purpose of accommodating the RR travel." He formally complained to Aiken about the arrangement in July 1871.



The Base compound continued to be the beginning of the Mount Washington Railway until 1876 when a six-mile railroad spur line from Fabyan went into operation. Even the heaviest main-line locomotives could not bring their passengers to the original Base due to the final grade to the site, so the Cog track was extended down to a new passenger transfer point.

Rev. Guy Roberts wrote, "This occasioned the awkward arrangement of having the depot - which was an ungainly three story affair - car & engine houses, stables, wood sheds, boarding house, etc., at the original terminus of the Cog-road, but with the actual junction of the two roads a quarter of a mile farther down the Mountain." This "awkward arrangement" would last nineteen years before nature erased most of the original MWR Base complex in flames in 1895.

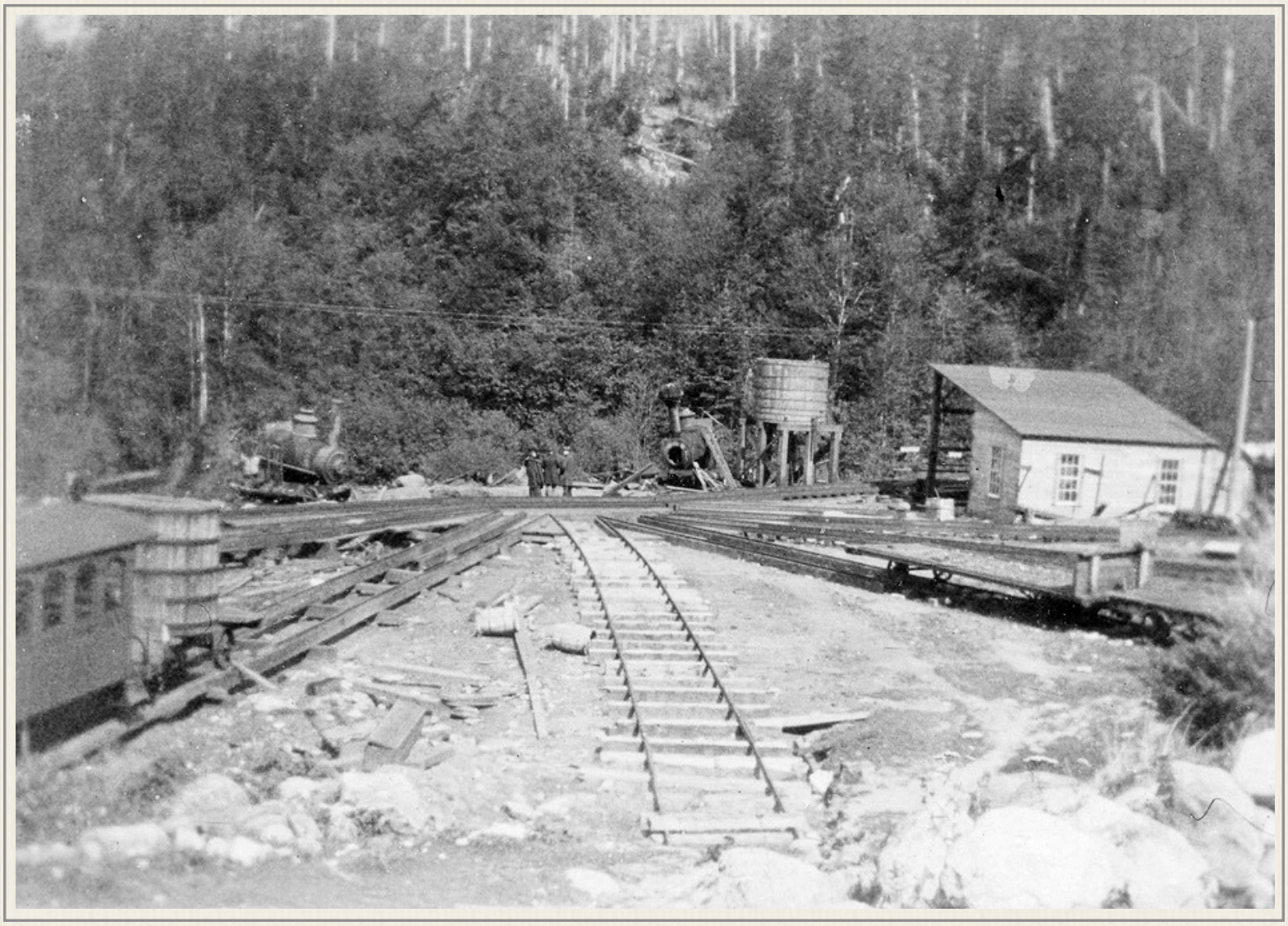


The tracks are laid and the platform is built ready for the passengers from the Fabyan spur line (left) to the cog line (right) - NYPL Digital Collection

"The fire, which destroyed the buildings and much rolling stock belonging to the Mount Washington Railway at the Base on the 23rd of May, is thought to have been caused by the forest fire, which originated at Zealand and extended to Mount Dartmouth. The latter is fully three miles distant, but the wind was blowing very hard from that direction at the time. When the fire was first observed the roof of the old depot was burning in several places. Two engines, and all but three of the workmen connected with the road were up the mountain, part at the Summit and the others looking after the fire that was burning near the railway. One engine, which was fired up, in addition to the two that were up the road, was saved. The old depot, engine and car houses, machine shop and the laundry, were all burned, leaving nothing standing but the old Marshfield House, occupied by the workmen, and a woodshed. Of the rolling stock four engines, two passenger cars, a freight and a baggage car were burned. The engines burned were the Eagle, Atlas, Cloud and Falcon. Some of the workmen lost their clothing and considerable sums of money. The company's loss was much larger than the insurance upon the property. Two engines that were made for the abandoned railway up Green Mountain at Bar Harbor, have been purchased, and a new one is being built at Manchester which will be delivered within a short time. Two new passenger cars and a baggage car have been built to take the place of those burned." - From Among the Clouds - July 13, 1895

The aftermath *(next page)* shows the railroad continued to operate. Two engines, *Eagle* and *Cloud* were scrapped. The straight smokestack on the burned engine indicates that is the *Falcon* that became No. 1, and a ladder leading to the other's dome hints that it may be the *Atlas* that was rebuilt.





- photos from Paul Forbes Collection





The 1895 fire prompted construction of a new engine house, car barn, boarding house, and transfer station near the end of the spur line. After move, the Marshfield House was burned and it left departing passengers with this mountain clearing view captured in 1906. *(Library of Congress photos)*

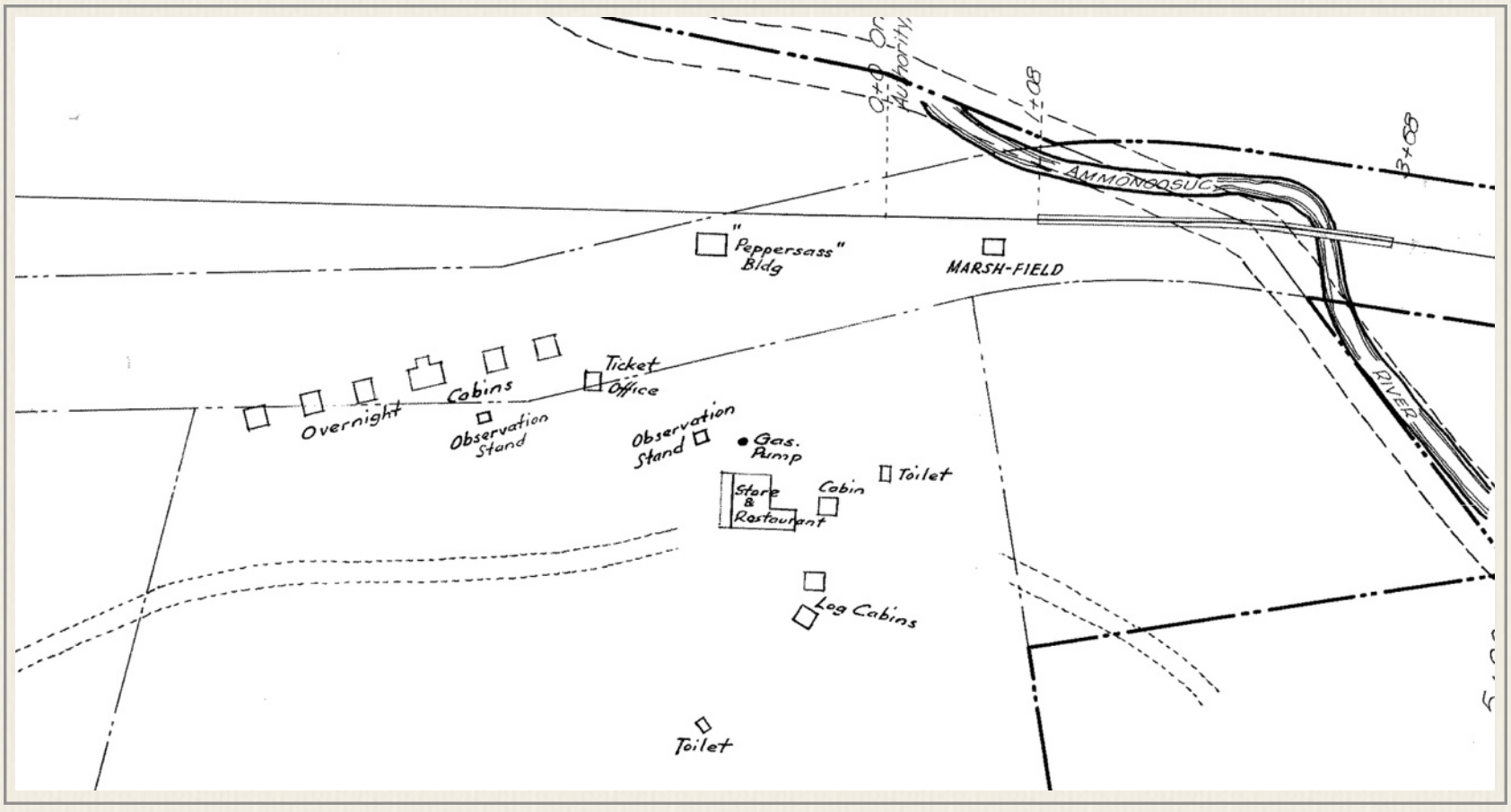


The next structure to occupy the original Base site next to the Ammonoosuc River was built in 1925. The tiny Kro-Flite Station was a waiting area for passengers who drove their cars up the Base Road to the Kro-Flite Kamps parking area. They would catch the train after it steamed up from the junction with the spur line passengers. *(The No. 9 waits in above postcard)* Rev. Guy Roberts successfully petitioned that the little station be named Marshfield to honor Sylvester Marsh and Darby Field. *(No. 1 crew takes a break below)* Little Marshfield Station was operational until the Fabyan spur line rails were removed, and Col. Henry Teague decided to focus his Base operations where the tourists parked their automobiles.



- photos from Robert W. Bermudes, Jr. Collection

Ch. 9 - Marshfield History



The Mount Washington Railway's 1925 Tax Valuation map *(above)* was corrected in September 1934 to show how Col. Teague had lined up the old Kro-Flite Cabins to overlook his trains coming up from the old transfer point to Marshfield. He had also built a "Peppersass" building to display the engine that famously crashed five years before. Pictures of the engine being moved and the building are part of the Granger Family Collection as the Plineys Granger helped with the various moves.



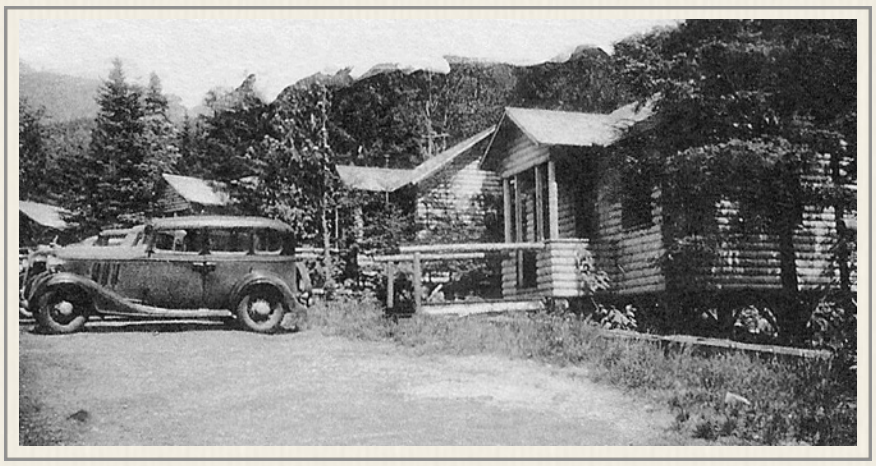
- Granger Family Collection

Teague's development of the new Base Station complex after 1934 was the subject of a glowing *Littleton Courier* report in September 1938 that detailed the work done just before the Great Hurricane hit New England that month.

"The latest innovation by Col. Henry N. Teague, president of the unique railroad, is a new waiting room, the log walls of which are just going up, at the Marshfield station. The large building includes a main section 40 x 50 feet, and two ells 32 x 30. It is to be a 1½ story structure of spruce logs cut on the White Mountain National Forest. It will contain a monster stone fireplace, and is expected to be ready for use next summer.

Determined to Progress

"Col. Teague is one businessman who is determined to keep moving forward, and under his management the cog railway has seen many changes and improvements. During the past summer five new overnight cabins, made of logs, have been built to accommodate the increasing number of patrons who come to ride up the mountain. This addition brings the cabin total at the base to 15, all operated under the regulation that they are for patrons of the railroad only and are not be let for any period of time.



"They serve as handy lodgings for those who come down the mountain on the last train at night or plan to go up early in the morning. Col. Teague now plans to cover the other 10 cabins, newly painted this summer, with rustic log siding for next season.

Has Log Cabin Home

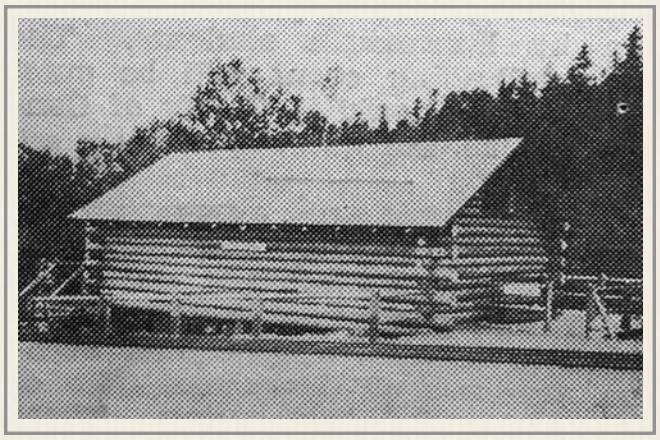
"In line with the log cabin scheme of things at the base of the mountain, Col. Teague has built himself an attractive two-story house of logs, not far from the Base Station. Modern in every detail, and very comfortable throughout, the glorified cabin fits nicely into a woodland setting that includes even a mountain stream.



"Two old buildings, the former laundry and ice house, have been converted into dormitories for the large number of college students employed during the summer. The total number of employees this past season went over the 100-mark at the height of business but has been reduced considerably by the departure of the students to nearly 20 colleges and schools in various parts of the country.

Up-to-Date Rest Room

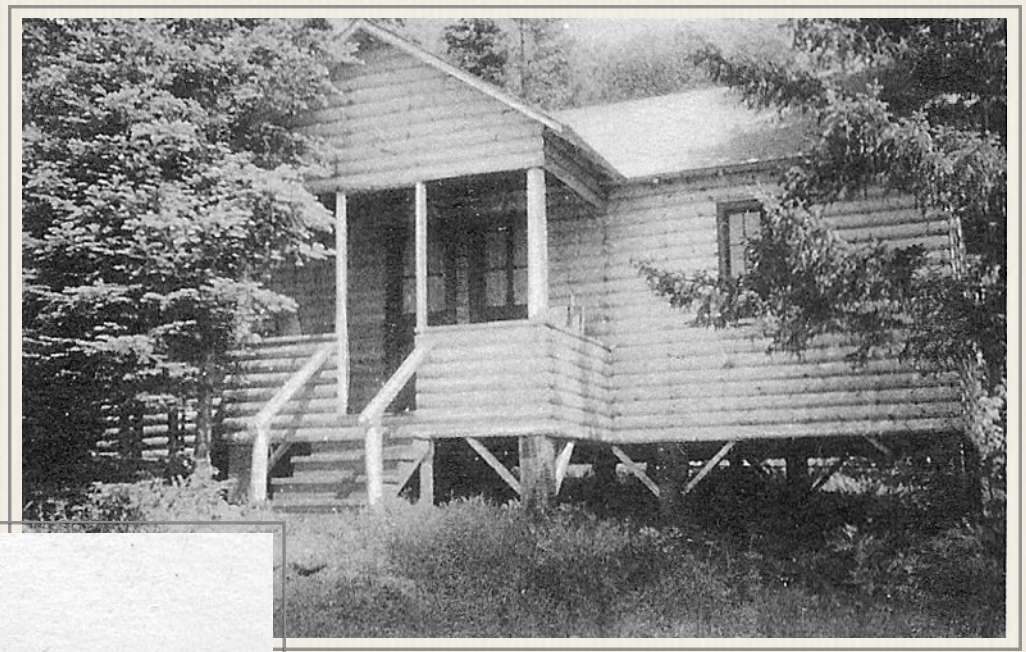
"One of the outstanding improvements of the current season has been the construction of a new rest room, fitted out in the most up-to-date style and carrying out the rustic motif in appearance. The public facilities here are as good as will be found anywhere. The home of "Old *Peppersass*," the first engine to climb the railway to the top of Mt. Washington, will become a log

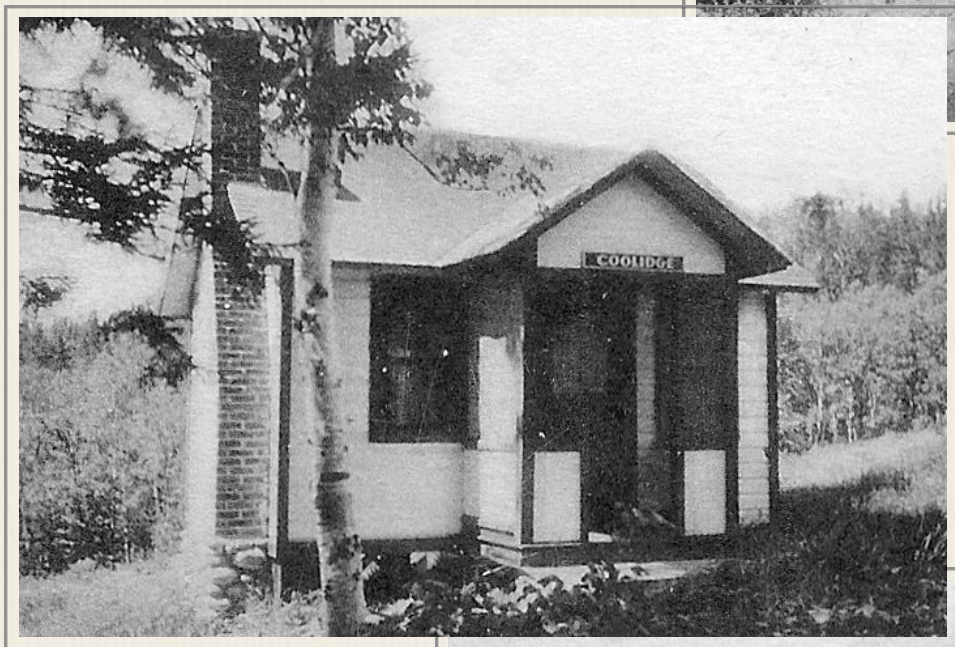


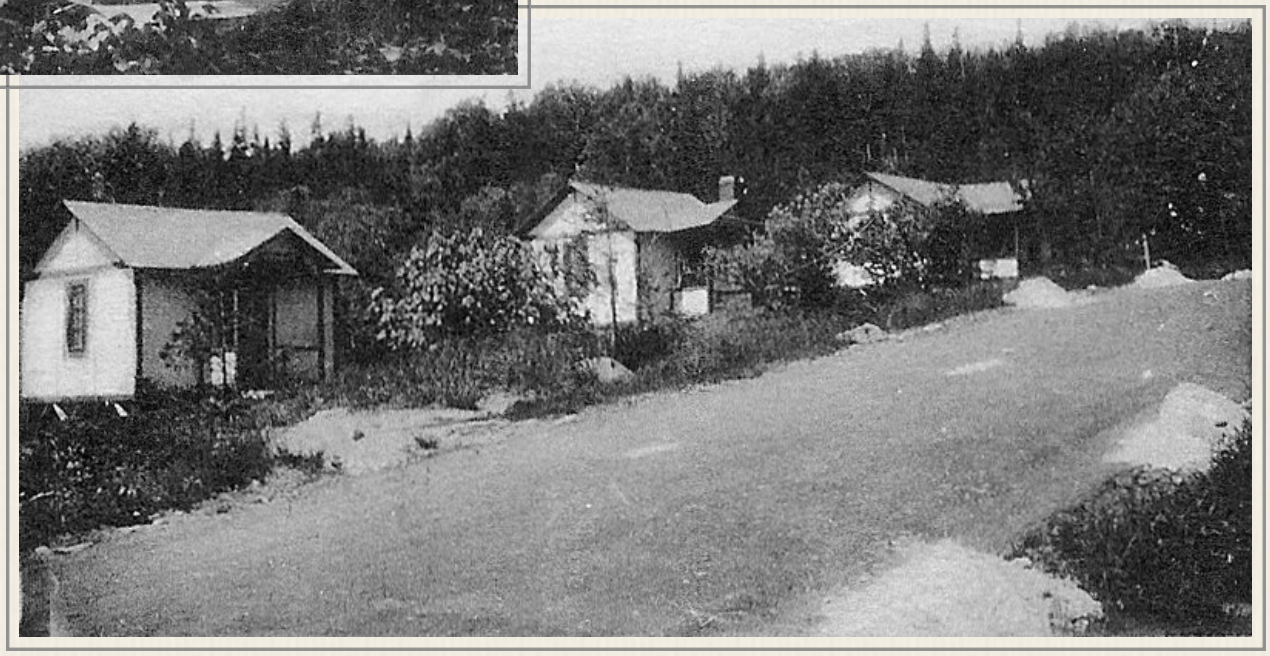
cabin next season, and will be moved a few yards from its present location.

"One thousand feet of six-inch pipe line was laid this year to get more water from the Ammonoosuc river. Three of the streamlined coaches on the railway have been fitted out for steam heat, and passengers now occupy leather covered seats that once were part of the equipment of Boston trolley cars.

This *Courier* article appeared on page one on Thursday, September 22, 1938 alongside the lead story detailing the devastation the hurricane had wrought the day before.

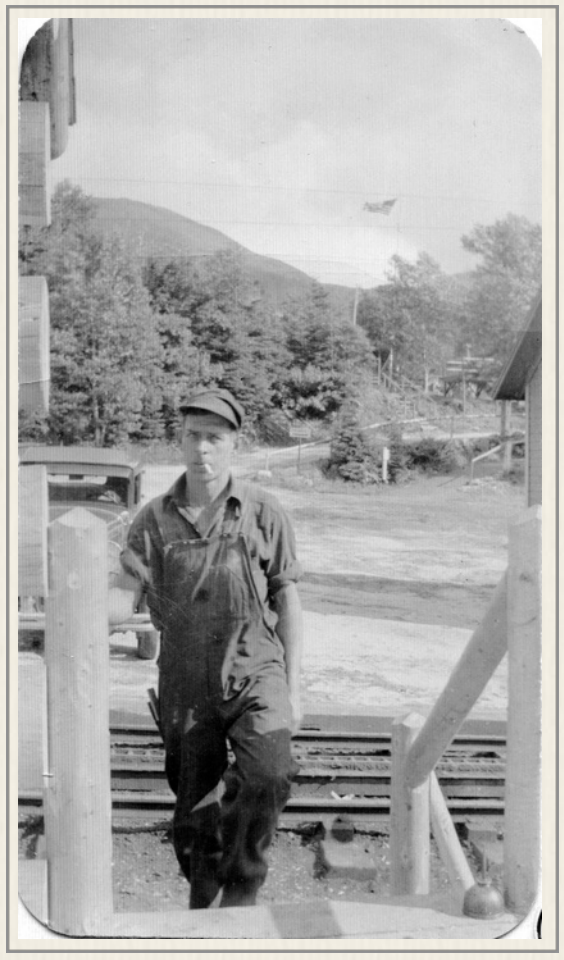








The new 48-passenger "streamlined" car is unveiled in 1938 with the No. 1 *Mt. Washington* in front of the new log restrooms.
- B&MRR Historical Society



Engineer Floyd Williams mounts stairs to the new log building. Edge of *Peppersass* House visible *(right)* along with US flag rising above trees. Note: oil can on landing (1938)
- Beverly Williams Decato Collection

This May 1939 view of the Base shows the new Marshfield under construction between Little Marshfield and the river. The "*Peppersass*" House is gone. The restroom building appears to have a porch on the back, the old Kro-Flite building with flag pole can be seen on the left with rental cabins in the center. The Hut, Boarding House and shops in the distance.
- photo Mike Dickerman Collection



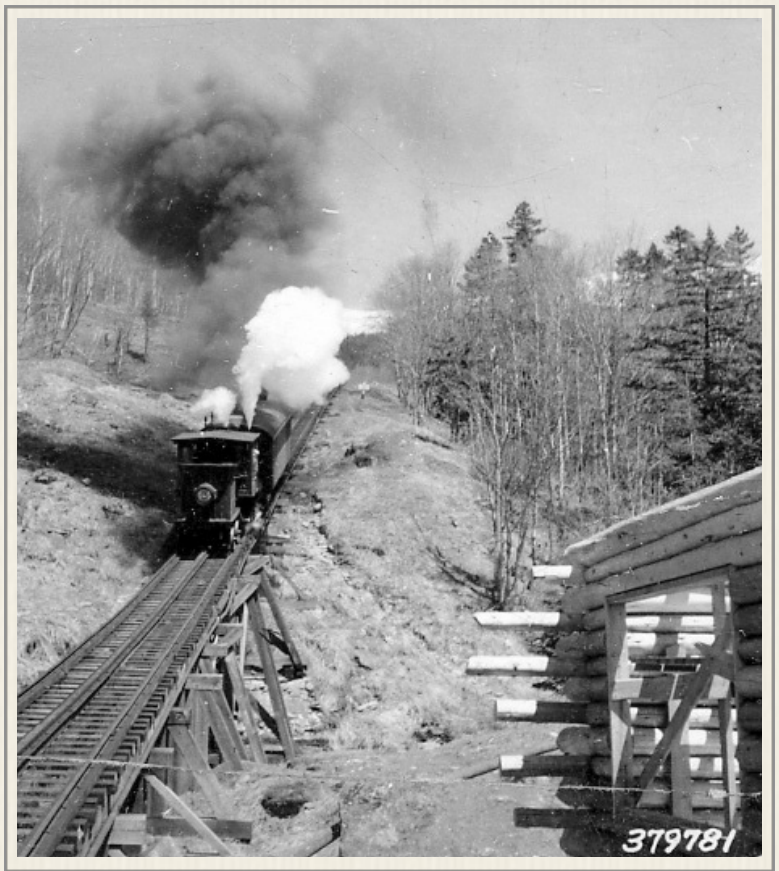


A blown-up segment of the previous picture shows flooring for office and living quarters above gift shop going on, while worker on staging works latest log course near front door.

The picture below was taken on May 18, 1939 as a "group of (National) Forest officers is about to inspect hazard reduction work on Cog Railroad right-of-way. National Forest land is beyond the buildings." The man with dark overcoat and light cap with back to camera may be Col. Henry Teague giving them a briefing.



- photo by Bluford W. Muir / Forest History Society



- photo by Bluford W. Muir / Forest History Society

A Cog train *(left)* steams up first grade past the new Marshfield construction in May 1939.

Col. Henry Teague wanted the new facility completed by June 22, 1939 as 100 guests including Missouri Senator W.S. Truman, and the New England Council were due to arrive from Boston for a noon luncheon at Marshfield before taking a train up over the new trestle built to replace track destroyed by the September 1938 hurricane.

Pliny Granger said Teague was especially frustrated with the slow progress of the great fireplace made of native rock. Teague told the stonemason to lay more courses. The mason did and the next day all the extra stones placed at Teague's behest had tumbled to the floor. Teague held his tongue. The stonemason then did the work at his pace, and the fireplace stood proudly for nearly sixty years.

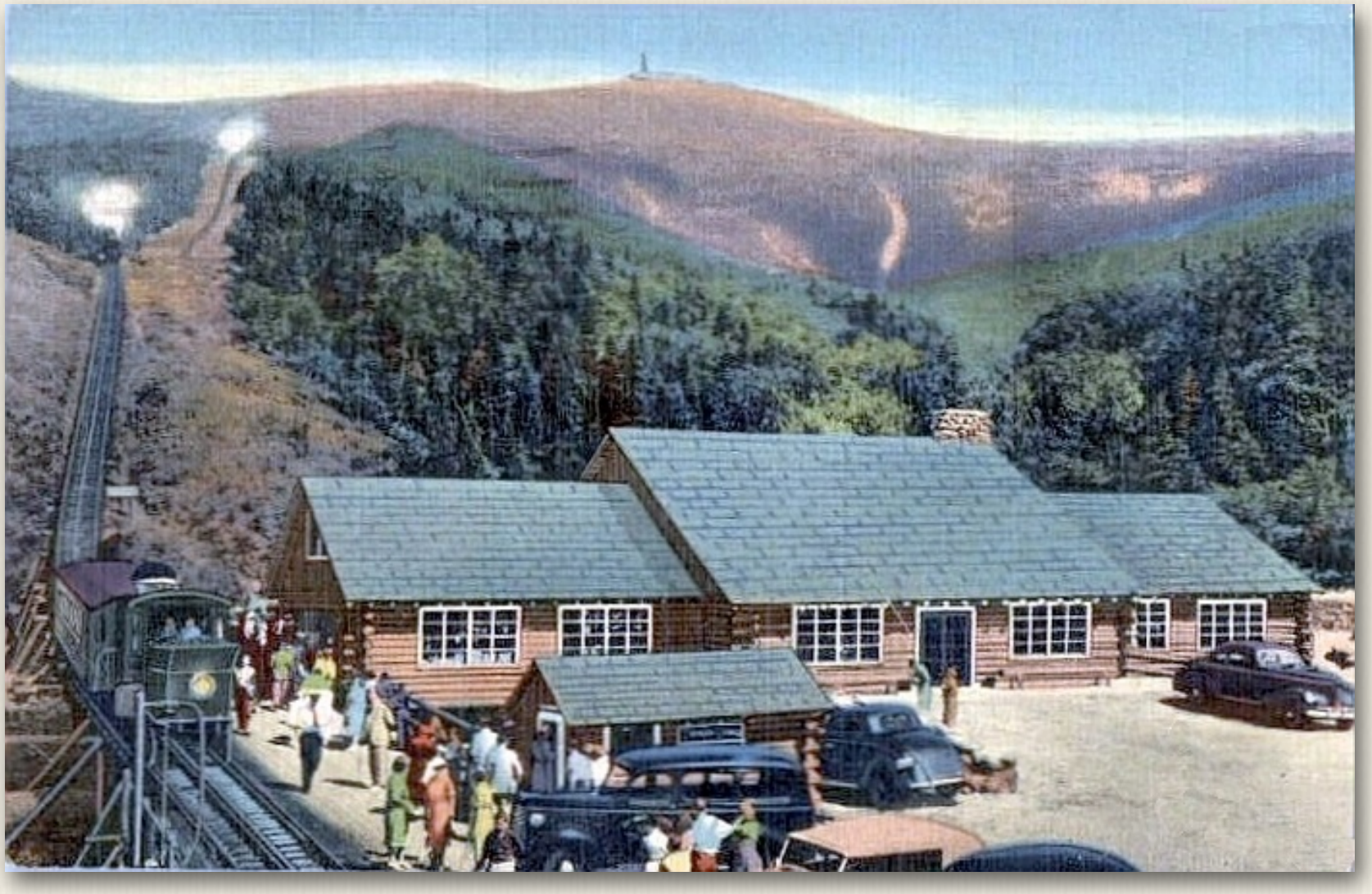


Postcard view (above) shows new Marshfield House and Ticket Office before old Marshfield (right) is moved.
A Boyce Family photo captured the finished facility (below) after the old station stop was moved.

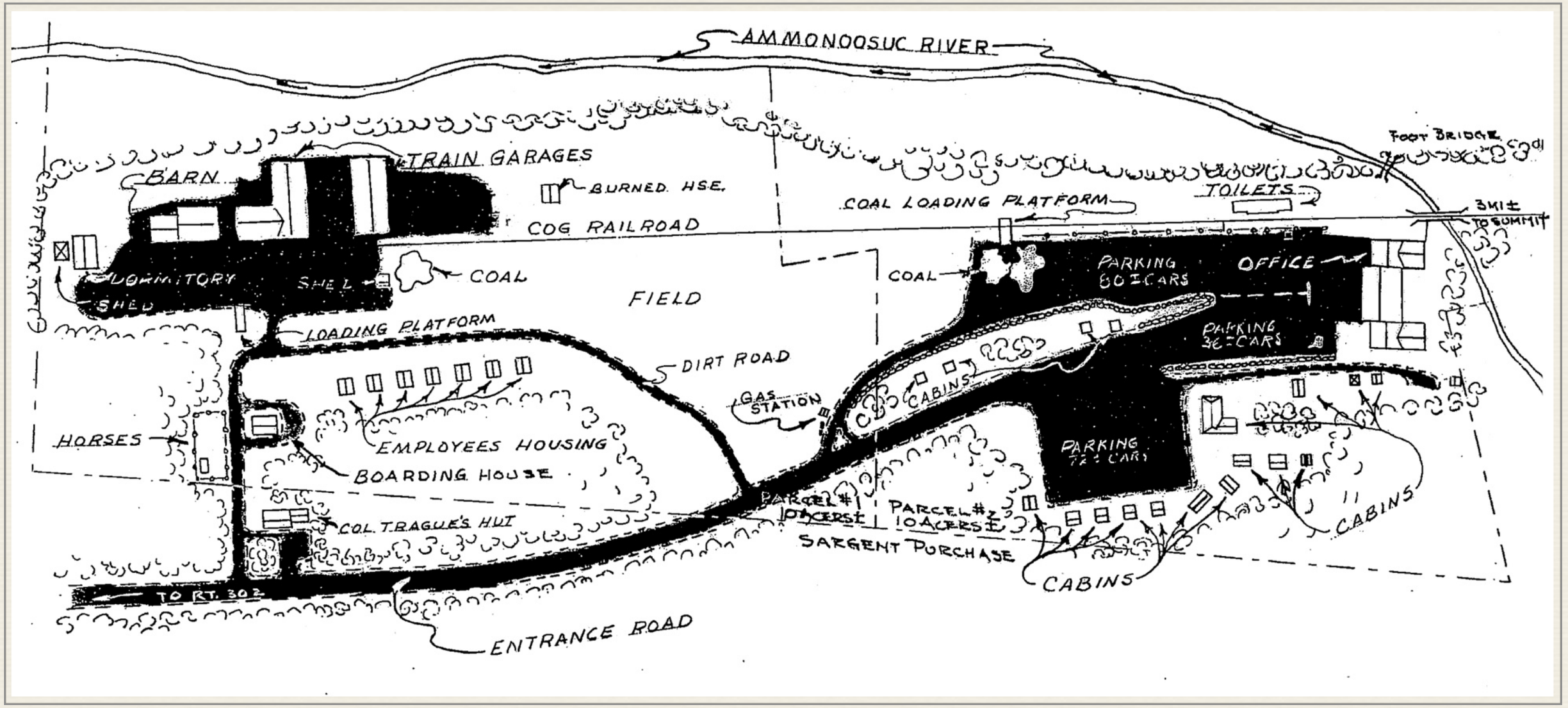


Marshfield Station
1955



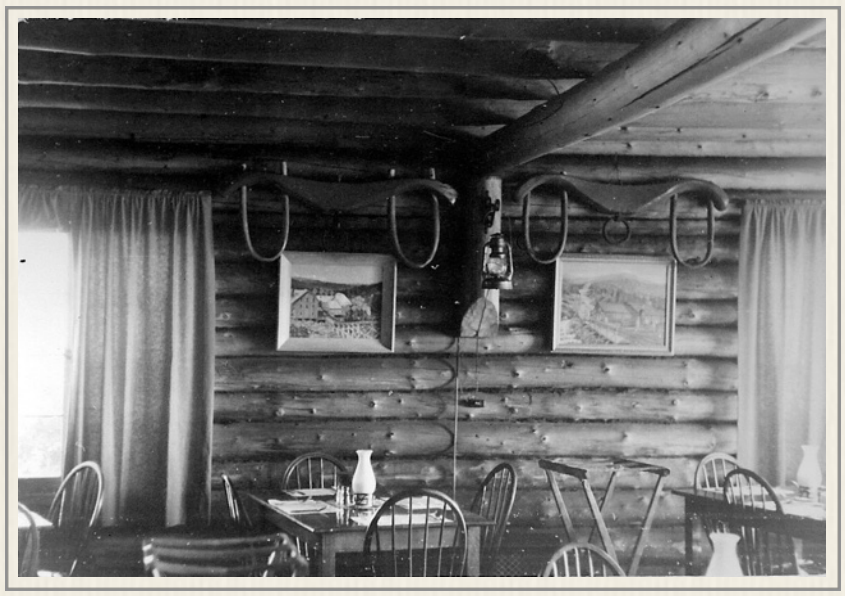








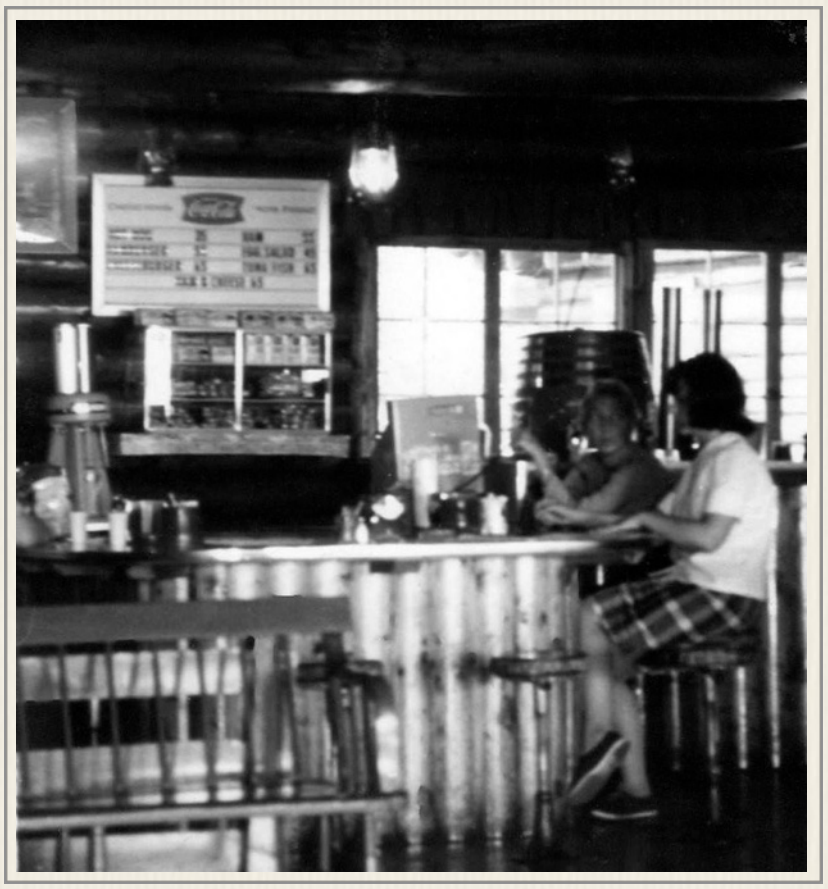
The Ticket Office is spun around, the rental cabins are moved, a switch and a coal bunker are installed, but the 1939 Marshfield Station project is the last major building constructed before Jitney arrives in 1950. The map above created for the Governor's Mount Washington Study Committee captures the location of the major features of the Base Station in October 1958.

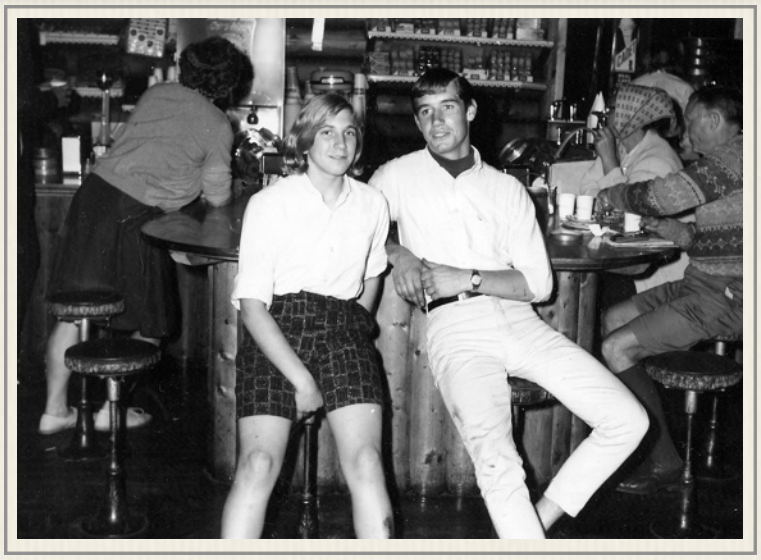














Marshfield Interiors: *Top: Dining Room / Col. Teague speaks to diners. Middle: Dining Room fireplace / Great Room fireplace postcard. Botton: Counter in 1973 / Anne & Norm chilling in 1964. Right: Gift Shop stocked with high quality souvenirs by Michael Haney.*



Marshfield Fireplace

Conrad Ekstrom Jr.: "This goes without saying... warm friendly inviting. I too remember this. On my first visit I could smell the smoke, feel the heat as it conjured up new thoughts about a new and exciting place... The Cog Ry."
David Huber: "My fondest (Cog) memories of this fireplace are rainy spring late afternoons before 'goofer' season began. Track crew and the rest trying to dry out while waiting for dinner and then again after dinner. And congregating around it on the late cold fall days waiting for enough 'goofers' to make a trip."
Terry Flaherty: ".... and Mr Rouleau sitting on the red bench nearby. Wishing us a "nice day!"
Robert Cal Callahan: "I used to have a cigarette, Rouleau's roll your own type, with him near the fire and have semi coherent conversations."
Alan Warner: "I was just thinking this picture would be perfect if Rouleau was in it!"
David Huber: "Was this a double fireplace? One on the other side in the restaurant also?"
Art Poltrack: "David - Yes it was double sided."
Mark Rockwood Senior: "E R also would say he built the back to back fire places"
R*oger M Clemons:* "Mark - He did build the building, though not without help, as he had been a logger and worked oxen in Canada. As for the rockwork, he might have helped, but it showed the work of an expert in river rock building." *(story about Col. Henry Teague & fireplace construction see page 335 this section)*
Paul Forbes: "I remember seeing Rouleau chopping up pieces of trackwood outside of the building near the old phone booth on the corner."
Morris Root: "BUT ... needed to be careful which wood was cut. Some was pretty well coated with cinders, etc., dull saws after cutting the wood were not appreciated by track crew or more importantly track boss. Yup, subject for more than one sermon on the Mount!"
Bonnie Randall: "Ken and I used to go up there on the first weekend in the spring to help open up Marshfield. The first few fires in that fireplace would bring down the bats who had been living in the chimney all winter - some flew out into the room, some flew up and outside and some dropped into the fire screaming all the way (what an eerie sound). It's a sight and sounds I'll never forget."

Col. Henry Teague's log-built Marshfield continued to welcome visitors to the Base Station through the Teague Family's tenure as owners of the Railway and into the 1990s with the new ownership group.

In 1994, a new Marshfield Station *(next page)* was dedicated near where the Marshfield House used to sit. The log building *(right)* remains empty for the next five seasons before a severe lightning storm occurs on August 24, 1998.



- Allen Haggett Collection



http://www.cog-railway.com/indexa1.htm

Fire breaks out during the storm and consumes the structure. When daylight breaks only the stone fireplace is standing and Cogger Brian McMinn takes photos of the ruin. Jitney Jr. is in nearby Littleton, New Hampshire that day reporting on storm damage there for WCAX-TV Ch. 3 out of Burlington, Vermont when he hears of the loss. *- See Vol. 3B Aggregated Timeline*



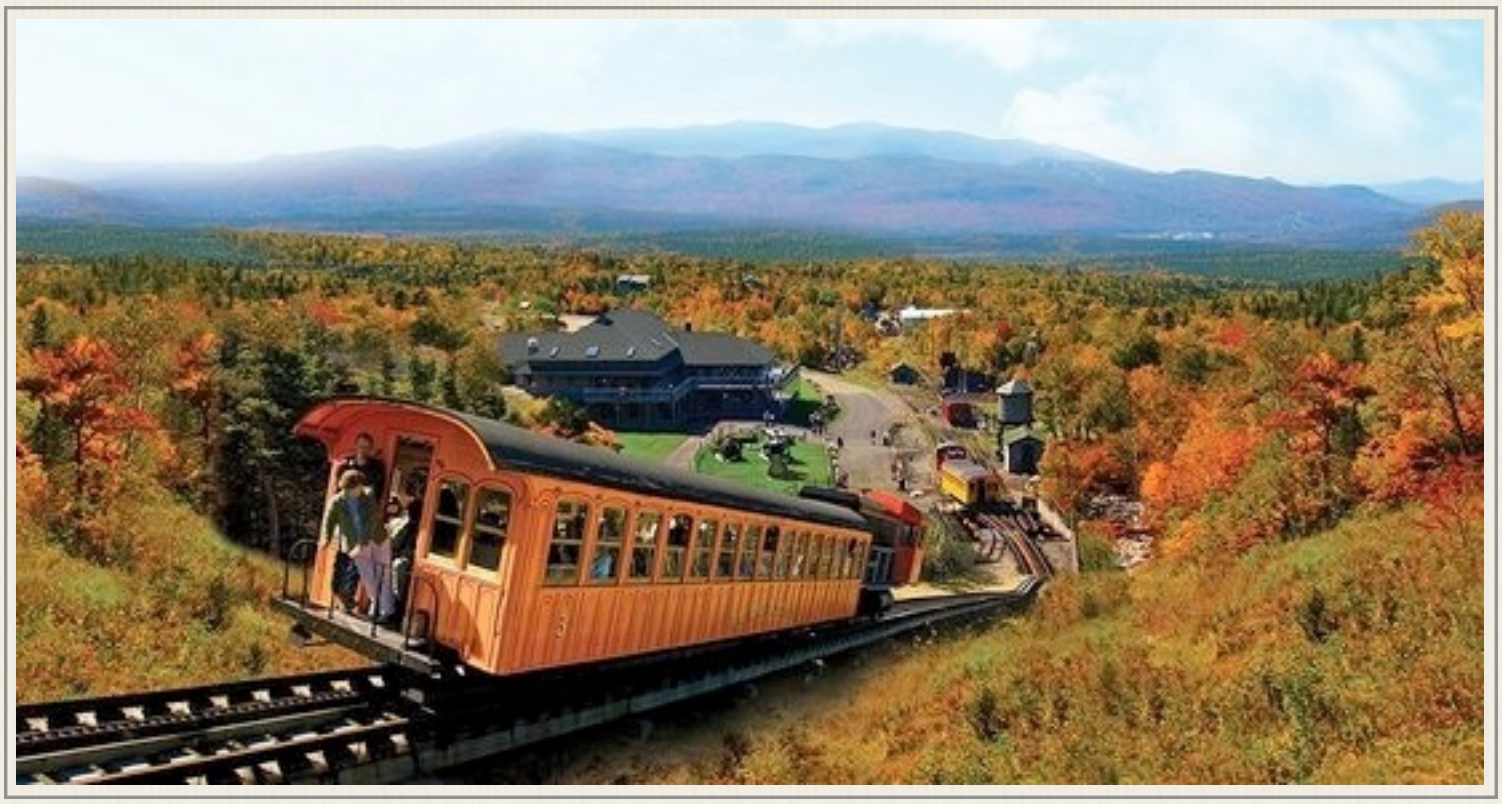


- Brian McMinn Collection

Ch. 9 - Marshfield History



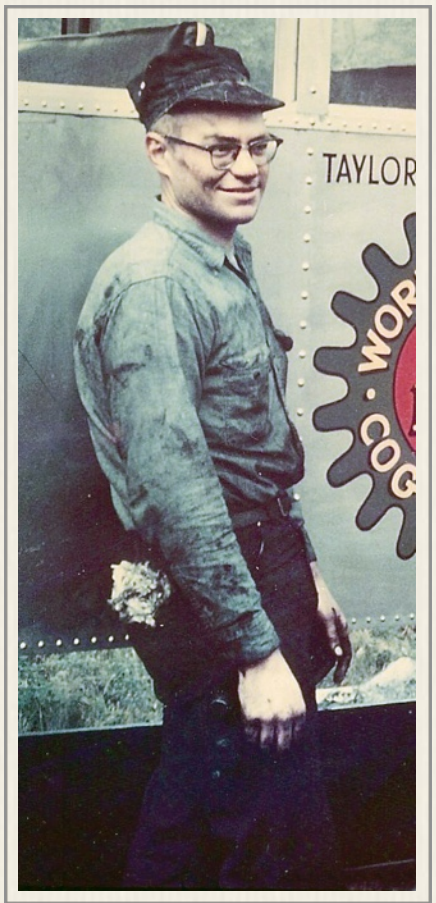




The Shop



No. 1 on the transfer in the summer of 1953
- Lewis Family Collection



PAUL PHILBRICK – Shop Foreman

Paul "mothers" seven engines each season; as a certified welder, Paul also tends switches, sewer lines, water lines, generators, tractors, etc. Day or night the phone rings – "Send Uncle Paul!" Engineers who run the trains told this reporter they are glad Paul works at the Cog. He must be doing something right! *(Cog Clatter v1n9 – September 2nd, 1966)*

Eddie Bird remembers Paul Philbrick at the Cog. They got to be good friends. "He was such a good guy – one of us would go into town – pick up a pound of blue cheese, so we could put it on sandwiches." Bird says they would sometimes buy a watermelon to load with vodka.

At the end of the 1967 season, the 31-year old Maine native left the Cog and went to work as a machinist for the White Pass and Yukon Railroad in Alaska - a narrow gauge railroad built in 1898 during the Klondike Gold Rush linking the port of Skagway, Alaska, with White-

horse, the capital of Yukon. According to the railroad's website, the WP&YR climbs almost 3000 feet in just 20 miles and features steep grades of up to 3.9%, cliff-hanging turns of 16 degrees, two tunnels and numerous bridges and trestles. The steel cantilever bridge was the tallest of its kind in the world when it was constructed in 1901. Paul recorded the last steam-powered, 110-mile run on the railroad. That audiotape is now part of Douglas Taylor's collection of train memorabilia.



White Pass & Yukon Railroad's Engine No. 73

Although Philbrick was now over 37-hundred miles away from Mt. Washington, the questions he posed to Jitney in an August 1968 letter made it clear Uncle Paul was still thinking about the Cog, and his questions outline the type of topics a shop foreman had to keep track of. "What date did they have all seven locos in operating condition? Who is working in the Shop now?" wrote Paul. "Which engineer runs which loco? Where is Griff Harris? Who took his place on the #3? Who took over the #1? Where is Chase and what is he doing? Is it true that only 3 locos were in operating condition on July 1st? Is it also true that they are running 8,000 or so passengers less than last year? Why is this? Is it fact that round-trip price is now $6.95? Has Ellen moved into the new Hut? Who is running the Ticket Office? Who is the Summit manager? Who put the plumbing back together up there and when was it ready to operate? How is the water supplied for this? Same as last year? Do they run the steam pumps? Shop hydro pump? How did the #1 work out with it's new smoke box, tubes & flue sheet? How does #3 run now after the wreck? How does the new cab look on it? Was the #9 re-tubed also? There was a problem with the L.B. (left back) cylinder of #1 in that the bore was larger than any 8-5/8th's inch piston in stock, and I wonder



what Bill (Liveston) did to solve it – I tried to find this out from him, but he could not answer as he was so full of dope – wanted to (respond) right to the time he died and kept telling Clem that he had to write me once more. Wonderful person, Bill was. Carl has passed away now also – sometime soon after I left for here."



Paul Philbrick (1965)
- Elvira Murdock Photo

As for his job in Alaska, Paul told Jitney "I'm still working in the machine shop here but now on 3-11 and as a machinist only part-time and diesel mechanic part-time. Got the best of both jobs and the best racket of anyone here in my opinion." And Philbrick stayed on the lookout for parts that would keep Cog steam trains running. "I've had a few letters from Mr. (Lionel) Rodgers asking if White Pass might be a source of supply for needed parts of Hancock inspirators and K-2 Pile National 32 volt steam turbine generators. I found several #9 Hancocks marked OK and in scrap & saved them out for him – now it's about 4 months later and will save them no longer as he does nothing about it. Thought perhaps the Cog might be able to use them on the Fireman side of their locos if they could not find parts for the #5's in use. We offered them a price of 50-cents a pound if he would pay cost of packing & shipping. Stupid people at the Cog don't realize these are worth a lot more than that. Lots of parts, new, in stock for #5's and one new body & I've told them this but here they still are as the W.P. priced them with 1910 prices and the Cog can't afford them? Rodgers seems not to understand that this is the only supply that I've found since Hancock quit in Canada. Plenty of K-2 parts, new, here also and they still are. One of these days as the WP is rapidly growing, they are going to need the space in the storeroom and all this obsolete junk that they will never need again will be thrown in a scrap car and sold for a few cents a pound."

On January 17, 1971, Paul's "car got stuck at the end of the road past (the) Liarsville" Gold Rush Camp. According to the *Fairbanks Daily News-Miner,* Paul "walked a couple of miles in minus-15 degree weather, and his hands, feet, and face were badly frozen." He underwent surgery at Juneau Borough Hospital, and a news story on February 22, 1971 reported "his face and feet have made a good recovery, while final outcome of surgery on his hands is still uncertain."

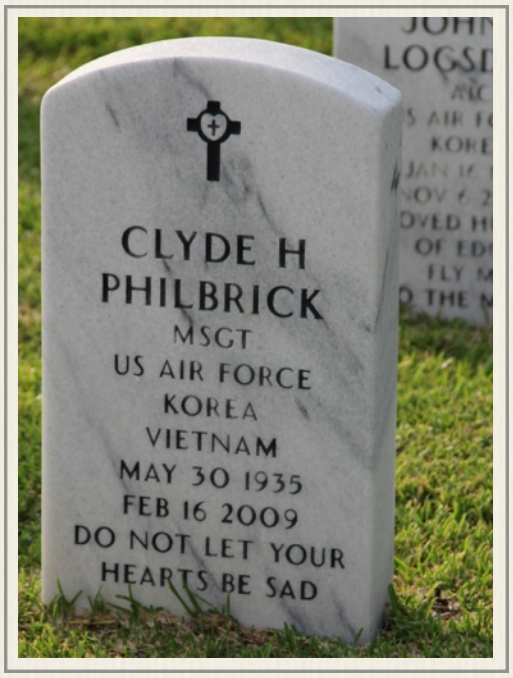
Ch. 9 - The Shop

The outcome of the hand surgery was not good, and a mechanic/welder without fingers was even worse. Paul Philbrick took his own life.

Alaskan law sealing death records for 50 years to all but family members and legal representatives frustrated our ability to confirm Paul's end. However, the Hamilton-Philbrick Family tree on Ancestry.com indicates that Paul Myron Philbrick was born on July 13, 1936 in Rumford, Maine to Harry Libbey Philbrick and his wife, Doris Elizabeth (Gallop) Philbrick.

Harry Philbrick was working the cutters in a papermill in Mexico, Maine in 1940 when Paul was three - the youngest of four children (Julian 8, Grace 7, and Clyde 4.) Paul's sister, Grace Ann went to the University of Maine at Farmington and obtained a bachelor's degree in education. She taught in public school, and spent time teaching outside the classroom, including horseback riding and swimming as a water safety instructor. She died May 16, 2009 after a long fight with Parkinson's disease at the age of 76.

Clyde Philbrick, who took care of the Summit House for two summers, died in February 2009 in Biloxi, Mississippi at age 73. He had retired from the U.S. Air Force as a master sergeant after more than 21 years of service including tours in Korea and Vietnam. Master Sgt. Philbrick specialized in radar. Fellow airman Craig Surginer said, "Clyde was the greatest trainer I ever had in Radar. For some reason he took me under his wing and taught me more that I could have ever hoped of learning. I truly admired his depth of knowledge and calm manner. His casual humor and giggles shall remain with me forever." Clyde's tombstone in the Biloxi National Cemetery carries the inscription "Do not let your hearts be sad." Perhaps a message he wished his younger brother Paul might have heeded on August 17, 1971 in Alaska.





- Alaska photos from White Pass & Yukon Railroad

The WP&YR suspended operations in 1982 when Yukon's mining industry collapsed due to low mineral prices. The railway was reopened in 1988 as a seasonal tourism operation and served 37,000 passengers. Today, the White Pass & Yukon Railroad is Alaska's most popular shore excursion carrying over 390,000 passengers during the May to September 2012

tourism season while operating on the first 67.5 miles (Skagway, Alaska to Carcross, Yukon) of the original 110 mile line.

HAROLD ADAMS

A "Cogger" with the most interesting background might well be Harold Adams, who is on the Shop force. Mr. Adams ran a steam boat for 18 years on Newfound Lake - drilled a well on top of Mt Washington through 200 feet of permafrost to a total depth of over 1700 feet - cares for the stationary engine and pump at the Base Station - (When a break in the line occurs Harold has been known to draw the water back to within a few ties of the damage so it may be repaired) - is an expert fly-caster - shoots deer with one shot - lifts engine cylinders with no help - has candy for all the kids on employees' street - has been known to suspend a belted man in mid-air above the shop floor - certainly an important part of the Cog picture for the last several years - Mr. Adams.

P. S. I can lick him - can't we Harold.

(Cog Clatter v1n5 – August 3rd, 1966)



- Adams Family Collection

Harold Adams was born in Bridgewater, New Hampshire on June 12th, 1899 and lived his entire life in Bridgewater and nearby Hebron. When he registered for military duty in September 1919, he was working as a farmhand for C. E. George in East Hebron.



Harold was a chauffeur when he married Gladys Barnard *(left)* in March of 1921. They had three children, Harold Jr., Barbara, and Martin. He ran a steamboat on Newfound Lake for a decade. The 1930 Census appears to have him working as a fireman in a local factory. The family history says he was a bear-hunting

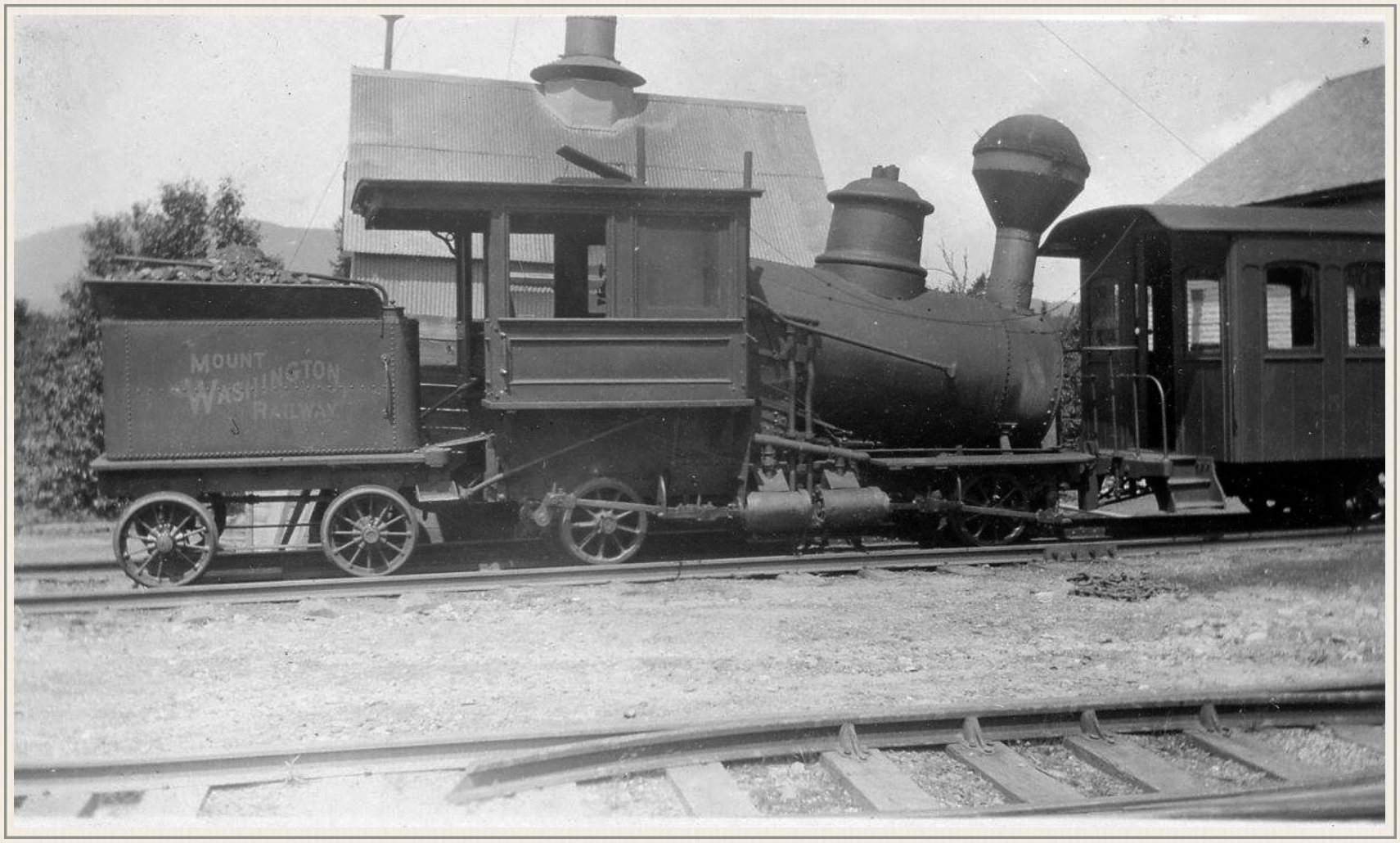
guide in the1930s. *(picture previous page circa 1936)*

Harold 's first trip to Mt. Washington may have been when he was employed to help the US Army Corps of Engineers drill a well to supply water to the summit in 1941. Relatives found this view of a double-header approaching the summit *(right)* in his collection of photos. An "artesian well driller" by trade when his daughter, Barbara married Duncan Greene in 1945. Gladys Adams worked one summer at the Cog in 1951. Harold started collecting a Cog paycheck in 1960. His experience with steamboats, water, pumps and drills would come in handy in the shops.



Summit view from drill site (Summer 1941)
- Adams Family Collection

After the 1908 summit fire, Bruce Heald writes in his history of the Cog Railway, the Boston & Maine Railroad enlarged its water pumping station at the Base, so Ammonoosuc River water could be pushed some 3700 feet in a single lift to the top supplying the new hotel to be built. "The (pumping) structure was located some 25 feet from the track in the vicinity of the laundry building. It housed two Dean Brothers steam pumps with steam cylinders sixteen inches in diameter and a large steam boiler. The new 3 and a half mile water line to the top was made of double

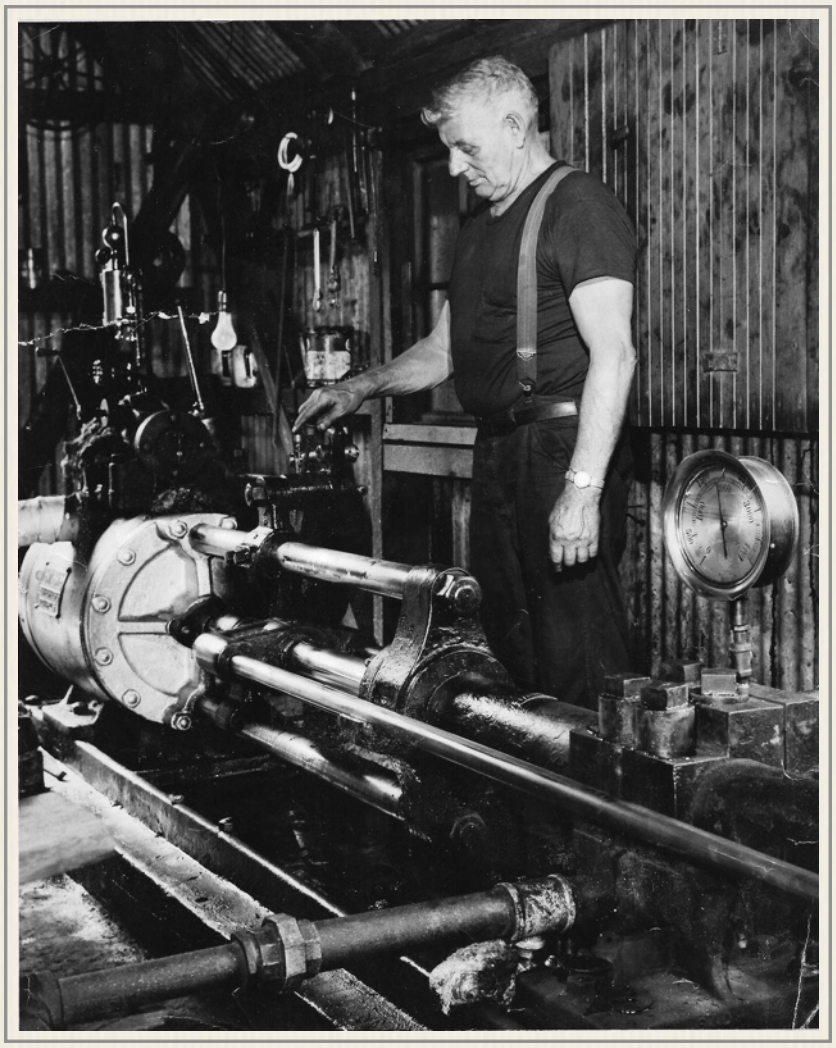


- Paul Forbes Collection

thick pipe 1.5 inches in interior diameter." The pumping station was completed in 1912 and can be seen in the 1930s image *(previous page)* behind the No. 4 parked at the end of the Cog line.

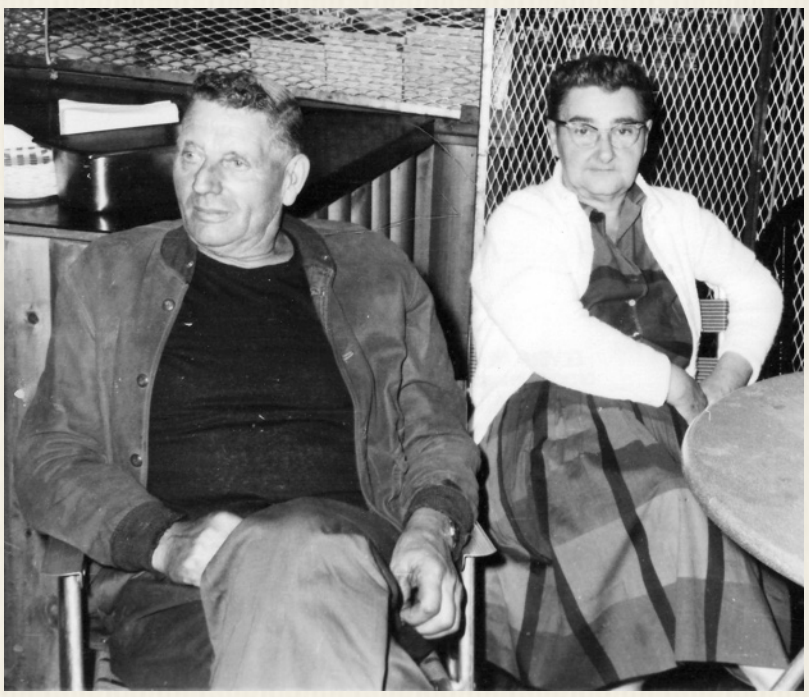
The installation of the Pelton water wheel took the pump house offline in the 1930s, and according to *The Story of Mount Washington* saved Henry Teague $2-thousand dollars a year because he no longer had to buy 150 tons of coal each season and hire two men to operate the steam pump.

The Pelton water wheel worked with natural run-off collected behind a dam on Franklin Brook. A dry summer in 1964 drastically reduced the brook's flow and the Pelton's power. The situation prompted Col. Arthur Teague to ask Harold Adams *(right)* to put the pump house back in business. The big boiler had been re-tubed the year before.



- Anne Koop Collection

In 2015, Lincoln "Linc" Handford, who worked in the shops in the early 60s, vividly remembered the rehabilitation: "The summit ran dry, so they fired up and rebuilt the old steam pump. I helped Harold. There was a piece of pipe outside the pump house that needed to go up to the shop. Harold said pick up the other end as he easily hoisted his end of the pipe. Well it was high pressure pipe – really thick metal and I collapsed when I tried to lift it and Harold laughed. I picked (my end) up and staggered up to the shops."



Harold & Gladys Adams at a Cog Party (1960s)
- photo by Elvira Murdock / Adams Family Collection

Jitney remembers offering to help Harold do some lifting in the shop one time. A cylinder needed to be brazed, and in order to properly make the repair, the heavy cast part holding the piston & valves had to be pre-heated over a charcoal fire. Jitney asked, "Can I give you a hand, Harold?" Mr. Adams turned to Jitney and pointed to a place away from burning charcoal. "Go stand over there, and don't you say a goddamn word!" He then easily lifted the heavy cylinder assembly and put it over the brazier.

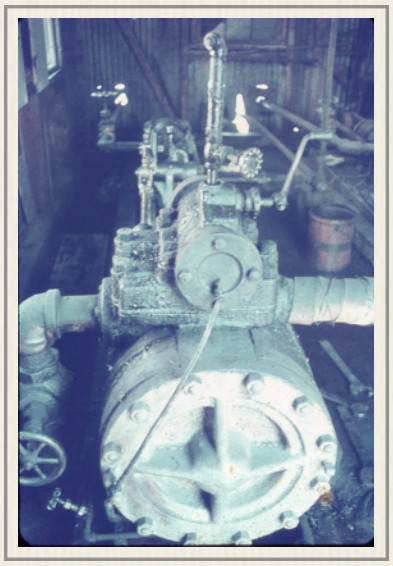
Harold and Gladys Adams were constant Cog fixtures in the summers living in the second cabin

heading up the mountain. Gladys resumed working in the Marshfield Gift Shop in 1961 selling souvenirs. A heart attack claimed Gladys Adam's life in September 1964. Harold was back in the Cog shops in 1965 from the mountain's opening in the spring until its closing in the fall - living in the cabin *(right)* he had shared with his wife of 43 years.



- Lewis Family Collection

He was still there when Claire Dwyer and Max Campbell moved into Jitney's old cabin in 1969 because "the girls' dorm wasn't going to hold everyone, and we had seniority." Dwyer remembers, "We used to chat with him. Someone told us that he still set a place at the table in the cabin for his wife. We thought that was so sweet!"



Harold would continue coming back to the mountain, so he was there when the old Steam Pump House was called upon to get water to the summit once more in the 70s.

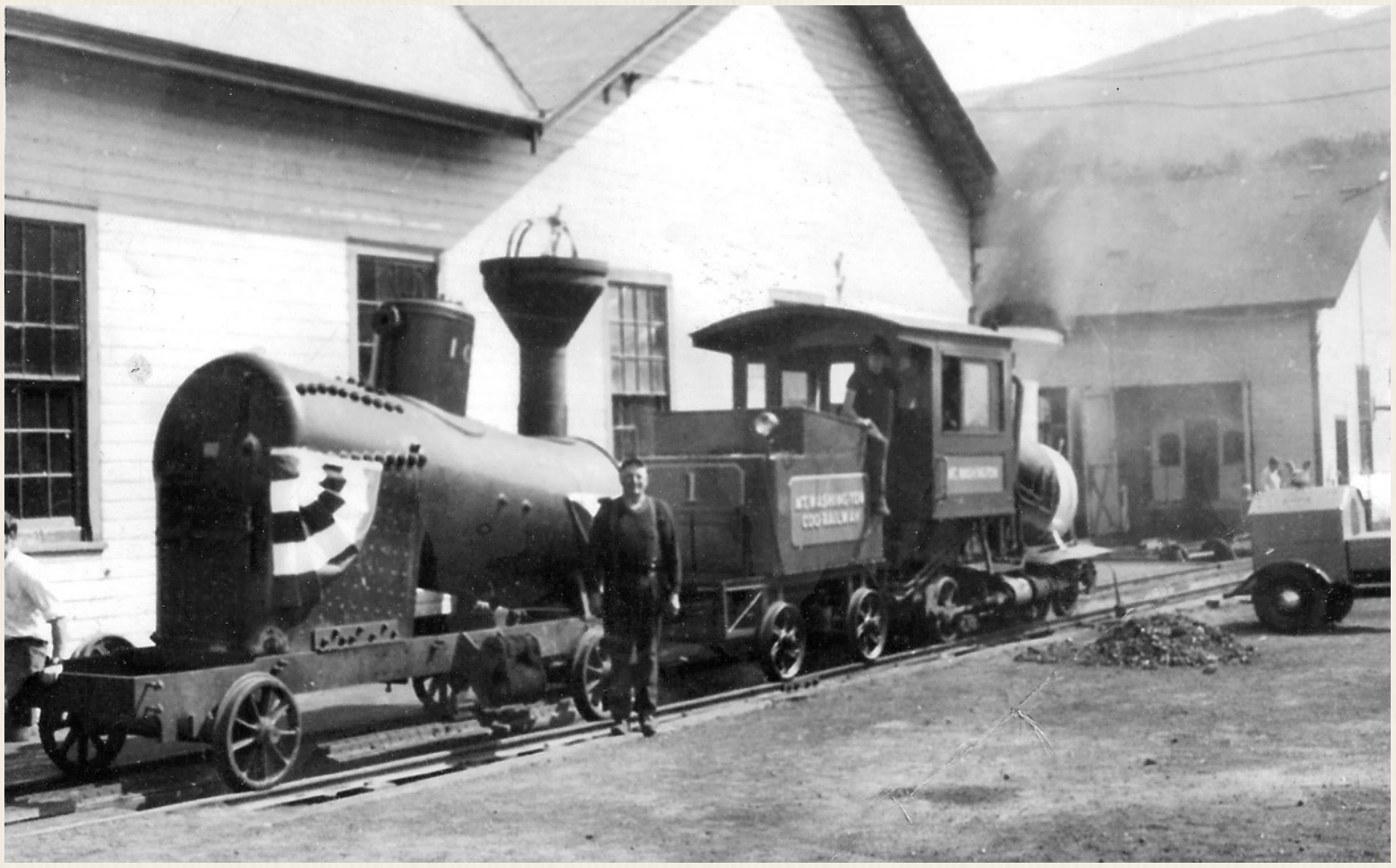
Charles Morrill, who started working at the Cog after 1967, had much the same reaction as Linc Handford had some fifteen years before: "You know, I might have been the last guy to actually run the steam pumps for any significant time back in 1975. I remember meeting Harold Adams there in about 1971 and it was a thrill to get it all going again when someone forgot to lube the (Pelton) water pump in the shop and the bearings ran dry one night. Anyway, it was going to be awhile to rebuild the (Pelton) pump they'd been using and Eddie (Clark) said, 'Well 'California Morrill,' this is easy, you just take some coal and throw it in every now and again... and just take and make sure that water stays right about here....' Every so often Roger Sanders came down to take a look, but the truth is I liked it a whole lot. The whistle was still on it back in those days and I used to blow it on the hour..."



- Lewis Family Collection

Harold Adams lent his expertise to construction of the Cog's last steam locomotive, the No. 10 *Col. Teague*. A May 1973 *Trains Magazine* article details the

project that began in 1958 with the delivery of a new, longer boiler with a bigger firebox and larger fire-tubes from the D.M. Dillon Steam Boiler Works of Fitchburg, Massachusetts. The new boiler sat for eight seasons atop cribbing outside the shop. In 1966, Col. Teague ordered a new locomotive frame from Luken Steel of Coatesville, Pennsylvania. B&M veterans and long-time "friends-of-the-Cog" Paul Dunn and Earl Cone had been directing liquidated steam parts and machinery from the B&M to the Base over the years where they could be used in the build. Engine builder Niles LaCoss and the shop crew mated the boiler to the new frame in time for the Cog's Centennial celebration in 1969.



Harold Adams standing beside the bunting draped No. 10 at the Shop (July 4, 1969)
- Adams Family Collection

Routine maintenance on the existing fleet would delay work on the new engine. A final push would occur during the winter of 1971-1972 in Enfield New Hampshire. No. 10's final outfitting would occur over the summer of '72 and her official debut would occur on September 24th. Randall Peffer wrote the hundreds of people on the platform and the dignitaries in the coach enthusiastically applauded as the *Col. Teague* made it's first official run. "No. 10 had a lot of friends in New Hampshire," wrote Peffer, "And they were wishing her a long life. No. 10 bellowed a return salute with two shrill longs, one short, two longs (of her whistle), and



Harold Adams turning parts on the lathe
- Kent Family Collection

stomped her passengers up the first steep pitch above Marshfield Station. (Engineer Steve) Christy looked back to LaCoss and Dunn at the station. Everyone smiled - no problems." But there would be problems. Pump house operator Charles Morrill says, "One of the things that bothered me a whole lot was the round of thefts that occurred in 1975. The pumps were made by Deane I think, and one day the builder's plates were gone." Harold Adams would live another sixteen years after those builder plates disappeared out of his renovated water pumping station. He went back to his home in Hebron, New Hampshire.



- Kent Family Collection



In January 1991, Harold broke his hip when he fell while walking unattended. On May 28, 1991, Harold Adams' large heart stopped beating at the Grafton County Nursing Home in Haverhill, New Hampshire.

He was buried in the Hebron Village Cemetery alongside his wife, Gladys and where his daughter, Barbara and son-in-law, Duncan were laid to rest some twenty years before.

According to his obituary, living relatives at the time of his death included two sons, Martin Adams of Warren, New Hampshire and Harold Adams, Jr. of Quail Valley, California along with three grandchildren and three great grandchildren as well as a half-sister, Hilma Robertson of Akron, Pennsylvania.



-Cemetery photos from Findagrave.com

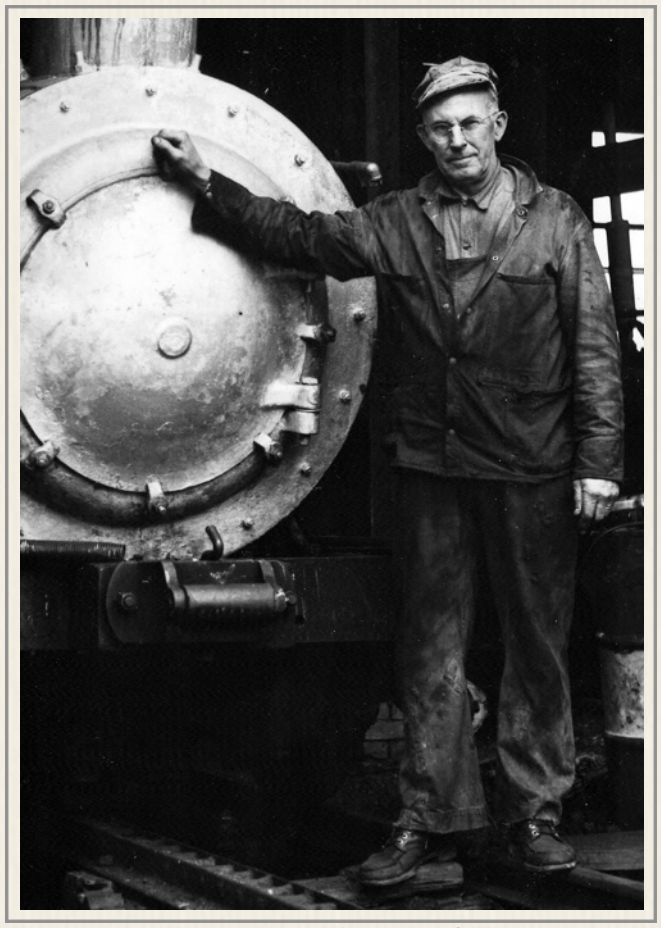


RAY "Slap" GILMAN - Boilermaker

Ray, from Lyndonville, Vermont, makes maple syrup, is an avid fisherman and successful hunter, and with Mr. Adams provides the hoisting service at the shop.

He is noted for his ability of listening and diagnosing the internal conditions of boilers. *(Cog Clatter v1n9 – September 2nd, 1966)*

Ray died of natural causes at his home in East Haven, Vermont in March 1978. His body was discovered about 4:30pm on Tuesday, March 7th when a friend, Percy Moultrop stopped by to see why Ray had failed to attend the East Haven Town Meeting. The retired Canadian-Pacific Railroad man was 73. *(Caledonian Record - March 8th & 9th, 1978)*



Boilermaker Ray Gilman (1960s)
- Teague Family Collection

Doug Taylor worked in the car shops across the transfer from Ray for several years. "Ray came to the Cog around 1961, having run out of steam work on the dieselized CP (Canadian Pacific) in Vermont. He really helped out the aging boiler situation in the Cog's aged motive power. Among other things, he led the replacement of No. 3's boiler barrel, and various other side sheet replacements."

"Ray thrived on challenges," recalls Taylor. "One day at the height of the season, No. 4 blew a boiler tube on the way down the mountain. After unloading its passengers at Marshfield, the engine coasted down to the shops. Fortunately, the bad tube was readily accessible from both



- Kent Family Collection

the firebox and smokebox ends, so with the fire banked, Ray (and Paul) covered it with asbestos tarps, insulation, and plywood. Then Ray climbed into the firebox on top of this, and with Paul working on the smokebox end, cut out and removed the bad tube, inserted and swedged in the replacement, refilled the boiler with water, removed all the asbestos tarps and insulation, broke the bank and brought the fire back to life. By the time No. 4 was scheduled to take its next trip up the mountain, it was waiting, ready, at the Marshfield switch. All within a 3-hour window."

Doug Taylor says, "Ray was smiling his Cheshire Cat grin for several days after."



Raymond Fifield Gilman was born on September 9, 1904 in Sutton, Vermont – the son of Warren Luther and Mattie Louise (Parrent) Gilman. Ray's dad was 56-year old dairy farmer originally from Bethlehem while his 32-year old mother was born in nearby Burke. The 1910 Census says the Gilman family consisted of Warren and Mattie, 14-year old Lilla M., 13-year old Ned W. and 5-year old Ray. Warren Gilman died on March 22, 1915 and the family moved to Burke. Sister Lilla was no longer at home when the 1920 Census count occurred in Burke. 23-year old Ned died sometime after enumerator Wilbur Hill visited the first week in January. That left 16-year old Ray and his mom, Mattie in the household. Mattie would die just after Christmas in 1926. Ray was a 26-year old machinist's helper living in Lyndon when he married Mary Dinah West on Halloween 1933. The couple would deliver a baby girl, Eva May Gilman on December 8, 1936. Ray was a machinist for the Canadian Pacific Railway in 1948. He and Mary were living on Charles Street in Lyndonville. As mentioned earlier, Ray died of natural causes in 1978 at the age of 73.



Ray, his dog & his mom
- Courtesy Gilman Family

IRVING SMITH

Mr. Smith is from Newport, Vermont and was with the Canadian Pacific for over 43 years where he worked as a boilermaker with Ray Gilman. *(Cog Clatter v1n9 – September 2nd, 1966)*

Irving Warden Smith was born on November 2, 1900 in Barton, Vermont to a couple of Standstead, Quebec natives. 25-year old Henry W. Smith was working in a mill when his 21-year old wife, Elsie M. (Dubois) Smith gave birth to Irving. Smith was 19 and farming in Wheelock, Vermont when he married Emily D. King on June 12, 1919. The couple had their first child, Stanley Irving Smith on October 13, 1920. Irving went to work for the Canadian Pacific Railroad in

1923, and in 1928 a daughter was born – Patricia Norman Smith on February 7, 1928. The family was still in Wheelock for the 1930 Census. Their home was reportedly worth $2500, and Irving was working in the CP's boiler shop. Irving's father, Henry died July 1, 1939 and the Census the next year found the Smith's living in Newport, Vermont. 20-year old Stan was a short-order cook at a local hotel while Irving was classified as a "steam railroad boiler maker." Irving Warden Smith would die in 1970 and be buried in the Lyndon Center Cemetery. His wife, Emily would live another 12 years before joining her husband in the plot in 1982.

EARL CONE

Mr. Cone, recently returned after 47 years with the B&M, is no stranger to the Cog. When Colonel Henry Teague purchased the Cog, Mr. Cone says he came with it.

Mr. and Mrs. Cone live in Nashua and have two sons, Jim (a former "Cogger" now in Vietnam and soon may visit here) and Bob, a sophomore at UNH. The "New Engine" being built is one of Mr. Cone's projects at the Cog and having been chief Mechanic Officer of the B&M, this reporter is sure it will run. *(Cog Clatter v1n9 – September 2nd, 1966)*

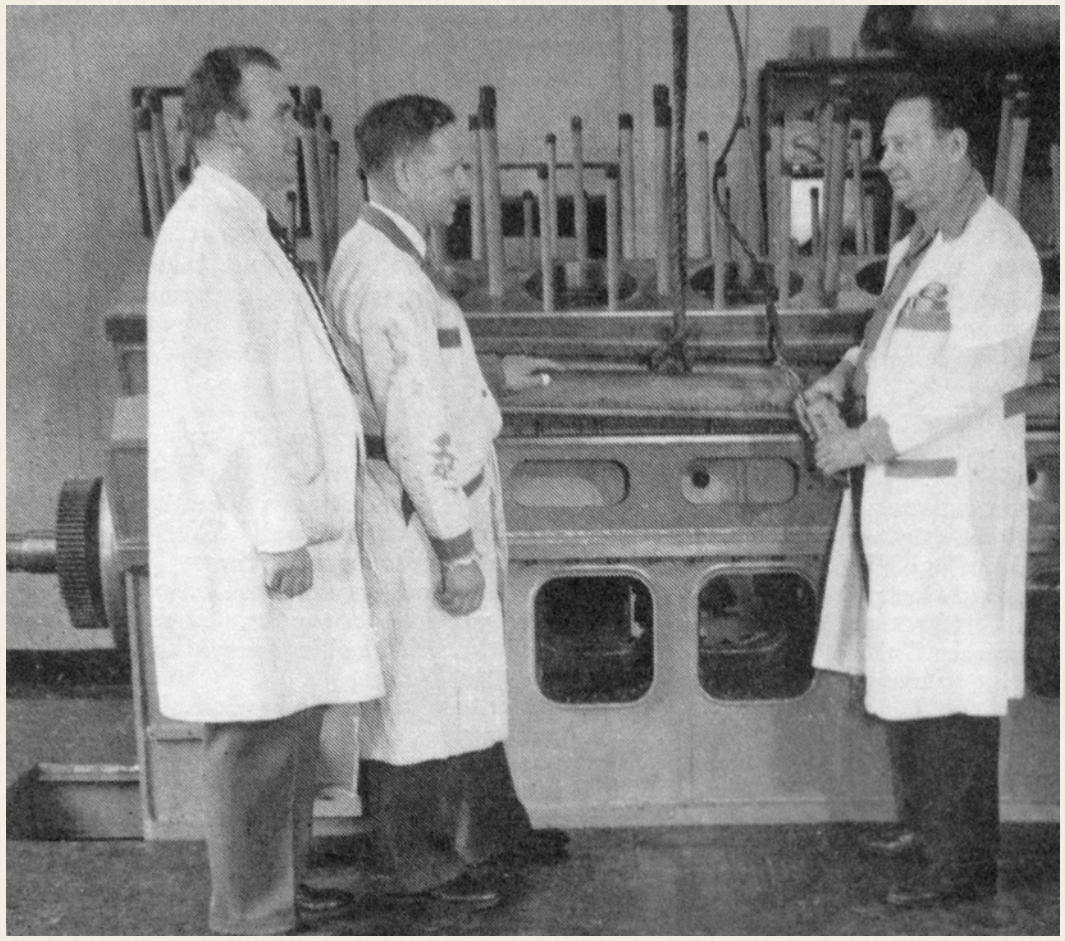
Machinist E.C. Cone
Presented with Gold Watch

Mr. Cone (at left), who was master mechanic for the Mount Washington Cog Railway for the past seven years was presented with a gold watch by President Henry N. Teague *(right)* "in appreciation of meritorious service. He was largely responsible for the improvement of the motive power and rolling stock of the Mt. Washington Railway, which made for safer operation." *(B&M Employees magazine, page 12 - Winter 1940)*



The *B&M Employees* magazine writes that Cone "entered service in 1918 as a laborer, served later as a machinist, was made assistant shop supervisor at Billerica in 1940, general foreman at Dover in 1942, assistant shop supervisor at Billerica again in 1944, and shop supervisor there in Oct. 1947." Cone was "appointed on Jan. 1, 1950 to be assistant to Superintendent of Locomotive Maintenance Paul C. Dunn assigned to Boston." *(B&M Employees magazine, page 6,7 - February 1950)*

10 months later, Dunn picked Cone to succeed William H. Prindall as master mechanic at the B&M Shops in Concord, N.H.



"Boston and Maine men, pictured *(left)* during a two-week course of study at the Alco-GE Diesel Electric Locomotive School in Schenectady, N.Y. Left to right are: S.E. Lodge, instructor; Earl C. Cone, Master Mechanic at Concord, N.H and A.L. Wood, general foreman at Westboro, N.H."
(B&M Employees magazine, page 23 - Dec 1950)

After two and a half years as Master Mechanic for the B&M's New Hampshire Division, Cone was appointed assistant superintendent of the railroad's Billerica Shops on March 16, 1953.

When the Billerica superintendent retired in June, Paul Dunn picked Cone to take over. Over the years as the B&M phased out steam and converted to diesel on the mainline, Cone and Dunn's positions in that company and their connections to the Cog Railway



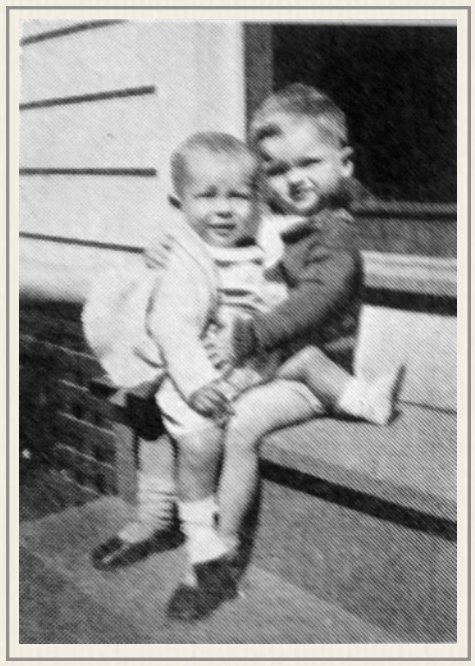
Earl C. Cone was honored by a large group of Concord B&M friends when he was promoted last March from master mechanic at Concord to assistant superintendent of Billerica Shops. Here left to right are: K.W.L. Broen, claim agent, who presented Cone a wrist watch and purse of money in behalf of his friends; A.S. Baker, executive assistant to the president, who was master of ceremonies; Mr. and Mrs. Cone. (B&M Employees magazine, pg. 30 - May-June 1953

led to some B&M steam equipment and parts, like boiler superheater pipe, heading to the Mountain where it was used to maintain the Cog fleet, and in the case of the superheater pipe became new water lines around the Base.

Ancestry.com's life summary goes "Earl Clifton Cone was born January 23, 1901 in Sunapee, grew up in Claremont, N.H. and would die in November 1985 in Berlin, N.H. In May 1927, the 26-year old machinist married 25-year old bookkeeper Lila E. Hosking. Three years later the couple was in living in Lebanon, N.H. awaiting the birth of the first of their two sons."

JAMES CONE

James Cone was born in Hanover, New Hampshire on May Day in 1930 - the son of the now Boston and Maine Railroad foreman. Jim likely came to work at the Cog with his father in the late 1940s when he was going to Norwich University in Northfield, Vermont - the oldest private military college in the United States.



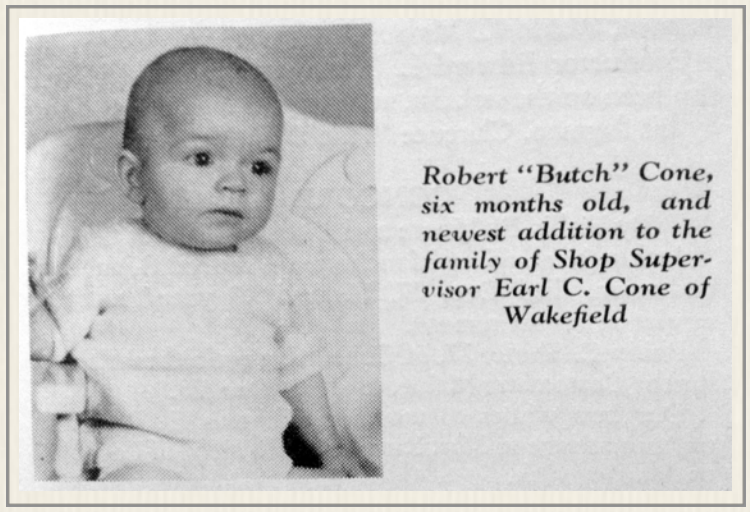
"Here we see James Cone, age 3 years, holding an arm full of Brent George Packard, age 13 months." (B&M Employees magazine Jan-Feb 1933)

The 20-year old Cone was working at the Cog and living in the Boarding House when Jitney arrived in 1950. Jit remembers loaning Jim his Indian motorcycle that summer.

Cone left college and the Cog to enlist in the Air Force and served as a B-29 gunner in the Korean War from 1951 to 1954. He was later selected for Officer Candidate School and graduated as a 2nd Lieutenant in 1958. He was in Vietnam in 1965-1966 and retired as a major in 1971 after 20 years of active duty. His last position was Commander of Security Police at the F. E. Warren Air Force Base.



Jim Cone *(left)* spent the rest of his life working for the Wyoming Livestock Board, and on various ranches in the Cheyenne area. He died in 2010 at the Davis Hospice Center in Cheyenne just one day short of his 80th birthday. Cone's obituary says he "was a true cowboy at heart - born a century too late."



Jim's brother, "Butch" did not work at the Cog. (B&M Employees magazine Feb., 1948)

Ch. 9 - The Shop

WILLIAM "Bill" LIVESTON - Machinist



Mr. Liveston at the lathe
- Kent Family Collection

"Mr. Liveston" was born William McLiveston on Christmas Day 1896 in Scotland and married Clementine Skea on New Year's Eve 1917. The couple was living in Arbroath when their first son, James was born in November 1918. The McLiveston's had lost the "Mc" from their name, and moved to Barre, Vermont by 1928 when another son, William Sidney was born. A girl, Norma completed the family.

By the 1940s, Bill Liveston was operating a machine shop in Lisbon, New Hampshire. At the Cog, Mr. Liveston ran the lathe - shaping axles and key engine parts with skill and precision. Linc Handford says Bill Liveston was a "joy to watch" as was the rest of the Shop crew.

"It was amazing to watch these guys work installing a new shaft by using two bottle jacks and slowly watching the milled boxes and the shaft go up into the frame," recalls Handford in 2015, and "at the last moment it would suck up into place and it was a perfect fit."



- Kent Family Collection

Mr. Liveston also schooled Jitney in the proper etiquette of drinking Scotch. Bill told Jit when a bottle was being passed around, a proper Scotsman would drink "only down to where the hand clasps the bottle" before passing it on. Therefore, Mr. Liveston told Jitney you should always "stand the bottle on the palm of your hand when it comes to you." He and his wife, Clementins lived in the second cabin down mountain in the row.

The Liveston's 39-year old son William died August 10th, 1967 in a Bristol, New Hampshire rooming house fire. Mr. Liveston died a little less than a year later in Lisbon, New Hampshire in July 1968.

DUNCAN "Dunc" GREENE - Shop Foreman

Drink was a key part of Duncan Greene's story at the Cog Railway.

Duncan Greene was managing a service station in Plymouth, New Hampshire when the 29-year old World War II veteran married Harold Adams' daughter, Barbara Fern Adams on December 8th, 1945. Their marriage license says Barb Adams was a 20-year old waitress. At the time, her dad, Harold was 43 and drilling artesian wells.

Dunc was six-feet tall, weighed 146 pounds and had completed three years of high school when he enlisted in Manchester, New Hampshire in March of 1941. His civilian occupation was classified as "semiskilled chauffeurs and drivers, bus, taxi, truck and tractor." He served as a private and may have been in India with "Young" Pliney Granger on the Army supply trains. Whether through the Granger, or the Adams connection, Dunc Greene came to work at the Cog Railway, and when "Old" Pliney left - Dunc, now working for the B&M at Billerica took over running the Shop. He and his wife, Barb lived just a cabin away from his in-laws in the fourth cabin up the row towards the mountain. While Dunc worked at the Shop, Barb worked at Marshfield. Both enjoyed adult beverages.



Barbara and Duncan Greene out on the town
- Adams Family Collection

Greene was running the Shop in 1960 when Dartmouth College student Doug Taylor got hired. "I was in rail-fan heaven my first year at the Cog," remembers Taylor. "I had loved steam engines all my life, and now I was a Brakeman on the Six Crew. Jitney was a wonderful source of knowledge and lore which I soaked in like a sponge. I also spent spare time at the shops, poking into the various workings of things, and eventually pissing off Uncle Dunc (or Drunk) the Foreman who told me in no uncertain terms to 'stay the @##@ out!' I took that as a suggestion, not an absolute."

"So a week or so later, after I had punched out, I snuck into the shop (through the back door by the dump) and found the No. 3 on the number 1 track with the dome cover off. I climbed up on top of the boiler and looked into the rusty interior illuminated by the work light. This called for closer examination so I went into the dome, head first, lower legs sticking up above the dome, and looked around. I studied how the tubes were arranged, and figured out how the boiler braces worked. Since standing on my head was most uncomfortable, I decided to come into the small space on top of the tubes, turn around, and then make my exit. With difficulty, I got my legs in,

but to my horror, there was NO room to turn around! I felt panic, but told myself I had gotten in, and could get out the same way. So I got my legs back into the dome, and with a lot of pushing with now bloody elbows, managed to get my knees over the top edge of the dome, and the rest of me. With a huge gasp of relief I looked around, and there, sitting in a folding chair leaned back against the shop wall was Uncle Dunc! He didn't say a word, and I, with as much dignity as I could muster, walked out of the shop on the other side of the engine. I am certain that he spent the rest of the night doubled over in laughter. I didn't go back in the shop for several days."

Dunc was the "nicest guy," remembers Eddie Bird, "and twenty minutes later he was just a bear - how many times did Barbara walk into the cabin door?" Jitney remembers Barb Greene could be combative as well. The Colonel put a new procedure in place where engineers would write down what mechanical fixes needed to be done on their locomotives (perhaps to catalog shop effectiveness?) Jitney filled out a new form and handed it in. Both Greene's were apparently unhappy with the procedure as Jitney says Barb proceeded to "read him off" about putting problems in writing.

Barb and Dunc Greene had no children, and left the Cog in 1961 after an impaired and impatient Dunc opened the front of a hot boiler to roll out some leaking flues after he had been drinking. That action - due to a possible pressure rupture was so dangerous, he was sent down the mountain.

Barbara Fern Adams Green died on May 27, 1969 of a self-inflicted gunshot wound in East Hebron, New Hampshire. She was 43. A little over a year later, Duncan Perley Greene died on July 23rd, 1970 of a self-inflicted gunshot wound also in East Hebron, New Hampshire at the age of 54. They are both buried in the Hebron Village cemetery.

The BIRD's - EDWARD & HARRY

Harry the elder and Eddie the younger came to the foot of Mount Washington from Massachusetts and toured the area as teenagers due to their vocal talents. Both sang with the Bretton Woods Boys Choir that bivouacked at Camp Duncan on the Base Road. Harry was on the choir roster for several summers. Eddie just one in 1947 at the age of 10. Both came up the road to the Cog.



Harry Bird Jt. (1954) - N.H. Archives

Harry Herbert Bird Jr. was born April 7, 1933 in Melrose, Massachusetts and Edward Francis Bird was born on May 19, 1937 to Harry and Edna Bird. 14-year old Harry met Col. Henry Teague in 1947 at Camp Duncan, and Eddie says the Colonel later "hired Harry to work in the Ticket Office and manage the Summit House." Jitney says Bird was in charge of an interesting Summit crew. One gift shop employee would take a strip of plastic wrap, stretch it across his eyes and pretend to ride a motorcycle the length of the counter making the appropriate sound effects for entertainment. Motorcycles figured in another Summit diversion - a single match torn from a book of paper matches would be split so two sections

would spread out from the head like wings. The match would be handed to an unsuspecting bystander so the wings could be held with both hands. The holder of the match would be asked to raise and lower their left leg several times - then perpetrator of the match schtick would ask, "What's a matter? Your motorcycle won't start?" There was also the sticky-fingered cashier who had a rather blatant visual tell of pointedly looking both ways before slipping some money from the till.


Dr. Harry Bird

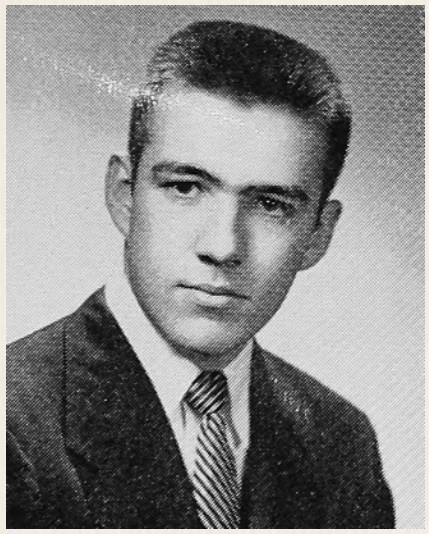
Harry left the Cog in 1954 when he graduated from Harvard. Bird first went to Tufts University School of Medicine with an eye towards becoming a country doctor, but received his medical degree in anesthesiology. His training was underwritten by the Navy so he interned at the U.S. Naval Hospital, Portsmouth, Virginia; the U.S. Naval Hospital, Chelsea, Massachusetts; and Children's Hospital in Boston before going to Dartmouth College as an instructor in 1964. Dr. Bird became a full professor in 1970 and served as president of the Hitchcock Clinic from 1983 until 1990. He was the CEO when they built the new hospital facility, and left Dartmouth in 1990 to become Commissioner of Health and Human Services for the state of New Hampshire. Retired Dr. Harry's advice to combat arthritis wound up in the 2011 book, *Home Remedies from a Country Doctor* by Jay and Dorothy Behlen Heinrichs. It involved drowning raisins. "Pack a small jar with golden raisins and cover them with gin," counseled Dr. Bird. "Eat nine raisins every morning, squeezing the extra gin back into the jar." He told the authors he uses this treatment even when the arthritis isn't acting up. "I think it works for both prevention and treatment," he says. He's not sure why it works; "it just does."

Eddie Bird says older brother, Harry and C. Everett Koop were friends and they were both on President Reagan's short list for surgeon general.



Engineer Eddie Bird (R) and fireman Ken Saccosia in the No. 3 Base Station
- Paul Saunders photo

Ch. 9 - The Shop



Edward Bird (1955)
- Wakefield HS yearbook

Eddie says his "years at the Cog went from 1953 through October 1964. I started as the first gas station attendant/parking lot attendant and when time allowed kept the coal bin full." The cocky and charismatic high school junior arrived just as the Pliney Granger cabin (two up from Jitney's) became the Girls Dorm. The Wakefield, Massachusetts Memorial High School 1955 yearbook *(right)* said Eddie's pet expression was, "Well, I'll be a dirty bird."

"In 1954, I became a brakeman, 1955 a fireman and 1957 fireman/spare engineer," recalled Bird. "Braking for Leo (Boucher) on the Three - my career stood around the Three – the only (engine) that ever bothered me was the Six - always on center." Translation: A very rare occurrence (Jit says never at all with the No. 6) when an engine stops with piston valves in the center of their stroke, or "on center." Steam could not go into the cylinders, and the train would not move. That's why trains were stopped on the brake, not on the ratchet so, if necessary, they could be moved slightly with gravity to get the valves off center.

"I don't remember whether it was 1959 or 1960 that while I was collecting some waste in the shop, I found one of the original steam whistles that had once been on the engines," recalls Eddie Bird in 2015. "Dunc Greene had always said the whistles would never go back on the engines. Dunc Greene did not like the whistles because at night when the steam pressure would drop, it will get to a point where the valve would crack itself because of the lack of pressure on it. And they would sit there and moan" Sometimes had mind of their own: we were sitting at Marshfield and I don't know if somebody tooted the whistle or did it its own, but we had a full head of steam and that whistle went wide open. So I was gonna climb up and I got halfway up the boiler and the pressure on the ears was so intense I couldn't. So we backed it to, I don't know how we, we reached up with a shovel or a hook or something. Shut it up." *(Jitney said Whistles had been piped into the boiler dome next to the pop valve. However vibration and torque had caused the pipe to some whistles to break and blow down the boiler with no way to close off the opening to rebuild pressure.)* "Knowing forgiveness was always more obtainable than permission," says Bird, "I wrapped the *(found)* whistle in the waste and returned to the number 3 engine. The whistle should have been attached to the dome of the engine, but that would have required an act above my pay grade. Knowing once... a whistle was in use Dunc would be searching every train to find said whistle, the plan was to



Engineer Bird with Sandy Stephen by the No. 3 Base Station
- Paul Saunders photo

keep the whistle no where on the Base."

Bird says "The choice was to attach and detach the whistle at the Waumbek water stop which we did. The hook up was not perfect - we attached the whistle at the end of the passenger car steam heat pipe. We detached the whistle or attached it each trip and hid it under the platform. All the train crews became co-conspirators after the first toot at Waumbek. Dunc was absolutely pissed that the whistle was in use, and even more at the fact he couldn't find it. The good news was Arthur loved it... The whistle stayed up the mountain until Labor Day, when it was returned to the waste bin. Eventually (not the same year) whistles were put back on the trains. To my recollection, whistles did not blow again until after 1964."


Gail Bird

In addition to finding a whistle, the seven year Cog veteran had discovered another thing of beauty at the Twin Towers restaurant. The restaurant was a favorite spot for the Cog boys to watch TV - particularly on Friday nights when Gillette sponsored televised prize-fights. "Gail came up (to the White Mountains) in 1960 as a waitress at the Twin Towers... she was the only one who could serve beer," explained Eddie. They would marry in late August 1961, and the pending nuptials were the topic for a draft Cog Party poem Jitney worked on that year, but did not finish until 2015.

Have you heard the Bird
Is planning to wed?
Must be a mistake
Hope it's not too late
To warn the unfortunate damsel

Eddie to build a nest?
A little haven for what he's cravin'
Happy, married bliss.

A Bird with many social feathers missing
Could change and become a gentleman -
Is only foolish wishing.

But hesitate, wait -
Love made Eddie use a razor
And dress real neat.

Gail felt compassion for a lonesome Bird,
And this mission she did take.
She felt it a noble cause,
Now Gail stand for our Cog applause.

Eddie started working in the shop. The *Nashua Telegraph* reported on Wednesday, June 28, 1961, "Edward Bird, who works rebuilding locomotives, teaches school in Hampton, N.H." Cog Railway financial ledgers for that year indicate Eddie's parents, Edna and Harry Sr., had been

flocking to the Summit for a half-dozen fall seasons to help serve the late season tourists at the top of Mt. Washington after the college help had left the Mountain.

"In 1962, Gail and I were assigned Dunc Greene's cabin and I worked in the shop, plus checked engines between trips and made sure parts were ready to repair minor problems between trips and was the spare engineer," remembers Bird. "Living (and teaching) in Exeter, New Hampshire allowed me to commute weekends after Labor Day until Columbus Day."

The couple would have a son, Gregory. Paul Philbrick was Greg's godfather and Jitney Jr.'s first baby-sitting gig involved watching the two-year old. Eddie Bird's last trip up the mountain was October 12, 1964.

Bird says he taught at middle school for five years at Middleton, New Hampshire, and then became a casualty underwriter for Liberty Mutual, AIG and New Hampshire Commercial Automobile. Gail taught pre-school, and was a music teacher as the family moved around a lot - first Exeter – then Dallas – back to New Hampshire then to Atlanta – New Jersey – Manhattan and finally upstate New York before retiring in Florida.

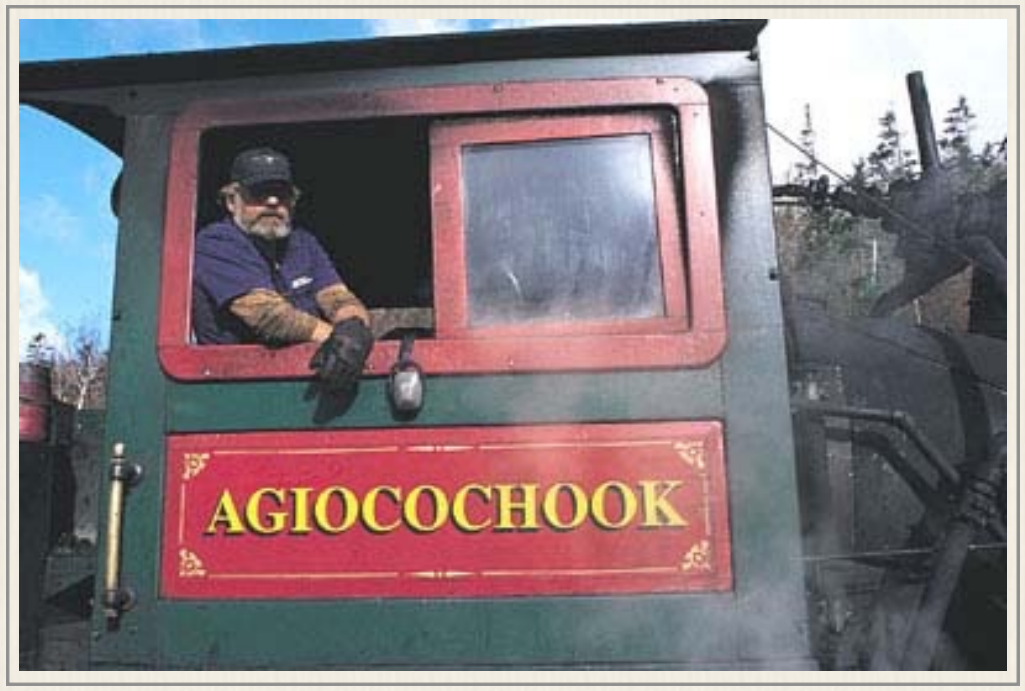
Eddie says, "Greg is now 53 years old working in computers – selling computers, hardware all that stuff" out of Minnesota. Greg's younger brother, Chris works doing similar sales – nationwide for a another computer company. Both are healthy. Greg's daughter is now in her second year teaching in Las Vegas. When she complained about the initial pay she was offered the proud grandfather/former teacher told her, "what they're offering you is ten times what I was offered."

"My eyes were a lot wider when I left the Cog than when I arrived," says Bird. The 12-year veteran who looked "forward to going up in the spring and smelling the coal smoke" says "it was the best experience of my life. When they converted to the new (diesel) engines – it wasn't the same railroad anymore."

Gail was diagnosed with Alzheimer's in 2006, and has been in a nursing home since July 2014. "I was able to keep her home until last year," says Eddie "but her needs just outgrew my capabilities of providing her care." Eddie says the aggression that comes with the disease is all gone, but "you can see the frustration when she tries to tell you something. I'd sooner be a quadriplegic than be that. But it is what it is. I had my aortic valve replaced in July 2015 and am getting better - slowly but surely."

And how did Gail's 54-year project of reforming this Cog bird turn out? "She has me well-trained," reports a laughing Eddie who loves to eat seafood. "Gail never liked seafood - she's been in the nursing home for a year, but I still don't cook lobster in the house."

LAWRENCE "Larry" BARRETT



Engineer Larry Barrett '72 prepares for a trip up Mt. Washington (2000)
- UNH Magazine Online

Littleton, New Hampshire native, Larry Barrett *(right)* found his way to the Cog Railway through an equestrian connection. "I was invited to work at the Cog by Col. Arthur Teague, in *(1964)*," wrote the retired horse trainer in 2015 from his home in West Waterford, Vermont. "I had been training his horses at my farm in Lisbon, when he came to me in the fall, and asked me 'how are things going?' I lied a little when I said great. He then looked at me and said, 'I mean how are things really going?' I told him the truth, that the winters were pretty difficult. (Col. Teague) said 'I thought so' and said 'I think we can help each other out.'

"He hired me to work with Bill (Liveston), an older machinist who did the winter tooling of parts for the running gear of the trains at his shop in Lisbon, New Hampshire. Then I went up to the Cog and helped to assemble the trains in the spring. Arthur asked me to start learning to run the trains in the spring and the fall when the college young people were not available to run trains. My qualifying run as an engineer was in 1967, the day after the accident at Skyline, when the New Hampshire Public Utilities Commission was taken to the scene. I had been training as an engineer under the tutelage of Pliney (Granger) III. We were on the way up for an overflow of people at the summit the day of the accident. We were on Long Trestle, when the train crashed." Taking care of people at the site, prompted him to become one of the first civilian EMTS in the country. He would later help found the Calex Ambulance service in northern Vermont. He left the Cog in the spring of 1968 after spending the winter organizing the construction of the new No. 10 engine at Ellen Teague's request. *(He would not return until 1997 and then only on a part-time basis.)*

Larry enrolled at the University of New Hampshire in 1969 and graduated in 1972. The school's alumni magazine called him *"Master of the Mountain"* in it's Winter 2000 issue. "Years ago, before UNH, Barrett was a 'cogger,' working his way up from fireman to engineer," they wrote. "Last year *(1998)*, when the new management asked if he'd like to work there *(full-time)* again, he didn't need to be asked twice." Barrett said being a Cog Railway engineer was his "dream job." But he also told reporter Meg Torbert, "It's a bad mountain,' ...along the (railroad) route are monuments marking where climbers have died. 'The challenge is making peace with the mountain, making it up and back safely. It's a rush. Once you get a taste of the cloud, and smell the cold, you're hooked.' During the summer, two of his five sons work alongside him, as his fireman

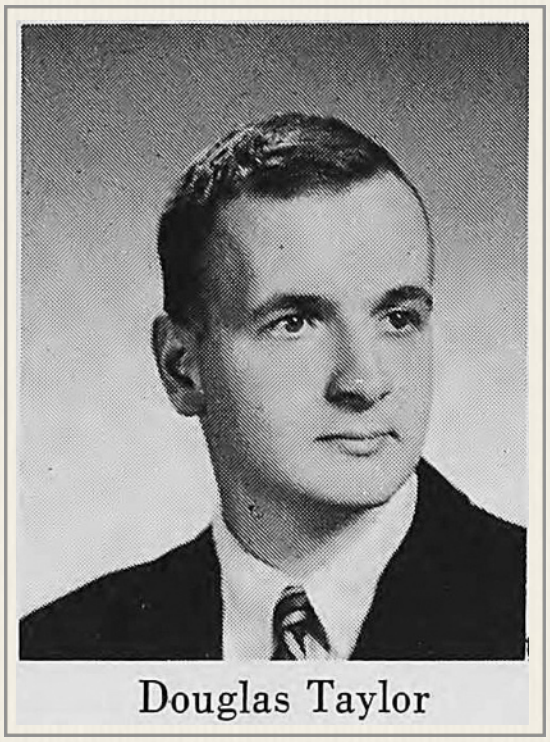


Engineer Larry Barrett in the dab during his second Cog stint for the Presby-Bedor group (~2005)
- Nigel Day Collection

and brakeman. Barrett, a devoted father, is delighted: 'What a deal, to work with your own kids.'" Larry told the *Clatter* publisher in 2017, he and his wife, Laura's eldest son, Travis did not work at the Cog but now teaches English in Newport, Vermont. Second son, Tristan broke and did some firing - working with his dad in the late 90's - early 2000's. Middle son Trevor broke and fired during the same time frame. Fourth son, Trace worked the grounds until he was 18 and old enough to brake. Trace left the Cog in 2003 when he moved to Los Angeles. Youngest, Troy was also a Cog groundskeeper before turning 18 and qualifying as a brakeman in 2002. A proud Larry says "All of our boys were very much in demand because of their smooth braking ability and their success in generating gratuities" which were shared with the train's crew. From 2000 to 2005 trains ran with three Barrett's as the crew. Lawrence W. Barrett died on June 1, 2024 at the age of 80.

Car Shop

DOUG TAYLOR – Master Car Builder


Douglas Taylor

1962 Dartmouth College Aegis Yearbook

Doug Taylor came to the Cog Railway in 1960 as a Dartmouth College student majoring in technical stagecraft from Lyme, New Hampshire. He started as brakeman for Jitney (see Sec. 9 No. 6 - *Great Gulf*) and qualified as a fireman in late August. The next summer he fired for Davey Saunders on the No. 6 while Jitney was taking summer classes to earn his masters degree.

Doug's passion for model trains prompted Col. Teague to pull him from engine service, and he was "put in the car shop to finish the unfinished *Thelma* car" - the second 56 passenger aluminum car begun by Edward Chumley. Taylor says word got around he spent his spare time in his boarding house room crafting finely detailed railroad models, including passenger cars. Doug says Paul Philbrick gave him a heads up that his Cog work assignment might be changing as Arthur needed to replace Chumley. Doug figures the Colonel must have thought, "Taylor makes little ones, I guess he could make big ones." Taylor says he was sitting on the Six one day, when Arthur walked over and gave him the job. Doug needed an assistant. Brakeman Johnny Morgan was walking by and his work assignment changed, too. Although Taylor's primary job was in the car shop, Doug was checked out by Jitney to be an engineer in August, qualified, and ran a number of trips "until I had to leave for the Yale School of Drama" in September 1962.



- All photos this segment Doug Taylor Collection

Doug continued in the car shop for the next two years completing the *Thelma* and starting a major rebuilding program on the wooden cars creating memories along the way.



Doug Taylor in the Car Shop
- Doug Taylor Collection

"There was the time I went up to the Cog very early to get a jump on car repair," Taylor recounted in 2015. "Paul (Philbrick), Harold (Adams), Ray (Gilman) and I were the only ones there. Ray did most of the cooking and shopping."

"About three weeks later I had been doing something up at Marshfield and was walking the tracks back to the Shop. Suddenly I noticed that the first of the waitresses was walking up the road from her dorm

Ch. 9 - Car Shop

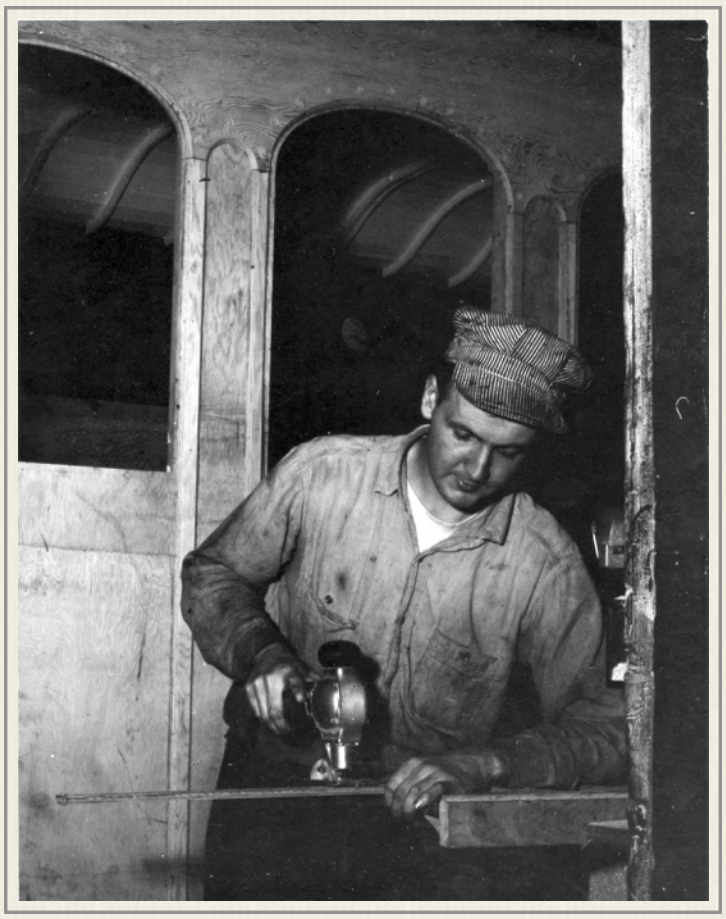


The brothers Taylor at the Car Barn
- Doug Taylor Collection

to Marshfield. Having not seen anything female for 3-plus weeks, I was more than interested. We passed, nodded, and I turned my head back to check out the rear view, still walking on the ties. The view was quite nice, but (no pun intended) I forgot about the missing tie on the little bridge, stepped where it should have been, and fell through the bridge into the creek! The shop crew, who had been watching the whole thing said I just vanished. Took a lot of ribbing when I finally appeared, very wet, at the shops."

The rebuilding work to be done on the cars was such that Doug convinced Colonel Teague in 1962 to hire his younger brother, Jeff Taylor *(above)* to work in the Car Shop as his assistant. "My men and I..." Doug remembers.

In addition to rebuilding the cars and filling in as an engineer as needed, Doug was also the Cog's "car knocker." Just as master mechanic Paul Philbrick would make early morning rounds checking the engines before they steamed up for the day, the "car knocker" would look over the brakes, the mechanics and condition of the passenger cars - both doors and windows.



While there was occasional interaction with engineers, car knockers main train liaison was the brakeman. "I was a very conscientious brakeman. I worked hard, but I had a terrible memory - still do," recalls Jack Lynch. "In 1962, Jitney and the Six were assigned the 'second' *Chumley* car - an aluminum monstrosity compared to the historic organic wooden cars. The *Thelma* car was built by Doug Taylor. He called it 'Taylor-Made.'" In order to keep cinders and soot away from passengers, the origi-





nal *Chumley* design had large windows to improve viewing and only a few small windows that opened for crew communication. It soon became clear that on sunny days with full loads, the car needed more ventilation for a comfortable ride.

Taylor says eight windows were cut into the top third of the regular side windows along each side of the *Thelma* and the *Chumley* "to add much needed ventilation to those sweat-boxes." Lynch remembers "instead of sliding up (like the wooden coaches) they tilted out. When opened too far they would hit the wooden structures that were used to deliver water and coal - both at Waumbek (water tank) and (the bunker) just below Marshfield. I must have forgotten to close those windows five or more times. Paul in the shop and Doug Taylor had to fix them weekly and were quite annoyed with me."

"It was a half-assed solution," recalls Taylor, "but Arthur didn't want to spend serious money to have sliding windows made elsewhere."



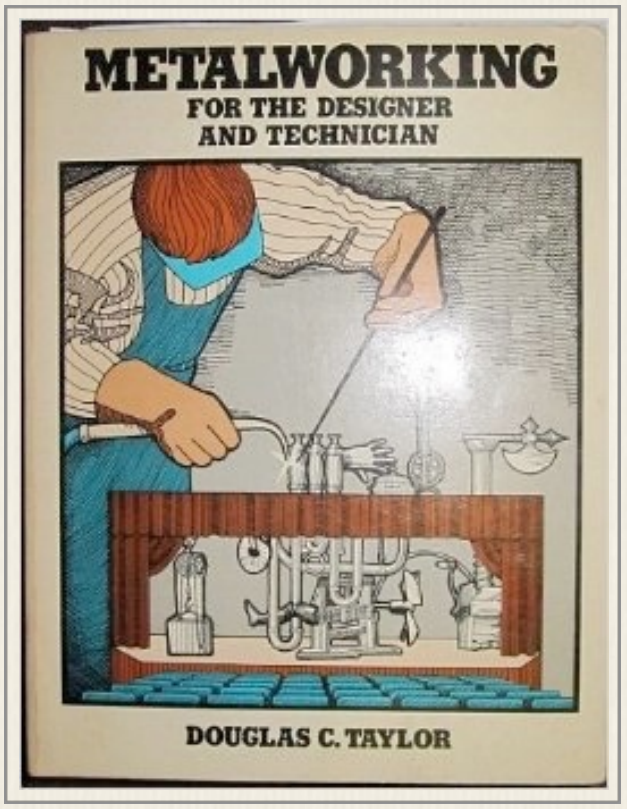
The Taylor-made "Thelma" car ready to roll at the Base platform
- Doug Taylor Collection

Ch. 9 - Car Shop

That may be the reason that one morning Doug was not in the best of moods when he was called to come fix a broken window in a wooden car. *(Ed note: The work required to keep the trains running and the Cog's seven-day work week fostered what was known as "The Ugly Season" and the formation of a "Grumpy Club.")* As he was walking up the aisle, Taylor noticed a small hairline crack along the side of one of the windows. Yes, it was broken - but not bad enough to warrant replacement. A frustrated Douglas took his hammer and threw it through the barely offending window shattering it - sending glass shards everywhere. Taylor felt better until he slowly turned and scanned the rest of the car. Then he saw the severely cracked window that needed replacement on the other side of the car.

Doug Taylor says he "left the Cog two weeks before Labor Day *(1964)* in frustration, and to prepare for being the Shop Technician at Yale School of Drama." He returned to the Mountain for a day in early September 1965 to visit brother Jeff, and other Coggers he worked with. "When the theatre season was over," says Doug. "I came back to the Cog to visit Jeff. Apparently they were short of engineers that day because I ran one or two trips, double heading with Jeff. Had fun."

"I finished my MFA at Yale School of Drama in 1968, using the knowledge I gained at the Cog on metals and metalworking for my thesis."



Taylor "later turned it into a book *Metalworking for the Designer and Technician* which modernized stage scenery construction in this country. I then spent the rest of my career teaching Theatre Technology and providing Technical Direction at various collages and universities across the country, including Dartmouth and the Univ. of Missouri at Kansas City where I headed the Theatre Technology MFA program."



Bassett breeder Doug with Meteor at a dog show (July 2000)
- photo by Rob Swanson/Burlington Free Press

Doug and his wife, Missy settled in Kansas where Doug is a professional breeder and judge of dogs who continues to maintain a keen interest in all things railroading and the collection of stories. Missy died in Doug's arms on May 31, 2017.

JEFF TAYLOR - Master Car Builder

When Doug went down the Mountain, Jeff took over the car building chores. "while packing up our house (in Iowa) in preparation to moving to Waterville, Maine, I came across a copy of my evaluation of the condition of each car, since I had taken over from Doug in the running of the car shops. Other than being rather poorly written, oh boy, I didn't think much of their overall condition! One of the main contentions was the braking systems that yet needed to be replaced. While 'my men and I' as Doug would say... I had an assistant for my last two years in the shops, we worked together in the car shops. Larry Bowen and I replaced the wooden cars' old brake beams and their off-center, high-friction lever system with a compound cable system... so that 50% more mechanical advantage was achieved and with equal distribution of pressure to each brake pad while eliminating all the friction points of the old levers and rods. I was very proud of that system." As for Bowen, "He was very brilliant and was an under-classman in college. (He) wore glasses and was lean, like a cross-country runner. Just a terrific person who also saved my life. We both were working on the front brakes of one of the wooden coaches in a new service pit that Doug and I had dug out the year or two before. The pit's location required the back wheels of the car to be on the transfer table. Paul (Philbrick) needed to use the table so he called out he was going to push the car the whole way into the car barn. I replied "Wait a moment" and I went to move some tools on the center of the ties, but Paul didn't hear me. He and his crew pushed the car in and if it weren't for Larry's sharp "Look out!" the cog gear would have crushed me - it was very close."



Jeff Taylor (L) and Doug Taylor rebuilding a wooden coach
- Doug Taylor Collection

John Ruggles, who also worked with Jeff in the car shops, also has vivid memories of the work pit. "It was very useful... the problem was that you get there in the spring... it had filled up with water. You dig (a hole) in New England, you got a problem with that. Every now and then we'd have a few critters that would fall in and it was quite an operation, pumping it out and cleaning it out for use during the summer. But... it was very, very useful for any of the work on the brakes" and the undercarriage of the cars.

Ruggles says Jeff Taylor's use of tools

borrowed from across the transfer, and not following a strict return rule put Jeff in jeopardy. "He would forget to return tools back over to the engine shop, and Ray Gilman and Harold Adams... would be looking for a particular adjustable wrench... and it wouldn't be in (its) place. I was very well aware of this (rule). I made it a point to always, if I borrowed something that we didn't have over in the car shop, I'd return it right away." It was during one of those trips that Jeff literally got his come-uppance. "I was over there in the engine shop... returning something. Both Ray and Harold were telling me, 'Thank you very much... but your pal over there, he's not that good about returning stuff.' About that time Jeff Taylor walked in... Ray and Harold looked at each other. There was a block and tackle right there where the engines were worked on. There wasn't an engine inside at that time. Harold reached over and grabbed Jeff's belt... put the hook in... and both he and Harold hoisted Jeff up about 10 feet up into the air... Left him up there... questioned him, 'Are you going to remember to bring tools back? Until you tell us that you're going to remember that and follow the rule... you can stay up there until you assure us that you're going to return stuff.' Jeff was up there... flapping like a bird... and he was yelling and shouting and waving his arms around, 'Let me down, let me down. What are you guys doing this for? Why are you doing this? I didn't do anything!' Eventually (Jeff) acquiesced... he promised that if he borrowed anything, he would very promptly return it when he was finished. It was four or five minutes he was up there... so, that was one of the more entertaining things," recalled Ruggles with a chuckle in June 2018.

"The guy who got hung by his belt from a block and tackle in the engine shop... that was me!" confirms Jeff Taylor. "I deserved it! It didn't pay to be cocky around Paul, Harold and Ray! One of the things about the Cog and the shop crew... there was a rough-and-tumble playfulness there. There was the time that Doug and I got into a wrestling match inside the 2 car which had no seats in it"

Qualified as a fireman, Jeff spent time filling in on the trains including a particularly cloudy day on the Deuce. Dave Woodbury was running and Mike Claypool was braking on the way down. "Davey and I left Mike with his fully populated coach up on Jacob's Ladder and we didn't realize it until we were at Halfway House! The dense cloud ceiling was just below Halfway House so no one (at the Base) saw the car-less Deuce stop and reverse while Davey peered anxiously ahead and I tried franticly to break the bank and get the fire going to maintain steam. Of course the Deuce, always with a hearty appetite for both water and coal, had almost neither left! When we sluggishly chugged up to the curve that begins Jacobs there was still no coach and we realized we weren't going to make it much further. Then as we reached the center of Jacob's, Mike and his car came into view. Mike, the cool guy he is, kept the passengers calm (they didn't know they were 20+ feet up!) and we rather quickly descended." Brother Doug Taylor has a slightly different recollection: "He lost his coach coming down the mountain when a brakebeam (on the car) came loose and stopped the car. He had NOT hooked up the bell cord, and through the heavy fog the passengers watched in horror as Jeff and the engine disappeared in the mist. It wasn't until he turned around to watch the coach go through the Waumbek switch that he realized he had

no coach, and had no idea where it was. (He said it was an incredible feeling). Fortunately he had been told to wait at Waumbek for an up-coming train, so he took on water as the fireman re-built the fire and shoveled in some coal from the bunker, and then, slowly ran back up-mountain in the fog until he found the coach (around the half-way house). With a little up-hill shove, the brakebeam was untangled, and this time with his coach, hurried back down to Waumbek where the upcoming train had been waiting for 10 minutes. No one ever knew - until now."

Jeff went down the Mountain for the last time in the fall of 1967 just a week before the accident."Jeff earned his MFA in Theatre Technology at Temple University," brother Doug reports. "He became a member of Campus Crusade for Christ, where, among other things took stage shows to Ireland and other countries. He joined Northwestern College as their Technical Director/Designer and Assistant Professor, and spent the rest of his professional career there, retiring as a full Professor (in 2014)." While at Northwestern Jeff wrote and published a paper entitled, "The Craft of Acting, The Art of Acting and Their Relationship to the World of the Work" - a paper that "explores the essence of acting and its relationship to God, Satan, communication, and dramatic art." Some might say Professor Jeff's research on the document started at the Cog Railway where every element of the title and description sometimes seemed to be in play. Jeff and his wife came back east to Maine in late 2015.

JOHN RUGGLES – Master Car Builder

Born in Columbus, GA, John has been here at the Cog for 3 years. John's parents, General and Mrs. Ruggles come from Lyndonville, Vermont. This fall, John will be drafted into the US Army and is hoping to come back '69. *(CC v1n9 – September 2nd, 1966)*



John Ruggles bartending at a Cog Party
- Anne Koop Collection

John's father served with Arthur Teague in the 22nd Infantry in World War II as part of the leadership of Combat Team 22 on D-Day. While Teague left the military at the end of the war, the elder Ruggles had stayed and made a career out of the Army. Over the years, the two veterans of the 22nd Infantry and their families would get together. "When I was a kid growing up," recalls John Jr., "it was a regular thing for us to get together. Visit the Teague's up in Philadelphia... whenever it was possible for my dad to get up there, go to the Army-Navy games... and I would stay with the Teagues." Col. Teague hired his old regimental XO's son in 1964 to work on his mountain railroad.

"Art Teague had always told my dad if I wanted to come up there and work for him on the railroad just write him a letter and ask for a job," says John Jr. He did just that when he graduated from high school. "I was kind of in between trying to figure out what I was going to do… school or not, and (the Cog) was a good opportunity to kind of get out there and get a real job, which it certainly turned out to be. The first summer I was up there I worked through the fall up

to closing and pretty much did odd jobs. Just a little bit of everything… carpentry work… painting things like the girl's dorm… dry-walling and painting… making a little bit of furniture and doing the electrical repair and reworking some of the cabins." When fall came John moved to the trains. "There was a need for brakemen… I was trained… and that's what I did pretty much throughout the fall after Labor Day. I got to know the Taylors, both Doug and Jeff Taylor and that's how I wound up the next year coming back and going to work with Jeff Taylor in the car shop."



Gen. Ruggles and family with the Teagues. John stands center (1961)
- Photo by Elvira Murdock - Anne Teague Koop Collection

1965 was also the year the Base Road was improved a bit. "I had a Triumph motorcycle in 1965 and there was a nice new stretch of road... that was a great place to take the bike out and see how fast it'd go... probably cruised up to 100 miles an hour a few times on that (stretch)."

His motorcycles weren't always that fast. For one summer's transportation, John Ruggles used an Italian motorcycle that featured bicycle pedals to turn the engine over. 13-year old Jitney Jr. became the proud owner of the machine at the conclusion of the season and took it home to Chester. Upon arrival, Jitney Jr. fired the machine up and proceeded to ride it around the lawn while his parents anxiously watched. As their son ducked under the neck-high clothesline without being dismounted, Mrs. Jitney turned to her husband, "Can he ride a motorcycle?" Jitney, who had given his son no instruction said, "Apparently." Unfortunately, the motorcycle was more road bike than dirt bike and a small jump several days later on the side lawn disturbed the timing mechanism to the point, Jitney Jr. could not get it to run again.

According to Ruggles, Jitney Jr was not alone in riding two wheelers on surfaces they weren't designed for. "Jeff Taylor told me about this," says John. "His brother Doug had a Vespa motor scooter. And at that time some of the (old spur line) trestle was left below (the shop) and headed down past the Base Road. Doug thought, 'Well, that's kind of interesting. There's enough trestle maybe I can ride the motor scooter down the right-of-way.' Well, in the process… he ran into a mama bear and two cubs. The mama bear didn't appreciate that, and Doug managed to get the Vespa turned around, and headed right back up (to the Base). It apparently wasn't very far down… and he managed to escape the wrath of Mama bear." For his part, Doug was surprised in late 2018 to learn the story of his bruin encounter had surfaced. He added one key detail. On his trip down Taylor came to a tree across the path that forced him to lift the Vespa up and over in order to continue on. When he turned to flee the bears, he opened the scooter's throttle wide open. ""I couldn't look around to see if she was chasing me" as he wove amongst the obstacles, but Doug Taylor says he and his scooter went back over that downed tree without stopping.

As Jeff Taylor moved to working on the trains, John became the Cog's "car knocker." "The way the term came about," explains Ruggles "is you take a hammer or something like an adjustable wrench, and everything that had nuts and bolts in the undercarriage, brakes, the axles for the wheels that were held on with set screws. You go around and give those a tap and listen to the sound. You could tell something was loose that way, and that is how the term 'car knocker' came about. And when (passenger) cars were wooden… you know what a wood shop sounds like – (you) use a wooden mallet or a hammer for a lot of your work. Both of those things together. That's where the term 'car knocker' came from."



Passenger car inspection and repair was John's job throughout 1965 and 1966. "During '66, I had also become a fireman and I could fill in occasionally… that is the only photo *(left)* I have of anything I did up there. (I) filled in as a fireman or brakeman whatever was needed in the fall when personnel got a little short sometimes." While keeping steam up, the fireman would learn how to run the engine, and on busy days might swap jobs with the engineer for a run. "It depended on who the engineer was," says Ruggles, "If the engineer didn't think you were as competent as you should be in understanding how to run the locomotive, or having the kind of experience that would allow you to run the different engines" you didn't run. "Because each one of (the engines) had its own personality. I spent a lot of time, firing for Frank (Thompson on the No. 9) when he needed a fireman." While firing the *Waumbek* Ruggles became familiar with No. 9's unique forward steam valve *(right)* known as the "butterfly valve."



No. 9's "butterflies" - main steam center & forward steam right.
- FB We Worked There

"The packing on a butterfly... would wear in and be polished," says Ruggles. "You could be running, and if you weren't paying attention... if (the packing) hadn't been tightened up, you would be going up the mountain and

that valve would just start to open on its own. The next thing you know, it would just spin itself wide open. Give you quite a surprise." And whoever was firing had to be careful as well. "I can tell you... if you bumped it (with your head as a fireman), you'd change the position of (the butterfly). And Frank wasn't real happy about that... he didn't like surprises."

John says firemen had other things to bump their head on. "There used to be a water tank up at Skyline and it was on the firemen's side. If firemen wasn't paying attention and had his head out the window. I can tell you from my experience that could give you quite a swat as you went by the frame for that tank which was still there back in the sixties. I got a free x-ray at the hospital in Littleton over that."

But John Ruggles' main focus was the passenger cars, and he spent time in the fall doing research on the historic railway coaches. "I stayed after closing, and I worked with Crawford going through a lot of the old pictures because it occurred to me that the paint scheme on the cars *(silver and green)* was nothing like what the original was." He found more proof as the repair work on the Number One car was underway. "The Marshfield side of (the One car)... was the worst as far as weather goes, and it became apparent we needed to replace a bunch of the panels," says Ruggles. "After talking to both Jeff and Doug Taylor, we decided that we would do the same treatment on the side of the Number One car that was later done to the Number Two... all plywood and glued and screwed together. I made cutters to duplicate the original molding and trim on the car." When it came time to paint the exterior. "I scraped the paint down and noticed, well, it's yellow. It was pretty obvious that the cars had a very Victorian sort of paint scheme" just like the old photos he'd reviewed with Crawford. "I can't even remember whether I asked Art Teague's permission or not," says Ruggles in 2018, "other than just saying, I need to redo the car." Ruggles noted the first layer of paint was "very similar to a color that we normally had a gallon or two of in the paint room down there at the shop and I painted it to match the original color scheme. I think both Art and Ellen, to a somewhat lesser degree, were rather surprised with what (the No. 1 car) looked like. I was not there in '67 - I was in the Army when the car was rolled out of the shop, people saw it up there at Marshfield. It got labeled the circus car."

Ruggles' decision to go with the historically accurate color scheme was not countermanded by Colonel Teague. Ruggles says it was part of his management style learned during the war years. "One of the things about a guy like Art Teague, my father, or other people who were in military service... officers, who commanded others, when somebody wasn't doing a good job or perhaps they weren't as competent as you'd like... you couldn't just fire them and bring somebody else in... So you had to make the best of the people you had to get the job done. That was why guys like Gordy Chase were there. Art Teague was making the best out of the material he had to work with." Social status was not that important. "Art Teague was basically a good old boy. He got along with a lot of people," says Ruggles. That was not the case with Ellen.

John says "a little incident" at the Teague Farm in Guildhall after the Cog closed in 1966 provides some insight into Ellen's personality. The Ruggles family had joined Art and Ellen Teague



The No. 1 "circus car" pushed by No. 4 Summit heads for the top from Skyline (~1969)
- Anne Teague Koop Collection

for dinner. After dinner, Ellen brought out the champagne and caviar. "My dad being a general officer (in the U.S. Army) the opportunities for this sort of thing was an every day occurrence. We were part of the diplomatic community in Vietnam. But (for) Ellen Teague... that was one of those little things that said, 'Hi, I'm mainline Philadelphia. We're not here up at a small farm in Vermont. My impression (of caviar) went like this, 'You put that stuff on a cracker, boy, I can't think of a better way to ruin a saltine." John thinks his caviar assessment "would've flown with Art Teague alright. But I didn't dare say anything like that. No, not even close."

John spent the Cog's "Annus Horribilus" of 1967 in the Army. He would return in 1968, and bridge the "Jitney Years" with what we are calling the "Next Generation" operations under Ellen Teague. Ruggles' Cog story continues in *Vol. 2 Cog Roster.*

John and his brother were living in Phoenix, Arizona at the time of their dad's death in January 1999. John went to Arizona in 1971 first working in machine tool repair. With an engineering degree he started doing aerospace and defense work as R&D engineer until 1994 while also serving on Phoenix' planning commission. He took a breather in 1995 then got back into the workforce as a machinist. He finished his "official" career as a designer, builder and programmer of robots in 2004. There was a retirement move to Flagstaff where he volunteers at animal shelter and the Riordan Mansion State Historic Park. He's been a Coconino County Planning and Zoning Commissioner since 2011. John told Jitney Jr. in March 2018, he's currently working with Grand

Ch. 9 - Track Crew

Canyon National Park doing restoration of historic lighting at the El Tovar on the south rim. "Paid work!" he says to go along with "odds and ends machine work."



Track Crew

LARRY "Father Goodie" GOODEN – Track Foreman

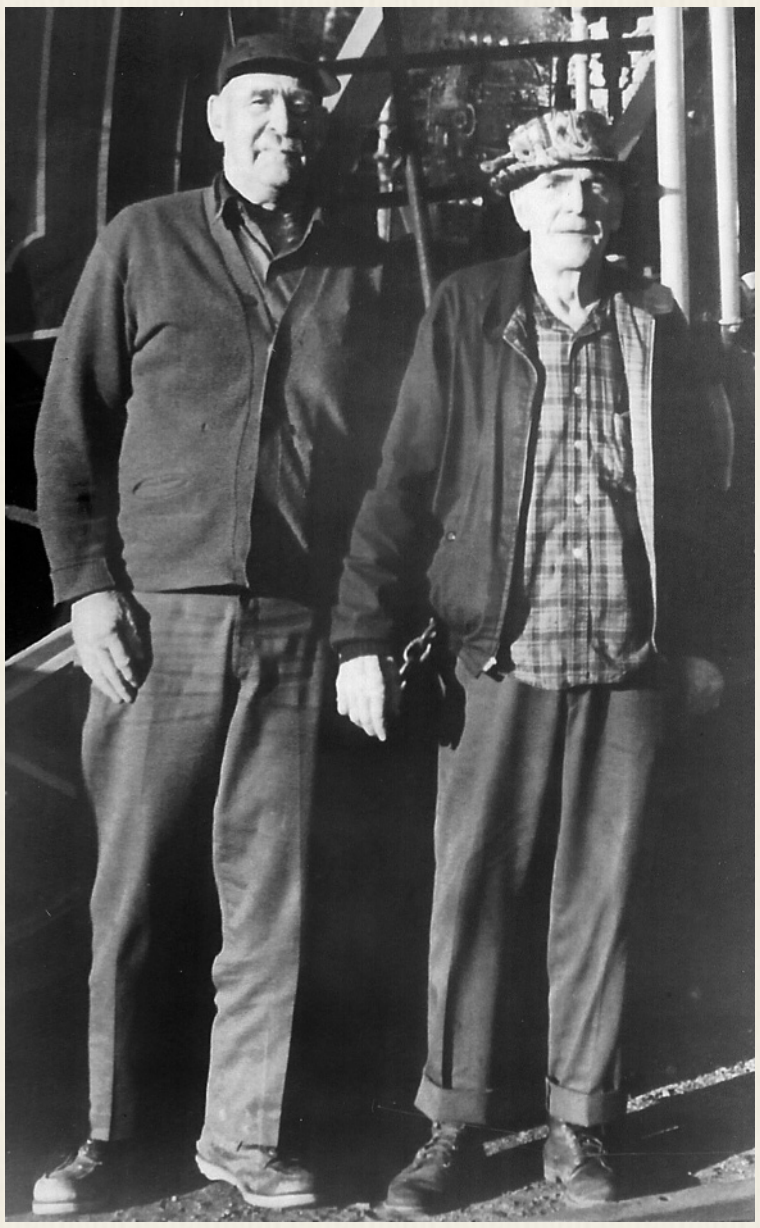
Being track foreman and road commissioner at Twin Mountain keeps Larry a full-time mountain employee; noted for his ability to do any job any place, anytime, alone or otherwise. When there is "trouble on the line" where's "Father Gooden?" Larry has been at the Cog for years and a welding car at full speed doesn't slow him down. *(Cog Clatter v1n9 – September 2nd, 1966)*

Larry Stephen Gooden was born July 12, 1905 in the town of Carroll, New Hampshire - the son of John and Alfreda (Rines) Gooden. John had come to the United States from Prince Edward Island and worked for a time in Boston. Work brought him north to New Hampshire and the area around Twin Mountain and Whitefield where he met Alfreda. But at that point, John's last name was Gaudette. Marriage to Alfreda changed that. "They always called him Goody, not Gaudette," says grandson Lewis Gooden. "Our grandmother (Alfreda) put the 'e-n' on the name because it sounded better... they were calling him Goody... That's how it became Gooden. That's what my sister tells me." In November 1927, 22-year old Larry Gooden married 17-year old Charlotte Evelyn Harriman in Whitefield, New Hampshire. Charlotte was the daughter of Charles and Maude (Brown) Harriman. The family story of their romance is slightly different from the official record. "She wasn't 17. She was still only 15 or 16," says son Lewis. "She fell in love with my father and she was only 14 years old. They wanted to get married and they wouldn't let them get married till she was 16. She lied about her age. She says she was 16 and that's when they got married."



Charlotte & Larry Gooden
- Gooden Family Collection

Larry's son, Lewis says Charlotte was not his father's first love. "My father used to go over to the one-room school house (in Twin



Father Gooden & Rouleau
- Gooden Family Collection

Mountain) which was probably a quarter of a mile from where he lived," says Lewis. "He used to go there and build the fire in the stove for the school. He fell very deeply in love with the school teacher. She was a lot older than he was, so they didn't get married." But Larry's oldest daughter would later correspond with the woman through the mail.

A woodsman and carpenter, Gooden first worked in the forest with horses. The 1932 Littleton, New Hampshire City Directory lists Larry as a truck driver. Son Lewis says "He had two or three trucks… pulp trucks… logging trucks." Larry had one of the first chainsaws in the area that weighed 52 pounds. Lewis says his dad worked with Emile Rouleau, the woodsman who arrived at the Cog in 1938. "Rouleau would stay in the woods all winter. My father would bring him in the food and Rouleau took care of the horses in the woods." They worked the Black Brook area - up a trail just before the Zealand Campgrounds today. Rouleau lived in a tar paper shack with a good woodstove and plenty of firewood all around. Rouleau would come out of the woods in the spring, and move into Larry's dad's cabin. "Rouleau would go over there," says Lewis Gooden. "My father (Larry) would go down and probably buy him 25, 30 cases of old Ballantine Ale beer. (Rouleau) would go to that cabin and he'd stay in that big cabin until he drank every drop of that beer. Then my mother would go and tell him, 'You know, it's time for (you) to sober up.' At that time, he had the shakes. She started feeding him, made sure she got some food in him, and get him back out there again - ready to go to work again."

Larry Gooden was road commissioner and later custodian of the Carroll Sanitary Landfill in his home town. Father Goodie came to the Mount Washington Cog Railway in 1955 and took over as track foreman in 1960 - the same year his wife, Charlotte died. It would be a position he would hold at the railroad for the next twenty years.

Gooden was part of the team that reopened the railroad in the spring. One chore was to open the pipes from the springs at Waumbek so the water tanks that had been drained for the winter would refill. Goodie was heading back towards the tanks one fall after opening the valves and saw water gushing from the tender fill pipe at the bottom of the tank, while members of his crew just stood and watched. In an expletive filled directive, the foreman said in essence "Close the goddamn trap!" "We can't," they replied. "There's a rabbit!" Goodie roared up to the spurting spout



and sure enough the body of a dead rabbit that had taken refuge in the empty tank was preventing the water cut-off from closing. His crew would learn it was not the first time Larry Gooden had dealt with animals and water flow issues. Later, on a lunch break, Father Goodie and his track crew were talking about screwing up chances to make money.

"Mister Jesus," said Goodie, "Lost my temper - that's why I ain't got money - few years ago, turned on water at the sink - it would run - then stop. I turned off the damn faucet - wait - turn it on, the son of a whore would run and stop. Mister Jesus, it must be in the damn spring box up the hill I put in for making water go to a couple of cabins when I have money. I dug it up - took off the top - Mister Jesus, could you believe there was a son of a whore trout - no tail - but an end like a knob - a stopper - I scooped up that stopper-ass trout - threw it on the ground and stomped the son of a whore. Cooling off - it came to me, I just killed the only stopper-ass trout on the planet - Mister Jesus, folks would pay thousands to see it. I finally figured the damn neighbor kids put the trout in the spring - trout came down the inch pipe to the box where the ⅝" pipe fed the sink. Sink on - the current pulled the trout into the pipe as it tried to swim back up the inch pipe - over time, the son of whore's tail was shaped into a stopper!"

Larry Gooden did not live at the Base in the summer. He commuted from his Twin Mountain home and the widower packed his lunch in a brown paper bag. He would vertically twist the top of the bag closed rather than rolling it down horizontally, so the package resembled a Hershey kiss. Every morning he could be seen striding up from where he parked his car, the bag clutched in a strong hand - moving it back and forth like the cross-head transferring power from the cylinder to the crankshaft on a Cog engine.



Jitney with Goodie as he enjoys his bag lunch on the ticket office bench - his rolled brown bag to the left - Lewis Family Collection

Jitney still recalls joining Goodie one morning in the track foreman's walk up from the Bunker when the construction details of a tour bus dropping off passengers near the Ticket Office caught Larry's attention. Gooden's weathered left hand reached up and his finger traced the long line of closely spaced rivets that attached the bus's metal side panels to the frame from back to front. As he approached the front of the bus closely admiring the workmanship, Goodie commented to Jitney, "Jit - Look at these rivets - you ever seen so



many sons of whores?" Jitney didn't answer as, unlike Goodie, he had noticed the tour bus was disgorging a women's group for a visit to the railroad. From the look on their faces, Jitney knew they had not heard the words, "rivets" or "sons" in Larry's assessment nor did they know Father was a most courteous and kind person, normally careful with his speech around customers. They stood aghast as the oblivious track foreman strode past to start his work day, and Jitney - red-faced looked for a place to hide.

Harold Adams used to tell this story in the machine shop about Larry. "One Friday evening Harold was in the New Hampshire State Liquor Store in Whitefield. There was a line in front of the cashier, Harold was at the end of it, and Larry was at the head of the line. As Larry approached the cashier he placed his intended purchase on the counter, and reached for his wallet, or pocket book, as he called it. "Red roaring, Jesus," Larry exclaimed, "put the son of a whore back on the shelf. I forgot my %#%@ pocket book." After Larry, left several people were murmuring. Someone asked Harold if he knew who that guy was. Harold's response – "I never saw him before in my life!"

While Father's language was strong, his body was even more so. Jitney Jr. was riding the trains for fun in 1965 when he had a ringside view of Gooden's durability while standing in the left window of one of the aluminum passenger cars. The descending train had stopped just above the Skyline switch where the track crew had been working. They had been using a welder mounted on a small cart that was now sitting on the siding. The plan was to ease the welding cart slowly down through the switch by hand - throwing the rails as needed to put the cart behind the tender of the train where it could be chained for a return trip to the Base.

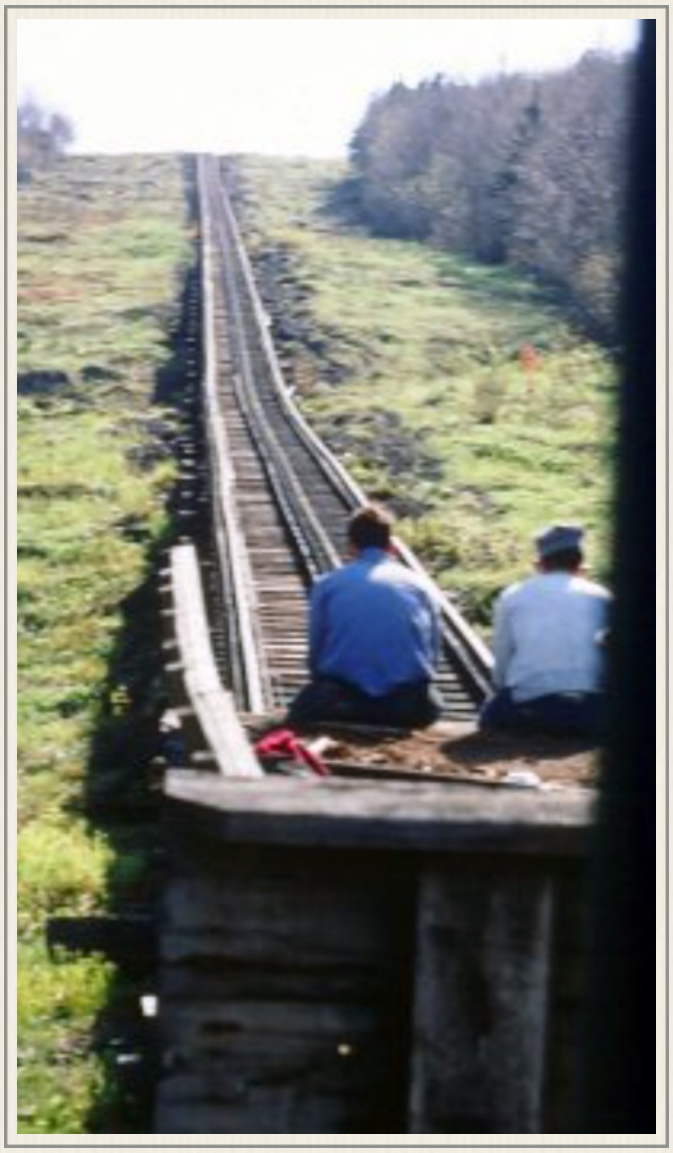


Son Lewis Gooden holds the dented pocketwatch his family says Larry was carrying the day of the welding cart accident. (2018) - photo by Jitney Jr

Jitney Jr. watched as the work crew surrounded the cart - Father Goodie and another Cogger were directly behind and below the cart as the group started backing the cart down. All went well at first, but then there was a slip - the group started losing control of the heavy welding cart. Men started getting out of the way - Larry Gooden was the last to abandon the original plan, and Father Goodie fell backwards onto his back in between the cog and outer rail. The cart wheels rolled up and over his shoulder – derailing and dumping the welder, but only bruising Goodie. Jitney Jr. remembers, "It was really scary and probably would've resulted in the loss

of the left arm on anybody else." Instead, the 12-year old watched as the track foreman got up and directed his men to re-rail the cart - lift the welder onto it and safely attach it to the tender while holding his left arm to his side. He got up into the cab of the engine for the ride down. Jitney says the accident got talked about quite a bit "because they nearly lost the welder and they ran over somebody." If the switch had been completely thrown and the cart hadn't been derailed by Goodie's left arm and shoulder - the cart would've taken off down the mountain till it crashed into the next train up or went off on a curve. Larry's son, Lewis says he "had an indentation down his arm so all that was over the bone was just the skin… it was that deep… it was a "v" that just went right down in." Steve Christy who joined the track crew a year later "vividly recalls a scar across one of (Goodie's) upper forearms that… was a result of the cart's wheel running over it after he fell."

Christy who remembered Harold Adams' "Larry at the Liquor Store" story in 2016, says he also witnessed Father Goodie's ability to improvise. "Larry stopped every morning in Twin Mountain at the general store (Champagne's?) on his way up to the Base," writes Christy. "There he would pick up his paper and his daily supply of tobacco, including some Beechnut Chewing Tobacco. One particular morning the store either didn't have any chewing tobacco, or Larry forgot it. Just as the work train was ready to depart he realized what he'd done, and he wasn't very happy. He asked the engineer to wait, went back to the car (this was the Pontiac that he referred to as "the whore wagon"), and grabbed a good supply of cigars that he had stashed there. I stupidly assumed that he was going to get his "nicotine fix" by smoking them throughout the day," says Christy. Then the work train pushed out of the Base and up the Mountain. "Larry's habit was to sit on the front of the work car, legs crossed below it, and study the track as we went up to our particular day's work site. Early on, I had decided to sit with him and listen to his assessments of the track and to ask him questions. Sitting on the front of the car with him that morning he lit up a cigar as we left the Base. By the time we got somewhere around the Half-Way House he had a little less than a third of the cigar left. As I watched in disbelief he carefully put the cigar out, brushed off as much of the ash as he could, then took the cigar butt, shoved it in his mouth, and began chewing it. I thought I was going to lose Pete's breakfast right there." Jitney says sometimes Goodie would just cuff the ash off with his thumb, and just flip the butt into his mouth without even removing the cigar stub from his lips.



Christy says "One morning before the work train left the Base, Larry was trying to start one of the old Wright



chainsaws on the work car. Nothing he tried worked, so he decided to bring it down to us at the shop. He gave it to Paul Philbrick and asked if he could start it. Paul asked if it had fuel, and Larry assured him that it did. He asked if it had spark, and once again, Larry was strident in his statement, saying that it did NOT have any spark. When Paul took the lead off of the spark plug, placed it near the top of the plug, and pulled the start cord, he could see that it did, indeed, have spark. Paul decided to have a little fun with Larry. He asked Larry to hold the lead between his thumb and forefinger to see if he felt any electricity. Larry reluctantly obliged, and Paul put the saw where he could continuously pull the cord as soon as it recoiled. Of course, Larry was getting pretty good jolts of electricity, such that he couldn't let go of the lead while Paul kept pulling the cord. After several pulls Paul asked Larry if he could feel any "spark". Larry, still unable to let go, and not wanting to admit that he hadn't checked the spark, replied, "I can feel it just a little!" Paul finally let up on him and after cleaning the spark plug of the fouling from being flooded, started the saw and gave it back to Larry, who left the shop chagrined."



Father & Kids: *(L-R) Lewis, Bradley, Bob, Barbie, Larry Jr., Raymond & Dickie Gooden. Larry seated (1975)*
- Gooden Family Collection

Son Lewis says Larry was not the only Gooden with Cog connections. "My brother (Bradley Gooden) and… my cousin (Milton Rines) used to haul the coal from the Fabyans up to the base of the railroad. They used to unload the railroad car. They opened (a chute) at the bottom of the car. They had a single axle dump truck and they conveyored the coal up into the (truck) and they would have to shovel a lot of it. They take it up (to the Base) and dump that load, then come back down, and they only had so many days to unload the (railroad) car. Milton liked to drink. He always carried a fifth of vodka or under the seat of the truck. Bradley says… they used to have fun with the tourists going up the mountain. They'd be going up the mountain and the old dump truck, (Milton would) get (the truck) right down in first gear because he had a load on... a whole bunch of cars would gather behind him, and he says, 'You watch them. I'm going to stop them cars… they're gonna have a helluva



time to get started.' He'd slow right down and almost stopped. The cars had to stop. They didn't want to hit him. Then he'd step on (the gas) and go. That was the old Base road like it was - up and down, crooks and turns in it." Lewis says his brother would come home at night covered with black coal dust.

When Larry Gooden retired from the Cog in 1980, he moved to King Square in Whitefield, New Hampshire. "Father Goodie" died Thursday, November 1, 1984 at his home at age 79, just four days short of the 57th anniversary of his marriage to Charlotte.

STEVEN CHRISTY



Steve came North to work on the railroad which is way above ground. Home is Bossier City, Louisiana where he will be completing Airline High and one year as "Father's" right-hand man. Steve says he enjoys railroading and has been fortunate to work with "Father." *(Cog Clatter v1n9 – September 2nd, 1966)*

The *Lebanon (N.H.) Times* profiled Steve Christy in the fall of 2013. Jennifer Dewey MacMillan wrote, "Raised in the south, Steve started coming to New Hampshire in the mid-'60s. During his high school and college summers, he worked on the Mt. Washington Cog Railway doing a variety of jobs."

Steve's Cog career began with a copy of the *National Geographic* magazine left in a doctor's office. The issue had a story about Mount Washington that Steve's mom read while she waited. Later she learned a woman in her church group had two sons who were working at the Cog railway. The woman was Dorothy Gordon, Paul Dunn's sister and mother of Jim and David Gordon who had gone north to Mt. Washington for summer jobs. "I'm sure she rues the day she picked (the magazine) up," says Steve in 2018 because her son would eventually make his home in New Hampshire far away from his Southern roots.

Steve was not the first Christy to come north. His older brother, Ken, who had played football and won a Florida state championship with Jim Gordon, went to the Cog and worked on the track crew in 1965. Age was the only thing that kept Steve at home that year. "I didn't turn 16 until midway through the summer of '65, so I couldn't have worked up there." Both brothers went to the mountain in 1966 and joined the track crew.

While working on the track crew, Steve Christy got noticed for possible train duty. "I had come up in early June, probably first week of June and gone right up on the track crew, where I was supposed to work all summer," says Christy. Engineer Gordon Chase ran the work train. "He wouldn't get out and do anything," remembers Steve. "He'd sit in the cab and sleep all day. But he'd keep an eye on the guys that were working, and if he saw somebody that he thought looked ambitious, he would want to get them on his crew... that was his whole purpose for running the work train... scouting new talent (to fire his engine) so he could go in and make life miserable for

the counter girls while (his firemen) were servicing the locomotive and bring it back up (from the bunker). Chase says to me one day, 'How'd you like to learn how to fire a locomotive?' 'That would be cool.' So he spoke to Larry and Larry didn't have any problem. They brought me into the cab, and I would fire in the morning with whoever the fireman was instructing me, and... it got to the point where I was beginning to understand it... So Gordon asked me if I would be his fireman for the summer." The change would boost Christy's pay rate by over 10-cents an hour, and the young man said yes. All this occurred before Jitney arrived to begin his job overseeing train operations. "(Jitney) figured out what's going on," says Christy. "He pulled me aside and said, 'There's no way you're firing for Gordon Chase. We need to have somebody on that locomotive who is virtually an engineer themselves just to keep an eye on things.' I guess I was bright enough to understand that, but I was still a little peeved because it hit my pocket book pretty hard." Steve would fire for others during the remainder of the Jitney Years, while working on the track and in the shop. He learned the various personalities of each of the engines.

"They used to keep the old Eight down at the shop for a spare... guys would come down, you know, they'd been out drinking all night and... they'd start in belly-aching about what was wrong with their engine... they needed to bring (them) to the shop. Harold (Adams) would sit there and say, 'Oh, that's all right. Bring it on down... the Eight's sitting right out there.'" Christy said suddenly their tune would change. "Oh, I think we can make it through the day," Christy recalls with a smile. "You know, (the Eight) had two-and-a-half-inch (forward steam) pipes. It and the Four... and it just didn't produce enough volume of steam to deliver to the cylinders. Now the other thing about the Eight was... it had d-valves on the front two cylinders... the only one on the mountain and it had little piston (valves). They'd taken the d-valve out... converted the cage and put a little piston valve in... a little bit like a little dumb-bell. I'm not kidding ya. By August, it was just sucking air."

Steve learned working at the shop had its own type of risk. "One day we were pressing a gear out in the horse barn... That first area... had the concrete floor and the horizontal hydraulic press. It might've been a ratchet gear and the keyway to the key had either moved or was apparently just a little bit too tall. We used white lead for lubrication, and we had these huge steel blocks that were maybe four or five feet long" to press the gear. "(It) took two of us to pick them up, and this cotton-picking gear got stuck. We had 90, 100, 110 tons of pressure on (the steel blocks). You could hear the bars that we were pressing... They were making this noise. I'd never heard that before, and this guy says, 'I'll move that son-of-a-bitch.' He grabs a 16-pound sledgehammer and he strikes one of those steel bars that were being used to push the thing on. With all of the tension on it, that thing just popped, and it went almost to the... (high) ceiling in there... then came (down) Why somebody didn't get killed..."

Christy doesn't remember the Cogger's name but can't forget what happened a few days later with this same worker. "I remember he was a mainline railroad guy. He might've been there to help Ray. We were jacking up a locomotive to pull the front shaft out. When we did that we used these little bottle jacks... we would jack it so far and then we'd crib it... set it down" and repeat..

Ch. 9 - Track Crew

"I had been asked to get the thing up in the air." says Steve. "I'd done it with (Paul & Ray) a couple of times. This guy was running one of the bottle jacks. And I kept telling everybody, now put your shingle between the top of the jack and the frame. We wanted it to go up level and just take little bites... crib and little bites... and go on up. Well, I stepped over the track to look at something... his bottle jack kicked out and went almost to the car barn... went at least halfway over the transfer tracks and I'm thinking that thing could've hit me a few seconds earlier. I was so mad. I went and got a can hook and I went looking for him. Couldn't find him. I'd have beat him to within an inch of his life I was so mad at him."

"Three days before my 19th birthday," he told MacMillan of the *Lebanon Times*, "I qualified to become an engineer. I didn't enjoy running the train three or four trips up the mountain every day – it got kind of boring! *(Christy told Jitney Jr years later, "Yeah. You get to see the girls and whatnot. I just couldn't stand the tediousness of it")* But I really enjoyed my time in the machine shop. Since no one was making steam locomotives any more, if we wanted something, we had to build it!" And build it they did. Christy spent the winter of 1971-1972 in the foundry of Cog master mechanic Niles LaCoss *(right)* in Hanover, New Hampshire. With them was the frame of the new engine - a project that Col. Arthur Teague had started with the purchase of a new boiler in 1958. Steve became fast friends with the older LaCoss. Niles would eventually be part of Christy's wedding party. LaCoss's story can be found in *Vol. 2 Roster*.



Steve Christy & Niles LaCoss in Marshfield - Teague Family Collection ??

When the frame returned to the mountain on May 16, 1972, *Trains Magazine* reported "it sported a complete set of cylinders, pistons, rods, gears, brakes and counterbalances. It also showed off a few personal innovations: Christy had changed the position of the cylinder cocks so that when the cylinders were cleared the steam would shoot under the locomotive instead of onto the feet of bystanders."

Final assembly of the new engine occurred over the summer, and early in September she was fueled and the fire lit. Fireman Robert Clement coaxed the pressure to the boiler's first pop-off at 140 pounds. "Engineer-builder Christy pulled himself onto the right-hand seatbox," writes *Trains Magazine* reporter Randall Peffer, "and wound open the throttle wheel. Without even breathing heavily, No. 10 walked up the 15 percent grade to the coal bunker."

The next day Christy and Clement took the engine up to the summit pushing passenger coach No. 4. Peffer says "Three hours later No. 10 drifted back into Marshfield Station. She steamed so easily that Christy hardly needed to run the injectors, and her tender still held several hundred





pounds of coal. Although Clement saw cold spots in the five-grate firebox, No. 10 had so much steam that she popped off even on the steep 37 per cent Jacob's Ladder grade." The *Col. Teague* was ready for its "official" maiden run on September 24, 1972 with Christy at the helm. The article concludes "No. 10 *(above)* has a hundred years ahead of her." But there was only one more summer at the Cog for Steve Christy. That part of Steve's story continues in *Vol. 2 Cog Roster.*

After the summer of 1973 *(see Vol. 4 Appendix)*, it was time for Steve to leave the railroad and settle down; he would be getting married in the fall. "I needed to get a real job, so I walked into the bank, here, and met with Reuben Cole, who was the president, and a few days later he offered me a job," Steve said. Except for a five-year stint working for another local venture, Steve has been with Mascoma Savings Bank ever since, serving as its President since 1990.



Steve and his wife, Donna, have lived in Lebanon since 1973 and raised two children, both of whom went through the Lebanon school system and have since graduated from college and now live in the Big Apple. Steve prefers the simple life that Lebanon offers: "I have a seven-minute commute. Two stop signs. Beautiful, beautiful."

Steve retired from his banking position at the end of 2016.



Keeping the Center Rack Greased with the Cog Bucket

Tim Lewis: "Bud Nye *(back to camera)* and Jitney at the grease rack just below the bunker. Not sure who's filling their oil cans behind in the shed. I believe the fire is cleaning out the Cog bucket so it could filled again for a trip up the mountain to grease the rack. I think the pipe sticking up from the flames was the pipe that got attached to the boiler so steam could introduced to the grease to liquify it enough to drip out the bottom through little square hole in cab floor on the way down the mountain. I know the Six and the Nine had those holes. Not sure about other engines, and not totally sure about the procedure - never got to ride in the cab as a kid to observe, but did hear some of the bitching about having to do it. I believe there was some extra pay involved. Can anyone confirm my rack greasing impressions?"

Dave Moody: "Tim, the cog bucket had to be burnt off every once and awhile as it filled up with small coal and coal dust. There was a copper coil inside the tank that heated the grease up on the ascent after being hooked up to the steam heat line. A valve on the bottom of the tank was opened on the way down and the grease ran through the hole in the cab floor and onto the cog gear. The fireman was in charge of closing the valve before reaching the switches and the base and sometimes they forgot, resulting in a large puddle of ooze. The crews were paid one extra hour for running the bucket and it was messy... if the wind was blowing it was REAL messy and most of the grease landed on the sidepieces instead of the rack. The trainmaster was supposed to check wind conditions but that didn't always happen! The tank was nailed to the middle of the cab floor, making it hard for the fireman to shovel coal on the way up."

Tim Lewis: "Dave - even one of the things you mentioned would've kept Jitney Jr out of the cab on one of those runs. Thanks for the tutorial. I think I'll still opt for riding on the front platform on a Cog bucket run."

Alan Warner: "Dave - can't remember all the specifics, but Richard Tirrell & I managed to drop the bucket off the 3 on the way down. Probably my fault as I was fireman."

Art Poltrack: "Messiest job ever. Grease all over the place."

Morris Root: "OK, Tim - Can you lip read the knowledge Jit is sharing with Bud?"

Tim Lewis: "Morris - no but if you have a transcript, I'll fold it into the *Jitney Years*."

Morris Root: "Just remembering a few favorite nicknames, not sure Bud was on board with the guidance."

Tim Lewis: "Morris - as son of Jitney, I understand the need to tune out sometimes OR develop a good rejoinder. When he reminded Cin and me that he "grew up in the Depression," we'd just answer, "Yeah, and we grew up depressed!"

Charley Kenison: "Bet they are discussing that it's too dirty to put in the Six! Bob Kent on the right."

Tim Lewis: "Thanks, Charley - appreciate as many ID's as possible."

Shirley Kent: "Not sure that's Bob. Clothes don't look right. White collar?"

Anne Koop: "Is that a young Jitney?"

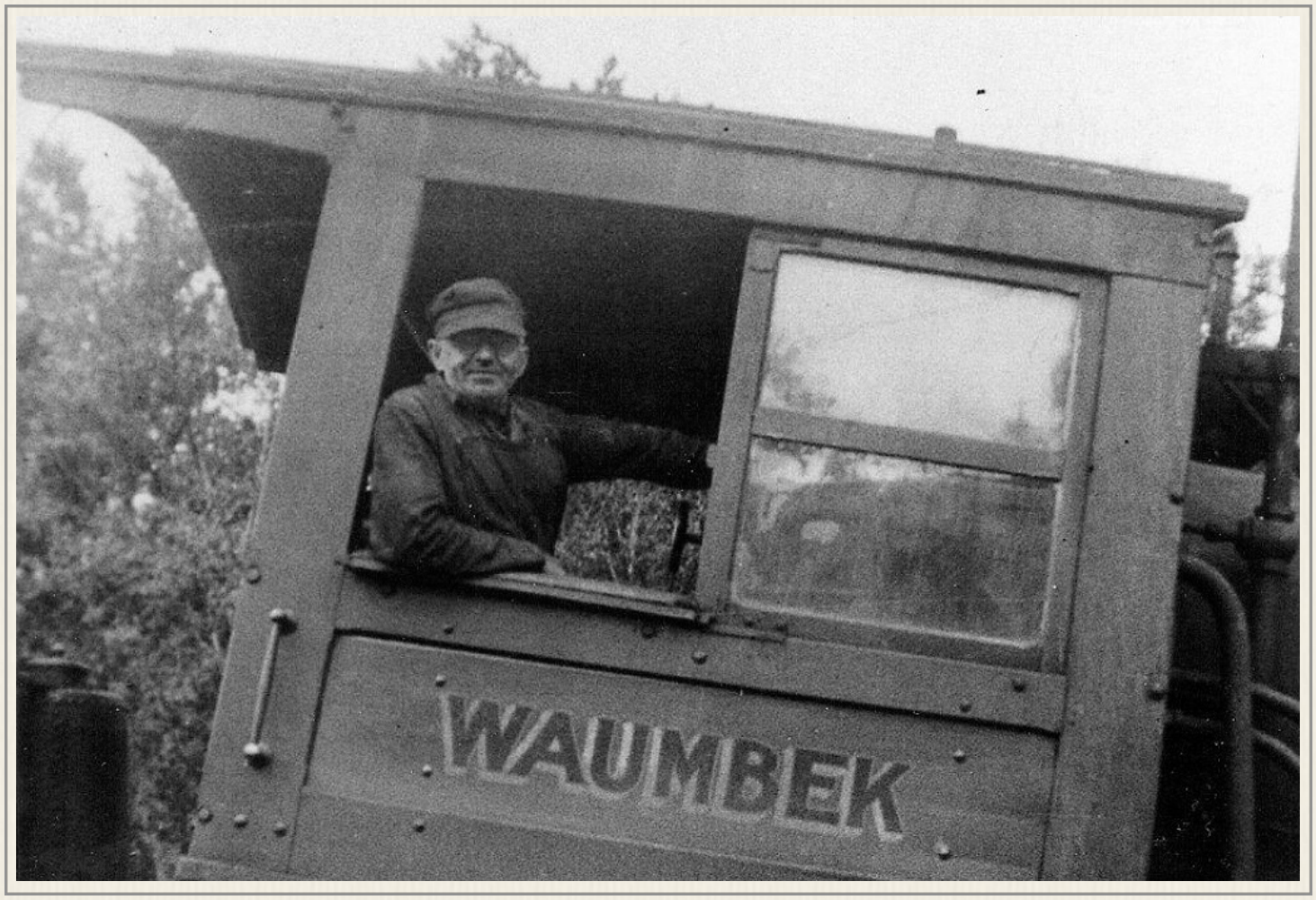
Glenn Nye: "Thanks for the photo."

Morris Root: "Hi, Bud - Do you remember that conversation?"

Glenn Nye: "Morris - No memory. Cog Bucket is also a no memory."

Tim Lewis: "Morris - it's obvious that you remember the conversation - did it involve Jr. at the throttle? I never heard anything about it but I'm sure the guy on the running board with a grease gun waving the engine through the switch and walking up to meet the car at the elephant might've heard a thing or two. I remember that run from the bunker very well."

Morris Root: "Tim - like Bud, I'm going to go for the lack of incrimination. From evidence in the photo very likely occurred when I was there. If I wasn't firing for Bud, might've been season I was off the mountain for Army boot camp and back later to run spare."



Pliney Granger Sr. at the controls of the No. 9
- Granger Family Collection

The Grangers

Senior engineer Mike Boyce was not the only source of Cog knowledge for Jitney to tap during his early years at Mount Washington, nor was Mike's family (Boyce-Camden) the only one with multi-generational representatives at the railway. Jitney also looked to people named Granger to answer his questions starting with the patriarch, "Old Pliney."

PLINEY GRANGER, SR.

Ancestry.com's computer algorithm figures that "when Pliney Nye Granger Sr was born on April 12, 1890, in Walden, Vermont, his father, Guy, was 38 and his mother, Ellen (Stevens), was 34."

"The original family name was Pliny Nye Granger going back to a great-great grandfather," says granddaughter Dale Ann Granger Eckert. "The name skipped a generation - then Grandpa was born Pliny, but somewhere a record keeper stuck an "e" in the name. Thus they are all Pliney's." By "all" she means her grandfather, her father and her brother.

In 1901, the family was in Passumpsic. Pliney recorded perfect attendance in Miss Gibson's room when school closed on February 8th.

The first Pliney with an "e" married Nellie E. Laird on July 8, 1911, in his hometown of Walden where he was a butcher. When 27-year old Pliney registers for the draft in June 1917, he is farming in Passumpsic, Vermont with Nellie taking care of four kids – Bernice, Maidene, Pliney Junior and Mary.

Allen, Guy and Granville would join the family before Nellie died on July 1st, 1926 at the age of 35.

The *Barnet Directory* lists Pliney Senior as a truck driver two years later, and his 1930 Census occupation is carpenter helping to build dams on the Connecticut River as part of the 15 Mile Falls hydro project.

According to Arthur F. Stone's, *The Vermont Of Today: With Its Historic Background, Attractions and People*, "In the summer of 1928, the Connecticut River Development Company, started the construction of what will become the premier hydro-electric development in the New England States and the largest east of Niagara Falls."



Connecticut River Development Company train delivering building materials at Commerford Dam site (1930s)
- Waterford, VT history blog

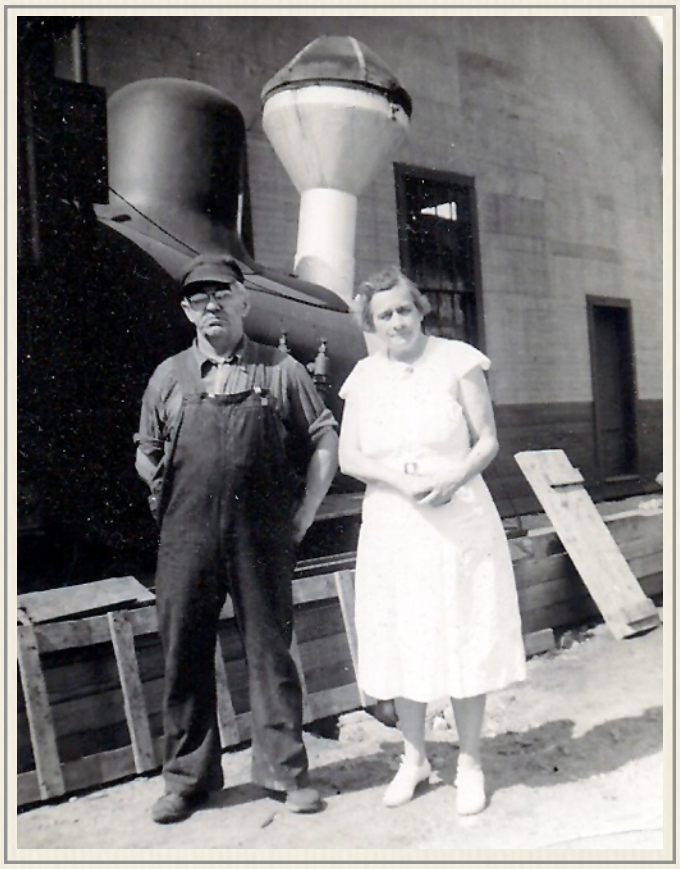
The former editor of the St. Johnsbury *Caledonian* (1890-1910) writes that in late August 1928, "a gang of men began clearing the way for five miles of standard gauge railroad and numerous sidings to transport the materials needed in four years of construction and to connect with a quarry. When the project is all completed this road, which connects with the Canadian Pacific Railway at East Barnet, will be nearly twenty miles long, now crossing the Passumpsic River on a 140-foot span steel bridge with the track on an 18-degree curve. In a month the number of workers had risen from a dozen to nearly fifteen hundred; in the peak of construction four thousand men will be employed. The little village of East Barnet, which the railroad calls Inwood, was wholly unable to care for this army, so a self-contained, carefully planned village was made on both sides of the Waterford-Barnet highway. Everything essential by way of utilities or of other essentials to comfort and protection is included in this village. Stores, hospital, shops, offices, store-

houses, homes are built on the west side of the road. Houses with a combined capacity of sleeping a thousand men, with separate buildings for dining halls, etc., as well as many cottages for the foremen and for family use have been completed on the other side of the highway."



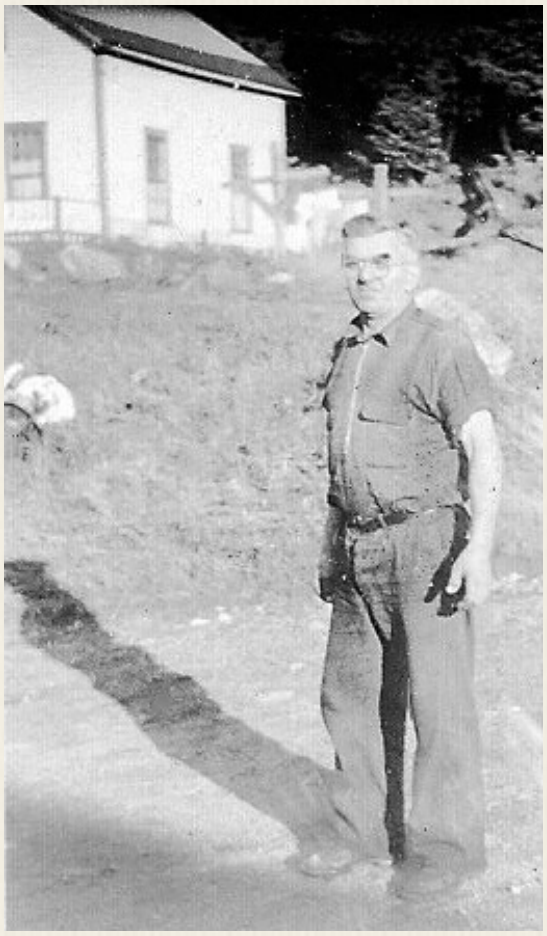
According to the *Barnet Directory,* Pliney Sr. was employed by the Connecticut River Development Company through 1935.

1935 was also the year the widower will remarry. Canadian native Zelma Aiken had been married for twenty years to Ai Wallace Fulford of Barnet. The couple had four children before Ai Fulford died June 20, 1934 in Barnet. Four days before Christmas in 1935, Pliney Nye Granger married Zelma Fulford. Pliney and Zelma had two daughters, Florence known as "Honey" and Susan.



Pliney Sr. and Eliza Granger
- Granger Family Collection

"In 1938, Pliney Sr. was working for the railroad in Buffalo, N.Y. as an inspector," says granddaughter Dale Ann Granger Eckert. Family stories say, "the company was in the practice of buying the inspectors with fine dinners and booze to pass things of questionable condition. A non-drinker and not one to be swayed by fancy offers, Pliney couldn't be bought." However, Pliney's grandson Pliney III says "Old" Pliney had a different reputation at the Cog. "There's stories about him hiding his beer in the brook and somebody finding it and him getting really up-



"Old" Pliney Granger at the shop with Mike Boyce's cabin in the background - Granger Family Collection

set about (the theft). I forget where these stories came from, but I had heard them up at the Cog - various and sundry tussles with the kids. They would waylay him about something and he'd clean their clocks. He was a banty rooster," says Pliney III. "Boy, he kicked me out of the shop more than once."

It's unclear exactly when Pliney Senior joined his brother-in-law Arthur Welch working at the Cog Railway. His son, Pliney Junior started washing dishes for his Uncle Stubby in 1934.

However by July 6, 1940 – the *Mt Washington Daily News* reports Mike Boyce's record of longevity running Cog trains is "rivaled only by the combined years of Pliny Granger and his three sons: Al, Guy, and Pliny, Jr. Altogether they have served 25 years." From 1940 to 1955, Pliney lived in Lisbon, New Hampshire.

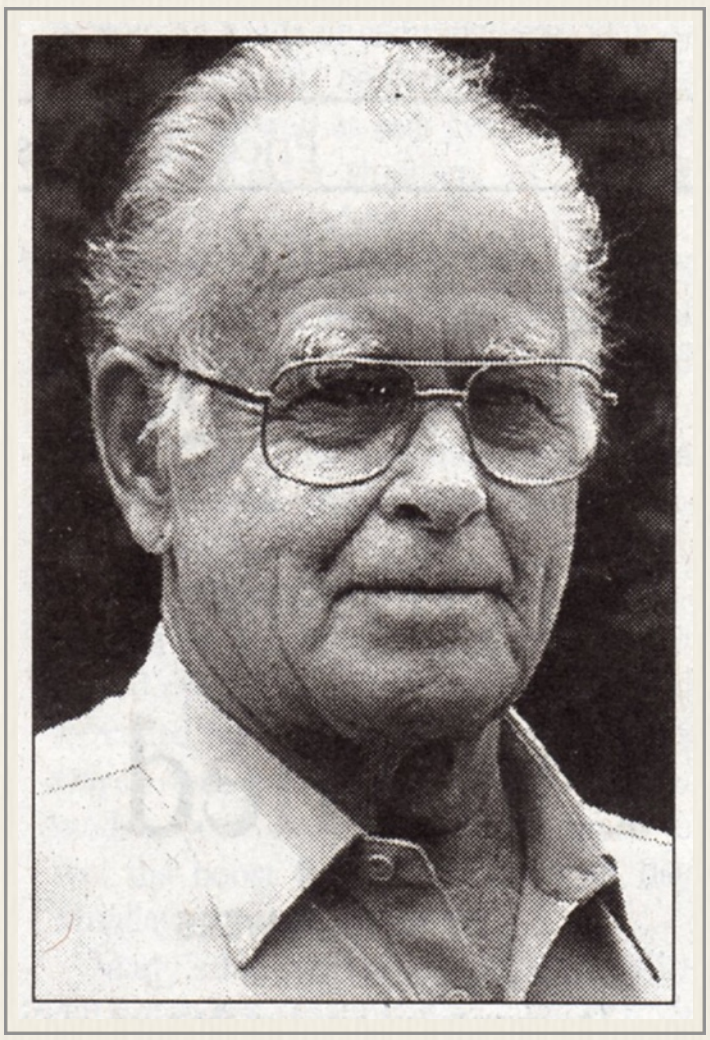
Pliney Senior followed Earl Cone as the master mechanic at the Cog Railway and was in charge of the shop when Jitney arrived in 1950. In the winter, "old" Pliney worked for the Boston & Maine Railroad out of the Billericca shops at least until 1952, according to a letter Arthur Teague sent to Pliney Junior.. "I wrote your father that he could go into the base at any time he wanted to," said Teague, "and I was quite surprised to learn that he had not been working all winter, as Earl (Cone) told me he had a couple of jobs for him, but I guess the railroad prevented (Earl) from putting your father on."

Pliney Senior retired in 1955 and moved to Danville, Vermont. He died suddenly of a heart attack at his residence on Hill Street on April 30, 1975, at the age of 85, and was buried in Passumpsic, Vermont. His second wife, Zelma died December 27, 1981

PLINEY GRANGER, JR. - Track Foreman

Pliney Nye Granger Jr. was born on April 15, 1915, in Walden, Vermont. He married Mildred Marguerite "Millie" Deslandes on August 8, 1942, in Littleton, New Hampshire. He died on August 13, 2004, in Littleton, New Hampshire, at the age of 89. (ancestry.com)

"Young" Pliney "worked at the Cog Railway for many years following in his father and uncles' footsteps, and starting a family tradition of working at the Cog Railway, which has continued down through the years to



"Young" Pliney Granger Jr. - Granger Family Collection

his grandchildren. He began as a dishwasher in the boarding house, and through the years he advanced to working on the track and trains and became track foreman. In his later years he worked as a consultant for the Cog Railway. He was an avid hiker of Mt. Washington and was very proud of the time he ran up the Ammonoosuc Ravine Trail in 45 minutes." "Young" Pliney worked for the B&M Railroad starting in 1934 in Billerica working on steam engines. During World War II he served in the United States Army in India as a locomotive engineer." *(Caledonian Record obituary- August 18, 2004)*

There are always more details beyond the concise life stories of a newspaper obituary. In this case the family says a teen-aged Pliney Jr. "made a trip to the mountains to apply for work, but was turned down. Col. Henry Teague, hearing the young Granger was looking for a job, personally wrote Pliney Jr. – reprimanding him for not letting it be known who he was. The letter was waiting when Pliney Jr. got back to Vermont, and he started at the Cog in 1934" as a dishwasher at age 19.

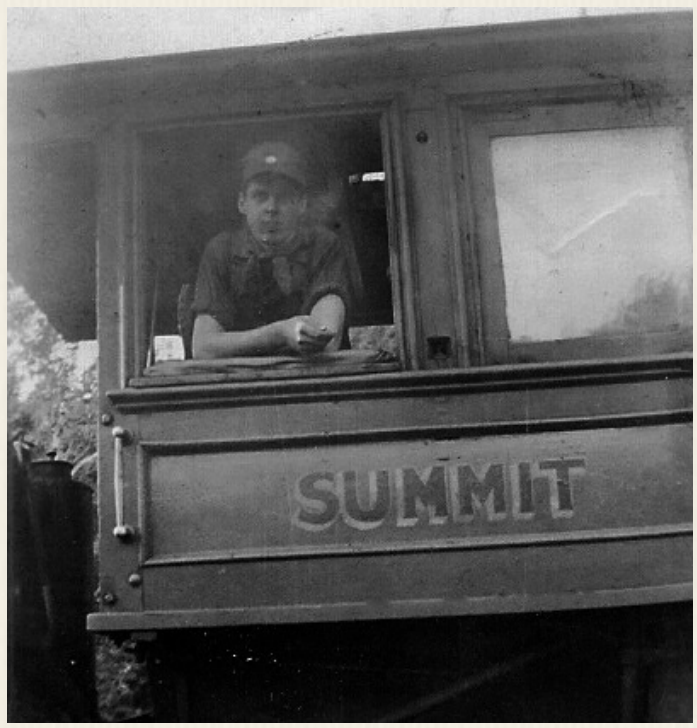
Pliney Jr. had a touch of wanderlust in him. In 1934-35 with brother Guy, Kay Lamont and another girl he began a trip to Florida. They made it as far as Maryland when the universal joint went out in the car and they had to return.

In 1936, Col. (Henry) Teague got Pliney Jr. a job with the Boston & Maine RR as a boilermakers apprentice in the Billerica, Massachusetts shops. Knowing he didn't have a place to live, Earl and Lila Cone offered him a place to room in Billerica.

Later that year he was laid off at Thanksgiving and again, with Allen this time, Pliney decided to head west looking for work. In a 1934 Studebaker, they made it as far as Texarkana when he was called back to work at the B&M. He stayed with the Cones in Massachusetts from 1937-38. He and Earl returned to work at the Cog summers. He worked up to firing the steam engines, then engineer and supervisor.

Allen Granger

"Young" Pliney was not the only "Old" Pliney Granger off-spring on the Cog payroll in the 1930s. His younger brother by three years, Allen *(seen right in the cab of No. 4)*, was also keeping the trains running. Guy, who was five years younger than Pliney Jr., *(seen next page on left next to sawmill with unidentified friend)* also punched the clock. By 1940, the Grangers - father and sons had racked up 25 years of service at the Cog Railway. Allen's service was briefly interrupted that summer when he was stricken with acute appendicitis on Monday, July 8th. The Thursday edition of the *Mt. Washington Daily News* for reported Al was better - well on the road to recovery at the Whitefield hospital. The *Littleton Courier*



Allen Granger in No. 4
- Granger Family Collection



of Thursday, July 18, 1940 reported Allen *(seen below in the Summit)* "is spending a few days the home of his father (in Lisbon)... recovering from a recent appendicitis operation at the Morrison hospital in Whitefield."

In March of 1994, Allen Laird Granger sat down for an interview with Sandy (Granger) Ferno to talk about his life, including the Cog years. "I was born on February 12, 1919 in Barnet, one of seven children," he told his niece. "My mother died when I was seven. My father remarried 10 years later. My older sisters, Bernice and Maidene, took care of the family. I also have 2 half-sisters, Florence and Susan, from my father's second marriage. We're all still living. My oldest sister, Bernice, is now 82. We lived on a farm in Passumpsic. One of my sisters married and





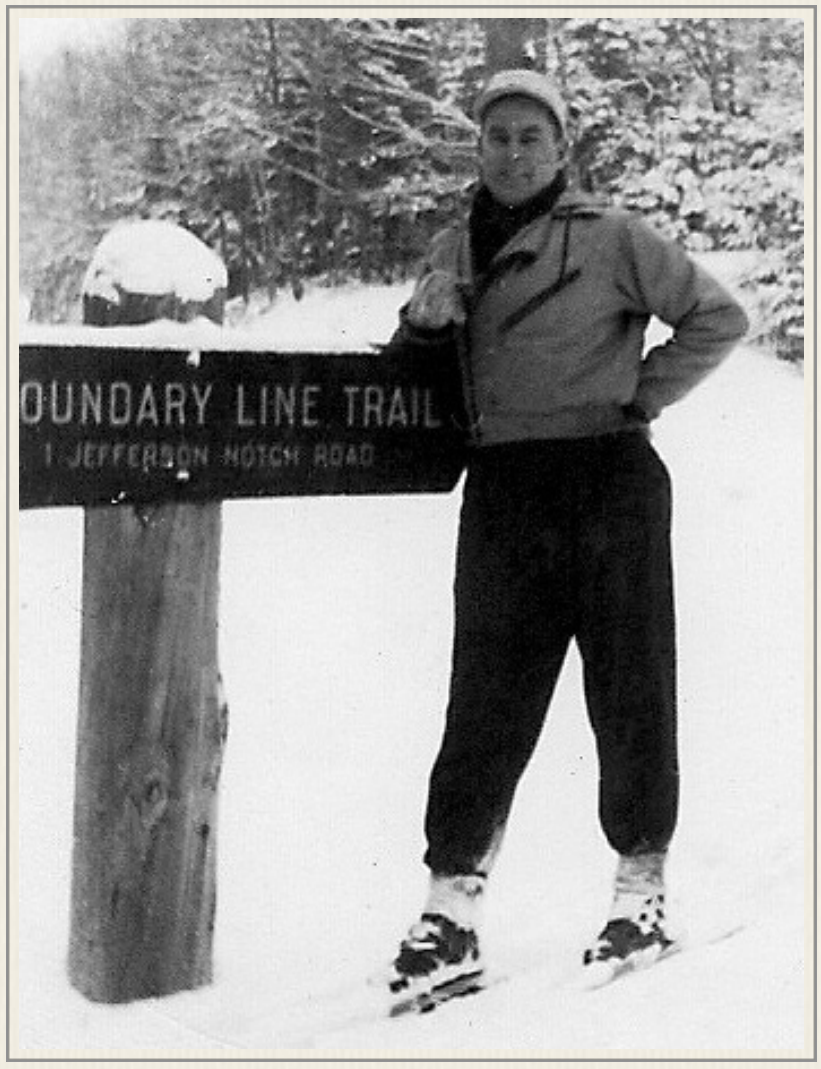
Pliny Granger Jr. (left) and Floyd Williams man the No. 4 Summit (August 7, 1935) - Beverly Williams Decato Collection

settled in Northfield, and when I was fourteen I went to live on her farm at Bull Run, this was in 1934. In 1936 I moved to another farm, where I worked for $2.00 a week and board. In the spring of 1937, I joined my father and brothers, working on the Cog Railway. My brother was an engineer, my father a mechanic and I was a fireman. I stayed with that job for six years (through the summer of 1942). I was usually on the first train up the mountain in the morning. At age 21, I went to Billerica, Massachusetts for a couple of years, working in the Boston and Maine Railroad shop, but then I quit and returned to Vermont. I had known Katherine Ella Farr of Northfield since we were young, and Rev. Arthur Hewitt married us in January 24, 1942 at the Methodist Church in Riverton."

"After getting married, we lived on one of my father-in-law's farms in Roxbury. I had a few cows and ran a vegetable truck garden that spring. I never had a chance to harvest it, however, as I joined the service in July 10, 1942. I was sent to Fort Devins first and then on to Camp Croft in South Carolina for basic training. They kept me as an instructor because there wasn't an assignment for me at the time. Then I went back north to Camp Edwards, in Massachusetts to the 36 Infantry Division. I made it home to Northfield frequently, using my Boston and Maine pass. Our first child, a son, Allen Laird Granger Jr., was born on March 10, 1943. I had my picture taken with him. That was my last visit home before being shipped overseas." Allen's story of his

military service including time as a P.O.W. can be found in the *Appendix Sec. 2 - Military History: The Grangers.*





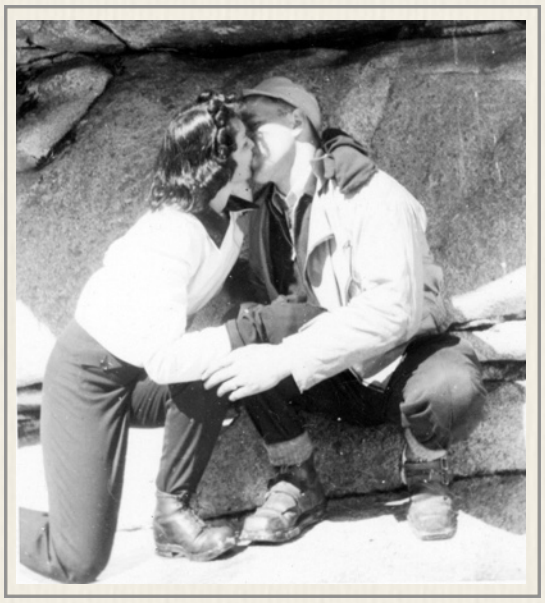
Mille Deslandes & Pliney Granger (February 1942)
- Granger Family Collection

Millie & Pliney

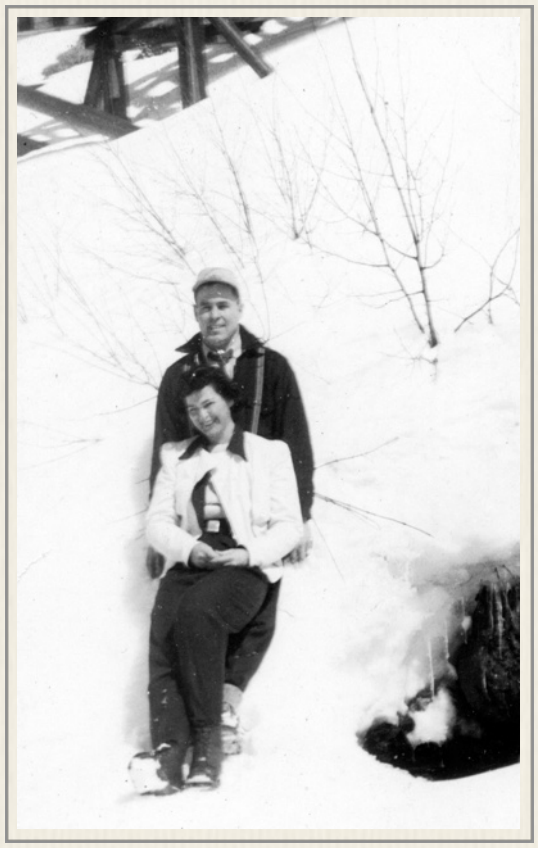
When back in Vermont, Pliney Granger Jr.'s free time was spent roller skating and attending dances at such places. He would meet his life partner at one of those dances. "Millie" Deslandes was born in Lyndonville, Vermont, the daughter of a carpenter in the B&M railroad shops in that town. The family moved to Littleton, New Hampshire and her father went to work at a whetstone factory. She grew up there - third oldest of six children. The 1930 Census reports the 18-year old Millie was working as a stitcher at a local shoe shop and spending free time with friends outdoors. "Back in the day the girls knew where to find the men - on the mountains. They would hike to fire towers and up the mountains and especially the Cog," says Dale Ann Granger



Millie hiking up to Waumbek with someone other than Pliney on a date (late 1930s)
- Granger Family Collection



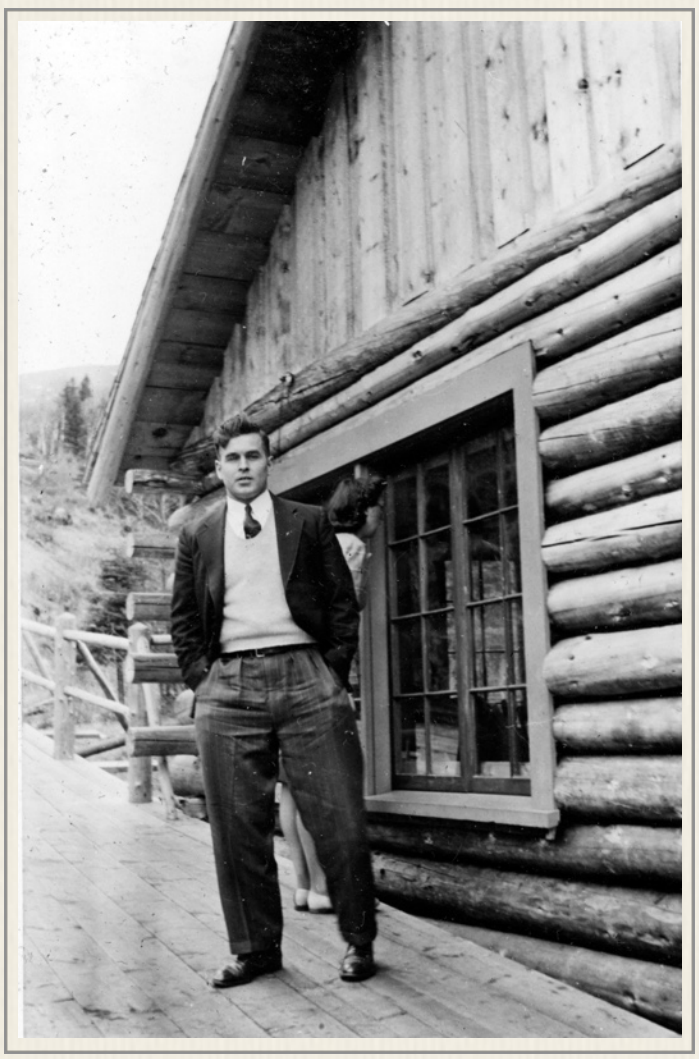
Eckert. "Mother told of getting lost with a friend on the Jewel Trail and following the sound of the trains to pop out along the track near Waumbek. Daddy remembered seeing her bug bit and scratched from the trek."



Dale Ann says "they met at a dance hall on the second floor of a place in Bethlehem. Daddy always tells of being the original designated driver when the Cog crew would come down off the Mountain. I think like a good Vermont farm boy he'd drink milk."

Hiking dates between the pair included winter treks into the Base like the one pictured in February 1942.

Their kids don't know if either graduated from high school. "I don't think Mother did," says Dale Ann "because mother wanted out of the house and she wanted to have good clothes so she wanted to go to work." Pliney Jr. did attend Montpelier Seminary where he participated in track events - placing second in the 880-yard dash in May 1933, and lettered in baseball in June. The only Granger on the 1933 roll of graduates was Bernice Elizabeth Granger of Barnet who completed Montpelier Seminary's four-year commercial course with honors for maintaining a general average of 85 to 90.



The pair would marry in August 1942. 27-year old Pliney was working as a fireman for the B&M and 30-year old Mille listed her occupation as "Skiver" as she was now working with thin, soft leather at the shoe shop.

Pliney went into the Army in 1943, the family says he could have had a deferment as Pliney III had just been born. He chose not to. "Young" Pliney wound up in India running trains through the mountains to help supply operations in Burma. *(see Appendix Sec. 2 Military History: Grangers)* A bit of a Cog Railway tradition wound up on the troopship. Daughter Dale Ann says her father told her about making an unauthorized supply run to the ship's mess where some of the trainmen liberated some onions and bread. Uncle "Stubby" Welch's onion sandwiches, a staple of a Cog track lunch, were

made during the Pacific transit. "Daddy liked to tell me that was the only thing safe thing you could eat on the ship," says daughter Dale Ann. "The chicken, the eggs had feathers when you cracked them open!"

Pliney Jr. returned from the war to the Boston & Maine railroad. His son says "What my father did as a road foreman (at the B&M) was similar to up there (at the Cog). He kept track of crews and equipment and was kind of a liaison between the employees and the first steps of upper management. He tried to keep things running smoothly." Pliney III says his dad's job required a great deal of corporate diplomacy. "I can remember horror stories about (Hugh W.) Stillings telling (dad) 'Conrail is not connecting the way we want out in Schenectady. You go out there and straightened those people out!' (Pliney Jr would) go out and talk a little bit - 'How you doing? You know - things are going well? This happened the other than that. Yeah, yeah, yeah."

The couple's two children, Pliney the III (called "the big boy" by Col. Arthur Teague) and Dale Ann, would also work at the Cog Railway.



Millie, Big Boy & Pliney Jr. (1943)
- B&M Employees magazine

Pliney Granger III

Pliney Nye Granger III was born in 1943 as his dad was preparing to go overseas. When the Cog Railway resumed operations after the war in 1946, Pliney Jr. continued to take leaves of absence from the B&M and go with his family to work on the Cog. Pliney, Millie and the "big boy" lived in the Peppersass House that had been moved from Marshfield in the 30's and converted into employee housing at the top of cabin row. "There was a big, big raspberry patch between us and the next one,"recalls Pliney III. Cliff and Rita Kenney lived in that cabin which would later house Bob and Shirley Kent.

As he was growing up, Pliney III took keen interest in the daily operation of the Cog trains. "Because every day, every single one of them went back to the barn. The engines went in the engine shop. The cars went in the car barn and every morning they came out. They didn't sit parked up at Marshfield. I had to be seven or eight or nine or something to remember this stuff. One (engine) was special. It had dual side stacks. I believe it was the Four and it fascinated me. It sounded different. It was just different of meter than the others," and in 2018 he can still mimic chugga-chugga sound of



Pliney III & Millie in front of their cabin
- Granger Family Collection

the engine. "It was real neat. I remember saying something to my father and he said one was a direct pipe, the other had a valve in it so you could really only shut one." *(Pictures of dual stack exhaust engine in Vol. 3 Timeline - Jul 22, 1939 & Oct 9, 1950)*



Pliney III & Dad Junior with pooch
- Granger Family Collection

In addition to watching the trains, Cog kid Pliney III watched the workers. "I went on one day to the shop to be a nuisance and somebody... was working in the... carpenter shop" in what would become the horse barn. "He was working something on the table saw. He says, "Don't get near - don't reach across the saw or anything." Of course, Pliney reached across the saw and the blade caught his arm. **"**And the thing that worried me the most," he recalls "was the sweatshirt which bound the blade and stopped it" before it cut too deep. "I was terrified to go home because it was a new sweatshirt. Mother was going to kill me because it had blood on it."



Three Plineys Granger (1943)
- Granger Family Collection

That didn't dampen the young man's mechanical curiosity. "Usually I was on the sawmill - trying to take it apart. (I) had to have been seven, eight, nine... and I had it in my head there were pistons in this thing and I wanted to find them." He took steps using what was at hand. "So if my father needed his tools or they needed parts for the sawmill, the tools were on the sawmill, the parts for the sawmill were under the porch in the cabin because I would take them home."

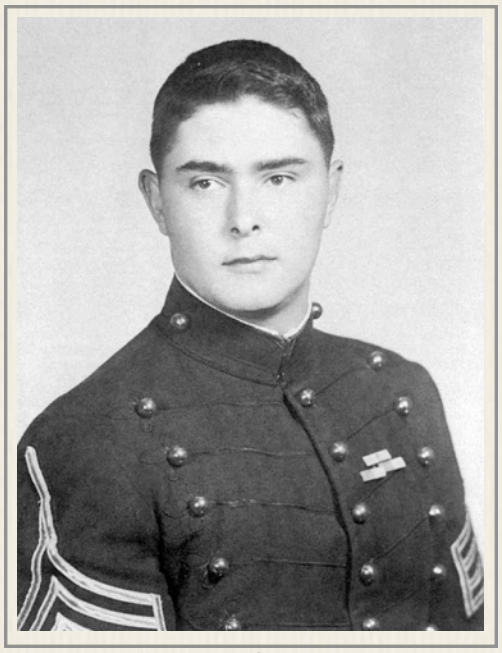
Cog owner Col. Henry Teague noted the young man's initiative. "I got paid when I was probably eight or nine. I'd been down there bugging everybody in the shop, and here would come the big convertible with the chauffeur," Pliney told the *Cog Clatter* editor in 2018. "Henry was 'Well, young Pliney you've been busy. Well... there's your pay - time to head home.' He'd give me a nickel or something... to get me out. I'd go back over and start tearing the sawmill apart."



Granger Family trailer (1960s)
- Granger Family Collection

1951 was the last summer the family lived in a Cog cabin because Millie was pregnant with Dale Ann in 1952. In the future the family's Cog residence would be a trailer parked in a clearing above the Hut where the second gravel road to the shops began. The family's official residence for tax purposes was Littleton, New Hampshire, but they would

rent close to the shops in Billerica, Massachusetts and Mechanicville, New York where Pliney Jr. worked for the B&M.



Pliney N. Granger III (1960)
- Christian Brothers Academy

As reported in the *Troy (NY) Record*, the May 1949 crowning ceremonies at St. Paul's Church saw Pliney Granger, 3rd, and John Montgomery acting as pages. Seven years later, the newspaper said Pliney was part of the modern and classical piano solos presented by Mrs. E. Safford Desautels by her senior students at the recital closing the 1956 season in mid-June. On June 24, 1956, Pliney was one of 35 students who were graduated from St. Paul's Parochial School in Mechanicville. He would then go to a private Catholic college prep school in Colonie, N.Y. - the Christian Brothers Academy.

For the next four years, Pliney would commute to the school on the D&H Railroad. The 1960 yearbook says "Despite the long trip each day Pliney has taken a keen interest in the C.B.A." He was on the honor roll as a freshman, on the merit roll as a sophomore and junior, and a credit cadet in his senior year. He became the cadet major in corps of cadets and was part of the Wansboro Rifles his last three years. The yearbook said, "he plans to continue his education next September at Siena College." But that may have been his dad's plan for his son. "(I) got out of high school," remembers Pliney in 2018. "I told him 'What I want to do is go into the Navy.' 'No, you've got to go to school.' I wasn't ready."

But the new high school graduate was ready to work at the Cog, and his dad wrote to Arthur Teague to see if there might be a position available. The Colonel's answer was enthusiastic. "Of course we will give big boy a job! What do you want him to do?," wrote Arthur Teague to Pliney Jr. in April 1960. "Duncan Greene and Philbrick will be back on the job and it would be a good experience to work out of the shop and operated on the 4th or 5th train."

Pliney III became yet another son of Boston & Maine veterans to come work summers at Mt. Washington. "(Jim) Cone *(1950)*, (Harvey) Stillings *(1963)*, (Joseph) Malandrino *(1959-1962)*, there was like three or four. I worked with sons of these B&M upper echelons that knew my father. They all had kids up there. Steve Dunn *(1952-54)*, and the Dunn I worked with was Phil Dunn *(1960-61)*."

"I started off on the trains," says Pliney III "which amazes me. I don't remember who taught me or qualified me, but I know I broke that season. I must have qualified quick because I broke that season for (Gordon) Chase. Pete Swazey was fireman. He was a big boy and I can remember him chasing Chase out of the cab with the shaker bar, using it like a little stick."

"When I was braking for Chase whoever taught me when you're moving through the switches, you have to flag through the switches with the forward motion. And he says... just remember you're doing that to follow the rule. (Chase) can't see you because he's... supposedly legally blind,"

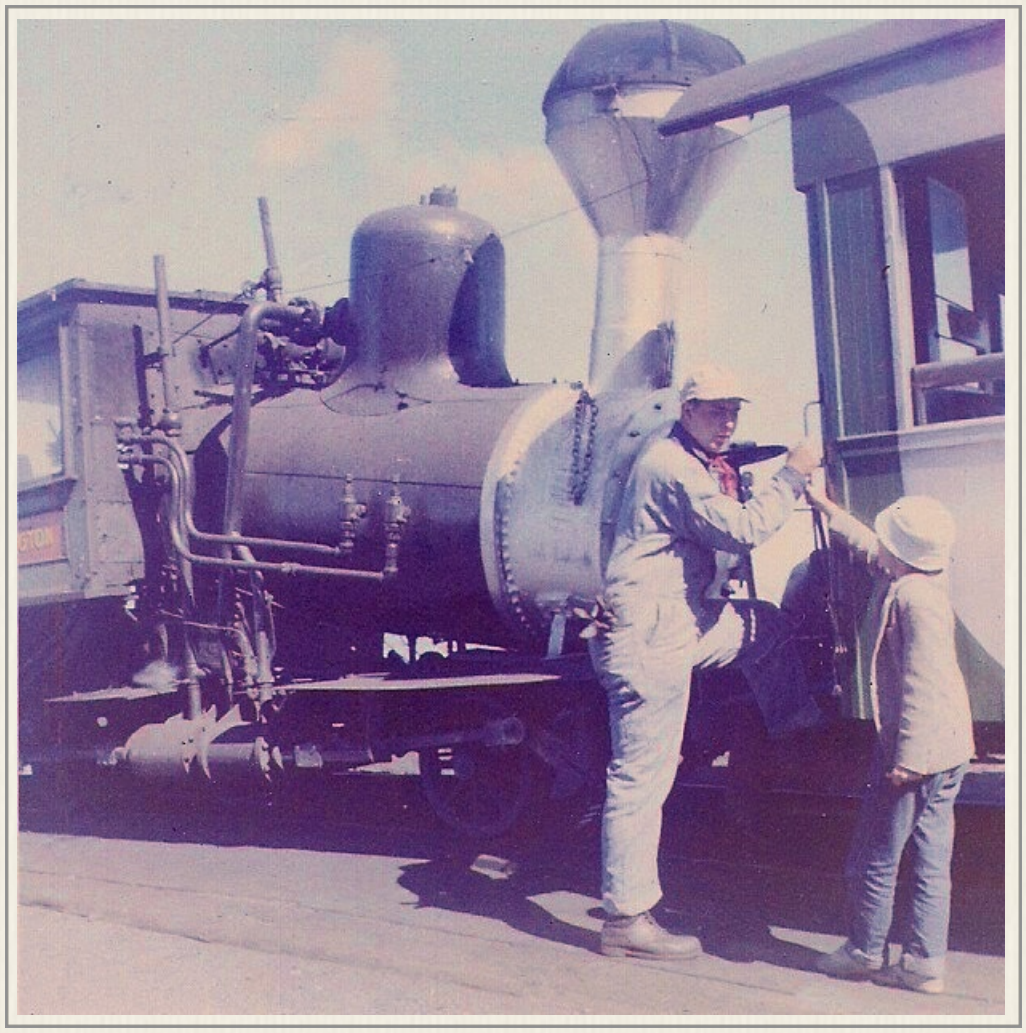
says Granger. Another time, "we were running back and forth from Marshfield... with his car and Pete (Swazey) says he drives pretty good for somebody who's legally blind. I mean his eyes looked like..." Later on, after Pliney III had fired for Chase he says modifications were made to No. 1 *Mt. Washington.* "They moved the steam gauge on the One from the top of the boiler down near the injectors so he could see it. I went back another time... after I fired for him, and... there's the steam gauge down by the injectors. I said 'What's going on?' That's so Gordy can see it."

Pliney remembers a literal game of "hot pockets" developed. It involved the coveralls all the brakemen had to wear. "They lost a few of those coverall things because (the brakemen have) got the waste in (their) pocket and (you) take the oil can, oil it up a little bit and touch it off. And see how far they'd go before they realized" the waste in their pocket was on fire. "I did somebody... can't remember who... after having extinguished the waste... he took his coveralls off and hung them in the back of the ticket office... we went to lunch. We came out... there was smoke... we didn't burn the ticket office down, but it was a pretty good little blaze going."

After his first Cog summer, Pliney III went to Rensselaer Polytechnic Institute in Troy, N.Y. "That didn't go anywhere," he remembers. "Didn't make the first semester. When I went and interviewed with the dean of freshmen before we started, he's looking at my stuff and he looks at me, he said, 'How'd you get in here?' I picked a non-engineering courses. That's how I got in."

That winter the RPI dropout writes to request a Cog summer job for himself and his cousin. Col. Teague sends a hand-written reply. "I'm glad that we will have a young man by the name of Granger back. People by the name of Granger have kept the Ole Cog running and I'm glad you are picking up where they left off. Besides working on the cog railway hard, I hope you have put in a good winter at the books. They are more important today than they were a few years ago - so don't neglect as your future depends on them to a great amount. As for your cousin - I'll have to wait and hear from the old boys to see what jobs we do have open. Regards to your Mother & Dad. Sincerely, Arthur S. Teague."

" I was happy braking," says Pliney. "We stopped at Skyline one time and Pete came out and got me and says 'in the cab.' I say, 'No.' He says



Pliney III and Dale Ann Granger at Summit with No. 1 (1960)
- Granger Family Collection

'NO, you're going to learn how to fire. And he went up and we started up... and I can remember one thing that I still remember to this day. Chase says, 'Don't give me any of that one handed shit. You will use both hands on that shovel!' You have to take the shovel... rest it by the firebox... open the door... shut the door." Engineer Gordie's directive stuck with Pliney such that he couldn't fire any other way. "The last couple of times, I was up there, I couldn't do (the one-handed technique)."

After the 1961 season, there was another attempt at college. "I went to Hudson Valley Community College to study automotive technology and I think I lasted two semesters," he says. "I was not ready for college."

Pliney wrote seeking work in 1962, and offered to stay through the entire season. Arthur Teague's acceptance letter read, "Glad to have you in the fall but please, don't overlook the education. You need all you can get in this day and time. Jane left school after the first semester - we feel she has made a mistake."



Dale Ann with brother Pliney Granger in the cab (1962)
- Granger Family Collection

Swazey moved on and Pliney climbed into the *Mt. Washington's* cab with El Gordo. "I was with the crew that was opening up cabins and cleaning up... and whatever." The engineers started to arrive and he'd volunteer to fire for them. But others got the nod. "I think (Chase) was the last one that came in and of course nobody else wanted to fire for him... so that's how I ended up firing for Chase that year."

When he did become Gordie's fireman he learned it was more than maintaining the fire and steam pressure. "You had to do it all," he says and when you took time off you might come back there might be problems. " I took an afternoon off when I was firing for Chase and something happened... I don't know who fired for him." However when Pliney reported for work the next morning all the trains are backed up. "They're parked in front of the Marshfield house in, down through... and everything... What the heck? So I get up in the cab and I'm looking and I scrape the fire around a little bit. It looks pretty good. Of course, I should have checked the water first one. And It had 30 pounds, 10, 20 whatever." When Pliney checks the three water cocks, no water comes out and the water glass is empty. That's a problem. "We got no water in this thing and we've got about 30 pounds on it. I got to looking around, and they had left the water cocks open. Chase, I can understand (but) whoever was firing for him? It just drained out."

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Fireman Pliney calls the shop and they ask, 'Where's Chase?" 'Oh he's in having coffee.' 'Well black that (fire) over he says, and I'll come up and we'll get some water into it.' Okay, so I went in and told Chase. I say, 'there's no water in the thing." Chase leaves Marshfield to go back out to the engine. Pliney decides to avoid the impending confrontation. "I stopped and had a coffee and went back down. (Chase is) up in the cab. 'We're all set,' he says. 'What do you mean we're all set?' He's got the injector running. There was enough steam to prime the injector. He said 'I got some water out of it.' I says 'I'll be down at the shop.' I got outta there. For crying out loud!"

Even when Pliney was firing Chase could cause problems. "We took an oil train up," he says. "We'd get up there... park it where we're going to be so it'll drain." The weather that day was not good. "I'm banking the fire," and Chase interrupts him saying "get out there and hook that (tank) up, get out there and hook it.' He wasn't going to go out... it was a rotten day. So I got out and I saw him go in for coffee." After the fuel fill is running, Pliney joins Chase in the Summit House kitchen. "We're sitting in there having coffee and... he says 'Go check and see how it's doing.' I checked, It had a little bit more" but Gordie wouldn't wait. 'The other (train) is coming We got to shut it off and get moved up out of the way.' Um, (the fire) never got banked. We had no fire... There was enough steam to get (the oil train) up out of the way. Next train comes up. I'm back there, give me a shovel full (of burning coals), give me another shovel full. I think that was the night they woke me up (at the Boarding House) because I was giving him hell in the middle of the night when I was sound asleep. I was woken up... and severely chewed out because I'm screaming at Chase in my sleep at night. He had that effect on people."

While the engineer of the No. 1 *Mt. Washington* might induce nightmares for his crew, Pliney III says the engine itself was a dream. The No. 1 "was always my favorite engine," he says. "The year I fired it, I gained weight. Everybody told us how hard it was to fire that engine well in '62 when I fired for (Chase), you leaned against the fireman's seat. You took your shovel and you went like this... One-lump level shovel - four corners - park the shovel, sit down and watch until there's no smoke. Go back and put four more on. That was the easiest firing engine. And I didn't realize that in the later years it was the '18' because it had the boiler of the One on the frame of the Eight or vice versa."

Pliney III could compare engines because he fired quite a few. "I fired for Frank Thompson *(No. 9)* for awhile. It had to have been in post-season. I fired for (Donnie Enman - *No. 3*) - I've fired for Bobby Kent (*No. 2*) I fired for Chase and then that last year *(1963)* I know I ran a couple of work and oil trains because I wasn't old enough to run passenger trains. I wasn't 21."

Pliney III's first car can be seen pulling the family's camper in an earlier picture. It was supposed be his ride back-and-forth to RPI in the fall of 1960. His father bought it for Pliney before he got the job at the Cog. While Pliney III reported for duty in 1960, the car stayed home by parental edict. Later, he would have a summer car and that prompted classic stories of the Base road. "There was the time I chased Paul Philbrick up the Base road. He was driving a Renault *Dauphine* - one of the little earlier ones, and I had my '53 Chevy or something." When Pliny met

Paul on the road the incident was on. "So I turn around. I'm just going to follow him for the heck of it and he was cranking! He must have seen my headlights because he started going faster. Well, past the choir boys (Camp Duncan) - on that old bridge that went down and was like a 90-degree turn across that narrow bridge. Just across that, the first sharp turn there - we met the state trooper. Well, Philbrick was a little ways ahead of me, so when I came around the corner, (the trooper) was stopped and commencing to make a turn. So I kept going because there were just dim headlights in the back. We hit that one good straight stretch before the final turn to go to the Hut. I'm halfway up that stretch. Paul's gone around the corner. The headlights brake. There he is. There's (the trooper). He's on like what... a 409 Chevy? We both got stopped in front of the Hut. And did we get the riot act read and everything... the tickets were written... Arthur wanders out and stands in the back - kinda taking it all in - the trooper gets all done. Art says, 'Can I have a word?' The trooper goes over and they talk. Trooper comes back, takes the tickets back - rips 'em up and leaves. Arthur comes over. Paul goes on his way, and (the Colonel) says to me, 'This wasn't for your benefit.' He says "(Paul's) got one shot left and then he loses his license. I cannot have my shop manager not be able to drive! So you just lucked out."

Pliney's extra-curricular activities came to the Colonel's attention again at the end of 1962 after the "official" Cog party *(right)* was held on August 15th. "There was an end of the season party in the boarding house," he recalls. "Because I knew that an open bottle was an empty bottle I managed to end up with this little... bedside table and it had a false top... I think I had the better part of three-fifths in there of various and sundry (flavors). After everybody was pretty well through all the cases of beer and stuff (at the party). I decided 'Oh, I'll be generous at the end of the season.' I brought a bottle out - that disappeared. I went back and got another bottle and brought it down. I don't know if there were more than half of us, but it must've been awful loud because Arthur was really ticked the next morning."



Ginger Nye (left) and Pliney Granger III (right) anchor a can-can chorus line at the 1962 Cog Party. "I'm not a dancer, so I had to be lubricated. (Ginger) and the other girl (next to brakeman Ken Christy) organized this thing. I think she was a Southerner because anybody from Pennsylvania down was a Southerner back then. That's the only Cog party I can remember. And they talked in the seventies of taking the train up the mountain. They'd have a party on the summit after work."
- Granger Family Collection

And the Colonel had not forgotten the following March when Pliney asked for a job in 1963. "We will be glad to have you back with us again this year," wrote Teague. "I do want you to understand this Pliney - that this year I do not expect you to get into those hell razing episodes at the Boarding House."

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Arthur also had some advice for Pliney when he helped with a breakdown on the Mountain. “Somebody broke a cam strap. I ended up bringing the engine down and yeah, you know (it’s pounding) - the brakeman’s trying to stay off... (So I went a bit faster) - little by little it smoothed out and we came down. Arthur was standing on the platform. (He said) ‘You ever come down the mountain that fast again don't stop here, just keep going and don’t come back.’ ‘It was the only speed that would run smooth’ ‘Don’t ever!” said the Colonel ending the conversation. “And in the Seventies that was normal speed for the cowboys that were up there!”



Dale Ann Granger and fireman Pliney at the Summit (1962)
- Granger Family Collection

Pliney III helped close the Base in 1963, and took his time going home as there was no school to go to, and gas station jobs the only prospects for work. “I was putzing around taking my time because I was gonna go back to work in the gas station... I pumped gas everywhere,” says Pliney. “My father said ‘Where have you been? You need to get your act together. They need some help out in Deerfield, in the (B&M) diesel shop. You can get a job (there) for the winter.’ So I went over, interviewed, talked to... (with) whoever was in charge of the Mechanical department and... ‘Yup. Yup’ - took the physical - went to work. And my winter job lasted 40 years in the diesel locomotive repair” department of the Boston & Maine. Pliney says “that’s why I wasn’t real happy with diesels up here (at the Cog) and I freely admit that. I haven’t been up the Mountain since the first diesel existed.”

However in the spring of 1964, Arthur Teague was wondering whether Pliney III would return. “Just a short note to let you know we will be glad to have you back again with us again this coming season 1964. Hope you have a good winter and please do give our best to your family. We are expecting a good season, providing the weather will be in our favor. Looking forward to having you with us. P.S. - Please let me know what your plans are.” Pliney’s plans no longer included working at the Cog until Arthur Teague died in 1967. “I got ahold of (Ellen Teague) after hearing about Arthur and volunteered my services. Then she said come on up.” Ellen’s letter of August 31, 1967 said “I am delighted you can be with us at least a week. It would be wonderful if you can take that extra week off with your wife, Judy, We will be glad to do what we can for you as you have and will be doing much for us. Perhaps Judy might be interested in helping us with some of our work in Marshfield.” From then on, Pliney III “was doing (the Cog) on vacations and weekends... Stealing a day here and there.” His wife would often come along.

Pliney III married Judy Avery in New York on April 30, 1966 "because we wanted to start a new month off differently," explains Judy. "Before we had kids that one summer that you worked in Fitchburg (MA) and (Pliney) didn't want to commute. That's the summer I worked as a short order cook with Grace (Rusinski)," says Judy. "I had never been a short order cook and they needed a short order cook, so they hired me... That was an interesting experience when buses come in and you've got a busload of tourists that want to eat right now... they may want their food cooked... but they want it now... because the bus going to leave... I learned to just take them in order... to wait their turn. But with Pete (Rusinski), I remember him dropping this big box of spaghetti on the floor... (the crew) were having spaghetti for supper... it had not been cooked. We had to pick it up. (Pete) did imbibe a bit."



"Big Boy" (left) and Engineer Pliney Granger III at the Summit (1980s)
- Employees magazine and Granger Family Collection

Filling in where he was needed when he could into the 80s, Pliney III witnessed Cog operations under the third Teague to own the railroad. "One of my weekends up there. I was braking and the weather was not good... get up to Skyline... pitch over to the flat spot... everything stopped. I said, 'What's up?' 'Um, we're showing little water and the tenders dry," said the engineer. "So we call down," remembered Pliney. At the ticket office "they said, 'Well, black the fire. You probably got enough steam to get there (Summit) and then you can just coast back.' And I'm out there and... I'm standing on the ground between the engine and the coach... it was an old coach... I said,' What?' So they repeat (the carry on order). I say, 'Do you understand what you're asking us to do? We've got people on this coach who will have no heat... if something happens, we can't move and you expect we're going to go up there and do that?' 'It's not your decision. What does the engineer say?' Whoever it was was a new one. (He asks me) 'What you do?' 'I wouldn't take these people up there.' 'Alright,' he says, 'We're going back down." Tourists in the car started applauding. They were listening in the coach."

Pliney continues to keep an eye on the Mt. Washington Cog Railway and its new owners. "I'm surprised they don't run double headers because they can fill any steam train they run." Chase's old fireman is also trying to figure out how the proposed Skyline hotel to be built beside and over the track at the old Skyline Switch site will integrate with classic engine operations. "I'm thinking



Pliney III demonstrates classic one-handed shovel technique (2009) - Berkshire AMC Paddlers

if they ever built something like that... when they run the steam engine... they'd have to do some sophisticated firing so it didn't smoke all over it.

These days, he and his wife Judy have been known to do some recreational paddling with the Berkshire chapter of the AMC Paddlers. He also continues to use his Cog firing skills as the group's Spring 2010 newsletter reports, "Dinner on Saturday night was 'Turkey in a Can' as Judy and Pliney Granger once again displayed their magic *(left)* by roasting a whole turkey in a garbage can – in only about an hour and a half!!"

Dale Ann Granger

Pliney and Millie's second child was daughter Dale Ann, born in 1952. "I was supposed to be (named) Martina Blanche," she says in 2018. The name was to honor the memory of a daughter Arthur and Sadie (Granger) Welch had lost. "Uncle Stubby was going to put up a bond or something for me when I was born, because his daughter died in childbirth or shortly after... and Mother said no."

Dale Ann grew up in Littleton, New Hampshire during the summers when her dad was working at the Cog, and winters in New York when "Young" Pliney would be back at the Boston & Maine.



Uncle "Stubby" in party hat and wife, Sadie stand while Millie holds birthday girl, Dale Ann and her present at the Welch's in Passumpsic (1956) - Granger Family Collection

In April 1962, the *Troy Record* reported that Dale Ann was one of six young people who won awards in the Catholic Daughters of America annual poetry contest. The grand regent of Court St. Paul, CDA at Mechanicville (NY), Mrs. Maraget Flanagan presented the awards during the international party program of the court at the Knights of Columbus Hall.

When the family came to the Cog in the summer, they stayed in a trailer. The parents would work and Dale Ann, like the rest of the Cog kids *(see Ch. 10)*, would ride the trains, care for the animals, and have adventures together. "Jackie (Kenney) and I would be playing around behind the cabins when Mother and Rita (Kenney) would be going around (making up the rooms) and we found this loose board that we could jump up and down on it. It was kinda like a little teeter totter. (I) didn't pay any attention to all the nails sticking out, and I got one right through my sneaker - right through the foot. That was one teta-



Dale Ann with family cat, Buffy in the 1960s. Anne Teague Koop remembers "This trailer parking was just off on the left from the clearing and the back road that led to the shop."
- Granger Family Collection

nus shot down at Littleton Hospital, and walking on the side of my foot the rest of the summer."

Dale Ann was anxious to join the Cog crew. "I started the summer I was 15 - I'd turn 16 in July (1968). My first couple of checks, my money went on Daddy's (pay stub)." Now one of the girls working the counter in Marshfield, Dale Ann did not stay at the girl's dorm with her colleagues at the start. "Let's put it this way," she says, "Mother didn't let me. Mother commuted me (from Littleton.) We commuted up to the Base the first two years when I was 15 and 16. Mother drove me and then she'd just hang out in the parking lot - she always loved to just sit in the parking lot and watch people."

When she finally did get to stay at the Base, she bunked at what used to be Mike Boyce's and Jitney's cabin. "I worked that summer with Wheatey and Robbie *(siblings Ellen and Robbie Wheat. Robbie was short order cook)* and that crew in our pin striped outfit." There was some danger to the job. "When I was behind the counter, I'd cut down the ice cream tubs, so we could scoop them out. I tried to pull one (tub) out and caught the metal ring. I got four stitches from that on my finger."

Dale Ann graduated from Littleton High School in 1970 - worked that summer at the Cog and went off to college in the fall. "My college career lasted six weeks. I came home and I think I vegged that year."



Counter girl Dale Ann Granger (1970)
- Granger Family Collection

The summer of 1971 Dale Ann went on cross-country trip with some non-Granger cousins - fellow members of the Class of 1970. "Mother knew their grandmother that lived down the street. So good boys, no problem. We were going to drive cross country. What we failed to tell her was the car (only) made it to New Jersey, or that was their plan and they didn't tell me so I didn't have to lie." In the early 70's thumbing for rides was still a thing. "So we hitchhiked from (New Jersey) to New

Orleans to California." Dale Ann says the group split up on the West Coast. "One continued around the world basically. The other one had a girlfriend, so we were going to hitchhike back." But eastbound foot traffic was heavy that summer. "There were too many people on the side of the road. We couldn't get a ride. We hopped a plane and came home. That fall I went back (to the Cog) and I'm pretty sure I worked in the gift shop, because I definitely remember doing inventory with the drums that filled the corner (of the back section)." There was a "whole tower" to count. "I took one, I had one at home and it lasted until last year *(2017)* when I went to dust it. It just fell apart - crumbled. First of all, I wasn't really good in the gift shop. I was *allowed* to work in the gift shop" selling "the touristy cheap stuff. I worked in the tourist department. Mother worked with (Mike Haney) behind the good counter" with the higher quality items.

Dale Ann found out indirectly that Millie was unhappy about her daughter's adventure which echoed Young Pliney's wanderlust of the 1930s. "I remember somebody telling me that she wasn't too pleased with me. Well, I knew that when I found my sleeping bag was burned (and) stuff was missing," she remembers. "Daddy was supposed to be disapproving because Mother was. But then he'd go, "Well did you go to Texarkana?" And it's like, "Well when I went... and then somehow..." I jotted all this... down from stuff that we talked about."

Dale Ann says 1972 "didn't go well." There was another trip out west that included Judy P. Holmes of Whitefield, N.H. and a car. "I was 19 in El Paso. I missed a stop sign because I saw a red light at the next intersection and we were headed for the mountains. I didn't see the stop sign or the pickup truck that I put into the Dallas Missouri Street sign. Mother wasn't very happy about that."

Back east, Dale Ann began looking for full-time work. "I went into nursing homes... and Jeremiah's restaurant waitressing... and nurse's aid work... until I stumbled into electronics for a break." Like brother Pliney, Dale Ann's temporary gig at a Massachusetts electronics firm turned into a career. ""Is there a Repair Technician Hall of Fame? I don't know the answer, but I do know Dale Granger- Eckert would have to be a founding member," said the Circuit Technology Center's newsletter in early 2018. "Dale retired recently from CTC after working as a senior repair technician for over 31 years. Her contributions to the world of circuit board rework and repair have been immense. Dale came to Circuit Technology Center in the days of through-hole only with high soldering skills and a strong understanding of circuit board assembly techniques. What she did from there is remarkable. Professionally speaking, Dale is the perfect confluence of technical aptitude, industry knowledge, a jeweler's dexterity, and a creative engineering approach to the most perplexing rework and repair challenges ever seen at Circuit Technology Center. More than her expertise, skills, and knowledge, Dale is also a genuinely great person to be around." Andy Price, CTC Senior Sales Manager chimed in: "Dale is a true professional in the art of circuit board rework and repair. She developed and pioneered many of the procedures that are commonplace in the world of circuit board repair today. Her skills as a technician are only surpassed by her kind and thoughtful character, always willing to share her vast knowledge, always willing to help her fellow worker succeed. Her impact in the world of electronics cannot be over-



Granger Family meal in Passumpsic (L-R) Mary, Jean, Pliney III, Millie, Sadie, Dale Ann,
- Granger Family Collection

stated, working on products that support the defense of our country, medical products that save lives and the telecommunications products that continue to keep us informed. She is without question among the very best that we have ever had, or ever will have." Of her career, Dale Ann says simply, “stuff happens. We repaired circuit boards. So if you dropped one, broke the corner off, we could transplant a corner on, and replace the circuitry. When I left I was working with three thousands circuits, soldering lead free 3000 circuitry onto eight thousands pads.”

While Dale Ann’s inherited her dad’s wanderlust, she followed in her father’s footsteps in another way - running. Her dad, “Young” Pliney would often run up the Mountain for fun beating the trains to the top. He tackled the Ammonoosuc trail in record time. His legs even powered some trips from Littleton see his folks in Lisbon with his new born son. “Didn’t he say he put you in the basket... on the bicycle and pedal to Lisbon because that was where grandpa would have been,” recalled Dale Ann while reminiscing with her brother in 2018. Her retirement profile at CTC noted, “She is an avid runner and has competed in many marathons. She is also a major supporter of the Alzheimer’s Association... running in... the marathon’s to support the vital work they do.” Work that Dale Ann hopes will result in a cure for the disease that claimed her mom.

She believes the spirit of Young Pliney is with her every time she runs up Mount Washington because of what greets her on top. “My husband and I have run the Auto Road Race - 7.6 miles Only One Hill - seven times and every time I made it to the finish there has been a steam train at the summit. One year the steam engine had to wait at the summit (for her arrival) because a diesel had broken down.”

Dale Ann says she and her dad would “check the paper every year on Father’s Day to see how the Auto Road Foot Race would turn out. After he had his stroke we would sit on the bed in the

morning, and when I asked what he wanted to do that day he would say 'Race you up the Mountain.' So the spring after he passed we got in the lottery to run the mountain and I took him up with me with his ashes in my fuel belt to leave at the Summit. Interesting how the Mt Washington Cog Railway seems to be prominent in the obituaries of so many Coggers," says Dale Ann. "(I) would be curious how many ashes are on the Mountain. I know Crawford's are up there."



In 2017, Dale Ann and her husband began an annual morning run *(right)* up the Base Road for her dad to be there when the first steam train leaves. She calls it the "Race to the Base - For All the Old Coggers. It is still my own little run but I would love to see it as a real race someday," she says. "I ill welcome any old Coggers the opportunity to set a new course record when we run (in 2019.)"



Judy Granger with "Gabby" in the baby carriage visit the shop

Fourth Generation Grangers

The Granger tradition at the Cog Railway entered its fourth generation in the late 1980s as "Old" Pliney's great-grand daughters went to work for the current owners of the attraction - the Presby and Bedor families, who bought the railroad from Ellen Teague in 1983.

Gabrielle Granger-Clark says she "was there summer of '87 & part of summer of '88. Leigh (her sister) started the summer of '88. Not sure if the stories I remember would be good for publishing!"

One of those stories involved a small rail cart known as the "Sally car." Small enough to fit in the back of a pick-up, but large enough for a mattress to fit on it for a seat, Coggers would take the Sally car to the top of Crawford Notch - drop a truck at the bottom of the Notch where the old Maine Central tracks came down close to the road again - then go back up, hop on the Sally car for a late night thrill ride across Frankenstein trestle. "There was a landslide at one point across the tracks, says Garbrielle Granger. "So you couldn't go all the way. You'd have to stop. There were no trains to run into." But in July 1998, there was a parked railroad maintenance vehicle. The collision sent all six Coggers on board to the hospital.

How much impact can the Mountain have one's life? Pliney III and Judy's other daughter, Leigh Granger married Allan Haggett whom she met at the Cog.



Gabrielle Granger (c) with grandparents, Millie and Pliney Granger outside Marshfield (1980s)
- Granger Family Collection





Millie Deslandes Granger (above) near the Summit and Pliny Granger (right) (1980s)
- Granger Family Collection





Millie's sister, Claire & the Pickel Boys

Millie Granger was not the only Deslandes daughter to marry a Cogger and work at the Base in the gift shop. Claire Natalie Deslandes *(above)* was "mother's youngest sister" says Dale Ann. Claire, eleven years younger than Millie married Hollis Dean Pickel in 1949. Pickel *(left & below)* was born in Newport in November 1923 and grew up in Westmore, Vermont on a dairy farm. Ancestry.com reports at age 19, he joined "the military on February 2nd, 1943 in Weare, New Hampshire." Claire and Hollis' daughter says they worked at the Cog "after the war." "I know that dad was a fireman, which was back breaking labor and very dirty!" says Lisa Pickel. "He would tell of having to shovel coal very quickly in order to make it up the steep parts, like Jacob's Ladder." Jitney remembers Pickel as an engineer running when he arrived in 1950. He doesn't think Pickel came back in 1951. Hollis' older brother Willard fired for



Mike Boyce at one point. But additional details or confirmation from family members about Willard Pickel at the Cog Railway remain elusive.

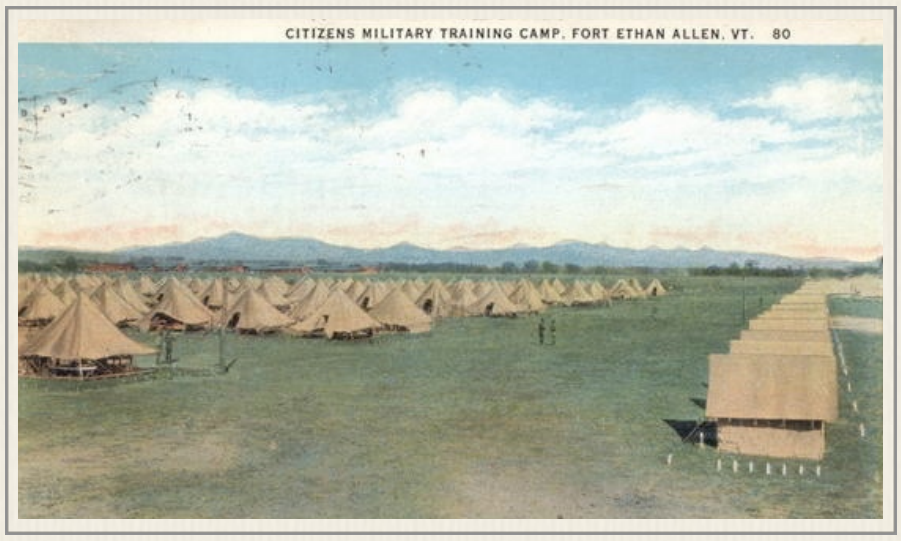


Hollis "Pic" Pickel & wife, Claire (Deslandes) Pickel
- Granger Family Collection

But wait, there's another Cog Granger...

John Granger

A cousin to Pliney Granger Jr., John Albert Granger was born on Feb. 22, 1912, in St. Johnsbury; son of Fairbanks Scales employee Albert C. Granger and his wife, Eliza Judkins Granger. John grew up in Passumpsic and graduated from St. Johnsbury Academy in 1931, followed by a post-graduate business course at the academy. After high school, he attended Citizens Military Training Camp at Fort Ethan Allen *(below)* for two summers. Jobs were scarce back then so in the summer of 1936, John, like Pliney Jr., went to work with his Uncle Arthur "Stubby" Welch as a dishwasher for the crew maintaining the Cog Railway. The next winter he stayed on as a carpenter with his Uncle Pliney Granger at the Lodge/Boarding House on Mount Washington. *(See Appendix - 1936 Food Service)*



His daughter, Sally (Granger) Barrett says in 2016, "Dad always talked about his time there. He always told the story about the cat in the wood stove." Barrett suspects the cat story occurred during the winter while staying and working with "Old" Pliney at the Lodge. "Someone got the wood stove going, and the door must have been ajar as the cat got inside and was sleeping. I think it was Pliney? Anyway, they got the fire going, and heard an awful noise and they opened the door and the cat ran out and was smoking."



Dale Ann Granger-Eckert kept in touch with John. "I corresponded with him than the last couple of years (of his life)," she says. " John was great. He had to have been a humorous, because he told me when I first wrote to him and he said, 'I've got two daughters, whatever, but no sons - yet.' And that was when he was 90," Granger-Eckert says with a chuckle.

John Granger worked for five years as a carpenter's helper with his father; then later with contractor, George Quimby. He



John & Marguerite Granger
- Granger Family Collection

enlisted in the Army in Rutland on March 3, 1942. The 5-foot 10-inch, 148 pound private was assigned to the 315th Combat Engineers of the 90th Infantry Division. He participated in the Normandy Invasion and received four battle stars with action in Normandy, Central Europe and the Battle of the Bulge. Upon returning home, he spoke at war plants in New England. On April 21, 1945, the U.S. Army soldier married Michigan-born filing clerk Marguerite Campbell, who was living in Hartford, Connecticut at the time. After his discharge from the service, they moved to Montpelier and later to East Montpelier where they lived for 38 years. John was a painter and paper hanger for seven years, worked for the Buttrick Creamery in East Montpelier for 10 years and then worked for the Vermont Department of Agriculture as a weights & measures inspector for 15 years. He was a part-time columnist for *The Times Argus* and for several years was a guest speaker as a Vermont humorist. John was also a lay preacher and sang in the choir at the Old Brick Church of East Montpelier, where he was a member for many years.

John was an excellent gardener and raised vegetables, strawberries and raspberries, as well as many varieties of flowers. In 1985, John and Marguerite moved to their winter home in Florida, where John had a small citrus grove. He was a member of the Trinity Methodist Church in Arcadia, where John enjoyed attending Sunday school. Barrett says "Dad died at 97 when my son was in college, and we went to visit him just before he died. (Her son) Dan was glad they had that time together. After two daughters, and 3 granddaughters, he (John) was happy to have a grandson."

John A. Granger, of Northfield, formerly of East Montpelier, died on Sept. 13, 2009, at Mayo Healthcare Manor in Northfield. Survivors include daughters, Judith Rivard and her husband, Stephen of Williston; Sally Barrett and husband, Wayne of Friendship, Maine; three granddaughters, Kristin Waterman and husband Brian of Easton, Mass., Karla Eberlein and husband Eric of Seattle, Wash.; Elizabeth Barrett of Westport, Mass. and grandson, Daniel Barrett of Friendship, Maine. John also leaves four great-grandsons, James Waterman and Michael Waterman of Easton, Mass., Earl Eberlein and Asher Eberlein of Seattle, Wash. and many nieces and nephews.

He was predeceased by his wife, Marguerite, in 2005, and by two brothers, Martin Granger and Jason Granger in 2006.

http://www.legacy.com/obituaries/timesargus/obituary.aspx?page=lifestory&pid=133238024#sthash.bqmiH1Vc.dpuf

John A. Granger is buried with his wife in South Walden Cemetery in Vermont.

To be filed under the heading "Small Planet," John Granger's daughter Judith would marry Stephen Rivard from Newport, Vermont. In 1970-71, Steve Rivard played drums in a high school garage band called *Vergen Wooöle*, which featured two drummers and an "auto-accident" lead guitar player. The keyboardist in the group was Jitney Jr. - a Cog tie unknown to both players until the Spring of 2016 when the *Cog Clatter* publisher was tracking the family ties of John Granger.



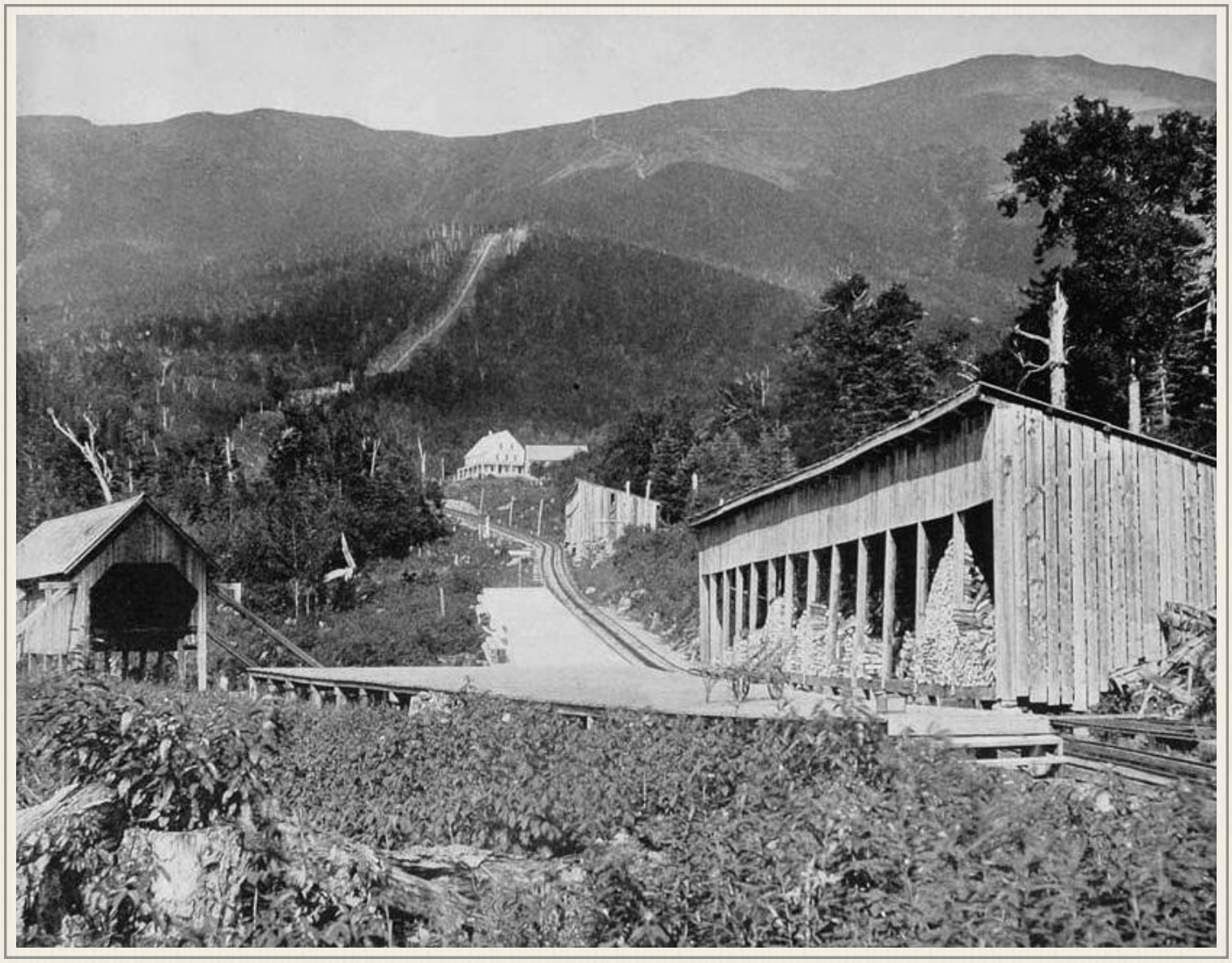


Spur Line

The Fabyan spur line could not make the final climb to the original Base Station and the Cog tracks were extended down to a new transfer point.

From 1876 to 1895, this platform would develop with a car enclosure for the spur line and wood sheds to store fuel for the Cog loco's. Maintenance continued up the line at the roundhouse next to Sylvester Marsh's Depot.

When nearly all the original Base buildings burned in 1895, the Boston & Maine decided to move all operations to the transfer point and the current shop complex was built.



Ch. 9 - The Base / Shop

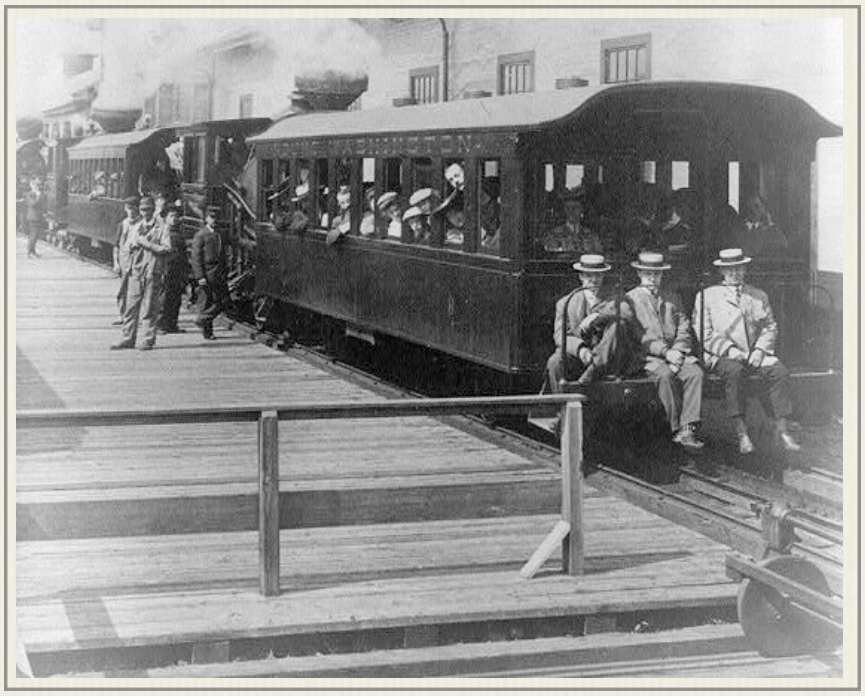


The new Base/Shop complex saw thousands walk across the platform as part of their Mt. Washington trip at the turn of the 20th Century.

These scenes document Base operations of the era when trains were the main form of modern tourist transportation.

That would change in the 1930s.







Ch. 9 - The Base / Shop



The automobile had arrived, and the spur line rails and its wide platform were gone. However the support structures for wood, coal and ice storage remained as did the Cog trains. That changed in September 1938 when the hurricane winds that blew Jacob's Ladder into Burt's Ravine also got under the eaves of the 185-foot building and destroyed all but the first section next to the machine shop.



-20+94.6 Middle Branch Brook

P.S. -20+08.2 = 1056+01.27-V24.1

P.S. -18+59.7

-18+45.6 Derail

-17+78.2 End of Rock Road = 1058+3

-17+35 Derail

Pump Ho

Coal Pockets

Laundry & Printing Office

Ice Ho

Wood Shed

Coal

-20

Cool Trestle

-10+35.4

-15+05.5 Water Column

-14+02.9 End of Standard Equipment C

Machine Shop

Engine House

48.2

64.2

56.2

50.7

Transfer Table

Car Barn

AMMONOOSUC

RIVER

Carpenter Shop

-9+16.1

-9+34.5

20

Bram Wing Road

BASE STATION

Boarding House

Boarding Houses

A

B

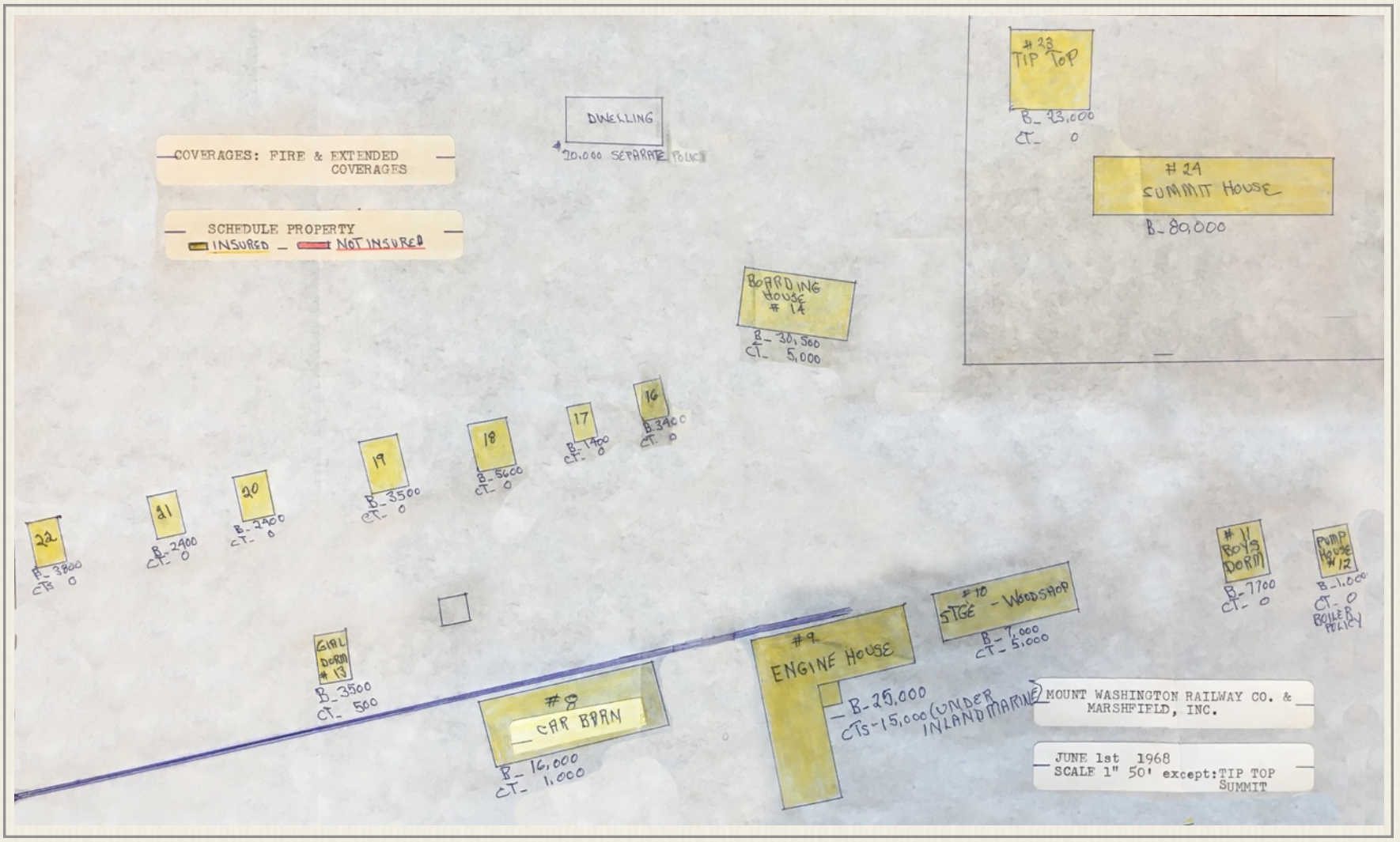
C

D

+17.3 End of Main Line

-9+01 10" Akron Pipe

1968 Insurance Map



The Mount Washington Cog Railway's 1968 Lumberman's Insurance Policy contained maps of buildings that were covered *(yellow)* and those that were not *(red)*. Above is the Shop Complex / Summit configuration at the end of the Jitney Years. The numbers indicate coverage value in dollars for B *(building)* and CT *(contents)*. The evaluation was done by Homer Hamlin Jr. of A.D. Davis & Son, Inc.

Engine House/Car Barn Replacement Cost:	$ 58,000
Stable/Boys & Girls Dorm/Pump Replacement Cost:	$ 27,800
Boarding House Replacement Cost:	$ 42,500
Help Cottages Replacement Cost:	$ 27,500
Tip Top House Replacement Cost:	$ 30-40,000
Summit House Replacement Cost:	$115,000*

*estimate if at Base Station. No attempt to adjust for summit location & additional labor and cartage


The Shop Complex
1955
Base Road
The Col's Hut
Boarding House
Old B&M Roadbed
Boys Dorm
Pump House
Kerosene Pump
Storage
Transfer
The Shop
Car Shop
Honeymoon Cottage
Cog track
To Marshfield Station
Ammonoosuc River

No. 1 - *Mt. Washington*



Tourists Dr. R.D. and Katheryn Leonard pose for their son with No. 1 on Base platform Aug 1960
- Richard Leonard - railarchive.net

No.1 - *Mt Washington*



"El Gordo" wheels the No. 1 down through Skyline Switch at sunset
- Kent Family Collection

GORDON CHASE – Engineer

Gordon supports the finest whistle on the mountain but this newspaper thinks it wise not to discuss its origin. Gordon is one of the old-timers on the Cog his experience around stationary boilers and engines, also. He likes to go west during the winter. What color hat do you wear out west, Gordie - black or white? *(CC v1n2 – July 13th, 1966)*

Gordie, with new tires, good whistle, and well lubricated throttle, and experience with stationary engines and boilers, is running the One. Gordie, one of the old-timers at the Cog, likes to go west during the winter. As of yet, this paper hasn't

found his hat color out there, black or white. *(Cog Clatter v2n4 – August 17th, 1967)*

Gordon Edwin Chase was the third of seven sons born to Warren and Violet (Leavitt) Chase on December 4, 1910. In April 1930, the Chase family was living in Lincoln, New Hampshire. The 48-year old head of the household, Warren, was doing odd jobs around town and paying $14-dollars a month to rent their home.

He and Violet's oldest son, Kenneth was 21 and working at the paper mill. 20-year old Howard, 19-year old Gordon, and 18-year old George were working in the woods. George Chase was the first in the family to be born in New Hampshire. Gordon was born in Nova Scotia as were his older brothers and father. Gordon's mom was also Canadian. 15-year old Arthur, 11-year old Robert, 9-year old Clarence, and 7-year old Ruth Chase completed the 1930 Census of the household. All four were still in school. The 1930 Census document reports that Gordon had completed the eighth grade before going into the woods to work.



Gordon E. Chase (1950s)
- Paul Saunders collection

Gordon married 29-year old Leona Merchant in Lisbon, New Hampshire on October 14, 1939. She was the daughter of Frank Carr and Eva E. Aldrich. She came to the marriage with two daughters, 6-year old Harriet S., and 5-year old Shirley E. Merchant. In April 1940, census enumerator Ida T. Sawyer found the newlyweds and the girls in Woodstock, New Hampshire renting rooms from Alfred and Vida Wilcom. Alfred was a carpenter at the papermill. Gordie was working 42-hours a week at the heel mill to support his wife and stepdaughters. He had worked 20 weeks in 1939, and made $380-dollars.



Unidentified Cogger and Gordie at Ticket Office (1950s)
- N.H. Then and Now

Gordie went to Manchester, New Hampshire on January 12, 1943 to enlist in the war effort. The 5-foot 7-inch, 144 pound semi-skilled pulp millworker was not yet a US citizen and entered the military as a private. The enlistment record says he had two years of high school. Gordon Chase would serve until October 6, 1945. Seven years later, the Army veteran came to work at the Cog Railway.

Growing up in a family of seven boys may have amped up the competitiveness and testosterone level of

Ch. 9 - Engine No. 1

Gordon Chase for he was known for seeking an edge - whether writing to see if his engine was the "oldest" or coming down the hill the fastest. While quiet and polite with the public, Gordie was profanely descriptive with colleagues about what sexual acts an attractive female across the parking lot (even an owner's daughter) should perform with him or with those around him. When Leona would visit the Base, the children would line up and Gordie would publicly point out "That one is hers - that one's mine - not mine" and so on. "El Gordo" was known to drop tools during his last-minute walk around check of the No. 1 *Mt. Washington* at the Base loading platform, so he might take a closer, surreptitious look at the nearby legs of attractive female tourists.

Chase knew his way around the North County of New Hampshire but if you asked him for directions he used beers consumed, not milage to measure distance - i.e. from here to there is so many beers. Gordie had a case of beer when he convinced a fellow Cogger driving by his "girlfriend's house" to drop him off one evening. When they arrived, Chase walked up to the latched screen door, but the woman refused to let him in. Chase demanded entry. She refused. The driver watched as Gordie stood back and threw the case of beer through the screen and let himself in. The driver left, and stopped by the next morning to pick Gordie up for the drive back to the Mountain.

Fellow fireman David Saunders could not believe that Gordon Chase would be selected and qualify to be an engineer ahead of him in the late 1950s. However, the crass woodsman from Lincoln, New Hampshire had one key advantage over Harvard student Saunders - he could work every day until the season ended Columbus Day weekend. "Running in the fall that was the only thing (Chase) had going for him," says Eddie Bird. "I don't think anyone who was there was surprised" about what happened in September 1967 on Gordie's last run down the mountain. It was on that run that 56-year old Gordon Chase broke one of the longest held records of the Mount Washington Cog Railway.

Gordie's reputation as a "piece of work" meant firemen assigned to the No. 1 during the summer were



- Paul Saunders Collection

some of the most capable, and responsible of the train crew. The Southern-gentleman Jim Gordon, who fired for Gordie in the early 60s before becoming an engineer wrote Susan Rogers at Vassar in the spring of 1965 confirming a summer suspicion - Gordon Chase had been diagnosed with cancer that winter.

Gordie apparently came back to the Base after 1967. Second generation Cogger Art Poltrack was taking a break at the Base in 70s. "I'm sitting on the bench in front of Marshfield one day, must have been at lunch, since it wasn't morning," remembers Poltrack. "This fellow comes up and sits next to me and starts chatting away. He obviously knows quite a bit (about the railroad.) Long story short, who was it but none other than Gordon Chase!"

Gordon Edwin Chase died on October 20, 1976 at the age of 65.

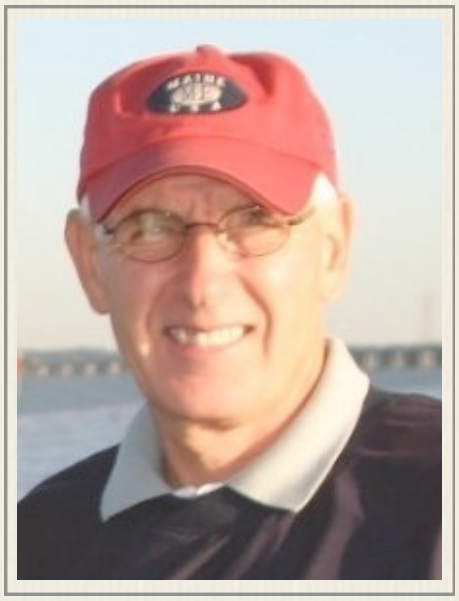


Fred Kent at the summit
- Tom Norcott Collection

FRED KENT – Fireman (1966)

Fred goes to the University of Maine studying Pre-Vet. Working on an animal such as the ONE will prepare him for any critters he has to treat. *(Cog Clatter v1n3 – July 20th, 1966)*

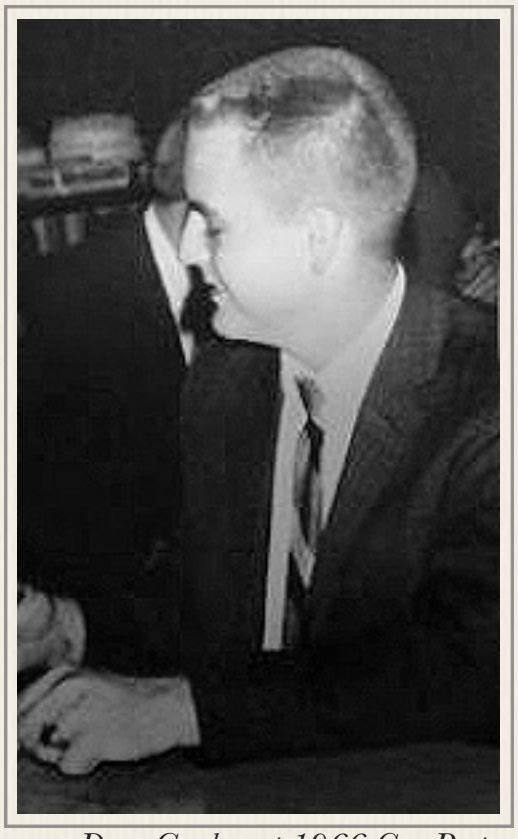
Anne Teague Koop says Fred came to the Cog in 1962 and started, as many others did, washing dishes in the Marshfield kitchen for Pete and Grace. Fred Kent's brother also worked at the Cog and married Cathy Holt which means Fred's family connection with the mountain began with his great-great grandfather, Burt who published *Among the Clouds*. Anne Koop says Fred was the first boy she dated the year before she met her husband, and was "the first guy I ever had a heartbeat for." Fred Kent's LinkedIn page says he graduated from the University of Maine in 1969 with a BS in Animal Science. A member of the Sigma Chi fraternity, Fred also skied for the Black Bears. A masters degree followed in 1970 at the University of Missouri-Columbia before receiving a doctorate in veterinary medicine from Cornell University in 1974. Dr. Kent *(right)* opened his own animal hospital in 1977 in Rumford, Maine where he continues as chief of staff some 40 years later. He was a founding member of the Animal Emergency of Mid-Maine group in September 2000.



Ch. 9 - Engine No. 1

DAVE GORDON – Fireman (1967)

Dave, a true Floridian, will be going to Maryville in Tennessee. Although his objective for the future is unknown, he is gathering experience on the one. *(Cog Clatter v2n4 – August 17th, 1967)*



Dave Gordon at 1966 Cog Party
- Anne Koop Collection



Gordon Champion (2015)
- Lewis Family Collection

GORDON CHAMPION - Brakeman (1966)

Gordon will be starting a hitch with the U. S. Marines come Fall. Gordon attended UNH last year. Two Gordon's on the One could be confusing. *(Cog Clatter v1n4 – July 27th, 1966)*

CHARLIE KENISON – Brakeman (1967)

Charlie, from Jefferson, N.H., has this year come from the kitchen to the trains. He considers this a major step, and steps lately have been his business. *(Cog Clatter v2n4 – August 17th, 1967)*



Retired General Mgr. Charlie Kenison
- LinkedIn 2015

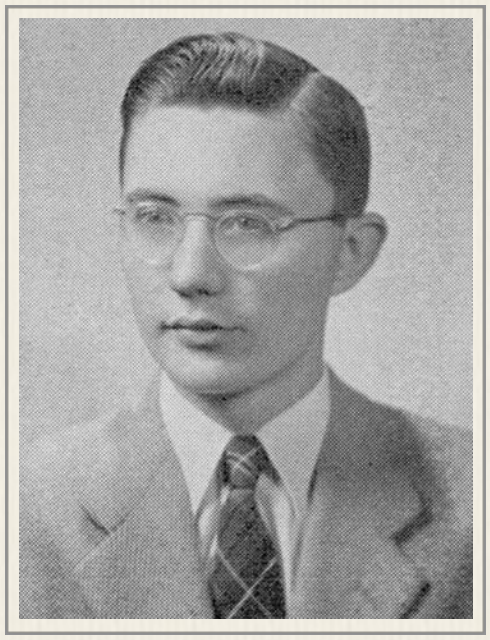
Kenison's LinkedIn account indicates Charlie retired as General Manager of the Mount Washington Railway after dealing with all operations including "Railroad, Gift shop, Restaurant, Repair shop, Design and Build Locomotives" starting in February of 1996. His daughter became the Cog's chief safety officer in later years. He oversaw the placement of the Cog train display in Twin Mountain, and continued to consult after stepping down in 2014. By then pay for the general manager's position had risen into the six-figure range.



Engineer Charlie Kenison (1968)
- Cog Railway: We Were There FB

Other No. 1 *Mt. Washington* Personnel

SANDERS "Sandy" STEPHEN - Fireman (1956 & 1957)



Sanders Stephen came to the Mountain in 1954 after graduating from high school *(right)* in Wakefield, Massachusetts where he played varsity basketball for two years, was vice-president of his junior class and served on the Student Council in his senior year.

Sandy was part of "the Wakefield crowd" at the Cog - a summer employment pipeline that saw more than eight Wakefield Memorial High School boys come to work for Henry and Arthur Teague in the 40s and 50s. The four Saunders brothers were all products of Wakefield Memorial, as well as Richard McDowell, hockey team member Eddie Bird, and Bird's older brother, Harry.



Sandy's brother Charles came to work at the Cog with his friend, Harry Bird. "Harry Bird took over (managing) at the top," says Sandy, "and my brother Charles *(right in 1946)* worked at the summit just one year." (Charles Stephen is now a Unitarian minister in Lincoln, Nebraska.)



Sandy started work washing dishes in the Marshfield kitchen with another young man named Walter, who came from central Massachusetts. "Sandy's fine disposition and sense of humor" as described in the Wakefield High yearbook, *The Key*, may have been put to the test, as a young waitress in the dining room from Lancaster, New Hampshire was not impressed with their work on the dishes and cutlery. "I sent them all back to him to try again," says Mary (Lund) Stephen in June 2016.

MARY LUND



Mary Lund was the daughter of a chemist who ran the P.J. Noyes Company in Lancaster. Her dad would later move back to Boston and start a company with some friends. "They developed a paint you could put on the highways that wouldn't disappear," says Lund "and that's what they use to this day. It was a big step forward because you didn't have to paint every year and it lasted a long time."

Mary had spent one high school summer working at the Weathervane Theater in Whitefield. That was the summer she picked up her brother, Peter Lund at the Base on his days off from the Cog. Peter Lund had started working on the Marshfield soda fountain in 1953, moved to the ticket office before going up to manage the Summit House in 1956.

Ch. 9 - Engine No. 1

(Ed note: Where reporter-at-large Philip Hamburger found him working there as Lund became one of the characters in the September 12, 1959 New Yorker article, "Rack and Pinion")

Mary said in a joint 2016 interview with her husband that picking up Peter was when she "got my first look at the Cog." Sandy: "And all those men!" Mary: "I was not looking for men at that point."



Mary may have not been looking for men, but when she started working at the Base the next summer, Hank and Mary Lahey remember Miss Lund "had the attention of all the males" – and that included the two dishwashers.

"Walter and I lived above the kitchen," recalls Sandy. "And we looked down a hole which looked down at... I think looked down on Mary's shower. Is that right, Mary?" Mary: "I like to think that is not correct. I remember you guys standing out there – harassing me." Lund lived in one of the cabins just up the hill from Marshfield. "I had to go over there (Marshfield) to take a shower which I tried to do as little as possible. I tried to do it when (Sandy and Walter) weren't around."

Sandy and Walter were not alone. Older Cog males now in college came calling that summer. "Of course, I had a lot of suitors because I was the only girl there for a time," says Mary. Sandy: "The first year she went out with those two guys – Harry (Bird) and Ted (Ely) – the second year she went out with two other guys – Andy Rankin…" Mary: "God, You can remember all their names?" Sandy: "Andy Rankin… Of course, I was pissed off – Andy Rankin and uh,… Why? You wouldn't go out with me at that point because I wanted you alone – no one else. I didn't want to share you and you said 'Nope I'm not going out with one person." Mary: "That's right because I'm not getting involved – big mistake (laughs)" Sandy: "Andy Rankin and… oh, Dick McDowell." Mary: "That's right! Dear sweet Dick McDowell." McDowell had played the clarinet in the Wakefield High band and went to Norwich University. Mary Lund was the "sweetheart of Sigma Chi" when she went to a Norwich function with Cadet McDowell.

Dishwasher Walter left the mountain early in the summer of 1954, and Ruthie Hartford pitched in to help Sandy. The next year Sandy left the Marshfield kitchen and started working on the trains as a brakeman. His last two years at the Cog were working on the No. 1 *Mt. Washington* as a fireman. "I was there with Gordon Chase – unfortunately," recalls Sandy. "Well, it was probably fortunate for the customers," says Mary "because while Gordon ogled the women, Sandy ran the train. I don't think this was legal, but… " Sandy remembers, "The One had no compression at all – we came



Fireman Stephen - full tender ready to go (1956 or 57)
- Paul Saunders photo

down pretty damn fast most of the time, although that might've been Chase."

Mary continued to date and work in the dining room. Colleagues included Priscilla Alden, and the Ferguson twins from Jefferson and Lancaster, New Hampshire. She says there were times she helped out in the kitchen when Pete Rusinski had a few too many. "They asked me to do the cooking and Gracie *(Pete's wife)* – we were all trying desperately to get breakfast out" to the crew. "You had to feed them and Pete was not available." Sometimes when Pete drank, he was too available. "One night, he chased me around the kitchen," says Mary. "He didn't catch me!"

Mary says she was also pestered by a Penn State prospect from the mainline of Philadelphia. The young man would practice in the shop parking lot – rifling footballs across the flat area. Sandy remembers "he was definitely a little on edge all the time. He'd get down on all fours and come charging forward." Jitney says the young man was going to be playing for Paterno, and he quickly got promoted up the train crew ladder. He started running engines before Jit thought he was ready to shoulder the responsibility and the pressure the Cog quarterback position entailed.

Mary says the "crazy football player" kept after her for a date. "So, I finally agreed to go to someplace very innocent, and I came back and told them in the kitchen and they said, 'No – no, Mary you cannot do this. We know he's been harassing you, but no.' So I told him I couldn't go." Instead, the Penn State prospect went down the mountain early that summer with "stomach problems." But people who went to visit him at the hospital reported they found him instead in the urology department being treated for an STD.

One man who didn't pester Mary was M. Rouleau. "He was such a nice man… he was so sweet to me" especially when it came to taming the train crew's language when Mary came within earshot. "I knew very well he would say, 'Alright, Mary's here. I want the language to clean up" in his lilting French accent.

1957 was the last year at the Cog for both Sandy Stephen and Mary Lund. "See we just decided to get married – boom – so I called the Cog (in June) to see if they had any job for me," recalls Mary "and they said, yeah you can run the cabins and I thought 'I don't know anything about running cabins, but why not?' So that's what we did."

Nearly six decades later, the couple vividly recalls the Saturday of their nuptials. "We had the weekend off," says Mary. "The day before I found a nice little dress to wear." Sandy: "And we found a ring." Jitney had directed them to Aubin's Jewelry in Lyndonville, and Sandy drove over to get the ring early Saturday morning. Then the pair waited at the train station in Lancaster for a delivery from Concord, New Hampshire. "That was back when you had to have blood tests" says Mary and the results were due on the morning train. "The town clerk said she'd stay open until the train came in and we told the minister to just wait – and he said, 'Look I've got a big wedding I'm going to this afternoon as a guest, and I said 'Well as soon as the train comes in we'll be over' – so that worked out okay," Mary concludes with a laugh in the month of their 59th wedding anniversary.

Ch. 9 - Engine No. 1

The couple drove to Montreal for their weekend honeymoon and returned to a surprise Cog welcome in Mary's cabin next to the office where she handled cabin rentals. "Thanks to Gracie," says Sandy. "The cabin was unlivable." "We were so tired," says Mary. "They'd gone in... and booby-trapped (the door)" Sandy: "Powder went over everything." Mary: "Tied our clothes together. We were angry - yes!"

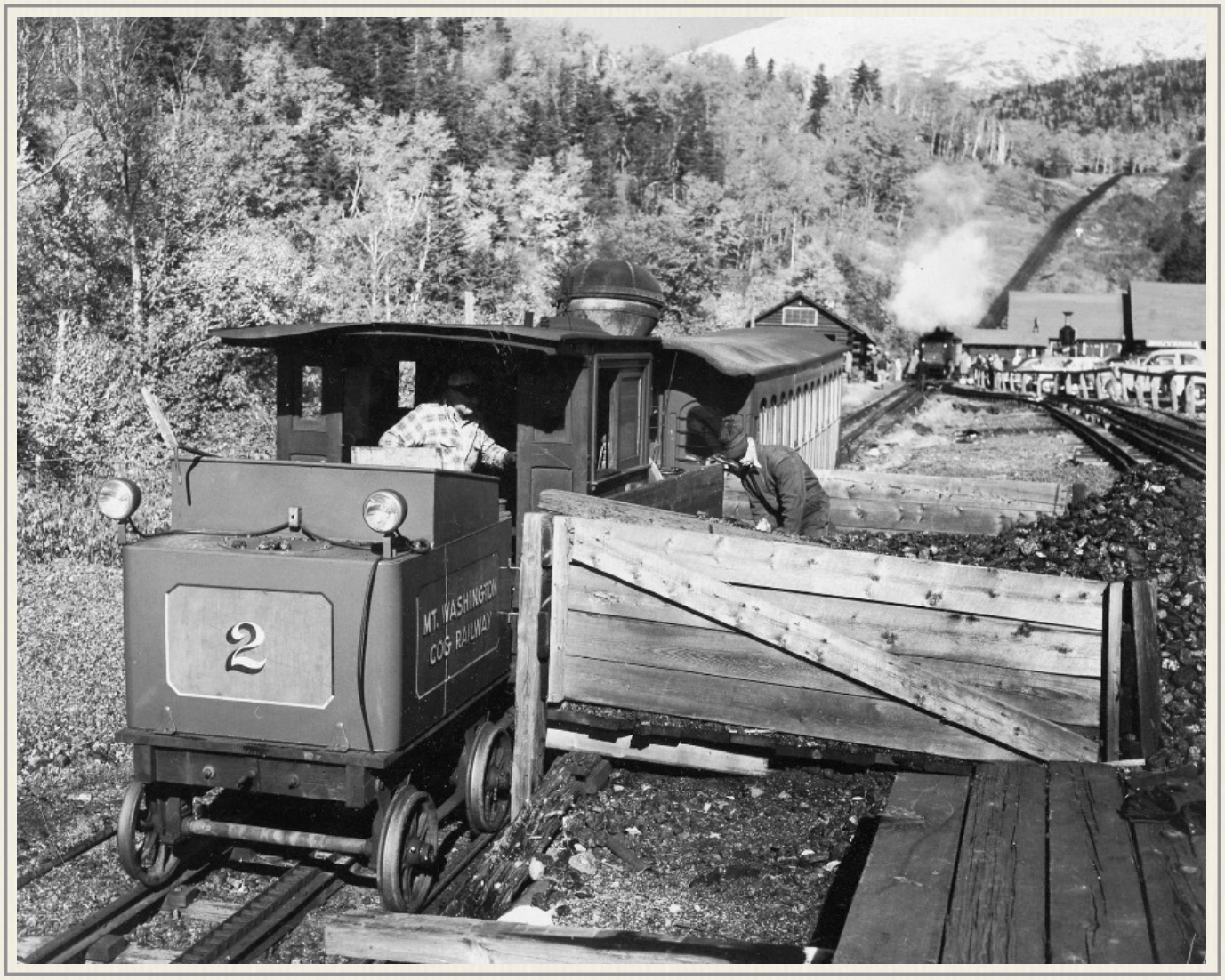
Later Mrs. Jitney would lend a hand when things got messy for the newlyweds. "(She) was a saint," says Mary. "She was so good to me." Sandy: "And that (gasoline powered) washing machine. (Jitney) used to kick it a lot - I know that and it worked." Mary: "That was the year I was washing San's clothes - the first year we were married and she invited me down to use the washing machine."

The couple were living in Braintree, Vermont approaching their 80th birthdays when contacted about their time at the Cog Railway for this manual/memoir. "You really brought back a whole different world that we haven't thought about for some time," the pair told the former *Clatter* publisher. Sandy Stephen is now a justice of the peace ready to help any 21st Century lovers with similar impulses seal the deal.



Antique motive power at the Shops (1963)
- Lewis Family Collection

No. 2 - *Ammonoosuc*



No. 2 - *Ammonoosuc*



Bob Kent on the air valve of Deuce
- Kent Family Collection

BOB *"80 lb."* KENT – Engineer

Bob teaches in Essex Junction, Vermont and last year was chosen Teacher of the Year in that city. He has just returned from a summer session in Beria, Ohio. *(Cog Clatter v1n9 – September 2nd, 1966)*

Bob is competing this year for the senior engineer post with Gordon Chase. A school teacher from Essex Junction, Vermont, Bob wields, and is noted for, a mean steamin' shovel. *(Cog Clatter v2n4 – August 17th, 1967)*

Robert Lee Kent was born in Northfield, Vermont on February 25, 1933 - the son of 35-year old rural mail carrier, William Orlando Kent and his 34-year old wife, Katie Belle (Jones) Kent. The family lived in Rochester, Vermont

where Bob's dad worked for long-time postmistress Nellie Trask - George Trask's mother.

Bob followed George Trask to Lyndon Teachers College where he was class president his sophomore and junior year. He edited the 1957 yearbook. Described as having "leadership ability" and "talent for dramatics," he was part of the Lyndon drama group all four years, played basketball the first three years, and baseball for all four. He also met a cheerleader from Newport, Vermont by the name of Shirley Jenks.



Robert L. Kent
- 1957 Verlyn yearbook



Shirley Jenks - Cheerleader, Dorm Councilor, Junior Class Treasurer (1955)
- 1955 Verlyn yearbook

Shirley Elizabeth Jenks was the daughter of Newport florist Harold Burton and Elsie L. Harriet (Brundage) Jenks. The 41-year old Newport native had been operating his greenhouse for 13 years when his 30-year old Canadian born wife delivered Shirley at the local hospital on December 12, 1934.

Bob started working at the Cog in 1956 and fired that first year for Jitney on the No. 6. According to the LTC yearbook, he came back to campus telling "tremendously funny tales of the Cog Railway." Shirley, meanwhile had started her first teaching job in Essex Junction, Vermont.

Bob and Shirley would marry on June 23, 1957 - the same summer he became an engineer and started running the Deuce. He would stay with that engine through 1967. In 1968, Bob became crew supervisor to help train new personnel and oversee safety regulations under the Cog's new general manager, Mr. Lionel Rogers for two years, and then with Paul Dunn for another four. Bob Kent finally left the Mountain in 1973.

DAVE WOODBURY - Engineer (1966)

Dave returned to the Cog this year after spending last summer in Poland. He'll be entering Law School this fall. So about four years from now his advice will be legal. *(Cog Clatter v1n2 – July 13th, 1966)*

David Woodbury started at the Cog as a Marshfield counter boy but soon determined that he would rather work on the trains. He received his undergraduate degree from the University of Pennsylvania in Philadelphia in 1966, and then went to the University of Michigan in Ann Arbor for a law degree.

He joined the New Hampshire Bar in 1969 and is still practicing in 2015. His practice area is mainly in personal injury, both for plaintiffs and defendants. He has been a resident of New Boston, New Hampshire since 1971. He and Candace have three daughters and six grandchildren.

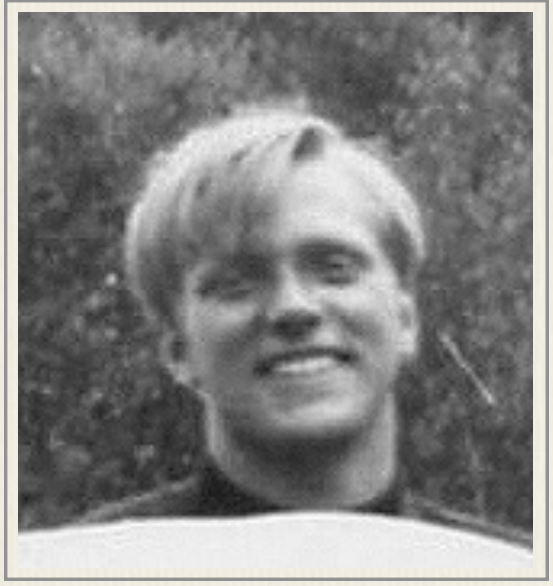
Dave went to Concord as a New Hampshire state representative for the towns of Mount Vernon and New Boston. "Over the past forty plus years, I have served on the New Boston Conservation Commission, Open Space Committee, Dump Study Committee and Solid Waste Committee," writes Rep. Woodbury on his state biography webpage. He was also school district moderator from 1974-1990 and selectman from 2001-2010. Woodbury was unable to win a second term in 2016.

JEFF TAYLOR - Fireman (1966)

Jeff is a fireman and spare engineer going to the University of New Hampshire, majoring in Drama; so playing these twin roles is just the way he likes to act. *(Cog Clatter v1n3 – July 20th, 1966)*

MIKE CLAYPOOL – Fireman (1967)

Mike goes to Williams College during the winter and hopes to be a lawyer. Could he be getting extra curricular work in Franconia? *(Cog Clatter v2n4 – August 17th, 1967)*



Mike Claypool (August 1966)
- Lewis Family Collection

MIKE CLAYPOOL - Brakeman (1966)

Williams College is the winter address of "Mike" Claypool. Mike says he enjoys Cog work. His Dad gave permission to use a hammer on Mike – no wonder Dave has no complaints on his work. *(Cog Clatter v1n4 – July 27th, 1966)*

Mike completed his degree at Williams and went on to get a Masters Degree in Education at Texas Southern University. He worked as a school administrator. His online bio reports "after a long and productive career in educational administration, where he was lead administrator of organizations as large as 175 employees and a $10-million dollar budget," Mike joined his wife - Jamie's healthcare consulting firm, helping private and hospital-based Texas doctors better manage their practices. The couple have two children and live in Spicewood, Texas - an unincorporated town of less than 8-thousand people in Burnet County 35 miles northeast of Austin along the Colorado River.



Mike Claypool (2015)
- J. Claypool Associates



Jaimie Claypool (2015)
- J. Claypool Associates

"Being in New Hampshire certainly provided me a love of nature and an appreciation of small town life," recalled Mike in November 2015. "I am actually on my third retirement career; involved in the fire service, believe it or not. In the office; not the field."

Ch. 9 - Engine No. 2

RICHARD *"Cincinnati Kid"* CRANDALL Brakeman (1967)

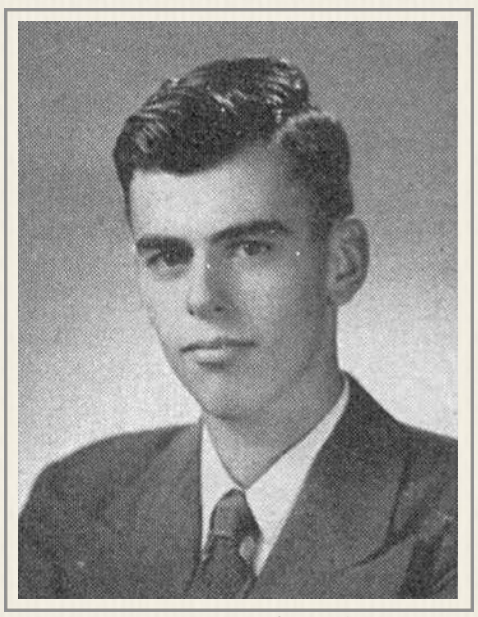
Cincinnati finds card playing at the boarding house invigorating and "interesting." However, he can't keep a poker face as he heads for the heads to help out. *(Cog Clatter v2n4 – August 17th, 1967)*



Becky Morgan & Rich Crandall on steps to Summit kitchen window (1969)

QUENTIN PEAVEY - Fireman (1958)

Bob Kent fondly remembers the hard-working "Quent" Peavey from Jitney's hometown of Lunenburg. "He did a 'very' good job," says Bob. "He was an excellent fireman." Born in Lancaster, New Hampshire on February 1, 1933 to Ernest E. and Shirley (Colby) Peavey, he would graduate *(left)* from Lancaster Academy in 1951. Quentin was a resident of Lunenburg, Vermont when he died on Thursday, March 8, 2012 at Dartmouth Hitchcock Medical Center. Quent was a veteran of the United States Navy and worked as a machinist at the Groveton Paper Mill for 27 years. Quent was survived by his wife of 53 years, Mary (Lamotte) Peavey along with two sons, Jeff Peavey and his wife Dana, Darren Peavey and his wife Debbie; three granddaughters Heather (Peavey) Pinsonneault and her husband Mark, Hannah D. Peavey and Gracie Lyn Peavey and a grandson Quentin D. Peavey.

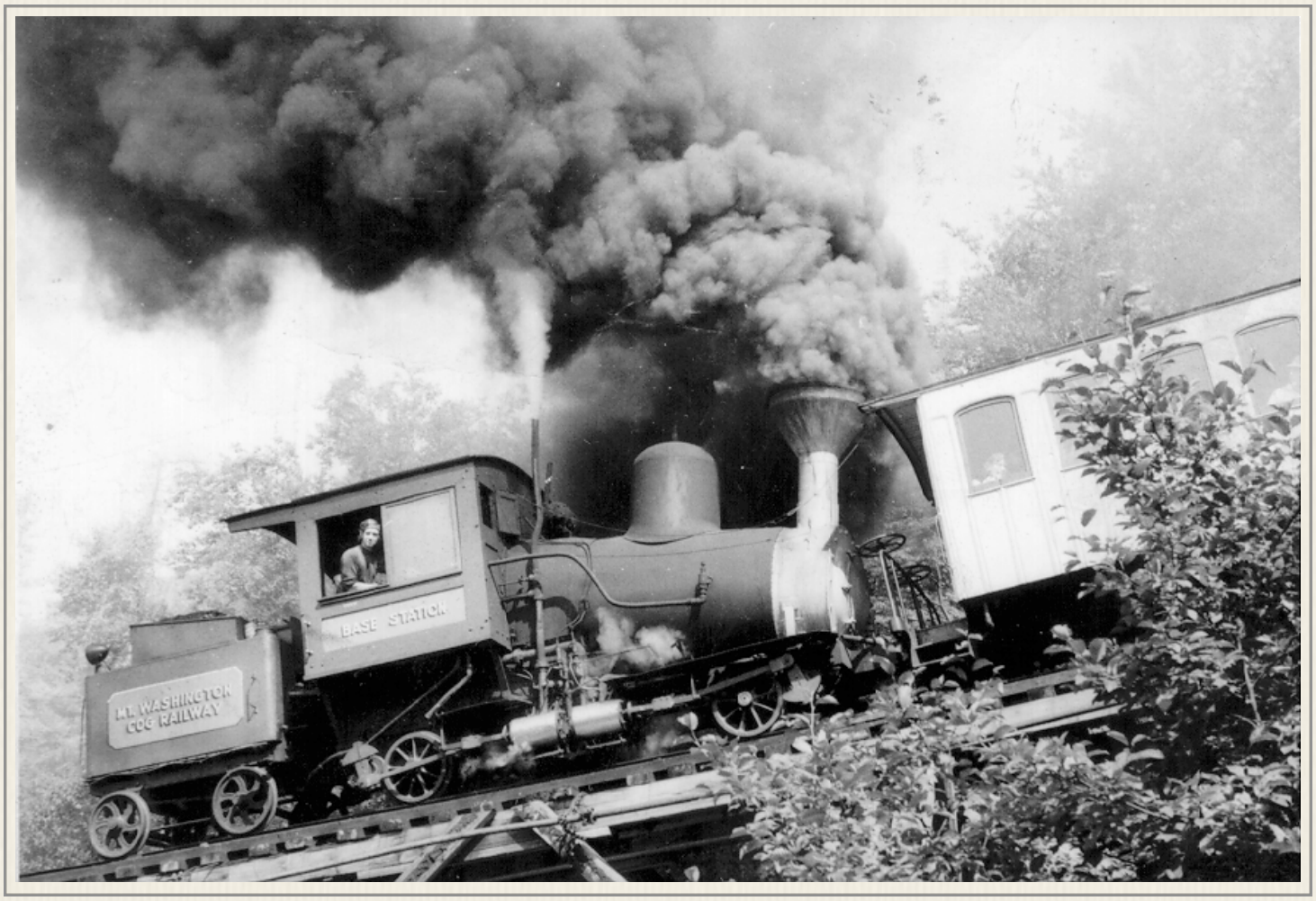


Quentin Peavey - 1951 Lancaster Academy



- Thompson Family Collection

No. 3 - *Base Station*



No. 3 crosses the Ammonoosuc at the start of another trip with Norm Koop at the throttle
- Kent Family Collection

No. 3 – *Base Station*



J Griffin Harris, Jr.
1960 Verlyn Yearbook

GRIFF HARRIS – Engineer

Griff, a teacher from Lincoln, keeps his engine in good running order and only allows polished cinders to fall on his train. *(Cog Clatter v2n4 – August 17th, 1967)*

James Griffin Harris, Junior was born in Littleton, New Hampshire the hometown of his parents. Griff's dad was a 22-year old truck driver when he married 21-year old beautician Velma C. Fogg in late September 1934. Griff arrived on February 20, 1936, and brother David was born in 1939. The Littleton Census report says Griff's dad was working as a "tumbler man" at the Green Laundry to support his young family in 1940.

Ch. 9 - Engine No. 3

After high school, Griff went first to UNH, then Plymouth Teachers College before transferring to Lyndon Teachers College just 35 miles from home. He was on the LTC baseball team his junior and senior years, and completed his degree at Lyndon in 1960. Griff was teaching in February 1961 when he married 20-year old Mary Jean Carter *(right)* of St. Johnsbury Center.



Mary Harris (1962))
- Lewis Family Collection

The college ballplayer became a utility infielder at the Cog with time at the throttle of a number of engines including the No. 4 *Summit* and the No. 2 *Ammonoosuc* in the fall. Brakeman Geddes Anderson from Greenwood, South Carolina remembers summers of fun in 1958 and 1959 with Griff, who was driving his new 1958 Chevrolet Bel Air with the first set of vanity license plates Geddes had ever seen that simply said "GRIFF."

After leaving the Cog in the early 70s, Griff wound up in Sarasota, Florida with his second wife, Paula. Griff Harris died December 1, 2016 at the age of 80.



Engineer Griff Harris (left) and fireman Norm Koop at and in front of the Base Station
- Koop Family Collection

MARK SWEENEY – Fireman (1967)

Mark, who fires for the three, even goes up the mountain on his day off - but of course, they're twins and he didn't know which way he was going! *(Cog Clatter v2n4 – August 17th, 1967)*

PETER CARTER - Brakeman (Fall 1967)

Carter, from Milton, Massachusetts, was riding in the No. 3 *Base Station* for fall substitute engineer Gordon Chase on Sunday, September 17th, 1967. *- See VoL 2 Roster*

LARRY BOWEN - Brakeman (1966)

Attending the University of Colorado with his future undecided. You may not see Larry on the Three as he is also a qualified fireman, so when fireman take a day off - Larry or Tim Bemis have to fill in. *(Cog Clatter v1n4 – July 27th, 1966)*



Rusty Aertsen in front of Ticket Office
- Walter Aiken Collection

RUSTY AERTSEN – Brakeman (1967)

Rusty, like Charlie, has moved from Marshfield to the main-line and likes it. A Harvard man, Rusty is a major of history and comes from Philadelphia.

(Cog Clatter v2n4 – August 17th, 1967)

Aertsen was riding in the cab of the *Base Station* on Sunday, September 17, 1967.

Guilliam "Rusty" Aertsen IV was born October 10, 1947 in Philadelphia - the son of Guilliam and Mary Geay Aertsen. Rusty graduated from Harvard and found his future wife - another Philadelphian, Margaret Pauline "Max" Campbell working in Marshfield at the Cog Railway. Max Campbell was born June 29, 1948. The pair were married on June 2, 1973 as "Max" officially became Margaret Campbell Aertsen with her friend, Claire Dwyer (who got her the job at the Cog) as part of the wedding party.



Rusty makes "Lizard Lips" for Max in Marshfield (1970)
- Maureen Driscoll Collection

A May 1991 *New York Times* article and a current *Bloomberg Business* bio found online tells us Rusty has made a name for himself in Boston financial circles. A "bad-loan specialist who worked on Texas real estate problems a few years ago," *Times* reporter Steve Lohr writes, "(He) was named last year (1990) to head the Bank of Boston's real estate department." The article goes on to examine what factors went into the refinancing of a $27-million dollar loan on the building at 89 Broad Street.



Rusty (center) with unidentified friends aboard the "Snowbird" at the Concordia Yawl 70th Anniversary in Padanaram Harbor, South Dartmouth, MA hosted by the New Bedford Yacht Club (August 8-10, 2008)
- Photograph by Doug Cole

Bloomberg reports "Mr. Aertsen served as the Chairman of the Board of Trustees of the Old South Church from 1992 to 2002" and by 1996, Rusty was the executive vice president of BankBoston - a position he held for two years. In 1997, he became Chairman of the Board of Directors of the Massachusetts Housing Investment Corporation. In 1999, Rusty launched Aertsen Ventures LLC and became CFO and Director of Cine-Cast LLC. Mr. Aertsen has been a Director of NewReal, Inc. the General partner of New England Realty Associates Limited Partnership, since March 11, 2002. He is also the Co-Chairman of AGS Realty Advisors since 1999 and Member of Premier Capital LLC since 2000. He is also the Chairman of Massachusetts Housing Equity Fund Inc.
http://www.bloomberg.com/research/stocks/people/person.asp?personId=8023833&privcapId=290937



Rusty Aertsen (June 2013)
- MA Housing Investment Corp.

Rusty and Max apparently enjoyed being down at sea level. In 1995, they bought a 40-foot Concordia yawl called the "Snow Bird" that was built in 1958 by Abeking and Rasmussen.

Margaret "Max" Campbell Aertsen died November 20, 2003.

NATHANIEL CARTER - Brakeman (Fall 1967)

Carter, from Milton, Massachusetts, was braking the *Chumley* car on the No. 3 *Base Station* on September 17. *- See Vol. 2 Roster*

Other No. 3 *Base Station* Personnel



Fireman Mad Man McKenna (L) and Engineer Leo Boucher in the No. 3 (1950s)
-Lewis Family Collection



LEO BOUCHER - Engineer

Leo Boucher was a big personality. Big in stature - his barrel chested figure was easily recognized standing by the tender in a long-running postcard image *(left)* of the *Great Gulf* on Jacob's Ladder taken in the fall when Leo was firing for George Wilmot. Boucher was big in voice. Jitney remembers an evening in 1951 when Coggers had gathered after work to drink in a big tent set up on the side of the old Fabyan House. He was sitting with Leo having beers. "It was mobbed and noisy," remembers Jit. Suddenly, Leo bellows, "Quiet!!" The entire tent fell silent, and Leo leaned over and said in his normal baritone for all to hear, "What'd you say, Jit?" much to the newly minted, baby-faced engineer's embarrassment.

Dennis Buss who fired for Leo in 1962 and 1963 says "The story around the Cog was that Leo had been a US Marine, and had participated in the US intervention of Nicaragua in 1912. The story was that he had been impaled by a bayonet, which resulted in the lop-sided protrusion from his belly. Whether or not this is true, it added to the mystique of Leo's persona."

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"I can remember one of the years there when I was working the early sixties, Paul Malandrino fired for Leo," recalls Pliney Granger III, "and (Malandrino) says you have to get used to it. it's kind of scary at first because you start off and you look over, it looks like (Leo is sleeping.) You come to a hill... coming down, it's the same thing you pitch over and he sets (the air valve) - (the track) levels out and he comes to - starts going over the edge he comes to."



Leo Boucher (1952)
- Dartmouth College

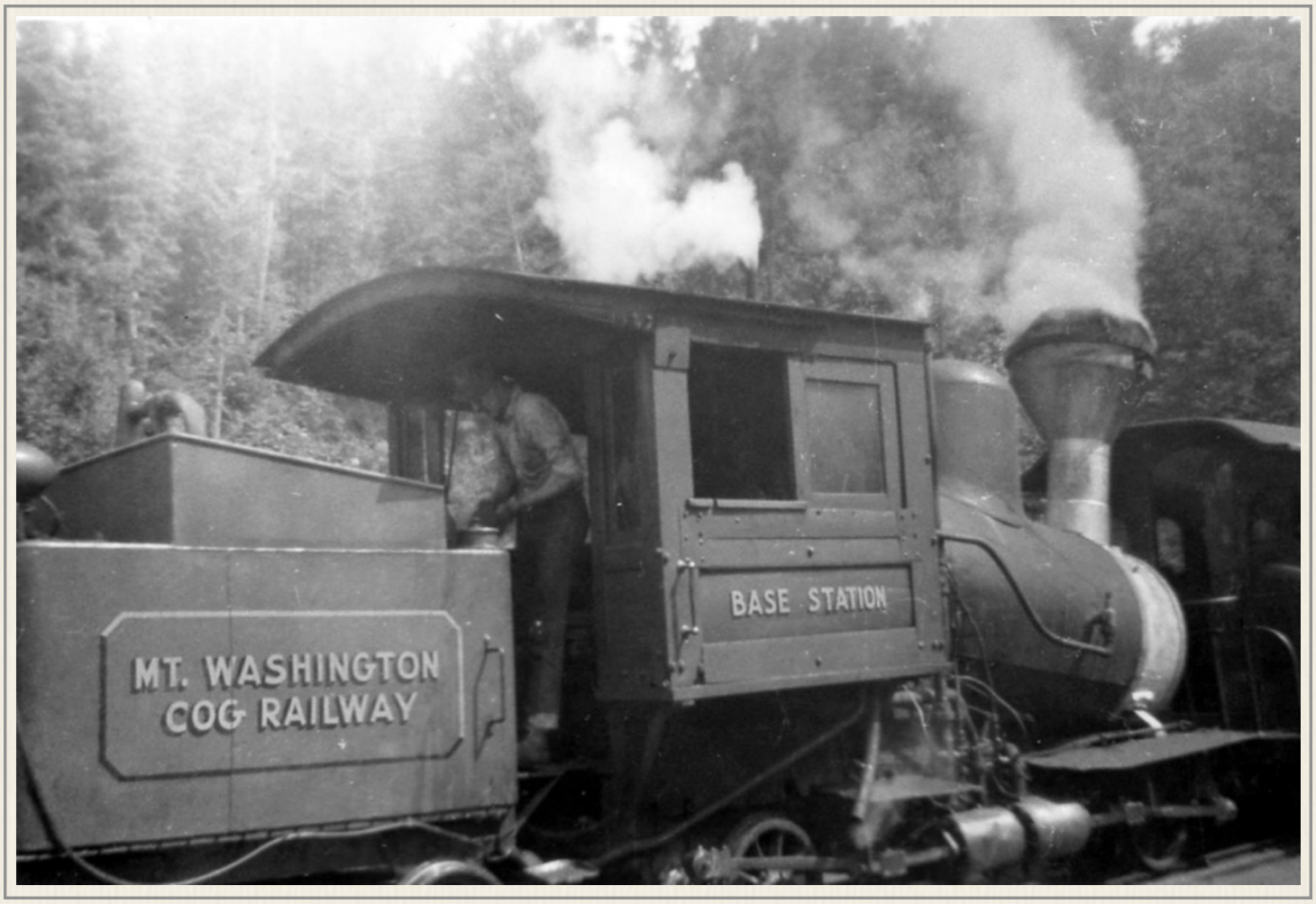
Leo was an entrepreneur. He appeared in a television commercial drinking a cup of tea in the *Base Station's* cab declaring, "I'd sooner Lipton." He opened a restaurant in Lincoln, New Hampshire and when, just before Christmas, he took in only 50-cents all day, Leo decided it wasn't going to be a going concern. He could plumb pipe. He could cook. When a Summit House chef was abruptly fired, Leo volunteered to man the kitchen and reportedly manipulated some roast beef into something memorable. His legendary cook-out at Waumbek Tanks saw the well-lubricated Leo reach bare-handed into the coals to retrieve steaks that had fallen from the grill.

Married once and divorced, Leo the good Catholic, never married again. That didn't stop the romance. He would say if people saw his convertible's top down, he was "pitching woo" because it got too hot if he left the ragtop closed.

He worked at the Mt. Washington Hotel and towards the end of his life was reportedly the caretaker of a town dump - living in a small building next to the landfill. The story goes that when Leo Boucher died, the town bulldozed his dwelling into the dump.

"MAD MAN" MACK McKENNA - Fireman

McKenna came to the Mountain from Mexico, Maine and after he left the Cog, Jitney remembered in 2015 that he ran a gas station in his hometown. Jitney says when he later asked McKenna how the business was going, McKenna said, "Oh my neck is killing me, Jit - it's gets so sore from watching all the cars drive by." Beyond that, McKenna remained an elusive research subject for the former *Cog Clatter* editor with no first name to run with. The first few drafts of this manuscript told readers "any assistance on the rest of "Mad Man" McKenna's story gratefully accepted." Assistance came in the form of the Mount Washington Railway corporation's financial records provided by Ken and Bonnie Randall in late 2016. Walter F. McKenna worked on the Cog from 1951 to 1967. His first name and middle initial unlocked the following from Ancestry.com, "Birth: Oct. 12, 1933 in Mexico, Oxford County, Maine, USA Death: Jan. 22, 2015 in Auburn, Androscoggin County, Maine, USA. (Walter Frederick McKenna) was the son of Wilfred and Viola (Wilton) McKenna. He attended Mexico schools and graduated from Mexico High School. After High School, he served his country in the Korean War. He later attended college in Boston, Massachusetts where he studied Electrical: Heating and Lighting. He married



No. 3 Base Station at the platform in the summer of 1963 developed from a roll of exposed film that Jitney Jr. found in a trash can by the Base switch. It appears the unknown (and careless) tourist has a picture of fireman "Stretch" Buss crammed into the cab.
- Lewis Family Collection

Irma "Carole" MacDonald in 1958 and together shared their home with many foster children as well as their own. He was predeceased by a son Darren in 2014 and a daughter Lisa in 2002 as well as three brothers; Albert, Carl, and Robert McKenna and one sister Jean Hanson. Burial: Mount Auburn Cemetery in Auburn, Androscoggin County, Maine, USA. Record Created by: Connie Lagasse Russell. Record added: Feb 22, 2015. Find A Grave Memorial# 142941804"

DENNIS "STRETCH" BUSS
Fireman (1962 - 1963)

"I was a brakeman for the first year (on the No. 6)," remembers "Stretch" in 2015. "The 2nd & 3rd years, I was a fireman for Leo Boucher." Buss' story goes like this:

"It was customary for engineers to allow their fireman to run one trip a day. Leo didn't follow this custom," says Buss. "I never complained though. I was young and full of energy. Leo had difficulty getting in and out of the cab. The No. 3 engine was notoriously difficult to fire. Engineers and firemen all advised me that the only way to fire the No. 3 was to keep a 'lean fire.' If the coal layer got too thick, it would 'clinker' for lack of draft. I practiced and practiced taking light shovels of coal and spreading them with a deft flick of my wrist, as I had been taught by experienced engineers & firemen. Leo never offered me any advice. But, he never criticized me either. If I was having a tough time holding steam, he would help me by slowing down a little, or turning off the injector a little early as we approached the summit."

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"Stretch" Buss returns to the Cog (2011)
- Dennis Buss Collection

"Then one day in my second season with Leo, he motioned me onto the engineer's seat. 'Get up here boy' he said, and he took the shovel. He didn't use any of the wrist-flipping techniques that I had learned were essential to fire the No. 3. He waddled back & forth between the tender and the boiler, dumping shovel after shovel of coal into the firebox. As we moved up the mountain, the steam pressure inched up and up. I had to add extra water to keep from popping off. As we approached the Summit, we had a full head off steam (unprecedented in my experience). When we passed Lizzie's Monument, Leo tossed the shovel into the tender indicating that he was done for the trip. Gasping for breath, he wiped the sweat from his forehead. As we approached the Summit, he opened the firebox, and said 'look here boy.' The firebox was FULL TO THE BOTTOM OF THE FIREBOX DOOR with RED HOT COAL. I had never seen so much coal in a firebox. I was FLABBERGASTED!!! Leo never again offered to fire, and I struggled through the rest of the season using my futile wrist-flipping, lean fire technique. I told this story to engineers & firemen around the Cog. But I never had the nerve to try Leo's approach."

"One day, Leo took a day off. He was replaced by a young substitute engineer, who shall remain nameless in this narrative. I told the young engineer about Leo's technique of filling the firebox to the rim, and he decided to try it. The young engineer fired and I ran. We got a little past Waumbek before the fire clinkered up, and the steam dropped. We had to stop the train in the middle of the track and totally re-build the fire. All trains were blocked for almost an hour. It was VERY EMBARRASSING… Leo obviously knew something that no one else knew about coal-fired steam engines."



Other Duties as Assigned

"When I worked on the Cog, my assignment every Thursday night was to escort the Teague daughters for dinner and dancing at the Mt Washington," recalls Stretch. I was never quite sure why I got this assignment, but it was a lot of fun… The oldest daughter (Jane) was about my age. There were four in all, I think… We were at least 30 years younger than anyone else on the dance floor…"

David Woodbury confirms eligible college-age Cog men were often found on the arms of the Teague girls. "Just last Saturday night," Woodbury wrote in a February 4, 1964 letter to Jitney, "I went out on the town



with A.S.T. and family. Janie asked me to escort her to a charity ball. They were something. All in their ball gowns (Jane, Margie & Ma) Art & I had on our tuxedo's. It was some contrast to the summer time. Ma Teague was telling me how Margaret Chase Smith was going to be LBJ's running mate in the fall." Woodbury, who would become an ESQ later in life, attached an ECR suffix to his name on the envelope - Engineer Cog Railway.

Bud Nye was Margie's date *(left)* for the Annual Heart Ball at the Warwick that year. The *Philadelphia Sunday Bulletin* of February 9th reported on page 2 in the society section that maestro Mark Davis "called on two young guests, Margie Teague, of Chestnut Hill, and Carlyle Nye, of Penn Valley, to demonstrate" a "Twist" dance replacement, the Fruge. Society editor Ruth Seltzer noted "the fruge is also known as the dog, the thunderbird and the bug" before writing "Margie's father, Arthur S. Teague, owns the world's first cog railway - the one that has been climbing Mt. Washington, New Hampshire since 1869. Carlyle's dad is Dr. Robert Bruce Nye, associate dean of Jefferson Medical College."

Asked about the 1964 soiree in 2016, Bud could only say, "I suspect it's true. I dated Margie for awhile and later dated Fannie. As to how well we did the fruge, no longer in my memory (probably thankfully)."

Nye says the paper's mis-identification of his father is understandable. "Most people knew Bruce as my dad as my sister and I lived with him (he was my father's older brother) from age 7 on," writes Bud. "His wife, Alice, was my mother's older sister and they had become our parents."



Seltzer closed her article by saying, "It takes almost as much energy to do the fruge as it does to run Mr. Teague's train to the summit. Heart specialists, please note." Col. Teague sent the clipping to Jitney as he was delighted to "see how the little train keeps puffing among 400 top doctors at a swanky hotel!"

"I visited the Cog in 2011," says Dennis "Stretch" Buss *(above)* "They had only one coal-fired steam engine in operation at the time (No. 9). The rest, they had replaced with diesel engines. I found my engine (No. 3) in the junk yard." He returned to the area in 2016, "I was at a conference at the Mt Washington Hotel in January," he wrote Jitney Jr. "I didn't get to the Base Station, but the hotel is full of Cog memorabilia." The following picture was attached.

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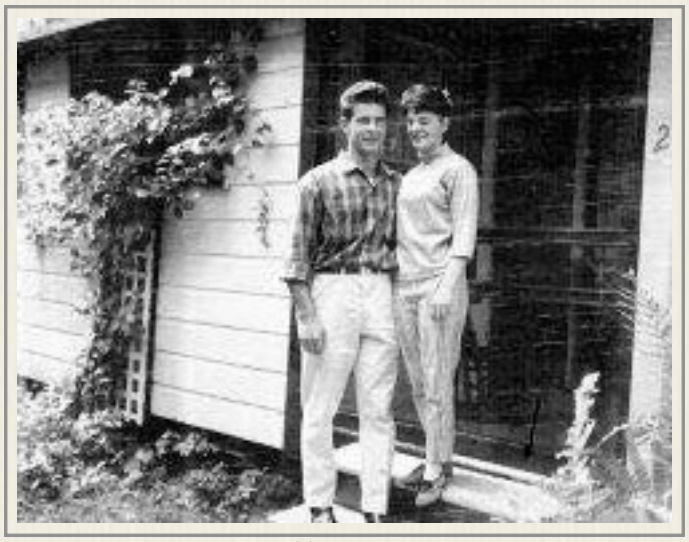
DONALD "Donnie" ENMAN - Engineer



Donald P. "Donnie" Enman, Sr., was born on November 7, 1942 in Morristown, New Jersey - one of ten children of the late Charles E. and Dorothy A. (Willey) Enman. His family moved to Jefferson, New Hampshire where they purchased a 300 acre dairy farm, "Millbrook Acres." Growing up on the farm, Don began working at a young age. One of those summer jobs was at the Cog Railway starting in 1958.

Donnie fired for Frank Thompson on the No. 9 *Waumbek* and eventually ran the No. 3 *Base Station*, and because he lived in nearby Jefferson was able to help out in the fall after most of the teachers and college students had to return to their respective schools. His family reported Donnie "was the test driver for the first train after the derailment" in 1967.



Don & Patty Enman (mid-1960s) - Peter Poltrack Collection

Donnie had taken over farm operations from his father soon after leaving high school. Enman's 85 head herd produced milk for many years for the Berlin Dairy. Don married Patricia A. Deblois and after her death, Phyllis L. Hubbard. He had two sons, Don and Darren, and a daughter, Debbie. The family says Don loved working outdoors (not the cattle) and cherished his favorite dog, a red and white border collie, "Laddie." In his spare time, Don loved watching the Boston Celtics, and caring for his beloved Koi Fish. Later in his life, Don built a 4,000 gallon Koi Pond in his backyard that became his pride and joy. At one time, the pond held over 20 fish, many over 2 ft. long

Donnie moved to Stoneham, Massachusetts. He died at Winchester Hospital on Wednesday, April 17, 2013, at age 70.

GEDDES D. ANDERSON - Brakeman

Geddes D. Anderson of Greenwood, South Carolina wound up working on the slopes of Mt. Washington in 1958 because of a college friendship between his uncle and Arthur Teague.



'LOST' GIRLS SPEND NIGHT ON MOUNTAIN

3 Wrightson Sisters of Orange and Friend Follow River in New Hampshire Till Found.

CHEERED BY IRISH TERRIER

Unworried in Darkness, They Are Brought to Bretton Woods by Cog Railway Employe.

"**Uncle G.G.**"

Grafton Geddes Dowling Jr. came from Teague's home state of South Carolina. He was born on September 29, 1915 in Beaufort to 23-year old Leonora Connors Mauldin and 33-year old Grafton Dowling. Young G.G. Dowling worked alongside Arthur at the Cog for Col. Henry Teague in the 1930s. Nineteen year old G.G. wound up in the September 1, 1935 edition of the *New York Times* when he found four missing teenage girls and their dog walking alongside the Ammonoosuc River as 300 searchers were scouring "the lofty wilderness of Mount Deception." Three were daughters of the vice president of the Great Atlantic and Pacific Tea Company - up from New Jersey and staying at the Bretton Woods hotel. The fourth was the daughter of the hotel's manager.

The paper reported Dowling met the four "while on his way to work on the cog railway after searching for them all night. He and twenty other college students, employed on the railway, beat through the mountain paths until 4 A. M. and had only a few hours sleep before going to work. Dowling picked them up in his car and drove them two miles to the hotel. A pre-arranged signal of five blasts from the whistle atop a hotel called off the hunt, in which 100 searchers from a near-by CCC camp took part." Art Teague, who had become manager of the railroad that year, and G.G. Dowling remained friends over the years.



G.G. Dowling (1936) - USC Yearbook photo

Ten years before the rescue, G.G. and his younger brother, Joab had made the papers in Florida and in South Carolina because of their rather unique summer job. 9-year old G.G. and 7-year old Joab Dowling ran a gasoline station in Sebring, Florida. Their dad, regional real estate mogul Grafton Geddes Dowling Senior told a *Sebring White Way* newspaper reporter, "After I purchased the W.C. Waldron property on Dinner Lake last March (1925) it was agreed that the seller could remove the little store and filling station on the property when possession was given in July. But after coming to Sebring for the summer the boys conceived the idea of making some money before school time and requested that the store and filling station remain... and they be given sufficient capital in stock to commence business." A week after they opened, the paper reported they were "doing well. The style of the firm is 'Dowling Brothers.' A South Carolina negro who has been in the employ of their father for a number of years is assisting these boys in dispensing gasoline and oils. His name is Thomas Carter and his employers have taught him to be polite and to be on the job early and late. G.G. and Joab state that their first earnings will be invested in two row boats and rods and reels for their use on Dinner Lake." A month later, the *Palm Beach Post* did a follow-

up story with more details. The boys' father had bought the property for a new home that would be built "on the beautiful lake front property" in the fall after the station is removed. G.G. and Joab are reportedly "dreading the time when the new home will replace their first business venture." By the middle of August, the *Post* reported they'd made enough to buy a boat and fishing tackle. Unfortunately, Sunday school, dinner, an afternoon drive and supper keeps them from both fishing and selling gas on the Sabbath - the day the previous filling station owner said he made his most money. According to the paper, G.G. hand lettered signs that said they operated on a cash only basis - "Please do not ask for credit, it embarrassess[sic] us to refuse you." Joab said they needed adult help with the spelling of refuse and embarrass. The reporter also included Tom Carter's assessment of the business. "Yas'm. Dey's good business men," said Carter with an expansive smile, as he tightened the radiator cap. "effen dey jes let dat credick business along, dey's gwine to mek a lot o' money."

It's not yet known whether the boys' father, G.G. Senior met or became aware of Henry N. Teague at this time in the Florida real estate market. Teague was plying the seacoast between Miami's Biscayne Bay and Palm Beach in 1925 while G.G. Dowling Senior had purchased property in central Florida.

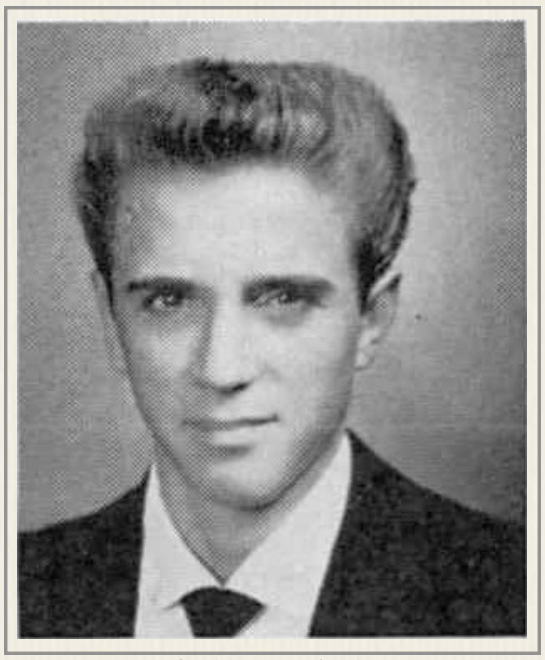
The Dowling family was back in Greenwood, South Carolina by March 1934, and G.G. Jr. was at the University of South Carolina organizing a ball to celebrate the anniversary of the establishment of the local chapter of his fraternity - Sigma Nu on May 11.

Grafton Geddes "G.G." Dowling remained at the University of South Carolina, Columbia in order to earn three degrees - the last a Juris Doctor. He began practicing law in Beaufort in 1938 and did so for the next 50 years. He was a veteran of the U.S. Army and served in World War II. He served for five years in the 1970s as Presidential Delegate to the United Nations Conference in Geneva, Switzerland on Rules of Warfare. He was elected to the South Carolina House of Representatives and served 40 years on the State Fair Association. He helped found the Bank of Beaufort in 1958 and served as its President and Chairman. He died August 13, 2001 in Beaufort, South Carolina at age 85.

Nephew Geddes

"My mother (my uncle's sister - Louise Dowling Anderson) died in February 1958 when I was 18 years old," writes Geddes Dowling Anderson in May 2016. "Uncle G. thought it would be an uplifting interlude if I went to N.H. and work with Mr. Teague's cog railroad. In early June 1958, I was on a train to New York City and then on to New Hampshire. I remember being picked up in a large green Chevrolet van *(known as "the Cog wagon")* from the cog. I believe they picked me up in Littleton."

"When I arrived at what was called the 'Base Station' my first memory was going to see Mr. Teague who had invited me to his



Geddes D. Anderson (1958)

residence *(the Hut)*... He was very cordial... and wanted to know all about his old friend. His wife (Ellen) was also quite nice. I remember they had several children who were quite active."

"There were other small residences in the... area which housed adult employees. The student workers lived in a wood frame dormitory which as I recollect was two stories high," recalls Anderson. "I can still remember the names of some of my friends who were co-workers; Dave Usher, Bob Campbell, Griff Harris, Linc (Handford) and Hob Scott. Another S.C. native who worked with us was Sammy Seastrunk from Columbia, S.C. In the summer of '59 I invited a friend to go with me. His name was Rhett Sanders. He still lives here in Greenwood (S.C.) and we often recall the fun we had at Mt. Washington." The pair and their "fabulous" summer jobs made the local paper that year. The *Greenwood Index-Journal* reported "Rhett Sanders and Gettys[sic] Anderson are 'railroading' this summer. (T)he two college students serve as guides telling of the weather, the snow and of the 50-mile an hour wind. Going down there is not much time for conversation, being brakemen takes up every minute. They can sing with guests when they return, 'I've been working on the railroad ---"

Anderson says "Jitney" was the most colorful of the train engineers. "I can still remember him sitting in the steam engine... dressed with similar attire that the legendary "Casey Jones" of the Cannonball Express probably wore. Just a few months ago my friend Rhett and I were reminiscing about the summer of '59 and he inquired about Jitney as well as the others who were co-workers."

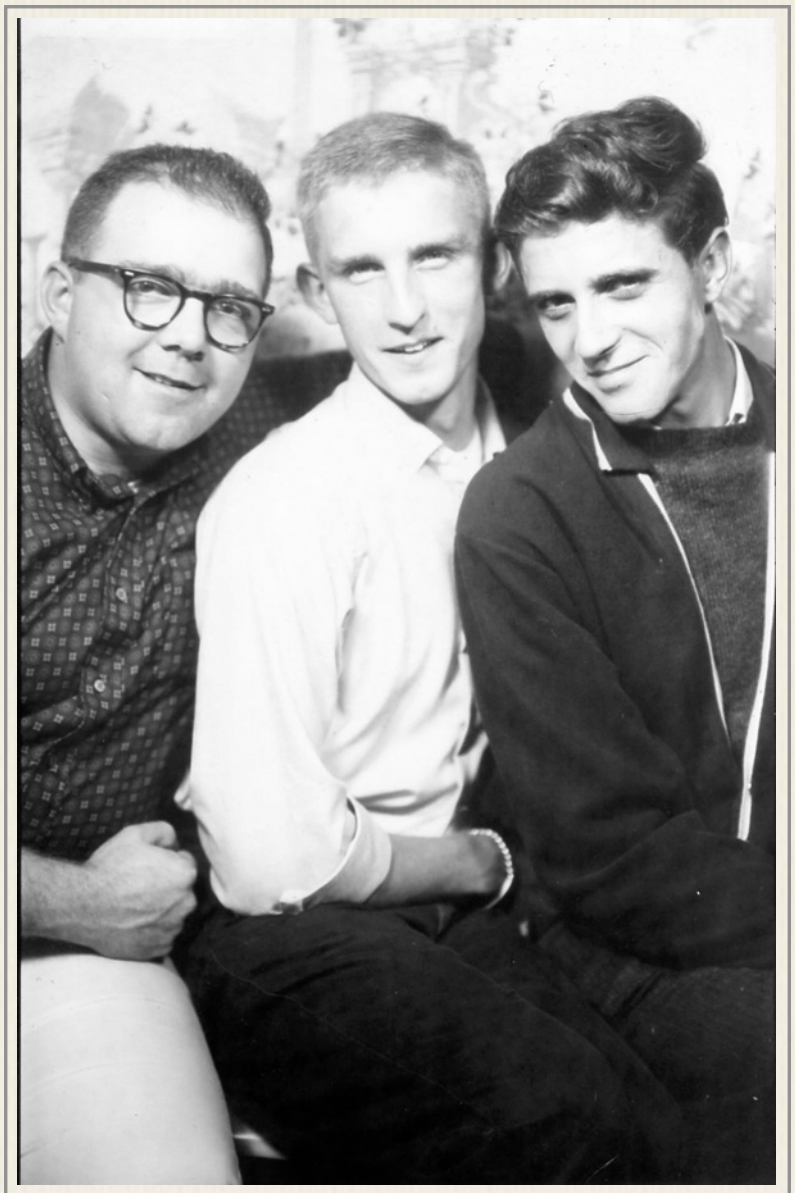
In 1958, Anderson says "As brakemen, we dressed in all denim, red bandana around the neck and denim cap with a bill (baseball type). We also had to take a heavy winter jacket because when you reached beyond the timberline of Mt. Washington the temperature dropped dramatically... it could be 75-80 degrees at the Base Station and 30-degrees at the Summit. Each (train) had a crew of 3; the engineer, fireman and brakeman. All three had to be astute, able and coordinated for the excursion to be safe. In looking back, I often wonder why there weren't more problems and 'white knuckle' moments."

"The first stop on the trip up was at the Waumbek Water Tank at which we would take on a supply of water... I would make my spiel and thereby explain the history of the Cog, surrounding terrain and other points of interest, elevation levels and other interesting aspects of topography in the region," remembers Anderson. "After listening to me with my Southern drawl, I was constantly asked how did I know so much about New England history being, obviously, from the South. The truth was that Mr. Teague had all the brakemen memorize the spiel but the passengers enjoyed teasing me about my knowledge of the area and my accent. In fact, all of the Cog employees called me 'Reb' the entire summer. They would goad me into giving a true 'Rebel Yell'. They thought that we Southerners did that all the time. So anytime, they wanted to hear one I would oblige by giving a simple loud and long shout. If the truth be known, we hardly ever did this in the South - it was simply a war cry given by Confederate soldiers usually before a battle. We had great fun all summer."

Ch. 9 - Engine No. 3

Anderson's memories of the track phone - "a rather large telephone apparatus" and the switch are vivid - "we would switch about seven rails so that our unit could move to the side and allow the down coming train to pass. These rail handles were extremely heavy but would have to be pulled up to switch the tracks and sometimes needed to be done quickly if the approaching train was near."

The memories of the rest of the trip are equally strong, "(T)he terrain would begin to level off somewhat as we neared the summit and the hotel, where one could get warm and enjoy a couple of hot dogs. The hotel, as I remember, was somewhat plain and certainly not the 'Ritz.' After a brief interlude at the summit, the brakeman was about to start earning his pay-check. Let me insert at this point that we went through several days of training with experienced brakeman before we were allowed to go 'solo.' The tense and rather dangerous job was braking the passenger car as it cruised down the mountain behind the steam engine. The braking apparatus was located at the rear of the car and... there was wheel-like handle which had a ratchet that would tighten and lock the brake but you had to constantly adjust the tightness as you coasted down the mountain. Keep in mind there were places on the track which were less steep than other parts. All of the braking was done on a porch on the back of the car and close to the front of the engine. When we arrived at the Base Station you could hear a collective sigh of relief from the passengers on many occasions as they disembarked from the car."



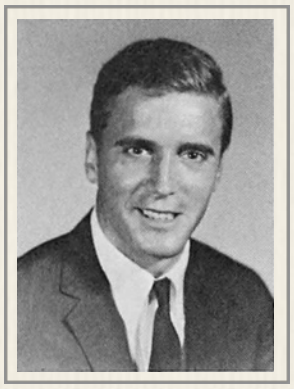
Fair Coggers: (L-R) Griff Harris, "Hob" Scott & Geddes D. Anderson; probably taken at county fair coin operated photo machine (1958)
- Anderson Family Collection

Beyond the job, there are other 58-year old Cog memories from this Southern gentleman. "The cooks in the kitchen would often offer to cook 'grits' for us Southern boys which we would take them up on," writes Anderson. "Good memories of the summer stock plays and county fair when we would go as a group during the evening."

It was on one of these down mountain excursions that a debt was incurred that Anderson says remains unpaid. "If Griff Harris is still on this side of the shore he still 'owes me," Anderson writes. "I took the blame for being the driver of his new 1958 Chevrolet Bel Air when we were out one night. (W)e had been to the county fair and were returning to the Base Station when he was speeding through the mountain road and lost control. The car was heavily damaged, but we were all unhurt. I believe Hob Scott was also in the car. Griff told me that if I would take the blame for driving, then his father would probably get him another car. I de-

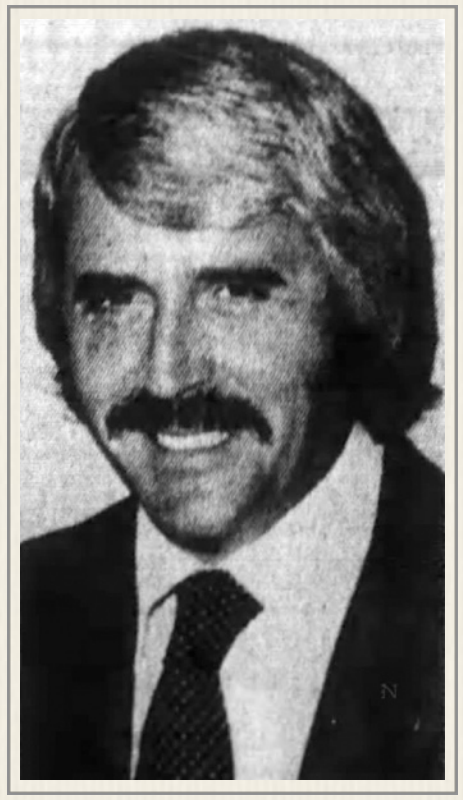
cided to help him out. If I am not mistaken, the photograph I have enclosed *(previous page)* was taken at the county fair the night that the accident happened. No other car was involved. By the way, cameras were not popular when we were youthful. Looking back, I deeply regret not having the foresight to take photographs. I believe that photo is the only one I had from my two summers at Mt. Washington."

Financial ledgers from 1958 have called into question whether "Hob" Scott was the third person in the car the night of the crash. On July 25th the books record the Railway Corporation paid Whitefield Court $110 on behalf of three Coggers - train crew Griff Harris ($75) and Geddes Anderson ($25), and track crew worker, A. J. Blake ($10). Blake could be the character known only as "Little Albert," who drunkenly gave a police officer a hard time at an automobile accident scene until the officer told "Little Albert" to go up and sit on the bank and keep quiet because he was "nothing but a common drunk." Little Albert went and sat but had the last word by saying, "I may be a drunk, but I'm not common!" Jitney would make brief mention of the incident at the Cog party by mentioning "them boys in Whitefield jail" outlining the Cog family that Col. Teague took care of during the summer. While Anderson remembers the accident with Griff's car clearly in late 2016, he could not confirm whether Blake was the third man at the crash or was indeed, "Little Albert."



Anderson says after he left the Cog he went back to college in South Carolina - then dropped out and "went to Hollywood and was under contract at Warner Brothers in the early 1960's. After being in "tinsel town" for about two years, I came back to South Carolina Law School. I have been a lawyer since 1972 with a "nickel-dime" type law practice." That first practice in his home town was located at the 514 Textile Building, and by then he was married to a local Greenwood girl, the former Linda Witherspoon and they had one child, Geddes Jr.

Four years later, Anderson *(right)* was elected to the public defender post. He was one of four candidates in November 1976 seeking to replace T. L. (Tommy) Hughston Jr. who had been elected to the South Carolina House of Representatives. Anderson resigned the public defender's post for Greenville and Abeville counties on July 1, 1979 to concentrate on his private practice. A year later, Geddes Anderson was named assistant solicitor for the Eighth Judicial Circuit of the state working with Solicitor William T. Jones.



But after only a few months as an assistant prosecutor for Greenwood, Abbeville, Laurens and Newberry Counties, Geddes resigned. He was back in his old public defender's job January 1, 1981 following his successor's resignation in mid-December. The change was announced by Tommy Hughston, who was now on the board of the local public defender corporation.

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First born son Geddes D. Anderson Jr. eventually followed his father into the legal profession. He first earned a business degree at the University of Florida and worked for Merrill Lynch before heading to law school. He spent time as an assistant state's attorney and is now a trial, appellate and arbitration lawyer *(left)* in Jacksonville, Florida.

Geddes Sr. had another son with his second wife, Susan Long Anderson in 1988. 18-year old Drake Dowling Anderson died in July 2007 from injuries sustained in an automobile accident. He had just graduated from Greenwood High and was a member of the Eagles State Championship football team. Drake Anderson was planning on studying criminal justice in the fall at Tri County Technical College.



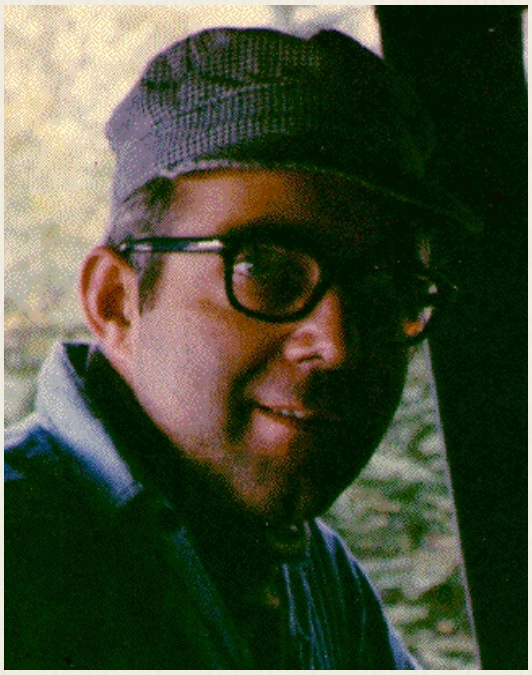
Contacted by the *Cog Clatter* publisher in 2016 for this book, Geddes D. Anderson Sr. said, "I have a lot of fond memories those two wonderful summers in the mountains of New Hampshire - the Courier & Ives scenic beauty of Mt. Washington and the New Hampshire mountains. I'm 76 years old, but I'm still hanging in there." Geddes hung in there until March 24, 2018 when he died at the age of 78. See obituary in his *Vol. 2 Roster* entry.



No. 4 - *Summit*



No. 4 - *Summit*



Griff Harris in the cab
- Kent Family Collection

GRIFF HARRIS - Engineer (1966)

Griff is one of the old turners of valves and a New Hampshire school teacher from the land of Lincoln. He is one of the few from Lincoln who doesn't measure mileage by beers. *(Cog Clatter v1n2 – July 13th, 1966)*

MORRIS ROOT – Engineer (1967)

Morris, from Essex Junction, Vermont, is attending UVM and has plans or being an engineer, civil that is. *(Cog Clatter v2n4 – August 17th, 1967)*

To the young *Cog Clatter* editor in mid-August 1967 it appeared Morris had taken over the No. 4 *Summit* after stints braking and firing on the No. 6 *Great Gulf*. But in 2016, Root corrected the record. "I appreciate you giving me credit for being THE engineer

on No. 4 in 1967," writes Root, "but my 'job' summer '67 was as spare – roving engineer. Summer '67 went like this for me – May: go to the Cog, work on opening and track repairs, etc.; June to mid-July: US Army training at Ft. Devens in Massachusetts; mid-July and August – step in as engineer on as needed basis. I ran every engine on the mountain before the summer was over. Amazingly both Gordon Chase (No. 1) and Frank Thompson (No. 9) allowed me to run their engines, a rare opportunity."



Morris Root (2003)
- Lewis Family Collection

In 2015 on Facebook, Root recalled how he qualified as brakeman with engineer Gordon Chase riding the work car ahead of the No. 1 - *Mt Washington*. "Yup, braking lesson number one on the work train, Gordon Chase says, 'I point up, gimme less brake. I point down, gimme more.' Qualified in an instant!"

1967 was Root's last full summer at the Cog. Morris graduated from the University of Vermont in 1968 with a BS in Civil Engineering. That summer he married Dianne Ainsworth from Bob Kent's hometown of Rochester, Vermont, and three weeks after the nuptials wrote to Jitney in early September. "This summer has been rather busy – (working for DuBois & King)," he wrote. "I even condescended to work two week-ends at the Cog and that was enough to keep my curiosity satisfied. 'Bashful Bud' (Nye) & the rest were having a pretty good time of it, too – so I didn't feel too far 'out of it."

That fall it was off to the University of Maryland at College Park - graduating with a Master's Degree in Water Resource Planning in 1970. Then it was active duty in the military. "I (was) on active duty from July 1970 to March 1973 with an overseas 'tour' in the Republic of Korea 1971 – 1972, front lines of the Cold War (classified missions for this and that…sssshhhh!!!!)."



Engineer Griff Harris in the cab with fireman Joe McQuaid and brakeman Owen Jansson in front of the No. 4
- Anne Koop Collection

The Vietnam era veteran joined the firm Dufresne-Henry in March 1973, and worked for the company for more than 18 years before starting his own company. On LinkedIn, he describes Root Engineering as an engineering practice "specializing in the design of new and repair of old, including historic dams. It provides all inclusive services of coordinating environmental, structural permits, and historic protection review as necessary. 39 years experience. Licensed in five states, currently active in Massachusetts, and Vermont."

Dianne Root writing in the family's 2015 Christmas newsletter said her husband's "major accomplishment for 2015 was completion of a timber crib dam replacement for a manufacturing company in north central Massachusetts. The project was a post Tropical Storm Irene (August, 2011!) repair that became entangled with environmental regulations when the dam owner did not make immediate repairs." And it was clear from the document, Dianne and Morris are proud grandparents, "Our granddaughter, Adriana, turned 12 in October! Where did the years go? We are delighted she is playing cello and saxophone in her school's band and orchestra in St. Albans, VT. Our grandsons, Levi and Wyatt (4 ½ and 2 ½) are very active boys whose antics always amuse us. They live in Wilmington, N.Y., three hours away."

NORMAN KOOP - Fireman (1966)

Norm is attending Juniata College where he is a history major on his way to being a lawyer - Anne that's not all - he's soon to be qualified as an engineer *(Cog Clatter v1n3 – July 20th, 1966)*

GORDON CHAMPION – Fireman (1967)

Gordon, a two year man, enjoys the bunker, hard-firing engines, and French. He will attend UNH this fall. *(Cog Clatter v2n4 – August 17th, 1967)*

TOM MORRISSEY – Brakeman (1967)

Tom, while a spare brakeman, has been painting lately but is ready anytime to hop on a train. A first year man at the Cog, Tom says he enjoys it very much. *(Cog Clatter v2n4 – August 17th, 1967*



Engineer Griff Harris, fireman, Brakeman Norm Koop (1964)
- Anne Koop Collection

No. 6 - *Great Gulf*



Chester friends visit the Mountain: (L-R) Eleanor Westine, Mrs. Jitney, Bill Westine & his dad, Buss and Jitney with Miss Jitney, Roger & Jim Westine and Jitney Jr. pose with the No. 6 at the Summit
- Lewis Family Collection

No. 6 - *Great Gulf*

1967 - *"Home of the Fighting Irish"* - McNye, McQuaid, & McLaughlin

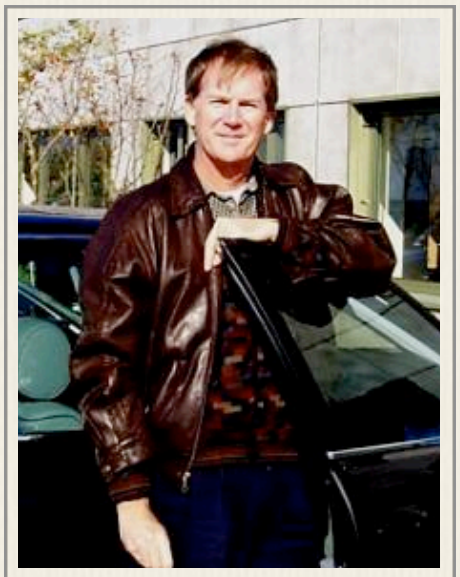


GLENN "Bud" NYE – Engineer

Bud is one of the early bloomers in engineering; but is very efficient and proud to run the "Mighty Six."

A few years hence, Bud will be Dr. Nye, if all goes according to schedule and Bud usually is on schedule. *(Cog Clatter v1n2 – July 13th, 1966)*

Bud is attending Chapel Hill and is from Philadelphia. In a few years Bud will be Dr. Nye and Frankly we think



Dr. Nye, M.D. in 1999
- Lewis Family Collection

he will. *(Cog Clatter v2n4 – August 17th, 1967)*

Glenn Carlyle "Bud" Nye Junior was born in Conway, South Carolina on June 29, 1946 - the son of Virginia Blanche (Stone) and Col. Glenn Carlyle Nye. Bud's mom died ten months after his birth in Philadelphia at the age of 29.



Col. Glenn Nye, a commanding officer of the Marauder group (left) uses the sand table method to point out important targets to be hit during a low-level bombing attack. (13th September 1943)
- Photo by Samuel Goldstein/Keystone Features/Getty Images

Col. Nye was the commander of the 332nd Bomb Group based at Andrews Field in Essex, England starting in June of 1943 just four months after his first child, Virginia Cassandra was born. Flying twin engine B-26 Marauders, the 332nd made low-level bombing runs against marshaling yards, bridges, road junctions and airfields in Europe during the run up to D-Day. The group became known as "Nye's Annihilators." Military histories report the 332nd BG successfully destroyed many V1 buzz bomb launching sites. 30 of the group's planes were lost due to flak.

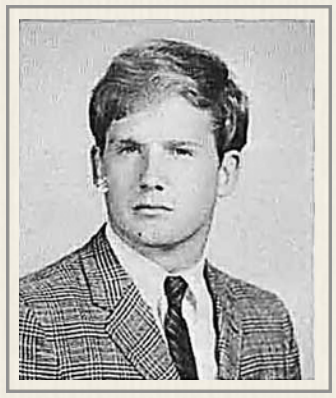
After the war, Nye spent three years at US Air Force Headquarters at the Pentagon working on plans for NATO. Still a Colonel, Nye became XO of the 17th Bombardment Wing (Light) in the summer of 1951 in Illinois where the widowed pilot met his second wife, Marie J. Templeton. Nye was named wing's commander in June 1952 in Korea.



Wing Commander Colonel Glenn C. Nye Missing in Action

On October 7th, Col. Nye was leading six-plane daylight strike on a Communist supply area in the central part of North Korea. Pilot Tom Semans was "flying number six on the right of the second echelon of three ships each, and saw the flak walk right by my left side and into (Nye's left) engine." The *Stars & Stripes* reported Nye's A-26 Invader "spiraled out of the formation just before bombs were dropped. The A-26 exploded on impact behind some hills. No parachutes were observed and no friendly or enemy activity in the area was seen by the other crews, who descended to an altitude of 75 feet over the scene of the crash." Col. Nye and three crewmen were listed as missing in action. Bud was six. His sister, Virginia was nine. His step-sister, Laura Templeton was a student at the Univer-

sity of Illinois. Bud and Virginia went to live with Dr. Robert Bruce Nye and his wife, Alice. Bruce Nye was Bud's father's older brother. Alice was Bud's mother's older sister.



Bud's yearbook photo - UNC Yakety Yak 1968

Col. Nye's namesake came to the Cog Railway in 1961 as a student at the Haverford School having just finished the IV Form (10th grade). He would attend the University of North Carolina at Chapel Hill. He would graduate in 1968 and continue to run trains in the summer as his medical training began.

"It's hard to believe that I spent eight summers at the Cog. My last year there (after my first year of medical school) Ellen gave me a cabin so I could keep up with my studies," recalls Dr. Nye. "I think my cabin was the third from the top, several above the girl's dorm. I wasn't entirely alone that summer. Bill O'Dell gave me a large rabbit who I named Sebastian. I imbibed a little scotch on the rocks in the evenings and had to share. (Sebastian) took several licks then hit the floor. His only bad habit was he would nibble my boot tops if I failed to get up early enough in the morning. I couldn't take him home at the end of the summer so Bill look him to Harvard Square and found him a new home.



In August 1970, Bud married Claudia Jordan in Gloucester County, Virginia. Claudia worked at the Cog in 1968 and 1969. The couple would have three children during their dozen years together - Taylor, Glenn, and Kent.



His oldest son, Glenn C. Nye III *(right)* was a diplomat for the State Department and served in Congress - representing Virginia's Second Congressional District (Virginia Beach and the Eastern Shore and parts of Norfolk and Hampton) in the US House of Representatives from 2009 – 2011

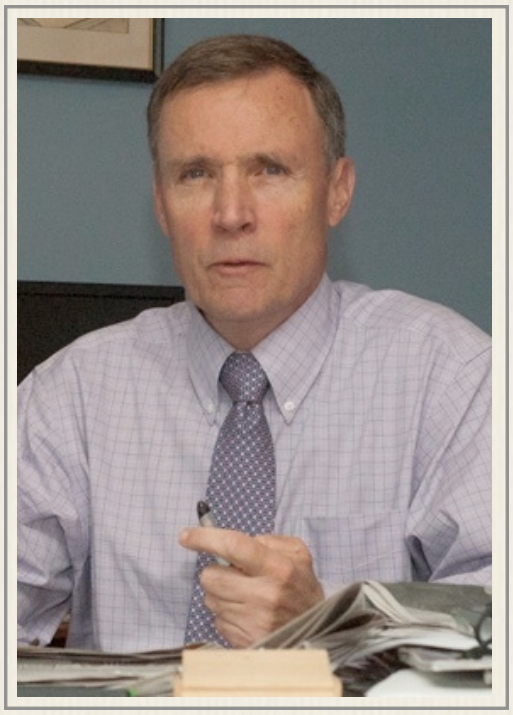
Bud graduated in 1972 from the medical college at Thomas Jefferson University in Philadelphia. His residency was in internal medicine at Lankenau Hospital in Philadelphia. He had a fellowship in cardiology at the University of Kentucky Hospital in Lexington. He married Louisa Donelle Simpson Oldfield in Norfolk, Virginia in1983.



The couple moved west where the retired cardiologist now spends time guiding folks on the snow at Whitefish Mountain Resort in the winter and on the trails in Glacier National Park in the

summer. "This is the view *(previous page)* from our front porch this evening (January 5, 2016). This mountain reminds me of Mt. Washington and this is one of the reasons I moved here, plus exceptional skiing. We were ranked the 9th best in North America by Ski magazine this year." In the spring of 2018, the Nyes moved east to Virginia to be closer to family.

JOE McQUAID – Fireman (1967)



Joe is a liberal conservative from Manchester and is attending UNH. Joe says it's quite Claire that he will go into Journalism. *(Cog Clatter v2n4 – August 17th, 1967)*

Joseph Woodbury "Joe" McQuaid *(right)* is the third generation of his family to produce news content for the people of New England. Joe's grandfather, Elias McQuaid started his newspaper career at age 17 with the *Manchester (N.H.) Mirror* in 1890 before moving to the *Boston Traveler* in 1905 and becoming "widely known in New England and New York newspaper circles" before dying suddenly in 1930.

Four of Elias McQuaid's sons became journalists and one was Joe's dad, Bernard "B.J." McQuaid who founded the *New Hampshire Sunday News*. Legendary *Manchester Union Leader* publisher William Loeb hired the veteran war correspondent and bought his *Sunday News* in 1948.

Joe started working at the *Union Leader* for his dad as a news office boy at age 15 in 1964. A year later, he came to the Cog Railway. Joe's currently writing a manuscript about his four summers at the Mountain - a coming of age tale and tribute to Col. Teague. He's doing that in-between negotiating forum appearances with 2015 presidential primary candidates as publisher of William Loeb's newspaper, the *Union Leader.* Joe now sits behind the desk of his dad's old boss, War Secretary Frank Knox, having served as a sports reporter, editor, managing editor, editor-in-chief and general manager at the *Union Leader* before becoming the newspaper's publisher in 1999. Joe's daughter, Katherine became the fourth straight generation of reporting McQuade's. She is managing director of the paper's NewHampshire.com website, while her brother Brendan joined the staff after a stint with C-SPAN in Washington, D.C. In June 2017, Joe published his memoir of his time at the railway - *Cog Days*.



JIM McLAUGHLIN – Brakeman (1967)

Jim is a Manchesterite also and will attend the University of Florida where he will become a Floridian Indian. He says he may go into Journalism. *(Cog Clatter v2n4 – August 17th, 1967)*



1966 Crew

BUD NYE – Engineer
MORRIS ROOT – Fireman
TIM BEMIS - Brakeman

MORRIS ROOT – Fireman (1966)

Morris is a student at the University of Vermont where he is working toward his degree in Civil Engineering, so it seems he will turn out to be a civil Indian! *(Cog Clatter v1n3 – July 20th, 1966)*

"I preferred (to wear) a sweat band ala Willie Nelson to a hat when firing," wrote Root in May 2019 after the crew photo (right) surfaced after a being lost amongst Root family archives during a move. "After a couple trips coal dust darkened my complexion and looked 'Indian-ish.' Leading to the infamous crew nickname, Indian. One day a goofer asked Bud an off the wall question to which he responded, "I don't know ask my Indian."

TIM BEMIS - Fireman (1966)

Tim is attending Grove City College as a Political Science major. Tim has received word that he is eligible to 'become a USAF pilot -- and as a spare fireman you may see him winging from one engine to another — or waitress. *(Cog Clatter v1n4 – July 27th, 1966)*

Tim was born in November 1946 - the son of Dorothy Wagner Bemis and the late, Norman Stearns Bemis. He got his BA from Grove City and went on to receive a MBA from Temple University. Tim continued to work at the Cog through his college years and became an engineer. He married Jill Atkins. Railroading apparently agreed with Tim as he had a long career in sales for Conrail before retiring in 2002. Timothy Gordon Bemis died at home in Neavitt, MD on August 31, 2008.



Tim Bemis
(Grove City College - 1967)

1965 Crew

JITNEY – Engineer
BUD NYE – Fireman
MORRIS ROOT - Brakeman



Morris Root
(UVM - 1967)

Morris Root *(right)* came to the No. 6 after spending the summer of 1964 being "held hostage in the gift shop selling clay squirrels to desperate tourists" with "Gladys Adams, who was my 'counter partner." He spent that summer taking pictures of trains, and the next year did what he could to get aboard one of the locomotives.

"Most of my 'exciting' adventures were working with opening crew mid-May through June thawing Summit House heat system and doing other creative plumbing on the summit as well as in the cabins at the Base. (I) experienced a few educational sermons on the mountain by Father Goodie (Larry Gooden) - Rule of thumb working with Father was NEVER stand downwind as he loved to chew tobacco. Joined in the mass mobilization when there was major track fire that burned 50 feet or so of track at Waumbek circa 1964."

Jitney Jr.'s most exciting (in a bad way) Cog adventure occurred with Brakeman Root. More than fifty years later, Jitney Jr. distinctly remembers "helping" Morris throw the Base switch one evening as a twelve-year old when the Six was heading towards her overnight position. "I threw the two flags – unfortunately (Morris) had already thrown one of them and I put it in the wrong position." Luckily, Root noticed as the Six started backing up and got the flag thrown the right way before any damage or derailment occurred.

Jitney Jr. still has a deep emotional response of mortification (Post-Traumatic Switch Disorder?) about making that mistake. "Over the years it has kept me up at night," says the former Cog kid, "when (the incident) has popped into my head unbidden. But I figure it does demonstrate what can happen when two people throw a switch instead of just one."

Root says his "most embarrassing classic" occurred when he was braking for Gordon Chase. "I could not close the coal chute on the bunker because someone had thrown in a plank that wedged in the opening. (The) result was a bunker's worth of coal on the track with Mr. Chase figuring the tender would run through the coal no problem. BIG MISTAKE!!! Think it led to my 2nd or 3rd lesson in jacking and blocking for getting the wheeled objects back on the appointed rails. My early days on the trains were with the famous Gordon Chase …too many stories, but as Jit would say, 'His initials are…" *(Editor's note: a mild euphemism of the era was "Good Christ!")*



1964 Crew: *(L-R) Brakeman John Hanna, engineer Jitney, and fireman Bud Nye - by Elvira Murdock - Lewis Family Collection*

1964 Crew

JITNEY – Engineer
BUD NYE – Fireman
JOHN HANNA - Brakeman

John Hanna was going to Colgate University in Hamilton, New York when he came north to work at Mount Washington for the summer. Unfortunately, time has helped cover his tracks since leaving the Cog except for a letter that fall.

8 Nov 1964

Dear Jit, Barbara, Tim, and Cindy,

I am sure that our fireman has written you at least three times since September so here I am!

Candy told me she sent you a postcard when she got home from the Cog. She has been down to school here twice and I have been up to Cornell once, a slight change from seeing her everyday.

Has Taffy (Note: Jitney Jr.'s former baby-sitter) *still got Bud in her eye? I think I remember her best when she watched the track for me that day! Especially when dirty old Archie MacDonald tossed her a piece of coal. What a dirty old man! And (Johnny) Morgan's eyes! God, what a dirty young man! Be sure to say hello for me. (Hee hee)*

Do you think you are going back to the molehill next summer? I am not. While we had some great times there, it started rubbing my fur a bit the wrong way. AST didn't help any with his damned Labor Day issue. Candy

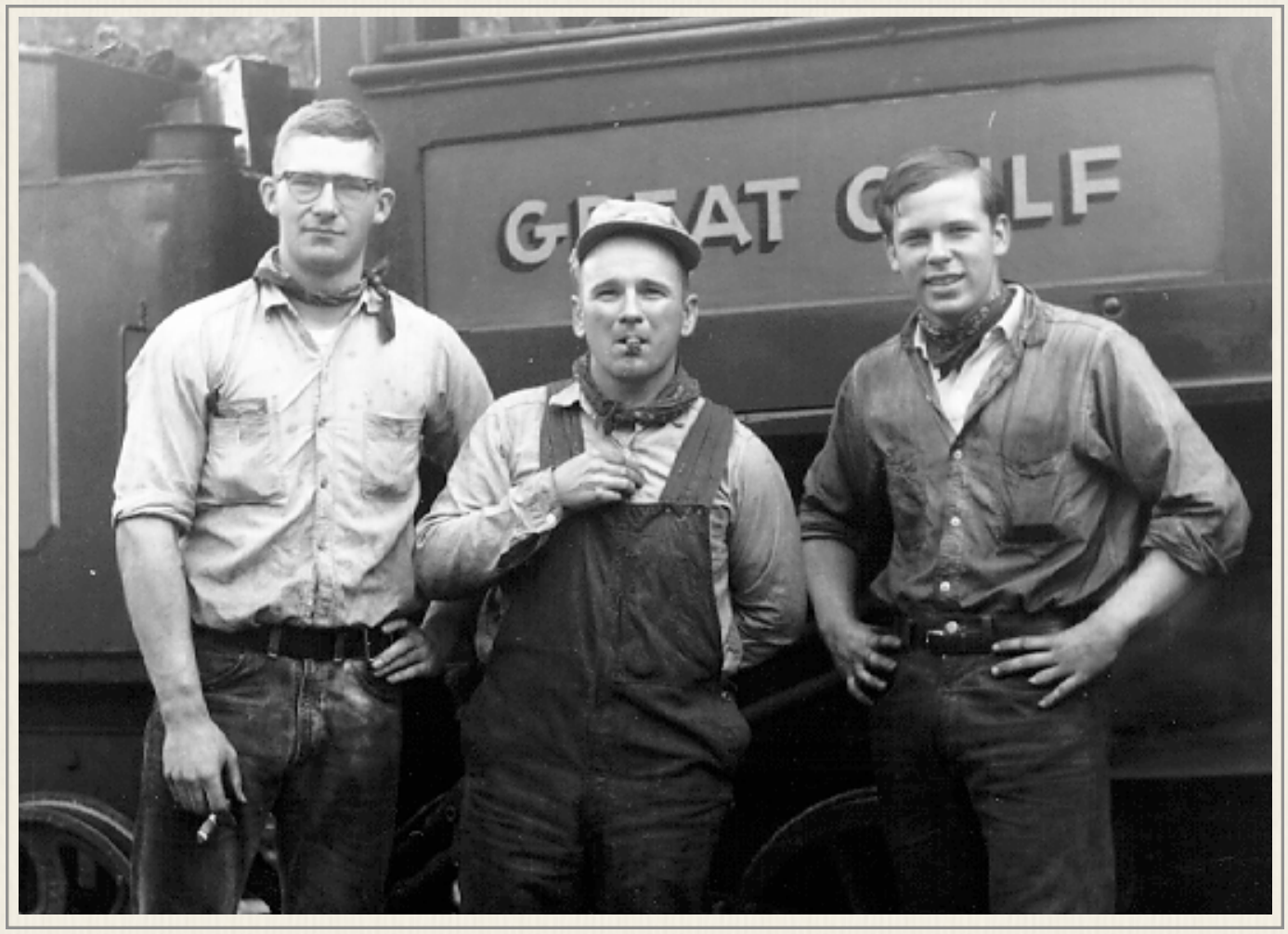
doesn't think she'll be going back either. I got a letter from Fanny. She wants to know if I can recommend any colleges around here that she might like to go. I don't think I have any suggestions!

Your trusty brakeman, John

The "damned Labor Day issue" involved John asking the Colonel for permission to leave early before the holiday. The Colonel said no. Jitney still remembers the young brakeman returning to the No. 6 after the meeting where the request was made. "Remember the adage where life is sometimes a shit sandwich?" asked Hanna. Jit nodded in the affirmative. John quietly said, "Well, I just got a bite."

"John Hanna was a nice kid and wanted to fire and run," remembers David Woodbury. "But Arthur wouldn't let him because he had some medical issue which scared Arthur off. (John) was disappointed and didn't stay around too long. I don't know how Arthur knew (about the condition) because there were no physicals."

We think John Hanna became a journalist, but we were unable to track down the rest of his story for this book. Any assistance would be greatly appreciated (2015). Turns out our initial thoughts on John's career path were wrong. A 2019 online search turned up a "John Hanna" reference on the Pittsburg (PA) Center for Arts & Media website about a 2015 printmaking class at the facility. That led to the artist's LinkedIn page which told of his degree from Colgate University. The Pitttsburg Center's CEO passed along John's obituary, and the Merrick Art Gallery gave Jitney Jr, his family's contact information. The rest of John's story is in his Roster entry.



1963 Crew: *(L-R) Fireman Dave Woodbury, engineer Jitney, and brakeman Bob Bradley*
- by Elvira Murdock - Lewis Family Collection

Ch. 9 - Engine No. 6

1963 Crew

JITNEY – Engineer
DAVE WOODBURY – Fireman
BOB BRADLEY - Brakeman

DAVID WOODBURY - Fireman (1963)

As Jitney took artistic license with Dave's character in *Chapter 5 - A Day's Work* in order to give readers a composite impression of a train crew's work day, Jitney Jr. figured it was appropriate to let the former state representative from New Boston, New Hampshire set the record straight. "Since I, or at least my name in the composite fireman character, figures in the narrative," writes Dave in early May 2017, "I thought I would flesh out my bio. As noted, I began to study law at the University of Michigan in the fall of 1966, fresh off the Cog. I graduated in 1969, passed the N.H. Bar that summer and engaged in a legal career here in N.H. with a brief incursion into Massachusetts. I got through it with only a few bumps and thumps (until) 2012 when I retired. I have served as Selectman, School District Moderator and State Representative all of which I have enjoyed. Candy and I live in the same house here in New Boston that we bought in 1971 and where we raised three wonderful daughters and now have six grandchildren. I went up to the Cog reunion in 1999 and was thrilled to see Jit, Barb and the Kents. Also attended the 2014 reunion as well as some less organized events at Jit's in Danville. I've seen Doug and Missy Taylor a few times over the years and my close neighbor Jamie Stapleton ran on the Cog in the '80s."

Bob Bradley - Brakeman (1963)

Robert H. Bradley III was one of three children born to Dr. Robert H. and Patricia Brackenridge (Pray) Bradley. He was bracketed by an older sister, Virginia and younger brother, Peter. "My dad was a... urologist *(chief of urology at Chestnut Hill Hospital)*," says Rob at the start of April 2017. "I grew up in Chestnut Hill, not very far from the Teagues, so that's the reason I got the job."



Robert H. Bradley III
1959 Chestnut Hill Academy

Bradley had graduated from Deerfield Academy in 1962 where he had played hockey and was the high scorer his senior year. He continued to follow his father's educational path and went to Williams College where he played varsity hockey all four years and was the team's co-captain. During his freshman year, Rob started looking for an "exciting" job. "I'd always worked summers since I was 13 or 14, so I was looking for an exciting job and I ended up with this crazy guy named Jitney" thanks in part to his father. "My dad loved railroads... and somehow he got to know the Colonel" through his practice.

Young Bob Bradley stayed at the Boys Dorm. "It was like camp, pretty sparse - you had a bed and some place to throw your clothes and that was about it," he remembers. "You were basically working from seven to seven." He hung out that summer with a Teague relative, Johnny Morgan. "We went down to Orange, Massachusetts and jumped out of an airplane. I figured after one jump -



No. 6 ascending past Half Way House - Brakeman Bradley on the front platform (1963) - Photo by Jitney Jr. - Lewis Family Collection.

'This is terrifying!' I don't need this kind of adrenaline to have good time. Morgan loved it, so he ended up being a big skydiver. I think he skydived a hundred times. He was hooked." Jitney recalled when Morgan "went down there the first time he came home with a chute. He bought one." Bradley says Morgan "was a guy who always believed in pushing things to the extreme."

Bradley pushed things closer to the ground. "I remember at one point *(Johnny and)* I wanted to go over *(to our)* family place in Maine, and no way to get there and *(Jitney)* you lent us your car. Typical eighteen year olds... coming back Sunday night we realized we had no gas left and there weren't any gas stations open. So I went over to my uncle's house and with the connivance of my cousin siphoned a bunch of gas out of his car. My uncle heard us and came out and dressed me down worse than I've ever been dressed down. Then we came back that Sunday night in Jitney's car and we were looking at the gas gauge the whole way thinking we were going to run out of gas."

Bradley's memories of other employees and the daily Cog work have become vague. "You spent all day on the mountain, so a lot of the other employees you didn't see very much," says Bradley adding with a chuckle. "I was, of course, the best brakeman on the mountain." The one incident that stands out involves the Mountain's fickle atmosphere. "The weather changed so quickly and we were coming down the mountain - four or five o'clock - and it was all of sudden enveloped in clouds and we were in the middle of a real thunderstorm and things we worried about in those days was a lightning strike," recalls Rob. "I remember us being stopped at some point - one of us being on the (track) phone with clouds around and a lightning strike nearby and one of us sort of got blown off the track because the electricity came up the track - came up the wire - nobody was hurt, but it's a distant memory." When Dave Woodbury had to leave early for school that summer, Bob Bradley moved into the cab and spent his final ten days or two weeks of his only summer at the Cog as Jit's fireman. "It is quite a chapter in our lives and it is a remarkable thing," says Bradley.

Back at Williams College after the Cog, Bradley is one of twenty juniors who are "tapped" for induction into the college's sole honorary society, Gargoyle on May 6, 1965. With the entire junior class seated atop a low fence stretching the length of the science quadrangle, the *North Adams Transcript* reports, "new members are escorted individually by current Gargoyles in academic garb to a circle at the center of the quadrangle. The names of the new Gargoyles are not announced until the moment of tapping. The society derives its name from stone gargoyles carved on the fa-

cade of Morgan Hall, a nearby dormitory."



Dr. Robert H. Bradley Jr. captures the Great Gulf steaming up Long Trestle with Jitney at the throttle and son, Rob on the front platform. (1963) - Bradley Family Collection

The newly minted Gargoyle, Robert Bradley is mentioned again in the *Transcript* in October as working as "a logging camp scaler in Alaska" during the summer of 1965. The Pacific Forest Foundation says a scaler is "the person who determines the amount of footage in a log. Usually castigated as a blind, illegitimate robber by loggers, he or she is a highly skilled, completely ethical worker performing an essential service." Williams College proudly issued a report of record summer earnings by 1,040 Williams College students of $694,440 in 1965, "including one who made $9,100 selling dictionaries."

Graduating in 1966, Bradley again followed in his father's footsteps by enlisting in the Navy. "I went to Navy OCS in Newport. I survived it - came through as an ensign and then spent 3-and-a-half to four years in the Pacific." First serving on a destroyer patrolling the coast of Vietnam, Taiwan and Hong Kong. "(It was) really fascinating and challenging. You really have more responsibility as a young officer in the Navy than you will for the next twenty years - Just really turns a boy into a man, and then I volunteered for Swift boats." Bradley was a Swift Boat commander for a year in 1969-1970 in the unit former Secretary of State John Kerry served in. "I arrived two weeks after he left," recalls Bradley. "And the big talk was why he would leave after four months. We all served a year." The website of veterans of Coastal Squadron One (www.swiftboats.net) says Lt. JG Robert Holmes Bradley III became Officer in Charge of PCF 24 in April 1969 after the boat was returned to service in Da Nang. The PCF 24 *(next page)* had suffered battle damage in March when it was hit by two 75mm recoilless rifle rounds while on Cua Dai River patrol.

The website says "on the afternoon of 19 April 1969, (Lt. Bradley's boat) and PCF 79, on SEA TIGER patrols, were headed east on the Cua Dai (sometimes known as "Ambush Alley") when they came under rocket and automatic weapons fire from the shore about 30 yards away. One 82mm recoilless rifle round penetrated the engine compartment of PCF 79 causing minor damage and both craft were hit by numerous small caliber rounds. Three navy men suffered minor wounds and one Viet Cong was killed by return fire from the patrol craft." In early July, Bradley's boat was sent to tow the wreckage of a helicopter that went down 45 miles east of Da Nang.



"I was lucky enough not to see too much of combat," says Bradley in 2017. "Ninety percent of the time was on the ocean patrols which was safe at that time and only about ten percent of the time on the rivers which was pretty scary." However, Lt. JG Bradley apparently saw enough combat to be awarded the Bronze Star, according to the website.

"Back in the World" after Vietnam, Bradley decided to go global. "I loved the international life so much that I wanted an international career" and enrolled in the Fletcher School of Law and Diplomacy in Boston with an eye on the U.S. State Department. But after a year, he went to work for Citibank "who had the broadest international network of any bank in the world."

Rob married Nancy Hazen Alesbury *(right)* on September 11, 1971 in Hartford, Connecticut. After a wedding trip to London, the newlyweds were off to Beirut for his job with the international division of the First National City Bank of New York. Two years in Lebanon - then South Africa for a couple of years - then Germany for six before going to London. "Our first child was born in Johannesburg," says Bradley. "Our second child was born in Frankfurt and our third child in Hamburg. so we had a Hamburger, a Frankfurter, and a Johnannesburger."


A. C. Sulick Photo.
MRS. ROBERT H. BRADLEY III
nee Nancy H. Alesbury

In London, the family became "strong believing Christians," says Rob and in 1985, he wanted to try something new - starting a bank from scratch and moved back to Boston. "I wanted to try and start a bank that was not Citibank – that really treated clients well and had strong ethical policies. I was lucky enough to raise 8 or 9 million bucks in a year – about half from overseas and half from Boston. I started a bank called Boston Private Bank and Trust Company and ran that for six or seven years and that was quite a venture – raise all the capital

and get it going – it's still around – it's got a market of a billion-two, billion-five – listed on the NASDAQ. Because I started this bank there are six hundred fifty people employed." Bradley says he moved on in 1992 "when banking became more like a utility - always being investigated - always some regulatory authority looking at what you're doing." He and two partners started a wealth management firm known as Bradley, Foster & Sargent. "I'm still working full-time and we're managing $3.2 billion dollars - 36 people. So look what you did with all your training, Jitney, you managed to create an entrepreneur."

In addition to entrepreneur, Bradley thinks he's a "frustrated teacher." When his last son went to college, he did not like the feeling of the empty nest. "I was really depressed because I really loved parenting." Rob reached out to a black pastor in the inner city of Boston, and became a mentor to a fatherless seven year old. "We put him into Catholic elementary school. We sent him to camp. We took him to the Red Sox, we did all this stuff and two years later the kid just totally turned his life around." That led to Bradley's latest enterprise - a school for the inner city of Boston. A notice in the Park Street Church bulletin saw 30 people coming to the Bradley's house in January 2000. After two years of work, the school - Boston Trinity Academy - opened its doors in 2002. "It's 6th grade to 12th grade. It's 70 percent minority. The most diverse school in New England," gushes its founder. "African American, Latino, Asian American, thirty percent white and every kid goes on to college or university and seventy percent of the kids are on scholarship. Close to 400 kids have graduated. We graduate about 20 to 45 kids a year, and I'm still chairman of the board and trying to raise money and recruit people." The former *Great Gulf* brakeman tells his old engineer, "it must've been some of that teaching influence, Jit." Jitney says, "A lady once said to me, 'You must've been a great teacher. I said I would've been if it hadn't been for the kids."

Rob and Nancy's three kids are all married. A daughter in Alabama married a Maine-born law professor. "They have five daughters like *Pride & Prejudice*," reports Bradley. Another daughter graduated from Williams and married a teacher who left education to join law enforcement. The son-in-law is now an NCIS counter-terrorism agent. He and the family are in Crete. The only son lives in nearby Needham, Massachusetts with three kids. Overall, a dozen grandchildren. "Our quiver is full of arrows," says Rob.



Bob Bradley was the last Cog crew member Jitney got to speak with before he died. After the hour long conversation for this memoir ended, Jit turned to his son and said, "Geez, he's some guy isn't he?" Jitney Jr. had to agree.

JACK LYNCH - Brakeman (1962)

Jack Lynch, who was going to MIT with Dennis "Stretch" Buss, worked as a waiter at the Summit House his first year of 1961, but joined the *Great Gulf* crew the next summer. "In '62, I was a brakeman on the No. 6 and Jitney was my engineer," Lynch recalled in 2015. "Dave Woodbury was the fireman."



"One day, I had forgotten my bag lunch to eat sitting on the platform of the coach on the way up the mountain (while inspecting the track). That day, your sister *(Miss Jitney in 1962 - left)*, I'm guessing maybe age 7 was sitting with me. She got her lunch out and asked me where mine was. I told her I had forgotten it and she offered me half of her sandwich. I refused of course, but she insisted, and I was grateful and moved. Of course, we got more food at the Summit House."

"Another day, coming down the mountain on a cold rainy foggy day, we 'found' about 20 Cub Scouts huddled by the Skyline Switch WITHOUT THEIR LEADERS !! We had a (track phone) we could hook up to a wires running along the track to notify the Base Station and the Summit House of our find. The kids were cold and wet, but healthy and not scared. They had heard the trains (we did make a lot of noise) and they simply walked in that direction. Never found out how the leaders got lost."

"All the Cog crew worked seven days a week and often 70 - 80 hours a week. But Dennis (Buss) and I needed all the money we could get to pay for college, so we would punch in at 7:00 am like everyone else but would often volunteer to take the last train up the mountain, which left at 6:00 pm and would return about 8:30 pm or so. (We'd trade with the appropriate crew person at Waumbek or Skyline). If we punched out at 9:00 that gives us a 14 hour day on those days. So we regularly worked 80 - 90 hour weeks (at $1.10 an hour). But a few times during the summer we'd punch in for over 100 hours in a week. That would happen if there was serious engine failure (breakdown) on the mountain and we'd have to work to 11 pm to even 2 am in one case, which of course Dennis and I would volunteer to do."

"On rainy days, when business was slow, I'd often sit in the cab of the engine with Jitney and Dave Woodbury. If a pretty girl saw us looking at her, they frequently waved to us. Jitney was always the first to say, 'She wove at me!' Dave and I would argue with him about that."

"Jitney and several of the other trainmen had a thing for train whistles. During the winter they would individually hunt down mainline trainmen who collected train whistles as well. As these fellows were older they apparently were willing to part with their whistles to younger trainmen."

"That year (1962) I met Mary Griffith who worked at the counter in Marshfield House. (We were married in 1965.) The next summer, Jitney asked me to be his brakeman again, but I wanted to be a fireman which I was able to do with Pete Poltrack, but we were only the spare engine (six

engines were the regular ones). Big mistake - Jitney was a great person and I should have stuck with him."

Upon reflection, Lynch says, "The Cog was a very special place. The extreme smells, the wide range of personalities, the sheer power of the engines, the awesome beauty of Mount Washington made the Cog a magical place. We all worked hard but I think we all loved it."



Jack Lynch giving the 1962 Brakeman's speech at Waumbek in 2012. "I took some friends to visit the Cog. One of them cajoled the brakeman into letting me give part of the talk"
- Lynch Family Collection



1961 Crew: *(L-R) Fireman Doug Taylor, N.H. Gov. Wesley Powell, engineer Jitney, and Brakeman Dennis "Stretch" Buss*
- by Elvira Murdock - Lewis Family Collection



DENNIS "STRETCH" BUSS - Brakeman (1961)

Dennis D. Buss came to the Cog as an undergraduate at the Massachusetts Institute of Technology, and Dartmouth man Doug Taylor remembers "Stretch" was very proud of his college. A woman once asked Stretch, "Where do you go to school?"

"M.I.T." he said standing even taller.

"Oh, really – every time I go to Boston I ride that."

The 20th Century engineering student took a keen interest in the 19th Century technology he was working with. Jitney recalls him hunched over in the cab, carefully engaging the injector, listening to the device, timing its clicks as the water from the tender was drawn up into the device and propelled with steam into the boiler. Then shutting the injector off and doing the same procedure over and over to figure out the physics behind the boiler water feed.

"I was intrigued by injectors," remembers Buss. "It seemed to me that injectors violated the laws of physics to take water at atmospheric pressure and inject it into a boiler under 140 psi, without the use of a pump. But Jitney provided me with some written material that helped me to understand the physics."



Smooth Ride: *Tourist Sam Vaughn, Jr takes a picture of "Stretch" Buss braking the Chumley car to keep just right pressure on the No. 6 locomotive while descending on Sunday, August 13, 1961 - Vaughn Family Collection*

Dennis left the No. 6 *Great Gulf* in 1962 to become a fireman on the No. 3 *Base Station*. "Leo returned to the Cog in 1962, and needed a fireman. My interview with him was short. I confessed that I had never fired before, but I had watched other firemen in action, and I was willing to learn… I got the job. My first day on the job, we struggled through three trips to the summit, and at the end of our last run, Leo swung down from the cab and said "take 'er down and bank 'er, boy. I was panicked!! But I bravely replied 'yes sir.' I had never banked an engine for the night. But, I was well aware of the perils. If the fire was too hot, it would consume all the coal in the firebox, and by morning, the fire would be out. If the fire was not hot enough, it would go out. Either way, the consequences were disastrous. The fire had to

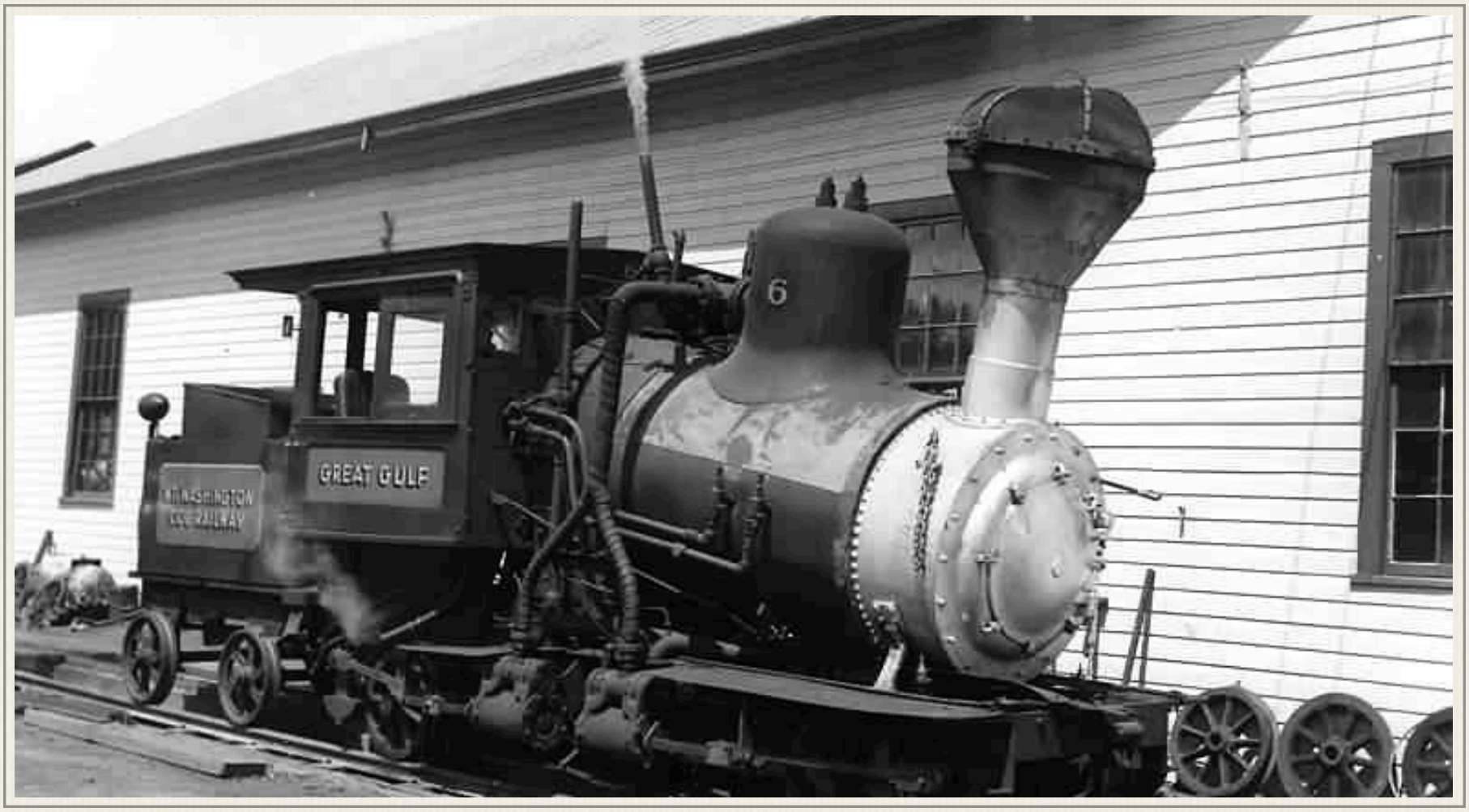
be just hot enough to consume coal slowly throughout the night. I banked the fire, and hoped for the best. And every hour all night long, I woke up and walked from the Boarding House to the No. 3 engine to check on the fire. In the morning, when I broke the bank, I had a good fire and enough steam to operate the blower. I was exhausted, but relieved…"

"Stretch" earned his bachelor's degree in 1963, and stayed at MIT for a master's and doctoral degrees and briefly became part of the electrical engineering faculty at the Cambridge, Massachusetts university.

In July of 1969, Dr. Buss went to work for Texas Instruments designing semiconductors. In 1987 after he and colleagues won major engineering awards for "the demonstration and development of mercury cadmium telluride monolithically-integrated charge-coupled device focal plane arrays" he left TI to become vice president of technology at Analog Devices. He spent a decade at that company and then went back to Texas Instruments.

He became TI's chief scientist in 2007, and a visiting scientist at MIT before retiring in 2010. Buss still consults and talks to students. September 2013 found him presenting a seminar at Purdue on the future of electronics beyond Moore's Law in "what he foresees as 'an era of accelerated technology innovation."

"Stretch" Buss lives in Dallas, Texas.



DAVID USHER – Fireman (1960)

William David Usher was born in Boston, Massachusetts, on September 28, 1939, the son of an insurance claims adjuster, W. Lawrence Usher and his wife, Virginia (Donald).



Dave started braking for Jitney on No. 6 in the summer of 1958 while he was a student at Bowdoin College in Maine. He completed three summers at the Cog and three years at Bowdoin before enlisting in the U.S. Navy in February 1961. *Bowdoin Alumni Magazine* blurb from October 1958: Class of 1961 Dave Usher had a unique summer job: he served his "second term" as brakeman of the Mount Washington (N.H.) Cog Railway! The railway was the subject of a photo story in the *Portland Sunday Telegram* for July 6, which included a view of Dave leaning from the platform of the lone passenger car.



The 22-year old naval aviator married 21-year old Susan Lowell in Texas in May 1962. Dave flew jets until one post-flight medical check in 1963 revealed he had diabetes. Discharged and back at the Cog for a visit, David told Mrs. Jitney how the flight surgeon was surprised Dave was even conscious when the blood test results returned that day. Then Dave laughed, asked for a pan, and nonchalantly put his insulin injection kit in it. Then rattling the needle in the pan as he went to the sink for some water to boil, he merely said, "Lunch!"



David and Susan moved to Connecticut where David worked as a salesman, and the couple had three children; Lisa, Bill and Karin. The couple divorced in early 1971.

Later that year, he married Torrington, Connecticut native, Marilyn Rondoe. He owned and operated the

Tillotson farm on the Morey Road in Craftsbury, Vermont for many years while working as a salesman in various lines of business, whatever it took to keep his farm going.

He was a mentor for students at Craftsbury Academy for several years. Dave enjoyed shooting guns, riding ATVs in the Arizona desert, visiting national parks, and traveling across the country.

His wife, Marilyn died in Burlington in February 1996 at the age of 64.

Six months later, David married Linda Stoddard in Clark County, Nevada. He later sold the Tillotson farm and helped his wife, Linda work her family dairy farm. She died in March 2008. David died 13 months later at his home Quartzsite, Arizona.

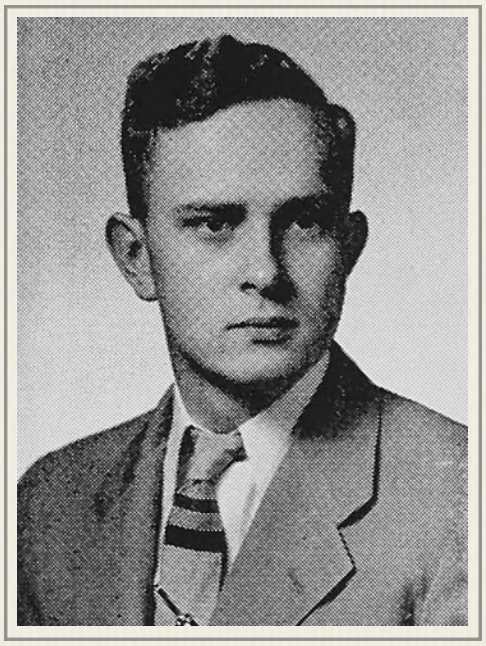
William David Usher was 69.



1960 Crew: *(L-R) Brakeman Doug Taylor, engineer Jitney, and fireman Dave Usher (July 1960)*
- by J.L Bradley- Lewis Family Collection



1958 Crew: *(L-R) Engineer Jitney, brakeman Dave Usher and fireman Dave Saunders (July 1958)*
- Lewis Family Collection



DAVID SAUNDERS – Fireman (1958)

Jitney's kids called him "Sluefoot Blue" although neither (now in their 60s) can remember exactly why. Davey Saunders was born March 15, 1937 in Wakefield Massachusetts - one of the nine children of Paul and Marjorie Saunders. He graduated from Wakefield High School *(left)* in 1955, went to Harvard and was mentioned in an *Associated Press* article by Don Guy in June 1956 that talked about a late May snowstorm dropping eight-inches on the mountain and delaying the railroad's opening until June 10th.

"Because it is a summer operation," wrote Guy, "the Cog Railway has always attracted a working crew of college boys, teachers and even professors. David Saunders, a Harvard freshman, is the fourth Saunders brother to work on the railroad. He lives at (309 Albion St) Wakefield, Mass., and his father, Paul is head of the mathematics department at East Boston High School." *- (Bennington Banner Saturday June 9th, 1956)*



According to his high school yearbook, "Lunch-room discussions, reading, and listening to records capture Dave's interest. He hopes to attend college or to be an orchestra leader. His activities include Band, Orchestra, Senior Play *(right)*, Oracle Staff, Junior Prom Committee, Cross Country, and Track. His favorite subject is history... his sport, track."

The Four Saunders Boys

The Saunders brothers' story at Mt. Washington begins in the same place that Harry and Eddie Bird's began - halfway down the Base Road at Camp Duncan.



Steve Saunders (1946)

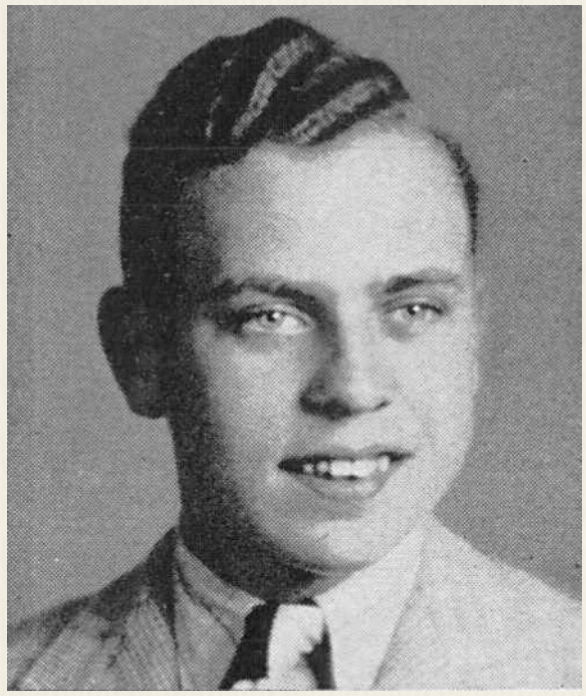
STEVE SAUNDERS - (1946 - 1949)

"I was singing in the Bretton Woods Boy Choir from 1943 until my voice changed from soprano to alto to nothing after my 1944 season," recalls 85-year old Stephen (Steve) C. Saunders in April 2016. "The cook we had at Camp Duncan, the home of the BWBC was Mrs. Howell. She took the job of cook at Camp Duncan because her son (Phillip) was singing there. I knew Phil, and when he came to visit his mother he told me he had written to Col. Teague and got a job there (at the Cog.)"

"So, that next year I did the same. I went to work in the Gift Shop (in 1946) because I was too small to handle an engine." Steve Saunders may not have been big enough for the engines, but he grew out of the Marshfield Gift Shop assignment. "The next year, 1947 I returned to the Cog and worked as the switchman at Waumbek switch, graduated to fireman," and convinced his brother, Joe to join him in 1948.

Ch. 9 - The Saunders Boys

CARL F. "JOE" SAUNDERS - (1948 - 1949)



"I wrote home and asked my older brother (Joe who graduated high school in 1946) to come up and go to work - as summer work was hard to get in Massachusetts," says Steve. Carl Forbes "Joe" Saunders *(left)* was "well known" to his Wakefield High School classmates "as an able (hockey) goalie." How able? Joe lettered as the Wakefield Memorial High School hockey team's goalie in 1946. The yearbook described him as "master of the nets." It went on to say Joe "has left a remarkable record of success not only as a sportsman, but also as a student, for Joe's name constantly has appeared on the Honor Roll. We must not overlook his humorous characteristics - his witty remarks can brighten the dullest day. Such a combination of favorable traits can only mean success."

The M.I.T. student and eldest Saunders brother, says he spent two summers at the Cog - the summer of '48 in the Marshfield Gift Shop, and then in 1949, worked as a "cabin boy and parking cars," before leaving. Brother Steve remembers "(Joe) came up and worked parking cars. He hated it and after the year was over, he never came back."

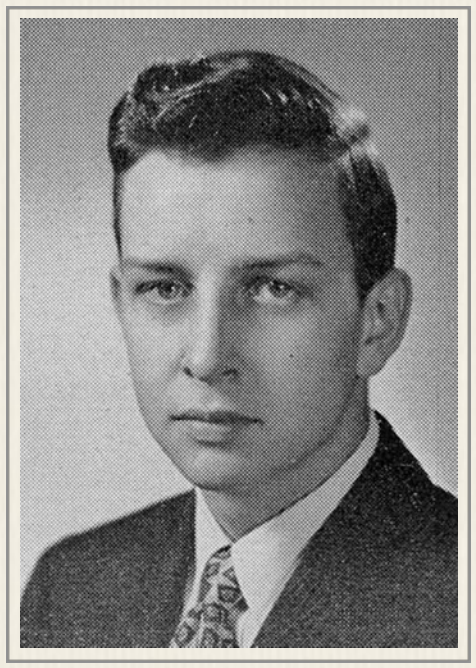
Steve says 1949 turned out to be his last summer as well. " I probably would have gone back the next year but ended up joining the Air Force with one of my friends from the Cog (Dick Gallup) We went through jet training together and he died back in 2008. I went to his Memorial Service at Arlington Cemetery where he was buried with full military honors."

There were still two more Saunders brothers to join the Cog Railway roster and both had first followed older brother, Steve to Camp Duncan on the Base Road.



PAUL SAUNDERS - (1950 - 1952 & 1957 - 1958)

Stephen writes, "My younger brother Paul *(previous page)* also sang in the Bretton Woods Boys Choir as well as my youngest brother David."



Paul Saunders graduated from high school *(right)* in 1951. The yearbook said he was "Wakefield's answer to Fritz Kreisler (a legendary Austrian-born violinist and composer), Paul is not only an accomplished violinist *(left)*, but also an outstanding basketball player, golf enthusiast, and sharp-shooting member of the Rifle Club. His hobby is collecting records... enjoys Wakefield High's dances... (and) plans to attend college after graduation."



Brother Steve Saunders says, "Paul went to work on the Cog until he joined the Air Force. My youngest brother David followed Paul. (So) I must confess that I started the Saunders clan working on the railroad back in 1946." Paul Saunders joined the U.S. Air Force in November 1952, and rejoined civilian life in September 1956.

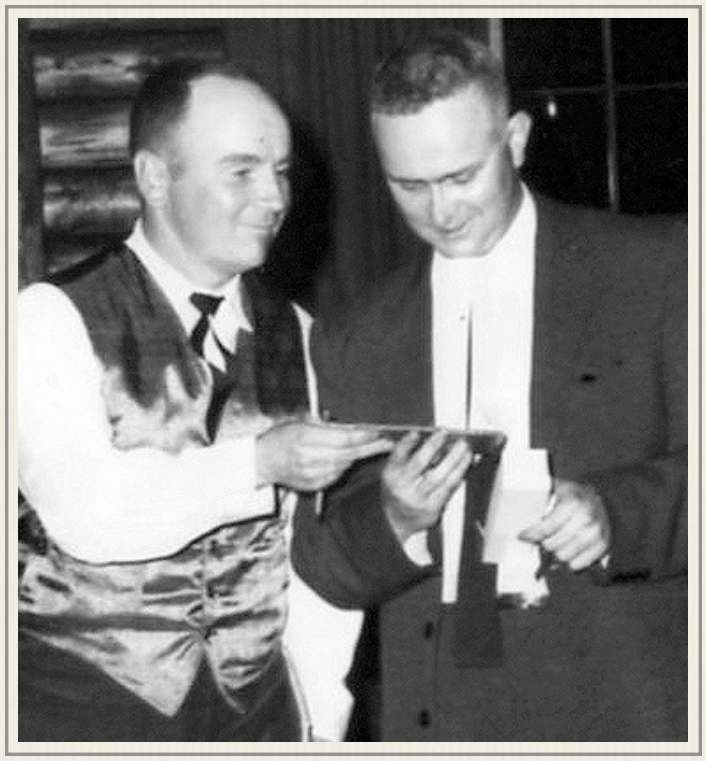
Paul went back to the mountain in 1957. Sandy and Mary (Lund) Stephen remember, "Paul was an engineer. He started dating Barbara (Frescoln from Pennsylvania) and she was much younger than he. She was a character," recalls Mary. "They were absolute opposites he was very precise – she was scatter brained – it was wonderful to watch." Thirteen months after leaving the Air Force, Paul married Barbara Frescoln.

Stephen and Joe are the only Saunders brothers still living in 2016. "I had a wonderful time at the Cog. Never made much money but just being there with a couple of other students from Lyndon State (George Trask & Joe Fillion?) made my summers go like mad."

"SLUEFOOT BLUE" - the rest of the story

David Saunders returned to the Cog in summers after he graduated from Harvard in 1959 as he pursued a medical degree at the University of Vermont College of Medicine.

His 1963 internship at Beth Israel Hospital in New York was such that David would head down the Mountain for a final time in 1962. There was a good-bye gift at that year's Cog Party *(right)* and a letter from Saunders asking about the '63 season in November 1963.



MC Jitney presents a commemorative gib to Dave Saunders at the 1962 Cog Party - Lewis Family Collection

Ch. 9 - Engine No. 6

Dear Jitt & Barb:

Thanks for the letter and picture. I note that it was taken at a Cog Party. Am happy to learn you had one of them this year.

I was told by Stretch's grand mother while home a couple weekends ago that one of the engineers had died. I assume that means Boucher – is that right? I hadn't realized Stretch had been set-up for running as well as Dave Woodbury. Very good boys. I assume Chase & Frank had their usual duet this year. Was Doug back at coach-building? I never did get over but my intentions were good. Did Bob Kent go back and how is Don Enman? Grace & Pete back as usual?

Yours, Dave – formerly ugly-man on #4 & #8 engines.

David met his wife, Kathleen at Beth Israel. They would be married for 50 years. Dr. Dave spent two years the Navy stationed at Camp Pendleton and then went to the Upstate Medical Center in Syracuse, New York where he became chief resident of internal medicine. During his 38-years in private practice, he was also the team doctor for the Syracuse professional hockey squad.



The eventual Dr. Dave performs an early procedure on the No. 1
- Paul Saunders Collection

His interest, or faith in healing may have been sparked at the Cog Railway as Jitney remembers David would often mimic Oral Roberts and lay his hands on broken engine parts and command the faulty piece of the locomotive to "HEAL!"

He was upset when Gordon Chase qualified as an engineer ahead of him. Chase got the call ahead of Dave as he would be able to run trains in the fall after Saunders and the others would leave for school.



Kathyn and David raised seven daughters on their farm on the outskirts of the city. He stayed in tune singing with Syracuse Barbershop Quartet and Syracuse Chorale.

David Giles Saunders died April 28, 2014 at the age of 77.

DAVID USHER – Brakeman (1958)

David was the reason Lincoln Handford became part of the Cog crew, and together they would have many edgy adventures at the Mountain starting with how Linc got hired.

LINCOLN S. "Linc" HANDFORD – Journeyman (1958-1965)

"I went to visit Usher," recalled Handford in 2015. "(I) hung out with David at the gas station - road the trains - slept on top of Mount Washington - taking meals with Dave. Everyone thought I was part of the crew. This went on for about two weeks - until Arthur (Col. Teague) came up and said, 'Young man, you've had a nice two weeks now go home and write me a letter in the

spring asking me for a job.' So I started in 1958 working at the gas station and the bunker. David taught me to be a brakeman."

Linc also spent time on the track crew. "My first year, Pop Pike was track boss and he used to say 'them college boys - all book learning - no common sense." Jitney remembers the man who Larry Gooden would replace in 1960 wore a red cap that Pike would tug to the side as he outlined the track work to be done that day with some mangled terminology for one of the 1200 Cog trestle pieces officially known as a "bent." Jitney recalls Pop telling his crew, "Going up to 444 - going to put in a bench (or a horse)."

In the evening after work, Linc and Dave were known to conduct explosive chemistry experiments. They would take a cast-iron "T" fitting from the Shop - plug the openings - put aluminum powder inside - tie the device to a tree in the woods and blow up the tree. Jitney says he remembers the quiet of the Base after dark being punctuated several times by loud booms as Dave and Linc's pipe bombs would go off shattering the trunk of some tree in the surrounding forest. The explosions stopped not because of safety concerns, but because the Shop crew was getting ugly that their supply of cast-iron fittings was dwindling.



Fireman Linc Handford with engineer Leo Boucher (July 15, 1961)
- Lincoln Handford Collection

While Linc qualified to work on the trains like Dave, he didn't stay with one train. "(I) broke for Leo Boucher - fired for him, too!" says Handford. "There's a picture of me and Leo and the side board of the cab *(left)* - fired for David Saunders when he ran. (I) fired for Gordie one year. I never engineered."

Linc says there was always time for some fun for the two of them (Handford & Usher). "On hot days coming down, we would hop off at Waumbek Switch run down to the tanks - climb up and jump in - then clamber up in time to jump down back onto the train."

Linc finally focused most of his Cog work time at the place where he and Usher found their IED parts. "I worked in the Shop and that's why we got whistles. I would go to the foundry in Lancaster, New Hampshire to pick up eccentrics and cast metal parts. I went to Boston in the stake truck - the B&M would provide stuff. I unearthed the Devil's Shingles that were buried underneath the brass."

Ch. 9 - Engine No. 6

And he and Usher may have been some of the last folks to actually ride a slide board. By that time most of the Cog rack on the track was installed using two pieces of support timber under the rack's flanges - leaving an open space below the spindles, so grease and ice would not build up interfering with the cog gear itself. However, there was a section of the old design just below the Summit on the way to Skyline where a single timber supported the rack, and the flanges could still be used for braking the slide board. The trick was to stop before the rack switched to the new design as the slide board would immediately stop while the rider continued down the mountain.



Linc's skeleton with coconut head (2010)
- Lewis Family Collection

Linc knew Jitney was a science teacher, so when he came across an assembled set of bones of a female forearm one winter, he brought the hand and forearm to the Cog.

Jit said "thanks," but noted there were a lot more bones in a human body. The next winter, Linc was helping a contractor tear down an old building belonging to a fraternal organization. In the building was a trunk with a complete human skeleton. The contractor kept the skull, but Jitney and his science class got the rest of the skeleton *(right)* courtesy of Linc.



Brakemen Linc Handford and Geddes D. Anderson wait for the meet at Skyline (August 1959)
- Linc Handford Collection

Linc kept coming back to the Cog even after Dave went into the Navy - again because of friendship. "I was there 7 or 8 years - Bob Campbell's sister Heather and I were an item for four years."

Linc is now (2015) a painting contractor in East Northport, New York who focuses on historic restoration. He has two sons. The 29-year old is a musician (cellist) who works in the restaurant trade. The 23-year old went to Pratt Institute and is an architect.

1954 Crew

JITNEY – Engineer
DICK McDOWELL – Fireman
EDDIE BIRD - Brakeman



Eddie Bird standing next to the No. 6 with Boarding House roommate Dick McDowell in the cab (1954)
- Lewis Family Collection

Thanks to the Rev. Lin Knight's journal he kept during his two years at the Mountain, we know the make up of the No. 6 *Great Gulf's* crew in 1954 as well as the other trains & rail crew.

No. 1 ***Mt. Washington*** - George Wilmot, Les Read & Duke Hough
No. 2 ***Ammonoosuc*** - Cliff Kenney, Paul Philbrick & John Large (Lange?)
No. 3 ***Base Station*** - Leo Boucher, Earl Steady, Jackie Climo
No. 8 ***Tip Top*** - Hap Williams, Gordon Chase & Steve Dunn
No. 9 ***Waumbek*** - Russ Spicer, Ted Ely & Andy Rankin
Track Crew: Charlie McKinney, Joel Estey, Bob Edwards, Clyde Philbrick, Nelson Kinnie (sp?) & Pop Pike

Ch. 9 - Engine No. 6

Gift Shop: Mike Haney, Bob Cody, Junior & Woody

1952 - 1953

HARLAND "Hap" WILLIAMS – Fireman



Harland Williams
- 1952 Verlyn yearbook

Another Lyndon Teachers College student, "Hap" fired for Jitney in 1952-53 and helped the Jitney's move into Mike Boyce's cabin in 1953. Hap moved from the No. 6 in 1954 to take over the throttle of the No. 8 as engineer with Gordon Chase firing, and Paul Dunn's son, Steve on the brake wheels of the coach. The rest of 1953 train crews, according to Rev. Knight were:

Cliff Kenney, Russ Spicer & Ted Ely
Leo Boucher, & Tom Fahey
Ned Carey & Walt (Mac) McKenna
George Wilmot, George Hanna (fired) & Melson (Put) Putman
George Trask (Dave Gates later)

Brakemen: Dick Beck, Jackie Climo, Sandy Wieland, Duke (Claude) Hough, Charlie McKinney, Paul Philbrick, Andy Rankin, Steve Dunn, Lin Knight

Harland Williams was born in Craftsbury, Vermont on July 5, 1927 and graduated from Craftsbury Academy before going to Lyndon. He taught at several Vermont schools before retiring from Riverside Junior High School in Springfield, Vermont. Hap played and coached basket-



Hap in the No. 6 (1950s)
- Lewis Family Collection



The No. 6 crew at the Summit - fireman Hap Williams and engineer Jitney (1952)
- Lewis Family Collection

ball and followed the contests his two children, Audrey and Gary played in. Hap died April 4, 2013 after a long struggle with Alzheimer's disease. At his funeral, his second wife, Ann remembered the time Hap took her to Mount Washington to see the Cog Railway in operation. After railroad officials learned that Hap was a Cogger from the 1950s, they offered the couple a free ride to the Summit. She wanted to go, but Hap said, "No" - explaining that he had spent so much time on the job firing and running, he didn't need to take the trip again. Harland Pike "Hap" Williams is buried in the Pine Crest Cemetery in Charlestown, New Hampshire.



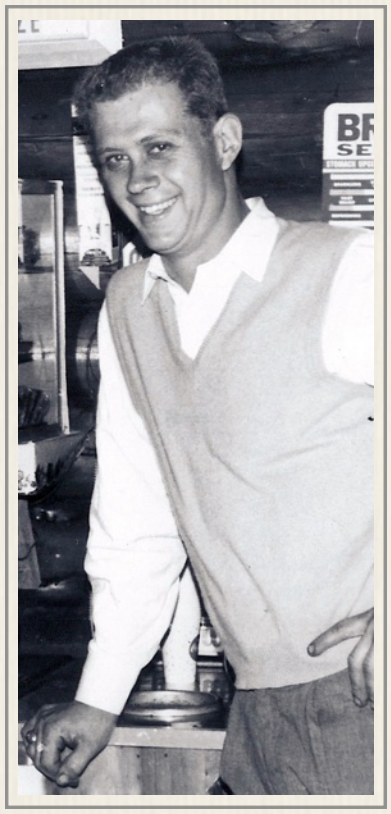


No. 8 - *Tip Top*



No. 8 – *Tip Top*

PETE POLTRACK - Engineer (1966)



Pete returned early this spring and went to Camp Drum for two weeks; returning to engineer the 8. Pete is well-acquainted with maintenance and operation of heavy equipment Army style. Late nights and late trains are Pete's specialty. Enough said. Right Pete?

Pete's looking forward to being a dairy farm operator and that's no bull! *(CC v1n2 – July 13th, 1966)*

Peter Poltrack says the Cog Railway came into his life when he used his family connections to get out of another summer at the farm in 1960. "I do remember being home in Stamford and calling Uncle Tony (Cog Railway book-keeper since 1950) asking if he could get me a job for the season at the Cog. In my mind it was going to be one season. I was a dairy major at UConn - and thought that I'd take a break from cows as I was going to

Ch. 9 - Engine No. 8



A shirtless engineer Peter Poltrack tackles mechanical adjustments on the No. 8 Tip Top at the Summit (1966)
- photo by Tom Norcott

spend the rest of my life pulling teats." Pete's Cog employment lasted for a half-a-dozen years only to be broken up by his military service. The Cog lifestyle apparently didn't sit well with officials back at the University of Connecticut. "For the next 3 years I pissed off my college advisor," recalls Poltrack in 2015 "because I would return to school for class wearing a washed pair of grease imbedded dungarees; I believe this was the reason I failed his course in animal nutrition."

Pete says "In '63 and '66 I went in early and left late as we - Paul (Philbrick), Harold (Adams), Bill (Liveston) the machinist, and Ray (Gilman) the boiler maker, closed the Shop leaving the Base to Crawford for the winter."



Peter's son, Ethan followed in his father's footsteps. "Ethan grew up hearing about my experiences, and the fact that Tony, Cynthia, Celia (Poltrack) had worked at the railway, so it was natural for him to seek employment there. Ethan's stint was from '94 thru '98."

Engineer in Training: *Peter Poltrack lets his fireman run a trip while keeps the steam pressure up. Pete waves to someone behind Marshfield as Elvira Murdock captures the image (1966)*
- Teague Family Collection

NORM KOOP – Engineer (1967)

Norm attends Eastern Baptist where he is a history major - Anne that's not all - he intends to be a lawyer. *(CC v2n4 – August 17th, 1967)*

Norm Koop took the controls of No. 8 *Tip Top* when Peter Poltrack went down the Mountain for the last time. His crew in 1967 included his younger brother, David. Their dad, C. Everett Koop remembered that the pair had plans for 1968. "The spring recess from college brought David home for two weeks. We heard snatches of his conversation with Norman as they discussed their previous summer and their next summer's activities on the Cog Railway. Norman was an engineer. David had been Norman's brakeman, and now he was to be his fireman." Those plans fell through just four weeks later, and changed the course of Norm Koop's professional life.



David Gordon
Chamberlain High School (1966)

DAVID GORDON – Fireman (1966)

Dave *(left & right)* attends Chamberlain School in Tampa, Florida. He is not sure of his plans for the future, but that fits firing the eight. *(CC v1n3 – July 20th, 1966)*

TIM "L.B." BEMIS – Fireman (1967)

Tim goes to Grove City College as a political science major. Tim finds the 8 a switch from some he used to fire and has stepped up dieting at lunch and liquid intake at night.

(CC v2n4 – August 17th, 1967)





Bill Whiteley at 1966 Cog Party
- Koop Family Collection

BILL WHITELEY - Brakeman (1966)

As a Government major at Lafayette, Bill *(left)* is preparing for law school. The *"Clatter"* thinks it might be wise for Bill to become familiar with international law if the trips to Canada are to continue.

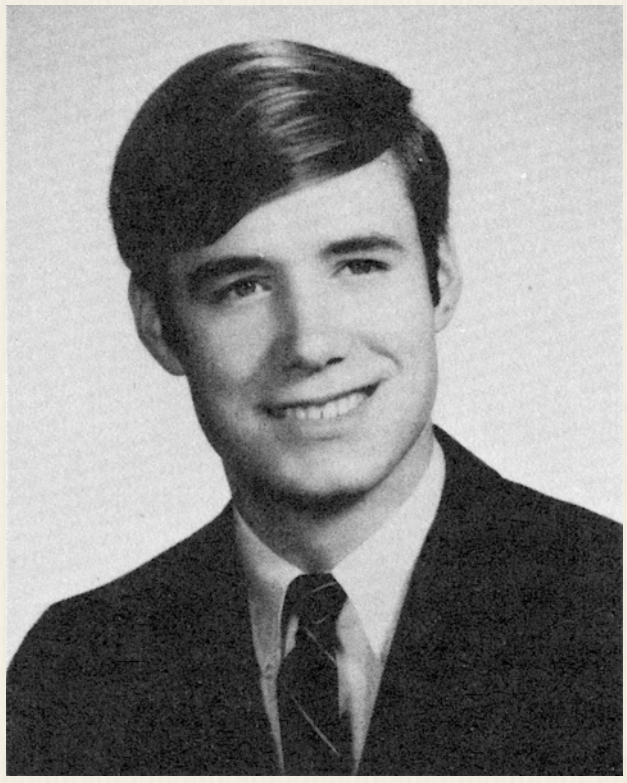
(CC v1n4 – July 27th, 1966)

DAVE KOOP – Brakeman (1967)

Dave comes from Philadelphia and attends Dartmouth. Some of his hobbies are climbing mountains, bird calls and Larks, and acrobatics besides warding off attacks at skyline. *(CC v2n4 – August 17th, 1967)*

David was the youngest of three boys born to C. Everett and Elizabeth Koop in Philadelphia. The third son, Allen had also attended Dartmouth and the Koop Family summered in New Hampshire. The Koops say David started climbing right from the start of his life - up out of the crib and onto furniture - scaling trees as a toddler - walking the ridge pole of their three-story home at age four. His parents say he became a "sure-footed skilled climber," but also a "tumbler" - able to safely fall from various heights without injuring himself. Dave used both talents to entertain passengers in 1967 as the Koops explained in 1979.

Ch. 9 - Engine No. 8

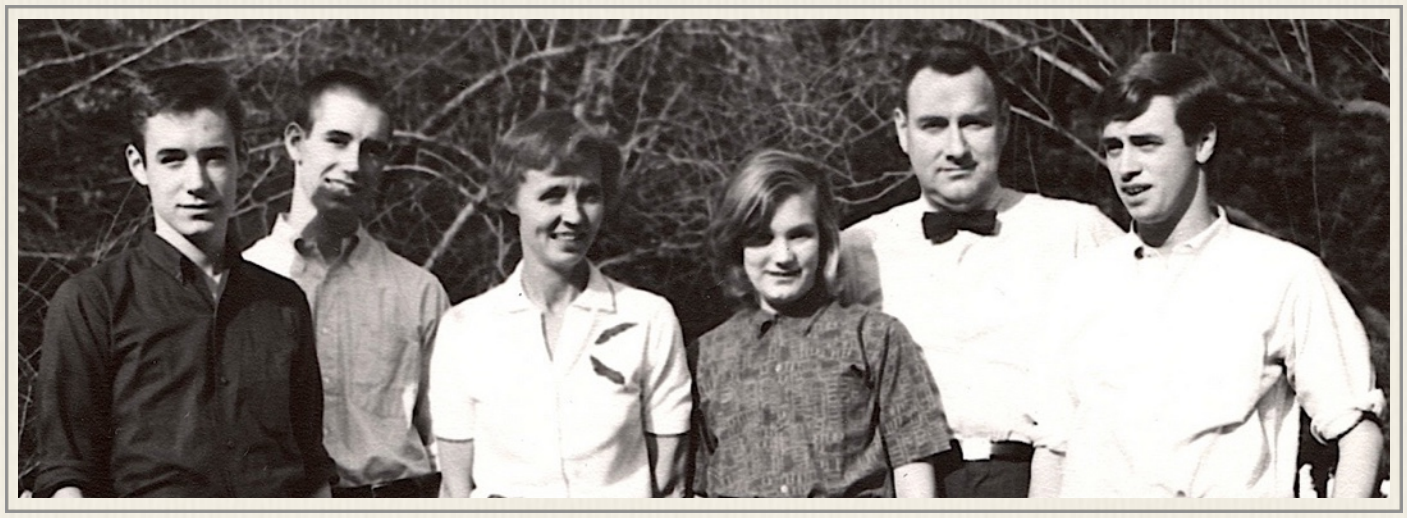


"During one summer while he worked as a brakeman on the Cog Railway at Mount Washington, he and some friends put on frequent sham accidents and fights for the amusement of the passengers. One of these consisted of waiting until all the passengers were in the car of the train on the Summit, ready to make their descent from the mountain. Then, with the ringing of the bell that attracted their attention to the Summit House, David *(left)* would emerge, accidentally trip on the top step, and fall down the stairs into the cinders. This again, without ever hurting himself."

"His staged fights on top of a coal bunker at the foot of the mountain frequently resulted in his falling from the top of the coal supply to the top of the coal tender and then to the ground. He had no fear either of climbing or falling, and thoroughly enjoyed being a clown."

Like his older brother, Norm - Dave met a young woman at the Cog and fell in love. Steve Christy's cousin, Lark worked the counter in Marshfield. Dave would travel to meet her family during Dartmouth's 1967-68 winter break. "David had asked to spend half of his holiday in Louisiana in the home of the girl he loved," writes "Chick" and Elizabeth Koop. "It wasn't easy to say yes to that request, since we saw so little of him, but how pleased we are now that David had that precious time with Lark, and that her family came to know him too."

There were other life changes underway. "At Christmas, David also decided to change his major from pre-med to geology, and his plans for graduate school leaned in the direction of the far west; so we were gradually becoming accustomed to the thought that we would be separated by a great distance and for long stretches of time. During his spring vacation, we agreed that David would go directly from Dartmouth to his summer job on the Cog Railway at Mount Washington, in New Hampshire, with his brother Norman, and that he would spend three weeks at home after Labor Day before his senior year began."

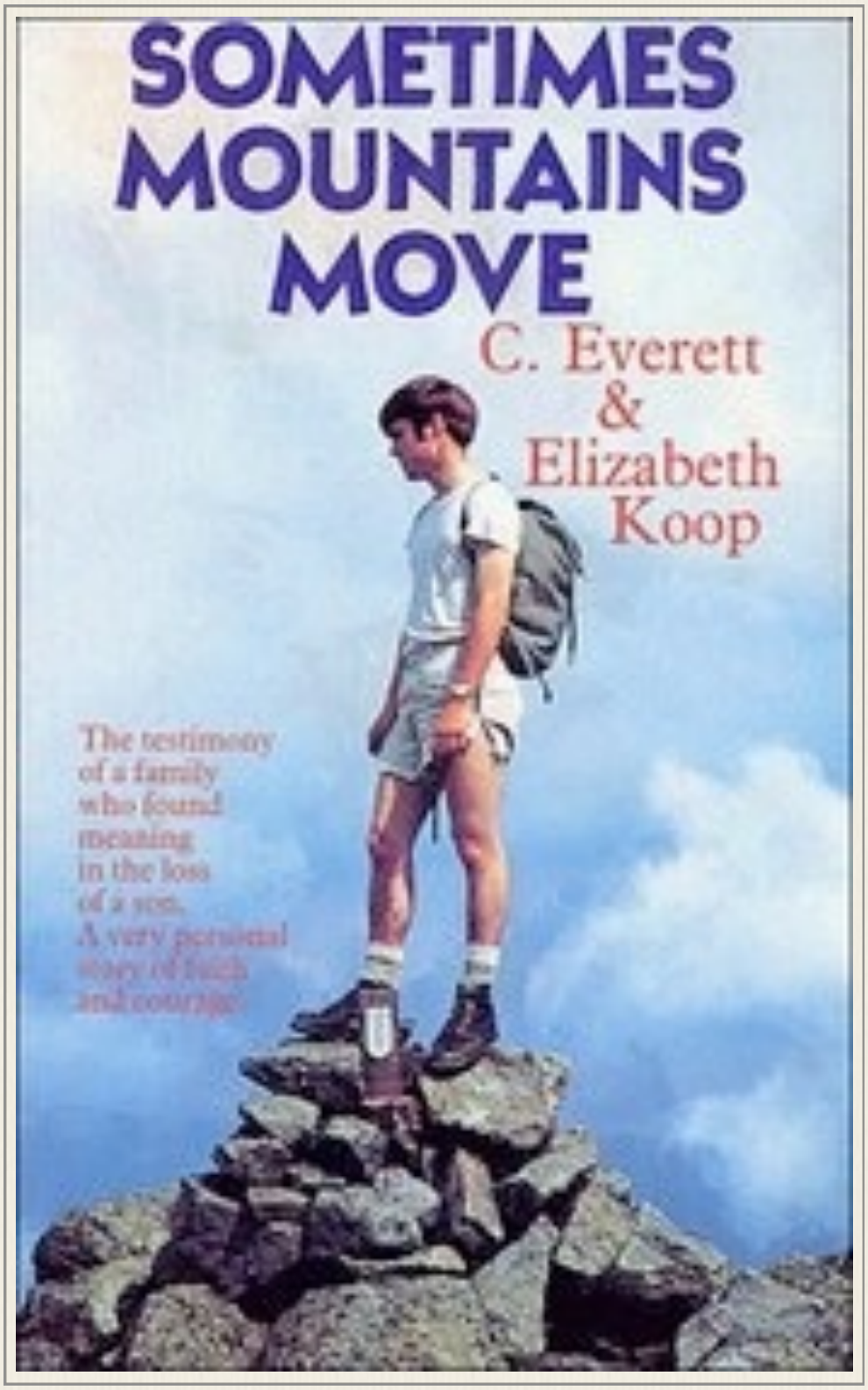


The Koop Family (left to right): David, brother Norman, Mother Elizabeth (Cora), sister Betsy, father Dr. C. Everett Koop, and brother Allen (circa 1962)
- FindaGrave.com

Norm Koop's younger brother, David died in late April of 1968 while climbing the rugged Profile Cliffs of Cannon Mountain just to the east of Mt. Washington. Dave fell 100-feet when rock gave way as he was driving a spike into the cliff. He was 20 years old. *(Nashua Telegraph – April 29th, 1968)*

The dean of Dartmouth College called David's father, C. Everett Koop the surgeon in chief at Children's Hospital of Philadelphia on that Sunday in April. He told Koop, the future Surgeon General of the United States, he had bad news - "the worst, David is dead. He was killed in a climbing accident on Mount Cannon this afternoon." It would take rescuers two days to bring Koop's body down off the narrow ledge where he had died from blood loss - his left leg crushed by the large sliding piece of Cannon Mountain on a rock face known as "Sam's Swan Song."

The story and the Koop's reaction to their son's death with advice for others is recounted in their 1979 book, *Sometimes Mountains Move.* They turned to their faith for comfort. "The grace of God was sufficient," they wrote, "and we knew a peace that did indeed surpass understanding." David and Norm's other brother, Allen, a professor of History at Dartmouth College continued to climb mountains and became a member of Solid Rock Climbers for Christ, an organization bringing the Good News to Climbers. Allen, who spent time as an AMC "croo" member at the Lakes of the Clouds' hut in the 1950s, provides copies of his parents' book to SRCFC to share with families of climbers who have died in climbing accidents.



A downloadable revised edition of the book is available online at this link:
http://www.campbellorthodontics.com/Documents/Sometimes%20Mountains%20Move.pdf

No. 9 - *Waumbek*



No. 9 coaled and preparing for trip up July 1, 1963
- Mike Condren - condrenrails.com



Frank at the Ticket Office
- Walter Aiken Collection

No. 9 – *Waumbek*

FRANK THOMPSON – Engineer

Frank is the engineer who runs first train in spring and last train in the fall. It isn't unusual to see him running a bulldozer about the Base because heavy equipment is his line.

Hey, Frank, still racing stock cars every chance you get? *(CC v1n2 – July 13th, 1966)*

Frank is usually the first engineer up to the top in the spring and the last down in the fall. He also has experience in making soup special and running heavy equipment. *(CC v2n4 – August 17th, 1967)*

Frank Henry Thompson, Jr. was born in 1925 in Jay, Maine, the



Frank H. Thompson, Jr.
- Paul Saunders Collection

son of Frank H. and 26-year old Lucy (MacDonald) Thompson. On April 2, 1930, census taker Richard W. Austin found the 57-year old blacksmith running his own shop, while his 31-year old wife was caring for 5-year old Frank Jr., 3-year old Carl and 17-month old, Annie in their home on Mill Street in Jay.

Ten years later, the family is in Canton, Maine where the elder Frank is farming. 15-year old Frank has completed six years of schooling, while 13-year old Carl has done four. Annie is no longer on the family roster. But according to the 1940 Census, 49-year old French Canadian Eddie Cyr is renting a room from the Thompson's while he works cutting wood for pulp.

Frank Jr. has two years of high school and is working as a semi-skilled lumberman, raftsman and woodchopper when he enlists in the Army in Portland, Maine on March 19, 1943 as a private. Out of the service in 1946, the 21-year old veteran is living in Center Conway, New Hampshire and marries a local girl, 15-year old Geneva E. Brown. The probate court grants permission for the union. Geneva is the daughter of woodsman Rockford Eugene and Evelyn (Morrill) Brown. Geneva and her dad were born in East Jay, Maine while her mom was a Conway, New Hampshire native.

When Frank gets married his 74-year old dad is retired and living in Canton, while his mom, 47-year old Lucy is a shoe shop worker in Poland, Maine. The newlyweds make their home in Center Conway and eventually have four children - Elaine, Rockford, Gerald and Laura. Elaine E. (Thompson) Shannon died after a brief illness in December 1999. At that point, Rockford was living in South Conway; Gerald was in Fryeburg, Maine; and Laura L. (Thompson) Velez was in Belmont, N.H.

Exactly when Frank starts work at the Cog is unclear, but he was running engines in the early 1950s.

Ch. 9 - Engine No. 9

CHARLES HANSEN – Fireman (1966)

Charlie is muscling his way around Northeastern University as a physical education major and finds riding on the Nine and running the cog bucket (alias the "soup kettle") a continuation of his winter's endeavors of plenty of exercise and good diet. *(CC v1n3 – July 20th, 1966)*



Joe Long at Cog Party 1966
- Anne Koop Collection

JOE LONG – Fireman (1967)

Joe is going to Juniata as a math major. I'd say more about his transportation finds but I can't make this a long story and make him a legend in his own time. *(CC v2n4 – August 17th, 1967)*

JOHN WEIGEL - Brakeman (1966)

John goes to school off and on even though he has received a degree in Engineering; His ingeniously converted VW attests to his practical application of his knowledge. The *"Thelma"* is his first concern and she is neat to say the least. This speaks well for John's taste. (Few women you can stop anywhere') *(CC v1n4 – July 27th, 1966)*



John "Wiggle" at Cog Party (1966)
- Anne Koop Collection

John received a Bachelor's degree in Mathematics from Dartmouth College, a Master's degree in Chemistry from the California Institute of Technology, and a Master's degree in Business Administration from the University of Colorado in Colorado Springs. He was a long-time employee of Lockheed Martin Technical Operations as a Software Systems Analyst.



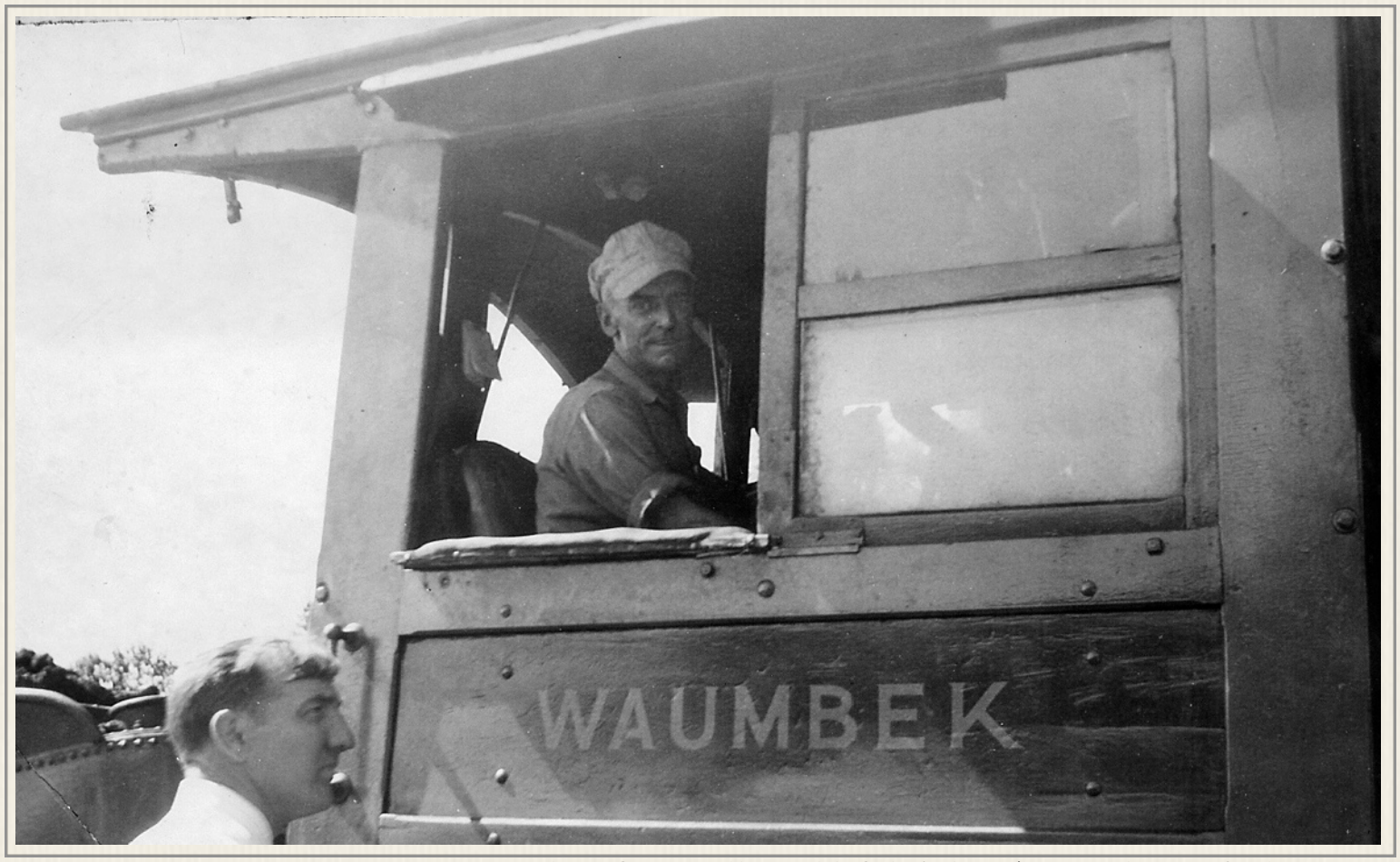
John Weigel - RIP
- Weigel Family Collection

John died of pancreatic cancer on October 19, 2010 in Colorado Springs, CO - his home since 1977. From an obituary written by his wife, Mary Dolores Crowley Weigel.
http://andewweigel.name/JMWObit.html

ROGER MILLER – Brakeman (1967)

Roger has come down from "among the clouds" this year to go on the *Thelma* car. Although his namesake is singing, Roger would rather cash in but we don't know whether that's a Morgan Service beckoning or he may be taken to the cleaners *(CC v2n4 – August 17th, 1967)*

Other No. 9 Crew Members



Engineer George Wilmot with Col. Arthur Teague at the Base Station (1948)
- Photos from Wilmot Family Collection

GEORGE DEWEY WILMOT - Engineer



Born July 26, 1898 in Lowell, Massachusetts as the Spanish American War was wrapping up, George's middle name honored the hero of Manilla Bay, Commodore George Dewey of Montpelier, Vermont. He was a welder and a crew supervisor in the building of the battleship *USS Massachusetts* at Fore River Shipyard in Quincy. His family says he started working at the Cog in 1940. He was still running when Jitney arrived at the mountain ten years later. Wilmot married Dorothy "Dot" Westberg in 1943 and had four children. The pair is seen in 1951 in photo at right. He died in Lancaster, New Hampshire in May 1983 at the age of 84.

KEVIN McKINNEY - Brakeman/Fireman

"I was a neighbor of the Teague's on Rex Avenue in Philadelphia from the time they lived there and our families were good friends. As a boy, I watched Arthur build his house, brick by brick from start to finish. My brother Charles worked (at the Cog) from about 1954 until 1958 as a fireman and engineer. He now lives in Charleston, South Carolina (80 y.o.). I worked from '59 until '63 - running the gas bar the first summer and then braking for two years and firing for two years with Frank Thompson." Remembering his Cog time in the spring of 2016, McKinney says he bunked that first year in the Boy's Dorm next to Geddes Anderson and his roommate, Rhett Saunders. "We lived together on the second floor. I had the first room and they shared the larger

middle room. The last room on the second floor was occupied that year (1959), I believe, by Sammy Seastrunk - a great guy! He had a terrific voice, and he loved to sing! I found his obituary. He was a graduate of Clemson. He had been a successful surgeon and had pioneered artificial knee joint surgery. I had lost touch for so many years and only through a fluke I learned of the reunion at the Cog in 2014 which I attended with my wife Peggy. After hearing of the event, I tried to contact as many of the guys I knew from the Cog, with some success. I was able to muster Owen Jansson, Steve Holzel and his brother Tom, Freezie Frey and Pete Poltrack. I called Griff Harris and had a great chat - my God, he's got a great memory! My last run was in September (1963) as fireman on the No. 9 with Pete Poltrack as engineer."









Coal Smudged Images from the 1960s: *(Clockwise from upper left) Frank & No. 9 coaled and ready below the bunker as part of double-header; Peter Poltrack, Frank Thompson, unidentified crewman, & John Hanna(?); Peter Poltrack & Frank dining in Summit House kitchen and Poltrack, Thompson & brakeman. All early to mid-1960s*

- Peter Poltrack Collection

Train Crew Notes



Jeff Taylor (August 1966)
- Lewis Family Collection

We wish to congratulate **Jeff Taylor** for qualifying for engineer on July 11, 1966 on the 7:30 a.m. train and encouragement to **Clayton Roy** and **Norm Koop** who are in their final stages of apprenticeship as engineer. *(CC v1n2 – July 13th, 1966)*



Clayton Roy (2003)



MARK JORDAN – Fireman (1966)

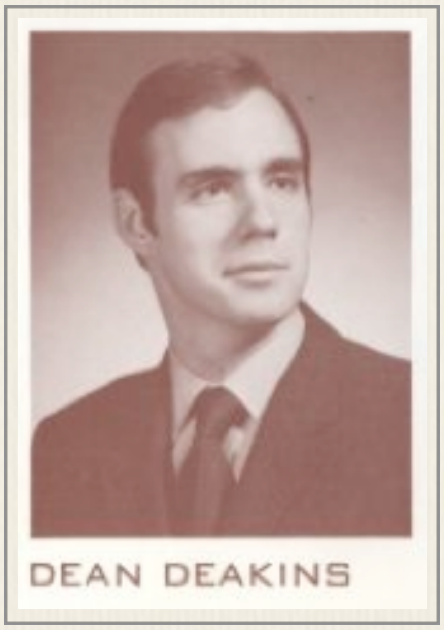
Mark *(left)* comes from Philadelphia and is going to Concord College. At the time of the interview, Mark said he planned to become a building contractor and follow in the steps of his grandfather. *(CC v1n9 – September 2nd, 1966)*

JOE LONG – Spare Brakeman (1966)

Joe Long thinking toward a nuclear physicist while attending Juniata as a math major. I can't write more as this may become a Long story and make him a legend in his own time. *(CC v1n4 – July 27th, 1966)*

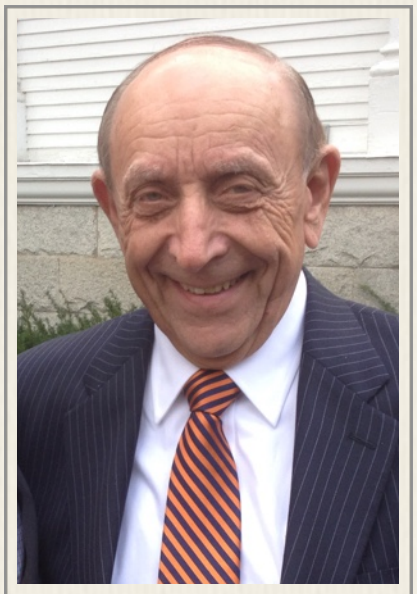
JOE McQUAID – Spare Brakeman (1966)

Joe McQuaid attends school in Manchester, a real liberal fellow as long as it's conservative Joe will be a writer if all goes well and as a spare brakeman he should gather a lot of material as he checks in with Cliff on the phone. *(CC v1n4 – July 27th, 1966)*



DEAN DEAKINS – Spare Brakeman (1966)

Dean Deakins attends the University of Delaware and is in the final trips of qualifying for brakeman. *(CC v1n4 – July 27th, 1966)*



Tom Baker (2015)
- Lewis Family Collection

TOM BAKER – Spare Brakeman (1966)

Tom "Sticky" Baker is enrolled at Bentley; an outstanding skier, is qualifying for brakeman. *(CC v1n4 – July 27th, 1966)*



Tom Baker at 1966 Cog Party
Murdock- Anne Koop Collection

Tom Baker married Margaret Ellen Teague on December 23, 1967 in Concord, New Hampshire.

A Bloomberg Business online executive profile accessed in December 2105 says, "Mr. Thomas J. Baker serves as the Chief Financial Officer and Controller of Boro Developers, Inc. (formerly Boro Construction, Inc.). Mr. Baker has a wealth of knowledge in the areas of corporate accounting, human resources, and office administration. He joined Boro Construction in 1996. Mr. Baker served as the Director of Contract Administration at Smith Technology for two years and supported all regional offices and company divisions including their insurance administration and audit. From 1972 to 1994, he held positions as Senior Vice President in the Financial Risk Management and administrative areas of BCM Engineers, Inc., and prior to that as Accounting Supervisor at Ogden Leisure Corporation. Mr. Baker served as a Captain in the U.S. Army for two years and was the Deputy Finance and Accounting Officer at Fort Leavenworth, Kansas, responsible for administration of all financial accounting functions and related finance service for the Army installation. Mr. Baker earned his BSA in accounting from Bentley College in Massachusetts. http://www.bloomberg.com/research/stocks/private/person.asp?personId=117287356&privcapId=6499287

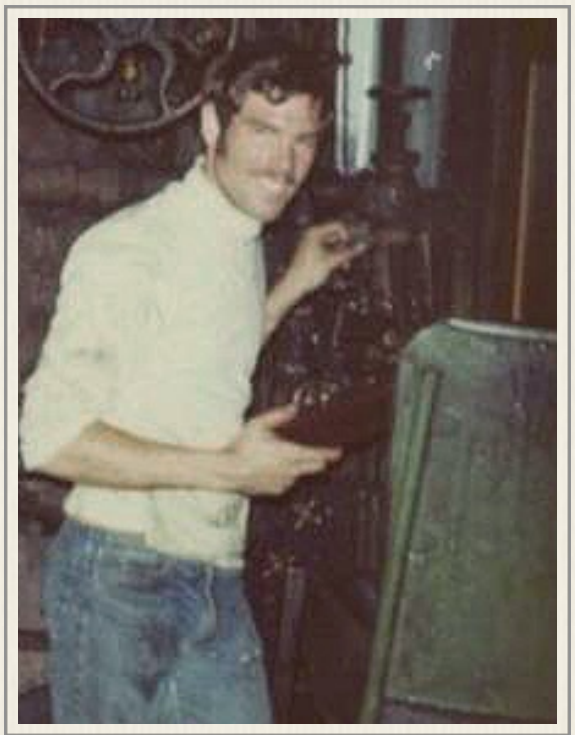
Tom Baker was teaching Nick Chaykowski how to brake on Sunday, September 17, 1967. Baker was in charge of passenger coach No. 6 that was paired that day with the No. 2 *Ammonoosuc* being run by Griff Harris and fired by his brother, David Harris. Their train made what was to be

the last meet of the day at Skyline. The Deuce took the switch, and the No. 3 *Base Station* with the *Chumley* car moved by heading for the summit.

As Harris backed the train off the switch and onto the mainline, "it was agreed between the two that Nick was to 'flip the rails' and Mr. Baker was to change the cog racks and the two flags. The third rail to flip... is the one which crosses the cog rack. Immediately adjacent to this is the side track cog rack connection which has to be slid to a position parallel to the main rail. In performing this movement Mr. Baker stood facing down hill with his right foot in a position to be struck by the rail when flipped from the cog rack to the closed position. He, therefore, spoke to Nick to wait until he moved his foot which he immediately did and the rail was dropped out of position as intended, thus clearing the cog rack.

"After completing the changing of the rails and the switch points both of these individuals... examining the switch and found that it had been completely changed or restored for main line moves."

The description of this particular Skyline Switch throw by Winslow Melvin is unusually precise because of what would happen at the site about 75 minutes later that day.



Bill Oedel
- Lewis Family Collection

BILL OEDEL – Spare Brakeman (1967)

Bill, from Cheshire, Conn., is a sophomore at Harvard and has hopes of becoming a teacher of history. Right now, Bill is apprenticing in the ticket office under the direction of Cliff and Klopp. *(CC v2n4 – August 17th, 1967)*

Bill joined Bud Nye's crew on the No. 6 in 1968, became an engineer, and left the Cog in 1973. He also became a teacher of history. William T. Oedel graduated magna cum laude from Harvard in 1970 with a B.A in American History.. He received an M.A. in Early American Culture from the University of Delaware in 1973, and his Ph.D. from Delaware in 1981.



Prof. Bill Oedel (2014)
- UMass Amherst

Bill taught Art History at the University of Illinois at Champaign-Urbana; was a visiting assistant professor professor at Delaware and curator of Collections at the Historical Society of Pennsylvania in Philadelphia before joining the faculty at the University of Massachusetts at Amherst in September 1984. He would be there for more than 30 years retiring at the end of 2014 as Chair of the Department of Art, Architecture and Art History.



Ned Carey's HS graduation photo
- Lewis Family Collection

EDWARD "Ned" CAREY

The Lancaster Academy graduate and his wife, Louie lived downstairs in Honeymoon Cottage in 1952 while Jitney and his bride, Mrs. Jitney lived upstairs. Honeymoon Cottage was located across the tracks next to Railway's sawmill. Jit remembers a water leak in the upstairs apartment at one point went downstairs onto Ned and Louie's bed.

The Carey's were there when the sawmill next door burned to the ground in the middle of the night - apparently ignited by sparks from a passing train. The Carey's safely went out the front door. Upstairs, Jitney soaked a wedding gift quilt and draped it over their heads to protect the couple as they descended down the stairs alongside the building next to the blaze.

Ned was an engineer when the cog gear on his engine went up on a rail - slid for a bit and then came back down in the rack. After the incident, he decided to not run engines and worked at other jobs at the Base. *- See Vol. 2 Roster entry for the Carey's obituary*

THE TRASK'S

While George Trask *(right)* helped Jitney get a job at the Cog in 1950, the Trask Family's involvement in the story of Mount Washington and railroading began much earlier and continues to this day.



George's paternal grandmother was Caroline Maud Crawford. She married George's grandfather and namesake, George Henry Trask on August 26th, 1893 in Boston. The 27-year old Caroline was a distant relative of Ethan Allen Crawford, the man who first surveyed Crawford Notch in New Hampshire and laid out the footpath to the top of Mount Washington in 1821 that would be followed by Sylvester Marsh's railway in 1869.

Caroline and George Trask (George's grandparents) lived in Rochester, Vermont and had two children. George's dad, John Crawford was born in April 1896, and George's aunt Margaret was born two years later.

Margaret Trask settled in Springfield, Vermont and worked for Mr. E.S. French of Rochester as a secretary for the Springfield Terminal Railway - a six mile line that began in 1896 as a munici-

pal electric railway connecting the machine tool town with nearby Charlestown, New Hampshire. A power house and dam at Gould's Mills supplied the power to run the railway. The short line later adopted diesel to transport goods to the Boston & Maine's main line running up the Connecticut River. The 1930 Census lists Aunt Margaret Trask as a railway trained stenographer living as a lodger with the Brooks Family on Summer Street. Margaret never married and died in 1975 at the age of 77.

Margaret's older brother, 20-year old John Crawford Trask married 19-year old Nellie Catherine Foley just three days before Christmas 1916 in Hartford, Vermont. A year later, they had their first son - John Crawford Trask Junior. The 17-year old Junior was the first Trask to go to work for Col. Henry Teague manning the information booth at the Summit House in 1935 (perhaps hearing about the job from Aunt Margaret as the Springfield Terminal Railway was closely tied to the Boston & Maine Railroad which had unloaded its Mount Washington Railway operation onto Teague just four years before.) J. Crawford Trask would work at the mountaintop hotel for a few more years coming down from the summit to work the Cog's information booth at the Mount Washington Hotel. At that time, the Base Road ran through the grounds of the hotel, and would continue until a new segment of highway was built.

John Trask (the father) worked as a carpenter in Rochester and was known to always drive around town in "a pick-up truck (an ugly green one in the early '60s)." Nellie was Rochester's postmistress for 22 years from 1945 to 1967. Their second son, 16-year old George got a job in the summer of 1942 driving Henry Teague around the White Mountains in the Colonel's green Nash when the Cog was closed during the war. George says the Cog crew for the summer of 1943 was just the old Colonel, caretaker Jimmy Webb, and him.

George enlisted in the Navy in 1944 and came back to the Cog in 1947 after his discharge. He worked on the tracks with Pliney Granger, fired, ran engines, and did various other jobs. George enrolled at Lyndon Teachers College in 1948. There he met and roomed with Norman Lewis from Lunenburg. While watching Norm dancing in a Jitterbug contest at the Cedar Grove Dance Hall in Lyndon, George with a few beers under his belt, called out encouragement to his new classmate, "Look at him jitter... Jit... Jit.. Jitney!" and Norm's nickname was born and stuck.



LTC roommates Norm Lewis and George Trask (1950)
- Verlyn yearbook

George's younger brother, William Foley Trask spent two summers working at the Cog Railway. Ticket agent reports in July and August 1951 are signed by Bill, who had just graduated from Middlebury College as a history major. Three years later, Bill would be working as an assistant to the Dean at Middlebury when he married Lyndonville journalist Ruth Ann Shonyo, the 24-year old daughter of successful Caledonia County meat-packer. When it came to finding a mate, geo-



George & Jitney at Cog reunion in Danville (2002)
- Lewis Family Collection

graphically speaking, Bill was once again following in the footsteps of older brother, George.

While at Lyndon Teachers College, George met the daughter of a Canadian-born, St. Johnsbury plumber turned chef working at the St. Johnsbury House Hotel. Aline Lillian Williams was the sixth child of Thomas H. and Laura M. (Lachance) Williams - born in 1932.

Six days after the Jitney's got married in 1952, 26-year old George and 20-year old Aline walked down the aisle. There was some controversy over the fact George was not Catholic, but Aline found a priest willing to perform the ceremony. Jit remembers his job at the wedding was to alert the organist in the loft when the bride was ready for her processional. Jit says his foot had barely mounted the first stair when the organist launched into the musical piece not waiting for the "official" signal to go. Jitney Jr. discovered in research for this manual that when the pair applied for a marriage license, George told St. Johnsbury town clerk W. A. Bemis that his occupation was "Superintendent - Mt. Washington Railroad." The newlyweds took up residence in the last yellow cabin in the row closest to Marshfield known as "*Peppersass* House."

1952 was also the year that George took advantage of an arrangement Henry Teague had with the Boston & Maine Railroad, and landed a special apprentice position in the engineering department of the Billerica, Massachusetts shops. Teague's arrangement allowed Trask and others like Pliney Granger to go work for the B&M during the year, but take a leave of absence during summer months to come work at the Cog.

George almost immediately made an impact in the Shop Division's annual cribbage tournament. The *B&M Employees* magazine reported in March 1953 that "The shop (cribbage) tournament is going full blast, and at this writing the teams are bunched closely.



An unidentified tourist, Joe Anger & George Trask pose for the camera at the Summit next to the No. 6 Great Gulf
- Paul Saunders Collection

George Trask and Joe Parent have a one-game lead over Manny Pacheco and Herman Gendreau, with other teams following in Division I." However, when the April edition of the *B&M Employees* magazine came out the tide had turned in the tourney; "In the Shop divisions of the (annual cribbage) tournament, Jim Freeland and Paul Courser appear to have it salted away, with George Trask and Joe Parent furnishing as the chief opposition." The magazine's July-August 1953 edition noted "Special Apprentice George Trask is on leave of absence with the Mt. Washington Cog Railway during the summer months."

George Trask would leave the Boston & Maine in 1956 for a job in the plywood industry first in West Stewartstown, New Hampshire and later his hometown of Rochester, Vermont. George's second full-time summer stint at the Cog ended in 1957, but he continued to work on a part-time basis. George says Arthur wanted to start attending some of the fall horse shows his girls were riding in, and was willing to pay George a hundred dollars a day. George and Aline's son, Robert remembers that his dad "would come up often to help Arthur (Teague) on weekends, (and) that is when I would come up and hang out and be a pain in the butt along with Charlie (Teague)."

The Trask family remained a full-time part of the Mountain thanks to George's father-in-law. Thomas H. Williams Sr. was cooking at the Summit House in 1956 - a full-time position Aline's dad would hold until Dartmouth College sold the hotel and the summit to the state of New Hampshire in 1964. After that, Williams, like his son-in-law would come back to help in the fall.





Both Trask boys - George "Buddy" Trask Junior *(left)* and "Bobby" *(right)* would work on the railroad, too. Robert Trask remembers, "My bother (Buddy) worked here starting in the late 60s until the late 70s and part-time after that."

A 1974 *Boston Globe* In This Corner article by Duke Simoneau entitled, "Young hands run oldest railway" says most Cog crewmen come to the job because of friends or relatives. His "good example" is "20-year old George (Buddy) Trask whose 16-year old brother Bob is now training to be a brakeman."



Buddy *(right)* would go on to spend 35 years as a high school varsity basketball & soccer coach and athletic director in northern New Hampshire at his alma mater, Stratford High and then at Colebrook Academy. He was inducted into the New Hamp-

shire Interscholastic Athletic Association's Hall of Fame in November 2012.

As for his start at the Cog, Robert says, "my father came home one weekend in July of 1972 after working as a weekend warrior at the Cog. He asked, or told me there was a opening in the kitchen as a dishwasher. Well I jumped at that job, (I) was delivering newspapers at this time for the past 4 years. (I) started under the great Pete and Grace with Ruthie and the poodles watching over me as well as the dishwasher I replaced."



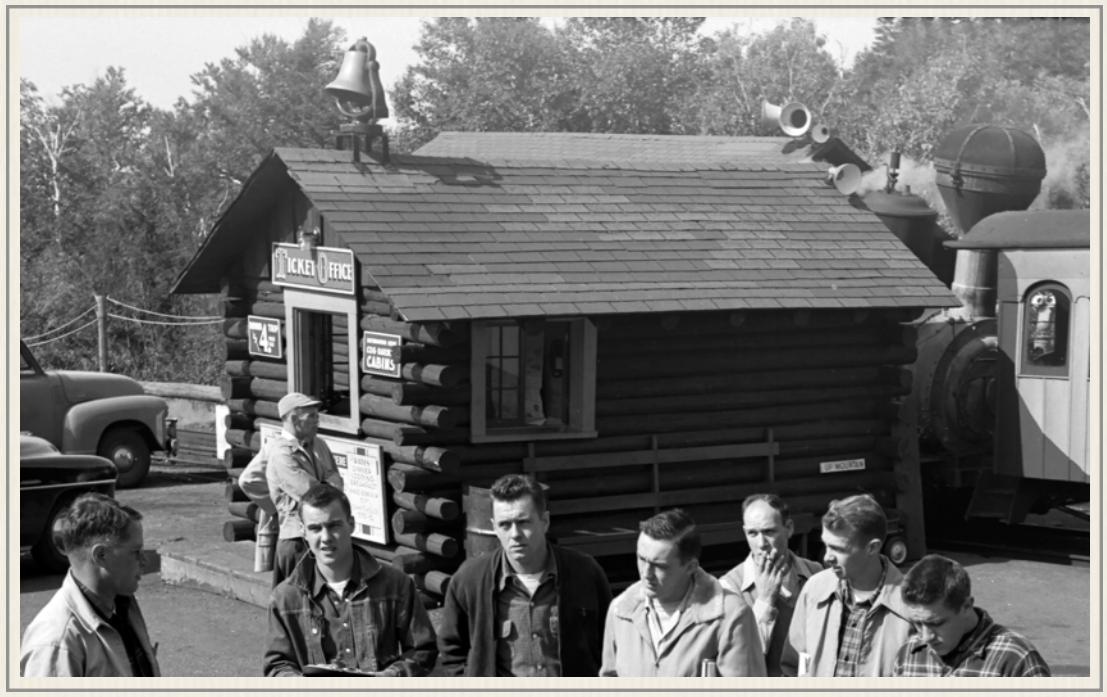
At the age of 61, George H. Trask returned to manage the railroad full-time for two years *(1987-89)* for the new owners. He is now *(2015)* retired and living in Rochester, Vermont. Although the local golf course has arranged for him to look after the fairways and greens on his own schedule.

His son Robert *(left)* is working on matching his dad when it comes to Cog longevity. "I have been here except for a year or two ever since (1972), 40 years and hopefully more to come, (I) met some of the best people that I would call friends or family. (I) always wanted a train set growing up, always got Hot Wheels™ instead, so I went to the Cog to get my dream train set. I have met so many great people here that I will treasure in my heart forever."

The Poltrack's

While the Trask Family's Cog Railway era began in 1935 and continues still, the Poltrack's got their start at the Mountain the same year that Jitney arrived in 1950. However, Poltrack's continued to work at the Cog past the end of the Jitney era in 1967. They owe their introduction to the operation to a frustrated Dartmouth College graduate with an American History degree, who was heading back to Hanover in the fall for an MBA, and got lost on his way to a summer date.

"A fork in the road did it," writes Art Poltrack on Facebook in 2015. "The year was 1950. My father, Anthony was a student at Dartmouth. He had a date with a young lady who worked at the (Mt. Washington) hotel. My father was the most impatient person I ever met and thinking that he had gone too far on Route 302, turned left onto the base road instead of going the last mile or so to the hotel! He followed the Base Road and upon arriving at the Base got out of his car thinking he was in a time warp. Adding to the bizarre situation he heard over the loudspeaker 'Tony Poltrack, Tony Pol-



- Courtesy Dartmouth College

track please report to the ticket office immediately!' So, over he went and who was working in the ticket office but none other than Eugene Brooks *(right)*, a classmate of his who lived down the hall from him (at Dartmouth College.)" Brooks told the lost Dartmouth man all about the mountain climbing railroad operation.



Eugene Brooks (1951)
- Dartmouth Aegis

Anthony Stanley Poltrack was born in May 1923, the ninth of ten children to Polish immigrants, Kazimierz (Charles) and Ludwika (Louise) Leszczynski Poltrack in Stamford, Connecticut. Tony graduated from Stamford High in 1940 and attended college for a year before the 20-year old five-foot ten-inch tall stock clerk enlisted in the U.S. Army in February 1943. Tony served in New Guinea as a tech sergeant in the 85th Malaria Control unit. Back home and mustered out, the Pacific Theater veteran headed north up the Connecticut River to Hanover, New Hampshire to finish college.


CPL. ANTHONY S. POLTRACK

After his accidental discovery of the Cog Railway, Tuck School student Tony followed up on "Brooksie's sales pitch" and sat down with Tuck School alum, Henry Teague when Teague came to Dartmouth early the next spring recruiting workers. Tony was hired as the summer bookkeeper for 1951, and continued as a part-time Cog employee doing accounting and the like while working full-time for Price Waterhouse and the NYC YMCA before finding his corporate home at the CR Gibson company in Norwalk, Connecticut.

When Arthur Teague bought the railroad, Tony Poltrack became part of the corporation's board. Tony's son says his dad "obviously struck up quite a friendship with Arthur Teague, too in the following years" because when he was born in 1958, he - Arthur Poltrack was named after Col. Teague.



Cog waitress Carolyn Poltrack

Tony also convinced some Poltrack family members to spend summers working at the Cog. "I was originally to work at the Cog in the summer of '64 when I had just turned 16," remembers Carolyn Poltrack Ashley in 2015. "But I got cold feet so I went in '65 between my junior and senior years of high school. I know (Uncle Tony) simply wanted to get me out of the sheltered world I was in! My guess is that Tony offered most of the nieces and nephews the opportunity, but only (Peter, Cynthia, and Celia) were wise enough

to go. I will never forget when it snowed in August at the base! My last summer was the Centennial in 1969."



Cecilia Poltrack (1969)
- Poltrack Family Collection

55 years later, Cynthia Poltrack (Skinner) fondly remembers her two summers (1960-61) at the Cog. "I waited tables at the base and always served Ellen and Arthur Teague. We had a tight knit group then of college kids. Had some wild rides to Littleton in the Cog car. Should have had one of the girls drive. Ellen (Teague) would give us tickets to the summer theater at Mountain View where we would go on a date. I did brake the train once when my brother, Peter, was the official brakeman. (He) had made a bet that I couldn't do it - no money involved just a dare. As an aside I had to buy jeans when I went to work there. Generally girls didn't wear jeans... so different today."



"My father *(left)* came up once a month or so during the seasons until 1969 to work on the books," recalls Art Poltrack in 2015, "and handed me off to a willing engineer for entertainment (for) that day. I remember Chase, your father (Jitney), Harris, Thompson and Kent being very nice to me as a child."

Being nice at the Cog meant making sure that no one got hurt by the 19th Century technology. "Les (Art's brother) and I spent many a trip with Frank Thompson on the No. 9 as children. I remember Frank as being a very nice guy," he told Facebook Coggers in September 2015. "He had one rule which I followed and I imparted upon all other visitors to the cab: 'Sit there (in the fireman's seat) and don't touch a f{%^ing thing.' Very, very wise words for the uninformed!"

"This of course was while I wasn't fishing with Charlie and Jackie, or participating in bull runs at the shop," says Art.



Charlie Teague & Jackie Kenney (1964)
- Ellen C. Teague Collection

"One time Charlie Teague let the bull out of its pen in the horse barn," explains Art. "Needless to say, it got loose from its rope and was chasing Jackie Kenney, Charlie and me around down by the Shop. Jackie and I took quick refuge in a horse trailer backing up against the center divider, followed quickly by Charlie scampering over the rear lift gate. Mr. Adams came out of the shop and literally got the bull by the horns some kind of way, and got the animal back in the floor to ceiling lined pen in the horse barn. Afterward, he administered a spanking to Charlie. I also remember Arthur as approving the unapproved spanking."



Arthur Poltrack

"My last recollection of Arthur (Teague) was that he let me ride one of the

horses in a circle on a rope with him holding the rope." The young rider, Arthur Poltrack, was nine years old.



Lester Poltrack

Seven years later, Art Poltrack *(prior page)* went to work at the Cog for Ellen Teague. His brother, Lester *(right)* joined the Cog crew two years later in 1977. Art's second cousin Ethan, Peter's son, completed the roster of Poltrack's at the Cog Railway in 1994. By then, Art Poltrack was making annual pilgrimages back to the mountain, picking up a shovel, and firing for a day on the line.

"My father never told me about whether he made the date at the hotel or not. But he always attributed it to 'the fork in the road,' says Art. "So, eight Poltracks, on and off for 65 years and still going. Like many of our fathers and mothers, I'm sure they're all smiling down from above watching vigilantly over the current day events. I know Tony is."





Allen Fillion stands second from left behind engineer Mike Boyce. George Tatham is to the right of Boyce holding hammer. Pat Camden is on the left of the four men standing on the engine's running board.
- Fillion Family Collection

The Fillion's

Three generations of Fillion's from St. Johnsbury, Vermont also worked at the Cog Railway. Allen Fillion, his son - Joe, and Joe's sons, Mark and Tom all worked for Teagues. Tom says Grandpa Allen's older brother Garfield (Joseph Garfield Fillion born 1889) also worked at the Cog - Garfield and Allen both starting their Cog careers under B&M ownership. The 1910 Census records the 20-year old Garfield as a pulp mill worker living in Berlin, N.H. with his uncle, Cy-

ril. But when enumerator Louis B. Shipman visits the household on Maple Street on April 29, 1910, Garfield has been out of work for two weeks. Garfield apparently found employment that summer at the Cog. The season of 1910 fall edition lists Garfield Fillion as the railway's track inspector. Ten years later, Garfield and his wife, Anny are back in Quebec farming with two daughters, six-year old Mary and newborn Jeannette.

Allen Thomas Fillion was born on April 6, 1896 in St-Patrice-de-Beaurivage, Québec - the son of Joseph Fillion and Barbara Gallagher. The 21-year old unmarried Canadian was working as a trackman on the Mt. Washington Railway when he registered for possible service in World War I on June 4, 1917. Registrar M.G. Hastings described Fillion as a tall man of medium build with black hair and brown eyes. He would work at Mt. Washington for about thirty years. The family says Allen used to drive Henry Teague south in the winter.



Engineer Allen Fillion, his son, Joseph and daughter, Laurette are subjects of a B&M publicity shoot circa 1929. The image would still be used in the 1930s by new railway owner, Henry Teague
- Fillion Family Collection

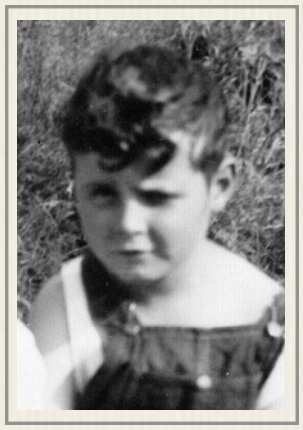
Allen Fillion would marry Marie-Ange Fortier. He had three sons and one daughter with Marie-Ange. Their first son, Joseph Roland would be born in 1924 in Quebec. The family had moved to St. Johnsbury, Vermont by the time their daughter, Laurette Alma was born in September 1925. The 1928 City Directory for St. Johnsbury says Allen is now working as an engineer. Leo Fillion was born in 1931 and son Maurice arrived in 1933. U.S. Census worker Barbara Higgins finds the 43-year old Allen working in a bowling alley to support his family in mid-April of 1940. The Fillions would spend the summers living at the Base in the cabin next to the Boyce's - Laurette becoming fast friends with Mary and Catherine Boyce.



Laurette Fillion at the mountain with Cog toddler Beverly Williams (1939)
- Beverly Decato Collection



Leo Fillion (1939)
- Beverly Decato Collection



Maurice Fillion (1939)
- Beverly Decato Collection



Joseph Fillion (1948)
- Verlyn Yearbook

Jitney meets U.S. Navy vet Joseph Fillion at Lyndon Teachers College in 1948. Joe had followed in his father's footsteps at the mountain, and was running Cog trains. By the time Jitney became a Cogger, both Fillion's had left the mountain. Allen left as his expertise in using steam he gained at the Cog was in demand recapping automobile tires for the C.H. Goss Company in St. Johnsbury. 26-year old Joe married Lyndon classmate, Molly String *(right)* in 1950 and began working at the Fairbanks Morse Scale plant. The new Mrs. Fillion was described in the 1950 LTC Yearbook as "quick of wit and fleet of limb, on the go and full of vim, hard at work and in good trim." The couple would move to Tampa, Florida in 1954 and Joe would begin a 32 year career in quality assurance at the Ralston Purina Company. The couple would have three sons; Mark, Tom and Dan. Mark became the third generation to work at the Cog in 1967. Brother Tom started in 1968 and the family was captured at a Cog picnic table that summer.



Molly String (1950)
- Verlyn Yearbook





Allen Fillion sits at left with grandson, Mark standing behind him. 1968 was Mark's second year at the Cog and he had moved from the Marshfield kitchen to tending the coal bunker *(right)* and parking lots. For his third and final year at the Cog in 1969, Mark joined Father Goodie's track crew.

Tom Fillion sitting to the left of his grandfather *(above)* was spending his first summer at the Cog working in the kitchen. The family snapshot also includes Allen's wife, Marie and Joe's brother, Leo.

Tom says during his second year of 1969, "I worked on the base crew – honey bucket, painting, ran the gas station etc. (I got invited to go to a concert in New York that summer but didn't go. It was Woodstock!!)"

Ch. 9 - The Fillion's



1970 found Tom assigned to be the switchman at Waumbek and he also was brakeman. His last year of 1971, Tom *(left)* was firing. He would go on to graduate from the University of South Florida. A biography in the Summer 2007 issue of *The Hamilton Stone Review* reports Tom is a mathematics teacher, golf and tennis coach at Robinson High School, Tampa. Other teaching assignments have included English Language trainer for the Royal Saudi Air Force in Taif, Kingdom of Saudi Arabia, and personal teacher for Nick Carter of The Backstreet Boys. He has been published in *South Beaches Journal*.

Tom's grandfather, Allen Fillion died at age 78 on December 10, 1974 - nineteen years to the day after his son, Maurice had died in 1955 at age 22. After his retirement in the 1980s, Joe and Molly Fillion would return and spend summers at the Cog. "My Dad worked in the ticket office during the 1980's," reports Tom.



Molly & Joe Fillion pose with son Tom, and Tom's daughter, Paula at the Cog in the 1980s. Manager George Trask had asked the couple to return to help out.
- Tom Fillion Collection



"He and my mother lived in Paul Dunn's cabin and the Chalet. The old Cog phone from Paul Dunn's house is on the wall of my house here in Tampa!"

Joe died in Florida May 20, 2013 at the age of 88. Son Tom spread some of his ashes in the Amonoosuc River and at Jacob's Ladder. His widow, Molly continues to live in Florida.

CHAPTER 10

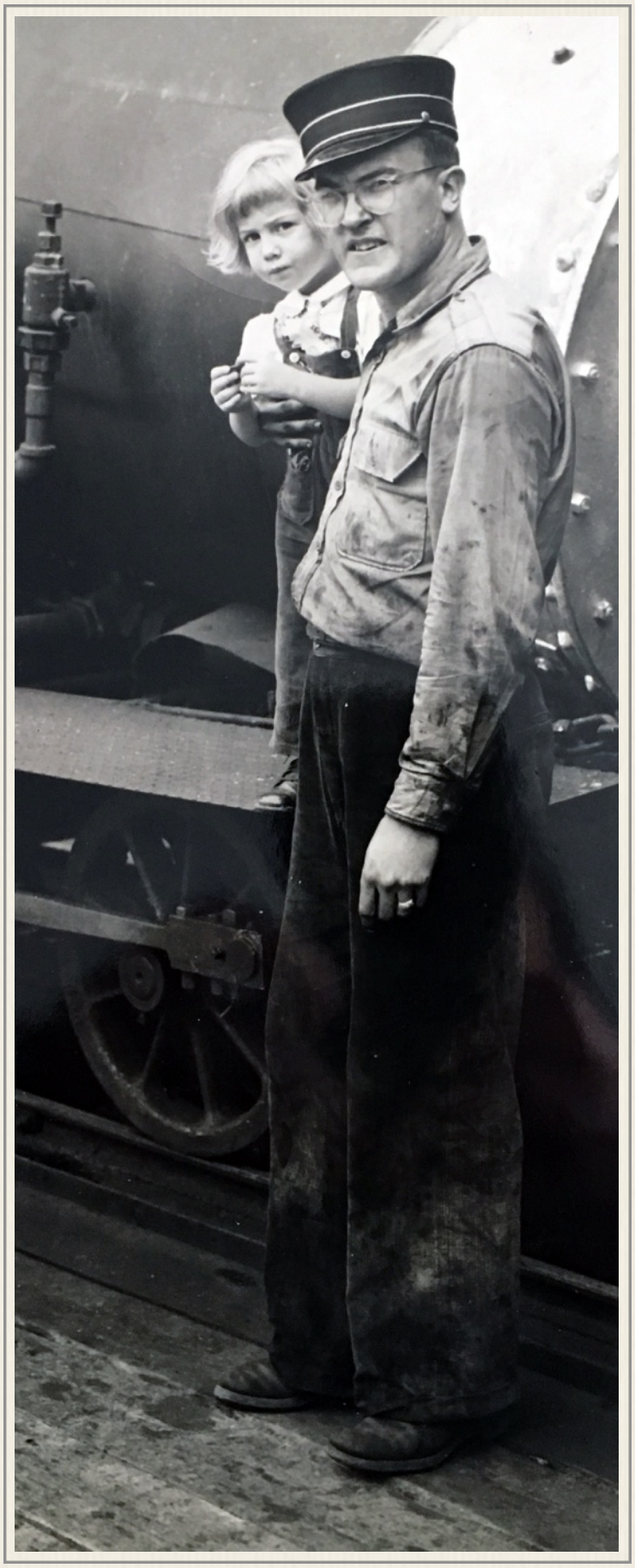
Cog Kids



Senior engineer Mike Boyce explains how the No. 6 works to a young student (July 1946)
Photo by Roy Stevens/The LIFE Images Collection/Getty Images

The Mountain provided the younger set with unconventional summer stories to tell to classmates in the fall. Swimming (at Upper Falls & the Crawford House), hiking, horseback riding & horse shows with all that tack to saddle soap & polish, blueberry picking while waving at tourists in passing trains, yellow jackets, fishing, cinder scraped knees, snowbound bunnies, kerosene stoves, Cog grease, overnights at the Summit & Lake of the Clouds, snow in July, road trips to Littleton & Whitefield in cars packed with groceries & laundry, frappes & orange-Cokes, college kids who thought you were older, and summer sunsets with azure blue skies & engines softly steaming in repose.









Jane's Summer World: *3-year old Jane Teague hangs from the No. 6's tender, poses on the running board with an unidentified conductor and clambers up the ticket office in 1946. Diagnosed with diabetes at age 6, Jane would turn her attention to horses and holds a bridle (right) alongside Judy the Dog on the road in front of cabin row.*

- Teague Family Collection

Jit's Place



The yellow cabin with green trim *(right)* was the summer home of the Jitney's. The mainline train headlight featured "Cindy" and "Tim" on the side and lit the way for Cog crew looking for fresh baked cookies & half-baked conversation with Jit.

The kitchen table built by Earl Whitney (Mrs. Jitney's dad) to fold in half for transport was definitely not the roundtable at the Algonquin Hotel, but the design did keep evening discussants on their toes as leaning too heavily on either end would raise the middle like a drawbridge and slide dishes into one's lap. Jitney looked forward to talking politics, world affairs, philosophy, and science with the collegiate crew members. It was an opportunity for the Lyndon Teacher's College graduate to be exposed to what the young people were learning at their universities – Ivy League and otherwise.

It was also an opportunity to tell jokes, swap stories and sometimes tweak the class divide. Jit was fond of telling young people whose families were on the social register of the mainline in Philadelphia that "the only thing we register around here are dogs."

Mrs. Jitney was the "hostess with the most-ess" baking raisin sugar cookies, ginger snaps, peppermint squares or brownies for the informal gatherings. The discussions were such that Jitney Jr. and sometimes Miss Jitney would sneak just a bit down the stairs (that had no bannister) from their second floor front bedroom to listen and peek over the stair treads down onto the group. Several times, Jitney Jr. made the mistake of revealing his position by joining the conversation. He and his sister became known as "step children."

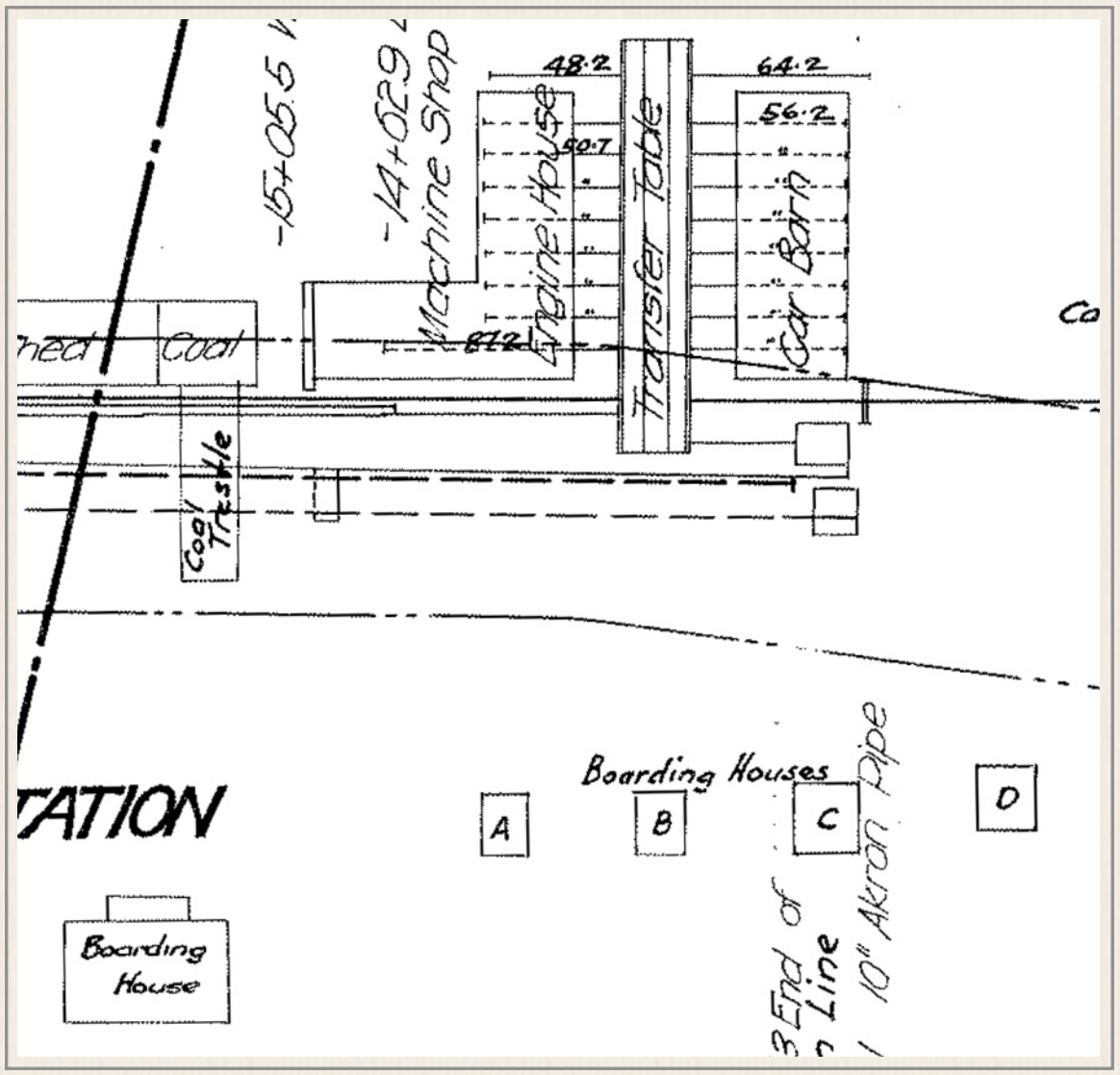


"Step-child" Cin and the swimsuit chair (1963)
- Lewis Family Collection

Sent back up to bed one time, Jitney Jr. angrily flipped the covers upon entry such that they knocked off a wet bathing suit drying on the railing. It fell down and landed squarely on Doug Taylor's head. The tall trainman sat up from his slouch in the chair, took the damp suit from his head, looked at it, scowled and said "I guess it's time to go." He left without another word despite Mrs. Jitney's abject apology and pleas to stay.

Ch. 10 - Cog Kids

On the other hand, co-host Jitney had no problem departing the table when he felt it was his bedtime. He'd head up the stairs and the conversation would continue without him because Mom enjoyed the discussions, too.



Mouths of Babes

Research in 2015 revealed the cabin (A) the Jitneys occupied from 1953 to 1967 was on railroad tax maps *(above)* as early as 1925 when there was only the Boarding House and by 1934 with a row of four cabins by the shop/train station. The cabin design was Spartan – thick rough timbers like those that held the track formed the framing. There was no insulation and in some places, like the narrow bathroom off the front room and upstairs, the back of the outside clapboards were the interior walls. The rafters of the roof were exposed, and shingle nails poked through causing a quick death to any helium balloons youngsters might bring back from "down the mountain" trips. The walls and ceiling upstairs had been spray-painted a flat white. That happened shortly after the Jitneys moved in. Arthur Teague provided the paint and the sprayer. Jit rounded up volunteers for the project with a promise of beer after the job was done. The aged wood drank in the paint as the volunteers drank in the beer and sprayed – spending so



Upstairs bedroom looking to the front has new paint on the walls & doors in 1970, but Jit's white spray paint still adorns the ceiling.
- Granger Family Collection



Another view upstairs bedroom- stair railing from which Jitney Jr's swimsuit fell on Doug Taylor's head at right.
- Granger Family Collection

much time on some sections the white paint seeped through the clapboard joints and rivulets ran down the yellow exterior. The Colonel later commented it was one of the more expensive paint jobs at the Base.

A single wood stove located in the living room with its hot uninsulated pipe running straight through the upstairs front bedroom tried to combat any mountain chilliness at 2500-feet elevation. The green rail with yellow slats child protection fence ringing the wood stove came down when a new kerosene stove was installed. The kerosene stove provided youngsters with their first official chore and example of recycling. The young Jitneys would take empty glass one-gallon jugs that originally held syrup to make soda for tourists at Marshfield, and walk them to the hand-cranked kerosene pump located just past the horse barn towards the Boys Dorm. Then it was back to the cabin with the fuel. Those glass gallon soda syrup jugs were also used for a time on the trains for both drinking water and kerosene supplies. They fit snugly in the corner of the engine's tender just behind the fill covers, but had a tendency to break. Recycled plastic gallon bleach bottles eventually replaced them. The other evening chore would be to walk the trash to the dump out behind the machine shop and toss the bag over the bank. The dump walk in the quiet twilight included the constant "thrum" of the Pelton wheel driving the generator, and the splashing water coming from the wheel's outlet running down the hill to join the murmur of the Ammonoosuc heard through the trees beyond the dump.

The downstairs windows of the Jitneys' cabin started less than two feet above the floor. It was a perfect height for a curious toddler in diapers to stand and watch the world outside. When Father Goodie's track crew came one summer to replace a sill on the up mountain side of the cabin, Jitney's first-born watched them disconnect the two propane tanks that fed the cabin's stove, refrigerator and hot water heater – then jack the house up enough to remove the rotted timber and replace it using the same oral directions employed when re-



placing a bent on the line. The crew seemed to enjoy having an audience.

When Jitney came by, Father Goodie said with great affection, "Jit, you've got the cutest little son-of-a-whore I've ever seen." Jit proudly accepted the assessment of his child in the kind spirit that it was offered. However, there was the problem that after the job was done and the track crew left, Jitney Jr, who was just learning to speak kept running through the cabin saying, "Mr. Jesus – Mr. Jesus – Mr. Jesus" innocently mimicking the foreman's cadence.

The youngster also became familiar with another track foreman who lived next door beyond the cabin's clothesline, the water pipes heading to the Shop, and raspberry bushes at the base of the hill topped by the Boarding House. Pop Pike parked his trailer and lived in that spot during the summer. He and his female companion used the plumbing facilities in the Shop. Eddie Bird vividly remembers Pop Pike bolting out of his trailer after a long evening's bender – clutching his pants and scrambling towards the Shop toilet.

One evening, Mr. and Mrs. Jitney were relaxing with gin and tonics – the young couple debriefing after a day on the trains and a day raising children. Their son wandered over and Mrs. Jitney picked him up for a hug. "You smell like Pop Pike," the youngster observed. Mrs. Jitney never drank gin again.





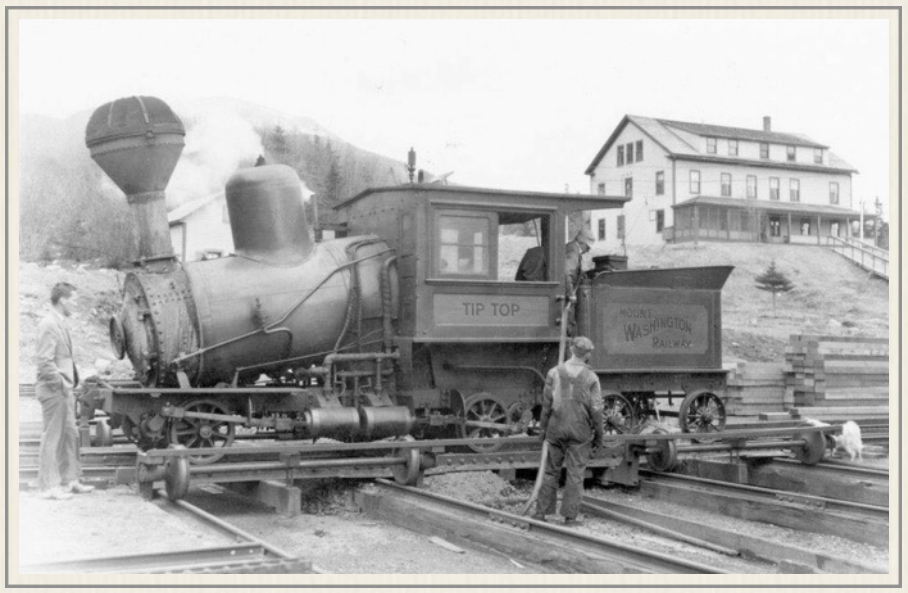
- Owen Jansson Collection

Eyes of a Child

While the downstairs windows were low to the floor, the two windows upstairs were high. They were one piece with no sash, and were either in or out to allow airflow front to rear with screening to keep black flies outside. Luckily, one of the blanket boxes specifically built for the Lewis household's annual summer move to the Cog was stored under the front window. The box was the perfect height for a kneeling youngster to observe Shop operations – at least those operations that occurred outside.

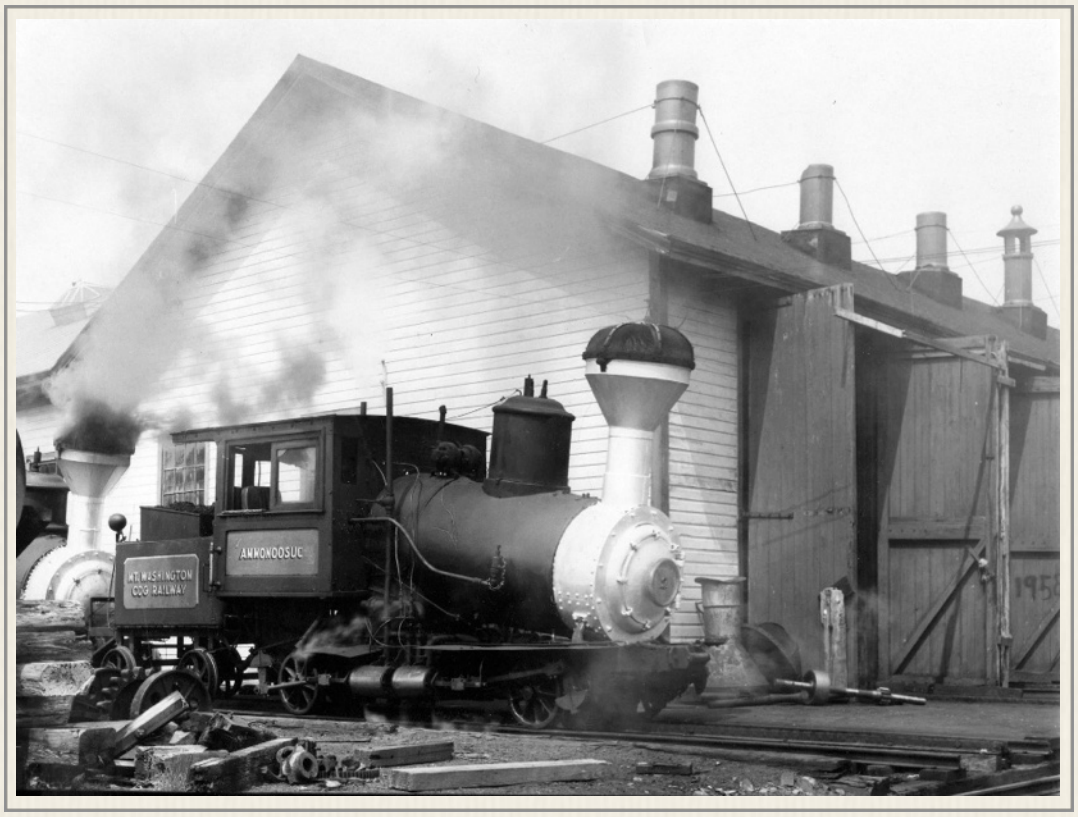
Periodically, engines with mechanical problems would back down to the Shop. The brakeman riding on the car's back platform would wind the brakes and stop the car while it was still on the incline before the track went flat at the transfer and tracks beyond.

Instead of a roundtable, the Shop's transfer table was a section of track mounted on wheels rolling on another set of rails running perpendicular to the mainline. This allowed locomotives, coaches and other rolling stock to be moved into storage or repair areas. There were eight covered bays in the Engine House to the left of the transfer. The first bay had 87-feet of track so engines could be backed into the main machine shop over a work pit. The other seven bays featured 50-feet of track. A ninth 48-foot long outdoor section of track was behind the engine house.



The Car Barn to the right of transfer also featured eight bays - each had 56-feet of

track. The transfer could move rolling stock to a ninth storage position with 64-feet of track behind the Car Barn. Jitney says occasionally the up mountain mainline rails would work their way down such that ends would have to be trimmed with a torch to allow the transfer table to move into position.



What happened next to the ailing engine depended upon the diagnosis the shop foreman had made further up the line. Minor repairs might be handled outside and the engine would use reverse steam to back across the transfer to a spot on the track in front of the shop – or stop on the transfer with tender attached. The transfer would be un-chocked and pushed by the coal bunker tractor's scoop (or hand-winched with huge pipe wrenches) to a designated repair stall. The ailing locomotive would back in with steam cascading from the cylinder cocks and rising from the side stack into the air – the plume being cut off by the overhang before dramatically shooting again from one of the chimneys designed for smoke to exhaust from each locomotive stall.

If a problem was more serious, the fire would be dumped at the bunker before the train went down to the Shop. The locomotive would stop on the transfer, the tender would be disconnected and rolled to a spot outside the front door. The transfer would be moved to the first bay and the engine would use its remaining steam to back into position. Shortly after it came to a stop, there would be a loud roaring sound and a cloud of steam would whoosh out the doors towards the transfer as the boiler was blown down.

The transfer would come back to its main line position, the brakeman would release the brakes and the passenger car would roll down the hill. There was a "ka-thump" as the first set of wheels hit the transfer. The brakeman might start winding the brakes to slow just a bit before the "ka-thump" of the second wheel set, then he would stop the car. Bragging rights were granted for stopping dead center on the transfer – shame was the reward if the car rolled too far and had to be pushed back on - or if too much brake was applied too soon such that the second wheel set failed to gain the transfer and the car had to be pushed on.

The transfer would then be moved to the proper stall of the car barn and the coach pushed in to await its next assignment. The transfer would return to its mainline position. The tractor would head back up the road to its main responsibility keeping the coal bunker full of coal, and the action at the Shop would move inside beyond the gaze of the juvenile eyes in the second floor

window. Often times Jitney Jr. would then return to whiling away his summer day reviewing his comic book collection.

Family Entertainment

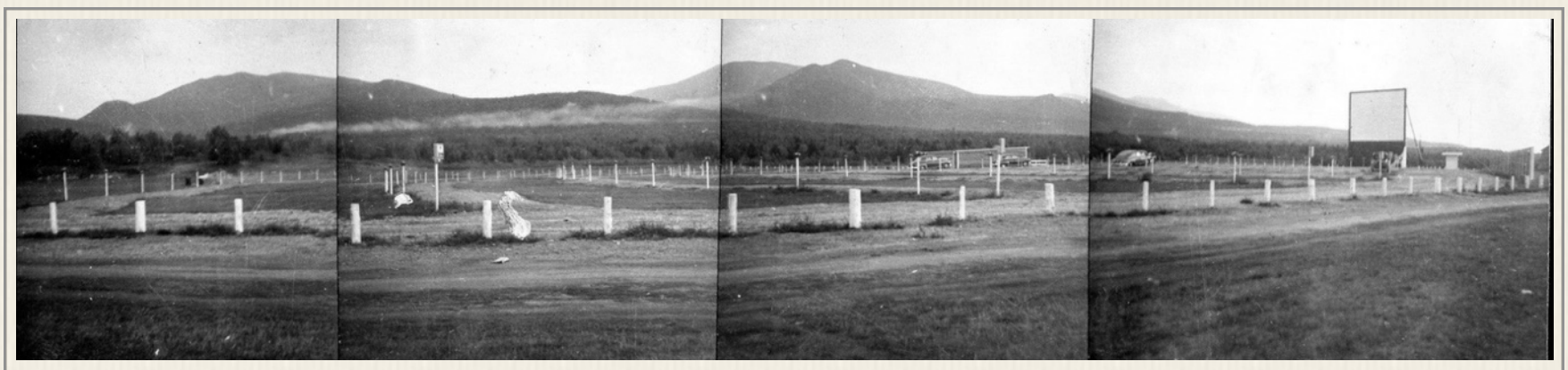
Working for a White Mountain tourist attraction came with cool benefits - specifically free passes to other attractions in the area. Cog moms would get together for a day trip with their Cog kids to places like Storyland, Six Gun City, and the Flume while the Cog dads ran the trains.

But on summer days with late sunsets when the No. 6 was parked and banked early, all the Jitneys sometimes went on short excursions. Down the Base road and left over to Crawford Notch and the state park *(right)* at the site of the Willey House disaster. Beyond the tale of the 1826 landslide that killed the family but left their home untouched there were live animals to feed - ducks in the pond, and a menagerie of birds, deer and other critters of northern New Hampshire in pens arranged along short trails across the dam.



Crawford Notch State Park (1953)
- White Mountains Remembered FB page

Other nights it was straight down the Base road and right to Twin Mountain to visit the fish hatchery there. Again there were pellets to toss that would attract the enthusiastic attention of the trout being grown for stocking in Granite State streams. Twin Mountain also provided a place to get haircuts, and go to the drive-in. When *The Longest Day* came out in the summer of 1963, the Jitney's station wagon was loaded with pillows and blankets, Windex™ and paper towels, and some munchies for a family movie night. Jitney Jr. was fascinated by the three-hour black & white feature. He would devour Cornelius Ryan's book the movie was based on without realizing his dad was working for one of the men that had lived through the "longest day" and helped make the D-Day landings a success. That knowledge came much later in life.



Panoramic photo of the Twin Mountain Drive In Theatre (May 1950)
- Twin Mountain Historical Society - New Hampshire Then and Now FB page

Ch. 10 - Cog Boys & Girls

Slivers & Cinders

Cog kids's summer adventures generally resulted in some basic first aid knowledge. Baking soda paste could soothe the sting after a run-in with yellow jackets across the road. Sliding down a stringer laid beside the track required mercurochrome after the finger-sized sliver was removed from the buttock. But the most common affliction involved cinders in the eye, and every Cog kid soon learned the proper procedure for removing the mote without injuring the eyeball. Nearly sixty years after receiving his first cinder removal instruction, Jitney Jr. was surprised to learn the technique had been printed in a newspaper in 1882.

"A very great distraction from the enjoyment of a trip in the mountains is the amount of dust and cinders certain to find their way into some unlucky person's eyes. Even the finest view of Mount Washington is apt to go unregarded if one is digging at his optics in the rich promise of finding a cinder mine there, and probably more tears have been shed over showers of half-burnt coal than over the famous avalanche which wrought the tragical fate of the Willey family. In view of these facts we make the following suggestion to all tourists. On finding a cinder in your eye don't rub it, don't get somebody to explore its nooks and corners with a pocket handkerchief. Cinders always lodge under the upper lid. Therefore, simply pull down that lid down over the other for a moment and let it go. The cinder is almost invariably brushed off against the "winders" of the lower lid. This very simple operation is efficacious in ninety-nine cases out of a hundred."

- Among the Clouds - Aug 23, 1882

The final cinder lesson for a Cog kid involved freshly mopped floors. Cinders from the ash pit at the bunker were recycled as material to make driveways at Cog cabins and level other service roads around the Base. Summer sneakers tended to track those cinders into the cabins and onto the floors. If the linoleum was dry it was much easier to sweep them up. However, if the youngster running in through the door did not notice that mother had just mopped, and the floor was still wet, the cinder tracks clearly convicted the offender. His boyhood training is such that to this day, Jitney Jr. gingerly and apologetically tip-toes across wet floors despite the custodian's assurance that it's okay to just walk on through.

The Extended Cog Family

The training and the instilling of values in Cog kids extended beyond immediate families to the Cog "boys and girls" in their later teens and early twenties at the Mountain who were on their own, away from home, and sometimes holding down their first job. That was a key part of the corporate philosophy of Arthur and Ellen Teague. "The hardest part of running the railway was trying to teach ethics, responsibility, and friendship," Ellen said in a1994 interview. "We were like a family. And if anyone didn't do right, we told them. My work at the Cog Railway at that time was to keep things as best we could morally – for the dignity of the railway wasn't easy."

The patriarch of the Cog family, Col. Arthur Teague embraced the challenge and was willing to accept referrals from frustrated parents. Ken Randall remembers a father asking Teague, "Art, I have a young man that I can do absolutely nothing with and if I send him up here do you think

you can straighten him out?" So Arthur said, "Send 'em up and we'll see." Well (the young man) came up – first year he was a conductor – second year he was a fireman – third year he was an engineer and he stayed a couple of years as an engineer and of course, he got drunk with the rest of us and all that. And you know right now when I pick up a copy of the *Manchester Union Leader* and read an editorial... I think to myself, 'Joe – you S.O.B. I wish you could see me now.' The problem child was Joe McQuaid."

Anne Teague Koop remembers in 2016, "The local police in Bethlehem used to plead with my father, 'Please Art – please tell your Cog children that they need to slow down and go the speed limit through Bethlehem.'" Bethlehem was a summer resort for Hasidic Jews and was the last town Coggers went through on their 25 mile drive to Littleton after work to do their laundry, go to the movies, and find entertainment. "They were in a hurry to get there before things would close down," says Anne and the police chief would tell her dad. "I've given too much grace to those Cog Boys!"

For his part, the former WWII battalion commander extended a great deal of grace to those who came looking for a job. "Art was well-known for not really tracing back," says Ken Randall. "He took whatever they said... as the truth." Randall says he was heading back to the Cog one day in his car with "COGRR" vanity plates, when he was stopped in Twin Mountain to wait for a truck accident to be cleared. A New Hampshire State Police officer approached his car, and asked Randall if he was connected to the railway. Ken said he was the bookkeeper. The officer then "read off at least to six to eight names, and in there somewhere was a name that I recognized that was on the payroll of the summit and so I told him so. He said 'what's he doing?' Well he's the night watchman up there. The state policeman said that's nice but he's been in jails in various parts of the country because of breaking in at night and picking up money and all that sort of thing. And he said if I were you... you ought to tell Art about that." Randall says he "always got up early and would eat with Art in the kitchen and then... we'd be in front of the (Marshfield) fireplace when the crews came in. So the next morning I said 'Arthur, I think we have a problem on the Summit.' And he said, 'Oh?' So I told him about the night watchman and Arthur said, 'I think you are right' and before the day was over the state police did show up and they sent him down the mountain."



Girls' Dorm: *(L-R) Candy Baldwin, Jane Conkey, Susie Rogers, Julie (?), & Jane Roper.*
- Owen Jansson Collection

While some infractions crossed the line requiring dismissal, zero tolerance was *not* part of the Teague philosophy. Bail was posted. Court fines paid. And things like underage drinking overlooked.

The Girls' Dorm moved several times during the Jitney Years, but was always away from

where the Cog boys bunked, and surrounded by cabins occupied by married personnel. However, unlike most colleges and universities of the time there was no dorm mom living at the facility. Thus a Cog boy, more than fifty years after the fact, proudly said he could still describe every one of the rooms in the Girls' Dorm, when it was located in the third cabin up the row recently vacated by the Pliney Granger Jr. family. When the growing Kent Family needed more room, the old Honeymoon Cottage was moved across the tracks, and renovated into the new Girls' Dorm so the Kents could live in cabin three.

Anne Teague Koop remembers "all sorts of things (were) going on" at the Girls' Dorm. "My mother," says Koop "helped out many of the girls who found themselves in situations. We would hear all sorts of stories (at the Hut) because we weren't supposed to know what was going on. We were too young." Anne remembers one case in particular. "She was a Philadelphia art student – found herself pregnant and her family told her if she did not get an abortion she would no longer be part of the family. And she said I can't – this child. She needed a place to stay. My mother had her come up to the Cog to recover from the C-section. (She) worked at the Cog that summer until – whatever she wanted to do my mother was going to help her – That's what my mother did for so many girls – more people than anyone ever knew" And what about her father? "He knew what was going on," says Anne "and he wasn't going to stop something going on at the Girls' Dorm, but with his five girls... You did not want to date one of the Teague girls be-



Jane Teague and her escort, Freeman "Freezy" Frey pose for a picture while Arthur (in the mirror) gives the young man "the look" (Dec 1963)
- Ellen Crawford Teague Collection

cause of their father. My father would try to watch over – when guys would come up."

"There was one guy... who worked in the Gift Shop that dated Margie for a while," remembers younger sister Anne. "They were standing outside, right under my father's window at the Hut. (The young man) was talking to Margie. She was standing next to the wall of old logs – but he had one hand – one hand there (over her shoulder leaning on the logs) and I guess he was talking to her." At that point, Koop says the Colonel intervened. "He opened the window and said, 'Margie it's time that you



Waitress Margie Teague outside Marshfield (1964)
- Elvira Murdock photo / Teague Family Collection

come in tonight – Right now - and you may go home.' Oh my gosh, I remember Margie was furious." Jitney remembers a time when the Colonel learned one of his girls was sharing an apartment with a young man, and immediately drove down to relocate his daughter and her belongings.

The Teague concern for members of the Cog family did not stop at the age of majority, and long before the concept of corporate social responsibility became a "thing." The Mount Washington Railway would take care of its valued employees - the members of its family. Bookkeeper Ken Randall says there was even a special fund for the purpose generated by sales at the attraction. "The Canadian money would be set aside," explains Randall. "That was one source that was used to ensure that various individuals whom Arthur really thought a lot of were taken care of. That's where he got some of the money he got to do that – bail, yes but it would be more than that – that's where he took care of the Chumley's. I don't feel free to tell you how many of the older individuals who were kind of living off of Art Teague, but I can tell you he was generous in seeing to it that many of the older individuals and the family received sufficient monies on which to live or sufficient stuff from the stores and that to take care of them over the winter."



Railway principals use the Cog's Canadian money fund to celebrate the 1965 Season at the Au Lutin Qui Bouffe in Montreal. (L-R) Mike Haney, Tess White, Margery Bargar, Art & Ellen Teague, Cass White, Mrs. Jack Middleton, Jane Teague, Jack Middleton and Jane's unidentified escort are captured by Jean-Paul Cuerrier who took souvenir photos for more than 35 years at the restaurant beginning in 1938 featuring guests posing with a piglet in the dining room. The restaurant burned down in 1973. (Fall 1965)
- Margery Bargar Collection

Ch. 10 - Cog Kids

Government Benefits



US Navy test hanger on east side of summit in summer(1950s)
- Lewis Family Collection

The Jitney years at the Cog came as the Cold War, and the cold and extreme conditions of Mount Washington weather entered into a partnership that would lead to a hot car for a five-year old.

The U.S. Navy was the first to recognize that the mountaintop could provide an interesting test bed for aircraft – for both their design and the jet engines that would power them. With temperatures topping out at 96-degrees in Washington, D.C. on August 15, 1947, the Navy announced they would spend winters atop the Mt. Washington to conduct "ice-box tests." The *Boston Globe* reported a Phantom jet fighter plane would be put on a Cog Railway flatcar and pushed to the Summit in the fall, so engineers could "determine whether the jet engine or the planes wings will ice up first. The plane will be housed in a building which will be opened at both ends to form a natural wind tunnel when the tests are run and closed during non-test periods to protect the crew of engineers and mechanics from the cold." The building was built just to the east of the Observatory and Stage Office that fall, and "Project Summit" was underway.



General Electric engineers would test their J-47 engine in the first building, and soldiers would field test cold weather gear on the mountain. Photographer Peter Stackpole chronicled the testing for the March 9, 1953 issue of LIFE magazine (pg. 127-131). Another larger facility for the Air Force *(right)* would be built to the north and east of the Summit alongside the Auto Road. Photographer Jitney chronicled the construction from the cab of the *Great Gulf*.



- Lewis Family Collection

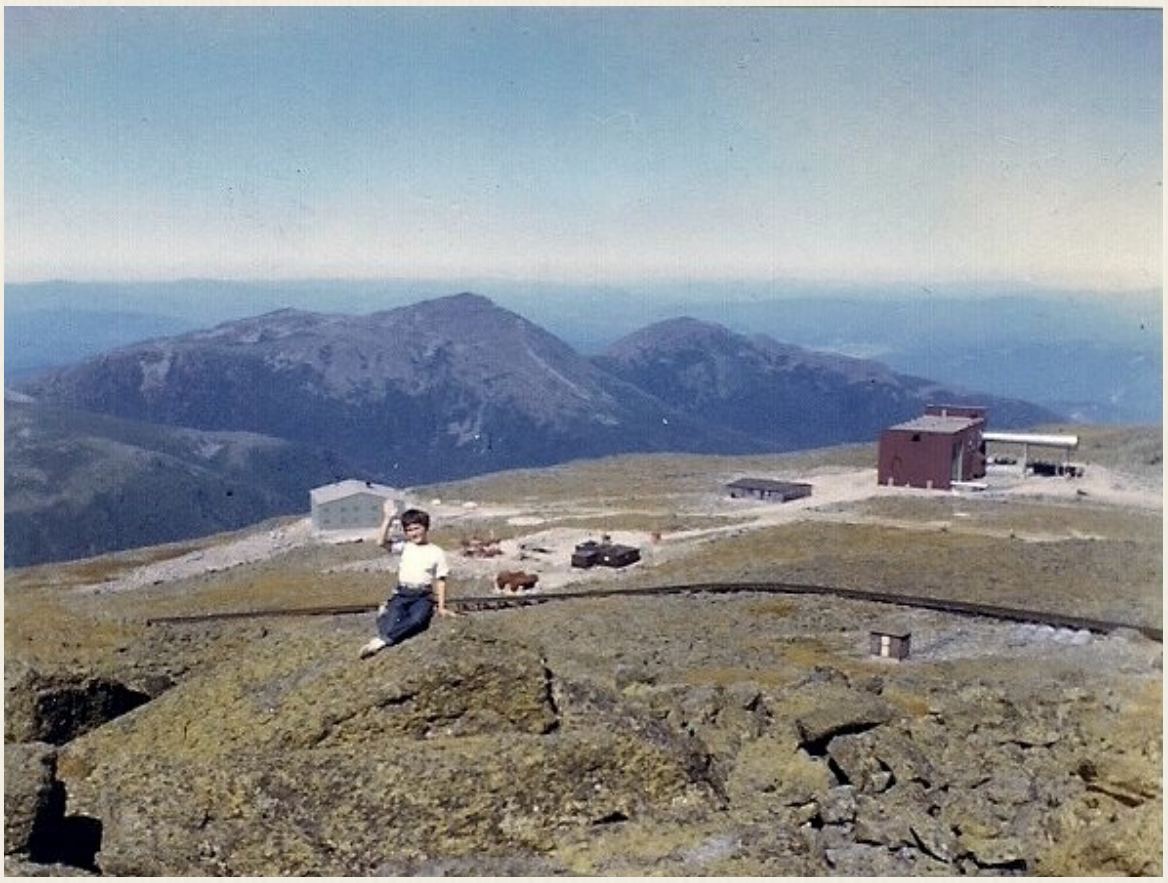




- *Lewis Family Collection*



Mike Condren captures the No. 3 descending past the Summit tank with the completed test facility in the background (1963)
- http://condrenrails.com/Mt-Washington-Cog/index.html



- *Granger Family Collection*

Ch. 10 - Cog Kids



Jitney Jr. at the controls back in Chester (Sept 1958)
- Lewis Family Collection

Jitney noticed that many research items were being discarded at the conclusion of experiments. The shape of one fiberglass model, used for testing and being tossed, inspired him to build a race care for his son as the shell might make a nifty mini auto body. Jit collected an old lawn mower, some wheels, and other parts from cast off materials. He enlisted the help of Linc Handford and others and started the after-hours build. The mower engine was placed in the rear of the frame on a moving platform, so it could be pulled forward to engage the belt transferring power to the wheels and pushed back to disengage. There was no reverse. The mower engine's throttle lever was mounted for hand operation. Exhaust would be vented out a small hole behind the driver. The mower's handle and not a wheel would be used to steer. The shop crew helped Jitney with the linkage. A bicycle horn would provide warnings to those in the car's path.



Miss Jitney sits on car with Jitney Jr. (right) holding starter rope as two friends (possibly Snitko kids from Twin Mtn) scrunch into the cockpit. (1958)
- Lewis Family Collection

Test drives were conducted in the Shop's very flat parking lot. The cockpit opening piece cut out of the shell became the back of the driver's seat. It and the carefully fitted wooden stool for a young driver to sit on were covered with pieces from a vinyl tablecloth. The seat and back were not attached to the car, but were dropped in so they could easily be taken out. Pieces of an old hose painted bright yellow protected riders from sharp edges. The shell, painted red, just set on the frame. There was a brass number Six from a steam engine build plate affixed to the front cowl. It was pretty cool, and during one ride back home in Chester in the driveway of the River Street apartment the race car easily survived a collision with the bumper of a grown-up's automobile. No damage – no injuries just an impressive paint transfer to the bumper's chrome. While the undercarriage and mechanics no longer exist,

the body made from "Project Summit" government surplus is in storage as part of the Gore Collection in Danville.

Other Vehicles

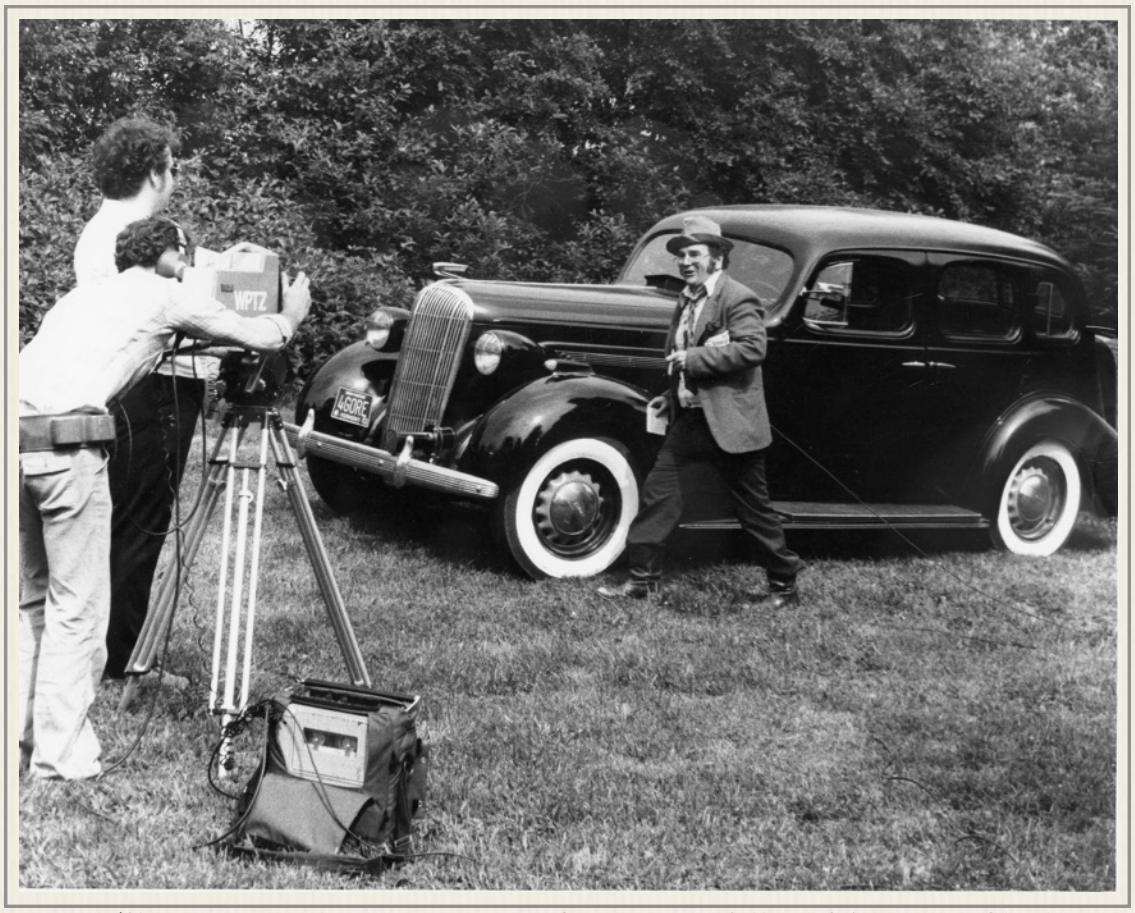
The successful build of the race car left the Jitney racing team willing to tackle a larger project. That came in the form of a 1936 straight-8 Buick sedan that had been driven into the Base by a young Cogger. The original owner had sold the car to Dunc Green for $15. Dunc just wanted the 6-volt battery out of it. The car had remained parked with the doors open through one winter, and the Teague dogs had made a habit of sleeping inside.



Jitney needed a second car. Mrs. Jitney had put up with his last idea of a Nash Metropolitan for just one summer. While the car *(left)* ran well, and was designed as the second car in a two-car family specifically marketed towards women, the Metropolitan was also smaller than a Volkswagen Beetle. In order to stuff a week's worth of Cog laundry, groceries, and kids into the "autumn yellow" two-tone hardtop, Mrs. Jitney packed around all the passengers with barely enough room to shift gears and see the mirrors with bags of groceries under the feet of her patient(?) children all the way back to the Base from either Whitefield or Littleton. The '36 Buick was bigger, the price was right - $15, and the Jitney racing team was ready for a new automotive challenge.

Jitney Jr. remembers watching Linc Handford work on the carburetor with dental tools on the cabin's kitchen table. A team member also "liberated" some windshield wipers for the project, when he felt the parts store operator had overcharged Jit for a new license plate bracket for the car.

The 1936 Buick would stay in the family. Stored for a second time at Grampa Lewis' farm in Lunenburg, Jitney Jr. would lead a second re-hab with high school colleagues in the 1970s that featured Grammy Whitney reupholstering the seats in some stylish 70s fabric. The Buick was the offi-



WPTZ cameraman shoots Rep. Danny Gore Energy Office PSA in West Charleston, Vermont as producer Jitney Jr. looks on (July 9, 1979)
- Lewis Family Collection

cial campaign car for Rep. Danny Gore's perennial run for Vermont governor appearing for over 35 years in parades, a series of failed television pilots, and a public service announcement for the Vermont Energy Office during the gasoline crisis. The Buick still runs and is part of the Gore Collection in Danville.



Car Ramp or Coal Trestle?

Automotive maintenance, like oil changes, etc., occurred on a ramp *(above left)* at the base of Boarding House hill. The floor was cut open under the oil pans, and a basketball hoop was eventually attached to its end towards the Shop for evening recreation. But when research for this manual in 2015 turned up something called a "coal trestle" on the 1934 tax map *(pg. 447)* the question arose could the car ramp of the 1950s and 60s have had a prior purpose?

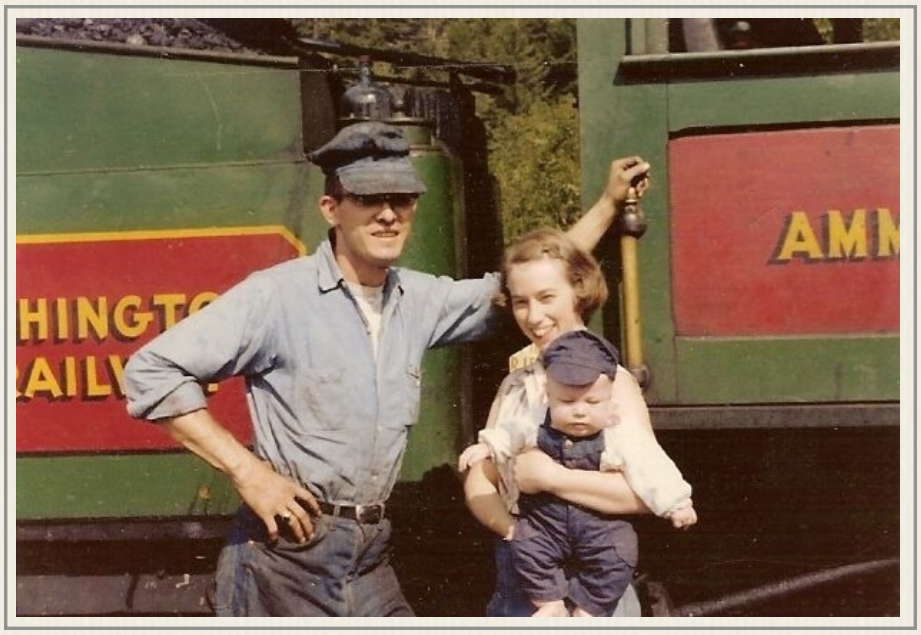


There was a visual clue in Dale Ann Granger Eckert's photo *(above)* of the 1930s Boarding House. The ramp was there, but it appeared to be much longer than the ramp of the Jitney Years. Was this the coal trestle?

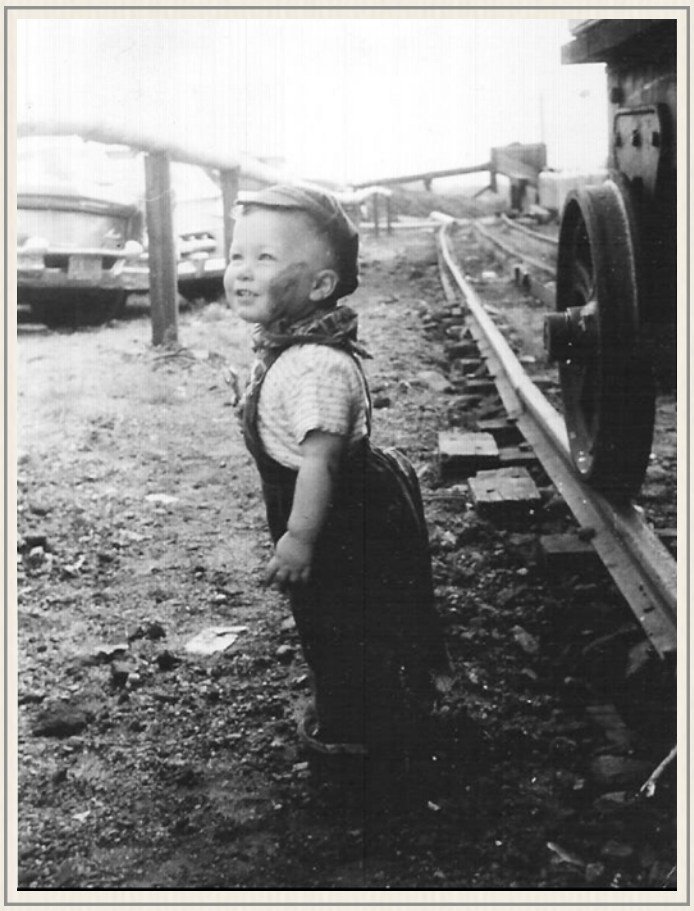
Confirmation came in a photo of Cog kid, Floyd Williams Jr., *(right)* in front of the "coal trestle" in 1937. Built after the Fabyan spur line was removed, it allowed trucks to bring and dump fuel into the coal bins for the trains. The crossover likely came down when the coal shed was destroyed by the 1938 Hurricane leaving only the section that became the car ramp.



Similar Photo Opportunities for 1st Born Males













Ch. 10 - Cog Kids









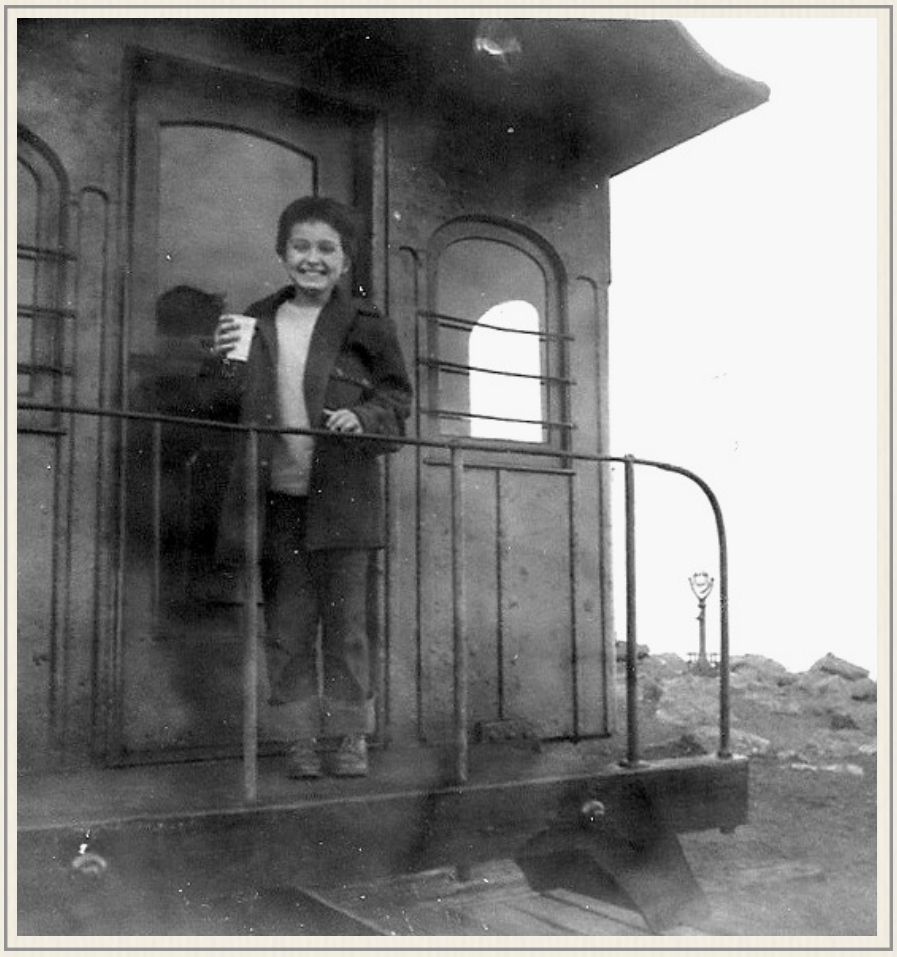
Proud new families with engines - well-dressed Cog kids and learning the ropes - lunch with Dad - and "after shower" time with the old man in the cabin. It produced a chef and a professor (below) and a generation with memories of a 20th Century childhood growing up around 19th Century technology - something few these days can say they witnessed first-hand.

- Kent Family (left) / Lewis Family (right) Collections





Trains and Teague Horses for the Daughters



Dale Ann Granger (Eckert) recalled in 2015: "...the Cog was great place to be a kid. My brother Pliney in the 40's and me in the 60's. If I wasn't running up the trails, I was hitching rides on the trains *(left)*. I don't think I ever rode in the car as a kid...

"...(I) thought of the Teagues as my best friends, especially Anne. Earned my first dollar from Ellen helping curry the horses when I was about 9. I remember Prince and Cog and was there a Black Beauty?

"I remember the dogs - Collies Rex and Regina, Dalmatians Chummy and Peggy who would follow us up the trails. And I think the poodle was Shoo Shoo. Mother made the gift shop and dining room off limits and I wasn't supposed to go into the Hut, but I would get to sneak in now and then.





"We had our little trailer each year. Also would bother Calijah's wife when she was tending to the restroom across the track, or trail Mother and Rita Kenney when they were making up the cabins."

Ch. 10 - Cog Kids



Birthday Party: Jeff Kent *(left)* and Cindy Lewis wait patiently for the cake consumption to begin at a birthday party in July 1960. Gas stove and gas refrigerator in background.



Photo Shoot: Miss Jitney strikes a pose just inside the camera strap for a posse of young photographers in the overflow parking lot in 1966.



Just Visiting: Gregory Bird *(left)* having fun pushing Karen Usher in a stroller in the living room of Jitney's cabin. The *Cog Clatter* was produced at the library table behind the young Bird.





Temperatures at 2300-feet elevation on Mount Washington rarely reach sweltering in the Summer. If it did get warm enough to contemplate a swim, the nearby Ammonoosuc River was really cold and its first good swimming hole was down the Base Road at Upper Falls. So the inflatable pool (or collapsable canvas Army surplus bathtub) would be deployed near the cabin's clothesline, filled with water that was allowed to warm up in the sunshine. Jeff Kent and Jitney Jr. *(above left)* chill out while Miss Jitney and Jitney Jr. flank some friends *(above right)*. It appears the water may still be a bit frigid judging by the expression on the unidentified young man's face. In later years, there would be swimming trips to Upper Falls and the Crawford House pool *(seen below in 1961)*.









Lucy & Charlie in a holiday photograph. Ironically, Charlie is on the horse. (~1958)
- Photo by Elivira Murdock - Cintra Hazen Collection

Lucy & Charlie

Lucy Simpson Teague was born on April 16, 1953 at Jefferson Hospital in Philadelphia - the fifth daughter of Arthur and Ellen Teague. Ellen writes in her memoir that Lucy was "a big strapping infant... easy to care for."

As Lucy approached her teens, her mother recalls, she "was a beautiful tall girl, her gracious manners making her popular and beloved by almost everyone."

Although two years younger than Lucy, Miss Jitney found a kindred spirit in the youngest Teague daughter. "I remember a few summers they always brought a calf to the barn," says Cintra Hazen in 2016. "Lucy would make the milk mixture and use a pail with an 'udder' type nipple to feed the calf. As the calf grew Lucy would take it up to the pasture on the hill by the boarding house."





Lucy & Prince (1962)
- Ellen Crawford Teague Collection

"Lucy was always with her horse, Black Magic, or feeding her calf in the horse barn," recalled her mother, Ellen. "She loved animals and considered them her best friends." However, the former debutante wanted to make sure all her children, and some of the other Cog kids would know the social graces necessary to move along the Main Line in Philadelphia. "Lucy was not a fan of going to the dance lessons at the Mountainview, but she did try," remembers Cindy. Miss Jitney's main memories of that terpsichorean training involved the many



Cousin Becky Morgan and Lucy atop the Base rock
- Lewis Family Collection

petticoats of the dance instructor ("Lucy was never very comfortable in dresses"), and a puzzle to solve in the hotel's parlor.

"(Lucy and I) were in different sessions, so I remember sitting in the lobby area working on a jigsaw puzzle that was carved out of wood with very unique pieces."

There was other training back at the Base. Cin says, "Lucy and I used to help clean the guest cabins. That was where I learned how to do hospital corners" when putting sheets on a bed. "I mostly remember just spending a lot of time wandering around the Base. Sometimes going up the hiking trails a ways, or just spending time in the barn grooming the horses or watching Lucy exercise the horses. She would also make sure the horses got up to the pasture to run and graze."

Lucy apparently enjoyed Miss Jitney's company as well. "I remember Lucy asking me to have dinner/lunch with her in the kitchen at the Base," says Cintra. "I know mom hated that because I think she felt we should be paying for it. But I loved having dinner/lunch with Lucy at the table in the kitchen. Sometimes I would just go sit with Lucy if mom had said no to eating."



The barn with trailer ready for loading
- Lewis Family Collection

There were also lunches away from Marshfield. "One time Lucy, Charlie, Jackie (Kenney) and I went to the Base and got burgers, fries and Cokes to have a picnic," says Cin a half century later. "As we were walking back down toward the cabins as we went down an embankment at the end of the parking lot (near the gas station)... all of a sudden we picked up yellow jackets and I ended up getting stung on the lip and dropping all the sodas."

Ch. 10 - Charlie



Jitney Jr., Charlie Teague and Miss Jitney in front of Jit's cabin (1964)
- photo by Earl Whitney/Lewis Family Collection

Charles Arthur Teague was born on February 24, 1955 - the last child and first son of Arthur and Ellen Teague. Ellen writes in her book, "the most important event for the Teague family (in 1955) was the appearance of Charles... our only living son." *(Ed note: Ellen delivered a stillborn baby boy in May 1944 while Art was training in England for D-Day. She says she left the body of "the lovely little boy baby in the laboratory for study, hoping it would someday save another infant.")* "Now that we had a boy at last,"writes Ellen, "Art and I agreed that our family of five daughters and one son was complete."

Charlie, like Lucy, went with little enthusiasm to the dance lessons at the Mountain View Hotel. Ellen Teague took advantage of other educational resources available at the Base for her son. Mrs. Jitney, an elementary school teacher during the winter, tutored Charlie for a time in the summer, and the German-born Cog photographer who had made a name for herself with a horn, helped Charlie with his chops.

"Little Charles," Ellen writes, "was the musical child, playing his trumpet *(right)* and taking lessons from Elvira Murdock. Charles went to Penn Charter School for two years and then transferred to Chestnut Hill Academy, going to boarding school in Stony Brook, Long Island, starting with the eighth grade. After several summers at boys camps and a trip to Mexico with his school teacher, he joined the rest of us at the Base Station."



At the Base, Charlie developed a reputation of being able to easily get into mischief. One summer the Cog kids got to ride up the mountain and stay overnight in the hotel when the Bretton Woods Boys Choir

was scheduled for a railroad outing and evening Summit performance. Jitney Jr. asked to sleep in a room other than Charlie's so he could stay out of trouble.

Ellen Teague says in the summer of 1965, 10-year old Charlie "occupied himself making slingshots and putting garter snakes around his neck to frighten girls in the dorm. He was also taking trumpet lessons and climbing the Ammonoosuc Trail by himself. Always a rascal, but a cute one at that, I once caught him standing on the big rock outside the gift shop proudly 'peeing' to the amusement of some people and disgust of others," wrote Ellen. Birds and small animals became targets for his slingshots. Bats were trapped, doused with kerosene, lit and let go.

In 1966, gift shop clerk Nick Lucker volunteered to take the Cog kids to the Midway Drive-In located halfway between Whitefield and Littleton for what Jitney Jr. remembers was a new Disney movie - *Follow Me, Boys!* perhaps? More memorable was the young people led by Charlie singing his two favorite pop songs that summer, "I'm Henery the Eighth, I Am" and "They're Coming to Take Me Away, Ha-Haaa!" over and over and over again. Charlie relished saying "second verse same as the first" in the former, and doing the cackle during the latter. Nick for his part, kept smiling during the trip.

The only Teague son, who had played "Hail to the Chief" on his trumpet as part of the public celebration of New Hampshire's purchase of the Summit and Tip-Top Houses from Dartmouth as a nine-year old in 1964, was an integral part of the dedication of a new locomotive in September 1972. "My son Charles had been flown up from Stony Brook School on Long Island," wrote Ellen Teague, "so he could be the brakeman *(below)* on the passenger coach, which was to be pushed up the track by the locomotive named for his father."



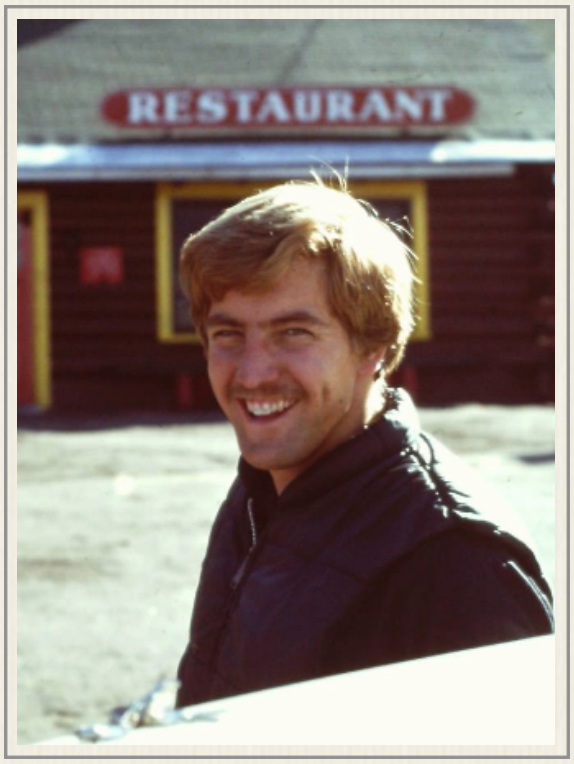
Ch. 10 - Charlie

Charlie worked summers at the Cog while attending technology college. That was a comfort to his mother in 1974 as Margie, Anne and Fanny were creating their own lives away from the mountain and eldest daughter, Jane had died. Ellen wrote, "That summer I found it very hard to work at the base without Janie and Fanny, who I missed very much. Fortunately, Charles was with me now, living in his own home at the Base." Charlie eventually ran engines in the late 70s. Engineer John Thompson says, "Charlie T. usually requested (me or Jon Hively) on the '3 hour cruise' to the Summit and back.



Charlie Teague in the No. 1 - Sidestack and air valve open ! Charles Morrill says "I took this.. partly because I couldn't believe what I was seeing." (1978)
- Charles Morrill Collection/ FB Cog Railway: We Were There

Hively says Charlie's request for help from the pair came after a "strong suggestion to Charlie from Ellen. She often worried to me about 'our Charles,' recalls Hively. "Ellen sent me on several trips with Charlie - (it was an) excellent opportunity to hone engineering and sleight of hand skills." Hively wonders whether the above picture with sidestack and air valve open, was taken "during the period when the No. 1's air valve used to drift open from the vibration. It didn't seat well, and I remember having to hold it shut during the trip up the mountie." Charles Morrill says the photo captured one of "the last few times out for the one..."



Charles Arthur Teague became president and manager of the railway in 1979.



First Generation Cog Kid Remembers

Every human believes their childhood experiences are unique. But research for this book demonstrates generations of Cog kids have shared similar experiences at the Mountain.

"You may think I have dropped all modesty and womanly reserve in writing to a stranger, but after reading my letter (from Dundee, Scotland) you will see I have a good excuse for so doing. I am almost an American myself, as my parents moved from Aberdeen to Quincy, Mass., in 1861, and father was engaged as foreman in one of the granite quarries there. He afterwards went to Concord, N. H., and it was in that city I was born. Finally he drifted to the White Mountain region and assisted in building the Mount Washington Railway and the Summit House. I am spending a few days with my children at the Trossachs Hotel in the Highlands... and there is a party of American tourists domiciled here. We were soon on the best of terms and one of them had been on Mount Washington only four days before sailing from New York for Glasgow. She had a copy of *Among the Clouds*, which she loaned to me. It was the opening edition for this season (1899) and contained a picture of the late Henry M. Burt. I remembered his features very well, though I was but 12 years old when we returned to Scotland. After reading the paper I went to my room and... I had a good cry. I looked out the window... and my thoughts wandered to the grand old White Mountains of my youth. I also recall some of the men I had known. One was a Mr. Judkins, conductor of the train, who would go with me and fill my bowl with raspberries, and then would climb to the top of the logs in the sawmill yard to get me a piece of spruce gum. A kinder or more generous man I have never met, a man whom children could not fail to love.

Ch. 10 - Cog Kids



Crawford House Concord coach that Jim may have driven.
- White Mountains Remembered

"There was also an old man called "Jim," who drove a stage from the Base to, I think, the Crawford House. I can see him now, a short rotund man with a large scar on his neck, and as honest a face as ever the sun shone on. Many a time has he made me sit beside him and take me along till we met the incoming coach and transfer me to the other driver, who would take me back to the Base. When he came back next day he would have some dainty for me, a bunch of grapes, or an orange or something that children like. When Jim exerted himself, he used to make a very peculiar wheezy noise that attracted my attention, which I would compare with the sound that came from a leak in the bellows in the blacksmith shop. Sometimes I thought it came from the scar and I would put up my hand but could discover nothing, then I would think it was his breathing. I do not speak of this in a sarcastic or humorous vein, but as it used to strike my childish fancy. Other names I remember are Dodge, Hitchcock, Aiken, Horne, Uncle John and Randall. Then there were the French-Canadians, rough in garb, but with hearts as big as the mountains themselves. How often after their day's work was done, have they taken a slideboard on their shoulders, holding on to my hand, and we would walk up the track a short distance and with childish glee I would sit in their laps and slide down to the Base. I have heard father relate some amusing stories about Mount Washington But I am not in a frivolous mood just now and will not repeat them. How many of these men have passed to the great beyond I have no means of knowing; but it is only natural that the Great Reaper has been among them and cut some down; but if any of those who are spared should ever visit Auld Scotia, there would be no greater earthly pleasure than to grasp their hands and welcome then for "Auld lang Syne." Perhaps some of your readers may remember "Little Jessie." - Mrs. Archibald Maclaren."

- Among the Clouds - Mon, Aug 7, 1899







"Dundee, Scotland. August 16, 1899 - To the Editor: Some one kindly sent me a copy of *Among the Clouds* of August 7th for which I return many thanks. It gave me great pleasure, mingled with sorrow to read of the grand old mountains and to look at the half-tone pictures of scenes connected with them and my heart yearns to look once more on them. I think I read every word, even all the advertisements, and... I see a hotel at Jefferson Highlands, the E. A. Crawford House. I wonder if that is the same E. A. Crawford, who used to stay in the log cabin at the Base in the winter, getting out the wood and lumber for the Mount Washington Railway. How sorry I felt for him and how I pitied his poor horses when one morning he discovered that during the night some miscreant had entered the barn and cut off their manes and tails. I was very young at the time, but I boiled over with indignation. The perpetrator was not known, and it was well for him that such was the case, as severe and just punishment would have surely followed. There is also the name of John Horne in the advertisement of the Railway, and I felt sure that he is the same person who had charge of the engines at the Base. How many times I have watched him working at the lathe in the shop or doing some repairs in the engine house, and when the engines were ready to be taken out and tried, he would put me on the seat in the cab and run them up and down the track. - Mrs. Archibald Maclaren" *- Among the Clouds - Fri, Aug 25, 1899*

Some Mount Washington Railway experiences, and the way they are remembered by adult "Cog Kids" are universal. The names may change, but the memories remain remarkably similar.

CHAPTER 11

Questions & Answers



Brakeman Doug Taylor ended his Waumbek talk by saying "If you have any questions, any time, shout 'em out, and I'll answer them for you. (If I can't give you a straight answer, well, I'll give you the world's most interesting or crooked one!!!) We are proud of this railroad and like to talk about it."

Well, up to a point. Sometimes visitors with questions got the "world's most interesting or crooked" answers first from members of the Cog crew before receiving the straight ones. Never malicious, it was more of an entertaining test of the gullibility of the tourists they served.

MIKE GOT IMPATIENT ANSWERING OVER 30 YEARS OF QUESTIONS

Mike was checking his engine when a loud lady started a somewhat one-sided discussion as to the geological history of the Mountain.

"Mr. Engineer, you know a glacier came and covered this mountain during the ice age – took 10,000 years to melt. I read plants seeded themselves ahead of the ice. Is that why arctic plants are here in the alpine garden?"

"Ask the man in the Ticket Office - it was before my time."

"No, no Mr. Engineer I hear this ice moved down from the North Pole and back in about 100,000 years, just thought that you working here would know that.

How fast does your train travel?"

"About four miles an hour."

"Why Mr. Engineer, only four miles an hour, my word."

"It's a damn sight faster than your glacier" was a murmured reply.

At the Summit,"Can I see the Pacific Ocean from here, sir?"

Trainman, "No ma'am just the Atlantic today, our fifty foot tower blew down last night."

Skyline Platform:

A gentleman, who had had both ears detained by his wife at the time, did not hear the Brakeman's explanation as to the loose rocks scattered over the summit and he asked, "Conductor, where did all those rocks come from?"

Brakeman, "Glacier, Sir."

Man excited, "Glacier, did you hear that, glacier."

To the Brakeman "Where is the glacier now?"

Brakeman shrugged, "Gone after another load."

Water Stops (Letting Water Off)

Approaching the Summit a lady was observed on the back platform of the car answering nature's call between the brake wheels. Upon arriving at the Summit the brakeman told this story.

Nearing the Waumbek tank, a lady asked if there were facilities aboard. The brakeman said, "I am sorry there are not any."

When the train stopped at the tank the lady asked, "Are there facilities here?"

Brakeman replied, "No."

Lady inquired, "Why are we stopping?"

Brakeman returned, "Taking on water, ma'am."

After taking water on the train stand to Skyline, the engine stopped again at Gulf Tanks. The lady now quite nervous and jumpy asked, "Are there facilities here?"

Brakeman shook his head, "No."

Lady a bit excited asked, "Why are we stopping?"

Brakeman, "Taking on water, ma'am."

As the lady turned and walked quickly to the back platform she said in a defeated attitude, "The trouble with this railroad is you stop often enough to take on water, but never to let any off."

Specific Questions and Answers

1. How fast does this train go?
   Pretty fast compared to the glacier.
2. Where is the glacier now?
   Gone back after more rocks.
3. Answer on the Track phone:
   "Summit! White Cloud speaking."
4. How did the rocks get up here?
   Eskimos hauled them up by dog team.
5. How do you see in the fog?
   We use a Fog Cutter – come down on instruments.
6. Mr. Fireman, is firing this engine difficult?
   Firing is fussier than a cat in a plant dish!
7. How come the boiler is at an angle?
   Hit a bump up there!
8. Which way is North?
   Ma'am, you look down for North.
9. Which ocean do you see from the Summit?
   The Pacific, ma'am!
10. What do you fellows do in the winter?
    Go back down.
11. To a weary engineer at the end of the summer: "How many horse power does the engine produce?"

    "I don't know."
    "Don't know!"
    "Geez! I can't answer all the questions you can ask."
12. "Does this train go all the way to the top, or just stop at the summit?"
    "Both"
13. "Does this train use gasoline?"
    "No. It's diesel electric!"
    "Why is there smoke?"
    "Black fly control!"

14. "What safety devices do you have on the way down, Mr. Brakeman?"
"Brakes on the car, brakes on the engine, forward steam – Our Father, which art…"
15. Cliff Kenney in the Ticket Office as a Lady complained after a trip to the summit:
"I just want my money back, I got up there and couldn't see a thing!"
Cliff: "Can't do that! Yesterday a blind lady went up; said it was the greatest ride and the biggest thrill she'd ever had. If you're lucky enough to be blind, you'll enjoy it!"

Caught in the Fog

A first year brakeman was spell bound by the stories of the Cog as told by the old timers. The engineer said, "The clouds were so thick on Jacobs Ladder I went about 50 feet right out onto the fog."

The new brakeman without thinking, "What did you do?"

"Do!" bellowed the engineer, "I picked up the damn ratchet – backed back onto the track, dropped the ratchet and took off up the mountain."

Enroute:

You can tell a happy engineer by the number of cinder burns on his guns.

On Jacobs:

Two exhausted hikers who had over-imbibed walked drunkenly down the Cog Railway to make sure they made it back to their car. "Heck this is an awful long set of stairs."

"Ya," burped and groaned the other, "but it's this low banister that's killing me."

At the Summit:

One small boy to another, "which way is North?"
"Down, I guess."

Looking down Long Trestle it's reassuring to know:

Five Safety Devices
- Compression
- Forward Steam
- Brakes
- Ratchet
- Lord's Prayer

Bottled Gas

In 1956, the Cog Railway conducted tests to see if bottled gas might be able to replace coal as a fuel for the steam trains. The experiment prompted the following soliloquy.

"Four score and seven years ago, our forefather brought forth upon this mountain a new railroad, conceived in iron and dedicated upon wood – the Colonel is now engaged in a great experiment – testing whether this railroad, or any other railroad, so conceived, and so dedicated, can run on bottled gas."

Ch. 11 - Q&A

Delivered at the coal bunker – mountain side chute in Cog style by Eddie Bird. (Note: The test failed. The engine steamed up quickly but could not hold the pressure needed over the long haul to the Summit.)

Where Eagles Soar

The brakeman with arm flapping stood on the front platform at the top of Long Trestle. Clouds were dense, the wind bumped the train and with a wild cry, he called out, "Mr Eagle, Mr. Eagle which way is down?" To the enthusiastic laughter of the passengers.

At the Summit - Size Matters?

Mike was checking the engine. A man sure stepped up with the assurance of a main line engineer in hand and said, "Say Mr. Engineer, I run an engine about six times this size, why hell, this tea kettle is about the size of my tender."

Mike was a proud man of his Cog engine continued tapping his hammer on the engine looking for loose parts.

"Why Mr. Engineer," continued the main liner. "The engine I run has drivers and cylinders that haul a hundred cars and run at 80 miles per hour. This toy can't compare."

Mike, irritated, hammered a couple loud bangs, finally turned around and said, "Geez, just run your great engine up here, I'd like to compare 'em."

The main liner got the message, turned and walked toward the Summit House.

On Compression:

One under-college undergraduate called the shop foreman. "Paul, Bob Kent says you got to put some rings in the damn Number two engine, she ain't got enough compassion to hold a baby carriage in a driveway."

On Speed:

A passenger in a hurry to get to the summit complained constantly how slow the trip was and was quite clear the railroad should be modernized.

The brakeman was very patient explaining the unique history of the engines, the type of road bed, safety and the joy of slowing down in a world where we seem to bypass more than we ketch up to.

But all to no avail – the passenger continued on how he would need a shave and hair cut before he got back.

The train finally arrived at the Summit in a good run of about an hour. As the complaining passenger left the coach he said to the brakeman, "God boy, this was the slowest damn train I was ever on. By the way what do you do in the winter?"

The brakeman shrugged, "Go back down, mister."

WHAT WOULD WE DO WITHOUT TOURISTS!

@#$%^&*()_!@#$%(&$!^&%$()_$#@!@#%&!

The above epithet announces the GRUMPY SEASON at Mount Washington Cog Railway!

In an effort to boost morale (usually in August) an unofficial "Grumpy Club" was organized and various people were appointed "president." It was not a sought-after position, and "presidents" worked hard to be removed from the post.

Willy Lump-lump

The Cog Railway attracted railfans. Doug Taylor says one legendary New England railfan was known as "Willy Lump-lump." Taylor says Willy was 30-something, overweight and myopic. Willy belonged to a particular class of railfan that were called "foamers" because they'd appear to foam at the mouth when they got near steam engines. Doug says he was firing for Eddie Bird one day. They were at the Base platform. Doug was filling the tender. Eddie goes "Uh-oh, There's Willy Lump-Lump!" Doug looks out to see this guy who looked like a Mexican bandit with cameras instead of bandoleros strung about his neck. Eddie looks at Doug and winks – then shouts to Doug, "Is it still in there?" Doug not knowing what the hell Bird was talking about goes with the flow. "Yup!" he replies. Willy Lump-Lump goes, "What's still in there? What's in where?" Bird says, "we've got a trout in the tender to help keep the water clean." Lump-Lump goes "No you don't." Bird goes, "Yeah we do. Wanna see him?" and invites Lump-lump up onto the tender so he can peer into the tender fill hole opposite the one Doug had the "elephant" fill hose going into. The water in the tender is dark and Lump-lump says I don't see him. Bird glances down, "There he is – see him swimming?" The tourist takes another look and goes, "Yeah, yeah" and proceeds to fire off his camera into the tender – click, click, click. Lump-lump then thanks engineer Bird for showing him and clambers down. As he moves away, Bird and Taylor look at each other and burst out laughing.

"Theater and the Macabre"

Brakemen on the Mount Washington Railway sometimes embraced their inner entertainer. One would grab his coach's broom, raise his red bandana over his nose and stage a mock hold-up of the train during water stops at Waumbek.

Another stayed a bit too long in Marshfield chatting up the waitresses in between trains. As time grew short, ticket office personnel were forced to announce over the public address system, "Would the brakeman for 2 o'clock train please report to the platform? Would the brakeman please report to your train for departure." The crowd in front of the train parted as the young trainman sprinted from the Marshfield main entrance towards the waiting coach. With great fanfare he leapt to the car's back platform, grabbed the brake wheel and leaned back out towards the crowd like Gene Kelley on a lamp post, and yelled to all assembled, "I'm no brakeman - I'm a lover!"

Ch. 11 - Q&A

Theater for the tourists did not stop when brakemen became firemen. The blower that kept the fire roaring on the engine's trip to and from the bunker along with the ratchet clanging and steam escaping from the cylinder cocks created a mechanical cacophony that ceased abruptly when the train stopped at the loading platform and the nearby waters of the Ammonoosuc could once again be heard. But if the fireman misjudged the run up of steam pressure, the No. 6's boiler would loudly and noticeably groan as she approached pop-off. On one occasion, the crew made a big show of leaping out of the cab and running as the *Great Gulf* moaned - went silent for a beat as tourists quizzically watched the sprinting train crew, and then loudly popped off - sending a roar of steam cascading into the sky. The crowd collectively jumped. The crew stopped running, turned around and sauntered back to the cab with grins on their coal-smudged faces until the Operations Manager came up to them and quietly, but directly, made it clear that particular prank would not happen again!



Macabre was built into the lore of the mountain the railroad was climbing. Many tourists had heard the Native Americans called the peak *Agiocochook* where by legend "Here the Great Spirit will dwell, and watch over his favorite children." Climbing to its summit would, according to the tale, bring death to the invader. Death had been part of the European story of Mt. Washington, too. Trains had been passing the Lizzie Bourne monument since the beginning. One summer, a skeletal female forearm and hand was discretely placed there so to sharp-eyed passengers it appeared to reach out of the stack of rocks towards the Summit.

The Appalachian Mountain Club was responsible for other piles of rocks that could also provide the basis for another tale for the gullible tourist on the trains. The AMC built cairns along the various hiking trails above the tree line of the Presidential Range. They were spaced so that hikers could safely follow them in the clouds when visibility was at a minimum. Rocks at the top of the cairns were painted white for several piles and then a painted yellow rock would top the trail marker.



The trails converged and one crossed under the tracks at Skyline which often prompted questions from tourists wondering "what are those piles of rocks?"

Brakemen had two choices; explain the AMC's cloud climbing safety feature, or talk about the sacred Native American space the train was currently traveling through, while men-

tioning how the ground was always frozen just below the rock strewn alpine tundra beside the tracks and that made digging difficult. The tall tale concluded by saying the Native Americans could not bury their dead here because of the permafrost, so they piled the stones around the bodies - marking the chiefs with yellow stones and the warriors with the white stones.

Ye Olde Stories

The Puppy Fainted Away

"Speaking of dogs," said Superintendent John Horne of the Mt. Washington railway, "did you ever see a dog faint away!" No one had. "Well, I have," said the veteran railroad official, and then he proceeded to tell of a very young pup which was taken from its mother and remained at the signal station on Mt. Washington all winter, several years ago. When taken down the mountain in the spring he met another dog, who undertook to make his acquaintance. "You will observe," said Mr. Horne, "the young fellow didn't remember ever having seen a dog, and doubtless thought the one before him was the only other dog in the world; so he keeled over in a dead faint." *- From Among the Clouds reprinted in Washington, DC Evening Star - Fri, Oct 25, 1895*

Ready With an Answer

In the cars on the Mount Washington Railroad there is a placard forbidding conversation with the brakemen, and stating that "the conductor will answer *all* questions." One of the editorial party last Saturday (7/29/1871) thought that it would be well to test the conductor's ability. Superintendent Dodge happened to be acting in that capacity, and he came round, the questioner thought he would begin at the foundation, and so put the first question in the catechism: "What is the chief end of man?" "To ride on the Mount Washington Railway," was the unhesitating response, and the class was dismissed for the day. *- Burlington (VT) Free Press - Tue, Aug 1, 1871 pg. 3*

Perils of Traveling

"The perils of the traveler were illustrated by the conductor on the Mount Washington Railroad last summer. When on the steepest place of that steepest railtrack in all earth, a man was frightened and said to the conductor: "Suppose the locomotive should give out, where would we go to?" "Ah," said the conductor, "there is a brake at the front end of the car." "But," said the traveler, "suppose that should give out, where would we go to?" Said the conductor: "There is another brake, you see, on the cars." "But," said the affrighted passenger, "suppose that also should give way, where would we go to?" And the conductor replied significantly: "That depends upon how you have lived." *- Montpelier (VT) Green-Mountain Freeman - Wed, May 3, 1878 pg. 1*

Gauging Beauty & Safety

"One of the employees about the mountain, in speaking of a recent lady visitor who was not very attractive in personal appearance, said, "The Almighty made her as homely as possible and then hit her in the face with a monkey wrench!"

"A lady visitor at the Summit a few days since inquired of a friend the use of the chains which secure the Summit House from the winds, and was told that they were the fire-escapes."

- Among the Clouds - Sat Jul 20, 1878

Ch. 11 - Olde Q&A

Going Down?

"An old gentleman who stood on the Summit House platform yesterday afternoon (7/31), as the train was leaving, inquired: "Is that train going to the Basement?"

- Among the Clouds - Fri, Aug 1, 1879

Questions 1881

"The intelligence of some tourists passes all belief. The other day a passenger up Mount Washington pointed to the telegraph wires and asked the conductor: "Will you please tell me what that wire fence is for?" Another visitor, a lady, who had been gazing with interest at a "Birdseye View of the White Mountains" in the hotel office, said to the clerk: "Have you any more of those pictures? I know Mr. Birdseye, and would like very much to get one of his views."

- Among the Clouds - Sat, Jul 23, 1881

Cyrus and the Slideboard

"Have you seen Cyrus? He is one of the characters at the Summit. The other day he was explaining the mysteries of the slide board, which the workmen on the Mount Washington Railway use in making the descent to the Base, to an inquiring visitor who remarked, "Well, now, that is a good way to go down the mountain, but they can't slide back, can they?" "Oh no," says Cyrus, "they have tried it several times, but it won't work." The visitor departed."

- Among the Clouds - Tu, July 21, 1885

Mouths of Babes

"The mountains were veiled from base to Summit in white fleecy clouds as the Boston & Maine express neared Fabyan's yesterday afternoon. "Papa," said a little girl in the Pullman car, "are we in the White Mountains now?" "Yes," "Well," said the little one, reflectively, "I see the white, but where are the mountains?" *- Among the Clouds - Wed, Aug 8, 1888*

Labonte's Tooth Puller

"Some years ago there was employed on the Mount Washington Railway a man by the name of Jacques Labonte. He was very ingenious, could use carpenters' and blacksmiths' tools to perfection, and might be called an inventor, as he had devised and perfected various schemes of no possible value; but his wife though there was no one quite equal to her Jacques, as she told the writer *(John Horne is the suspected author of his story)* that he once made a fiddle out of his own head, and had wood enough left to make another. Jacques was not what you would call a handsome man. His hair was fiery red, his eyes crossed, and his mouth, - well if mouths went by sizes, as shoes do, I should say it was about No. 17. But the most striking feature was his teeth. Almost every alternate one was missing, giving them the appearance of a miniature picket fence or the dumping grates in coal stove. But there was this advantage; if he wanted one extracted, there was plenty of room to work. One day Jacques was suffering terribly with the toothache, and, as the nearest dentist was in Littleton, he had to bear it, though so far as Jacques was concern, he might as well have been in Hong Kong, as he could not muster courage to patronize him. He had the sympathy of his fellow workmen, and recipes and suggestions were given him galore. One engineer proposed strapping him to the cog rail, take a stout rope, fasten one end to the engine, and the other to the offending molar; but Jacques said that his teeth came out so hard that he was afraid that some of the machinery might break, and his discharge would follow. Another man suggested taking a slideboard to the Summit, tie on to his tooth and the hotel, and start down the mountain; but as he would have to ride backwards, he did not approve of that. Instead, he hit on this brilliant idea; that a bottle of soothing syrup, or something stronger, with a weight and string attachment, would do the busi-

ness; so, getting together these tools, he went to his room and drove a staple into the ceiling so that a line hanging from it would just clear the bed. He tied one end of his string to a piece of old iron weighing about eight pounds, and passed the other end through the staple. He then put a table, on which was his courage-producer, to the side of the bed, also a cane seat chair under the staple to protect the floor, fastened the loose end of the string to his tooth and laid down, meanwhile holding the weight in his hand. He took a swallow of courage, and then allowed the weight to pull a little on the tooth, but it hurt so that he had to take more liquid courage. Again he gave his tooth a little tension, and still it hurt, tho' not quite so badly as before, as his grit was rising in proportion to the bottle lowers. Eventually he forgot about the weight in his hand, when down it went through the seat of the chair to the floor, and up shot the tooth to the ceiling. I saw the tooth suspended from the staple the next day, and it reminded me of a small lobster's claw before boiling. Ex-M." *- Among the Clouds - Wed, Sep 7, 1898*

Questions 1898

"How did all these rocks get up here?" asked a lady of a denizen of the Summit as she looked at the broken masses around her. But that is "not a circumstance" to some of the conundrums propounded at this high elevation. "Do you ever hear the echo from Echo Lake up as far as this?" inquired another dainty creature, as he proceeded to investigate the various mysteries connected with the Summit. It would require a very wise man to answer all the question propounded here - without smiling." *- Among the Clouds - Sat, Sep 17, 1898*

Ask Questions

"A reluctance on the part of many visitors to the summit of Mount Washington to ask questions is frequently responsible for their going away with an imperfect idea of what is to be seen here. Many persons have a feeling of delicacy in the matter, no doubt, thinking that they will be obtruding upon the time of others. This is a mistake, It is an unwritten law with the employees of summer resorts that they must be posted on the points of interest in the immediate vicinity, and that their knowledge must be freely, at the disposal of all patrons. It is a pleasure for a hotel clerk or a railroad conductor to answer all questions of tourists and to furnish them with accurate information, and in the majority of instances a few queries on the part of visitors will be well repaid. Ask questions, by all means." *- Among the Clouds - Thu, Jul 20, 1899*

Third Rail

"A close observer of all that happens on the Summit witnessed a laughable situation on a recent noonday. A mother and daughter were enjoying a promenade on the platform when all of a sudden the younger lady started to cross the track. About to step from the outer iron upon the cog rail, the mother exclaimed: "Look out, child! Have I not cautioned you repeatedly to beware of the deadly third rail." *- Among the Clouds - Tues, Aug 1, 1905*

Going Up?

"A little boy after intently watching several slideboards fly down Mount Washington, suddenly turned around and said: "Pa! How do they go up on those things?"

- Among the Clouds - Sat, Jul 21, 1906

Where to Board

"Superintendent John Horne of the Mount Washington railway is rarely surprised at anything that is said to him, but it nearly took his breath away one day lately when a visitor, while five trains were standing before the Summit House, thus address him: "Sir, would you have the kindness to tell me where the trains start from?" *- Among the Clouds - Fri, Aug 31, 1906*

CHAPTER 12

One Clap of Thunder

August 29, 1965



- Photos Lewis Family Collection

Paul: "Jitney, water was not drained back enough last night….wanta check it out?"

Jitney: "Ya, I'll catch the next train. How far down was it drained?"

Paul: "About Skyline Platform?"

Water is pumped to the summit storage tank which supplies water for the hotel. The three mile plus pipe line lies on top of the bents beside the stringer.

Ch. 12 - Thunder

The train slows and I drop off below Skyline Platform with a No. 10 tin can filled with kerosene soaked waste.

Snow, in the cold wind, bounces off my clothing as I walk up a few bents to a valve with an attached hose where, if water is being pumped or water is in the pipe, engines can take water in an emergency.

Crouching beside the track I light the kerosene and hold the can under the valve. Suddenly, my right arm whips and I am on my back in a drift of snow. I don't know what happened.



I reach across my body to find my right arm. I found it and picked it up. There is no feeling but it was attached. My left leg was numb. In a matter of seconds I could move my arm and leg.

Laying there I noticed my left boot was dry. The kerosene waste was burning on the bent and stringer. I was about six feet from the track on my back.

Getting up with my arm and leg back to normal, I walked over and threw snow on the burning waste.

I tried the valve; it was still frozen. I walked some distance away from the track to Skyline Platform where the train was waiting for the down coming train to take the switch.

As I climbed into the cab, Frank said, "That was close."

I took the fireman's seat. The fingers on my right hand and left foot felt hot. Removing my glove I saw small puncture type brown burns into two fingers. I removed my boot and sock. There were burned holes in my sock and puncture type brown burns on the ball of my foot.

Back at the Base, Mrs. Jitney said, "I heard just one clap of thunder."

Ch. 12 - Thunder

The Colonel arrived back at the base and came to see me. "Jitney, you and Barb, be Ellen and my guests, I've called the Trade Winds; they are keeping open for us."

At dinner, after I had a couple of Manhattans, Arthur gave a toast, "We are thankful Jitney is still with the Cog Family after being struck by lightning."

I said, "Arthur, being treated like this makes a fella wanta go up and get struck again!"

Other Lightning Strikes Recorded

Stagecoach Struck by Lightning: "A singular accident occurred upon the White Mountain Notch road about four miles above the Crawford House Wednesday afternoon (7/24/1872). A stage coach on its way from Ammonoosuc Station to the Crawford House, was struck by lightning during a heavy shower; the horses being thrown down but not killed and two passengers sitting on the top of the vehicle were somewhat injured. Their clothes were burned, their gold watches and watch-chains melted in their pockets, and one of the men was burnt upon the breast, the electric fluid also completely encircling his body."

- Burlington Free Press - Mon, Jul 29, 1872 pg. 3

"The office of *Among the Clouds* was visited on Saturday evening (7/28/1883) at about quarter past six o'clock by a flash of lightning, which came near causing disastrous results. The thunder-bolt made its appearance known by a terrific crash, accompanied by the bursting of a large fire ball. The editor, Henry M. Burt, who was standing between the office table and a compositor's frame, was struck in the back and knocked down by the lightning, the shock paralyzing his limbs and rendering him helpless. Three of the printers were standing or sitting close by, one of whom, W. A. Perkins, received a slight shock in the back, affecting him only temporarily, and the foreman, F. H. Darby, had his right hand badly burned by the electricity, while the third one, S. M. Whitney escaped uninjured. Mr. Burt was carried to the hotel, and restoratives were applied under the direction of Dr. F. E. Strong of the Summit House, kind assistance being given by Mrs. Dodge, Mr. E. S. Hill, and others. Two hours were spent in energetic efforts before the circulation was restored in the paralyzed limbs. He has not yet fully recovered the use of his limbs. The electric fluid is supposed to have entered the office by the stove pipe. From the stove it followed a shovel which lay on the floor, splintering the wooden handle and went up a gas pipe, from which it glanced off, striking the persons who stood in its way, and leaving the house by a telegraph wire. The type in one of the cases was badly "pied," and a good deal of it melted. At the stage office Mr. Stimson, the agent, had just left the telephone when the shock came, the fire ball bursting almost in his face. The engineer at the Summit House, John Straw, had his hand on a water gauge at the time, and found himself unable to let go. The shock was also noticed at the Signal Station and at the Summit House. The Summit is very seldom visited by thunder storms, most of them occurring at a lower altitude. So far as is known, no person has ever before injured by lightning on Mount Washington." *- Among the Clouds - Tues, July 31, 1883*

"About noon on Friday, July 3, (1885) the Summit was visited by a severe thunder and hail storm, and one lightning bolt succeeded in accomplishing a good deal of mischief. The telegraph

cable carried it into the signal station, where James Camden, a railroad employee, was sitting on the telegraph table, conversing with Assistant Observer Bauer. Camden was struck in the hip and thrown helpless to the floor, while several sheets of blotting paper on the table were torn into shreds, and piece of the linoleum oil cloth scattered about the room. The victim of the lightning was picked up partially paralyzed, and laid on Sergeant Beal's bed until he began to improve. It was suggested that his feet be placed in moist earth, the same way that a telegraph wire is grounded, to give the electricity a chance to escape from his body. It is a well known fact that a wire cannot be grounded at the top, because of the rocky soil, so the patient was taken to the base on a special train, and the experiment tried there. The results were seemingly successful, the sufferer being relieved in a short time, and stated that he felt the electricity flowing from his feet. He was at work the next day, rather lame, but apparently little the worse for his perilous adventure. The same flash of lightning entered the hotel parlor, tearing out a piece of the sheathing, and tearing the clapboards on the outside of the building. The hail fell to the depth of several inches, and when the clouds lifted, observers below thought the mountain was snow-capped. A path had to be shoveled across the platform to the train, through the drifted hail stones."

- Among the Clouds - Tue, July 14, 1885



Reverse side of Crawford Hassen's painting of the Hut ruins by moonlight (1965-66)
- Ken Randall Collection

Ch. 12 - Fire

Fire Next Time

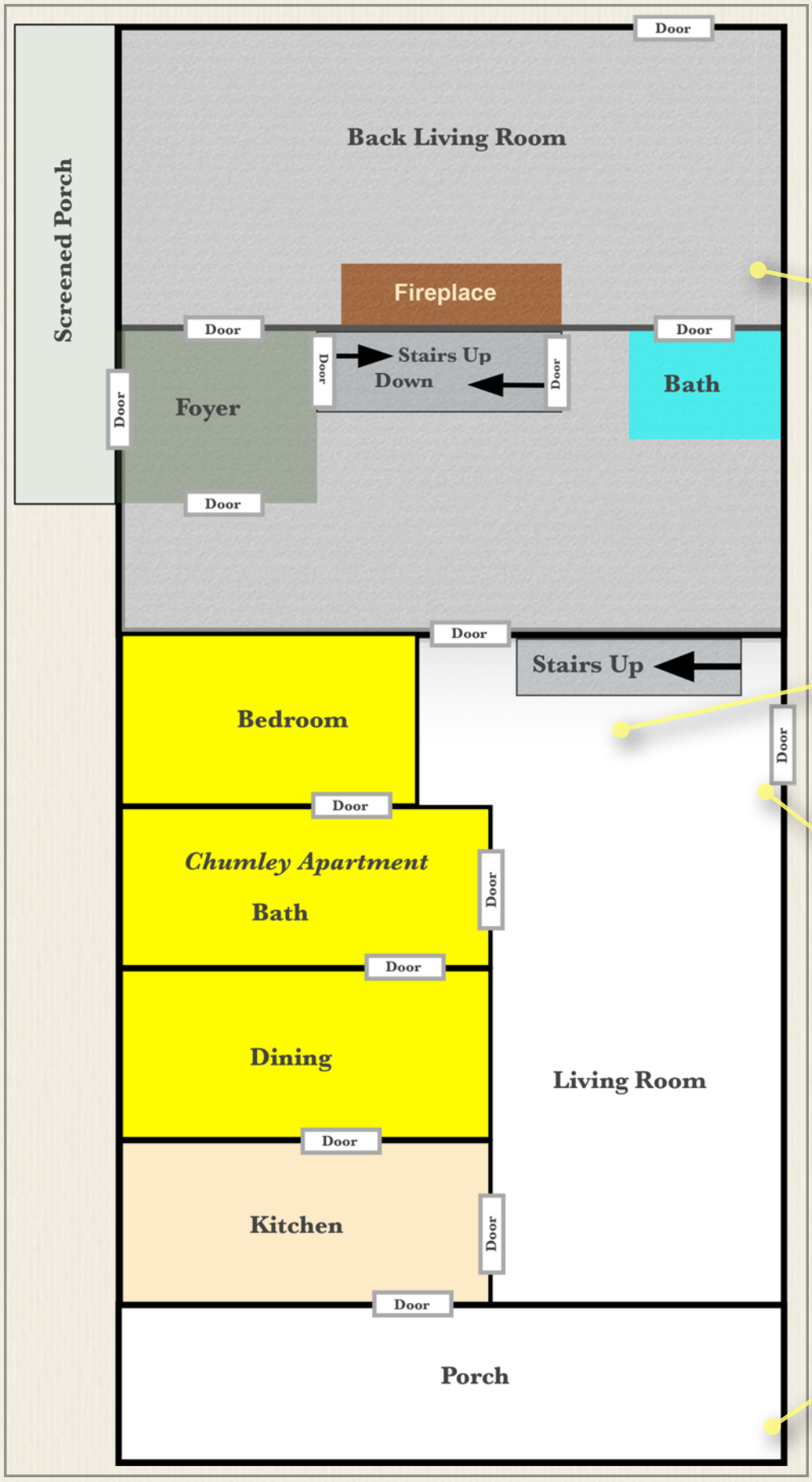
Jitney's narrow escape on Mt. Washington from thunderbolts from above may have exhausted much of the good fortune from the Gods of the Hills as the 1965 season closed poorly for the Mount Washington Railway.

"We wound up the season by actually going ahead in gross revenue on the RR but our expenses were up," explained Arthur Teague in a January 1966 letter to Jitney. "If we could have had a good Sept-Oct the season would have been a record. The Summit House was very bad – lost money even in the gift shop which I don't ever remember before – Mike Haney had a good year – the base restaurant was bad. Tony is still working on the records, so I have got to get this data to him so he can close up the books."

Two weeks after the trains had stopped running that fall, fire broke out in the summer house that Col. Henry Teague had built of hand-hewn logs in 1935. "In line with the log cabin scheme of things at the base of the mountain, Col. Teague has built himself an attractive two-story house of logs, not far from the Base Station. Modern in every detail, and very comfortable throughout, the glorified cabin fits nicely into a woodland setting that includes even a mountain stream," reported the *Littleton Courier*. The original "Hut" stayed that way until Arthur and Ellen began having children. The original "Hut" was added on to in 1945-46 to accommodate their growing family. The Halloween 1965 fire destroyed the structure *(below)* known as "the Hut" with its ten bedrooms, six baths, two living rooms, kitchen and other facilities - only the stone fireplace was left standing.



The Hut - First Floor





Hut photo shoot: *Jane Teague takes picture of Phil Zimmerman sitting on Prince 1 while Margie watches.*

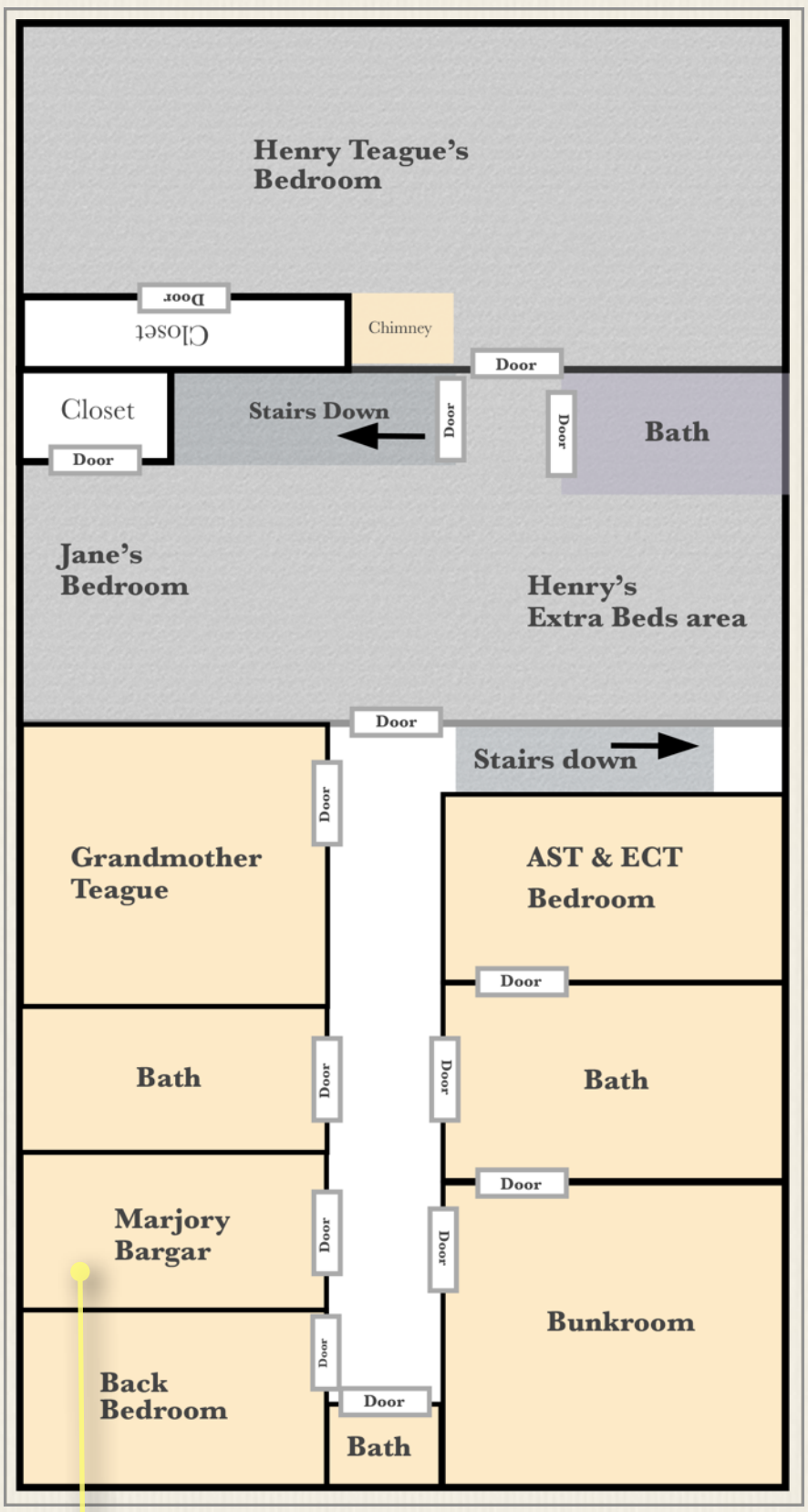


"Step-Children" *- From Top: Anne, Fanny, Phil Zimmerman standing alongside Susan Granger behind Margie, Jane holding Lucy, the two Zimmerman girls (Janet & Lynn) Judy the Dog sits in the chair. Note the nautical line used for the stair handrail - an homage to Henry's sea-faring father.*



The Living Room: Located to the left of the main entrance, this large room witnessed much of the Hut's entertaining. "I remember about 20 of us being guests at dinner in a restaurant," Shirley Kent recalled on Facebook. "Then going to the theater in Whitefield. We were always late, and after the performance went to the Hut." "Boy I remember that!" replied Anne Teague Koop. "We'd make deviled eggs and things so when you would come back to the Hut we could hear all about the play. Those were the good old days!"

The Hut - Second Floor





Regina & Rex: *The Teague collies in front of the original portion of the Hut. The pair would be part of the canine team that raised the alarm when the Halloween fire broke out.*



Henry's Hut: *The original structure (above right) was built in the 30s so Col. Henry monitor his mountain through large windows. The extension to the east was added to house Col. Arthur's growing family.*



A Philadelphia Friend: *Margery Bargar (left) was a dear friend and fellow nurse of Ellen Crawford Teague. She became a fixture at the Base helping care for the kids and working in the Gift Shop.*

In Ruins: *The log structure was reduced to ash and a debris strewn cellar hole (right) when fire broke out in the unoccupied structure on Halloween 1965. Henry's stone fireplace would be adopted into the new two-story structure to be built on the site in 1966-1967*



Newspaper accounts said Harold Adams was awakened shortly after 2 in the morning by the barking of the Teague dogs. He "found the residence ablaze." Harold, Paul Philbrick, Frank Thompson and Crawford strung two lines of hose to nearby hydrants in a "futile fight to stem the flames" consuming the Hut. The fire was so intense the building's steam radiators melted, and the quartet played water on the nearby Boarding House to prevent its loss.

"We left on Friday and were coming back on Wednesday to get the last load before the winter," Arthur explained to Jitney in his January letter. Paul called me Sunday morning at 6:30 AM and said she was gone. Frank Thompson, Harold, Crawford and Paul saved the Boarding House."



Col. Teague surveys the damage in early November (1965)
- Teague Family Collection

"In the Hut fire," wrote the Colonel "I lost all my Cog RR collection that I was making for 1969. Lost all the old pictures, about 25 old RR lanterns, stuffed animals from Marshfield, most of my past records of adventuring and many things we can never replace. Most of our summer clothes, riding hats & suits." A companion manuscript to this Operating Manual may have been lost as well. Dave Woodbury wrote Jitney in February 1964 that Arthur Teague was "getting out a book of his own on the Cog. I don't know how extensive it's going to be."

The public inventory in news accounts included "treasured stereopticon views and old photos and manuscripts associated with the Cog Railroad, the girls' trophies won in horse show competition over the years, a saddle, some harnesses" and "a garage in the basement contained an antique sleigh and a Brockaway horse buggy."

A December 1965 letter in the Richard Murdock file of the Bretton Woods Boys Singers at Dartmouth College reveals "Arthur Teague called me on the phone from Philly to inform me that his log Hut had burned to the ground and with it went many valuables and of course our two pictures from the choir and the Stompers. It was insured for ten thousand and Arthur will build one out of native stone, etc. It was a terrible loss." The newspaper article said replacing the structure would cost at least $70-thousand dollars.

Ch. 12 - Fire

The fire was declared "of unknown origin." The paper reported "two gas heaters and three electric light fixtures were left on in (the Teagues') absence." Teague reportedly told the Boys Choir officials they "don't know how or who started the fire, but there are rumors about someone doing it for revenge, etc."



The Hut would be rebuilt. Morris Root was part of the construction team. "One of my experiences at the Cog was the concrete work for the foundation of hut #2," he recalls on Facebook in 2018. "I was on track crew the day "Father" Larry (Gooden) and Col. Teague supervised us as we poured the 'crete for the footing. Reinforced the concrete with rail off the track." The design would incorporate the fireplace and chimney from the original built by Henry Teague. By early October 1966, concrete cinder blocks formed the first floor's walls *(above)* while the framing for the second floor and roof was underway.



At the west end of the building *(left)*, there would no longer be a drive-in opening to a basement level where Anne had gone to develop her photos in a dark room in the old Hut or things like Henry's convertible, Ellen's driving wagon, or cases of soda pop for Marshfield or the Summit might be stored.

Recovery from the the fire and subsequent construction meant that for the next two seasons Arthur, Ellen, Lucy and Charles would live in the so-called "*Peppersass* House" on cabin row.





Charlie Teague and the Colonel pose in front of the Hut in July 1964 (left)
A little more than two years later, father & son would stand on the second floor of the new hut as it was under construction (1966)
- Teague Family Collection



Crawford Hassen painting of the Hut ruins by moolzight (1965-66)
- Gift of Ken Randall to the Jitney Collection

CHAPTER 13

Hibernation



Winter Base photos from Doug Taylor Collection (March 1964)

The Mount Washington Railway has always been a short-line, short season operation due to the weather and climate of the White Mountains of northern New Hampshire. The first paying customers went up to just above Jacob's Ladder on August 14, 1868. Passengers could ride to the summit starting July 19th in 1869. July 1st became a traditional start date. John Ackerman, the Sunday editor of the New Bedford, Massachusetts *Standard Times* wrote in the April 1968 *American Heritage Magazine*, "The summer-only line burdened the Boston & Maine Railroad with heavy maintenance and summer operation costs" and "further offended the Boston & Maine by its winter hibernation and laborious spring revival." Ackerman said the Cog Railway made up for its

lack of profit by helping to lure vacationers to the White Mountains" who would ride the Boston & Maine to see the sights until tourists started using automobiles, and the Depression hit. Col. Henry Teague not only ran more daily trips but extended the length of the operating season to generate more revenue. In the years of the Colonels Teague trains generally ran from Memorial Day Weekend to Columbus Day to carry more passengers.

Then it was time to button up for winter. Trains and cars were parked in the engine house and car barn. Some might go down the mountain for overhaul and rehabilitation in machine shops. Water was drained from the boilers, the feed line to the Summit, the water tanks, the pipes in the Summit House and the Base's cabins and buildings, and lastly the line bringing the water to the Pelton water wheel. Windows were boarded up. Doors were secured. Provisions would be stocked in the Boarding House. There was no phone line. All would leave save one, or two. The snow would fall. The Cog would sleep until spring.



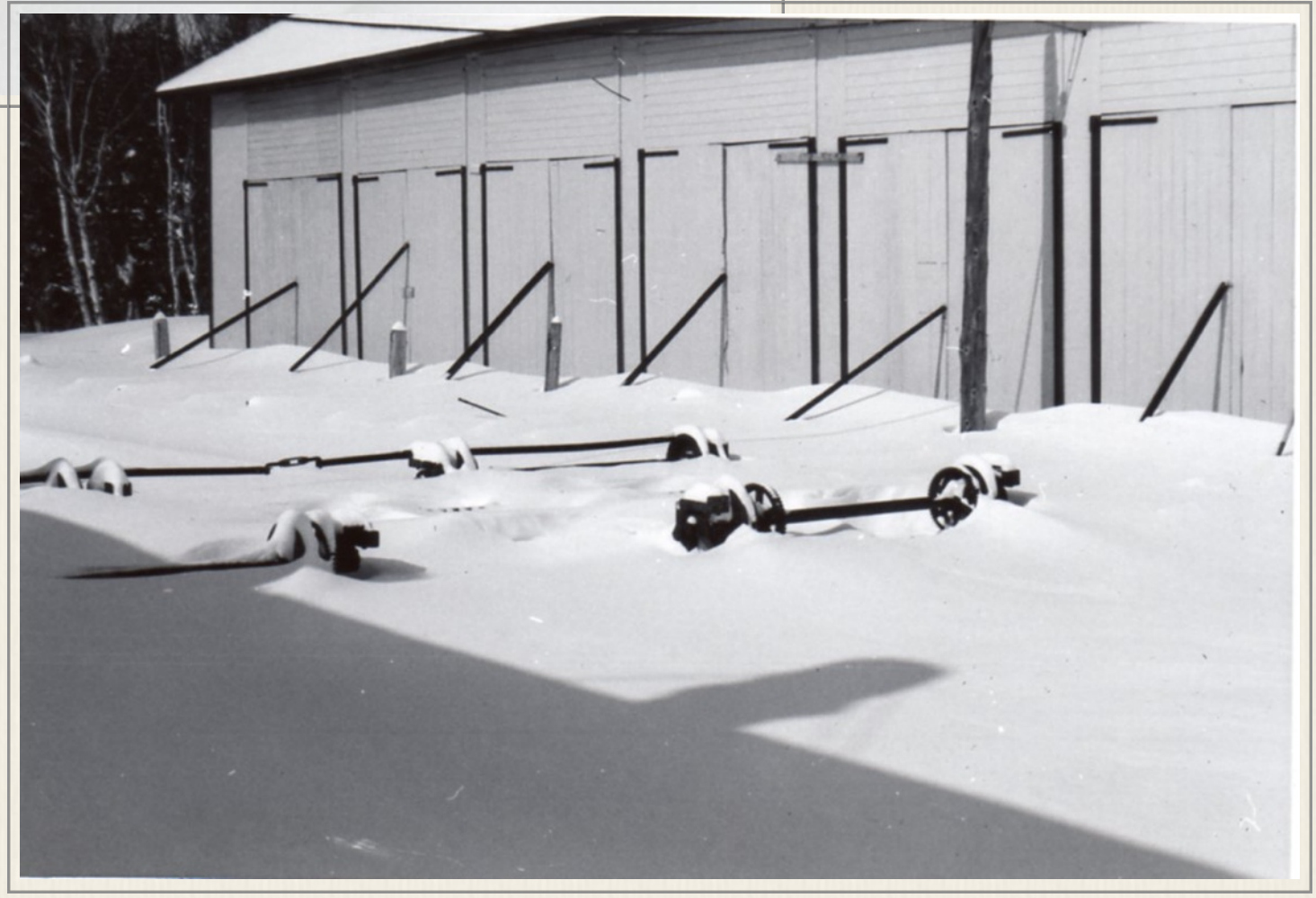




Ch. 13 - Hibernation



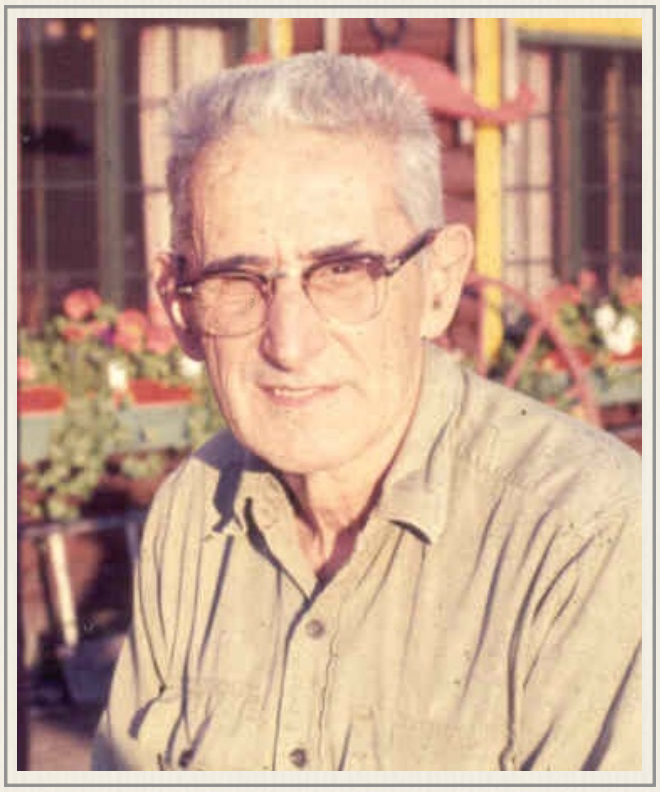




Caretakers

CRAWFORD

Part of the "Force," Crawford maintains a full year of employment at the Cog and his paintings hang in Marshfield. When asked of his home, he only designated the world. Come see Crawford's beard in the winter. *(Cog Clatter v1n9 – September 2nd, 1966)*



Crawford outside Marshfield
- Kent Family Collection

The work of the Mount Washington Cog Railway attracted, fostered, and created a cast of memorable "characters" - characters who were simply known by nickname, sometimes a single moniker. The 13-year old editor of the *Cog Clatter* did not press for more than a single name when it came to Crawford's story, and that created a mystery for that same editor forty-nine years later while researching this volume.

The April 26th, 1971 edition of the *Lowell Sun* reports that Crawford's 47-year old sister, Barbara Palmer died of exposure on the Base Road hiking through waist deep snow to visit her brother with her husband and son, who both survived the trip. The paper records Crawford's last name as Hassen. Her death records indicate her maiden name was Hasson. Others thought his last name was Hanson. So who was Crawford?

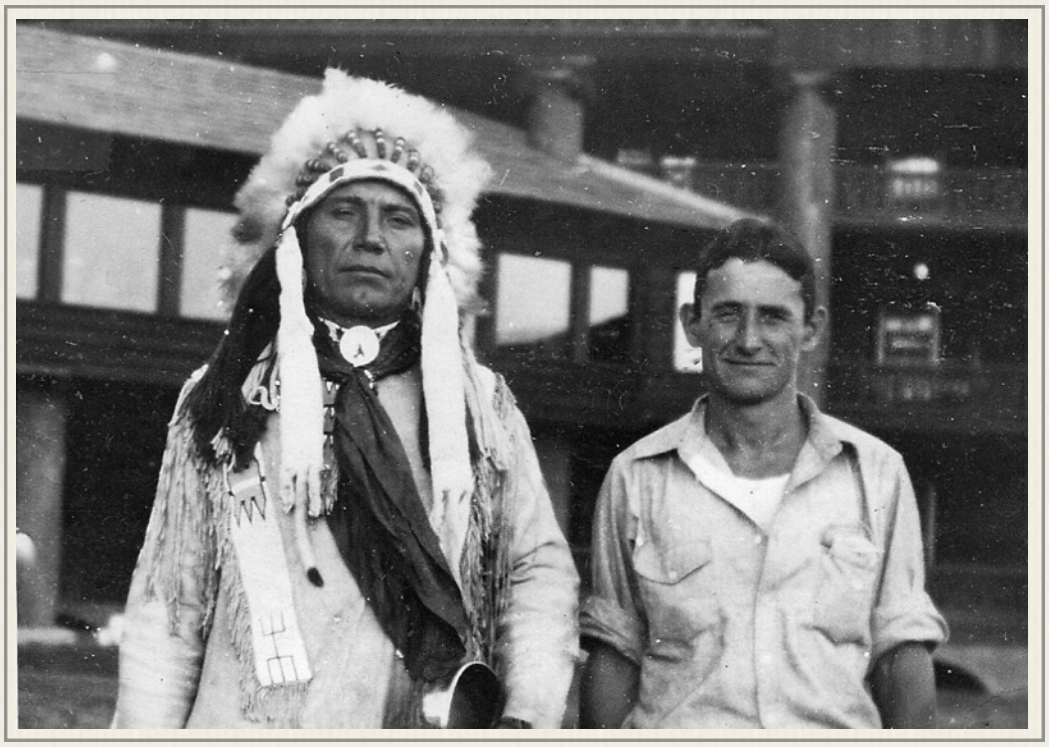
"I remember long conversations with Crawford when I was nine," says Dale Ann Granger Eckert in 2015. "He told me we were a lot alike. He was there when I worked on the counter at 16 and when I was 18 working in the gift shop. But I really enjoyed the long detailed letters that followed over the years. I still have them. It was a friendship that lasted over 30 years."



But who was Crawford? "My memory says he was a guide in his younger days at a national park maybe Yellowstone, hung out with the Blackfoot Indians and studied with the Jesuits," says Dale Ann *(left with Crawford)*. "No matter where I lived the first break in the snow on the Base Road - Mother and Daddy and I, and in later years my husband, would head up to the Base to see how Crawford and Shitter (the dog) weathered the winter. My parents had always made their way to the Base in the winter, cross country skiing the road, to see the caretakers even back in the 40's. I sent him a letter from PA one winter saying how much I missed the Mountain. That spring he had made a copy of my favorite painting. One of the Cog's true originals."

Ch. 13 - Hibernation

That still did not lead this editor to documents that would reveal exactly who was Crawford?



Note on back: Bootleggers/Chief Bullchild-Blackfoot and me, I, Him, He! (1927)
- Granger Family Collection

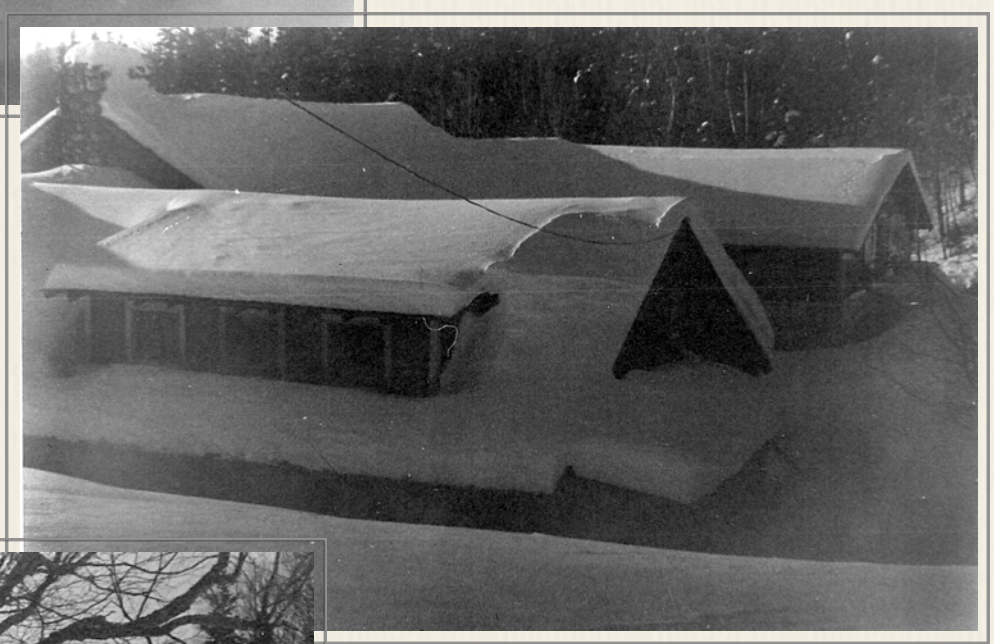
"I'd say he was born in 1903," says Dale Ann. "In a 1987 letter he said he would be 84 in a couple months. He commented in one that he was older than Daddy when we met and I was probably 8 or 9 at the time. We wrote very long philosophical tomes back and forth. He even sent a cassette of his philosophy in one. Visited him all the years he was in his little abode... in Jefferson. His little living quarters in the back of the garage in Jefferson belonged to C. Bader Chief of Police Randolph. I believe his ashes are up on the Mountain. I missed when it happened and I forget who it was who took them up. Last letter postmark was 1991."

The Jefferson, New Hampshire residence and the year of Crawford's last letter to Dale Ann was finally enough for a successful web search - discovered in U.S. Social Security Death Index,

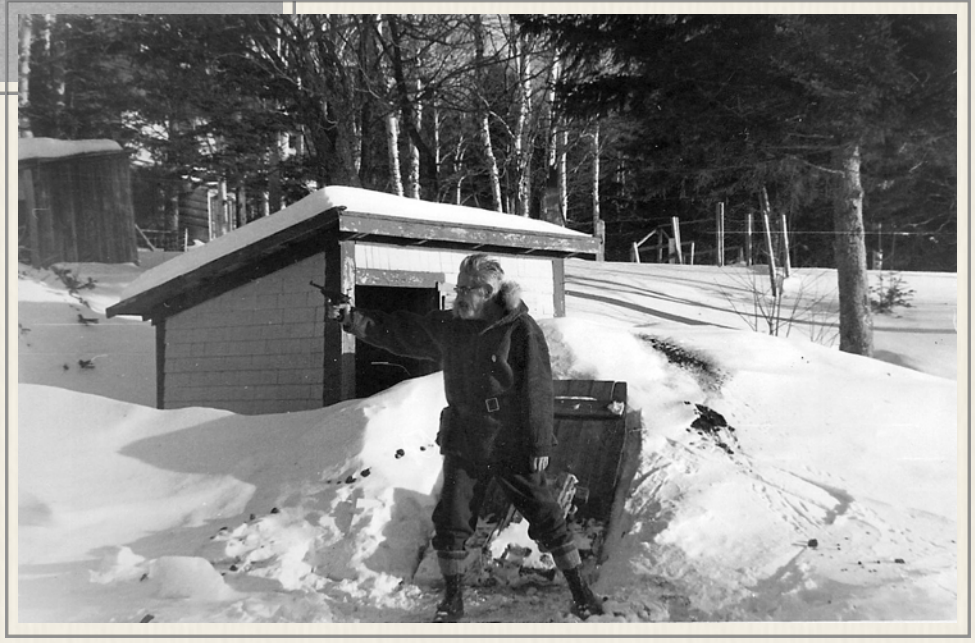


"Crawford" bearded in front of the Boarding House in winter
- Kent Family Collection

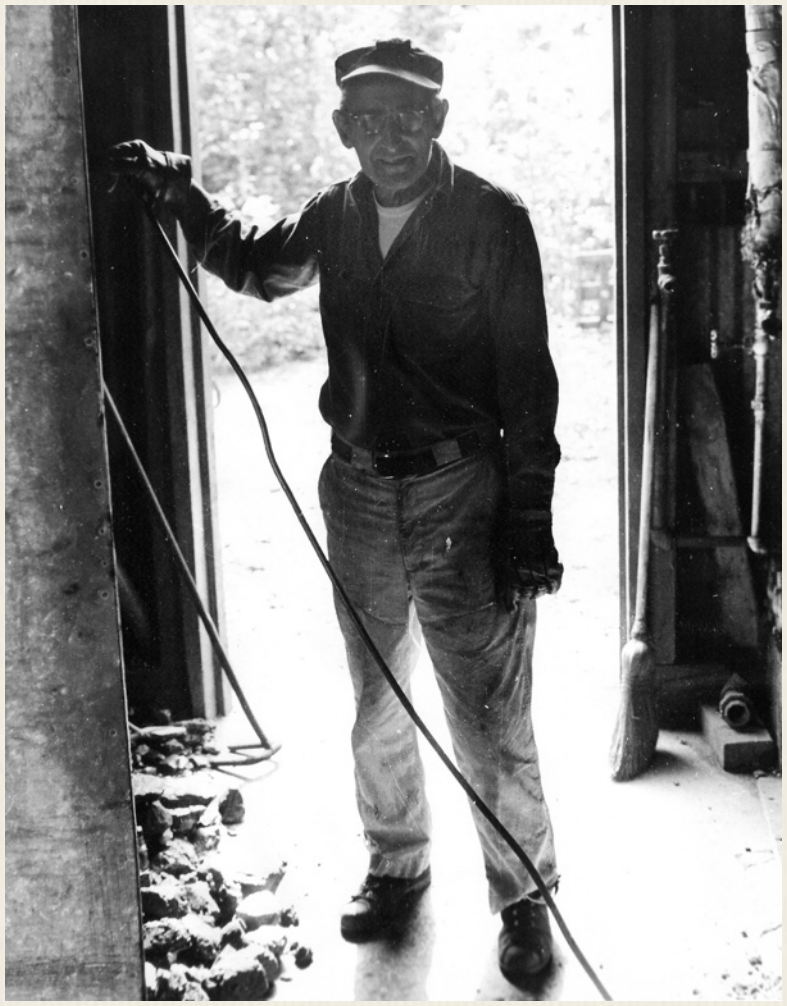








Ch. 13 - Hibernation

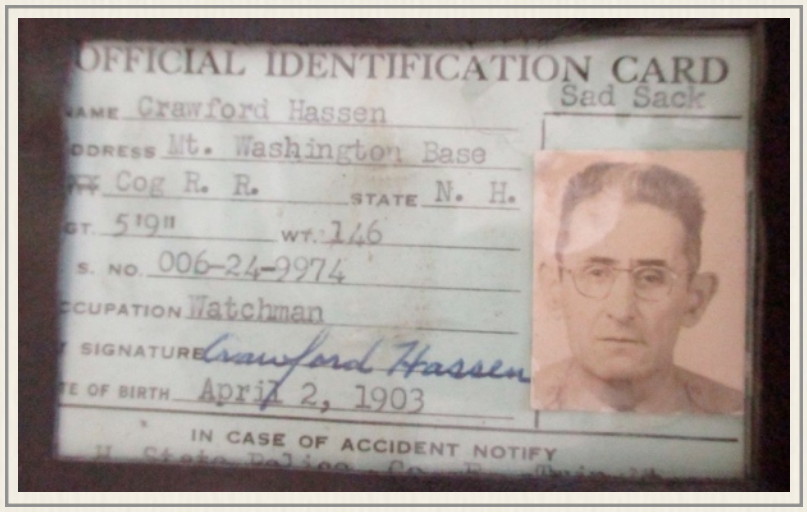


Crawford firing the pumping station (early 1960s)
- Doug Taylor Collection

1935-2014 was this: "Gerald C. Hassen was born on April 2, 1903. Gerald C. died on November 19, 1991, in Jefferson, New Hampshire, at the age of 88." Who was Crawford? Crawford was born in South Paris, Maine - the son of Minnesota-born painter, Charles M. Hassen and Mabel Crawford of Brockton, Massachusetts. By the 1930 Census, the family was living in Waltham, Massachusetts and their last name was spelled Hasson. 27-year old Gerald Crawford Hasson, brother of 22-year old Paul W. and 6-year old Barbara Hasson, was working as a mechanical draftsman.

While government documents answer the Crawford last name question two ways, memories of those who knew Crawford at the Cog answer it other ways and reveal other mysteries. "(I) never knew how he lost his eye but heard many stories of him taking out the fake one and rolling it across the bar at the Oxford Inn in Littleton," says Dale Ann Granger Eckert. On Facebook Art Poltrack says "I think he told me he lost his eye in a pick axe fight. Go figure. Didn't he also have quite a dent (scar) on his forehead from the same event? Like others, I too, witnessed the rolling of the eyeball in his boarding house apartment."

Crawford himself spoke in a *Littleton Courier* article about his winter hermit existence telling a reporter he didn't waste much water by doing the dishes or taking a bath. But said he "always wanted to put up a sign at the entrance to the Cog Railway. The sign would read, 'You are now entering Marshfield, Population 1. Crawford - Mayor, Crawford - Chief of Police, Crawford - Chief of Fire Department, Crawford - Town Drunk. Drive slowly, the life you save may be Crawford's."



Crawford told the reporter he "found out a long time ago' that money isn't everything" and that he never married - any girl friends lasted "only overnight! They don't fit into my lifestyle," he said. "I'm going to wait until I'm one hundred to get married and marry a younger woman about 70 so we don't have to worry about having children."

Jack Lynch remembers, "Crawford mostly told stories to tourists and to us trainmen on rainy days. He was also the caretaker at the Base over the winter. The road was never plowed so no one

came in. It was a lonely job. Once he neglected to light a fire for a whole week. Folks from town noticed this and snowmobiles were sent to bring back his dead body. They were quite surprised to see him alive, but quite cold. When asked why, he said he was lonely and figured they'd come to fetch his body."



Crawford's Winter of 1969 was chronicled in the *Littleton Courier* on Thursday, June 5, 1969.

Crawford Hassen, 67 – Enjoys Hermit Existence
As Winter Watchman at the Base of Mt. Washington

On Oct. 20, 1968 Crawford Hassen, 67, began his long, lonely vigil as watchman at the Mt. Washington Cog Railway Base Station, a watch which ended on Apr. 14 of this year, after a winter of record-breaking snowfall. For the past eight years Crawford has led a lonesome hermit's life in the Boarding House at the Base. Completely surrounded by the cold stillness of the winter, he makes his rounds on snowshoes and occupies the rest of the time at his favorite pastime of painting scenes of the mountains and portraits in oils and water colors. This past winter brought more snow than he ever remembered with eight feet on the level and drifts from 15 to 20 feet deep. In March he noted there were nine days of continuous snow. During one storm the snow piled so high against the porch of the building that he could not open the door. He climbed out an upstairs window and walked down the fire escape on snowshoes to shovel himself out.

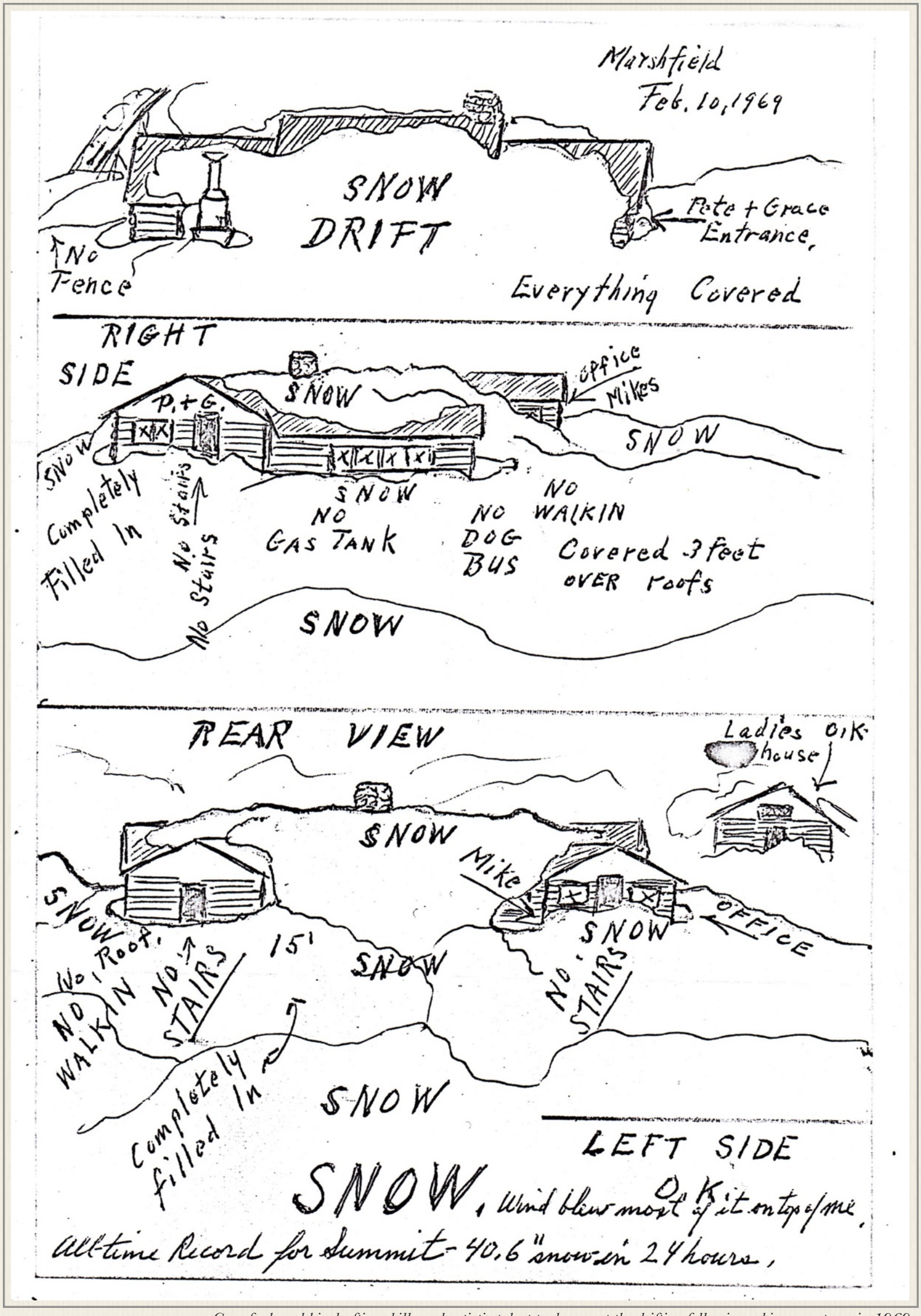
Ch. 13 - Hibernation

In past years his vigil was rarely broken by human visitors. An occasional plane would fly over to check on whether he was all right. If there were no fresh snowshoe tracks then someone would hike in to make sure he was not ill. With the coming of the snowmachine he has had many visitors during the winter the past few years. This is all right, he says, but when he was by himself he never got sick but when he associated with others he sometimes caught colds. The prevalence this past winter of Hong King flu caused him to paint a sign on the door of the Boarding House: "Hong Kong Bug Go Away," with a flying bug on the sign. The winter is rugged in this mountain hideaway and with no running water, he snowshoes 75-100 yards to Franklin brook to carry his daily supply of water.

This past winter he was busy preparing a series of historical paintings of the Cog Railway for the Centennial. One of the most spectacular paintings he has done in past years is a huge picture on the wall of the Marshfield House. Just inside the door above a display of native animals is a realistic forest fire with a huge bear running away from it. Another winter he prepared a round painting with the top of the mountain as the center showing the peaks, lakes, rivers and other points of interest visible from the mountain and identified on the margin.



Crawford Hassen is a descendant of Abel Crawford of Crawford Notch fame and, like those pioneers fo the forest, he is happiest when hiking the mountains or working around the base of the highest peak in the Northeast. When he gets out of his hermit existence, he goes to the city for a fling and then returns to spend some time camping before resuming his summer work. It is six miles from Route 302 at the Fabyans to the Base and the road is never plowed during the winter so few venture to hike in. With the coming of the snowmachine, however, many winter evenings and Sundays have seen visitors scoot over the snowdrifts and through the Jefferson Notch or up the Base Road.



Crawford used his drafting skills and artistic talent to document the drifting following a big snowstorm in 1969
- Randall Family Collection

Ch. 13 - Hibernation

This past winter the depth of the snow was so great that the Marshfield House was buried to the second story and drifts were deep enough so machines could be driven right over the building. Crawford formerly was with the National park Service at Glacier Park in Montana, working as a fire watchman. He never married and has enjoyed his outdoor life to the fullest. In winter he lets his beard and hair grown and when spring comes and he makes his first trip out he visits "Lucky" Morneau in Twin Mountain to get shaved and trimmed for the summer season."

- Littleton Courier -Thu, June 5, 1969.

Two years later, reporter and former Cogger Joe McQuaid profiled his old boarding house colleague in the June 6, 1971 *New Hampshire Sunday News.*

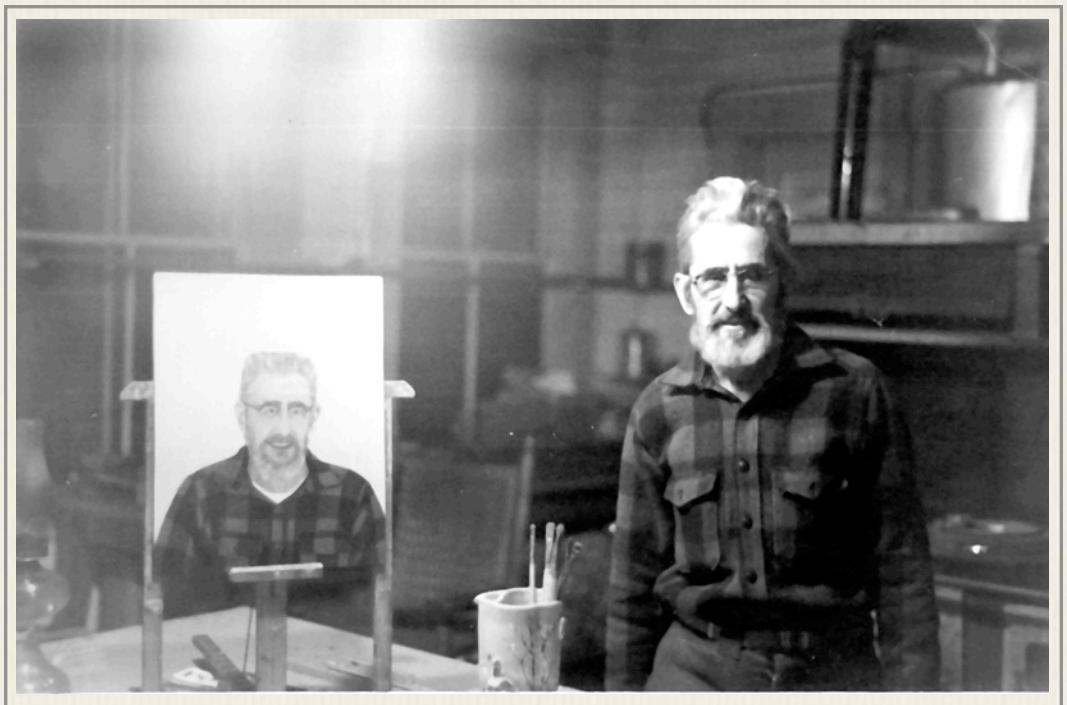
Lonely But Happy Winter Ending for Cog's Old Man

"Base Station, Mt. Washington – The real Old Man of the Mountain is alive and well here – the stone replica a few miles away in Franconia Notch is just that, a good imitation but not the true article. Crawford Hassen has been living at the base of the northeastern United States' highest mountain for more than 10 years. His life is varied, changing with every season. In the summer months he enjoys long talks with the college-age youths who work for the Cog Railway and share living quarters with him in a faded-yellow, three-story building known as "The Boarding House." In the early fall when many of the Cog crew have departed for the season, he helps the railway run a small snack bar in the venerable Tip Top House on the mountain summit. By late October of each year the Cog is shutdown for the winter and all its employees, from engineers to mechanics to brakemen and kitchen help, are gone. All that is except Crawford. He remains here, serving as caretaker and watchman for the Cog. The engines which belched black smoke and hissed steam all summer are now silent in shop stalls. A bell atop the ticket office which called thousands of tourists to the trains is now mute. And the boarding house itself no longer clatters with the thump of heavy engineer boots on its worn wooden stairs. Crawford, as he is known to many people, doesn't mind in the least. In fact, the winter months are most often the happiest time for this gruff old mountain man. New Hampshire's North Country has changed a great deal since Crawford's ancestors, Abel Crawford and his famous son, Ethan Allen, first carved out small homesteads in the wilderness two centuries ago. Ethan Allen Crawford, one of the first residents in the breathtakingly beautiful notch which now bears his name carved a path up the rock-strewn, frozen slopes of Mt. Washington and was one of the famous peak's first promoters. His father, a Scotch-Irish pioneer from Londonderry, had moved north to Lancaster years before and then east to the rugged Notchland where he opened an inn, the first Crawford House. In *The Story of Mt. Washington* by F. Allen Burt, Abel Crawford is described as "tough with the toughness of the pioneer. His eyes were clear, calm and thoughtful with a comical little glint that gave proof of the kindly humor that was forever bubbling within." Burt notes "his features seemed rough-hewn." That description fits the present-day Crawford remarkably well.

"The pioneer spirit which prompted his ancestors to seek "elbow room" in the wilderness has led Crawford to a hermit's life in the snowy stillness of the mountains. "What most people just can't understand is how I can live alone without going crazy," he says with a wink. Crawford



whose springy step and quickness belie his 69 years, has no trouble in keeping busy while the Cog sleeps through the bitter winter. Just staying alive occupies some of his time. His home on the boarding house first floor is just two rooms, kitchen and bedroom. Before snow flies, he builds up a large stock of provisions. But drinking water is a problem. All water pipes are disconnected for they would surely freeze and break in the below-zero cold. So Crawford, with bucket and hatchet in hand, wades through snow to a nearby stream and chops his way to water. Before the advent of snowmobiles five full months often passed in which Crawford would see nobody. He began oil painting to fill the void. Completely self-taught, Crawford has become an excellent artist. His number one subject has been the Cog Railway and its first engines and passenger cars. His paintings are alive with all the colors of this colorful mountain railroad. Drawing from a large collection of valuable and rare photographs and from his memory, Crawford has been able to describe on canvas the indescribable moods and mystique of the still wild mountains. Many of his early paintings brighten the log walls of the railway's Marshfield House and dining room. Others are in some business office in nearby Littleton while another now graces the national Newcomen Society's Philadelphia headquarters. Crawford paints strictly for pleasure and not profit. For a past or present Cog employee to receive on of Crawford's paintings is an honor and sign the person has gained the respect of this independent man. When not painting, Crawford does "a lot of reading, writing and studying." Described by one friends as "an East Coast Eric Hoffer," Crawford is something of philosopher. With a certain pride he notes his formal education ended with graduation from grammar school in a small Maine town. *(Ed note: Jitney Jr research found Hassen trained as a mechanical draftsman)* Although an old mountain man, Crawford is also hip to such modern equipment as high-power FM radios, stereo tape decks and tape recorders. He has made several recordings of his thoughts on religion, history and life and one such tape has found its way into a college where a philosophy professor plays it to his students. Some of his thoughts include: "Generaliza-



tions are more opinions than facts and this is true also of certain lines of education." "The opposite of a little truth is a lie. But the opposite of great truth is another, different great truth." "Genius is frustrated, dissatisfied and miserable," he says. "It is occasionally famous but on when dead." "Any man who can't be identified with the common herd is assumed to have rocks in his head." "We marry by instinct," says Crawford, a lifelong bachelor, "and we divorce by reason." Even so, Crawford advises young people to marry and enjoy life together. "The only real tragedy in life is its brevity," he says.

Crawford loves his solitary winter life and was not totally pleased with the popularity of snowmobiles. The snow-covered base road has become a favorite area of snowmobilers and Crawford fears the inexperienced are in danger in the while mountains. He knows too well the tragic potential of this "killer mountain." His sister was killed last winter while attempting to hike in to visit him. It is no early summer in the White Mountains. Crawford looks forward to more discussions with Coggers and tourists. But although Mt. Washington is beautiful in the summer with the sun shining on its flowered rocky slopes, Crawford undoubtedly looks ahead to another quiet winter in the shadows of Mt. Washington."

- NH Sunday News - Sun, Jun 6, 1971 pg. 31 & 44



Crawford Hassen winter sunset over Ammonoosuc Valley from Marshfield
- Anne Teague Koop Collection

McQuaid's story may have served as an inspiration for M. C. Sabedra of the *Boston Herald,* who did a feature on the Cog's "Old Man of The Mountain" in the fall of 1971.

"To millions of Americans, the Old Man of the Mountain is a craggy stone face on the side of a mountain at Franconia Notch in New Hampshire. To residents of the Granite State, however, the real Old Man of the Mountain is Crawford Hassen, a 70-year-old artist and philosopher who spends his winters alone on Mt. Washington, one of the coldest spots in the United States. Mostly, Crawford paints during his long, lonely vigil. When not busy with his paint brushes, he keeps a watchful eye on the historic Cog Railway. "That's my job," explained Crawford in a rich, gruff voice. "I have to watch out for the railway. Tens of thousands of tourists use it during the summer, I stay alone on the mountain all winter to make certain the railroad and buildings are not damaged. If repairs are needed, I make them. And I have to make them in a hurry. The snow, wind and below-zero temperatures could cause tremendous damage if an open door, or a broken window isn't repaired right away." So Crawford roams Mt. Washington on snowshoes checking the property. He has radio and telephone communication with the outside world daily. "If I broke a leg, or something like that," he said calmly, "they'd get help up to me. I have no doubt about that."

Crawford spends his spare time painting the magnificent mountain scenery close by. "Never had an exhibit in my life," he said. "I don't need an exhibit. When I come down from the mountain in the spring, there are people waiting to buy my paintings. The paintings are usually gone a few days after I come down." Alone in his winter lodge, known as the "The Boarding House," Hassen also jots down his thoughts on life and speaks them into a tape recorder. He makes the recordings for a college professor from New York State, who, in turn, uses them as a basis for lectures to his philosophy class. Why does the artist prefer to live alone all winter on a mountain? "You could say I'm a bit of a hermit," said Crawford. "But I'm a hermit who likes people. That's why I enjoy working at the Cog Railway during the summer months. I'm able to meet people; all sorts of people. I'm able to make up for all that time I spent alone during the winter." Hassen said the prime reason he prefers the lonely winter life is his love of art. "Let's face it," he declared, "first and foremost, I love to paint, and my winter job allows me plenty of time for painting. Also, it's beautiful and peaceful up there on the mountain. It's a marvelous and healthy life. I certainly recommend it." He said he has never been seriously ill while alone on the mountain. :When I talk to them down below on the phone," he said with obvious delight, "they all tell me they've got a cold, or a touch of the flu. The only time I ever have the flu up on the mountain is when people come to visit me. They bring the flu bug up with them. That's why I don't encourage visitors to come up. I'm healthy! Why should I want them to bring the flu, or a cold bug up to me?"

"The Old Man of the Mountain never watches television during his long vigil. "I haven't even got a set up there," he said. "I just can't stand television. I've got an FM radio. Also a tape recorder. I prefer listening to classical music while I'm painting. It's a lot pleasanter than all that nonsense they've got on television nowadays." In the spring, when the snow starts to disappear,

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Crawford rejoins the rest of the world and works at the Cog Railway. "Know what I like best about the summer?" asked the artist. "Most of all, I enjoy meeting the young people. I keep hearing about that generation gap. I don't believe there really is one. At least, I've never encountered any generation gap." Crawford paused for a moment. "There might be a conversation gap. The young people are well educated nowadays. For that reason, it is possible they may want to discuss subjects that don't interest their parents and grandparents. That might be what's wrong. There could be a conversation gap. Regardless, I enjoy meeting young people. They're full of life and, once you get to know them, they're quite interesting. I've learned a log by talking with them."

"Crawford uses only two rooms at "The Boarding House." "During the winter," he said, "there is no electricity. Also no indoor plumbing. The pipes and lines have to be disconnected. I use kerosene lamps. My radios and tape recorders operate by batteries. And if I need water, I have to wade through the snow to a stream nearby, and chop my way through the ice to get water. It's a rugged life, but it's a good one."

- Boston Herald - Sun, Oct 10, 1971 pg. 21 & 23





JAMES "Jimmy" WEBB

Mentioned by Ellen Teague in her book, 70-year old James Webb was also the subject of a winter welfare check by New Hampshire State Police and conservation officers in early March 1960. Conservation officer John Weeden, out of Whitefield, was airborne on March 3rd and flew over the snowed-in Base Station. Weeden reported "signs of a fire in the cabin" where Webb lived alone and could see "no tracks in the snow around the cabin." The rescue party climbed into a "Snow Cat" tractor and went up the Base Road through unbroken snow to the cabin where they found Jimmy safe and sound.

James Webb (with no middle name) was born to a single mother in a workhouse on November 26, 1883 in Knutsford, Cheshire, England. He lived for a time in a house for "waifs and strays" and had a younger sister, Sarah Alice Webb who was born in 1890. At age 17 he left from Liverpool for the United States arriving in Portland, Maine on April 18, 1901. An older brother, David Webb was killed near Ypres, Flanders in November 1914 and was awarded a Distinguished Conduct Medal - the second highest award for gallantry in action after the Victoria Cross.

The 1930 U.S. Census found the 46-year old Jimmy Webb lodging with the Patrick Cassidy family on Union Street in Whitefield, New Hampshire while painting and doing odd jobs for a living. 10 years later, the naturalized citizen, who left school after the third grade, is listed as a caretaker of a hotel in Carroll, New Hampshire. He worked just four months at the job in 1939 and received $240 dollars. When Jimmy registered for the draft in 1942, he said the "person who will always know your address" was Col. Henry Teague. Ellen Teague remembers "A former trapper, Jimmy loved the winters at the base and seemed to hibernate there like the bears and other wild animals which were his friends." Jimmy died in March 1965 at the age of 81.

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While Jimmy was found safe and sound during that March 1960 welfare check that was not always the case. One winter about ten years before, Jitney says the story went that three people - a couple and another man - decided to ride the winter out at the Boarding House. But the man supposedly died, and the couple placed his body in the Boarding House's barber chair to await the coroner's office to come and remove the body. The woman was very distressed by the whole situation. Pliney Granger III's version of the incident is a bit different. "The story I recall was the caretaker was Jimmy Webb (if I recall correctly). It was his wife that died during the winter, and her body was kept in an unheated section until they could get her out. I recall the old barber chair when I was a kid. Can't put a date on it. Late forties maybe." If it was Webb's wife who died then that would explain the concern by the conservation officers in 1960. But so far no record of a Webb marriage has turned up, and the winter death at the Boarding House is another Cog story in need of confirmation. The old *Clatter* editor is pretty sure the following tale from a caretaker known only as "The Great White Spirit" absolutely cannot be confirmed.

GREAT WHITE SPIRIT

Winter Caretaker -- Summer Parking Attendant

The Cog's winter caretaker held tourists in silent awe with the following story that was committed to memory and used by Jitney over the years.

"The snow spread over all the Base, a white waved and wrinkled stillness with only the top of tall evergreens showing. I was sound asleep upstairs in the Boarding House when I heard the awfullest noise I have ever heard in my life. I ran downstairs out on the porch – thrashing and charging across the white plain was the biggest buck I had ever seen in my life. Rushing back to my room I grabbed my rifle and returned in all haste to the porch – raised my rifle and took aim at the buck. He was close. I had to pull my gun back when he went by; just then out of the corner of my eye I saw the biggest Bob Cat I had ever seen in my life. I swung around to shoot that Bob Cat but just as I was going to pull the trigger that Bob Cat rolled his eyes at me with a look I had never seen before – this look compelled me not to shoot.

"The buck was gone. I went back to bed.

"In just about an hour I heard the worst noise I had ever heard on the porch. I grabbed my rifle and went down to the porch. There on the steps was the nicest hind quarter of deer I had ever seen in my life – that Bob Cat was so grateful that I hadn't shot him, he dressed out the buck and brought back a hind quarter."

Winter Caretaker Roster

1871-1879	"Uncle" John Camden	1932	Mr. & Mrs. Charles Buckner
1890-1892	Sam Gingras	1934-1936	Talmadge McCormick
1898-1915	Eugene Marcotte	1937-1938	Everett & Irene Peck
1913	George A. Gosbee	1942-1960	James Webb
1913-14	Ray Potter	1950-1951	Otis Ireland
1914-15	George Crandall Tatham	1952	Murdock Campbell
1920-1926	John B Coreau	1953-1956	W. Scribner
1930	John E. Williamson	1961-1983	Gerald C. "Crawford" Hassen
		1983-1984	David Moody

Work Away from the Mountain

While the Base Station and Summit slept beneath winter's blanket, down country there was no rest for the management. Machine shops and foundries were turning and casting parts for the engines, coal needed to be purchased, along with timber for track repair and trinkets for the tourists.

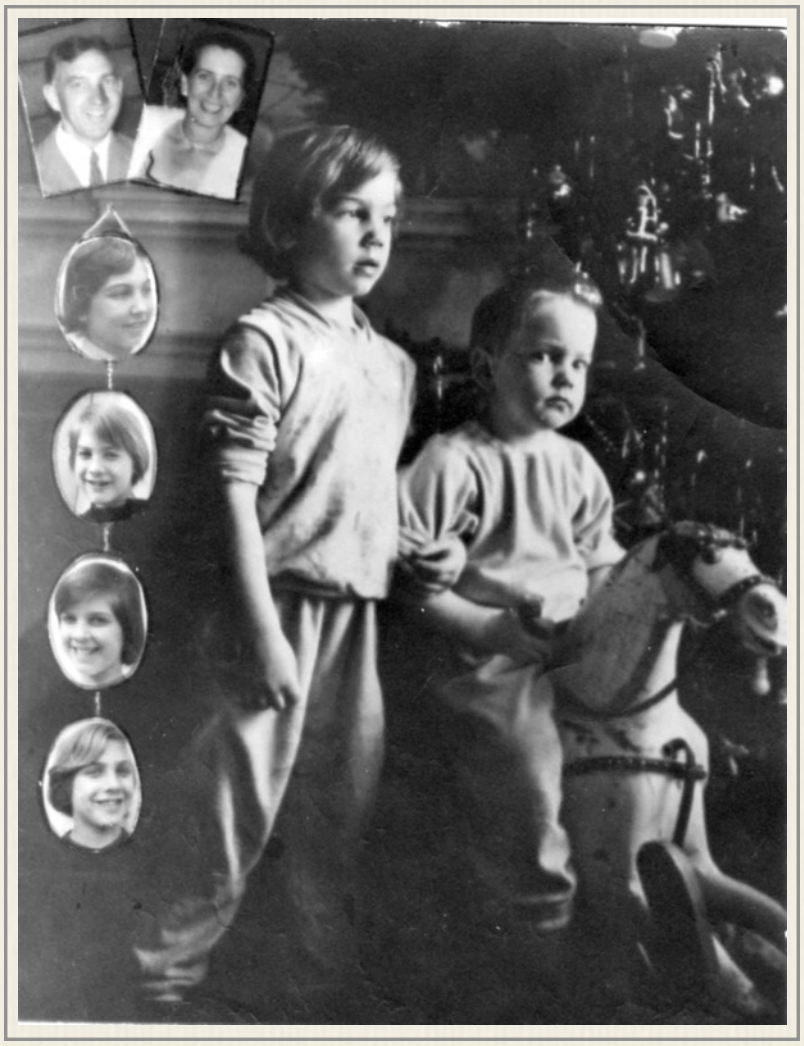
Col. Arthur Teague wrote "Young" Pliney Granger in March 1951 about problems purchasing timber for the track. "I have tried to buy 500 ties, 60 side pieces, 40 stringers, 30 centers 28' long, 60 Centers 24' long. So far I have not gotten any confirmation on it." In February 1952, Col. Teague told Granger he was still looking for a good wood supply. "I have made a trip down south just recently and I stopped in to see a couple of the lumber mills. I think by buying the lumber at the mill they can have it creosoted on route of shipment to Fabyan."

In February 1964, Teague wrote to Jitney that "we have bought a new welder, tender, some 6" loco axles Bethlehem steel, cog gears, crank shafts and more than $1000.00 worth of brass bearings, and I hope some new wheels as I carried the pattern and chill to the foundry last Fall."

A February 1966 letter to New Hampshire's transportation director Winslow Melvin outlined the mechanical work being undertaken. "For the last four years I have taken one locomotive boiler and given it a complete overhauling or rebuilding. During the 1965 season we did two boilers and the #3 boiler we put on a new barrel, flue sheets, stack, and removed every stay bolt and replaced the side sheets in the fire box. This included of course re-tubing with 229 tubes. Last Fall (1965), I brought in our '66 rebuilding locomotive and took out all the stay bolts, side sheets and boiler tubes. We scaled the boiler down and started replacing side sheets and stay bolts. Our mechanics will go into the Base early to complete this boiler rebuilding job and hydro and do our annual Spring inspection test of each locomotive boiler. Lukens Steel Mill has been supplying us with boiler parts and they are now building us two new improved locomotive frames. Incidentally they were the Original Co. who built frames and boilers for the Cog RR almost 100 years ago. We have changed our locomotive axle from 4¼" diameter to 6" and they are manufactured by Bethlehem Steel Axle Mill at Johnstown, Pennsylvania. They are made of 4142 steel which is the best. We are happy to report that the railway and all of its passengers are now protected by a public liability policy for the first time. This was written by the N.H. Fire Insurance before the start of the '65 season."

In a March 1967 letter, the Colonel says "Ellen, Mike and I have been to several 'Gift Shows' and are about finished with salesmen, so we are now pretty well along. Mike and Tony Poltrack are now in Boston at the Boston 'Gift Show."

There was also the annual Christmas card to craft and send to members of the Cog family. Each card a collage of the Teague family members culled from current snapshots and arranged in a Cog holiday motif.




A Very Merry Christmas
Ellen's Art Teague's Our Six


MERRY CHRISTMAS

1962


THE
TEAGUES

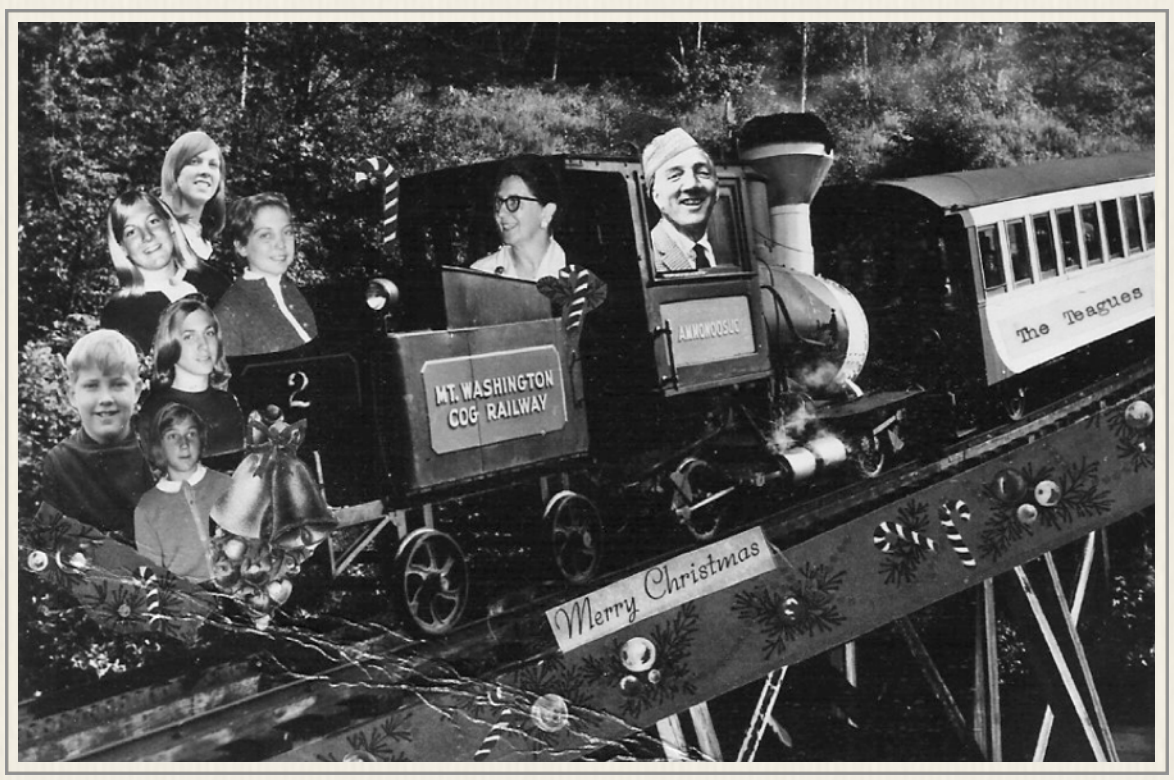
1963



1964



1965



1966

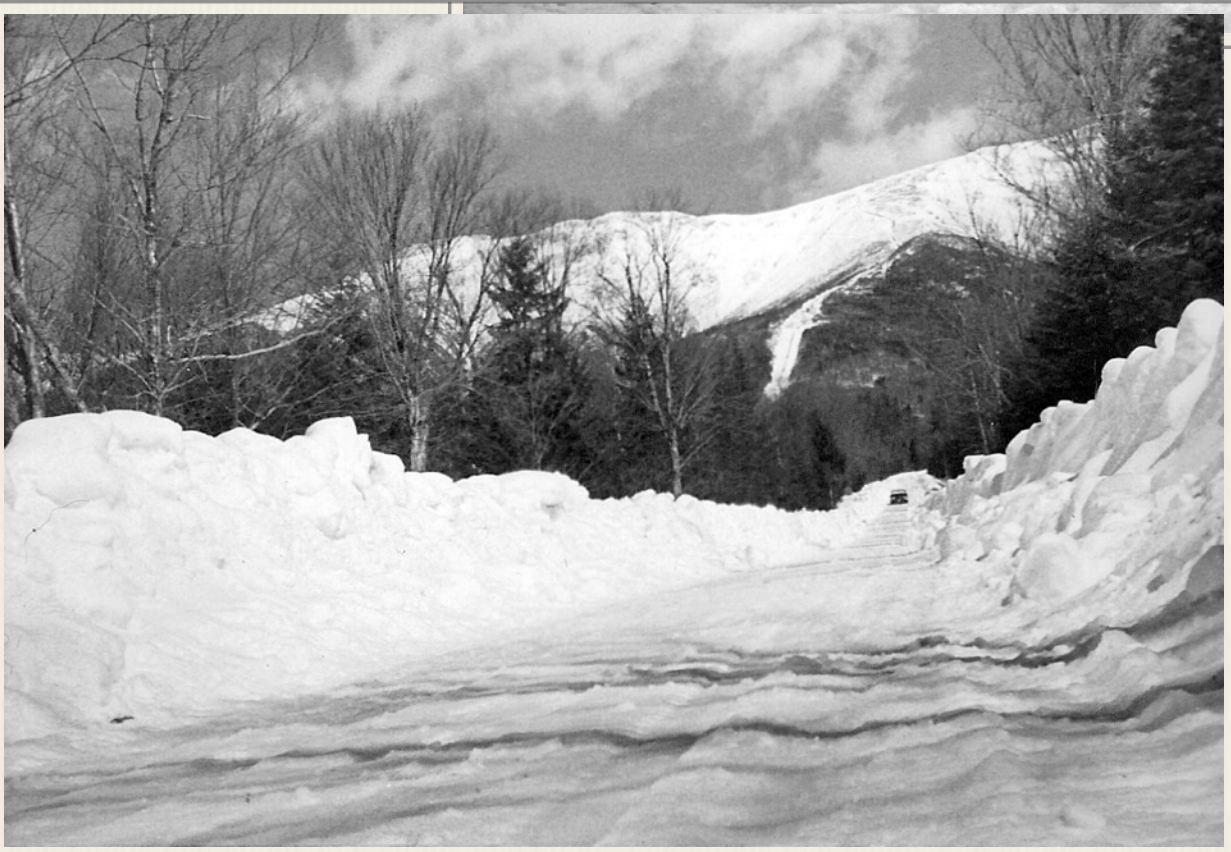
Ch. 13 - Hibernation



Only skis, snowshoes or snow-machines can travel the Base road for months. Then comes the road crew with wing plow and sander to punch a path to the caretaker so he may be joined by the Coggers responsible for bringing the railroad and its facilities out of hibernation. *(Spring 1963)*

- Ellen Crawford Teague Collection





Ch. 13 - Hibernation

Spring 1967



The snow melts and the Base begins to wake for the last of the Jitney Years at the Cog. Harold Adams captured these images on April 29, 1967. The new boiler *(left)* that would power the new No. 10 engine sits on its cribbing at the Shop where most of the pre-season work is underway. Necessary roadways have been opened with the bulldozer and tractor - that includes the driveway *(below)* of Mr. Adams' cabin. Spring sunshine will clear the rest of the cabin driveways.







CHAPTER 14

Annus Horribilis



- Photo by Annamarie Bailey

A *New York Times* book review of *The Year the Dream Died: Revisiting 1968 in America* by Jules Witcover was entitled "Annus Horribilis" – the Latin phrase for "horrible year." It was, according to reviewer Sidney Blumenthal, "an election year almost everyone wishes had never happened." 1968 was a year marked by an escalation in Vietnam, two assassinations (Martin Luther King & Robert Kennedy), and rioting at the Democratic National Convention in Chicago. One woman wrote to NASA saying the only thing that saved 1968 was Apollo 8 – the first manned mission to the moon that entered lunar orbit on Christmas Eve and sent back humanity's first view of an "Earthrise."

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While the American Dream may have died in 1968, most members of the extended Cog family of that era wish the year before - 1967 "had never happened."

1967 was going to be the last summer at "the Mountain" in New Hampshire for the Jitneys. Norm Lewis' educational career had reached the point where he would have to sign a 12-month contract for his new position as assistant superintendent in the fall. To wrap up his tenure as operations manager at the Cog, Jitney and Larry Gooden would walk the entire track, inspecting and cataloging its condition bent-by-bent – tie-by-tie. Jitney's final report would close by saying the only possible cause for an accident on the line in the future would be human error as the track, the locomotive & car mechanisms as well as operating procedures were sound if maintained and followed.

The barely teenaged reporter/publisher of the *Cog Clatter*, Jitney Jr. did not witness the start to that summer of 1967. He went on a twenty-day trip to the Philmont Scout Ranch in New Mexico with two of his friends from Chester, Vermont – Prescott "Scott" Heald and Daniel Petraska. The trip included five days out in a bus stopping at historic sites; then ten days hiking some 50-miles in the mountains; followed by five days of culturally significant touring on the way back. The trip went well. Jitney Jr. returned to New England with great memories, two cowboy hats and a backpack full of dirty laundry.

The summer did not start well for Col. Teague. Summit infrastructure had been damaged over the winter, and the mountaintop's owner, the State of New Hampshire had failed to give the Colonel a heads up that the Summit House could not be used for overnight guests. A special "train ride and an overnight at the top of Mount Washington" package deal had been featured in the Cog Railway's national advertising ahead of the 1967 Memorial Day opening. It had attracted many reservations.

Though the railroad no longer owned the building and leased it from the state, Teague attempted to do what he could to get the Summit House functional and salvage at least some of the income expected from summit operations. The *Cog Clatter* reported the effort this way in June.

Top Job

The resurrection of a summit house can be compared to that of a hiker sitting down and having his muscles tighten up on him; however, this year the Summit House seems to have a few more blisters; such as the wind damage to the water tanks and the State of New Hampshire.

Col. Teague rushed Uncle Paul and Father Goody to the summit with liniment and Band-Aids and therefore, has overcome many of these difficulties and with the help of his summit crew, hopes to see his "hiker" back on the trail. *(Cog Clatter v2n1 – June 29th, 1967)*

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Shortly thereafter, Col. Teague suffered a heart attack (or severe angina) and was ordered to rest by his doctors.

Get Well Soon

It is unusual on the Cog not to see Colonel Teague riding in the tender, crawling under an engine to check a bearing, walking beneath the trestle checking track, inspecting a roof or braking trains down the mountain but the doctor has strongly suggested that the Colonel catch up on some needed rest. Needless to say, these are not the kind of train orders the Colonel likes to receive. However, he did agree to run the Cog from his bed.

We are sure that if the Colonel will heed the slow-down signal, he will soon be back at full time, attending the many tasks that require his attention. *(Cog Clatter v2n2 – July 7th, 1967)*

Teague's return to the Base at the end of July from The Teague Farm in Guildhall, Vermont was reported this way.

Back on Top

It was nice to see the Colonel these last few days around the Base, looking better and participating directly in his Cog operations. Soon he will be back at the throttle on the mainline with a full head of steam! *(Cog Clatter v2n3 – August 2nd, 1967)*

The Mount Washington Railway Company's Board of Directors (President Arthur Teague, lawyer Jack Middleton, accountant Tony Poltrack, and Mike Haney) was scheduled to meet on Friday morning, August 4th. Ellen Teague writes in her autobiography, "Art attended (the meeting), but disagreed with so many of their (Middleton and Poltrack's) decisions that the meeting was adjourned. Art then returned to our yellow cabin for a nap, whereupon Jack and Tony asked if I would ride over with them to Guildhall, Vermont to our farm to get some vegetables."

In the late afternoon, Teague's 14-year old daughter, Lucy returned to the family's cabin to find the Colonel in the bathroom "dead from a self-inflicted gunshot wound."

Operations Manager Jitney and Shop Foreman Paul Philbrick were preparing to go down the mountain to visit painter Carl Nevers, who was battling cancer when the tragedy occurred. They arrived at the Colonel's cabin. The track phone at the cabin had been disabled. Mrs. Jitney and others began comforting the immediate and extended Cog Family as the news spread. Jitney informed Ellen of Arthur's death when she returned to the Base from Guildhall.

Please Note:

Today, Sunday, August 6th, 1967
2:00-2:01
All Trains Will Stop
All Business Will Cease
In Memory of The
Late Col. Arthur S. Teague
President of the Cog Railway

In Memoriam

We, the *Clatter* staff, were very shocked to hear of the recent death of our friend and associate, Col. Arthur S. Teague. The "Colonel", as he was fondly called, was perhaps one of the most illustrious and interwoven of the Cog crew.

Col. Teague came to the Cog as an employee of Co1. Henry Teague, to whom he was no relation, in l933. This was after he completed his final year at Clemson. He graduated with an engineering degree. He came and became the manager of this railway only to return to school during the winter to study for his masters. He did this until in 1941, Uncle Sam called and the Colonel answered.

As a first lieutenant, Teague entered the army. Maj. Gen. Raymond O. Barton later referred to him as "one of the bravest men in the United States Army" because in his five and a half year hitch Col. Teague landed on Utah Beach under Gen. James Van Fleet as an assault battalion commander, and with these troops went on to Berchtesgador in southern Bavaria; he received the Distinguished Service Cross, Silver Star, Bonze Star, Presidential Citation, Purple Heart and several other US decorations; also, the DSO (second highest British award with privileges to the court of St. James) from King George VI, Croix de Guerre and Silver Palm from Pres. Charles De Gaulle of France and a Belgium Unit citation before release in 1946 as a full colonel in the reserves,

When he returned to the Cog, Col. Teague immediately went along with some new improvements, such as the installation of a Pelton water wheel at the Base to replace the steam pump. The water wheel uses the water flowing down the mountain to run a generator. One half of its power is used to run a water pump forcing eight gallons a minute to the top of Mt. Washington and the other half, lights and supplies power to the Base Station. Under his watchful eyes many improvements were made on the rolling stock, larger and stronger cars were built, carrying 48 instead of 40 and refurbishing of the engines. The switches were put in, making a faster, smoother, easier trip. The design for these switches was also used in the Panama Canal.

November 20, 1962, Dartmouth College sold to the Colonel the rights of the Cog Railway and Marshfield. Since then new and better cars of 56 have gone into operation and better steel has been used in frames and such.

The Colonel did many things for this railroad, his employees and his country and the memory of Colonel Arthur S. Teague will be in the hearts of many who knew him, for many years to come. *(Cog Clatter handbill, August 6th, 1967)*

In the wake of his death, his widow Ellen Teague took Arthur's seat on the Board and was named President of the company. She says, "I would carry on just as my husband would have wished me to do" and "keep the trains running."

Ch. 14 - Annus Horribilis

That weekend, Steve Christy who found Lucy crying in the cabin the day of Teague's suicide, went out to the dump behind the shop and discovered a pile of Arthur's clothes and personal effects. He and Paul Philbrook doused the pile with kerosene and burned it.

Save for the one-minute work stoppage in memoriam, the rhythm of the railroad's operations resumed seven days a week. The annual Cog Party was scheduled for August 25th at Marshfield with a rock band called the Checkmates.

Lucy and Anne Teague prepared their horses, Black Magic and Lady Rouge, for a competition in southern New Hampshire (Keene) the weekend of August 19th. The *Cog Clatter* went to press (or rather duplicator) on August 17th, its publisher not knowing that paper would be his last.

Horses came to be part of the Teague lifestyle in 1950 when their first born, 6-year old Jane was diagnosed with diabetes and spent one month in a coma. As part of her recovery and control of the disease, her doctors recommend increased exercise. Ellen Teague writes Arthur was the one to suggest horseback riding. The Colonel later told Jitney, whose daughter was becoming interested in riding, that horses are great for young folks, but their care takes a lot of time and it's a very expensive hobby.

All the Teague girls rode and showed. The western-most building in the shop complex, built where Cog engines used to be fed became a horse barn. Pastures began to crop up on the Base – one next to the Boarding House – another a fenced-in part of a field sometimes used for overflow parking. A year after that fence went up a small stable was erected across the road from the cabin at the top of cabin row. The Teague Farm in Guildhall provided boarding space and hay for the Morgan horses, some thoroughbreds and a pony. A trailer was fashioned that carried the Cog Railway logo on both sides, so there would be some advertising as the Teague girls went to shows in New Hampshire. Massachusetts, Pennsylvania and New York. "Pleasure Horses Riding in Pleasure" was painted on the back.

All five rode successfully – Margie and Anne generally in hunter seat competitions. Jane, Fanny and Lucy in equitation saddle seat and pleasure riding classes. Mrs. Teague had a cart and driving horse to compete at Lancaster Fair. The ribbon and trophy count at their summer home known as "the Hut" continued to climb. Although as they each got older the teens' attention gradually drifted from horses to boys, and other pursuits.

The cache of equestrian memorabilia at the Hut was lost when the log structure built by Col. Henry Teague burned to the ground in November 1965. Teague family members moved into other quarters at the Base while a new "Hut" was built. Arthur, Ellen, Lucy and Charlie moved into their "little yellow cabin" closest to Marshfield.

While the *Cog Clatter* publisher had occasionally hauled grain and saddle soaped tack at the barn, he was more interested in trains. That editorial bias did not keep equestrian items from appearing in two July 1966 papers indicating ribbons and trophies were still being won.

Congratulations to Lucy and Anne Teague who came back from the recent horse show with four (4) Firsts, two (2) Seconds, two (2) Thirds and a Fourth. *(Cog Clatter v1n1 – July 6th, 1966)*

Anne Teague won a First; Second; Third, Fourth and two (2) Thirds in Champion. Jane Teague won two (2) Firsts in Champion and a First at the Newington Horseshow. *(Cog Clatter v1 n3 – July 13th, 1966)*

Lucy, the youngest Teague girl, lived at the barn – mucking stalls, cleaning tack, caring for and exercising the horses. Shy and quiet – ill at ease around people, Lucy was most comfortable with horses and the family dogs. As Jitney's daughter got older, she began spending more and more time with Lucy and the horses, and a friendship grew.

The friendship and the recent tragedy of the Colonel's death helped 12-year old Miss Jitney convince her Mom and Dad to let her go and accompany Lucy to the Keene horse show that August 19th weekend when the Teague's extended the invitation.

It was a long Friday for those going to Keene - even before the trip started. 18-year old Anne Teague had worked in the Gift Shop. Her boyfriend, 20-year old Norm Koop had run the No. 8 *Tip Top* up and down the mountain. Lucy and Cindy put finishing touches on the equipment at the Barn.

Ellen writes, "By the time we finished supper it was dark and they still had to load the two horses in the trailer. Lucy came to me and asked if she should go."

"Go by all means," I told her. "You must get your points to win the pleasure horse class at the fall banquet." Ellen says Fanny said just before Lucy left that night Lucy asked her (Fanny) to take care of their mother.

The big station wagon with loaded trailer pulled away from the Shop and up the hill by the Boarding House to departing waves from family members who retired to their cabins to sleep. Later on the road south, Lucy and Cindy curled up in blankets in the back of the wagon to get some sleep.

14-year old Jitney Jr. now slept in an addition off the back of the cabin. It contained a DC electric, mostly copper-colored washer with three plunger cups that went up and down to agitate the clothes. Mom liked it better than the gasoline-powered model that forced her to wear special saddle shoes with thick toes when she had to kick-start the engine on those laundry days when we weren't heading down the mountain to buy groceries and do the wash at a laundromat. The room was wide as the cabin and went back about 15-feet. Mrs. Jitney's dad, Earl Whitney of South Royalton, Vermont had built it, and earned the respect of the Coggers he dealt with at the shop dur-

ing the project. They liked the one-armed carpenter's frank and straight-forward approach to getting the job done.

The knock on the front door just after midnight brought Jitney Jr. immediately upright into a sitting position on his bed fully awake. He heard his mother descend the stairs from the second floor and open the front door.

There were voices - Mrs. Teague's - Lucy is dead. Cindy is alive but injured. A State Trooper will escort you to the hospital in Sanbornton. The three Jitneys dress and crowd into the front seat of their car – it's dark – when we hit the main road – the trooper pushes the speed limit and Dad stays with him. We discuss whom we will call once we learn of Cindy's condition.

At the hospital, we enter her room – the bed is to the right of the door – her head is wrapped in a turban of bandages – her long blonde hair has been cut - she's groggy but awake and smiles a bit when she sees us. I don't know if that was when she learned of Lucy's death or whether she already knew. I had to leave the room – I was getting light-headed and walked out into the hallway – bent over and rested my upper body on a parked gurney until the wooziness passed. Back in the room and details emerge – they'd been driving – the girls were sleeping in the back – the trailer hitch disconnected on Interstate 93 forcing the wagon and trailer off the road just before the Tilton exit at Bridge 52 – the station wagon rolled – Cin went out the back window - cutting her head and foot – landing between the wrecked car and trailer – Lucy was thrown through the side window – the car rolled on top of her. One horse had to be destroyed at the scene. Cindy remembers the gunshot. Ellen stops by. Cin asks about Lucy. Ellen says, "She's resting."

We left to let Cindy sleep and went to a telephone booth downtown. In the pre-dawn darkness, I begin making the calls to relatives relaying the news as my parents stand outside the booth giving me the names and numbers from an address book. There is an overnight in a motel and with Cindy in stable condition and improving, Jitney and son return to the mountain to finish out the 1967 season. Mrs. Jitney remains at the hospital, and stays with friends in nearby Franklin.

Lucy is buried next to her father in the Summer Street Cemetery in Lancaster, New Hampshire. Inscribed on her stone, "She dwelt unknown and few would know when Lucy ceased to be - But she is in her grave and oh, the difference to me."

When Cindy is released from the hospital, she and Mrs. Jitney go directly back to Chester, Vermont to recover and prepare for school to start. I can't remember whether or not the Cog party ever occurred.* I do know we left to be in Chester on time for the start of school and the trains kept running – at least until September 17th.

* Claire Dwyer says the 1967 Cog party did occur. "Mrs. Teague's feeling was that things had to continue on as normally as possible and that the employees needed a 'break' from the tragedies. I had made the arrangements earlier. It was held in Marshfield. We had one again in 1968 with the Checkmates. That one was at an outside venue somewhere. That was the last one as far as I know."



FROM THE DESK OF
ANTHONY S. POLTRACK

August 1967

Portrait of
Arthur Simpson Teague

The finest Gentleman we
ever knew

Arlene and Tony Poltrack

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The fall weather that September Sunday in 1967 was beautiful. Business was good. Many passengers decided to stay longer than the allotted 20-minutes at the Summit for each train. They didn't go back down in the car they came up on. They waited for the next train to arrive before descending. Such a layover was always an option for passengers, but the Cog was quick to point out there was no guarantee of a seat if you did that. The Ticket Office would keep track of the numbers coming off descending trains onto the Base Station platform, and late in the day with a large group of passengers still at the Summit, an empty train might be dispatched to bring them down.

The last train up at mid-afternoon on September 17th was the No. 3 *Base Station* pushing the 56-seat *Chumley* aluminum coach. Just nine years old, only one coach was newer, the *Chumley's* aluminum companion - *Thelma* that debuted in 1962. Engineer Gordon Chase was in charge of the last train that had several extra crew members training for new positions. "Rusty Aertsen was in the cab with us," says Charlie Kenison in 2021. "He was learning to fire even though I had probably only fired ten trips *(as a fireman)* by then." Fireman Kenison was running for the first time that Sunday. "(Gordon) decided that very day he was going to make me an engineer so that there would be someone who had the Gordon Chase name as being the senior engineer, and that's how I ended up in the engineer's seat that day."

Engineer Pliney Granger III was planning to head home to Massachusetts. His wife, Judy had to work in Greenfield Monday morning. He had brought his train back to the Base at mid-afternoon on what he thought was his last trip. Instead "I was told to keep the engine steamed up till the last train was mostly down the mountain," he remembers in 2016. "They were supposed to be overloaded because they picked everybody up being the last train." That order may have given rise to the "deadhead" story told later as Coggers analyzed the afternoon - that Granger and fireman Larry Barrett had run a "deadhead train" with an empty car up to meet the No. 3 at Skyline Platform where the last train's overload would be distributed between the two trains to go back down. Kenison says Gordon Chase thought Frank Thompson would be running the "deadhead" No. 9 *Waumbek* with an empty car all the way to the Summit, and figured Sunday operations could end sooner if he changed the plan a bit. "Gordon decided we could put them all on our coach and then just transfer them at Skyline," Kenison says. "We could save Frank the time it took to get from Skyline to the Summit and back… so the plan was to transfer the people at Skyline platform."

However, Granger says a tourist had arrived after the No. 3's departure who still wanted to go up the mountain. "I understand he was told they wouldn't send another train unless there were at least 15 ticket holders. Well, he managed to round up enough people and we had to go back up!" Granger was "not happy!" Judy Granger was ready to go home, but to pass the time she boarded her husband's train as it pushed out of Marshfield heading for the top, and a meet with the No. 3 at Skyline and go on to the summit. Years later, Pliney says "all in all... (the forced trip) was for the best."

When it came time for the No. 3 *Base Station* to leave the Summit in the late afternoon, there were nearly 80 passengers needing a ride. Passenger Ruth Frigon recalled the situation in an on-line post in 2012, "We were told 'must catch this train back or be stranded!' So many people were waiting & boarded the train." Cogger George Trask says his youngest son, Bobby, had gone up to the summit that Sunday to visit his grandfather, chef Thomas Williams. Bobby planned to come down on the last train, but instead boarded Griff Harris' train - the next to last to descend.

Young Trask and the other passengers, Harris and the No. 2 *Ammonoosuc* had met Chase's No. 3 *Base Station* at Skyline just after four. The Deuce was on the switch. Working together, brakeman Tom Baker and brakeman-in-training Nick Chaykowski threw the Skyline Switch back into the mainline position as the *Ammonoosuc* backed off the siding after the *Base Station* had passed by on its way to the summit. "It was agreed between the two that Nick was to 'flip the rails' *(of Skyline Switch)* and Mr. Baker was to change the cog racks and the two flags... the work started from the up-hill side after the passage of the car through the switch components. The third rail to flip from this direction is the one which crosses the cog rack. Immediately adjacent to this is the side track cog rack connection which has to be slid to a position parallel to the main rail." State investigators wrote "in performing this movement Mr. Baker stood facing down hill with his right foot in a position to be struck by the rail when flipped from the cog rack to the closed position. He, therefore, spoke to Nick to wait until he moved his foot which he immediately did and the rail was dropped out of position as intended, thus clearing the cog rack." Baker and Chaykowsky said they examined the switch after completing the changing of rails and switch point, and both found "it had been completely changed or restored for main line moves." They boarded the Deuce's coach and went down the mountain arriving at the Base at about 5:15pm... just about the time the No. 3 was departing the summit.

On that train passengers filled the seats and the aisles of the *Chumley*. 10-year old Susan Provencher said later that it had been a "wonderful day" for her family. Mr. and Mrs. Robert Provencher, sister 7-year old Linda, brothers Daniel and James (8 and 5) boarded with Susan. "About 5 o'clock we got into the little car," she told reporters. "It was jammed with people. There was no place to sit. We were standing in the aisle in the middle of the car when it started down the side of the mountain."

"The car was packed to the gills," recalled Harry Roemisch while talking to an *Associated Press* reporter the next day. The 23-year old Army private from Hinckley, Ohio was traveling with his 19-year old wife, Paula before shipping out for a tour of duty in Korea. "I didn't like the feel of it as we came down the hill. All the seats were full and the center aisle was full."

Not only was the *Chumley* car crowded, there were four crew members in the cab of the No. 3 *Base Station*. 18-year old Charlie Kenison, a fireman training to be an engineer, was running the train under the direction of 56-year old Gordon Chase, the engineer of record for the run. 19-year old Rusty Aertsen had fired on the way up, and was now sitting alongside 20-year old brakeman Peter H. Carter standing on the apron between cab and tender. Carter had ridden up on the

train with his girlfriend Julie Swenson - a Marshfield waitress. She was in the car where she gave up her right front seat to a woman passenger who would not survive the trip. Peter Carter's brother, 23-year old brakeman Nathaniel Carter was at his post in the *Chumley* dealing with the passengers and keeping the weight off the engine when the No. 3 approached the Skyline Switch. He had qualified as a brakeman just thirteen days before.

Just to brakeman Nat Carter's right was 6-year old Bertrand Croteau, Jr. He had gone up the mountain on a family trip with his mom, dad and 11-year old sister. 45-years to the day after the trip, his memories of riding down beside the brakeman when the accident occurred were still vivid. "I was standing in the window looking at the engine and it was more than a bump."

Several rows behind young Croteau, a 33-year old doctor from Georgetown, Massachusetts was riding with his daughter, Suzanne and his son, Robert. Dr. Donald Riemer would tell a reporter the next day, the car was "close-packed" with people. He recalled "One woman said *(to the brakeman)*, 'I hope it *(the train)* doesn't get away from you.' Five minutes later it went."

James "Brad" Dixon of Portland, Maine was on board crowded into a single rear seat with his parents, Mr. and Mrs. James Dixon. The family was heading down on the last leg of a much anticipated trip to celebrate Brad's 12th birthday. The Cog became the destination when Brad's dad couldn't get tickets to watch the Red Sox play at Fenway that Sunday.

On approaching Skyline, the engineer in training, the supervising engineer, and the two additional railway employees in the cab failed to see that one of the five rails of the Skyline switch was not in the proper position. It was the key rail that crossed over the center cog rack. It was a perfect derailleur, and that's exactly what it did – lifting first the back cog gear of the No. 3 out of the rack and setting it over – then doing the same to the *Base Station's* front cog gear. The engine's large spur gears then climbed up onto the wide cog rail at the crossover helping pitch the locomotive off the trestle.

"(The engine) lurched into the air and then crashed off the side of the tracks," wrote Croteau online in 2012.

Ruth Frigon was six or seven seats back on the left side of the car, "(The engine) shook side to side violently, then fell off!"

"It rolled off the track," said Roemisch, "and we kept going down the hill."

The engine and tender tumbled 15 feet or so to the rocks below. The silver smokestack bending as it struck a large boulder. The boiler did not explode, but broken pipes sent steam and hot water into the air and into the cab. Three of those riding in the cab were injured. All survived. "I remember starting to slow down coming down into Skyline Switch," recalls Kenison 54 years later, "and Gordon getting in my face and screaming at me for slowing down… you know, typical Gordon… going off on some of the younger kids… I don't think any of us were looking at the switch… because I was looking at him yelling at me… The other two were looking at him yelling

at me and going what the hell is going on? We hit the rail… Gordon and myself putting the brake on… we were almost stopped in the switch and then the coach hit us…."

Next, the switch rail that had derailed the *Base Station* did the same to the *Chumley*.

"Our car then jumped the switch," remembers Croteau. "The brakeman couldn't do anything to slow us. A woman sitting behind me tried to help turn the wheel. The sound of everyone screaming was louder then the train itself. To no avail."

"We were still descending," 49-year old New Jersey mailman George F. Buxton told a reporter later as he awaited treatment at Littleton Hospital, "and the brakeman was working like crazy." Buxton and his wife, Marie were sitting in the middle of the car on the left side. "It seemed like he had just brought it under control when we must have hit another downgrade and he couldn't hold it anymore. Then I saw the other train..." It was Pliney Granger in the No. 9 *Waumbek* pushing the other aluminum car Thelma with fifteen people aboard up to a Skyline meet.

12-year birthday boy, Brad Dixon remembered, "The minute the engine separated and the car started plunging downward, people started screaming something terrible." Two days after wreck, Brad told a reporter, "My mother and dad and I were all seated in a single rear seat. Mother wrapped her arms around me and Dad tried to hold us in the seat."

With its cogs out of the rack, the aluminum car with its human cargo became just a seven-ton sled on a very steep hill. A few passengers tried to jump to safety during the 500 or so feet it traveled down past Skyline Platform – gathering speed towards the on-coming train it was to meet.

"People were trying to kick out the windows," said Roemisch. "Everyone could see what was happening." One of those trying to escape was 30-year old Everett Demeritt of Wolcott, Vermont. He had accompanied a 27-year old Craftsbury widow and her 14-month old baby on the sightseeing trip. Mrs. Beryl Warren told a *Boston Record American* reporter, "Everett said: 'Give me a little room, I'm going to kick out the window,' he said. Then he said, 'Jump, I'll bring the baby.'" Before she could, the *Chumley* tipped off the trestle.

Mount Washington Hotel employee canteen operator, 26-year old Peter Frank said, "I was thinking of jumping but I didn't want to take the chance." Frank was on board with his 38-year old wife of just one year. "Mary was trying to break her window," he told the *Boston Globe*. "I tried to pull her away because they wouldn't break. It was safety glass; it just shatters."

Ruth Frigon says, "Our car went so fast you could hear the rails humming!!"

"We knew it was off the tracks," said 10-year old Susan Provencher. "I saw a man kick out a window."

"We were really flying," remembered Roemisch. "The guys who jumped out the windows got hurt real bad."

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Meanwhile, the 6-year old Croteau "was shoved under the seat by the other woman sitting behind me. We then went off the trestle to the right which is where I was standing."

Peter Frank reached out to his wife. "I was holding on to the seat across the aisle pulling on her arm. I jumped into the middle aisle. I just got her arm when (the car) tipped."

"(The car) flew through the air," remembers Frigon. "We landed on our right side, and slid at a fast speed, stopping about 5 feet from the rolling top of a ravine! The people were on top of one another about 6 deep and many wide!"

"The car went off the track and dropped about twice as far as I am tall," reported the brown-haired, brown-eyed 10-year old, Susan Provencher. "It hit on the front end and fell on the side. Everybody pitched forward. There were a lot of people piled up. I was piled up on top of people and people were piled up on top of me."

Dr. Riemer said his daughter, Suzanne fell underneath him as the car hit the ground. "I had to dig her out. I think she suffered brain damage."

Mary Frank landed outside the car. "She flew through the window," said her husband Peter. "The car was on top of her and... I could see her pinned. The window separator was across her neck. She was bleeding. I went over to my wife and felt her pulse and watched her die."

Young Susan Provencher said, "I could hear glass breaking and the people screaming and crying. I heard a man say 'I've got the door open.' He started pulling people. I was one of them. They were bleeding and crying. Some people were lying still."

According to the widow Warren, the man was Demeritt. "My escort got the door open and started dragging and helping people out. He wasn't hurt a bit. My baby only suffered a scratch on his lip." Mrs. Warren suffered a severe cut on her arm.

The out-of-control *Chumley* had snapped a rail on the slight bend below the Skyline platform sending it off the tracks in clear view of Pliney Granger and Larry Barrett's oncoming train. Pliney's wife, Judy saw the wreck from her seat in the railway's other aluminum car, *Thelma*. "I just rode up for something to do," she remembers, "and I was telling people now when we get up here, there's a train coming down. It will go into the side track and I'm looking and all of a sudden... the car was coming, not the engine. And it was like in slow motion. It just came down and it just (tipped off the track). And I said "Oh my god."

"Actually it was really almost too close!!" says husband Pliney Granger nearly 50 years later, and he says it's good that persistent tourist forced the last trip "because there wouldn't have been any one close *(to the wreck to help)* if we hadn't gone up."

Inside the *Chumley*, "It was all a big blur," according to Roemisch. "I landed on my back and people were on top of me." His wife was thrown to the opposite end of the car. The private told the *Associated Press*, "that's the only time I lost my head. I looked for Paula and I didn't see her for a while. Then I saw her standing there." Later, after helping tend the wounded Pvt. Roemisch would look at his wrist watch - smashed and bloody it was stopped at 5:35pm.

Postal carrier George Buxton said, "When we flipped off the tracks to the right and landed on our side now there was a little panic... people were screaming as they were trying to to find husbands and children."

"Somehow - I don't understand how," said young Brad Dixon "when the train stopped in the ravine Dad and I were still inside the car but Mother was underneath. Dad dragged her free so that the car wouldn't topple over on her. I blacked out for a while, I don't know why, I just did. When I came to, Mother was trying to comfort me even though she was cut something wicked." His father told reporters he "was able to crawl out a window under the car because of the angle in which it had halted." After getting his family clear, 55-year old James Dixon said "I tried to assist a a woman who was pinned next to my wife. I was unable to move her. I looked closer at her and assumed she was dead."

From under his seat, Croteau says. "I watched them pull people out from on top of me through a huge hole that used to be where I was standing."

Brad Dixon's mom suffered multiple arm fractures and serious head injuries. His dad broke ribs and his shoulder. With only a cut finger and scraped arm Brad told a reporter back in Portland two days later, "I wanted to be able to tell the kids in class about (his birthday trip on the Cog Railway). I guess I got lots to tell now, but I don't think I'll feel like it."



The up-bound train came to a stop. Engineer Pliney Granger III quickly scrambled down. "I started up (towards the wreck). I'd get winded going up hill even back then, and I'm thinking there's people hurt there. I didn't - I wasn't even a Boy Scout. Then I went back to the cab and I said to Larry (Barrett), 'Do you have any kind of medical experience?' And he said, 'I'll go up. I'll go.' I said all right, and the rule says somebody has to stay with the locomotive on the grade." Granger took charge of the Nine while Barrett and others from the *Thelma* went to help those on the *Chumley*. One of those helped was 10-year old Susan Provencher who was suffering from severe head cuts. "Men in uniform started wrapping blankets around everybody. They carried them to the other car." 26-year old Ralph Shackett, a passenger on the upbound train, was approached by a man in torn clothes... wrinkled and dirty... asking for sweaters or coats. "Look," the man said to Shackett, "my little boy is lying dead up there. Let's have some help. I need something to cover the people who are hurt."



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George Trask was standing by the ticket office window waiting for his ten-year old son, Bobby. The track phone rang and George picked it up. "I took the telephone call," Trask remembers in 2018, "and I don't remember who was on the phone... (but he said) 'the car just went by the engine.' I said what the hell are you are you talking about - Jesus Christ!"

Pliney Granger was on the other end of the track phone. "I said 'the coach is off on the ground beside the tracks in front of us,' and I kept getting this 'Where's the engine, where's the engine?' I said 'there is a large cloud of steam up by the switch. I can't see it. It's not here. The coach is here. There are people that need help. We need to get help here."

Ken Randall had finished his weekend bookkeeping chores for the railway, and was preparing to head back to Concord to start teaching Monday. He was seated in the Marshfield kitchen. "Pete (Rusinski) had a steak on the grill for me," recalls Randall in 2016. "Pete's wife, Gracie came in as white as a sheet and she said they had just told her that an engine and a car - a fully loaded car - up on the mountain (had crashed) and we had no idea what happened and from there on in things went downhill but fast."

"The State Police shut off the road down at Fabyan," says Randall. "However what we found out was the newspaper reporters were paying the ambulance drivers $75 and $100 to let them ride deadhead back up to the Base - which was not as it should have been, but that's what happened."

Once at the Base accredited newsmen ran into other obstacles to doing their job. The editor of the *Berlin Reporter* weekly Brud Warren "was at the crash scene within a few hours after the (it happened)... the editor, who also doubles as a photographer, had shot several photos of the general scene when a State Police corporal, as yet unknown, forbid him to take any more. The state policeman told Warren, "If you take one more picture I'll destroy your film," according to Warren's complaint made to (the head of the State Police). "Why?" Warren asked of the official. "Because I said so," the State Police corporal reportedly answered. A few minutes later Warren said the same official ordered him off the mountain because the "mountain has been sealed off." When Warren asked by whose order, the State Police officer refused to specify.

Word of the wreck reached the summit where 21-year old Greg Gordon was making dinner at the Mt. Washington Observatory. It was his first two-week stint gathering weather data. Food prep was interrupted when State Park employee John Davis came over from the Tip-Top House to tell Gordon the Cog had crashed and he was heading down to help. Gordon turned off the oven, gathered first-aid supplies, and hastened down the tracks on foot. He was the second person on the scene from the Summit. He saw the locomotive on its side at the switch and realized that the crew was pretty banged up. Gordon came across a man sitting still on the trestle. "I asked him if he was OK, and he replied that he broke his leg," Gordon told David Govatski for a

50th anniversary article in *Appalachia*. The man had decided to try jumping off the back of the car as it left the tracks. He'd landed on the tracks, and one leg went between the ties. Gordon soon found more passengers who had jumped from the out-of-control car. All of them had broken bones from hitting the rocks.

Sports car and auto road aficionado *(& stockholder)* Dr. Francis M. Appleton just happened to be at the Summit when word of the accident came up the line. He says he formulated a plan of action as he ran down the track to the scene; first - quickly determine the magnitude of the disaster; second - a quick, but sure check of the apparently dead to determine if any were still alive and could be saved; and three – evaluate the injured to see who required immediate treatment.

"Upon my arrival," wrote Dr. Appleton "I found an admirable show of well-directed attention to the tasks at hand and surprising lack of hysteria."

"It was fantastic," said Pvt. Roemisch. "People who could walk around administered first aid, artificial respiration. People were tearing up their clothes and using them as tourniquets."

Dr. Appleton said announcement of his arrival "produced a gratifyingly calm acceptance and cooperation among the victims," and "one of the victims proved remarkably efficient and helpful in the emergency, both before and after my arrival."

Dr. Appleton said, "Until the hut boys arrived, we made do with jackets and sweaters in lieu of much needed blankets, paper towels from the railway car for compresses, and nothing but positioning for splinting."

21-year old William "Bill" L. Arnold was one of nine "hut boys" who responded to the accident. Arnold was hutmaster at AMC's Pinkham Notch Camp and was drying pots in the kitchen when the accident happened. He first heard about it when he stopped for gas in Gorham and then headed back to Pinkham. 18-year old David Govatski was still cleaning dishes at Pinkham when news of the wreck arrived at that AMC facility. "I ran to my room, grabbed my pack and a headlamp, and joined others loading supplies on a truck," wrote Govatski in 2017. "We had a cache of military-surplus Stokes litters, or wire cots that could be used to safely transport accident victims. Arnold joined the crew as the crew was loading first-aid supplies onto two trucks. Bruce Sloat, AMC's huts manager, was directing AMC's response. Govatsky says "We drove the heavily laden trucks up the Mount Washington Auto Road, stopping periodically to prevent the engines from overheating.."

A quarter mile from the Summit at a section called Home Stretch - the site of the Air Force test station, a ranger stopped them and said it would be best to hike to the scene though he didn't know exactly where the accident was. He also said only blankets, not stretchers were badly

needed. They loaded their pack boards with blankets and the nine "hut boys" started walking in about 8:30pm.

A half mile in they met a man who said stretchers and first aid supplies were indeed badly needed. Arnold, Govatski and two others handed over their blankets and then headed back to the trucks.

They stacked seven mountain rescue stretchers one on top of the other and piled about fifty pounds of medical supplies along with more blankets in the top one. They made shoulder slings out of rope and the four of them would carry their 300-pound load as a team straight across very rough terrain to the railroad tracks. Once there they walked down the tracks, sliding the Stokes litters along the rails for another three-quarters of mile.



- Accident photos this chapter from Granger Family Collection

"The first thing we saw," wrote Bill Arnold in the April 1968 edition of AMC's magazine *Appalachia*, "was a switch on a trestle, below it was the engine lying on its side still steaming a little. However, no one was around it, so we continued on down, looking for the passenger car."

Govatsky says "By then it was dark, and the smell of coal and the moans of the injured met us at the wreck scene. The passenger car had traveled past where the locomotive had derailed and tumbled off the trestle.

"Railroad ties and sections of rail were torn up all over the place," wrote Arnold. "Soon we began to hear shouting and see a few flashlights. We… finally came to the passenger car about 500 feet below the engine. People were lying everywhere, most of them calling for help. Suddenly a man ran up… and tried to grab a blanket… saying it was needed for his wife."

Arnold says, "I was about to give it to him when Ranger Rick (Goodrich) said this man's wife was dead and they needed the blankets for the ones who were still alive. He told us to find Dr. Appleton and to give our equipment only to the people he told us to."

Dr. Appleton says Goodrich and other key personnel made it to the accident scene only because they broke through an information quarantine/news blackout thrown up around the wreck.

"When National Forest Ranger Rick Goodrich arrived at the base of the Auto Road he was told 'that his services and equipment would not be required," Dr. Appleton reported in *Appalachia* magazine. "Conservation District Chief Paul Doherty specifically asked, and 'was told such emergency as existed was under control."

Appleton says, "Both men got to the crash site in time to help with loading victims into railroad cars over a hastily built and precarious ramp. Had they not been diverted by suppression of information and ill-directed restriction (incidentally applied to all others, including trained would-be rescuers and newsmen) we would not have had to double-handle the first load of seventeen most seriously injured with one army-type canvas stretcher."

The injured loaded on the *Thelma*, engineer Pliney Granger III prepared for his descent with the Number 9 - an engine notorious for having bad compression for air braking especially after standing for awhile. "I had strict instructions on the first (descent), which were 'Very gently - Do not scare these people any more than they have been scared already.' I said, 'Can I pull ahead and clear the cylinders (for better compression)?' 'Nope,' because they built a platform right up to the front (of the car)." Granger says he did what he could to take it slow. "I think all of Long Trestle and probably Jacobs (Ladder) were on the brake. I mean the Nine back then liked to go down the mountain." That night became a bit of a blur for Granger - "At one point (engineer) Gordy (Chase) passed by. I don't think he got up in the cab because I don't remember flesh hanging off or anything, but boy, he was in total shock. I was amazed that he was moving around anywhere." However Granger does remember "the weather cooperated. It wasn't cold. It wasn't windy. (The weather) was the best we possibly could have had."

Summit House assistant chef Marshall "Tiny" Faye and his new wife, Bonnie were sitting down to supper in Lyndonville, Vermont. Faye came to the Cog as a St. Johnsbury Academy student in 1960, started working in the Summit House kitchen when Chef Tom Williams' assistant quit. Now a graduate of the Culinary Institute of America, he had left the Cog shortly after Lucy Teague died. Faye says he decided to leave "before anything else happens." His wedding was August 28, 1967. He was now cooking for Lyndon State College, and working nights at the Lyndonville Police Department when he received a call from the Observatory. Faye says in 2019 the message that evening was clear. "Can you come back? There's been a train wreck and we need some help." Help from people who knew the mountain. Faye called his employers saying he wouldn't be in for a day or two. Then the couple hopped into Faye's car that was modified for police work, and drove as fast as they could to the base of the Auto Road. There they "went around the gate... drove through the brook... got back on the road and drove to the summit." The new Mrs. Faye worked in the Observatory making sandwiches and coffee for the rescue crews. Marshall says, "I wound up going down to the wreck site and helping them carry Stokes litters" with

the injured up to the ambulances at the summit. His nickname "Tiny" was selected precisely because he was not.

Seventeen year old Judy Kenney and her friend, Diane Ferland from Whitefield were working the slow Sunday suppertime shift at the Marshfield counter. "Somebody came in and said there'd been an accident up on the mountain," she remembers in 2018. The two young women volunteered to go up on the first rescue train that was being assembled. Bob Kent, Griff Harris and his brother, David were exchanging the No. 2 *Ammonoosuc's* passenger coach for a flatcar. "I went out and asked Dad *(Cliff Kenney)* if I could go up on the train," says Kenney. "He said to go, but be careful." Judy Kenney recalls Cog president Ellen Teague also wanted to board the rescue train. "She was bound and determined she was going up on the mountain," says Kenney "and we were bound and determined she wasn't, because she just had a heart attack not very long before that... no way we were letting her up on that mountain... it would have killed her. I went and saw Mrs. Teague... I says me and my friend are going up on the rescue car and she says, 'I want to go.' And we said, 'No, it's better if you don't go. I said, 'They need you down here to help with stuff.' We had to tell her something. I said, 'Please just let us go up.' So she let us go up. I mean we'd all had CPR and first aid (training.)"

Bookkeeper Ken Randall was responding to the crash as well. "As the trains were going up to see what had gone on and what had happened, I got my fanny up into the office," says Randall. Following Art Teague's suicide in August, the railroad had purchased "something like one and a quarter million dollars worth" of accident insurance. Randall says it was the corporation's first policy of its kind. "(I) went through the paid bills to make sure that I had a receipt for the first payment on the insurance." Randall then made a phone call to the agent in North Conway "and I told him you better get up here because we just had an accident and we don't know who is and who isn't and what's going on." The agent drove to the Base to handle the situation. And despite some reluctance from the insurance company, the Cog would be covered for its liabilities. "We settled all of the claims and nearly exhausted the $1.1 million coverage," Railway lawyer Jack Middleton would later say. "Only one case went to the federal district court, and that was settled after one or two days in court. It is hard to imagine how $1.1 million dollars would cover 8 fatalities and over 70 injured today."

Another call that evening was made to Concord, New Hampshire. State Transportation Director Winslow Melvin's son, Richard answered the phone at the Melvin home. Richard remembers his folks "were out to dinner at a friend's house. Thank goodness, I had the phone number." Winslow Melvin drove to the Base Station, arriving at 12:45am Monday morning to begin his investigation of the accident.

When Bill Arnold, David Govatsky and the other two hut-boys arrived at the scene with the needed stretchers, engineer Pliny Granger III was already on his way down the mountain with a first load that would arrive at the Base at 7pm - passing another train at Waumbek heading up to collect the rest of the injured. "After bringing down the ambulatory people and passing the medical/rescue people I was sent back up," says Granger. To make the run, Granger needed a fireman as Larry Barrett had hopped onto the upward bound rescue train they had met at Waumbek. Track foreman Larry Gooden volunteered. "I had Old Father as fireman," recalls Granger. "He believed more is better... He put the coal right to it. We got to Waumbek. I opened the (firebox) door and (the coal) was coming out. I put him in the engineer's seat and hooked the fire the rest of the way up! We got the old 9 over the Ladder with barely 90-pounds of steam, good thing there was no load. That was really the bottom limits of getting across Jacob's Ladder "

The first rescue train arrived at the accident site with Barrett and counter girls Diane Ferland and Judy Kenney on board. "You just went and found somebody to help and you didn't have to go far," says Kenney. "There was a couple on the ground - old couple, probably in his seventies. They were from Massachusetts. He had a broken back. She had broken legs. We were above tree line so there was no trees or grass. It was just rocks... all we could do is try to make them comfortable. It got dark. It got cold. That poor woman was so cold. I took my sweater off, wrapped that around her." The young women made a lasting impression on Forest Ranger Richard MacNeill. "The thing that impressed me was the sight of three teenage girls *(Coggers Kenney, Ferland and likely Juliet Swenson -Peter Carter's girlfriend who was on the runaway car)."* MacNeill told the *Littleton Courier,* "They were giving reassurance to a couple who were both severely injured, and were doing a good job in calming them:" MacNeill, Kenney and Ferland were at the crash scene until the last train went down. Cliff Kenney's daughter said in 2019, "I come down on a flatbed (car)... with all the corpses."

Greg Gordon, the Observatory worker, had gone back to the summit for more supplies. When he returned to the scene, he found the AMC crew and others from the Auto Road and the WMTW television mountaintop transmitter all there. The horror of the crash was starting to seem real he told Govatsky years later. "What struck me was that people had tried to climb out of the windows as the car was speeding down the trestle, out of control," Gordon said. "The car reached a curve, and the car tipped and rolled on top of those people, and they were crushed between the rocks and the car. I remember that the front right side of the car was crushed and that an elderly man was crushed and still inside the car."

"It was pretty gruesome," recalls Summit House chef Marshall Faye. "The ones that were dead were really dead. There wasn't any question. And people were wandering around and

couldn't find their families, some people jumped out the window, then the thing rolled over on them. Man, it was just awful. I had nightmares about that for months afterwards." The night remains with him in 2019. "It hasn't left me. If I close my eyes, I can still picture the wreck site and the engine rolled over down below - with the fire box was open and the coals had come out into the cab... it was just awful."

As night wore on and the scope of the accident became clearer, Ken Randall came up with what he now calls "a rather devious plan of... still allowing checks to be written and bills to be paid." His plan commenced with an early morning meeting with the railroad's new president. "This was about two or three o'clock (in the morning)... I had taken blank checks to Ellen (Teague) and asked her if she would sign them on all of the checking accounts. She asked, 'Why?' I said I'm going to be at the bank on Monday morning, and I'm going to pull everything out in certified cash checks and try to beat any lawyer who might try to tie up the funds. So that's exactly what I did." And Randall says his plan worked "to the point that in October when Tony (Poltrack) came up and he went through the books. He came... to me and said, 'Ken, I have no idea how you did it or what you did - but everything checks out - right to the penny."

Back at the crash site, No. 9 fireman Larry Barrett was pitching in - helping keep people calm - convincing some to ride back down the mountain on the rescue trains. When the wrecked *Chumley* was pushed up off its side, Barrett single-handedly lifted a stringer up into position to hold the car in place. Barrett says the next day he tried to pick a similar timber up, but could not even lift one end.

The Hut Boys were busy, too. "It was just a matter of finding the people," wrote Bill Arnold. "They were scattered all over – patching them up as best we could, loading them on stretchers and lining them up to be taken down on the next train."

All the injured were loaded on the next to last train and it left with brakeman Peter Carter on board, "I remember seeing the headlights of ambulances on the Base Station Road on the way down." Over fifty years later people in Bethlehem would tell Jitney Jr of the constant sound of sirens going through their town that night - ambulances on the way to and from the hospitals. Cliff Kenney told his daughter how the ambulances came in over the hill by the Cog tourist cabins - turned left at Marshfield - and stopped to be loaded in front of the ticket office - then exit down past the coal bunker. He said, "That's all those ambulances kept doing - all night, just in and out, in and out" That third rescue train would arrive at the Base at 10:40 pm. Peter Carter, like Pliney Granger, says Mother Nature was kind that evening, "The weather was warm, and it could have been a lot worse if the conditions were not as mild." Things would've been worse if another accident had occurred in the area that night. Twenty-eight ambulances responded to the

Cog disaster stripping all of northern New Hampshire of ambulance coverage for more than 12 hours.

Arnold writes in *Appalachia* magazine that once that third train left "it was suddenly very quiet; there were about 25 rescuers by now, but no one said anything, it was eerie! After a few minutes someone suggested that we gather the bodies of the dead for the next train, which was to bring a flat car." The No. 2 *Ammonoosuc* was being put to bed for the night when the crash first occurred. Now engineer Bob Kent and David Harris were making their second emergency run with the flat-car up to Skyline crash site. When they arrived Harris climbed down from the cab. There lay the









body of one of the victims who had died due to decapitation. Harris hopped back up into the cab and told Kent, "Bob, I think we should stay with the engine."

Govatsky remembers "As we gathered blankets to cover (the victims), my headlamp illuminated a young boy's body. It took me a very long time afterward to get this sight out of my mind."

"We all worked at (gathering the dead)," wrote Arnold, "but no one said anything; there was nothing to say, really. Soon we had the bodies lined up and covered. There were eight of them." They had their own train for the ride down. They arrived at the Base at 12:29 am.

Pvt. Roemisch and his wife refused train transport. They walked up to the summit and were taken down the Auto Road by a waiting ambulance.



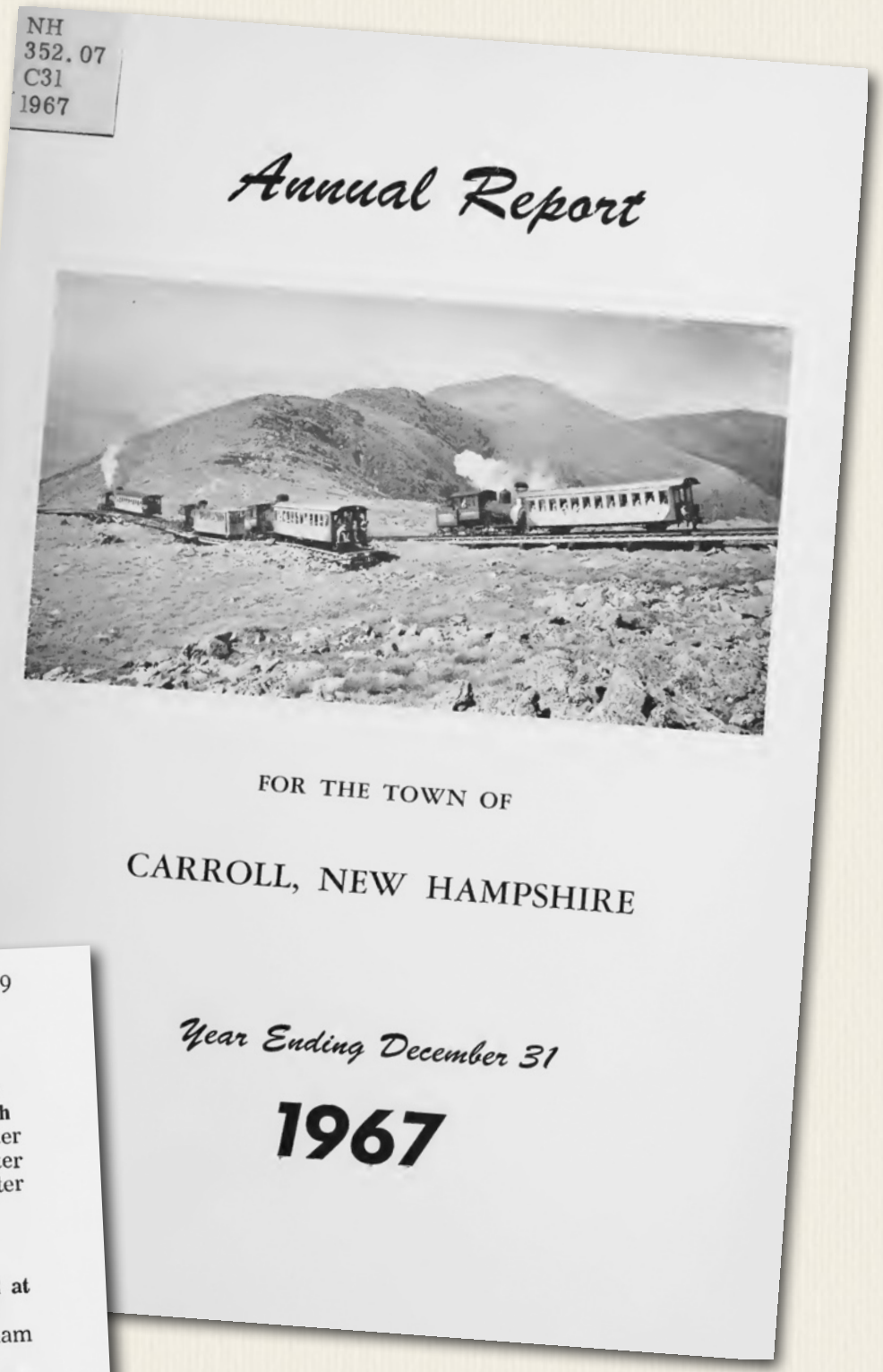
At the Base Station people were waiting for the last train down. Bookkeeper Ken Randall says, "We found out one of the photographers was waiting until the flat bed went up and the seven that died were going to be placed on the flatbed and come down on the railroad... We heard him say he was waiting for them to come down because he was going to go up, jump up on the flatbed, pull back the shrouds, take the pictures and then sell them to the papers. So we kind of started looking around to see how that could be discouraged – one of the Fish & Game individuals – he was built like a bear and he was about the size of bear, too – he said 'Don't' worry I'll take care of it.' They came down on the flatbed and as they stopped down at the bottom – the photographer jumped up on the flatbed and (with) his feet the floor of the flatbed... a hand – a bear's paw hit his shoulder and just jacked him back and let him fall... Yup, we said that took care of it." Randall says "that was one of the things I remembered distinctly" from that night.



The Jitneys learned of the accident from a network television news report they saw at their home in Chester that night. There were not very many details in the 40-second story with only a map graphic, but the Jitneys correctly guessed where it happened, and who was in charge of the train involved. Dr. Dave Saunders was listening to late-night radio driving home from the hospital. "Contrary to what you might think I wasn't swept with a nostalgia for the Cog when I heard it on the news," he wrote Jitney. "The summer must have been a terrible one for Mrs. Teague - losing her husband, a daughter and the accident at the Cog."

At that point in September, Miss Jitney was using crutches and wearing a fashionable Carnaby Street-style cap to school to cover the large question mark shaped cut on the top of her head until her hair grows back. Pieces of glass from the accident will work their way out of her stitched up foot for years. Jitney will ignore Arthur's observation about the cost of equestrian participation, and Cindy will own a horse named Cinnamon during her junior and senior years of high school. The horse is sold and converted into a 35mm camera before she goes to college.

In March of 1968, the *Annual Report of the Town of Carroll, New Hampshire for the Year Ending December 31, 1967* features a postcard picture of four Cog trains meeting at the Skyline Switch – one is pushing the aluminum *Chumley* car, and the No. 3 is farthest up the mountain. Inside, the Vital Statistics page records the deaths that year of town residents, Arthur S. Teague, 57 and Lucy Simpson Teague, 14 and has a special listing of the eight passengers killed in the Cog Railway Accident of September 17th. The page also records the December 23rd, 1967 marriage in Concord, New Hampshire of Thomas Baker and Margaret Ellen Teague, Arthur and Ellen's 21-year old daughter.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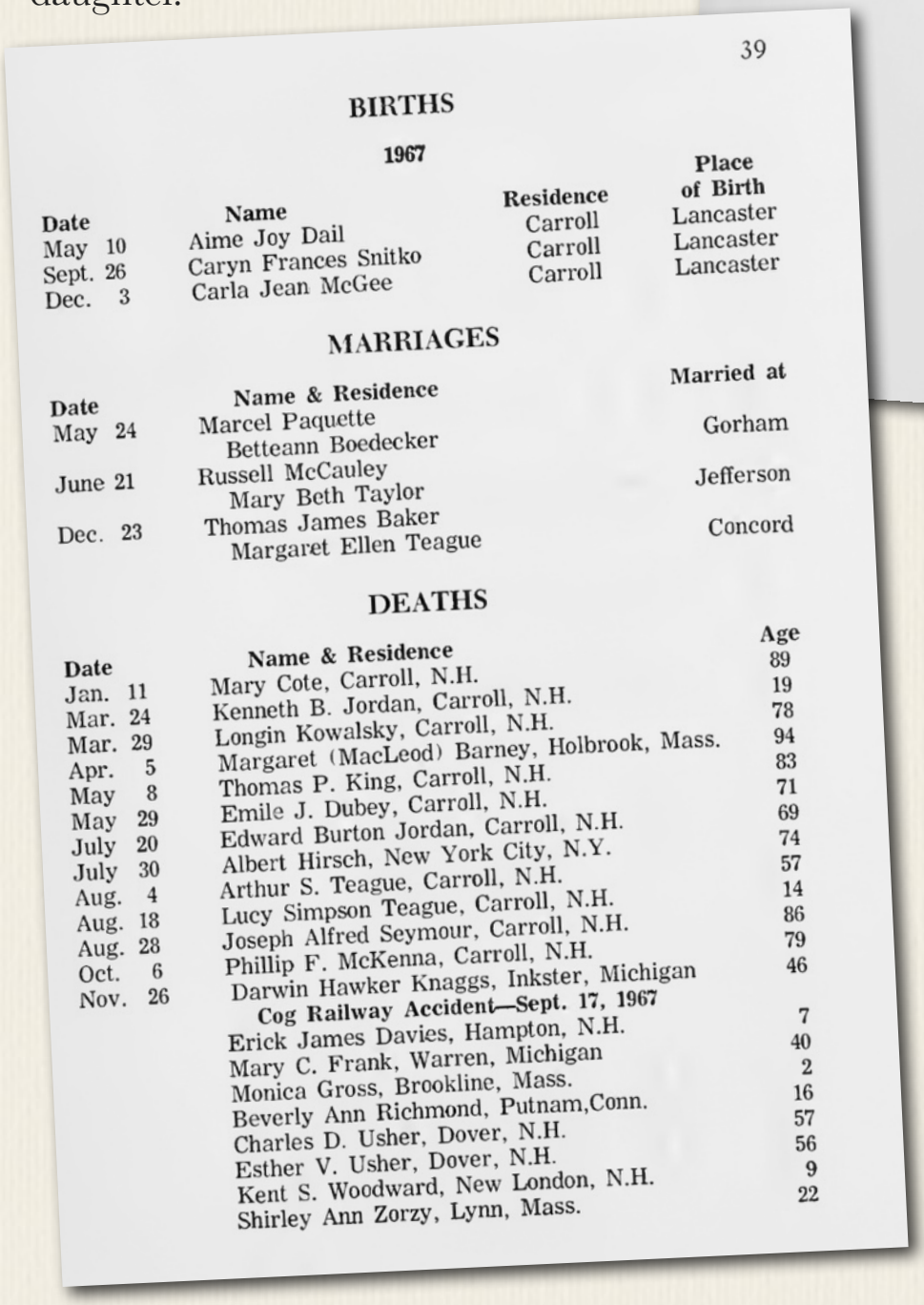
Annual Report

FOR THE TOWN OF

CARROLL, NEW HAMPSHIRE

Year Ending December 31

1967



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BIRTHS

1967

Date	Name	Residence	Place of Birth
May 10	Aime Joy Dail	Carroll	Lancaster
Sept. 26	Caryn Frances Snitko	Carroll	Lancaster
Dec. 3	Carla Jean McGee	Carroll	Lancaster

MARRIAGES

Date	Name & Residence	Married at
May 24	Marcel Paquette Betteann Boedecker	Gorham
June 21	Russell McCauley Mary Beth Taylor	Jefferson
Dec. 23	Thomas James Baker Margaret Ellen Teague	Concord

DEATHS

Date	Name & Residence	Age
Jan. 11	Mary Cote, Carroll, N.H.	89
Mar. 24	Kenneth B. Jordan, Carroll, N.H.	19
Mar. 29	Longin Kowalsky, Carroll, N.H.	78
Apr. 5	Margaret (MacLeod) Barney, Holbrook, Mass.	94
May 8	Thomas P. King, Carroll, N.H.	83
May 29	Emile J. Dubey, Carroll, N.H.	71
July 20	Edward Burton Jordan, Carroll, N.H.	69
July 30	Albert Hirsch, New York City, N.Y.	74
Aug. 4	Arthur S. Teague, Carroll, N.H.	57
Aug. 18	Lucy Simpson Teague, Carroll, N.H.	14
Aug. 28	Joseph Alfred Seymour, Carroll, N.H.	86
Oct. 6	Phillip F. McKenna, Carroll, N.H.	79
Nov. 26	Darwin Hawker Knaggs, Inkster, Michigan	46
	Cog Railway Accident—Sept. 17, 1967	
	Erick James Davies, Hampton, N.H.	7
	Mary C. Frank, Warren, Michigan	40
	Monica Gross, Brookline, Mass.	2
	Beverly Ann Richmond, Putnam,Conn.	16
	Charles D. Usher, Dover, N.H.	57
	Esther V. Usher, Dover, N.H.	56
	Kent S. Woodward, New London, N.H.	9
	Shirley Ann Zorzy, Lynn, Mass.	22

Ch. 14 - Annus Horribilis

Miss Jitney does not go back to the Cog until 1983, and then only as quick detour returning from her honeymoon trip to Maine to show her new husband where she spent her youth. They don't stop when they drive by Jitney's Cabin. It is now up on blocks off to the side of its old location with another cabin parked in front of it.

The accident victim's list includes the name of 9-year old Kent Woodward of New London, New Hampshire. An August 15th, 2012 posting on the online discussion board, where passengers Bertrand Croteau, Jr. and Ruth Frignon recounted their stories, said the (anonymous) author of the post had "just met the father of Kent Woodward, the nine year old boy who was killed in the accident. (The father said) that after the accident, the child's grandfather donated a large tract of land in memory of Kent, and this land became the New London Outing Club, a park open to the public in New London, New Hampshire. Among tennis, soccer, and lacrosse fields, there is also a little league baseball field there, established as a memorial to Kent."

The September 1967 accident is the first time in 98-years that a paying passenger had lost their life on the line. Crew members like Mike Boyce and his brother, and others working for the railway, like *Peppersass* photographer Daniel Rossiter, had died during those years, but never a paying customer. Another casualty of the 1967 wreck and the Cog's "annus horribilis" may have occurred nearly four years later - some 4-thousand miles away in Alaska.

The change in the Railway's management structure following Col. Teague's death, and the September wreck convinced shop foreman Paul Philbrick it was time to find a new job. J. D. True of Skagway, Alaska remembered in 1983 that Paul "was hired by the White Pass Railroad before he left the Mt. Washington Cog Ry."

But Paul told Jitney in a series of letters in 1968 that the change was very, very hard for him. "For some reason I could not force myself to admit that I'd never return to (the) Cog after last summer," he wrote. "Put on a big front saying that we'd not let the Cog die. I knew then as I know now that it would have to go as we knew it because of Ellen. I look ahead into (the) future now and see the Teague family at first pleased with what they have done. This will pass and first one and then another of the family will leave for a job with some security. Ellen will borrow money enough to lose the Cog. Then the State will get it. (The) State cannot run it either as a steam railway, so they go diesel."*

"One thing she (Mrs. Teague) has not yet understood is that in order to run the Cog successfully the shop foreman & manager must have respect for the owner just as the owners must honor

* Paul Philbrick's 1968 prediction proved to be mostly right. The New Hampshire Public Utilities Commission's June 7, 1982 Order No. 15,693 approving the increase of adult ticket prices to $20 for that summer dealt with both deferred maintenance and loans. The order says "the Commission deems it improper for the Company to make advances to its owners or employees of the corporation at rates far below the cost of the borrowings of the corporation. These advances are not to be made in the future" and banned "loans to owners or employees out of utility funds." The NH PUC's May 5, 1983 Order No. 16,406 approving the sale of the Mount Washington Railway Company to Cog Railway, Inc. reported that "outstanding loans by both the Railway and Marshfield, Inc. to Ellen C. Teague and Charles A. Teague" would be paid by the Teague's at the conclusion of the sale. Cog Railway, Inc began running diesel locomotives in 2008. Regular steam operations ended July 1, 2009 and steam started powering only a single morning trip.

the decisions of those in these positions or be able to give reason as to why not," wrote Philbrick. "Crews must respect both though a little dissent is good for the whole. This 'respect' that I speak of cannot be bought and is of the type that must be earned."

"This code that I've outlined here caused me to question... what percent of the real profit was spent outside the Cog operation & to question Ellen why she went against AST's decisions last summer. None of the questions were answered."

In Skagway, Paul roomed with True - his wife, Anna and their family. "He was quite an outdoor person liked to go hiking and more than once took off without letting anyone know where he was headed when it was storming. He fell off a cliff in Dyea once and laid for hours unconscious then attempted to drive his Jeep and nosed it into a deep ditch. I had to winch it back out with my truck by anchoring to a stump. He did not seem to care about whether he injured himself. He was really friendly at times and sometimes withdrawn – didn't want to talk anymore"

On his way out of New Hampshire, and during negotiations with Ellen Teague about his possible return to the Cog, Paul told Jitney he tried to do what he could to put the right people in place. "She has tried to transfer my loyalty from Arthur to herself – failing that; to the Shop. After this fails she thinks that I'm sick, and I am sick of her methods. She said she'd offered your job (operations mgr) to Bob Kent. I forced her to do this before telling her that I'd not return… I do think that he's the best man they will find for the job. She may or may not change her mind about Bob now, but boy the writing is on the wall for him and she'll get him out as soon as she can train (Tom) Baker. "

Philbrick worried about his old friends. "I feel badly about Harold (Adams) as he's caught in the same trap. He loves the Cog as we did but he can't see where it's going and he's getting older each year and resists change as much as possible. Please try to protect Harold as he'll do what Arthur did as soon as he understands Ellen if he thinks he's lost all of us."

In August 1968, Paul had plans to come back to the mountain. "Still miss the Cog though, in spite of knowing that I cannot work there again," he wrote, "but I'll be due a week of paid vacation after Feb. 2nd and so will take it in the spring or summer of '69 and may fly East for a few days to see for myself what kind of a mess they have made of what we worked so long to see prosper and live."

But by the end of the year, he was looking for surrogates to attend the railroad's 100th birthday party. "I bought 4 tickets to the Cog Centennial to be held at Crawford House in July '69 – I just want a couple of the 'Old Guard' to attend. As a favor and perhaps to preserve an old friendship, would you & Barb? Expect my brother, Julian W. Philbrick & wife, Barbara to be there. Damn but I'd like to see you again. Take care please, Paul." The Jitneys did not go to the Cog Centennial. It was the last letter they received from Alaska.

In Skagway, the True family continued to provide a home for Philbrick. "We know from what he told us about a bad wreck on Mt Washington that he somehow blamed himself for that," they

wrote. “He had convinced the boss to give that engineer involved another chance after being fired so one just figured this was why the different moods.”

In the fall of 1971, word started to spread through the Cog family that shop foreman “Uncle” Paul Philbrick had killed himself. Doug Taylor remembered the story went that Paul was driving back to the Lower 48 to be fitted with prostheses when he pulled over to the side of the road and took his life. His suicide uncovered by local newspapers, Alaskan death records sealed by the state, details of Paul’s final trial did not surface for twelve years. Jitney - retired from education - took an interim school superintendent’s position in Williamstown, Vermont in 1983 where he met Sara Sherwood of Brookfield, Vermont - one of the towns in the school district. The Cog Railway came up in conversation. Sherwood said some friends in Alaska had provided a room to a Cogger a dozen years ago who had killed himself. Sherwood asked the True’s to write down about Paul Philbrick’s time in Alaska for Jitney.

“During the winter of 1970 during a blizzard he left the house in his Jeep - to where we didn’t know. Many hours later and dark, we drove out the road a ways but couldn’t tell anything for several inches of new snow,” they wrote. “Sometime later, we got a phone call from the pipeline pump station and one-and-a-half miles from here. Paul had parked out on the riverbed about 3 miles out and hiked into the storm. When he returned the Jeep wouldn’t start account of frozen gas line. He attempted to correct the situation and got gas on his hands. He must have lost his sense of reason for one of his mitts was still there. He hiked the one-and-a-half or two miles to the pump station and froze his hands really bad. I don’t remember how long he was in the Juneau hospital but all his fingers had to be amputated.”

“He returned from the hospital and back to his job. I know he must have a real problem trying to do machine work with no fingers and as I remember he was really depressed.”



Then in August 1971, Philbrick “left one morning in his Jeep (I don’t remember whether he told us or not whether he didn’t plan to work) – About 2pm, I think, Anna noticed a note by the phone. All it said was ‘I will be where I was hurt.’ Anna and a friend went out to the riverbed where he’d frozen his hands” and there they found Paul. He had shot himself in the head just as Arthur Teague had done four years and thirteen days before.

“It was quite a blow to us for we really thought well of him,” wrote Mr. True. “Anna and I made a trip back to see Paul’s family that fall. His parents in Mexico, Maine – a sister in Rutland, Vermont and brother in Natick, Mass. Paul’s family are really nice people and we are glad we

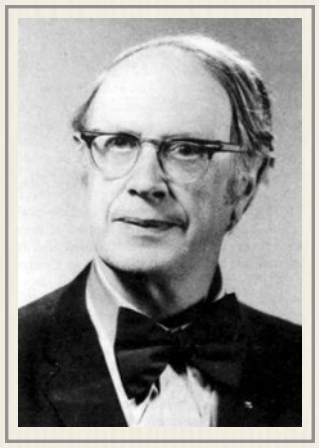


made that trip. Hope this gives a little as to what happened – It was sad indeed." Paul Philbrick was 35-years old.

As a memorial to Col. Arthur Teague, a rock from the top of Mount Washington was brought down in 1967 to serve as a headstone beside his and Lucy's graves at the Lancaster cemetery. In September 2013, the Colonel's gravesite became part of "a real-world, outdoor treasure hunting game" called Geocaching. Using GPS-enabled devices, "participants navigate to a specific set of

GPS coordinates and then attempt to find the geocache (container) hidden at that location." The couple that planted the cache to honor Colonel Teague said they did so "because White Mt Hiker is an avid fan of the Cog Railway."

Four Teague's now occupy that plot. Arthur's stone outlines his military career. Lucy's stone is next down the line moving away from the fence. Diabetes finally claimed Jane at age 30 in October 1973 - "Consider the lilies of the field as they grow, they toil not neither do they spin."



Rev. Alexander V. Hamilton V

Ellen Crawford Teague and son, Charlie would continue to operate the family-owned railroad for another nine summers helped by several different managers, and a train buff who was also an Episcopal priest. The Rev. Alexander V. Hamilton V had served as chaplain of the National Railroad Historical Society since the 1940s. Hamilton delivered the invocation at the 1969 Cog Centennial celebration where he met the widow Teague. He volunteered to help Ellen with the railroad and she later hired him as vice president of the railway. The Massachusetts native, the son of Rev. Alexander Hamilton IV and Mary (Spurr) Perrin-Hamilton, was a direct descendant of Alexander Hamilton, the Federalist and Secretary of the Treasury, who was mortally wounded in an 1804 duel with Vice President Aaron Burr. "He was the last generation," says Anne Teague Koop. "The name died with him because he didn't have any offspring."

Ellen wrote that in 1974 the Reverend Hamilton "somehow awoke me to my true self and inspired new feelings..." that made her "alive and happy inside." "My mother was very fond of him," says Koop, but the pair never married. Anne says "He felt he was married to the (Episcopal) church. They became very good friends, but he wasn't going to go there." "Neither was mom," added Charlie. Hamilton and Ellen continued to consult with the new owners of the railroad after it was sold in 1983. Ten years later Rev. Hamilton was in failing health and underwent two surgeries. He died in August 1994 at age 79, Ellen laid him to rest in the Teague plot *(previous page)* in Lancaster.

After selling the railroad, Ellen and Charlie had retired to Whitefield. "Her house was right next to a (Boston & Maine) train track where the train would go by every day until it closed down," says Anne. "They... would toot their horn at her, wave to her. She had a love for trains." Ellen Teague would still travel to the Base to greet tourists, keep track of "her boys" and give advice to the new ownership group.

She suffered a heart attack, and later a stroke. "She'd made a recovery," says daughter Anne of her 1999 hospitalization "but didn't want to go to rehab. Charlie couldn't take care of her at the house in Whitefield." So Anne suggested employing a home health care professional (something Ellen had done as a nurse), but Ellen balked. "I'm not having any strangers in my house," she told Anne. "She was determined that she was going back to her house," says Anne. "I remember calling her sisters and telling them, 'Could you talk to your sister. She's the most stubborn woman I've ever met. And I cannot talk any sense into her.'" And Ellen continued to worry about

her children. Anne recalls "I remember just holding her hand and (she) saying "I know this is going to be very hard for you" And I'm thinking, 'Mom I'm not the one going through this. Why are you still worrying about me?'"

Despite her difficulty breathing, Ellen rallied for a conference call with her other daughters. "She was on the phone talking to Margie and Fanny for over an hour," says Anne. "And I thought oh, she's feeling much better - the surge I guess you get towards the end, so I said to the doctor I'm just going to run home for the night. Say hi to Norm" who was taking care of the family while Anne was with her mother. Ellen Crawford Teague died the next morning.

"My mother was a character – she was rugged," says Anne. "When I think about it she was kind of a pull yourself up by your bootstraps – stiff upper lip, and I used to think Mom it's okay you don't have to be strong all the time."

Ellen was buried in the same plot with her longtime companion, Rev. Alexander Hamilton. Rev. Hamilton's epitaph reads, "Devotion to God - Sacrifice for Others - Love for All." Ellen's final phrase on her stone - "She fought a good fight - She kept the faith - She finished the course." She was 86. A final stone has been pre-placed at the site for Charles Arthur Teague - "A Devoted Son."



CHAPTER 15

Birthday Wishes



Jitney Jr. - July 28, 2011

"To my FB friends - 47 years ago today I shoveled a ton of coal into a steam engine to become perhaps the youngest person ever (11) to fire a complete trip up the Mt. Washington Cog Railway. Today I went back to the base of that mountain to see if the latest version of that engine was still running and pay my respects

My first 14 birthdays always included a ride in the cab of the *Great Gulf* thanks to the train's engineer - Jitney. On that day in '64, Jit told fireman Bud Nye (now a retired doctor doing Rocky Mountain guiding) to run the train and handed me the shovel. I nearly didn't make it over Jacob's

Ladder (the steepest incline) because a hole had developed in the coals in the front left corner of the firebox... steam pressure was dropping and it was tough to fill the shovel in the tender... lift it... turn and then walk uphill to open the door and throw the coal up into the firebox. I looked to Dad sitting on the fireman's seat ready to surrender the shovel. He turned and looked out the window. Bud adjusted the injector to reduce the flow of cold water into the boiler... and on the third try I got the hole stuffed... the black smoke from the stack signaled success. Once we got above Skyline it was easy street because the grade along the ridge line to the Summit is not that severe.

Today the *Great Gulf* is third in line behind the No. 9 and the Deuce when it comes to making the single steam-powered run each day up the mountain at 8am. The railroad counts on biodiesel engines to push the majority of the tourists to the top. That makes economic sense... and perhaps environmental sense... but it lacks the historic character of Sylvester Marsh's first mountain climbing cog railroad. The clatter of the ratchet... the roar of the fire.... the smell of the smoke... the hissing of the steam... and moaning of the boiler just before pop-off... the twilight song of the air valve being adjusted as the trains moved to their overnight parking positions on the siding and below the bunker... for a 20th Century kid growing up in a summer world powered by 19th Century technology it was magical... each engine a distinct personality with an amazing cast of characters working seven days a week to keep them running.



I'm sure the four bio-diesel's have their personality quirks but they run too quietly... with no visible signs of their mechanical exertion or the exertion of those who make them go these days with only a joy-stick controller that easily brings extra power to the gears on Jacob's Ladder...

Ch. 15 - Birthday Wishes

That is a bit sad for this birthday boy who is happy to have the know-how he thinks he might need to survive and thrive in a steam-powered society should the current technology literally go to ground and short-out. (There is some question as to whether I have the stamina these days to fire a trip!)

But in the meantime... here at the start of this article is a shot of the *Waumbek*... coaled and ready to go today. I took it with my iPhone... after I parked my hybrid right where the Cog's gas pumps used to be... the place where I first learned to pump gas for about 22-cents a gallon.

My friends that is what a birthday is all about... memories... consideration of that which has changed... and the good wishes from those you have met along the way. Thanks for all those greetings you have sent - aren't you glad I'm not a privacy freak and are willing to be transparent about my planetary arrival date...?? ;-)



- Photos this chapter from Lewis Family Collection

CHAPTER 16

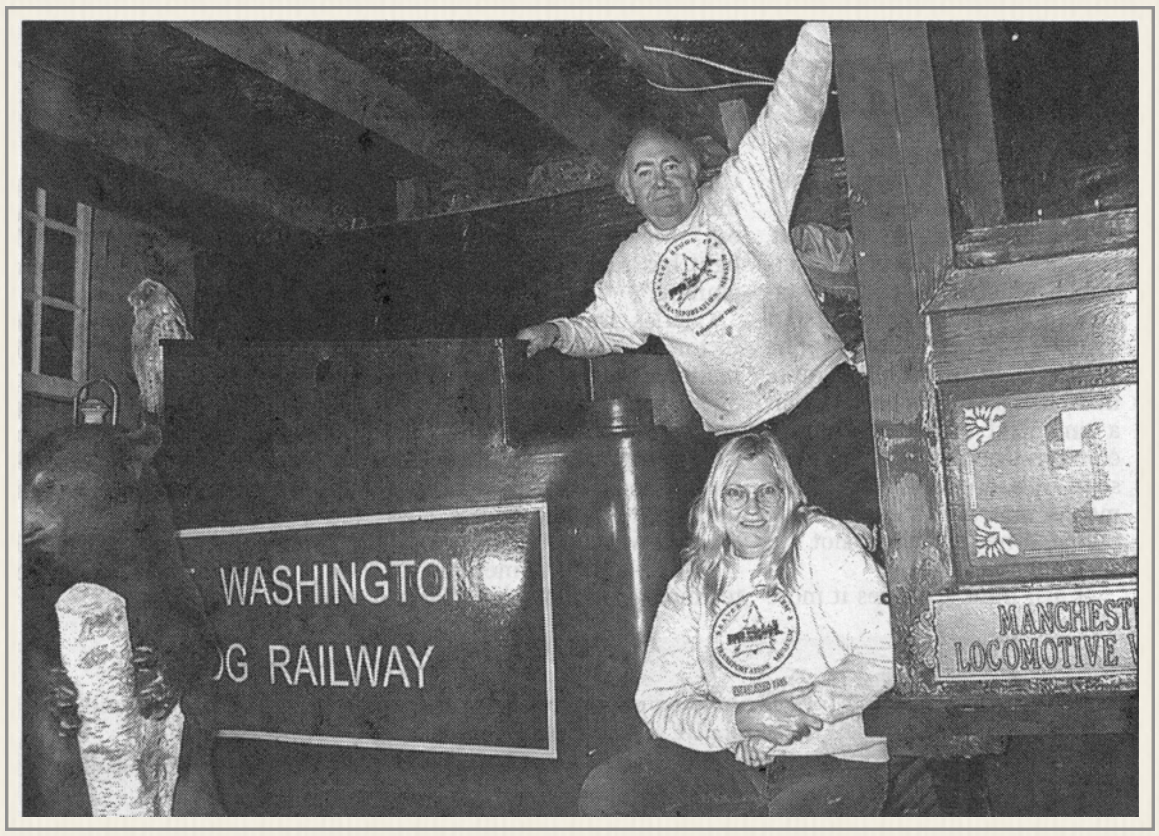
One Final Ride



Life teaches that one never knows when "the final run" will occur, unless a conscious decision is made to bring a chapter of existence to a close. Engineer Jack Frost and his fireman, W.I. Newsham *(above)* knew on that Saturday in July 1929 they were running and firing the last trip of the *Peppersass* - that Sylvester Marsh's durable 60-year old steam locomotive would spend the rest of that century and this on display. Photographer Daniel Rossiter did not know it was his final run.

Some later steam-powered Cog Railway rolling stock would meet a similar *Peppersass* fate, but most locos did not. Those not cannibalized for parts rust comfortably at ease on shop sidings - occasionally visited by those who once worked with them doing an intense summer job.

Beaver Brook Farm and Transportation Museum
Mont Vernon, New Hampshire
November 2005



According to *Sunday News* correspondent Gil Bliss, "Eddie and Beth Gilbert *(left)* already had the original disassembled "Tip Top" locomotive used for years on the "Railway To The Moon" when they salvaged the original 1870 Ranlet coach earlier this year - and the move was on to bring the pieces back to their 19th century glory."

"More than 2,000 hours of work later, the engine and coach are not only mounted indoors on an incline that simulates the average grade on the mountain, but the locomotive could run if necessary, thanks to Eddie Gilbert's mechanical prowess."

The article says the 20-year old museum is "the repository for multitude of trains, wagons, antique cars and tractors" including a Conestoga wagon and equipment from the Edaville Railroad. The Gilberts fund and insure the Museum "through his small engine repair shop in Arlington, Mass."

"The coach was restored by Beth Gilbert to the condition it was in when President Ulysses S. Grant and his family rode it to the top of the mountain." Gilbert said the Cog Railway never releases any of its equipment, but after he made a proposal they made an exception. "I'm just trying to preserve a bit of New England history. The coach was in severe disrepair and was buried to its axles in mud before being unearthed by the Gilberts and trucked to Mont Vernon over the summer."

Mont Vernon Museum Completely Destroyed
Concord Monitor
March 11, 2008

A Mont Vernon museum that was heavily damaged by a roof collapse last month was destroyed when more of the roof fell in during the weekend. The roof on the Beaver Brook Farm and Transportation Museum caved in Saturday under the weight of a foot of ice. The owners said nearly $2-million in artifacts were inside. The collection was not insured. Owner Ed Gilbert said neighbors helped the museum shovel snow from several buildings housing artifacts, but they could not break through a foot of ice that was left. Gilbert said some of the artifacts dated back to the 1600s. They included animated dolls, antique planes and a part of a train. he said little, if anything, is salvageable.

Beaver Brook Farm
&
Transportation Museum
Mont Vernon, New Hampshire

April 27, 2010:
Dear Friends,
For over 20 years it has been our privilege to host our annual Christmas Festival. Unfortunately time has run out for the festival; the last couple of winters have damaged the museum beyond reasonable repair.
We hope that you all enjoyed your time at the Museum as much as we enjoyed having you. We will miss you all, and will treasure our memories forever.
Our collections will still be exhibited at schools, fairs, and shows, and we will host an outside show here at our farm in the fall. This is going back to our roots, as we started with an outdoor collection. Check back to this website as we will post up to date information as our plans develop.
Should any of you wish to own a piece of our collection, you can contact us by mail or telephone (info below) and make an offer. Our aircraft and railroad exhibits and artifacts are all for sale.
We wish you all good health and many happy times,
Beth, Nedra, Eddie and all of our wonderful staff members who really made the place shine
Beaver Brook Farm and Transportation Museum
78 Brook Road http://www.beaverbrookmuseum.com/

No article describing the 2008 winter storm damage to the Beaver Brook Farm & Transportation Museum and its subsequent closure mentions the disposition of the Cog locomotive and coach in their collection. A web search turned up two discussion boards talking about the collapse http://z7.invisionfree.com/CanobieFans/ar/t2089.htm and http://forum.wwfry.org/index.php?topic=847.0;wap2

Review of a haunting July 2012 video tour of the site posted on YouTube by Steve "Rat" Albert https://www.youtube.com/watch?v=j6j_w4obUkI did not reveal any visual evidence of the Cog train. That visual evidence would not appear until abandoned spaces explorers Jennifer and Marcel posted a J&M Explorations video about the Museum in June 2019. Cog fans took note a posted frame grabs in 2020 on Facebook

Ch. 16 - Final Ride



Roger Hahn: August 1, 2020 at 7:52 AM "Probably 25 years ago I had read about the Beaver Brook Farm and Transportation Museum having acquired a cog railway locomotive and then, I believe later, they got a coach. In 2010 the roof collapsed in a snow storm and the museum shut down. I had been trying to find out more about what they had but could find almost no information, until I came across this video. At the 15:00 minute mark they show the coach, Ranlet #1. The coach that was somewhat famous for being the oldest passenger car in the U.S. still in service. A title it held for many years until being retired. While it was obviously damaged in the collapse, it was not the pile of splintered wood I had expected. I have heard that the locomotive was more a collection of parts than an actual locomotive. I still can't find any images of it. https://youtu.be/PdKoZgFHfXM





Bill Fothergill: "A co-worker actually moved the coach and loco to the museum years ago. The place is like a ghost town now, so sad so much stuff is still there. I spoke with Ryan Presby at the Cog last year *(2019)*, they would like to get the coach back as it is the oldest surviving passenger car left from the Cog." ***Roger Hahn:*** "Bill - It would be appropriate for the Cog to bring the coach back. Even though it was lengthened in the 1930's, this coach would have been around while *Peppersass* was still in service. ***Rand Peck:*** "Roger, the Beaver Brook Farm and Transportation Museum was located in Mont Vernon, NH

and owned/operated by Eddie and Beth Gilbert. They'd collected years worth of New England historical artifacts, built a barn and continuously added to it to share their collection with anyone interested. My son worked there as a boy giving tours during the annual Christmas Festival that attracted thousands of people. As you'd mentioned they lost much of their collection in a fire which put an end to their efforts. Eddie purchased much from the old Edaville Rail Road, laid track around his property, including a couple of covered bridges that he built, and gave rides. A very interesting man indeed!"

Joseph Orlando Jr.: "I was at the Cog when Eddie and his wife purchased the coach and both of them rummaging through the scrap pile to find pieces to mock-up an engine! Nice people and determined!! Still have a sweatshirt from them!"



After the Fall
Tracking the Faux No. 8
***Railway to the Moon* Facebook page**
March 2024

Conway Cole: "I don't know how well known but my friend sent me this picture today *(3/6)*. He didn't take it. Looks like tip-top from the beaver brook museum. Any idea where it is now?"

Andrew Toppan: "Did anyone notice this photo is *not* current? Could've been taken last year or last decade, I have no idea, but it isn't "now"."

Mike Harazim: "The post in this group from the other day this week about the Tip Top cog engine built in 1983 being re-



trieved from now closed transportation museum at Beaver Brook NH by a flatbed truck and probably brought back to Cog Railway at Bretton Woods. Anyone have any idea about Tip Top's fate? Like something to do with the Cog's special 155th anniversary or Tip Top being restored to service for rotation to help #2 and #9 with extra trains."



Craig Pilloni: "Can't be that old as the Tip Top was at Beaver Brook *(left & below)* three years ago *(2021)*."

Mike Harazim: "Craig Pilloni- Thanks for the true picture before being trucked."





Arthur Butler: "Mike - I have seen a Mt. Washington cog locomotive sitting on the side of a street at a small save yard in Foxborough, Ma. The tractor hauling the locomotive in the picture looks like their's. I'll drive past it and take pictures. - It's just sitting there amongst the junk vehicles."



Nathan Richard Chaplin: "It's here *(right)* in Foxboro Ma"

Roger Hahn: "If this was from Beaver Brook, does anyone know if anything was done with Ranlet





coach #1, that was partially squished in the roof collapse? "

Conway Cole: "Roger - i believe it is still on property"

Editor's note: Craig Pilloni's pictures from the 2021 clean-up of the Beaver Brook property *(previous page)* shows that the Ranlet Coach No. 1 has been removed from its position in front of the Faux No. 8 Tip Top. So far, no visual evidence has appeared on the *Railway to the Moon* site, the *Mt Washington Cog Railway* site or the *Mt. Washington Cog Railway: We Worked There* site as to the whereabouts passenger coach No. 1. *(May 10, 2023)*.

Ch. 16 - Final Ride



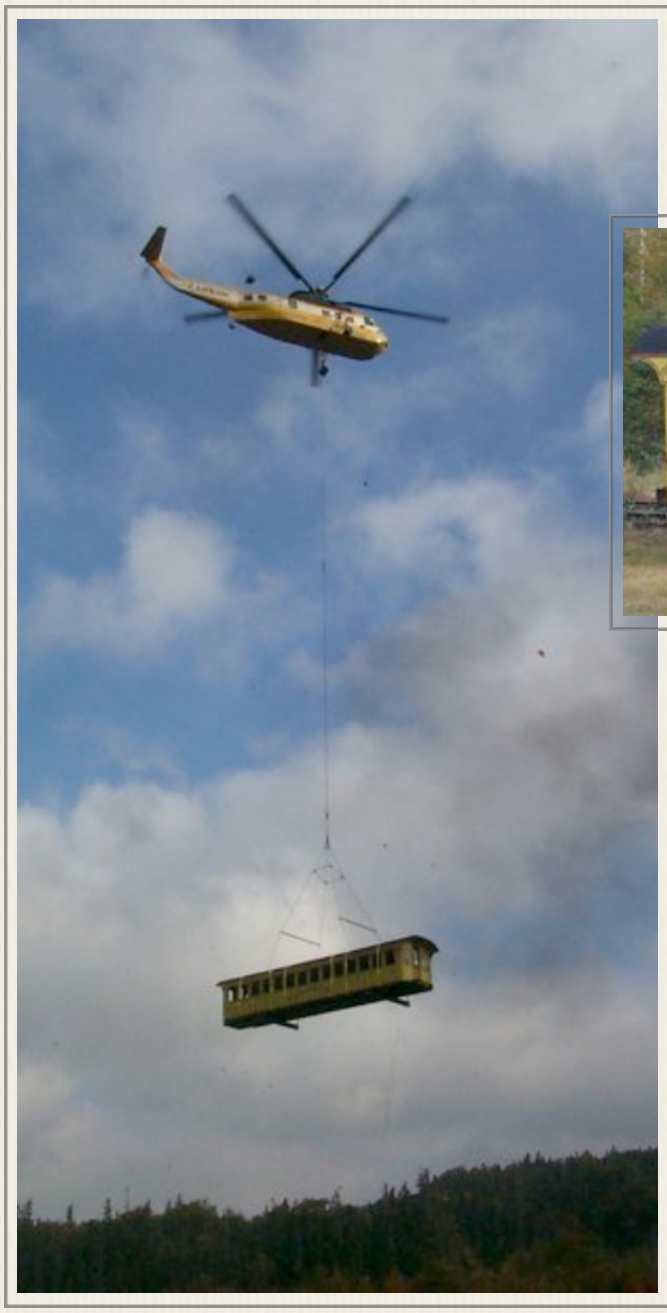
In late July 2011, Jitney Jr. made a pilgrimage to the "in storage" section of the Cog shops and found some of the railways' steam rolling stock behind the car barn and in the engine house awaiting their next assignment..







The "lucky" few, like *Peppersass*, who remain in the public eye include passenger coach No. 4. She was flown across the valley to the top of West Mountain at the Bretton Woods Ski Area in 1999 to serve as a warming hut for those taking runs in the winter.







Paul Forbe's ground shots *(above)* of the 1999 flight were posted on the Mount Washington Cog Railway Facebook site



Holly with "Bud Light" Mike at Old Cog Train Coach, Top West Mountain Brettonwoods N.H."
by Tom Doyle - *CogArazzi*

Ch. 16 - Final Ride

An amalgamation of parts from various engines and an aging car were trucked and donated to Twin Mountain for static display at the junction of Routes 3 and 302 in July 2013. Jitney Jr. stopped to pay his respects and take pictures of the finished display in April 2014.



















Ch. 16 - Final Ride

The railway's first hero, *Peppersass* rolled out of the shops in August 2016 after having been refurbished for its 150th Cog Anniversary Tour. The project done, current and "Next Generation" Coggers started talking on Facebook about what might be next for some of the equipment on display and "in storage."

Art Poltrack: "How about the 8 in Twin Mountie? Does that need a little TLC too?"
Andy X. Vanguard: "Probably. I want to do MW1 up nice for a display piece at the base."
Poltrack: "Do you mean Mt. Washington #1 behind the car shop? Up on blocks and the crumbling stack?"
Vanguard: "Yup. Put a new stack, steal parts needed from MW3 and build a new cab if that one can't be saved. And secret plan #2 - combine best usable parts from the 6 and 3 and the 8 boiler and get one more running steamer."
Poltrack: "Reasonable. I thought six was in reasonable shape?"
Vanguard: "Frame is fucked but otherwise I think ok I heard maybe some boiler issues though I'd have to confirm."
Poltrack: "Always start with the best frame."
Vanguard: "3 frame is good I think."



When Coggers and Cog Kids of the Steam Era re-visit the Base they often seek out old mechanical colleagues. When "Young" Pliney Granger stopped by in 2000 *(left)*, No. 9 *Waumbek* (his dad's loco) was still in service.

His son, Pliney Granger III spent time *(right)* in the "in storage" area beyond the transfer in July 2017. Both took a hands on approach to the equipment.





Bob Kent's Deuce still climbs the hill, but the Kent kids seek out the other engines, too. "A trip down memory lane," writes Karyl Kent on FB in September 2016. "Many of these photos "behind the scenes" actually behind the shop, where the old engines are left to be used for parts,

or hopefully to be rebuilt (?) (fingers crossed). Seeing these old- timer steam engines rotting and forgotten was like visiting a cemetery of sorts. Remembering when the Cog was all steam. The sound of the steam whistle brings tears to my eyes. This place is so much a part of who we are. Mom & Dad, Bob & Shirley Kent, Thank you for giving us the best childhood summers a kid could ever want!"

As for the latest iteration of Jitney's No. 6, the *Kancamangus* was moved from the engine house into cold storage beyond the car barn in the fall of 2016 to make room and keep the newest biodiesel under cover. Maturity gives you wistful insight into the sunset of a life cycle.







Ch. 16 - Final Ride

October 16, 1999

The Jitney's final ride *(right)* occurred at the first Cog reunion. It was perhaps the only car load of passengers who *all* knew immediately the engine's front cog had climbed from the rack and jumped timing when a loud "bang" occurred just above half way - the only passengers who entertained the brakeman and themselves *(below)* with a 30-year old "Waumbek Talk" recited by *Union Leader* publisher, Joe McQuaid.







After a reunion dinner, Jitney tells the Cog generations assembled that he preferred the time when he could actually pronounce the engines' names - the new owners had adopted Native American monikers for the locomotives.

Dave Woodbury and Jitney catch up *(right)* and Mrs. Jitney enjoys the summit view from the passenger car *(below)*.









Unseasonably warm and calm conditions at the Summit nearly made the winter jackets unnecessary, and provided the perfect lighting for one of the last photos to be taken of Mrs. Jitney *(next page)*

It was a very good Cog day!

Ch. 16 - Final Ride



Miss Jitney, Mrs. Jitney & Jitney Jr. (Jul 28, 1956)
- Lewis Family Collection

Barbara Jean (Whitney) Lewis, 71, of Danville, died at peace March 12, 2000, in the Fletcher Allen Health Center in Burlington. Her kind heart stopped beating Sunday evening while in the company of her family.

Barbara was born May 19, 1928, in Randolph, the second daughter of Earl Harold and Cleora Neal (Knight) Whitney. Barb graduated from South Royalton High School in 1946. She worked briefly for CVPS before attending Lyndon Teachers College. She married a classmate, Norman Luke Lewis of Lunenburg.

They spent the next 16 summers at the Mount Washington Cog Railway in New Hampshire, where Barbara clerked at the Marshfield Gift Shop. Barb's 30 years of teaching in Vermont included the graded school in Proctorsville, the one-room Peaseville Grade School in Andover, Chester Elementary School, and primary classes in the Newport City Elementary Schools from 1969 to 1988. Student productions were highlights of her teaching career.

As an active member of the Epsilon Chapter of Delta Kappa Gamma, she was chairman of the History Committee. In recent years she completed a history of charter members. Barbara was well-known for sharing her musical abilities, especially her singing voice with students, at anniversaries, weddings and choirs.

She spent 37 years touring (aka Mrs. Delphine Gore) with the Gore family supporting Rep. Danny Gore's campaign for governor. Her two final singing performances occurred with her son on Dec. 31, 1999, in the Rutland County Superior courtroom as part of that city's First Night celebration.

Barbara's first concern was her family and their well-being. Barbara was also a consummate and enthusiastic hostess who thoroughly enjoyed many friends. And these many friends supported her and the family during her final days. In her final hours, she was looking forward to planning a party with her Mom and Dad, as well as recently departed friends; Rachel Vincent, Elwin Griffin, and Donald Naramore.



The Jitney's *(right)* ended when Norm started working year-round as an educator in Chester and Springfield, before completing 31 years in the school business as a superintendent for 13 towns while living in Derby Line, Vermont.

Barb taught in elementary schools before the pair retired in Danville, Vt.

The Jitney personas were replaced by "the Gores" as the Lewis Family spent more than 35 years as comedic political activists supporting Rep. Danny Gore's unsuccessful bid for Governor in Vermont *(below right)*.

Cindy decided to backup her Mom's first choice by going to court and legally changing her name to Cintra. (Norm had told Barb at her birth, "If you're going to call her Cindy - name her Cindy.") A graduate of the University of Vermont ('77), she spent 30 years at IBM Burlington where she met her husband, Richard Hazen. They have one daughter, Erica, who joined the Gore campaign *(right)*. Richard & Cin live in South Hero, Vermont.

Erica works with troubled youth in Chittenden County. Cintra is "retired" but works part-time at the hospital in St. Albans.

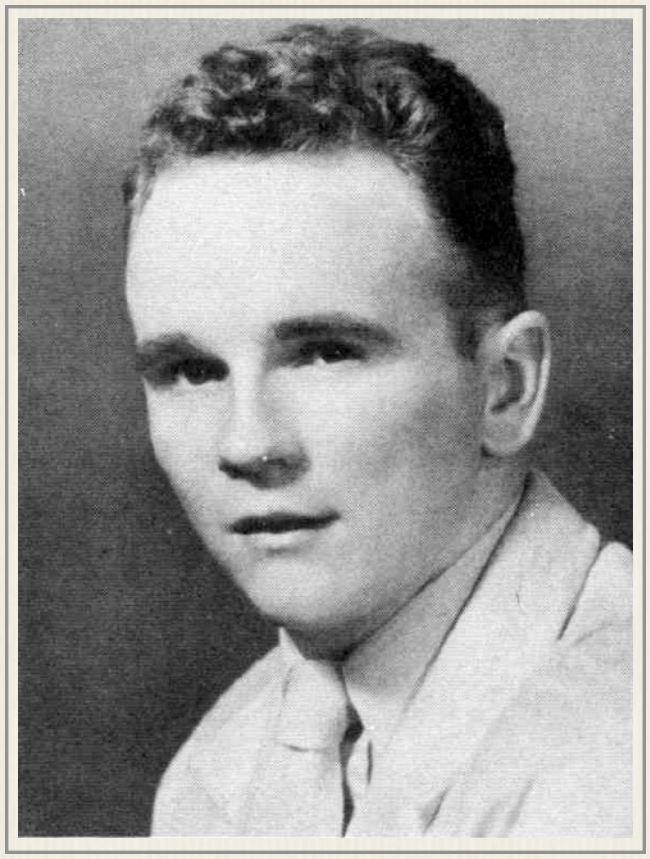




The Jitney's at the 1962 Cog Party (top) - The Lewis' and Gores in 1998 - Back Row (L-R) Durwood Gore, Cintra Hazen, Norm, Barb & Tim Lewis, Daphne Gore. Front: Delphine, Danny and grand-daughter Deanna Gore.
- photos by Elvira Murdock and Mary Clare Carroll

Ch. 16 - Final Ride

Norman L. "Jitney" Lewis of Danville, Vermont – educator *(1952-1983)*, Cog Railway engineer *(1950-1967)* and entertainer *(1928-2017)* died of natural causes in the early morning hours of Thursday, May 4, 2017 at the Northeastern Vermont Regional Hospital in St. Johnsbury. He was 88. Lewis, the youngest of five boys born to Albert Arthur and Eunice Mattie (Colby) Lewis of Lunenburg, Vermont, was proud to say he was born on 8/8/28 at 8pm at home. Norm went to school in Lunenburg, Gilman, and graduated from Lancaster Academy in 1946. He followed his brothers into the military and served in the U.S. Army of the Occupation in Germany. Discharged and back home working on the town road crew, he took the milk truck driver's advice and went to Lyndon Teachers College because as Gob Streeter told him, "They'll take anybody!"



Norman Lewis: *Dramatics, President of Student Government, Verlyn, Press Club Chairman, Editor of Blue Sheet, Basketball, Baseball. "Versatile... a comedian... a good organizer and worker... a sparkling personality" - 1952 Verlyn Yearbook*

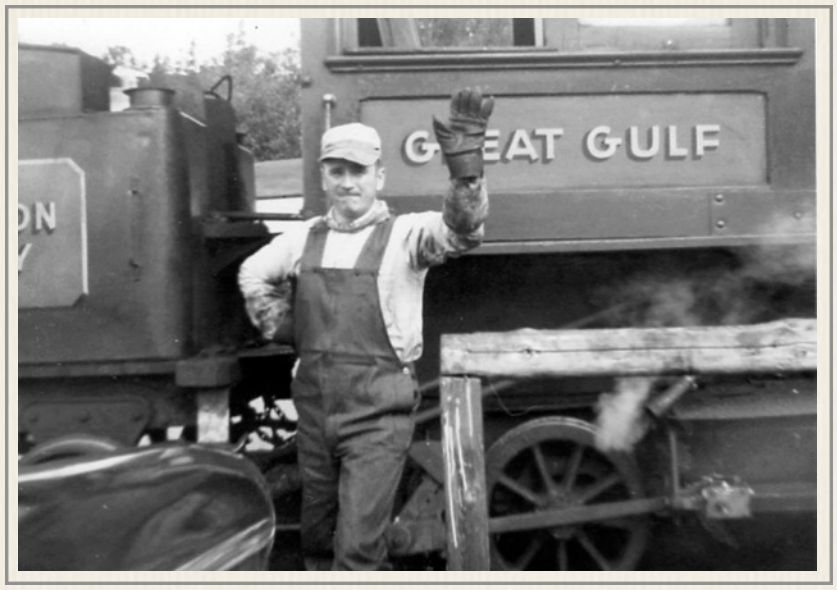
At Lyndon, he was part of the first class to move up to the Vail Manor campus, and pitched for the baseball team. Active in campus politics, he made sure the Hornet became the college's mascot, and with his friend, Dick Collins, got in trouble for risqué cartoons in the campus newspaper. His roommate, George Trask (responsible for the "Jitney" nickname due to Norm's jitter-bugging ability at the local dance hall) introduced Norm to Col. Henry Teague at the Mount Washington Railway, and thus began a summer job he went back to for 18 seasons – first alone, then with his family.



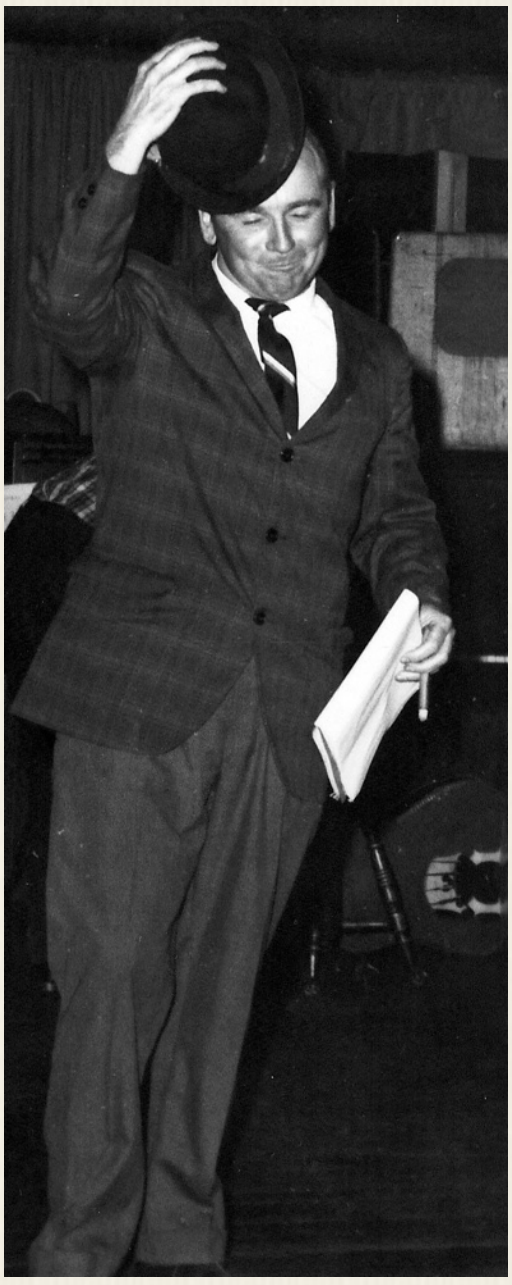
Norm met his partner at Lyndon. Barbara Jean Whitney was from South Royalton, Vermont and upon graduation the pair married in June 1952. Norm and Barb's teaching careers centered around the Chester, Springfield, Newport and Derby, Vermont areas – Barb focusing on elementary education – Norm teaching and providing students guidance before moving into administration as a principal, and then the superintendent's office until he retired 1983. They had two children, Tim Lewis (former broadcast journalist now teaching at his parent's alma mater) and Cintra Hazen (retired IBM employee now working part-time at the Northwestern Medical Center in H-R). Cintra and her husband, Richard Hazen provided Norm and Barb with a grand-daughter, Erica (a social service worker helping troubled youth in Chittenden County). Norm and Barb were glad Erica had two older half-brothers she could count on - Rick and Rob Hazen. The retired couple moved to Danville in November 1995. Barb pre–deceased Norm in 2000, after 47 years of marriage.

Ch. 16 - Final Ride

Norm was able to nurture his childhood desire to work in vaudeville by writing and producing original school plays that put every student on stage. He combined his vaudeville tendencies with his interest in politics, and orchestrated the perennial and constantly unsuccessful campaign of Rep. Danny Gore of Avery's Gore for more than 35 years and 1500 appearances around the state, the region, and that big flight to Colorado (where he got to see that other Cog Railway.) Luckily the Gore Family and the Lewis Family got along well and provided much needed support for Norm's creativity. Even after Rep. Danny followed U.S. Senator George Aiken's Vietnam era advice in 1994 that "when in a hopeless campaign – declare victory and go home!," Norm continued to monitor the political scene. He was glad he had lived long enough to see a black man be elected president, and had hoped to see Barb's dream of a female chief executive fulfilled. He had trouble believing what he was seeing, and would shake his head while monitoring the new administration in 2017.



For the last two years, he and his son have worked to complete a manuscript first begun in 1962 of an operating manual for the Mount Washington Railway steam locomotives during the Jitney Years of 1950 to 1967. While Jitney's technical manual and eyewitness story-telling section was completed early on, his son morphed the document into an extensive memoir, and with the help of Jitney's Cog family, it became an in-depth look into the little-known employees and events during the New Hampshire tourist attraction's lifetime. The fourth draft was completed at the hospital the night Norm died.



No service is planned at this point. Rep. Danny Gore says he and the Avery's Gore Historicity Committee will hold a celebration of the life of his long-time campaign manager Norm Lewis this summer in Avery's Gore. Norm fully endorsed Rep. Danny's stance that kindness was the key to success in a community, and so those wishing to make donations in his memory should select a local organization – food shelf, historical society, or school program – that puts kindness and dignity for all the world's people at the top of their agenda. Memories and condolences may be shared with the family online at www.saylesfh.com. Another site of interest for Danny Gore:

Norm and Danny Talk *(1984)* https://vimeo.com/215959948

Ch. 16 - Final Ride

The KENTS



Shirley Jenks Kent provided this family status report in October 2015.

"Jeff is working on private yachts as a chef. He returns to the mountain to hike as often as possible. Jeff came with us to the Cog reunion in 2014.

"Kellie married Peter Moreman. They met while she was at Youth with a Mission in Scotland. He was from Brighton, England. They have three children, the youngest is a senior in high school. They live in Williston about a mile from us. Kellie is a designer at a florist shop.

"Karyl has been cooking in an elementary school for several years, and introduced healthy food and farm to school before it was the popular thing to do. She is a caterer in the summer. This fall she started working for South Burlington Schools assisting the woman who is in charge of all the School Food Services. She is married to Bernie Young and they have three children and two grandchildren. They live in Huntington. Karyl, Bernie and Charlie came to the Cog reunion with us in 2014.

"Kris is married to Marty Gleason and they live about a half mile from us in Essex Junction. They have two boys, the younger is a senior in High School. Kris coaches running classes and participates in mud runs etc.

"Keith was born after our last summer at the Cog. He is a journeyman electrician and does the estimating for the company. He is married to Kiley O'Brien Kent, and they have a son who is three and are expecting a new addition in February. They came with us to the reunion at the Cog in 2014.

"The ten of us who rented a condo and attended the Reunion in 2014 had such a great time that we got together again in 2015 at the base of Mt. Washington with 17 of us. We plan to do this again in 2016. We are all thrilled that the # 2 - *Ammonoosuc* is still running."



Robert (Bob) L. Kent, age 86, of Essex Jct., VT passed away peacefully on Tuesday, June 11, 2019 at the McClure-Miller Respite House. Bob was born on February 25, 1933 in Northfield, VT. He grew up in Rochester, VT with his parents William and Katie Kent and his sister Beverly Kent (Gilman). In 1951, he attended Lyndon Teachers College (LTC) where he was active in baseball, basketball and theater. After his sophomore year, Bob enlisted in the U.S. Army for two years. He returned to LTC where he and Shirley Jenks met as the lead characters in the play "Bell, Book and Candle." If you're familiar with the play, then you'll know the spell was cast and never broken.

After graduating in 1957, Bob married Shirley who was teaching in Essex Jct., VT at the time. He accepted a job in Essex Jct. teaching math, science and physical education at the new Intermediate School, and he taught there for 34 years. Former students may remember nicknaming Bob's office "Mr. Kent's Deli". While employed there, Bob took a course that inspired him to teach Introductory Physical Science (IPS) to his eighth graders where he implemented hands on learning rather than demonstration. He believed in presenting the problem and allowing the students to come up with the solution. Bob was at least ten years ahead of the rest of the world with this practice and also with team teaching. Bob continued his education over the years at six colleges, acquiring 86.5 graduate hours. He spent one year at Michigan State on a National Science Foundation Scholarship. He served several years on the VEA Professional Rights and Responsibilities Committee, first as a member and then as chairman. He was a founding member of the Essex Community Theater which was forming in 1958. Bob enjoyed performing in many plays and was an active member of the theater into the late 1980s.

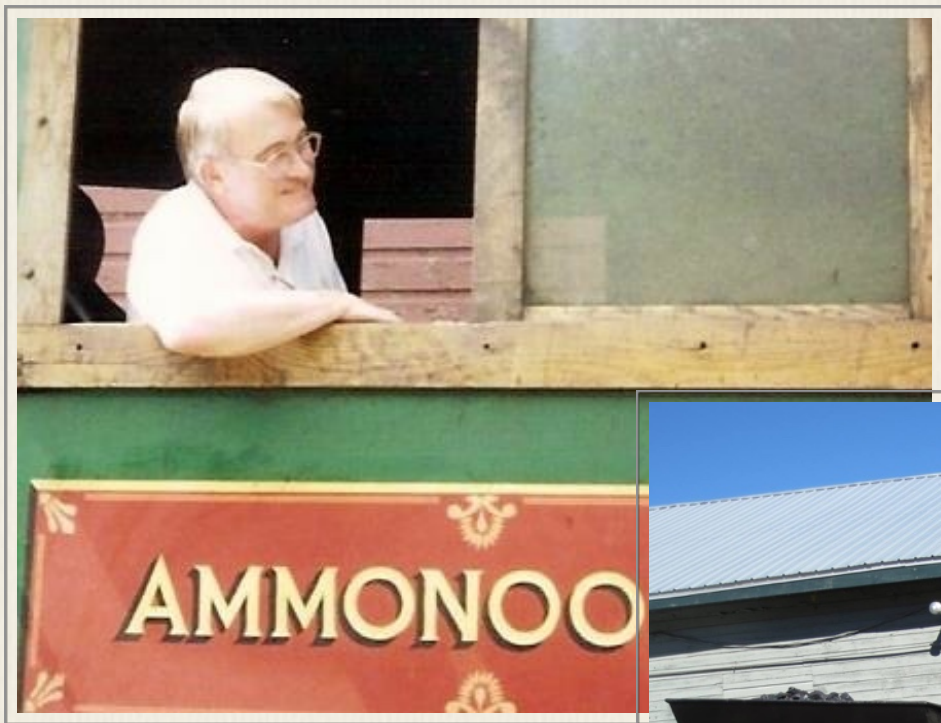
In 1956, Bob had started working summers at the Mt. Washington Cog Railway, NH as a fireman, and then later as the engineer on his favorite steam locomotive, the Ammonoosuc. As an engineer and train master, he was a mentor and friend to many of the younger men. To this day they still remember Bob's dry wit: "You're either going up the mountain or down the mountain," he would often tell them.
An avid photographer, Bob always carried a camera with him, and his photos of LTC, Cog Railway and the Intermediate School have been valuable in recording their histories.

After retiring from teaching, Bob worked at the newly opened Hannaford in Williston as a fishmonger for five years. He delighted in showing children the lobsters from the tank and always had Swedish Fish for them. He enjoyed interacting with the customers and sharing recipes. In fact, the kitchen at home became his new "lab," as he had fun experimenting with favorite foods and spices. Bob loved to drive, and he and Shirley crossed the US and Canada twice, stopping at Whistler, BC and riding the lifts up Blackcomb in July to watch snowboarding on the glacier. Bob was most happy when he was riding his John Deere to mow the lawns. Every holiday the whole family would gather to celebrate at the Kent home. Bob is survived by his wife of 62 years, Shirley, and his children Jeffrey Kent, Kellie (Peter) Moreman, Karyl Kent (Bernie Young), Kristin (Marty) Gleason and Keith (Kiley) Kent. He will be loved and remembered by his ten grandchildren and two great-grandchildren.

To honor Bob's memory donations may be made to: McClure-Miller Respite House, Colchester, VT or Annual Fund for Scholarships Northern Vermont University-Lyndon, Lyndonville, VT

"Outstanding in his field"

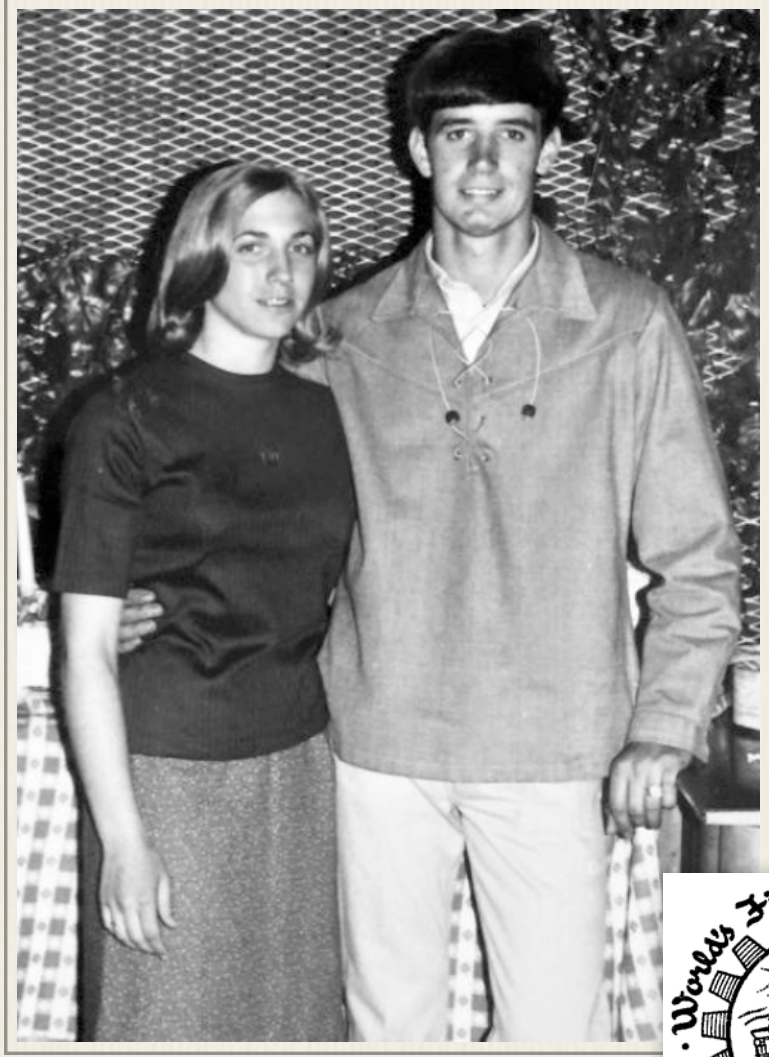
Ch. 16 - Final Ride

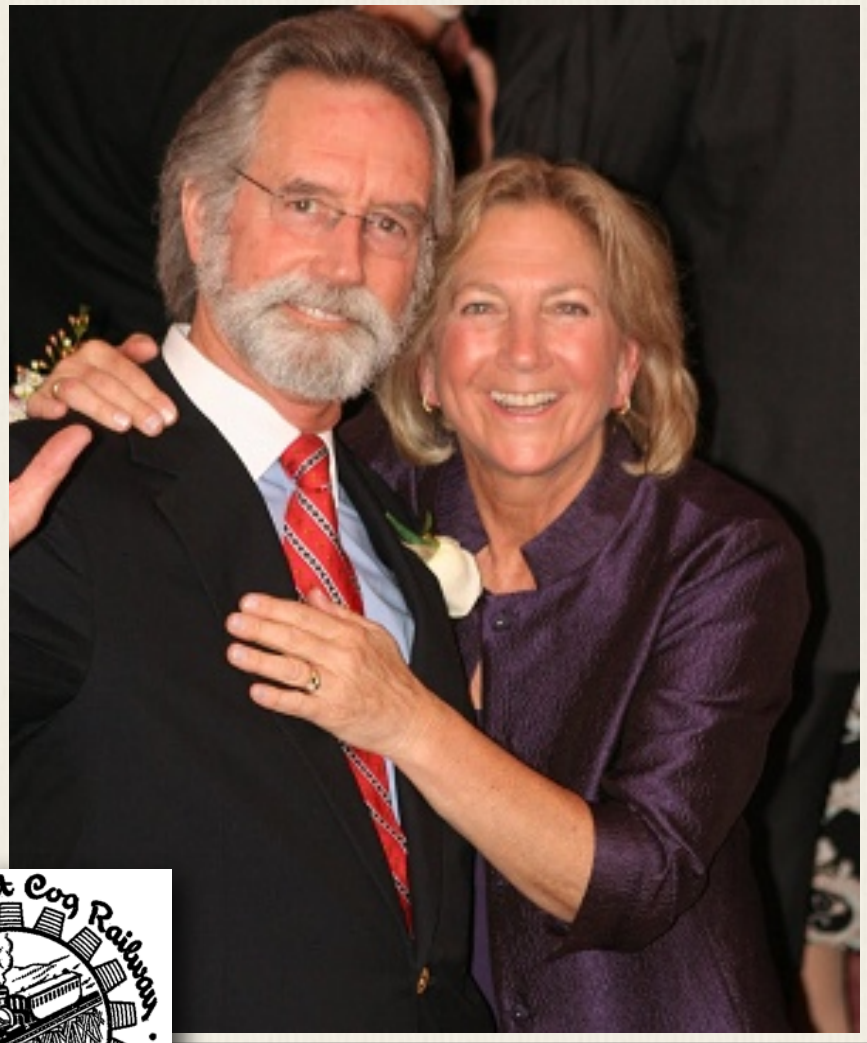






Anne and Norm Koop







Ch. 16 - Final Ride

Norman Apel Koop was born in Philadelphia on April 8, 1946 - the son of C. Everett and Elizabeth (Flanagan) Koop. Norm's older brother Allen says, "In elementary school, (Norm) had a realistic understanding of his achievements. I think it was in third grade that the teacher asked the students to predict their grades on the coming report card and Norman quite realistically gave himself C's and D's in everything except for one subject in which he gave himself an A which he wrote as "spealling."



The Koop Family (left to right): David (1947-1968), brother Norman, Mother Elizabeth (Cora), sister Betsy, father Dr. C. Everett Koop, and brother Allen (circa 1962) - FindaGrave.com

"In junior high school," says Allen, now a Dartmouth History professor, "Norman's life really revolved around school. He spent more time in school than any of us did – the punishment for misbehavior was an hour detention after school, but many times there weren't enough days in the week for Norman to do that, so he would often have to go an hour early to make up a detention. Finally, it was decided best if he simply reported directly to the principal's office where they set up a small desk for him, and he spent much of the time there hearing all the confidential business that passed through the principal's office."

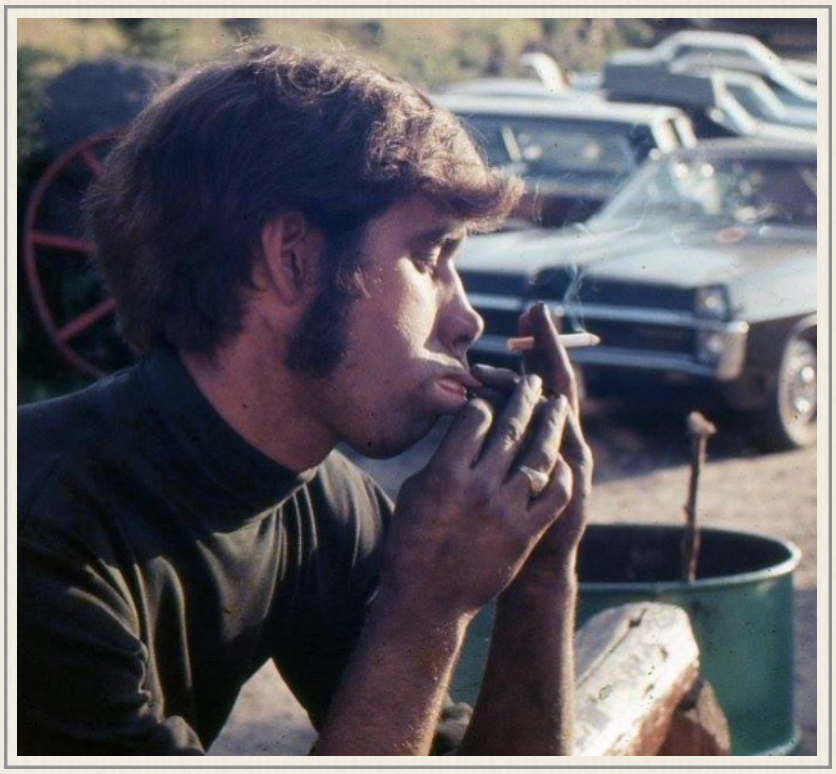
Allen Koop says Norm "eventually got his act together and attended the Stony Brook School – a prominent Christian school on Long Island from which he graduated and then would go on to college –eventually Norman would serve on the board of the Stony Brook School, and as he would go off to Board meetings, I never knew whether his fellow board members ever knew that in his first year there he was asked to go home for a few days because he had been caught smoking in his dorm room. He had been breathing the exhaled smoke into a plastic bag – learning first-hand the meaning of the phrase, "getting caught holding the bag."

Norm Koop came to the Cog in 1964 at the urging of his good friends, Bud Nye and Tim Bemis. Koop and several other young people were slated to go up to the Summit House to work, but Jane Teague said "We're keeping him (Norm) down at the Base." The summer of 1964 found 14-year old Anne Tilman Teague disappointed that her first boyfriend, Fred Kent was not returning that year. Anne was born on August 15, 1949 to Arthur and Ellen Teague. Like the rest of the teen-age Teague girls she would work summers for the family enterprise helping Mike Haney out in the gift shop. Despite her age, Anne joined a group of young Coggers heading for Newell's

Casino on Forest Lake between Whitefield and Littleton on Friday night early in the season. "I was allowed to go because all my siblings were going," recalled Anne in July 2016. "They had to watch after me. The UNH band was playing." In addition to a bar, Newell's had soda fountain and snack bar for the underage teens who came to dance. Tim Bemis brought his friend, Norm.

"I'd met Norm earlier that week when he came," remembers Anne, "and it was like, 'Who is that guy? He is really attractive,' you know whatever it is that attracts you to someone." And to Anne, 18-year old Norm Koop had that "crazy" Long Island look, "where you wore the skinny, tight black jeans - belt buckles always on the side - white socks and black loafers." And Norm had taken some peroxide to bleach a strip of his hair in the front because "you didn't do those types of things in his family."

But the "not quite 15" year old wondered if there was more to Norm than just an attractive exterior. "Sometimes you would get guys up (at the Cog) that couldn't talk - couldn't even speak English or connect a sentence and I wanted to see what he was like." Anne enlisted Tim Bemis, who had been saying Koop was "a nice guy," to help her with her investigation that night. "So I said, 'Tim, dance with me and when it's over have us stop so we're close to your friend, Norm." When the song ended, Anne says "I just went over and said, 'Do you mind if I sit down and just talk to you?' He said, 'Yeah, go right ahead' so we just sat down and I started talking to him and it was like, 'Oh he's interesting - he's intelligent,' but there was something about him, because he had come from Long Island... and it's like this guy is on the wild side. He needs to be tamed down." The boss' fourth daughter started dating Norm Koop that summer and was with him from then on.



Norm Koop pulls some "lizzard lips" for the photographer (1968) - Kent Family Collection

Unlike her older sisters, Anne Tillman Teague decided not to follow her mother's debutante trail in Philadelphia. Instead she chose to marry this son-of-a-doctor, who smoked, drove fast, and was going to college in '66 & '67 as a history major preparing to be a lawyer. Norm's career path changed to theology in the wake of the tragedies of 1967-68. Koop's brother-in-law Gordon Thompson says Norm often told him, "I don't know if I'd be in the ministry without the death of (brother) David."

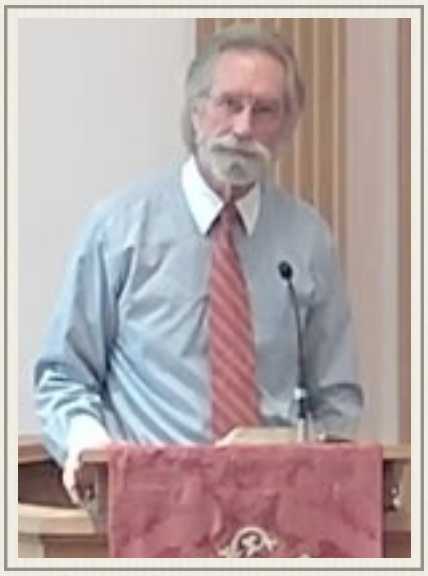
Anne and Norm would marry on December 27, 1968 at Saint Martin-in-the-Fields in Chestnut Hill, Pennsylvania. Ellen Teague writes the reception was held at the Teague home, and the Koops underwrote the honeymoon. "I was very happy for them and especially pleased that they could return to college" because the Koops had a made a deal with Ellen that they would underwrite Norm's education, if Ellen took care of Anne's remaining college.

Anne Koop says "Once I got into college I wanted to get out early and make money... so I went around the clock and graduated in a little over three years... then I taught while waiting for Norm to graduate." The Koops' last summer at the Cog was in the early 1970s.

Anne earned two teaching degrees at Eastern Baptist College, and Allen Koop says Norm

"eventually would excel academically, receiving a master of divinity – then a master of theology from Princeton University," and continuing in the Ivy League theme, Norman would teach Dartmouth students for over 20 years. He would teach them the Bible.

In 1973, Norm was called as pastor to the historic Deerfield Presbyterian Church in New Jersey. Jeff Simpkins, a former New Jersey State Trooper who found Christ with the help of Rev. Koop, said he came to Norm with many theological questions. Simpkins says at one point during these meetings Koop put his feet up on his desk and ate a banana as he compassionately and competently answered trooper's questions.



Rev. Koop at his Woodstock pulpit

After a church controversy in 1990, Norm moved to Woodstock as the pastor at the First Congregational Church of Woodstock, where he had filled in as a summer pastor. Norman and Anne celebrated 25 years of ministry in Woodstock in the spring of 2015. The couple faced another trial when Anne suffered a burst blood vessel at the top of her spine that produced "severe head pain, temporary memory loss and shaky legs." Matt Hongoltz-Hetling writing in the *Valley News* says Rev. Koop canceled their summer plans for 2015 and spent those months helping Anne recover at their cottage on Mascoma Lake. She returned to school in the fall.

Brother-in-law Gordon Thompson says Norm visited the Koop family gravesite in Hanover, New Hampshire on the morning of October 7, 2015, and texted several photos of the condition of the stones to relatives saying he would have to return soon with a putty knife to scrape the grass back away from his brother David's and his father's markers. However, Norm reported there was no major mold problem because the sun shone on the site. Norm told them he "liked to keep them clean."

Norm died that afternoon while working at the parsonage at 41 Elm Street in Woodstock. His wife of 47 years, Anne found his body in the woodshed when she returned home from school that Wednesday afternoon. There was no autopsy. The cause of death believed to be a massive heart attack. Matt Honglotz-Hetling's eloquent account of Rev. Norman Koop's last day was published in the *Valley News* on Monday, November 9, 2015.

Survivors listed in his obituary include his wife of 47 years, Anne (Teague) Koop of Woodstock; his children Charles Koop (Elissa) of Westford, Tina Koop Bazala (Matt) of Madison, Wisconsin, and David Koop (Sydney) of Madison, Wisconsin; seven grandchildren: Mattea Bazala (16), Aidan Bazala (14), Gavin Bazala (11), Elihu Koop (4), Kaiya Koop (2), Bodhin Koop (2), Stratton Koop (2 mos); a brother, Allen Koop of New London, New Hampshire; a sister and brother-in-law, Elizabeth (Betsy) and Gordon Thompson of Birmingham, Alabama; as well as nieces and nephews.

At his funeral service, congregants were told Norm's favorite hymn (#253) was "There is a Fountain Filled with Blood" that talks about the fountain and its contents (Jesus' blood) that washes away the sins of the sinners.

Rev. Norman Apel Koop was buried alongside his father and brother in the Pine Knoll Cemetery in Hanover, New Hampshire.

CHAPTER 17

The Last Bank

By design of its owners, the dint of its unique work, and the nature of its location, the Cog crew became a family. And like all families, there are stories, incidents and relationships known but not spoken of outside the family. This *Operating Manual* tried to tell as best it could most of the tales of the Cog family who toiled on the line between 1950 and 1967.

The Cog in the 1960s was a "beautiful community of 80 'odd' people living there and working together," recalled Lincoln "Linc" Handford in 2015. "Now it is gone."

"Set aside the woods, the mountain, trains, cog grease and coal bins. Can anyone imagine a parent today letting these great people any where near their children?" says Dale Ann Granger Eckert, a third-generation Cog kid. "(I had) many hours of philosophical discussions with Crawford from the time I was nine. I still have a box of correspondence that carried on the conversations until his death. Since I wasn't allowed in the Boarding House, I only know the good stories of Ruthie second-hand, though I spent many hours sitting outside Marshfield with her and her little dog, too. Rouleau - 'Nice Day' - always sweeping and tending the wood pile and fire place. And then there was Pete and Grace." Granger Eckert says, "The people were always as unique as the Cog itself."

The Cog and the Mountain was a powerful and magical place to "come of age." Besides firing a complete trip at eleven and later moving an engine (Thanks, Bud!), there is a line in the official train crew roster where the *Clatter's* publisher's name appears as a brakeman. It was a work train bound for Skyline switch - leaving late in the day so it would pass the last train down at Waumbek and repairs could be made uninterrupted. Operations manager Jitney was the engineer. Shop foreman Paul Philbrick would fire and do the necessary welding. "Brakeman" Jitney Jr. would scan the track from the front of the work car on the way up as the sun set.

The sun was down by the time the work train was parked by the siding and the welding cables strung. Jitney and son walked to a spot often favored by photographers above the switch, so their eyes might be protected from the white hot flashes of Paul's arc welding. It was clear and calm. The stars and the streetlights of Jefferson and Berlin pierced the darkness. It was quiet save for the hum of the generator and the bubbling hiss of the train in repose.

Ch. 17 - Last Bank

Suddenly, the Great Gulf ravine on the other side of the track lit up with a powerful silver-grey light as if a giant footlight had been turned on at the base of the gulf. That was the only place illuminated - "where was this light coming from?" the young brakeman thought.

The answer came as the full moon crested over the ridge behind us and turned that dark night into a silver-grey day that helped us pack up the gear when Paul was finished. The "official" teenage brakeman in the log book "fired" the work train on the way down, while the fireman adjusted the work car's push on the engine with the brakes.

I do not have a picture of the Great Gulf illumination, nor a copy of the log book. The Skyline Switch is no more, so any chance of someone duplicating my interaction with the Mountain that night is gone. However, the Mt. Washington Observatory staff continue to have magic mountain moments of their own. This time-lapse image they captured in 2013 of a night hiker with an LED head lamp traversing the Skyline ridge triggered a most pleasant flashback for this old Cog kid of the Sixties.



The Jitney era at the Cog Railway came to an end in 1967. It had been eighteen summers since Col. Henry Teague had hired the farm-boy / Army vet / college student. It had been sixteen summers since Jitney had brought his bride to the upstairs of the Honeymoon Cottage across the tracks. Fourteen summers had passed since Barb had gone to Lancaster mid-season to give

birth to a boy. A dozen summers had come and gone for a girl who learned to love horses with her friend, Lucy.

The era of a Colonel Teague running the railway was over. The Cog would continue to operate under the leadership of Ellen Crawford Teague, and just as with prior ownership changes new generations of Coggers would hear the tales about those who came before them handed down by the Mountain veterans who bridged the eras.

The *Coös County Democrat* editorial of August 9th, 1967 summed up the end of the Arthur Teague era this way: "As all who knew him appreciate, Col. Teague loved The Mountain. It was always an interesting experience to hear him talk about it and its history and to feel the enthusiasm he had for it. Many hours a day he spent hard at work for the famous Cog Railway which he kept running despite many problems that were bound to arise from such a unique undertaking in such rugged conditions. It was not to make money - or to make expenses - that he toiled, but for love of The Mountain and its railway. Many mourn his tragic death which is a great loss for the whole state."

"I wish I'd had a chance to meet him," wrote Charles Morrill, a next generation Cog employee now working as a tour guide at Thomas Jefferson's Monticello home. Morrill said in a Facebook post, "In so many ways the story of the Cog Railway in the 1970s was a story wherein the main character isn't there: like something by James Joyce, beautiful and also very sad."

And it is clear from many web threads reviewed for this book in 2015 that those who worked at The Mountain after 1967 came to share Arthur Teague's view that you toiled there for "love of The Mountain and its railway." Thus it was upsetting to many when it was announced that "Regular steam operations on the Cog Railway will end on Wednesday, July 1st, 2009" and according to the MBRRE, Callboy *(April 2009 issue, back cover)* "the Cog Railway will continue to run steam but only 1 trip a day."

Then things really got heated in a Railroad.net online forum when a working Cog engine showed up for sale on eBay.

Re: Mount Washington Cog Railway by THE COGGER » Wed Oct 07, 2009 9:25 pm

"To disrespect us that gave every ounce of our being to preserve a unique operation for future generations, is a wound that will never heal," posted a former employee with screen name "THE COGGER." "I have invested every ounce of my soul into the preservation of the steam program on Mt. Washington for future generations. And the thanks I get is to throw the *Agiocochook* on eBay. Yes all the pro-diesel guys and girls do not have a clue nor do most. Public education about the Steam locomotives of yesteryear is not my job, it is my obligation. How many of you out there know exactly what *Peppersass* sounds like running the grade?..... I thought so!"

Re: Mount Washington Cog Railway by cogger » Thu Oct 08, 2009 12:06 pm

"Selling the 3 won't change much or add money into the pockets of employees," answered another Cog veteran with a similar screen name of "cogger." "And unless you worked there, you'll

never really know how awesome those steam engines are. You didn't just open the steam valve and let them go, you worked to get them to the top. No two trips are ever the same and some are way better than others! I am thankful for this forum in that it allows discussion of a unique operation that has changed. We all have our opinions. I was just there this weekend and business was good. Diesel Cog is better than no Cog."

Re: Mount Washington Cog Railway by THE COGGER » Thu Oct 08, 2009 10:31 pm

"I am just clearly voicing my dislike for a piece of my heritage being raped for commercial gain," replied THE COGGER. "After many years of broken bones, blood, sweat and tears to try to fill the big shoes of those before me - that left me a precious treasure to preserve, pass on and share with all who wish to experience the rich unique heritage of the Cog. And to Cogger, thank you from another for helping carry the flame. I guess some just will never get it unless they were to see what we have seen, done what we have done, and the adventures we have witnessed and been part of."

Re: Mount Washington Cog Railway by cogger » Fri Jun 04, 2010 11:47 pm

"The 9 is being used because it has a feedwater heater installed. Makes for more efficiency. The 2 also has a feedwater heater, so it would most likely get certified. The 6 and 10 are also capable of being fired up. The 4, although painted as the 8, is the one slated for display in Twin Mtn near the gazebo. The 3 is the one that was offered for sale on ebay many months back. Steam runs at 9 am because it is really the only place it fits into the schedule. It goes up and stays extra time until the first diesel comes up and they go down as a double. As soon as the diesels get on the hill, it is in the way. They make the trip to the top in 40 minutes."



"Steam won't be back for the same reasons every other railroad switched. I am as disappointed in this as many people are now, and were back in the 50s when it went away from the mainline. I opted to not work there much last year and had decided to not work at all this year. I got a call to come up and work Memorial Day weekend, and I am glad I did. The mountain is still the same, the track is still the same and a diesel Cog is way better than NO Cog. I ran several trips on the diesels and they are awesome machines. The engineering and construction are top notch and railfans should take a look at them. They are the future of the Cog. Don't stay away because there isn't steam every hour. I almost made that mistake," concluded Cogger's posting.

There is something fitting that this online expression of opinion about the Cog occurred without the use of real names. After all, since 1869 the right-of-way up the western side of the Moun-

tain has been littered with the nicknames of those who worked there - Crazy Marsh, Calijah, Crawford, Father Goody, El Gordo, Sparerib Kenison, Uncle Stubby, Tese, Cece, Little Albert, Pic, Pop Pike, High Pockets, D-1, D-2, Sticky, Lazy Bear, Ruthie, Mother Varney, the Plineys as well as Uncles John and Paul, and so on. And beyond those "named few" are the rest of the anonymous women and men who contributed to the endeavor that is now approaching its 150th anniversary of operation.

Work on this manual/memoir began in hope that we might "serenade our Colonel while coal and steam shall last" with the full knowledge that "we will *Peppersass* and be forgotten like the rest." Along the way, we identified over 2000 Coggers. There are scores more we will never identify, but because of our Mount Washington Cog Railway experience we can viscerally identify with them. They are our extended and unknown Cog family - our mountain railroad relatives.



That concept was articulated by Jitney at the August 1966 Cog Party while presenting Colonel Arthur Teague a framed photograph *(above)* from the crew picturing a steam train heading onto Jacob's Ladder as seen from below the Halfway House. Jit's remarks were written in the vein of a personal wartime friend of the Colonel - the late Ernest Hemingway.

> *"In the integral and complex Cog Legacy there are threads of men inseparable, twisted, clipped, tucked and pulled to form an endless tapestry of the Cog. No man (or woman) is omitted, although unseen and unsung. If a spike changes to oxide and the driver turns to dust, still the red stain stays and a new workman will drive with equal vigor a spike to hold a new rail - the last by toil joined with the first. History cannot be changed or altered, and so as you Coggers work the engines, supply the wants of stomachs, the desires of beauty, accommodate the needs for shelter - ask not for whom the Cog climbs, it climbs for thee."*



No. 10 Colonel Teague ready to enter service on the line at its public debut on September 24, 1972
- Kent Family Collection



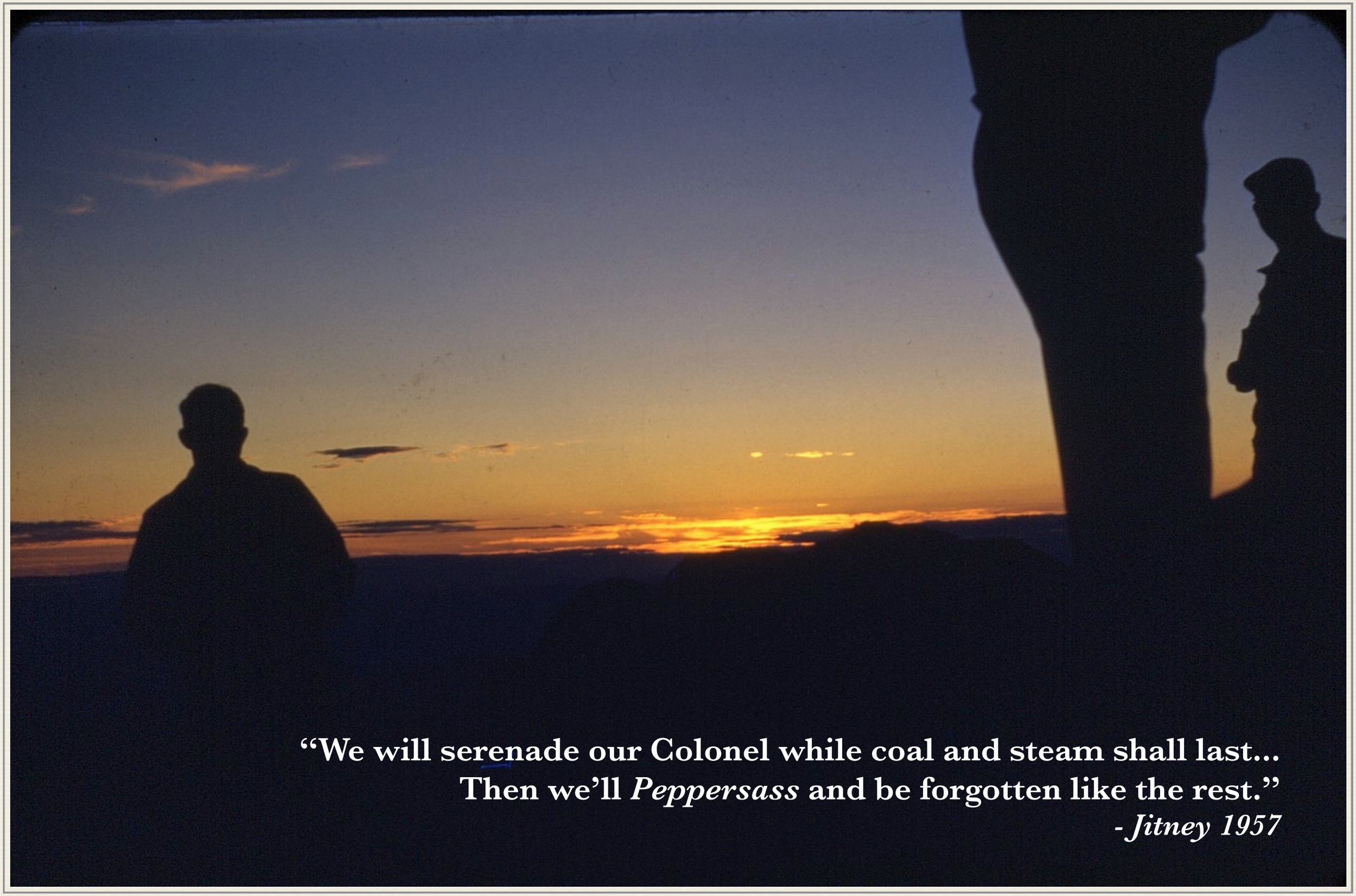
No. 10 Colonel Teague installed in its new role at the railway - directing passengers from Rt. 302 in Fabyan to the Base Station (November 23, 2015)
- Lewis Family Collection



Jitney Jr and Jitney with e-book next to cold stationary boiler in the Jitney Junction steam shed (May 12, 2016)
- Image captured by David Ballou

Author's 2016 Answers for a Virtual Book Tour

Q. *(You insert Questions)*
Jitney: "I'm basically an 88-year old Model-T Ford with one headlight - in mud season - rusting out, but my mind is still quick - I can forget things twice as fast as I used to. There are no good days just some better than others. Completing this long overdue book for the Colonel is one of those better days. I learned things I never knew about Mike Boyce, the railroad, and the people who worked there - with me and before me. I used to think my 18 summers at the Mountain were a large and significant part of the Cog story. Now I know that while they were important - that time and my work there was just a small piece of a much larger story."
Q. *(You insert Questions)*
Jitney Jr: "This book is as close as I will get to fulfilling my teen-age movie directing dreams of making a 'coming of age' film with the Cog Railway as the unique setting - filled with memorable characters and the behind-the-scenes world of a 1950s tourist resort - think 'Dirty Dancing' with whistles & coal smoke instead of dancing. The statehouse reporter in me enjoyed the quest for information about what was going on - before my arrival 'on-planet' and as I was growing up - finding in between the lines intricate political maneuvers and tussles to write - and re-write history - while maintaining an optimistic public face to the tourist and industry. Finally, as a professor I was astonished to find whole sections of source documents lifted and regurgitated without attribution in later texts. This would earn a failing grade in my class, thus my attempt to give credit all along the way. To sum up - I spent two plus years - in Cog - Neat-o!"



“We will serenade our Colonel while coal and steam shall last…
Then we’ll *Peppersass* and be forgotten like the rest.”
- Jitney 1957

CHAPTER 18

Engines & Shop Log



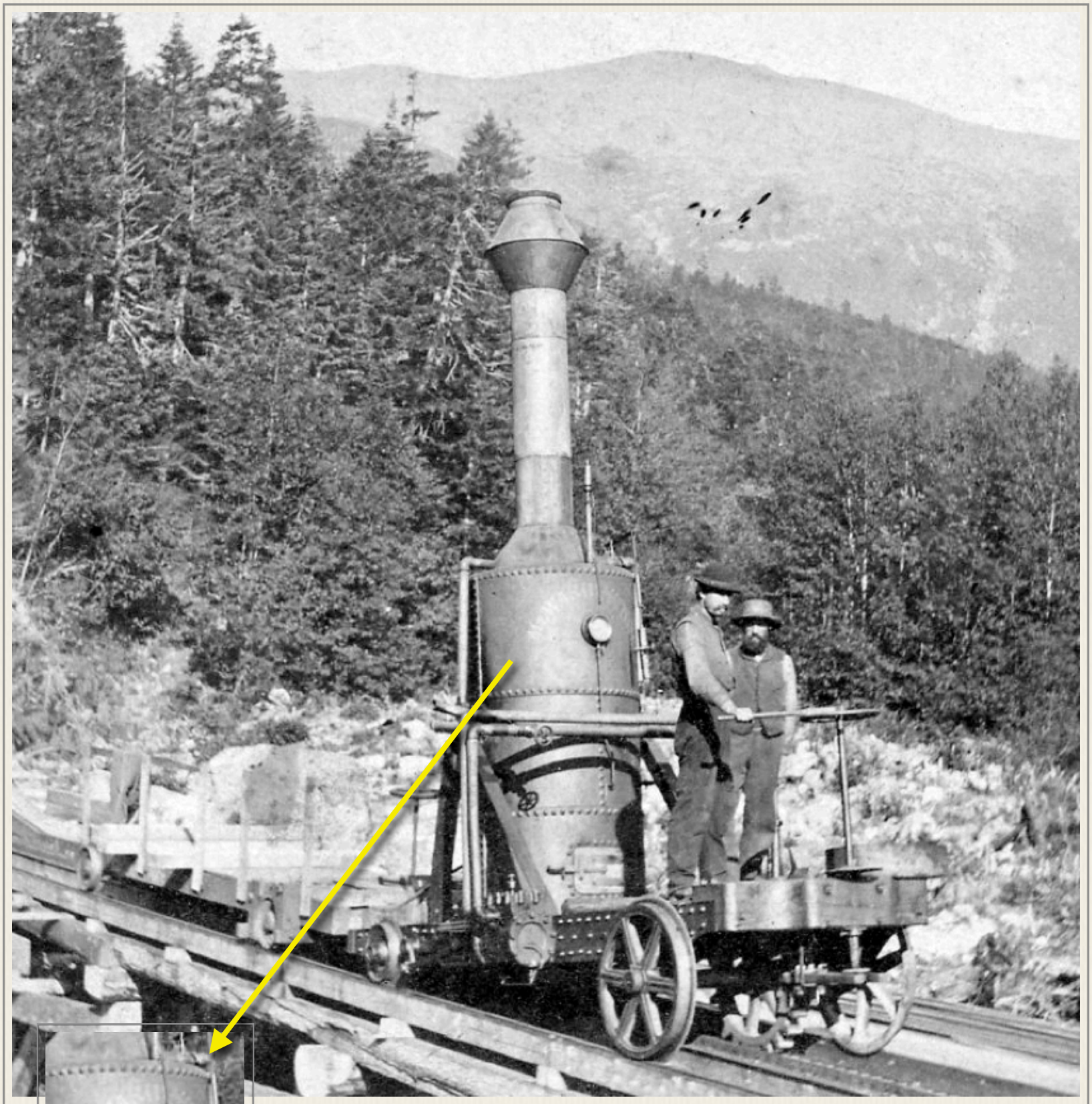
- Granger Family Collection

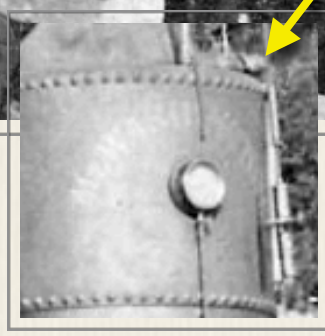
Accurately tracking the Mt. Washington Railway's rolling stock from birth to retirement is difficult because the patient's long history *(both locomotives & coaches)* through many surgeries and repairs performed by different mechanics over the years while trying to keep the trains moving during a short operating season. Glen Kidder's 1969 book, *Railway to the Moon* attempts to nail down the development & pedigree of the Cog engines seen in photos and discussed in news accounts. This chapter begins with a visual recap of Kidder's list of early locomotives, then adds more detail to the Kidder account by transcribing and collating the written notes found of those performing the work on each of the individual machines. That section begins with a one-page typewritten pedigree summary from February 1974 when the new manager, Edward Clark was taking over from Paul Dunn. It continues with individual engine and coach charts taken from three main sources. Notes in the usual Baskerville typeface indicates the information came from a hand-written ledger in Bencosky-Desjardins files. Notes in the Avenir typeface indicates information from single typed locomotive pages for # 1 and # 3 found in MWCR files by Jitney Jr on February 4, 2019. The last main source for the information contained herein are photocopies of shop logs found in New Hampshire Transportation Department files in February 2020. It concludes with a roster of BC&M and B&M locomotives used on the spur line from 1876-1931.

While the notes here will help the next researcher tackling individual engines' development over time, the regular reader should finish with a better understanding of the mechanical toll taken on the 19th Century equipment bringing tourists up and down Mount Washington.

In The Beginning...

"Mt. Washington"





Sylvester Marsh had an idea and a design. He had working models of his mountain-climbing locomotive, but there still needed to be a full-scale demonstration. For that machine he went to Whittier & Company in Massachusetts. It had the name "Mt Washington" *(left)* painted on its boiler. "Hero" was what Marsh later called it, but to those used it to build the railroad and to the general public its name was "Peppersass" because it resembled a pepper sauce bottle of the era.

The Man Who Built Peppersass

"CHARLES WHI'ITlER, manufacturer of elevators and machinery, and inventor, was born Nov. 26,1829, in Vienna, Kennebec County,Me. He is the son of John Brodhead and Lucy (Graham) Whittier. The first of his ancestors in this Country was Thomas Whittier, who came from England in 1638, at the age of sixteen, in the ship *"Confidence."* Mr. Whittier's education was obtained in the public schools of Roxbury, Mass., where he



CHARLES WHITTIER.

entered the Washington Grammar School in 1841, the year in which it was dedicated. At the close of his school days he was apprenticed for three years to learn the machinist's trade with the firm of Chubbuck & Campbell, Roxbury, of which the present *(1892)* Whittier Machine Company is the lineal successor. He has thus been in the same business for nearly fifty years. During his apprenticeship Mr. Whittier attended for two years the drawing school of the Lowell Institute, and became not only a practical mechanic but an experienced draughtsman. Being made superintendent of the business in 1859, he was admitted to partnership in the firm, which was then, upon the retirement of Mr. Chubbuck, changed to Campbell, Whittier & Co. In 1874 the business was incorporated under the name of the Whittier Machine Company, with Mr. Whittier as president, a position which he has since held. The works, for many years in Roxbury, but located now mainly in South Boston, comprise a very large and unusually fine plant in the line of foundry and machine work, especially adapted to the manufacture of steam, hydraulic and electric passenger and freight elevators. The company is one of the principal manufacturers in America of electric elevators, which represent the highest development thus far attained by electrical science and mechanical art in this industry. A large number of improvements, increasing the safety, speed and comfort realized in the use of elevators, have been introduced by the Whittier Machine Company. These improvements are protected by numerous patents, many of which are Mr. Whittier's own inventions. The company has always encouraged legislation calculated to secure the compulsory adoption of all reasonable safeguard s for the protection of life and limb in the use of elevators, including a rigid system of inspection. Mr. Whittier has al ways been identified with the Republican party. In 1884 he was elected to the State Senate, where he served one term. For many years he has been an active member of the Massachusetts Charitable Mechanic Association. He is one of the two vice-presidents of the Eliot Five Cents Savings Bank, Roxbury, and is a member of the Executive Committee of the Board of Trustees of Tufts College. For nearly forty years, he has been a member of the First Universalist Society of Roxbury. His long career as a shrewd, honorable and successful businessman, and as an inventor, qualifies him to stand as a truly representative man of the Commonwealth. Mr. Whittier was married in Roxbury, June 7, 1855, to Eliza Isabel, eldest daughter of Benjamin F. and Eliza (Everett) Campbell. They have no children."

- Massachusetts of Today: A Memorial of the State - Daniel P. Toomey - Columbia Publishing Co. (1892) pg. 215

Mt. Washington Railway Locomotive Roster

1866-1874

Glen Kidder List

Glen M. Kidder

Locomotive No. 1 - *Hero (aka Peppersass)*

Builder: Campbell & Whittier, Cambridgeport (Roxbury), MA

1866



Otto Gruninger 1869 description: "On the first engine the sizes of the forward and rear driver wheels are different; likewise the forward axle is set more deeply in the frame; the two have the purpose of bringing the locomotive into a more nearly horizontal position, so that the angle a is the average gradient angle of the line. The frame consists of part wood and part iron. The lengthwise walls, each consisting of two ½" strong sheets of iron riveted together... The boiler itself is vertical and is suspended somewhat forward of the center of the frame, measured lengthwise, installed on a support made of bent angle irons. The original arrangement allowed for it to remain consistently vertical at all gradients by revolving in its support. Subsequently, however, the small energetic vibrations to which this mighty pendulum was subjected as a result of the irregularities of the line as well as the movements occasioned by the masses being carried, proved so deleterious to the seal [of the steam duct] that the position had to be fixed. Steam pressure is proportionately enough to provide, on average, 75 to 80 hundredweight overpressure. The chimney rises from the cab to a height of 14 to 15 feet. There is no cladding of the boiler worth mentioning. Wood is used for burning; if coal were used, the same dimensions would give the boiler a significantly higher hauling capability, an especially promising detail for the *(Rigi)* project... A small steam-pump device handles the feeding of the boiler... (I)n spite of the complete lack of springs the journey was a relatively smooth one and in addition no shocks, or, better, vibrations, could be felt in the ordinary passenger coaches, that is probably on account of the elastic super- and substructure... Coupling mechanisms are likewise lacking. Passenger coaches are continually pushed upwards by the engine with no further connection to it... The tender, which is built to extend somewhat beyond the rear [bumper], is nothing more than a wooden barrel with [inch-thick?] walls; it serves only to take on fuel; water is carried in a special metal reservoir. This is rather small; it lies under the floor in front of the rear axle. Its dimensions.are: length (measured between the two frames) 4 feet; height 2 feet; width 1 foot 9 inches. The locomotive weighs 6 tonnes and is... in a position to carry a load of 6 tonnes on the upward-bound journey, This first engine is run at 3600 feet per 2 hours. That is the way the engine functions under normal circumstances. Mr. Marsh designates 3 English miles... per hour of time. This has been established as a rule for the prevailing grades. I was not able to obtain any exact data on the consumption of water. What the leading engineer was able to tell me would be based only on approximate information. According to that, one trip *(by Locomotive No. 1)* would require fifteen (15) 32-gallon barrels or 480 gallons. Between the start and the end, three water stations were laid on at approximately equal distances apart *(Cold Spring, Jacobs & Gulf?)*. Originally a number of barrels were placed on a structure from 6 to 7 feet high, which were (supplied) by means of long lead pipes (1200 feet) coming from springs high up. 3/4 of a cord of wood are calculated for each trip. This comes to a value of two dollars."

Locomotive No. 2 - *Not Named*

Builder: Walter Aiken, Franklin, NH

1868



Otto Gruninger: "Three engines are part of the railway's rolling stock. Two were already used in the past year *(Hero & this loco)*, while the third is presently under construction. Of these engines only the first was accessible to me, since the second was out for repair. Common to all three engines is the number of drive axles; they have two with a wheelbase of 10 English feet... The wheels sit loose on the axles in order to produce gliding friction that would arise through the difference between (them) and... the cogwheels sitting on the axles. The second and third engines climb the peak in one and a quarter hours, including stops for water. The second and third en-

gines carried more water aboard; they needed only two water stations placed at equal distances between the two end points *(Skyline & Waumbek)*. Instead of the barrels, wooden water [troughs] were used. 12 feet long; 6 feet wide; 5 feet high."

2nd Locomotive No. 2 - *Geo Stephenson*

Builder: Walter Aiken, Franklin, NH

1869



Otto Gruninger: "The third and most complete of the engines departs from the other two where power and weight are concerned, as well as in actual method of construction. Alterations of the third engine: The front and rear wheels are of equal size and placed at the same position of... the frame. Their diameter is equal to the... the cogwheel. The cab is placed in the middle. Everything is made of iron. The cogwheel that engages the rack for propulsion is on the rear axle "A," for reasons of safety, since the greater part of the engine's weight rests on the rear axle. Heavier loads can thus be conveyed. The drive-wheel on "A" is now larger, and instead of 11 cogs it has 20. Boiler. This is to be larger... Diameter 4½ feet; height 12 feet; It is fastened at its foot at a medium slope... directly to the frame by means of a wrought-iron frame, and no longer rests on an angle-iron platform. The funnel is built in the spark-catching style generally used by American railways. The tender is entirely of iron and is horseshoe-shaped, in the style of locomotive-tender with water reservoirs.

Charles Lowe Aiken Diary

Opening the 1870 season

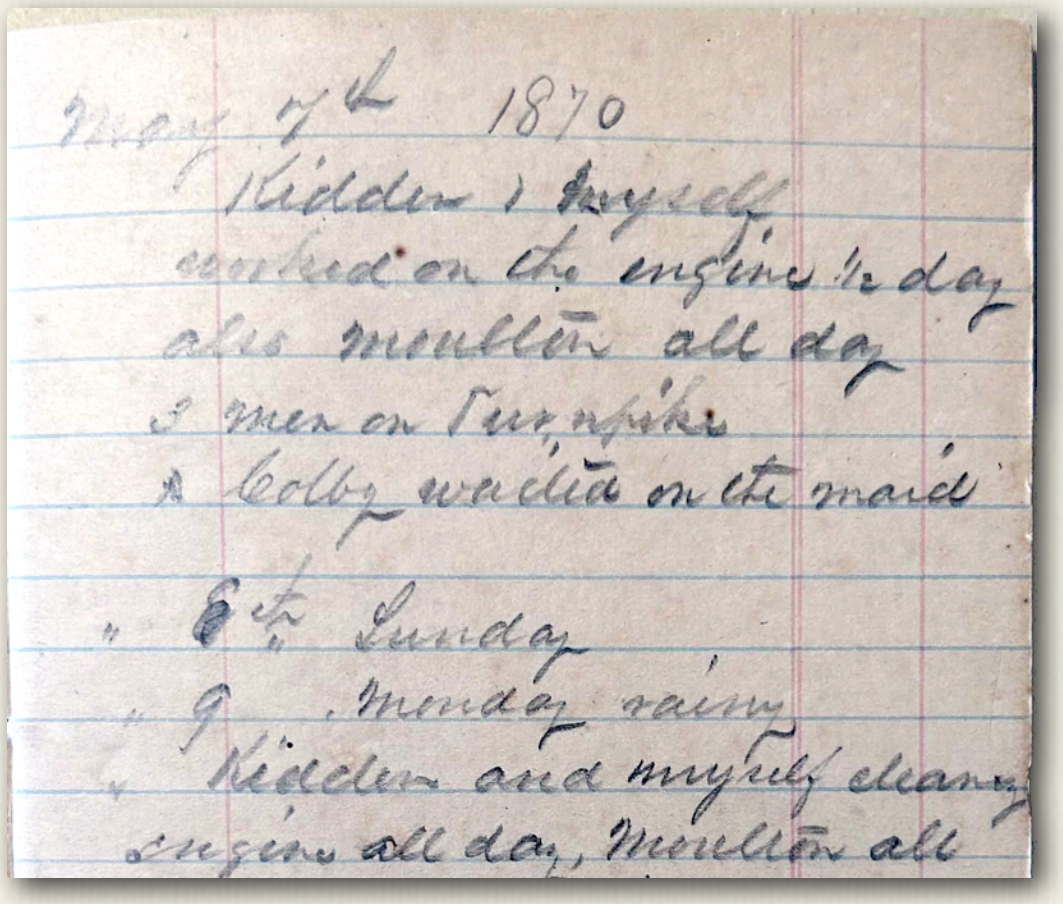
Aiken family member Steve Johnson *(descendant of Jonas B.)* found the following diary in the New Hampshire Historical Society's archives and asked the Society's Paul Friday to transcribe the 156-year old penciled notes. Separately, Rob Bermudes and Jitney Jr. tackled the chore. Jitney Jr. added *[first names]* to help readers know who was being written about. An asterisk (*) is added to the date where all three transcribers concurred in Charles Lowe Aiken's writings.

May 7th, 1870*

[Daniel] Kidder & myself worked on the engine ½ day also Moulton all day.

3 men on turnpike.

& Colby waited on the maid



May 8th Sunday*

May 9th Monday rainy*

Kidder & myself cleaning engines all day, Moulton all day on sawmill.

3 men worked on the road about a ¼ day each - the rest of the day washed blankets and helped about the sawmill "about the value of 1 man ½ day" Colby helped the maid most of the day. Mr. Marsh came in today also 3 Frenchmen came in tonight - before supper.

May 10th*

Kidder & myself on Engine, and sawmill also - Moulton and 2 Frenchmen.

The rest of the men worked on the turnpike (5 men all day).

A new man came in from Littleton about supper time.

Did not rain during the day although the sun did not shine during the day

May 11th*

[Daniel] Kidder, Moulton & myself finished the sawmill today. The balance of the men - 8 in number worked on the turnpike all day. Very thick mist all [day?] with an occasional shower

May 12*

Kidder and myself worked in shop all day. Moulton on sawmill - 4 men worked under sawmill cleaning out sawdust. Colby helped the maid today. French & V. D. *[Van Doren]* Niles went down to the White Mountain house. Asa Niles loafed about doing nothing. Putney & Gordon came in tonight also Mr. Sanborn

May 13 Friday*

Kidder worked ½ day on sawmill - I went to Wing Road for freight also to carry Sanborn & Moulton. 2 Frenchmen worked about the mill laying water pipe. Engineer and Sawyer commenced work today - French went for hay today - 5 men on Turnpike - rained all day got home 3 Oc *[o'clock]* in the a.m.

May 14 Saturday*

Kidder and myself worked laying water pipe all day - also 2 Frenchman; 5 men on Turnpike all day, French and cattle went for hay today. Mr. *[John Jarve or J.J.]* Sanborn & Walter *[Aiken?]* came in today. "Men did not come home to dinner today." Engineer & sawyer worked all day

May 15 Sunday*

Kidder & myself & French went down to Lovetts Mill for lathe & machinery. Got home about 6½ Oc - very pleasant.

May 16th*

Kidder and myself worked setting up lathe. Blacksmith commenced work today. – shod the oxen. French worked on road - shod oxen this afternoon – 3 men in sawmill in the forenoon – 4 men in sawmill in afternoon - "5 men on Turnpike in the forenoon - 3 in the afternoon" - the Sawyer and engineer both at work all day. A new man arrived tonight - Mr. Marsh came in during the afternoon - Mr. Sanborn went out tonight - Also Mr. Marsh

Very fine day - commenced surveying logs this P.M.

May 17 Tuesday*

Kidder worked in shop all day - commenced on engine in the afternoon. I measured logs all day for Mr. Marsh - 6 men on Turnpike all day – 6 men in sawmill

Very pleasant all day - a little misty in the morning - The oxen & yoke worked on Turnpike all day.

May 18th Wednesday*

[William Stevens or W.S.] Prescott came in this morning early. He, Kidder and myself worked on the old engine all day "No. 1" - 6 men in sawmill - 5 men on Turnpike - Teamster and cattle went to White Mountain house for railway freight Walter started for home about half past one P.M.

A very fine day.

May 19th Thursday*

Kidder, Prescott, & myself on No. 1 all day. 6 men in sawmill in the forenoon – 7 in the afternoon

5 men on Turnpike in the forenoon - 4 men in afternoon

French and 1 yoke of cattle went for freight - did not get home 'til 8 Oc

Fine weather all day - Sanborn and 3 carpenters came in the afternoon, 1 yoke of cattle on turnpike ¾ day

May 20th*

[Daniel] Kidder, *[W.S.]* Prescott and myself on No. 1 all day - 7 men in sawmill, 5 men on Turnpike
3 carpenters on shed
Mr. *[J.J.]* Sanborn came went home today

May 21st*

[Daniel] Kidder, *[W.S.]* Prescott, & myself on No. 1 all day - 1 man with cattle to White Mountain House for freight

4 men on Turnpike ½ day - 6 men ½ day
7 men in sawmill ½ day - 5 men ½ day in do *[**Paul Friday** says the word 'do' is an old time short version for ditto, so "in sawmill"]* 3 men on shed all day

Pleasant in the morning cold rain in the P.M.

May 27*

Kidder, Prescott & myself finished #1 in the morning
Run up the track with the telegraph men as far as Jacob's ladder. 7 men in sawmill all day – 5 men on Turnpike all day - 3 men on Road
Telegraph boys left today
Mr. Sanborn went to Littleton this after P.M. Very fine day

May 28th*

Kidder, Prescott & myself went home today. 5 men on Turnpike all day - 7 men in sawmill - 3 men on shed frame
Still fine weather.
Mr. Sanborn went as far as Tilton with us.

May 29*

Sunday no work

May 30*

5 men on Turnpike - 7 men in sawmill - 3 men on shed
Still Pleasant

May 31*

5 men on Turnpike – 7 men in mill - 3 men on shed
came back from home today – got in at 11 Oc

June 1st*

Kidder, Prescott & myself commenced on #2 today - 4 men on Turnpike - 7 men in sawmill
3 men on shed - French drove the cattle away to pasture today.
Sanborn came in yesterday afternoon - Pleasant

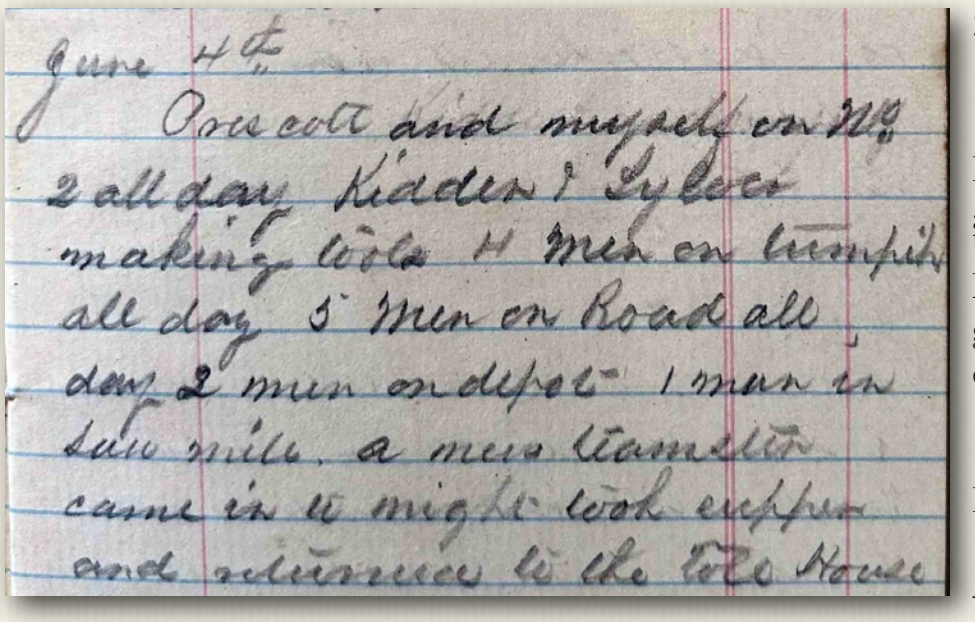
June 2nd*

Prescott and myself still at work on No. 2 - Kidder and Mr. Sanborn worked repairing first tank all day - also 1 boy in the afternoon – 7 men in the sawmill ½ day - 6 men ½ day in do *[in sawmill]* - 4 men on road ½ day - 5 men ½ day - 4 men on Turnpike all day.

1870 Charles Aiken Diary / Walter Aiken Letter

French came home this eve
2 telegraph men came today - Very warm all day

June 3rd
Prescott & myself worked on No 2 all day - Kidder in the forenoon - Kidder on tank in the afternoon
4 men on Turnpike all day
5 men on Road all day


June 4th
Prescott and myself on No 2 all day Kidder & Sylver making tools 4 men on turnpike all day 5 men on Road all day 2 men on depot 1 man in saw mill a new teamster came in & might took supper and returned to the Toll House

3 men at work on depot - ½ day
3 men in sawmill ½ day
1 man in sawmill all day.
1 man shoveling sawdust - ½ day
French went out today
also one of the Frenchmen went out in the afternoon.
Mr. Sanborn went home today. The two telegraph boys left this morning. One new hand came in tonight "Tibbets"

Fine weather

June 4th*

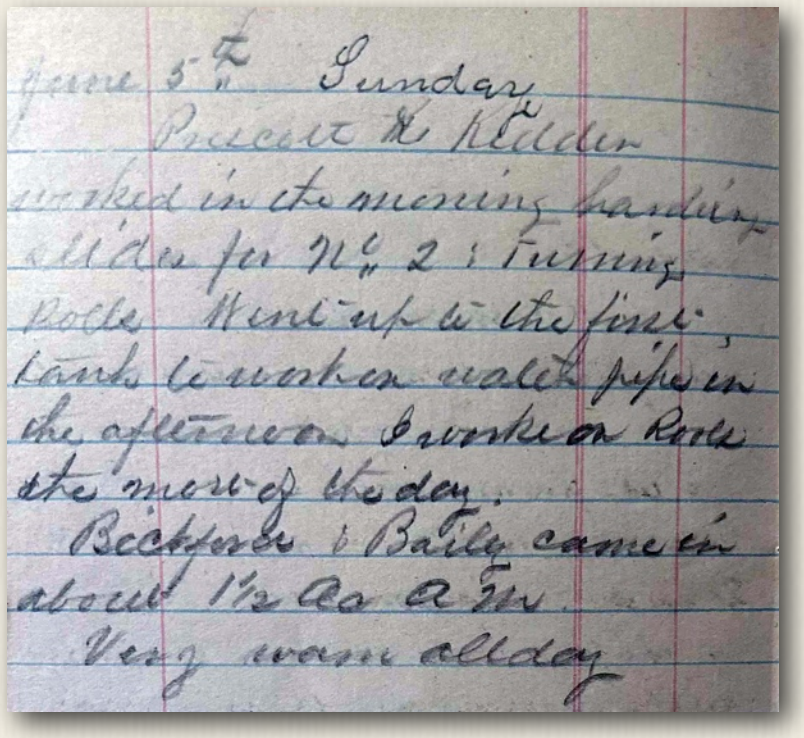
Prescott and myself worked on No. 2 all day - Kidder and Sylver making tools - 4 men on Turnpike all day - 5 men on Road all day -2 men on depot - 1 man in sawmill - a new teamster came in the *[or to]* night took supper and returned to the toll house

Walter Aiken Letter

June 4, 1870, Franklin, NH

Dear brother Charles,

I went to Concord with *[Sylvester]* Marsh yesterday *(6/3)* and saw *[Nathaniel]* White. White said that he would see *[John E.]* Lyon on Monday *(6/6)* and that one thing is sure and that is that *[John J.]* Sanborn will not stay there. They are all in favor of my taking the road, still Lyon may not consent to this but White says he will consent to a new man. You and Dan *[Kidder]* keep yourself a while longer and we will try and bring things out all right. I send with Cyrus *[Brown? – conductor in 1871]* a rough plan of building on top of mountain which I think will be the strongest and cheapest of anything we can make. White and Marsh thought also that this the best plan. It is very dry and hot here. You have only one thing to look out for and that is fire. Don't run an engine up the track at all till after a rain unless you are absolutely obliged to. Cyrus will give you all the news. We are all well. If they let me have the road I shall be up at once. If they don't it is uncertain when I shall go up. Please write as soon as you get this and let me know how you are getting along.


June 5th Sunday
Prescott & Kidder worked in the morning hardening slides for No 2 : Turning Rolls Went up to the first tanks to work on valve pipes in the afternoon Worked on Road the rest of the day.
Beckford & Bailey came in about 1½ A M
Very warm all day

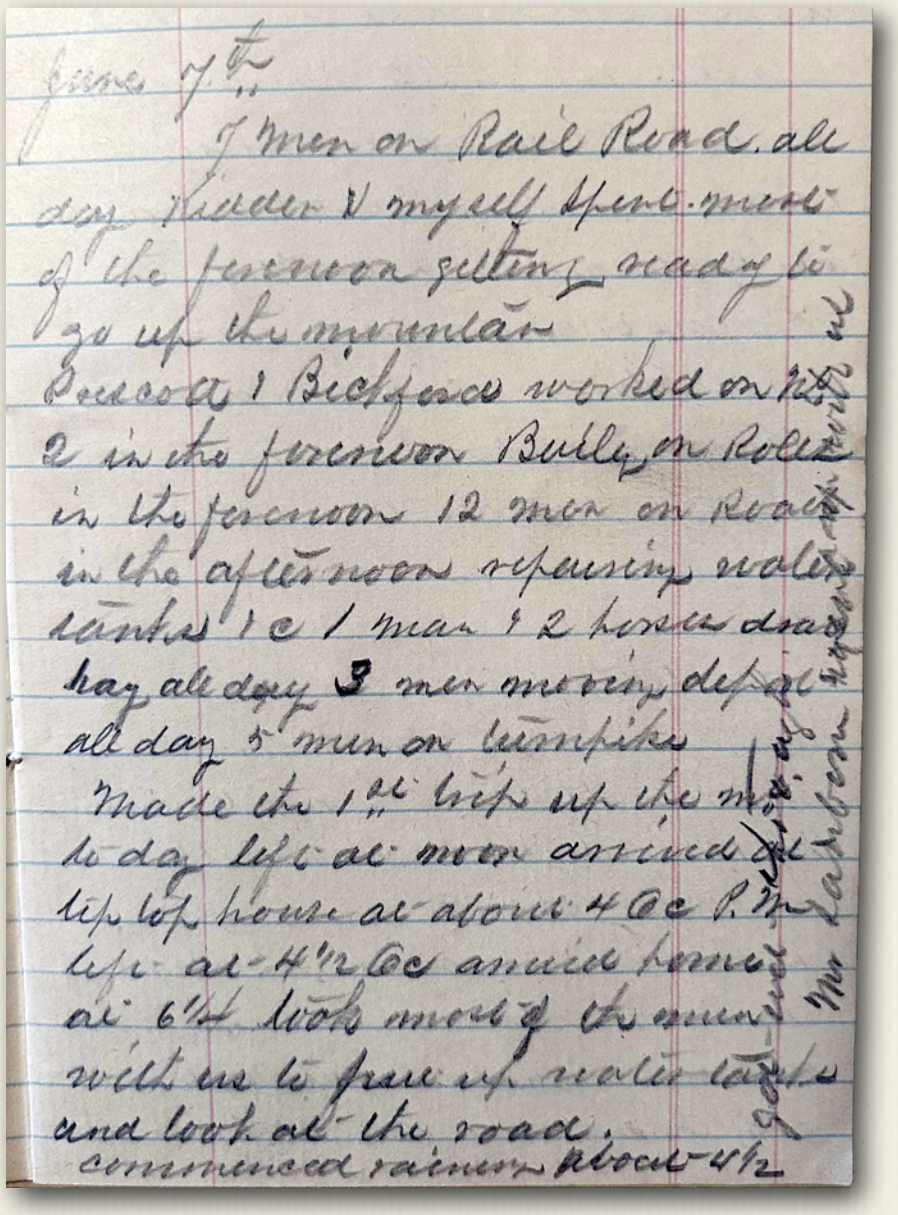
Your affectionate brother,
Walter Aiken

June 5th Sunday*

Prescott & Kidder worked in the morning hardening slides for No. 2 : turning Rolls - Went up to the first tanks

to work on water pipe in the afternoon - I worked on Rolls the most of the day

Bickford and Bailey came in about 1½ Oc A.M. Very warm all day


June 7th
7 men on Rail Road all day Kidder & myself spent most of the forenoon getting ready to go up the mountain
Prescott & Bickford worked on No 2 in the forenoon Bailey on Rolls in the forenoon 12 men on Road in the afternoon repairing water tanks 1 Oc 1 man & 2 horses draw hay all day 3 men moving depot all day 5 men on turnpike
Made the 1st trip up the Mt to day left at noon arrived at tip top house at about 4 Oc P.M. left at 4½ Oc arrived home at 6½ took most of the men with us to put up water tanks and look at the road.
commenced raining about 4½

June 6th*

Went to Littleton for Sanborn got home at two next morning

Kidder, Prescott and Bickford worked on No. 2 mostly during the day. Bailey turning rolls - 6 men on Turnpike all day also 2 horse teams commenced today - 5 men on the railroad. It has rained a little today the first for three weeks.

June 7th

7 men on Rail Road all day - *[Daniel]* Kidder & myself spent most of the forenoon getting ready to go up the mountain.

[W.S.] Prescott & Bickford worked on No. 2 in the forenoon. Bailey on the Rolls in the forenoon - 12 men on Road in the afternoon repairing water tanks 1 Oc - 1 man & 2 horses draw hay all day - 3 men moving depot all day - 5 men on Turnpike

Made the 1st trip up the Mt today left at noon arrived at Tip Top house at about 4 Oc PM. Left at 4½ Oc arrived home at 6½ - took most of the men with us to put up water tanks and look at the road

Commenced raining about 4½ - *[Got wet]* Good even though Mr. Sanborn went up with us.*(? – written sideways on page)*

June 8th

Kidder and myself went up to the 1st tank in the forenoon

Prescott on the No. 2 all day. I worked on No. 2 in the afternoon - Kidder draughting *[**Friday:** I feel confident I got the spelling of the word correct. My 1855 dictionary shows multiple meanings for that word. One of them is "the quality of being drawn." **Jitney Jr:** guess: "doing an angle iron?]*. Bailey commenced on the new Cars today

4 men on the Turnpike all day

2 men on depot - 5 men on Road

Bickford went up to the tip top house with Ballou and company

Putney & Colby for log sawing slabs 9 Oc about mill. Showery all day

June 9th

Prescott & myself worked on No. 2 all day - Bickford painting No. 1 - Bailey and Mike McCoit *[something]* building car all day - 6 men moving Depot all day

[Syler/Silver] in the shop - Putnam running engines as usual - 3 men on Turnpike

3 men on R.R. - a little stormy all day – 2 strangers came in tonight - stopped to supper and all night, "travelers"

June 10

Prescott and myself worked on No. 2 all day - also Bickford in the afternoon - Bailey and Mike on cars all day – 5 men truing up depot - 3 men on Turnpike - 2 men on R.R. - Putney is running engines

Kidder up to 1st tank in the forenoon also Bickford with him – Silver/Sylver in shop all day, "Gordon in Saw Mill in the afternoon, sick in the morning" - Mr. Marsh was in today - Mr. Sanborn & Kidder or went home today.

Josiah James came in about 2 Oc and went up the mountain as far as Jacob's ladder took dinner and went home about 6 Oc. Cloudy all day but no rain

June 15

Prescott, Bickford & Bailey on car all day - Kidder, Mike & myself ½ day – 2 men on depot underpinning – 3 men on Turnpike all day - 3 men on shed all day - 7 men in sawmill

Silver/Sylver in shop all day

Kidder, Mike & myself went up the mountain with a party of 4 for $25 - started about 11½ Oc A.M. - time up one hour 40 minutes.

Mr. Sanborn went to Whitefield came home about dark

Very pleasant all day

Walter Aiken Letter

June 15, 1870, Franklin, NH

Dear brother Charles,

I avail myself of a chance to write a line as JB is going to the mountains. The trout you sent came to hand Monday nice and fresh. Mary divided them and we all had some. I took some down to Mr. White who said they were first rate. I was at Concord Monday *(6/13)* and all day yesterday *(6/14)*. Had a long talk with Mr. Lyon in his room, we went back to the beginning of the road and followed it up to the present time. He told me the whole history of the thing, and I find he has been the moving spirit in it, that is he has had to step in and pay about all the bills. He talked very gentlemanly and reasonably about the whole matter. The conclusion we came to was that *[Capt. John W.]* Dodge is to go up and manage it. Or rather Mr. Lyon seemed to think that if Dodge went that I would have to take all the responsibility as Dodge was my man. Said he should want *[J.J.]* Sanborn to go in once in a while and examine the road bed and trestle work, because he thought he knew more about it than anybody else. We were all agreed to that and said we should like to have Sanborn do so. He had hired Sanborn till July 1st. Said he would not keep Sanborn there this summer on any condition after what had been said by the other directors. Mr. Lyon would not say that I should have the road at the price I offered, but Mr. White and the rest said It would resolve itself into my taking it and paying what I proposed. You need not say that I have leased the road, or that I am to manage it, only that a new man is coming in. I shall be up with Mr. Dodge sometime next week. Now that I have got to take the responsibility I want you and Dan *[Kidder]* to be very careful about fire and about any sort of an accident. I don't want anything of the kind to happen on my hands you know. As you keep the accounts of all the men we can tell how much boarding of men I shall have to charge to Turnpike use. You see if I have to pay the board, that is if they conclude to settle that way in the fall, I shall want the turnpike to pay all that really belongs to them. Mother had James *[Walter's son?]* up to the pond today. She is about the same as usual. Cooper has cleaned out about all on my stackings and before long I hope to have money enough to pay all my debts which are what I owe you and JB. I know that neither of you want to use the money at present. Still a man feels better when he is out of debt. Don't pitch into hard work too much as you are apt to when you have anything to do. Hope when you get rigged up that you will have an easier time of it. JB will tell you all the news.

Your affectionate brother, *Walter Aiken*

June 16

[W.S.] Prescott & myself on No. 2 all day - Bailey, Bickford, *[Daniel]* Kidder, and Sylver on cars all day

2 men on trestle work in front of depot – 2 men on Depot wall

6 men in sawmill – 3 men on Turnpike – 3 men on shed.

Mr. Sanborn went to toll house today for freight

A very fine day.

Trains Run Report / 1870-1874 Kidder Locomotive Roster

June 17th

J.B. came in this P.M. went home with Mr. Sanborn today left about noon - Prescott and myself work on No. 2 - he all day and I ½ - Kidder, Bickford & Bailey at work on car all day

3 men on Turnpike all day
2 men around depot at work
6 men and sawmill all day -7 men ½ day
2 men on shed all day – 3 men on shed ½ day – 2 men on R.R.
Sylver in shop all day, very pleasant all day

June 18

Prescott on No. 2 all day
Bickford about shop on various jobs
Kidder to work on water pipe coupling
stop cock *[&c.]* for Road.

1870

Mt. Washington Railway

Whole Number Trains Run			178
Daniel Kidder	"		77
W. S. (Wm Stevens) Prescott	"		54
Wm A. Clement	"	42	
Charles L. Aiken	"	5	

Engine #1 Runs	74 trips
Engine #2 Runs	56 trips
Engine #3 Runs	48 trips
Car #1 Runs	17 trips
Car #3 Runs	53 trips
Car #4 Runs	49 trips

Total Passenger Trains Run	119
Quickest Time up	1 hour 18 minutes (passenger)
Quickest Time up	1 hour 7 minutes (freight)

Total Number Miles Passenger Trains Run	335
Total Number Miles Freight Trains Run	120
Total Number Miles Run	455

Length of Railway	2 13/16 miles
Grade of Railway	3606 feet
Sharpest Grade	13 ½ inches to the yard

*Daniel Kidde*r - Master Mechanic

Locomotive No. 4 - *Atlas*

Builder: Walter Aiken, Franklin, NH

1870

"Mr. Aiken employs about 35 hands in the machine and wood shops... (that built) the unique and powerful engines used upon" the Mt. Washington Railway.



1870-1874 Kidder Locomotive Roster



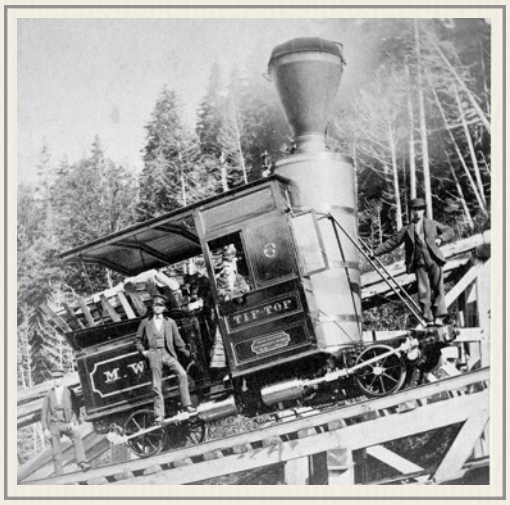
Locomotive No. 5 - *Cloud*

Builder: Walter Aiken, Franklin, NH

1870

Both the *Atlas (previous page)* and *Cloud (left)* featured cabs that were aligned with the frame unlike the *Geo Stephenson* with its inclined cab.

- Concord (NH) People - Thu, Aug 12, 1869 pg. 2



Locomotive No. 6 - *Tip Top*

Builder: Manchester Locomotive Works, Manchester, NH

1874

First dual-drive engine *(right)* with four cylinders - extended cab roof to protect wood supply

Locomotive No. 3 - *Hercules*

Builder: Manchester Locomotive Works, Manchester, NH

1874

First horizontal boiler engine with trailing tender



Boston & Maine Locomotive Roster

1935

Chas E. Fisher List

"In our last bulletin we listed the engines from the Fitchburg Railroad. This list did not include all of the locomotives owned by the subsidiary railroads which went to make up the Fitchburg R. R. The same system will be carried out in the matter of numbers - engines are arranged in their order on the subsidiary road and the 1895, 1899 re-numberings of the Fitchburg and Boston & Maine number will be indicated, provided the locomotive was not scrapped in the meantime.

MOUNT WASHINGTON RAILWAY

The Mount Washington Railway has the distinction of being first rack railroad built in the world. The road was chartered on June 25, 1858, in the State of New Hampshire, to build a railroad from the base station to the summit, a distance of 3.17 miles. Work was not commenced, however, until May, 1866 and a satisfactory trial was made over the 14 mile stretch in August of that year. The road was not completed to the summit until 1872 *(Ed note: July 3, 1869)*. The road was promoted by Sylvester Marsh and is termed the "Marsh System". The track was originally laid with 2x½" strap iron fastened on 6x7" longitudinal timbers, laid flat on the cross ties. It was 4'-7½ gauge and "T" rails are now used. The rack rail consists of 2-3x3x3/8" angles placed back to back between the rails, 4" apart, with 1-½" pins, 4" center to center for the rack teeth. The line commences 2668 feet above sea level and ascends 3625 feet, making an average of 1290 feet per mile. The maximum grade is 1980 feet or 37.5%. There are nine curves varying from 497 feet to 945 feet. The first engine was named the *Hero*, nicknamed *Peppersass* on account of its high stack. It was built by Campbell & Whittier of Cambridgeport, Mass., in 1866. The boiler was hung on trunnions in order that it might remain in a vertical position on any grade. Steam connections and feed pipes were made through these trunnions. The cylinders were carried outside the frames, carried on four wheels and drove a crank shaft geared to the driving shaft. The gear on the shaft engaged the rack rail. The Boston & Maine assumed operation on June 29, 1895, through control of the Concord & Montreal R. R. Mr. Yeaton gives the following engines on the Mt. Washington Ry. **U** = Upright boiler, **H** = Horizontal boiler

1	*Hero*	Campbell & Whittier 1866 8x12" 2 cyl. 4 wheels **U**	
1	*Falcon*	Manchester 1883 8x12" 4 cyl. 4 wheels **H**	*Formerly #7*
2	*George Stephenson*	Walter Aiken 1869 10x16" 2 cyl. 4 wheels **U**	
2	*Eagle*	Manchester 1878 8x12" 4 cyl. 4 wheels **H**	*See Note.*
2	*Atlas*	Manchester 1875 8x12" 4 cyl. 4 wheels **H**	*Formerly #4*
3	*Hercules*	Walter Aiken 1869 10x16" 2 cyl. 4 wheels **U**	*Rebuilt.*
	Hercules	Manchester 1874 8x12" 4 cyl. 4 wheels **H**	
4	*Atlas*	Walter Aiken 1870 10x16" 2 cyl. 4 wheels **U**	*Rebuilt.*
	Atlas	Manchester 1875 8x12" 4 cyl. 4 wheels **H**	*See Note.*
4	*Not Named*	Manchester 1883 8x12" 4 cyl. 4 wheels **H**	*See Note.*
5	*Cloud*	Walter Aiken 1870 10x16" 2 cyl. 4 wheels **U**	*Rebuilt.*
	Cloud	Manchester 1876 8x12" 4 cyl. 4 wheels **H**	*See Note.*
5	*Not Named*	Manchester 1883 8x12" 4 cyl. 4 wheels **H**	
6	*Tip Top*	Manchester 1874 8x12" 4 cyl. 4 wheels **U**	*Rebuilt.*
		Manchester 1878 8x12" 4 cyl. 4 wheels **H**	
7	*Falcon*	Manchester 1883 8x12" 4 cyl. 4 wheels **H**	
7	*Not Named*	Manchester 1895 8x12" 4 cyl. 4 wheels **H**	
8	*Pilgrim*	Manchester 1892 8x12" 4 cyl. 4 wheels **H**	
9	*Not Named*	Manchester 1908 8x12" 4 cyl. 4 wheels **H**	

Note: The *Eagle*, Manchester, 1878, the rebuilt *Atlas*, Manchester, 1875, rebuilt *Cloud*, Manchester, 1876 and the *Falcon*, Manchester, 1883 were burned in a fire at the Lyndonville, Vermont, shops, where these engines were repaired *(Ed note: NO! The fire occurred at the Base in May 1895)*, in 1895. The *Eagle* and the *Cloud* were scrapped, the other two engines were repaired renumbered as shown on Mr. Yeaton's list.

Mt. Washington Cog Railway Locomotive Roster

As of February 1974

Loco No.	Loco Name	Date Built	Builder	Remarks
1	*Mt. Washington*	1883	(1)	Re-constructed. See (1) and Loco #8 *(1892)* below.
2	*Ammonoosuc*	1883	(2)	Named *Atlas* when built *(1876*).
3	*Base Station*	1883	(2)	Ex-#5 which originally was ex-#2 of the Green Mountain Railway
4	*Summit*	1883	(2)	Partially dismantled at present. Ex-#1 *Mt. Desert* of the Green Mountain Railway, Maine
5	(Not Named)	1883	(2)	Currently, there is no #5 as #5 was re-numbered to #3 to replace an earlier #3 *(Hercules)* scrapped in the early 1930's.
6	*Great Gulf*	1878	(2)	Named *Tip Top* when first built
7	*Falcon*	1895	(2)	Currently, there is no #7 as this locomotive was destroyed in an unusual accident in July 1897. See *Appendix* - 1897 *Falcon Takes Flight*
8	*Tip Top*	1892	(1)	Originally *Pilgrim (?)* - Currently, there is no #8. The chassis of #8 and the boiler of #1 were used to construct the present #1 in 1972
8	*Tip Top*	1983	(3)	#8 construction began 1978
9	*Waumbek*	1908	(2)	Only locomotive with cab on same plane as boiler
10	*Col. Teague*	1972	(4)	Named after the late Col. Arthur S. Teague of the Railway. First official trip on Sept. 24, 1972

(1) The chassis of one locomotive (#8) and the boiler of the other (#1) were used to construct the present #1 in 1972

(2) All locomotives were built by the Manchester Locomotive Works, Manchester, N.H. except #10. When #9 was built company known as Alco-Manchester Locomotive Works

(3) Built at Mt. Washington Cog Railway & was finished Thompson Manufacturing space in Lancaster, NH in 1983 by Maintenance foreman Michael Kenly of Jefferson, Andre Desjardins of Twin Mountain, and Frank "Chub" Kenison also of Jefferson

(4) Built by Mt. Washington Cog Railway under the direction of Niles LaCoss, at its shops



Engine No. 1 gets its tender filled with water at the Base (1930s)
- Robert J. Girouard Collection

Locomotive No. 1 - *Mt. Washington*

Date	Repairs	Category
1/1/1883	Built by Manchester Locomotive Works	*General*
1/1/1906	New Boiler - Water Glass 20⅝th inch	*Boiler*
1929	Retubed (from single typed page #1 Locomotive found in MWCR files)	
1941	7 staybolts put in top of flue sheet pitted a little backend	
1950	New tubes	
1951	Boiler inspected - had 3 broken staybolts - rest all ok	
1952	Three new staybolts	
1953	Tightened two boiler braces - Two broken staybolts	
9/15/1953	New Main Shaft rear with new boxes	*Main Shaft (boxes)*
6/10/1955	9 tubes bottom row replaced	*Boiler*
5/30/1956	New crankshaft rear	*Crankshaft (boxes)*
	Valve seats planed - new D-valves rear	*Cylinder*
	New piston rings rear	*Cylinder*
8/10/1956	New piston valves with new covers front	*Cylinder*
9/24/1956	Right front cylinder no counter bore / Di. 8.521 - inspected	*Cylinder*
9/27/1956	New Main Shaft front with new boxes	*Main Shaft (boxes)*
	New crankshaft front	*Crankshaft (boxes)*
	All crank boxes new	*Crankshaft (boxes)*
1957	Hydroed boiler - 1 broken staybolt - Interior above flues ok - King - Inspector	
9/2/1957	New piston valve front	*Cylinder*
1958	Hydroed boiler - 19 bottom flues - Interior above flues ok - King - inspector	
6/1/1958	2 bottom rows flues new	*Boiler*
6/15/1958	New stack	*General*
8/14/1958	Both front valves new	*Cylinder*
8/29/1958	Left front cylinder rebored new piston and ring	*Cylinder*
	Left rear cylinder new piston & ring	*Cylinder*

Shop Log: Loco No. 1

1959 Removed 6 staybolts for sheet inspection - 3 broken bolts - Repaired two loose braces - Ok above flues - caulked patch bolts back head - King - Inspector

6/30/1959	Boiler Re-tubed	*Boiler*

1960 Hydroed boiler - 3 broken staybolts back door sheet - One busted tube right side - Caulked front flue sheet seam - One front flue sheet brace loose - Flynn - Inspector

8/8/1960	New crankshaft front	*Crankshaft (boxes)*
	Rear crankshaft ground	*Crankshaft (boxes)*
	Both front cylinders news	*Cylinder*
	Both rear cylinders rebored	*Cylinder*
	Both rear valves new	*Cylinder*
7/10/1961	Boiler re-tubed	*Boiler*
8/8/1961	New Main Shaft rear with new boxes	*Main Shaft (boxes)*
	Rear crankshaft new	*Crankshaft (boxes)*
8/9/1961	New Box right rear	*Crankshaft (boxes)*

June 12, 1962 - Hydroed Boiler: 170 lbs following repairs made. Removed 7 broken stay bolts / entered boiler for internal inspection – found interior ok / renewed 1 broken stud at angle bar left side of fire box / removed all wash out plugs – washed out boiler – applied plugs

8/11/1962 New Main Shaft Front with new boxes - New 4340 main shaft front, bought *(11/27/1961)* from Brad Foote gear works. Order no. C9609 - shipping order no. 1318411, blue print #112-A-9 (modified) Cog bore 4.744 (key-way on cog ¼") 115 ton shaft 4.750 Main gear base 4.620, tool marks inside of this new gear from Grant 5.9.1962, gear scored somewhat while being pressed on shaft and required 95-100 tons to be pressed. Holes found in teeth. Shaft 4 ⅝ (4.625) Ratchet bore 4.372 20 ton Shaft 4 ⅜ (4.375)

	The above shaft was installed front	*Main Shaft (boxes)*
7/2/1963	Front & rear shafts re-ground & new boxes	*Crankshaft (boxes)*
	Left & right front valve sleeves ground, new spools & new valve rings	*Cylinder*

Left rear cylinder bored & valve seat planed. New piston & new rings. D-valve was re-faced after inspection that yoke fit properly *Cylinder*

	Right rear piston & D-valve re-newed, valve seat in cylinder planed	*Cylinder*
6/1/1964	New boxes rear	*Crankshaft (boxes)*

Left rear cylinder bored to 8.603, right rear check at 8.389 small, 8.396 large / Right front piston valve ground & fitted with new spool & rings *Cylinder*

	Left front piston valve ground & fitted with new spool & rings	*Cylinder*

8/4/1964 Right front piston valve & sleeve replaced with another which was slightly small on outside surface so was built up with nickel weld. New spool & new rings in re-ground sleeve *Cylinder*

8/7/1964 New crank shaft with one new box on D.E. & used box re-bored G.E., both boxes approx. 3/32" oversize in jaw, G.E. box built up on one side with electric braize & bored in center front *Crankshaft (boxes)*

10/3/1964	New boxes front	*Crankshaft (boxes)*

5/1/1965 Left rear cyl. Valve seat built up & planed, new D-valve, new stem, bored out & new piston & rings. Crack under valve chest chipped out & brazed *Cylinder*

	Left front piston valve sleeve ground & fitted with new spool & rings	*Cylinder*

Right rear cylinder planed, new D-valve with new stem, new piston & piston rings, new piston stem *Cylinder*

Right front piston valve sleeve ground & fitted with new spool & rings. New piston in cylinder with new piston rings & stem *Cylinder*

8/1/1965	Right & Left Front valve sleeves replaced	*Cylinder*

6/1/1966	Right & Left Front valve sleeves replaced	*Cylinder*
7/22/1966	New Main Shaft rear	*Main Shaft (boxes)*
8/1/1966	Right & Left Front valve sleeves replaced	*Cylinder*
9/1/1966	New crank shaft rear	*Crankshaft (boxes)*
	Above crankshaft broke & was replaced by another new shaft	*Crankshaft (boxes)*
10/1/1966	Front & rear shafts re-ground & new boxes	*Crankshaft (boxes)*
5/1/1967	Right & Left Front valve sleeves replaced	*Cylinder*
7/1/1967	Front shaft re-ground, new boxes applied	*Crankshaft (boxes)*
8/1/1967	Right & Left Front valve sleeves replaced	*Cylinder*
10/1/1967	Boiler re-tubed, new flue sheet front and new smokebox	*Boiler*
11/1/1967	New Main Shaft front	*Main Shaft (boxes)*
	Left rear cylinder bored & planed - applied 4/68	*Cylinder*
6/1/1968	Left rear cylinder - new piston & rings applied	*Cylinder*
	Left Back/Left front - valve rod brackets re-brushed & new pins applied to eccentric rod connectors.	*Cylinder*
	Steam lines to cylinder reworked. New mud plug applied in barrel of boiler. Angle iron applied over back head for cab fastening.	*Boiler*
	Both back valves inspected - gaskets annealed & shim plates adjusted	*Cylinder*
8/1/1968	Front shaft re-ground, new boxes applied	*Crankshaft (boxes)*
	New cab ordered - old cab removed	*General*
	2 new engine wheels applied front end	*General*
9/1/1968	New ash pan applied	*General*
	Water cocks relocated - Teflon flexible lube lines applied	*Boiler*
10/1/1968	Teflon oil lines	*General*
	New ash pan	*General*
6/1/1969	New cab applied	*General*
	Rear shaft turned & reground - new boxes applied	*Crankshaft (boxes)*
	R.F. valve sleeve new	*Cylinder*
	Cylinder rings - R. Rear - R.F. & L.F. inspected R & L.F. valve rings - new L.F. - R.F.	*Cylinder*
6/1/1970	New rear crankshaft and boxes applied	*Crankshaft (boxes)*
	Right rear crank jaw in frame out of alignment. Built up with electric weld and ground out to correct this	*Crankshaft (boxes)*
7/1/1970	New tire - left rear	*Main Shaft (boxes)*
8/31/1970	Front crankshaft re-ground, new boxes applied - Center bearing the same	*Crankshaft (boxes)*
6/1/1971	Arc Welded frame front of right rear cylinder	*General*
7/1/1971	Arc Welded frame adjacent to previous weld right rear cylinder	*General*
8/1/1971	Arc Welded main frame between ratchet cross member & front main shaft right side	*General*
5/3/1976	Hydrostatic test @ 221 lbs. - one leaking stay rivet in flue sheet; Badly cracked dome cover - replaced 5/4/1976 with same from #3 loco	*Boiler*
	Internal inspection revealed ALL stays in good shape; All points in place & all cotter pins present. Crown rivet tight. Some flues badly corroded	*Boiler*

Shop Log: Loco No. 1

5/4/1976 Boiler checks ground *Boiler*

5/7/1976 Mud ring scraped out & washed *Boiler*

5/10/1976 Built new tender frame *General*

5/15/1976 Tender completed, assembled engine - Ready for service *General*

5/16/1976 Engine fired up for work train on 5/17/1976 *General*

5/17/1976 Shutoff valve for injector badly fouled up - nut holding valve in body stripped. Valve replaced w/ 2nd hand Lunkenhymer *Boiler*

6/1/1976 Replaced r. side upper threaded stud for cab support in boiler *Boiler*

6/1/1976 Set valve timing on front cylinders - Three (5 degree BTDC, TDC, 5 degree ATDC) drilled marks on eccentrics are NOT accurate for proper timing, nor are they identical. *Cylinder*

6/2/1976 Set rear valves & tightened backing plates on all *Cylinder*

6/2/1976 New bushing shrunk on R.F. counterbalance & new connecting rod with C.P. brass. New crosshead brass on same. NOTE: All valve seats, valve yokes & slide valves in good condition except L.R. - seat was built up at least once w/ braze & is cut in deeply - Braze is now very thing but apparently relatively flat & un-scored. *Cylinder*

6/3/1976 Stud inside cab holding bracket support for L. Auxiliary steam lines replaced *Boiler*

6/3/1976 R.F. connecting rod reshaped to keep C.H. & C.P. brass in alignment *Cylinder*

6/7/1976 Engine dropped R.F. main box binder on passenger run 6/6/76. 1 stud broken off in frame - removed by cutting & tapped. (Box jumped out of jaws causing itself, crank pin & box to heat excessively *General*

6/13/1976 Leaking boiler check repaired *Boiler*

6/26/1976 Replaced leaking economrer gasket & repaired leaking boiler check again Boiler

6/27/1976 Back 3 grates replaced *Boiler*

6/29/1976 Both crankshafts Magnafluxed - front shaft has several cracked teeth (marked with X's) otherwise OK - Rear shaft appears perfect. *Crankshaft (boxes)*

7/13/1976 Swing Checks in injector lines removed & ground *Boiler*

7/30/1976 Stack exhaust linkage re-worked to allow Side Exhaust to open fully *General*

8/1/1976 New exhaust nozzle installed & petticoat raised *Boiler*

8/1/1976 Pad bolt installed R. side *General*

1976 Total Season Trips: 43 *General*

1981	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Nov***
Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*



Locomotive No. 2 - *Ammonoosuc*

Date	Repairs	Category
1/1/1876	Built by Manchester Loco Works	*General*
1/1/1905	New Boiler - water glass length 21 ¼"	*Boiler*
7/1/1938	New barrel	*Boiler*
6/15/1954	Boiler re-tubed	*Boiler*
8/22/1956	Right front piston and rings new	*Cylinder*
10/20/1957	Rear shaft ground new boxes	*Crankshafts*
	Right rear cylinder new piston and rings	*Cylinder*
	Right rear cylinder valve seat planed with new valve and gate	*Cylinder*
	Left front cylinder new piston and rings; valve seat planed with new D-valve and yoke	*Cylinder*
8/20/1958	New main shaft and boxes - rear	*Main Shaft (boxes)*
	New crank shaft with boxes rear	*Crankshafts*
8/8/1960	Rear crank shaft ground	*Crankshafts*
10/12/1960	Left front cylinder rebored new piston	*Cylinder*
	Right front cylinder new piston and rings	*Cylinder*
6/25/1961	New main shaft and boxes - rear	*Main Shaft (boxes)*
10/31/1961	All pistons & piston rings checked & OK	*Cylinder*
11/10/1961	Shaft Magnafluxed and gears turned; New boxes applied / installed rear (Inspected July 1969 - OK)	*Main Shaft (boxes)*
	New crank shaft and new boxes rear	*Crankshafts*
5/15/1962	New crank shaft and new boxes front	*Crankshafts*

Shop Log: Loco No. 2

June 20, 1962 - Hydroed boiler: 170 lbs following repairs made. Renewed 3 broken stay bolts / entered boiler for internal inspection – applied one new pin to right front flue sheet – renewed left front corner mud plug – removed all washout plugs – washed out boiler applied plugs.

8/31/1962 Front shaft re-ground, old boxes bored to fit *Crankshafts*

9/7/1962 LB cylinder - new rings (cyl. bore - 9.065 - 9.071) Crosshead from #1 & piston rod - with piston from #2; LB crank pin bearing - new; RB wrist pin bearing - new; Cause Piston key sheared pushed out head. *Cylinder*

10/1/1962 Left front piston & piston rings checked OK; new D-valve and yoke *Cylinder*

10/3/1962 Right front cylinder bored, new piston & piston ring & valve seat planed, new D-valve *Cylinder*

10/4/1962 Left rear cylinder bored, new piston & piston ring, valve seat planed, new D-valve & yoke *Cylinder*

10/6/1962 Right rear cylinder, piston and piston ring checked OK, valve seat was planed & new D-valve *Cylinder*

7/17/1963 Rear shaft re-ground, new boxes *Crankshafts*

10/7/1963 New main shaft front, shipment #603-1704, shipping date 6.15.62 from letter of *(10-30-61)* and 4-11-62; 4140 steel, rough turned, finished here to 4.840 on Cog surface, 4.732 Main and 4.447 ratchet surface. Code on gear end of shaft is BSCD 6 62 836 E 646E189. Installed with new boxes *(10-7-63)* *Main Shaft (boxes)*

6/10/1964 Rear shaft re-ground, new boxes *Crankshafts*

7/18/1964 Front shaft re-ground, new boxes *Crankshafts*

10/12/1964 Left rear cylinder checked OK *Cylinder*

Right front cylinder D-valve checked OK, piston ring shows some lateral play, pins tightened in ring *Cylinder*

Right rear piston ring & piston new, cylinder checked 8.379 small and 8.390 large, D-valve checked & OK *Cylinder*

10/12/1964 Left rear Cylinder checked OK, D-valve OK also *Cylinder*

5/1/1965 Left front cylinder bored out, new piston, ring. Valve seat planed & new D-valve installed *Cylinder*

7/19/1965 New main shaft rear, BSCO 5-64-521, E, 650H012; Cog surface 6", Main gear 6", Ratchet 5 ⅝". Bearings 4". Wheels 3 ½" OAL 66 ⅛". Cog required 55 yon, Main 50. Manal spec. bronze used in new bearings, Installed *(7-19-65)* / Main gear on above shaft is drawing #1620 Long & short addendum system from order (BFGW) #E3888, new (checked and OK - July 1969) *Main Shaft (boxes)*

Rear shaft replaced with long & short addendum system drawing #1620, B.F.G.W. order #E-3887 No fillet between Crank & Cam surface or between cam & crank boxes on either side, leeway on gear end was cut 90 degree wrong and this is stamped in root of Keresy *Crankshafts*

10/1/1966 Boiler re-tubed *Boiler*

7/1/1967 New front shaft installed with new boxes *Crankshafts*

10/1/1967 Rear shaft ground, new boxes *Crankshafts*

Left rear cylinder planed & counterbored *Cylinder*

Left front cylinder D-valve seat built up & planed. Cylinder was bored, new piston & ring *Cylinder*

Crank pin bearings rear renewed *Crankshafts*

7/1/1969 Rear shaft removed account broken frame jaw RB; Jaw welded - new bozes applied - shaft re-ground *Crankshafts*

Front crank pin bearings *Crankshafts*

Rear crank bearings *Crankshafts*

8/1/1969 New Teflon lubricator lines applied *General*

Left rear cylinder saddle broken - frame also broke back of cylinder - cylinder saddle brazed and planed - frame welded - engine needs new frame *Cylinder*

1/1/1970 New frame applied - Rear brake: change of fulcrum on brake lever; thus, single adjustment; New 3" flexible exhaust lines applied. *General*

Two 9-inch cylinders - top valve; Two rebuilt cylinders applied - bottom valve; On forward steam - each cylinder has new 2" Barcos; Cylinder cocks on engineer's side - vent horizontal *Cylinder*

5/17/1971 Steam gauge checked; gauge line annealed; Boiler hydroed 180 lbs/sq in *Boiler*

9/1/1971 New firebox liner for door *Boiler*

9/25/1971 Checked & applied new steam gauge *Boiler*

9/1/1972 Saddle studs R.S. *Boiler*

9/16/1972 Stack repaired *General*

5/11/1976 Hydrostatic test @ 221 lbs. - 4 leaking plugs in cab, 2 on each side of boiler just in back of the water cocks. Right side front cab mount (upper stud) leaked *Boiler*

Repaired R.R. corner iron in cab. Ran 2 vertical rods (R&L Rear) from roof to center hole of rear corner irons; ran one horizontal rod from side to side just above door. Replaced or tightened loose bolts. *General*

Boiler checks ground *Boiler*

5/15/1976 Internal inspection revealed somewhat rugged crown sheet but rivets & crown bolts all tight. 1 missing cotter pin in L.F. sling stay - was replaced most stays fair to poor. *Boiler*

Warning bell repaired *General*

5/21/1976 Mud ring cleaned *Boiler*

6/1/1976 Main box badly worn RR; RR crank box badly cracked & burned due to excessive hearing in Fall '75. Both boxes pulled Main Shaft (boxes); *Crank Shafts*

6/3/1976 New main box installed - crank box cleaned up inside & new grease grooves cut (both RR) C.B. reinstalled Main Shaft (boxes); *Crank Shafts*

6/6/1976 LR main box replaced *Main Shaft (boxes)*

6/7/1976 LR eccentric & eccentric strap replaced a new *Cylinder*

6/10/1976 New main binder RR *Main Shaft (boxes)*

6/10/1976 New Crank pin brass LR *Crankshafts*

6/12/1976 "New roof, 3 new rafters - new crosspiece atop door" *General*

6/13/1976 New piston rings L.R. *Cylinder*

6/14/1976 New piston rings L.F. *Cylinder*

6/15/1976 Broken steam line to generator repaired *General*

6/16/1976 New piston rings R.F. *Cylinder*

6/16/1976 New valve sleeve L.F. *Cylinder*

6/16/1976 New valve spool & rings L.F. *Cylinder*

6/20/1976 "All valves set, timed & marked" *Cylinder*

6/22/1976 Engine fired up for test run - rough as hell - possibly out of time or valve setting incorrect on one cylinder *General*

6/24/1976 R.R. valve timing defective - sleeve was pressed incorrectly - valve was put to right & engine timed (was found to be way out) NOTE: L.F. & R.R. eccentrics badly worn. *Cylinder*

6/25/1976 Engine fired up for passenger run on 6/26/76 *General*

6/26/1976 L.R. crankpin brass heated excessively, seized, replaced *Crankshafts*

Shop Log: Loco No. 2

6/26/1976 Made 1st passenger run - lubricator quit - repaired by installing the tension spring in the oil feed valve, which was neglected when new valve was installed on 6/22/1976 *General*

6/27/1976 NOTE: On the morning of 6/27 a ¾" (approx) crack was noticed in the throat sheet L. side top. Engine was sidelined *Boiler*

7/2/1976 Mr. Malansen was called & approved A*(rthur)* Minot to weld throat sheet *Boiler*

7/3/1976 Hydrostatic test @ 221 lbs - seam next to weld weeped *Boiler*

7/3/1976 Secondary pop valve found to be defective - replaced with new 2 ½" Crane Air Pop - blow-down ring machined out for ⅔ rds, more clearance for steam - set at 140 lbs - 5 lbs blow back. *Boiler*

7/4/1976 Magnafluxed both shafts (all ok) *Main Shaft (boxes); Crank Shafts*

7/14/1976 Leaking tender seam repaired *General*

7/28/1976 New L.F. eccentric *Cylinder*

7/28/1976 Removed L. side forward steam piping & installed Barco new bushing threaded into cylinder & new pipes installed *Cylinder*

7/28/1976 New roller in block *General*

7/29/1976 Brakes adjusted *Crank Shafts*

7/29/1976 Exhaust & Forward Steam lines all tightened - new Barco gaskets *Cylinder*

8/1/1976 Crack appeared in curve at the top of back head. After grinding, crack was approximately 14" long with many smaller fatigue cracks radiating from main split. Mr. Malansen was called & boiler was condemned - engine sidelined for the duration *Boiler*

8/1/1976 Began stripping engine to remove boiler *General*

1976 Total Season Trips: 87 *General*

1981	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***		***Total***
Trips	*0*	*8*	*7¼*	*61½*	*29¼*	*16½*		*122½*

1992	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Nov***	***Total***
Trips	*12*	*23*	*60*	*35*	*6*			



Locomotive No. 3 - *Base Station*

Date	Repairs	Category
1/1/1883	Built as #2 GMRR, Maine - became #5 MWR *(1895)*	*General*
1/1/1909	New Boiler	*Boiler*
1928	Retubed (from single typed page #3 Locomotive found in MWCR files)	
1938	Retubed / New flue sheet - front - and barrel patch	
1941	1 Staybolt - TS RS1 - frontend seam leak	
1951	Inspected 6.51 - one broken boiler brace - 3 staybolts	
1952	3 staybolts - New tubes - Two bottom rows	
1953	Boiler inspected 6/53 and retubed	
6/10/1953	Boiler re-tubed	*Boiler*
7/10/1954	New main shaft front	*Main Shafts & Boxes*
	New crank shaft front	*Crankshafts & Boxes*
	New crank shaft rear	*Crankshafts & Boxes*
	New main shaft rear	*Main Shafts & Boxes*
9/27/54	All cylinders taken off vave seats planed	*Cylinders*
	All cylinders new pistons and rings	*Cylinders*
6/22/1955	Boiler patched right side	*Boiler*
7/9/1956	Right front cylinder changed	*Cylinders*
	New valve and new piston and rings	*Cylinders*
7/15/1956	Front shaft ground - new boxes	*Crankshafts & Boxes*
9/14/1956	Rear shaft ground - new boxes	*Crankshafts & Boxes*
1957	Hydroed boiler - 6 broken bolts - caulked rivets and seam in front flue sheet - Interior inspection ok - James King - Inspector	
9/8/1957	Right rear valve seat planed	*Cylinders*
	Right rear valve with yoke new	*Cylinders*
1958	Hydroed boiler - 4 broken bolts - Internal inspection ok - James King - Inspector	
5/10/1958	Left front cylinder piston and rings	*Cylinders*
	Right front cylinder rebored - new rings - valve seat planed new valve and yoke	*Cylinders*

Shop Log: Loco No. 3

1959 Removed and applied 20 tubes - Removed and applied 12 rivets bottom of front flue sheet - Hydroed boiler - 2 broken staybolts - Tightened braces - R & L sides of boiler - Internal inspection ok above flues - James King - Inspector

1960 Hydroed boiler - 7 broken staybolts - 5 on door sheet - one R side and one L side - Internal inspection ok above flues. Welded two cracks top of door sheet - Flange Knuckle - W. R. Flynn - Inspector

8/12/1960	Rear shaft ground - new boxes	*Crankshafts & Boxes*
10/10/1960	Front shaft ground - new boxes	*Crankshafts & Boxes*
9/8/1961	New front shaft & crank	*Crankshafts & Boxes*
10/1/1961	Left rear cylinder bored - valve seat planed - new valve and yoke - new piston & rings	*Cylinders*
	Right rear cylinder bored - valve seat planed - new valve & yoke - new piston & rings	*Cylinders*
10/23/1961	Left front & right front piston rings checked - new D-valve on both	*Cylinders*
11/27/1961	New 4340 shaft with new boxes bought from BFG Order #C9609 - Shipping order #B-18411.	*Main Shafts & Boxes*

June 22, 1962 - Hydroed boiler: 170 lbs following repairs made – tapped out front belly plug – have applied new plug / caulked patch on right side of back head – entered boiler for international inspection – tightened one front flue sheet brace on right side – applied new pin to same – removed all washout plugs – washed out boiler – applied same.

7/14/1962	Rear shaft ground - new boxes	*Crankshafts & Boxes*
8/3/1962	Right front main box new	*Main Shafts & Boxes*
5/1/1963	Left front cylinder bored to 8.410, new piston & new piston rings	*Cylinders*
	Right front cylinder checked 8.595, new piston and rings	*Cylinders*
10/11/1963	Front shaft ground, new boxes on drum end, used box re-bored on gear end	*Crankshafts & Boxes*
11/5/1963	Installed in rear	*Main Shafts & Boxes*

5/1/1964 New cranks shaft rear, received 10/22/1962; Flame hardened to 350-380. New box on drum end, used box was built up one side & bored true for rear end, installed" *Crankshafts & Boxes*

5/1/1964	All cylinders & rings checked O.K.	*Cylinders*

8/15/1964 New main shaft front, for shaft specs and shipping date see Loco #8 from of 9/15/1963. This shaft was installed with new boxes 8/15/1964" *Main Shafts & Boxes*

May 1965	Left & right front D-Valve castings built up & milled to fit yoke	*Cylinders*
	Pins tightened in piston rings both fron Cylinders	*Cylinders*
	Both rear pistons, rings & D-valves checked - O.K."	*Cylinders*

6/25/1965 New barrel applied, new front flue sheet, flues installed, ⅔ staybolts put in throat sheet & both side sheets, lower half of inside side sheets renewed & electric welded in place, new blow down valve (Okade) new 3" main steam valve. All boiler braces checked & tight, boiler hydroed to 180 lbs, new safety valve installed in dome." *Boiler*

8/1/1967	New Main shaft rear	*Main Shafts & Boxes*
July 1968	New stack applied - water cocks relocated	*Boiler*
	Waterglass mounts relocated	*Boiler*
	Main shafts & gears cleaned & inspected - indicated for run out - all ok	*Main Shafts & Boxes*

L.F. cylinder new piston & rings - X-head pin & bearing new - injectors reworked - new fittings applied - new cab applied - copper oil lines from lubricator to cylinders replaced with Teflon™ flexible lines - Cylinder cocks operating mechanism modified - Lubricator was out. *General, Cylinders, Boiler*

Front crank shaft reground - (center bearing new) - 2 new bronze boxes *Crankshafts & Boxes*

6/1/1970	New bottom to ashpan applied	*General*
7/1/1970	New tire - left rear	*General*
8/22/1970	New front crank shaft and boxes applied	*Crankshafts & Boxes*
9/27/1970	New right rear crank shaft bearing applied	*Crankshafts & Boxes*
10/7/1970	New stack screen applied	*General*
5/17/1971	Gauge checked 180 lbs./sq. in. Hydroed	*Boiler*
August 1971	Complete set of new brake linings	*Main Shafts & Boxes*
	New rings applied LB & LF cylinders	*Cylinders*
	New crosshead brasses applied to LR & LF	*Crankshafts & Boxes*
	New brake arm pivot rear applied	*General*
	Both rear D-valve yoke wear checked	*Cylinders*
	Cam strap pins applied on front end	*Cylinders*
	Two rear cam straps holds built up with arc weld	*Crankshafts & Boxes*
	Left rear pin reamed 1 1/16"	*Crankshafts & Boxes*
	Right rear pin reamed 1 ⅛"	*Crankshafts & Boxes*

Welded main frame (arc) between boiler support and ratchet lifter assembly *General*

	Arc welded broken frame LR cylinder	*General*
	Welded crack left side frame ⅓ of the way down	*General*
	New center bearing casting applied to rear	*Crankshafts & Boxes*
	Applied 3 long Teflon lines. RF, LF, & LR	*General*

New machined exhaust 3" line nipples front & back of stack exhaust valve. *General*

9/1/1971	Applied ⅛" shims between top of front axle bearing & frame	*Main Shafts & Boxes*

9/18/1971 R.F. Cylinder bore 8.635 - new piston & rings; R.B. cylinder bore 8.548 new rings; L.F. cylinder bore 8.465 new rings; L.B. cyinder bore 8.305 new rings; New crank pin bearing L. F.; New crank pin bearing L.B. *Cylinders*

9/23/1971	Adjusted valve plates	*Cylinders*
7/1/1972	Rear crank shaft broke - new applied	*Crankshafts & Boxes*
Sept 1972	New main bearing applied - front main	*Main Shafts & Boxes*
	Front crank turned - applied with new bearings	*Crankshafts & Boxes*
	Center bearing babbitted	*Crankshafts & Boxes*

5/4/1976 Hydrostatic test @ 221 lbs - 2 broken stay bolts - back sheet just above Firebox door - leaking blowdown (extremely stiff-acting valve) Possible leaking pad bolt - r. side. Leaking seam in fire box just above door - needs caulking *Boiler*

5/11/1976	Mud ring scraped & washed	*Boiler*
	Boiler checks ground	*Boiler*

5/15/1976 Internal inspection revealed several poor, badly corroded longitudinal stays & flues in generally poor condition - Dryline has been chafing on crown bolt & appears quite thin at that one point *Boiler*

5/21/1976	Mud ring cleaned	*Boiler*

Shop Log: Loco No. 3

6/25/1976	Replaced 2 staybolts mentioned on note of 5/4	*Boiler*
	New dome cover completed & installed	*Boiler*
6/27/1976	Engine assembled, fired up, made 1st uneventful passenger run	*General*
7/1/1976	Engine sidelined due to 1 broken & 1 Leaking pad bolt - old bolts removed	*Boiler*
7/2/1976	L.R. exhaust flange leading badly - flange & section of pipe removed - 3 stud holes drilled, tapped & helicoils placed	
	R. Side injector removed & disassembled - all seats ground - overflow valve was very poor.	*Boiler*
7/8/1976	4 new pad bolts installed, r. side (welded through both sheets) & new pad made"	*Boiler*
7/10/1976	4 new pad bolts installed L. Side	*Boiler*
7/11/1976	Magnafluxed both cranks	*Crankshafts & Boxes*
	Exhaust nozzle found to be broken as it enters Smoke chest - straightened, welded. Blower nozzle tightened up, straightened & welded.	*Boiler*
7/17/1976	Caulked leaking seams in two places on patch above Firebox door	*Boiler*
7/23/1976	Welded exhaust line - broken @ "Y"	*Boiler*
	Adjusted brakes	*General*
8/1/1976	New side stack valve	*General*
	Front brakes relined	*General*
	Badly leaking flue welded	*Boiler*
8/2/1976	Welded new rim around stack - new bonnet & new rim welded on stack - all the way around.	*Boiler*
8/3/1976	New brass in L.R. valve stem guide	*Crankshafts & Boxes*
9/1/1976	New water glass & gaskets	*Boiler*
	Repaired crack in R.R. eccentric strap	*Crankshafts & Boxes*
	1976 Total Season Trips: 177	*General*

1981	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Total***
Trips	*0*	*0*	*48*	*43*	*39¼*	*15½*	*146*

1992	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Nov***
Trips	*18*	*27*	*53*	*51*	*2*		



Locomotive No. 4 - *Summit*

Date	Repairs	Category
1883	Built as *Mt. Desert* GMRR - became MWR No. 4 *(1895)*	*General*
1/1/1908	"New Boiler - water glass length 19 5/8"	*Boiler*
6/1/1948	Boiler re-tubed	*Boiler*
	New flue sheet front	*Boiler*
5/15/1955	New main shaft front	*Main Shaft (Boxes)*
	New Main shaft rear	*Main Shaft (Boxes)*
	New crank shaft front	*Crankshafts and boxes*
	New crank shaft rear	*Crankshafts and boxes*
6/13/1955	Rear cylinders bored out	*Cylinders*
	Valve seats planed	*Cylinders*
	4 new pistons with rods & rings	*Cylinders*
	New Piston valves front	*Cylinders*
7/15/1956	New Piston valve left front	*Cylinders*
8/19/1956	Front shaft ground new boxes	*Crankshafts and boxes*
6/5/1957	New piston valves left and right front	*Cylinders*
8/15/1957	New crank shaft front with new boxes	*Crankshafts and boxes*
8/29/1957	New piston valves left and right front	*Cylinders*
	New piston and rings LF	*Cylinders*
10/10/1957	All piston and rings checked O.K.	*Cylinders*
6/6/1958	Both rear cylinders rebored - valve seats planed - new valves with new piston and rings	*Cylinders*
9/13/1958	Front crank shaft ground - new boxes	*Crankshafts and boxes*
7/23/1959	New main shaft front	*Main Shaft (Boxes)*
	New crank shaft with new boxes rear	*Crankshafts and boxes*
8/12/1960	Rear crank shaft ground new boxes	*Crankshafts and boxes*
6/30/1961	Boiler re-tubed	*Boiler*
9/1/1961	New valves and valve rings 2 front cylinders	*Cylinders*
10/31/1961	All pistons & rings checked & OK	*Cylinders*
5/1/1962	Right front piston valve new	*Cylinders*

Shop Log: Loco No. 4

June 18, 1962 - Hydroed boiler: 170 lbs following repairs made. Renewed 4 broken stay bolts – caulked left front side of Walker sheet. Welded left top flue sheet flange – entered boiler for international inspection – renewed 2 pins in front flue sheet 13 more on right side – removed all washout plugs – washed out boiler – applied plugs.

7/2/1962	Rear crank shaft new with one new box on B.E. and used box re-bored on B.E.	*Crankshafts and boxes*
8/2/1962	Right front piston valve with cage 50% step seal 2.625 rings	*Cylinders*
8/2/1962	Right rear piston, ring, stem new"	*Cylinders*
5/1/1963	New piston & piston ring right front	*Cylinders*
7/26/1963	Shaft with BB and A stamped on gear end was Magnafluxed and put between center & O.K. This shaft installed front	*Main Shaft (Boxes)*
	Front crank shaft ground - new boxes	*Crankshafts and boxes*
8/14/1963	Shaft with (CC) stamped on main gear end and #10 stamped on ratchet end was Magnafluxed, then heated between centers in an attempt to straighten. After heating and using water on reverse side of bend this shaft was still .035 to .040 out of true. This shaft was installed rear.	*Main Shaft (Boxes)*
May 1964	Left front cylinder rebored, new piston & ring, valve cage ground, new piston valve & rings	*Cylinders*
May 1964	Left rear cylinder rebored, new piston & ring, valve seat planed, new D valve	*Cylinders*
	Right front valve cage ground, new rings	*Cylinders*
	Right rear cylinder rebored, new piston & rings, valve seat built up & planed new D Valve	*Cylinders*
	Right & left rear counterbalances new	*Cylinders*
8/4/1964	New rings applied to left & right front valves	*Cylinders*
8/5/1964	Right front piston & stem new	*Cylinders*
6/11/1965	Right & Left front piston valve cages ground, new spools & rings, new gasket under right front cage	*Cylinders*
6/30/1965	Front crank shaft ground - new boxes	*Crankshafts and boxes*
7/2/1965	Rear crank shaft ground, new box on drum end, used box re-bored on gear end	*Crankshafts and boxes*
7/1/1968	Both front valve chest changed out	*Cylinders*
7/6/1968	This engine's boiler not sitting right in frame. New supports applied - engine used very little - no demand	*General*
7/1/1969	Frame broke off right side - broke in cylinder stud hole - welded frame - new type boiler support applied - engine test run - P.N.G. *(Pliney Granger)* says worked Ok	*General*
8/1/1969	New crank shaft applied & New boxes	*Crankshafts and boxes*
Sept 1969	Boiler re-tubed - *(Ray)* Gilman	*Boiler*
	Smoke screen new	*General*
	Flexible oil lines	*General*
5/10/1970	Tested Steam gauge 140#	*Boiler*
7/3/1970	Thirteen new rivets applied to bottom of front flue sheet. Flue sheet built up to full thickness with electric weld	*Boiler*
8/25/1970	Frame jaw slight crack Right rear jaw - frame jaws wearing out of line - New front crank boxes applied and shaft ground	*Crankshafts and boxes*
5/1/1971	Gauge checked & hydroed 180 lbs/sq. in.	*Boiler*



Crown sheet of the #4 - *David Huber: "The year I got stuck in the boiler inspecting ferrels on the front flew sheet. Wedged my hips between one of stay rods and top row of flews. Steve Christy had to heat the rod with torch to free me. Ever since this episode, I suffer claustrophobia, which seems to get worse as the years pass."*
- David Huber photo - MCWR: We Worked There (June 6, 2018)

8/24/1971 D valve cylinder from old #2 right front - new piston rings applied - Cam straps shortened 1 1/4" to accommodate D valve setup *Cylinders*

9/1/1972 Saddle studs renewed & saddle holes lined to carry load *General*

9/29/1972 New Main bearings applied - (Front) *Main Shaft (Boxes)*
New crank shaft & bearings applied front - Re-babbitt front center bearing *Crankshafts and boxes*

5/11/1976 Hydrostatic test @ 222 lbs - Leaking Barrel patch L. Side. 4 leaking rivets in a row - top of firebox door. Extremely thin, rusted through sheet - very bad leak next to welded stay-bolt in last row of stays before crownsheet in firebox just above door. This last area has already been Heavily padded w/ weld) several leaking seams including mudring. *Boiler*

5/15/1976 Internal inspection revealed 2 poor longitudinal stays, 3 fair stays. Crown sheet in excellent shape w/ good sling stays. Flues badly corroded especially at Back tube sheet. *Boiler*

5/17/1976 Boiler checks ground *Boiler*

5/22/1976 3 holes drilled in back inside sheet just above Firebox door. Sheet approximately 3/16" thick in all holes *Boiler*
Mud-ring cleaned *Boiler*

6/1/1976 Leak around staybolt inside firebox repaired & area padded *Boiler*

6/2/1976 A new section fo screen placed in bonnet to repair hole eaten out by worn out spark arrester *General*

6/3/1976 New spark arrester installed *General*

6/6/1976 New piston rings L.F. *Cylinders*

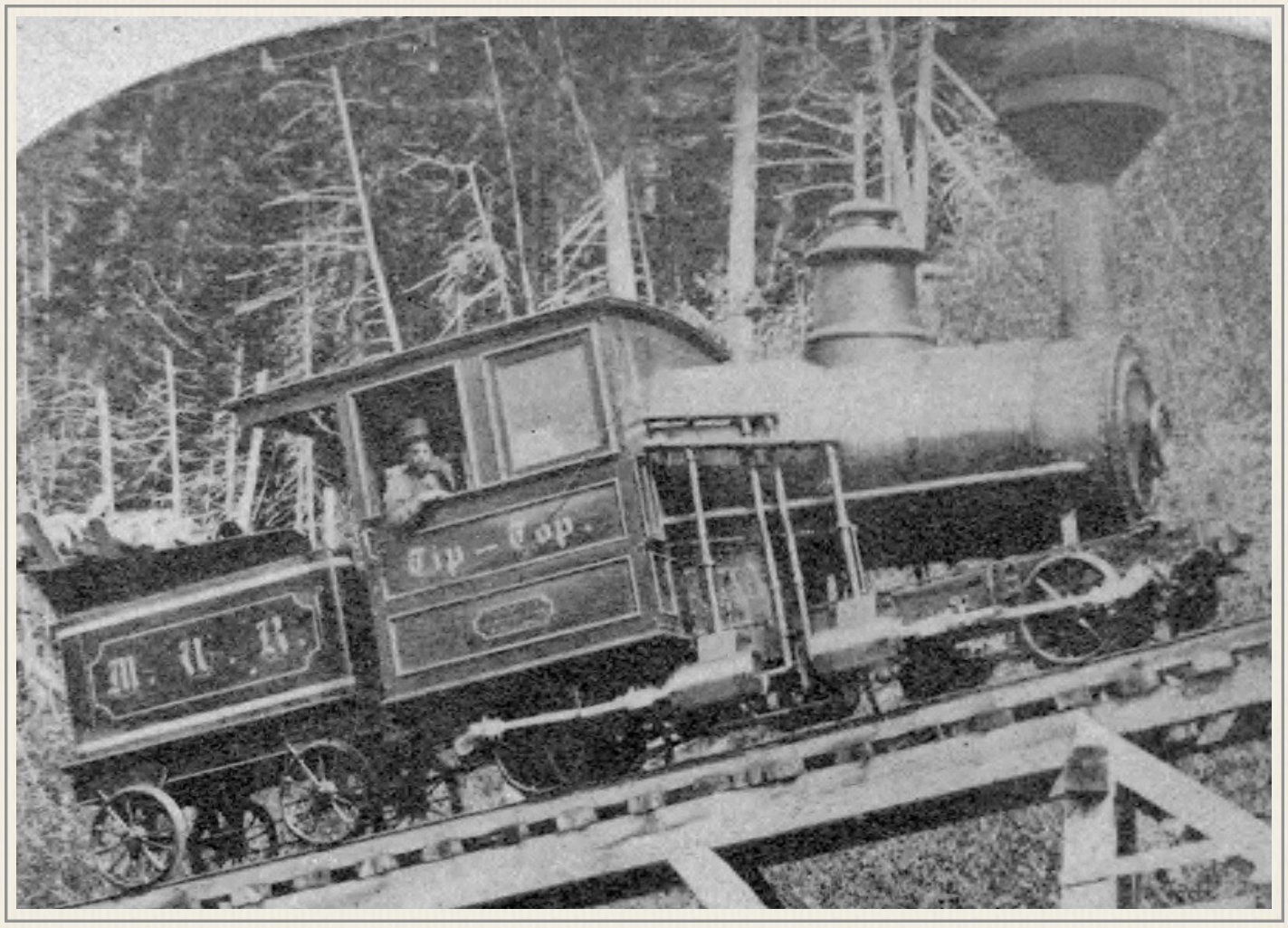
Shop Log: Loco No. 4

6/7/1976	New valve spool & rings L.R.	*Cylinders*
6/10/1976	Timed & adjusted all valves	*Cylinders*
6/11/1976	Cab mounting stud L. side bottom (in boiler) replaced	*Boiler*
6/12/1976	Engine prepared for service fired up made uneventful first passenger run	*General*
7/14/1976	Tightened up all forward steam lines	*Boiler*
	Repaired crack in boiler in back sheet just above mudring @ R.F. corner	*Boiler*
	Leaking tender seam repaired	*General*
7/15/1976	Magnafluxed both cranks & checked all valves for adjustment, readjusted R.R. & R. F.	*Crankshafts and boxes*
	Center x-member repaired	*General*
8/1/1976	Front brakes relined	*General*
	All exhaust piping tightened	*General*
	Blower pipe broken off & split - welded & reinstalled	*Boiler*
9/1/1976	Tender bearing R.F. fell apart - whole axle & bearings replaced	*General*
	R.F. crosshead replaced; R.F. inside guidebar replaced; R.F. crosshead brass replaced	*Cylinders*
	1976 Total Season Trips: 238	*General*

1981	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Total***
Trips	*0*	*4*	*24*	*33½*	*24¼*	*18*	*103¾*

1992	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Nov***
Trips	*4*	*34*	*49*	*61*	*5*		





Locomotive No. 6 - *Great Gulf*

Date	Repairs	Category
1878	Built	*General*
1/1/1905	New boiler - water glass length 20 5/8"	*Boiler*
7/15/1947	New frame and cylinders	*General*
6/23/1952	"Boiler retubed - length of tubes 70"	*Boiler*
5/15/1953	New crank shaft front new boxes	*Crankshafts (boxes)*
9/12/1955	New Main shaft front new boxes	*Main Shafts (boxes)*
5/10/1956	New Main shaft rear used boxes	*Main Shafts (boxes)*
8/1/1956	Used crank shaft rear new boxes	*Crankshafts (boxes)*
8/19/1957	Right and left front piston and rings new	*Cylinders & Valves*
9/20/1957	New crank shaft front new boxes	*Crankshafts (boxes)*
6/2/1958	Left rear cylinder rebored - new piston and rings	*Cylinders & Valves*
9/22/1959	New crank shaft rear new boxes	*Crankshafts (boxes)*
9/30/1960	Right and left front cylinders rebored with new piston and rings	*Cylinders & Valves*
9/30/1960	Right rear cylinder rebored new piston	*Cylinders & Valves*
10/12/1960	New cranks all around	*Crankshafts (boxes)*
9/25/1961	Right front cylinder rebored with new piston and valve	*Cylinders & Valves*
10/30/1961	Left rear piston & piston ring checked - ring shows wear O.K.	*Cylinders & Valves*
5/1/1962	Left rear rocker arm gas welded by P*(aul)* Ph*(ilbrick)*	*Cylinders & Valves*

June 17, 1962 - Hydroed boiler: 170 lbs following repairs made. Renewed 5 broken stay bolts – Renewed 19 bottom tubes – welded flue sheet flange and 7 5 bottom holes – renewed one rivet on left front side of barrel

patch – caulked at seam at same – entered boiler for internal inspection – tightened one front flue sheet on left side applied one new pin on same – removed all washout plugs – washed out boiler – applied plugs.

7/21/1962	New (soft) main shaft front & boxes	*Main Shafts (boxes)*
8/20/1962	New 4340 shaft with new main gear for # 6. The above was installed rear	*Main Shafts (boxes)*
8/27/1962	Used crank shaft front, ground new boxes	*Crankshafts (boxes)*
9/19/1962	Rear crank shaft which was installed in #6 *(9-22-59)* broke one tooth and was replaced by a shaft which was installed in #9 new in *7-8-62*. This shaft was re-ground, new boxes applied and installed #6	*Crankshafts (boxes)*
	Front shaft which was put in #6 on *8-27-62* was also removed and was replaced by front shaft from #9. This shaft was new on *9-14-58* and had been re-ground on *7-9-62*; it was ground again, new boxes applied and installed in front of #6	*Crankshafts (boxes)*
6/25/1963	Left & right front valve sleeves ground, new spools & new rings	*Cylinders & Valves*
	Left & right rear valves sleeves ground, new spools & new rings	*Cylinders & Valves*
7/3/1963	New 4340 shaft with new main gear, boxes were new in *7-21-1962*, were found to be O.K. so were re-installed. This shaft was installed front	*Main Shafts (boxes)*
7/1/1964	# 6 hydroed, 147 staybolts put in throat sheet, side sheets & butt, re-tubed with 229 new flues & flue sheets straightened, new partial side sheets welded in lower half of firebox on both sides. All work done in *10-63* but loco was not returned to service until *7-1-64*	*Boiler*
6/16/1965	All valve sleeves ground, new spools & rings	*Cylinders & Valves*
	Left front piston ring rivets tightened	*Cylinders & Valves*
	Right front piston ring rivets tightened	*Cylinders & Valves*
	Right rear piston & ring checked & O.K.	*Cylinders & Valves*
6/1/1968	#6 hydro - crack at throat sheet left side - patch applied & a Bader blow off valve applied	*Boiler*
	All rings & valves checked - rivets replaced	*Cylinders & Valves*
8/1/1968	Lateral rings applied - all main boxes	*Main Shafts (boxes)*
8/1/1968	New crank shaft applied - old boxes rebored for new shaft - lateral rings applied to end of boxes	*Crankshafts (boxes)*
June 1969	Rear crank shaft removed - bearings turned - new boxes applied & installed in #6 rear	*Crankshafts (boxes)*
	Pull pistons inspect rings - LF rings good for fair service	*Cylinders & Valves*
	Valves pulled - inspected rings - new rings applied all around	*Cylinders & Valves*
8/1/1969	Main boxes rear - removed & liners applied to take up lateral wear	*Main Shafts (boxes)*
5/1/1971	New lining in smoke box	*Boiler*
5/18/1971	Gauge checked and hydroed 180 lbs/sq. in.	*Boiler*
7/1/1971	Arc welded broken diagonal cross member; Arc welded cracked frame top between right side cylinders; Cracked frame welded between left cylinder and guide yoke; New rear linings applied - July and Aug 1971	*General*
	New elbow, new nipple and repaired & ground in seat to main steam dry line	*Boiler*
August 1971	Rear crank shaft ground new boxes	*Crankshafts (boxes)*
	New brake linings	*Crankshafts (boxes)*
6/1/1972	New tubes - 2 bottom rows plugged	*Boiler*
7/1/1973	New crank shaft (rear) & crank bozes old - just rebored	*Crankshafts (boxes)*
	New crank pin brass R.Rear	*Cylinders & Valves*

5/15/1976 Hydrostatic test @ 221 lbs. - 1 weeping staybolt in fire box just above door. Small leak in seam between side sheet & knuckle sheet L. side *Boiler*

5/17/1976 Internal inspection - No Problems *(crossed out then)* - sling stays acceptable, crown bolts O.K. Longitudinal stays acceptable, but poor. Front tube sheet & angle iron & anchors for stays badly rusted *Boiler*

Boiler checks ground - secondary safety valve broken internally *Boiler*

5/19/1976 Bad safety valve replaced by lever-type primary *Boiler*

5/24/1976 Rear brake relined & adjusted *Crankshafts (boxes)*

5/26/1976 Cleaned mudring - cut hole in frame to get into Fr. Water leg *Boiler*

Replaced steam gauge - old gauge probably frozen last winter - new gauge tested & reset *Boiler*

5/29/1976 Fired up for spare; replaced water glass *General*

6/3/1976 Old mud plug L. side back below floor boards was removed & mud ring was discovered to contain 6"-8" of rust & scale across back water leg - mud ring cleaned *Boiler*

Repaired rear brake arm fulcrum *Crankshafts (boxes)*

6/4/1976 Weldlet welded where old mudplug was cut out - new bronze plug installed *Boiler*

Pivot stud for grate shaker arm replaced *Boiler*

6/12/1976 Made uneventful 1st passenger run *General*

6/15/1976 Right Rear tender wheel removed - 2 set screws placed between wheel hub & internal bushing *General*

6/20/1976 Engine broke rear main shaft on passenger run of *6/20*. Cog gear was removed by cutting, was brought down with shaft in two pieces against flatcar & #10 loco" *Main Shafts (boxes)*

6/22/1976 Removed remnants of rear main shaft. Pressed #6 spur gear off broken shaft. *Main Shafts (boxes)*

6/23/1976 Put 175 tons pressure to press cog gear off #3's old 4340 main. Pressed off spur gears. Shaft taken to Berlin to have spur gear seat reduced to fit #6 spur gear - dye-checked new (used) shaft. *Main Shafts (boxes)*

6/24/1976 Pressed #6 spur gear on #3's main shaft @ 45 tons *Main Shafts (boxes)*

L. rear tender box in poor condition - packed with grease & reassembled *General*

6/27/1976 Installed rear shaft (Brad Foote gear) *Main Shafts (boxes)*

Dye checked rear crank - witnessed by: F. Kenison & E. Clark *Crankshafts (boxes)*

Old main boxes reinstalled w/ new brass spacers installed. NOTE: main boxes have approximately 1/16" play - crank boxes exc. *Main Shafts (boxes)*

6/28/1976 Crank replaced. Right rear connecting rod badly bent by main shaft failure. Straightened & replaced *Crankshafts (boxes)*

Engine completed - also installed new crosshead L. R. & New CH Brass *General*

Timed & adjusted rear valves *Crankshafts (boxes)*

7/8/1976 Rolled 2 leaking flues *Boiler*

7/9/1976 Replaced R. F. exhaust nipple *Boiler*

7/10/1976 New R.F. valve rings & sleeve *Cylinders & Valves*

7/12/1976 Right Rear crank box seized on passenger trip of 7/11/76. Box removed & turned - shaft cleaned up w/ emory cloth reassembled & shaft was bound. *Crankshafts (boxes)*

7/13/1976 Crank removed & boxes turned *Crankshafts (boxes)*

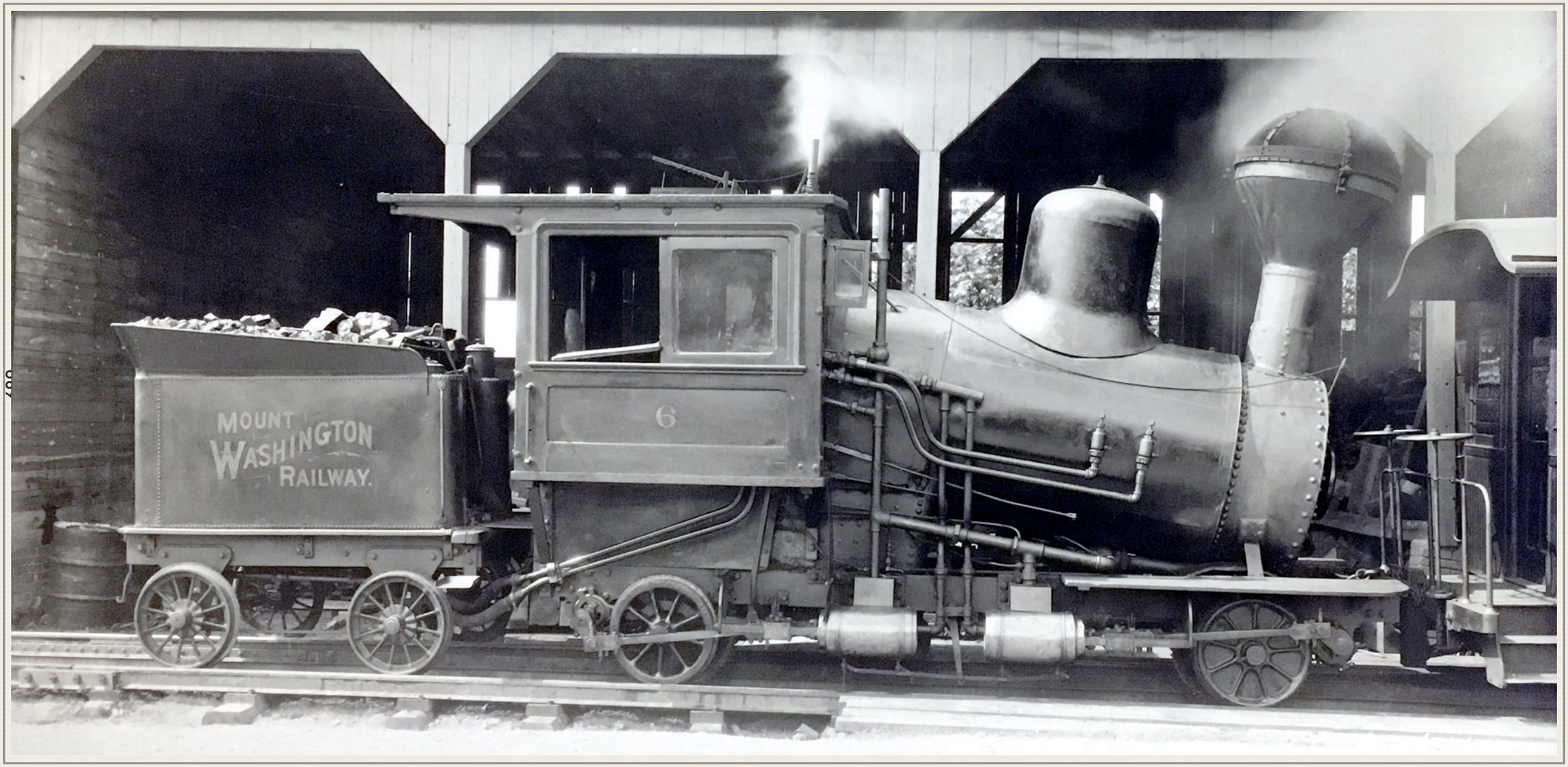
Shop Log: Loco No. 6

7/13/1976	R.F. Exhaust nipple tightened	*Boiler*
7/13/1976	New packing gland R.F.	*Cylinders & Valves*
7/16/1976	Replaced "union" nut and coupling in suction line into R. injector (nut was stripped - injector would not work)	*Boiler*
7/18/1976	"Set screw in Valve sleeve sheared - breaking rocker box to hell - new rocker, valve spool, sleeve & rings installed @ L.R. (broke passenger trip of 7/17/76"	*Cylinders & Valves*
7/20/1976	Welded incessantly leaking flue	*Boiler*
7/25/1976	Rear brake shoes torn apart on passenger trip of 7/24 - ran into fliprail at Waumbek. Shoes removed & straightened - new hard linings & adjusting rod added.	*Crankshafts (boxes)*
7/30/1976	Patch welded on outside of forward steam ell on R. side	*Boiler*
	Welded broken exhaust line	*Boiler*
August 1976	Smoke box caved in where front boiler mount presses - hammered out dent - welded new 3/8" backer inside, made new iron for boiler support (L. Side)	*Boiler*
	New crossheads R.R. & R.F. - New & head brass R.F.	*Cylinders & Valves*
	Petticoat bracket broken & petticoat dropped down - repaired.	*Boiler*
	L.F. tender wheel had new bushing made, pressed in - tender shaft built up with weld & machined @ end of shaft"	*General*
	Front tender boxes leaned and repacked w/ grease	*General*
	Blower pipe repaired (broken off) & Upper petticoat mount welded	*Boiler*
	Auxiliary steam piping (from L. side of main steam) replaced	*Boiler*
	New grates installed	*Boiler*
	Badly leaking flue welded	*Boiler*
	Old open position door latch *r*emoved & hole welded	*Boiler*
	Tender piping removed & tightened	*General*
	Repaired broken long. Stay - main steam valved broke on Passenger trip of *8/30/1976* - valve disassembled & dry line removed	*Boiler*
9/1/1976	New Main steam valved & dry line installed	*Boiler*
	NOS bottom water glass valve installed from #2 Loco	*Boiler*
	1976 Total Season Trips: 188	*General*

1981	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Total***
Trips	*5*	*10*	*57¾*	*57½*	*26½*	*0*	*156¾*

1992	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Nov***
Trips	*4*	*28*	*70*	*82*	*8*		

Allen Haggett: "David Gooden - Remember the #6 *GREAT GULF* under 40 minute trips? Should of got a speeding ticket." ***Gooden:*** "yup" ***Michael Thompson:*** "Allen - Tricky never ran it that fast" ***Chris Lemieux:*** "Michael - all I know is I had some great trips on that engine and was certainly my favorite" ***Thompson:*** "Chris - favorite?"



Reference photo of No. 6 during Peppersass accident investigation in July (1929)
- New Hampshire Transportation Department Archives

Shop Log: Loco No. 8



Locomotive No. 8 - *Tip Top*

Date	Repairs	Category
1893	Built	*General*
6/15/1937	Patch applied to barrel	*Boiler*
	Mud plugs applied to barrel / water glass length 19 5/8"	*Boiler*
7/1/1952	Boiler re-tubed	*Boiler*
	Top part of flue sheet new	*Boiler*
6/15/1954	New main shaft front with boxes	*Main Shaft (boxes)*
	New main shaft rear with boxes	*Main Shaft (boxes)*
	New crank shaft front	*Crankshaft (boxes)*
	New crank shaft rear	*Crankshaft (boxes)*
1/1/1956	Original boiler in use	*Boiler*
7/10/1956	Rear shaft ground - new boxes	*Crankshaft (boxes)*
8/7/1956	New Piston Valves front	*Cylinders*
6/1/1957	Right rear and left rear valve seats planed	*Cylinders*
	New D valves new pistons and rings rear	*Cylinders*
7/29/1957	New Piston valves front	*Cylinders*
8/14/1958	Both front valves new	*Cylinders*
8/26/1958	All piston rings checked "OK"	*Cylinders*
	Both rear cylinder valve seats planed - new valves with yokes	*Cylinders*
8/18/1960	Rear shaft ground new boxes	*Crankshaft (boxes)*
	Both front valves new	*Cylinders*
	Right gasket blown	*Cylinders*
7/20/1961	2 front cylinders rebored with new pistons and rings, new valve cages and rings	*Cylinders*
11/1/1961	All pistons & piston rings checked & OK	*Cylinders*
11/25/1961	Rear shaft heated and straightened in lathe. Bearing surfaces trued and new boxes applied. Main & Cog gear turned. This shaft installed rear	*Main Shaft (boxes)*

12/1/1961 New shaft and boxes in rear *Crankshaft (boxes)*

June 14, 1962 - Hydroed Boiler: 170 lbs following repairs made. Renewed 4 broken stay bolts / caulked 6 rivets top of boiler back of smoke stack / entered boiler for internal inspection – found interior Ok – removed all wash out plugs / washed out boiler – applied plugs.

7/16/1962 Both left & right front piston valve cages ground with new spools & 2.625 50% step seal rings *Cylinders*

8/1/1962 Right front main box new *Main Shaft (boxes)*

8/3/1962 Left front piston valve installed with 50% steo seak 2.625 rings, found gasket partly steam cut & renewed same *Cylinders*

10/13/1962 Left & right front pistons and piston rings checked & found O.K. *Cylinders*

10/16/1962 Left rear cylinder checked O.K., same piston was installed with new ring; valve seat was planed, new D valve applied *Cylinders*

10/17/1962 Right rear cylinder re-bored new piston & piston ring; valve seat planed & new D valve *Cylinders*

9/15/1963 New crank shaft front - ordered *8/13/1962*, received *10/22/1962*, Flame hardened teeth, new 6" brake drum with 6" hub was pressed to 25" face to face between hub and spur gear, and was found to bring the brake band too close to the ratchet gear; with this measurement, there is 3/8" clearance between drum and crank box if the foz is 6" OAL. Old boxes were re-bored for this shaft and it was installed *Crankshaft (boxes)*

9/25/1963 Re-tubed with 230 new tubes, 47 new 15/16" staybolts put in throat sheet, 2 only 1" studs (staybolts) put in the first two belly braces on right side, one new pin installed in boiler brace (front pin on the bottom 2/3 brace from right side to front flue sheet) new cotter on same braced on back end. 9 new 3/4" x 2 1/2" rivets put in smoke box starting with the one off midway behind the stack and running down toward the right side. Bottom of the front flue sheet was padded or built up with electric weld, on the right side of the front flue sheet where this sheet had been welded in 1952 a small crack was found. This was burned out, chipped and re-welded. A crack was found in the back right corner of the inside back sheet in firebox between two rivets of the mud ring, this was burned out, chipped and welded. A hole was sawed out & tapped thru the patch and barrel on the left side of Loco for a new single injector. *Boiler*

9/26/1963 Rear crank shaft ground nw box on drum end & used box re-bored, built up one side 3/32" over 5" fitted to gear end *Crankshaft (boxes)*

6/15/1965 Left front valved cage ground, new spool & rings *Cylinders*
Right front valve cage ground, new spool & rings *Cylinders*
All pistons & piston rings checked & OK *Cylinders*

1/1/1967 New 6" shaft applied old style gear cast *Main Shaft (boxes)*

8/1/1968 Crank shaft boxes renewed front *Crankshaft (boxes)*

9/1/1968 New piston rings applied - valve rod bracket re-bushed - both front valve chest changed out - water cocks removed & cleaned - Teflon flexible lube lines applied - steam piping repaired - new wheels applied front end - Expect would need rebore new pistons next ring change. *Cylinder*
2 new engine wheels *General*

6/1/1969 2 new engine wheels *General*

8/1/1969 Valve rod brackets L.F & L.B. - R.F. Rebushed *Cylinders*

5/1/1971 Checked gauge *Boiler*

8/17/1972 Out of service *General*

9/15/1983 New Main shaft front, shipped rough turned, finished here to approx .100 oversize on all surfaces except wheel. Installed with new boxes *Main Shaft (boxes)*

1981	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Total***
Trips	*0*	*0*	*0*	*0*	*0*	*0*	*0*

New Cog Engine Built

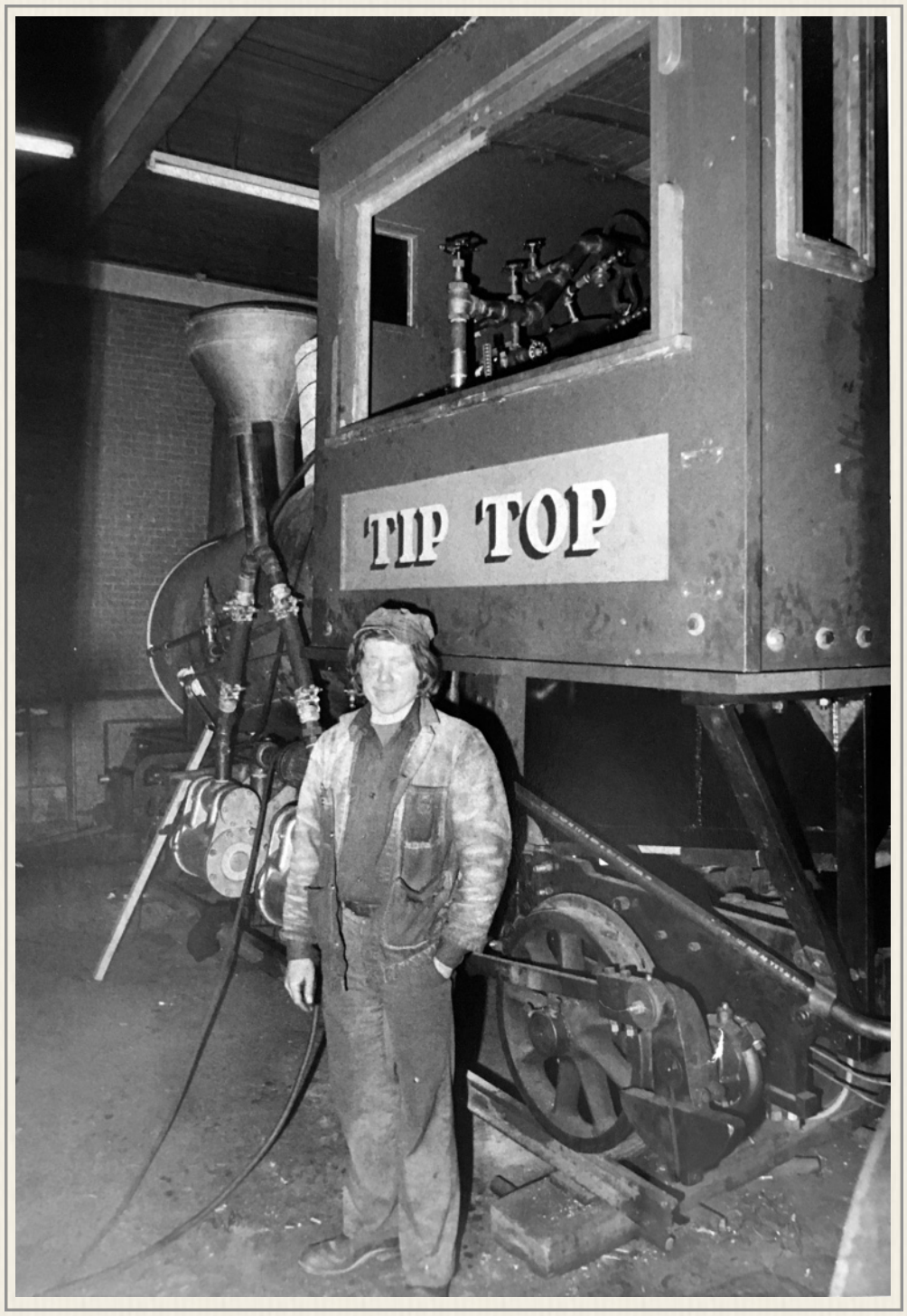
April 10, 1983

Vintage 1870 steam locomotives are rare today. If your business is using them to push *(Ed note: Correspondent Barbara Tetreault incorrectly used the word "pulling")* coaches up the Northeast's highest mountain then keeping six engines in service can be tough. The Mt. Washington Railroad Company has solved the problem of replacement by building its own engine. Maintenance foreman Michael Kenly of Jefferson, Andre Desjardins of Twin Mountain, and Frank Kenison also of Jefferson are finishing work on a new locomotive in the old Thompson Manufacturing building (in Lancaster). Work on the new engine began five years ago when then-manager Charles Teague decided it would be nice to have a spare because the heavy (pushing) requires frequent repairs to the engines. Actually, the Cog Railroad must have seven locomotives because state regulations require ti to keep one locomotive in operating condition at the Base Station in case of emergency. Teague figured building an eighth locomotive would guarantee six engines available for (pushing) coaches up the mountain. Since then, however, engine No. 8 titled *Tip Top* after the old summit building had to be retired. So, the new engine will replace it.

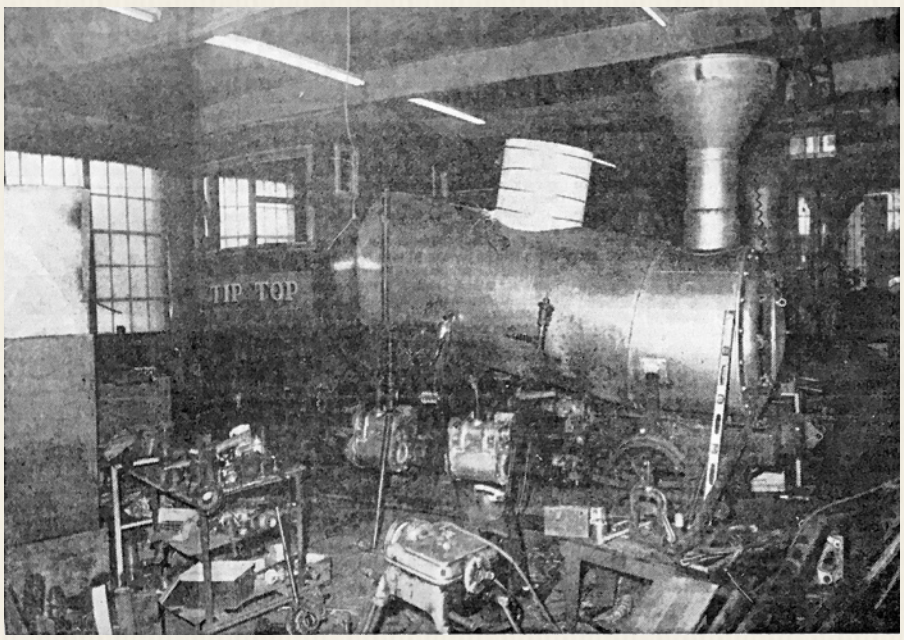
The Cog Railroad locomotives used today are almost exact replicas of the ones used when the railroad first started hauling people to the top of Mt. Washington over 100 years ago. Kenly said there have been a few changes - most notably an increased from two to four cylinders - but the locomotives have remained very close to inventor Sylvester Marsh's original design. Kenly said there are two main reasons the company has kept to the original design instead of adapting to changes in the early part of this century. He pointed out the design has worked. "This design has worked out quire well. Our safety record is very good," Kenly said.

Indeed, the only major accident on the track happened Sept. 17, 1967, when eight people were killed. The mishap was determined to have been the result of human error probably caused when a passing hiker tampered with one of the three switches. *(Ed note: While that was one theory how a rail to guide wheels across the mainline cog rack was in the wrong position, the cause was the crew's failure to notice the rail See Vol. 1 Annus Horribilis and Vol. 4 Skyline Switch).* The other reason is more aesthetic and has to do with the thrill of riding to the summit in a coach (pushed) by an old-fashioned steam engine. In her book on the railroad, present owner Ellen Teague said New Hampshire Profiles polled its readers back in the 1950's on whether the cog railroad should be replaced with a monorail. The response was overwhelming negative.

While Kenly and crew began building



Michael Kenly, the Cog Railroad's maintenance foreman, stands beside Tip Top. Kenly and other members of the railroad's repair crew helped build a new engine to replace the old Tip Tip (1983)
- Barbara Tetreault photo / Coutesy NH Union Leader



No. 8 under construction at Thompson Manufacturing in Lancaster, N.H.. What began as "Charlie's Angel" will now be known as "Tip Top" (1983)
- Barbara Tetreault photo / Courtesy NH Union Leader

the new locomotive five years ago, they have not been working steadily on it during those five years. Work is done during the off-season when the men are not busy with the day-to-day operations. The first winter the crew put the frame and running gear together. It took two winters to find a company to build the boiler. Monroe Boiler Works of Pittsburg, Penn., built the boiler, which, because of the steepness of the grade, has to be horizontal to maintain operating efficiency. The casting was done in Lewiston, Maine, and most of the machinery was made by Arthur Minot of Bath. The track foreman made the wooden cab. Most of the remaining parts came from Manchester. Kenly said the locomotive should be finished for the railroad's Memorial Day opening. It will have cost approximately $150,000. The 17-ton locomotives climb the mountain at a speed of 4 mph (pushing) a coach that weighs 10 tons when loaded. The track has an average grade of 25 percent with a maximum grade of 37 percent."

- New Hampshire Sunday News - Sun, Apr 10, 1983 pg. 6A

1992	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Nov***
Trips	*19*	*29*	*25*	*56*			



Hikers pose next to the new Tip Top at the summit (1999)
- Rand Peck Collection

Shop Log: Loco No. 8 v2

Number 8 in Storage
May 31, 2010



The day after Paul Forbes took a photo *(left)* of the Number 8 engine in storage behind the shop, he posted it to the *Mt Washington Cog Railway: We Worked There Facebook* page. It prompted a forth-right discussion thread by Coggers who had worked at the railroad when steam was the prime motive power.

Michael Kenly: "Chub, Arthur Minot and I built this loco from the ground up in 1983. Two years ago we replace all the staybolts; the boiler may be rusty, but it's the best one we have. I could have the 8 in "Tip Top" (haha) running condition in 6 wks no problem if someone wanted to pay for it. Don't be sad, find someone willing to fix this and I will gladly do it!"

Peter Steady: "Sad are the days when that new style engine climbed the hill. So much could be done to draw the crowds. Little cabins to protect the hikers and riders, a REAL Restaurant perhaps. Have the Presbys and Bedors ever been to visit the Clarks. Wow such a waste of what could be. No Place I ever want to be again. A total trashing of Nostalgia. I surely hope that they all die with their greedy profits tight fisted in their hands. What a Shame, and Thank You Charlie for your part of trashing such a beautiful piece of history. I'm sure Daddy Chub would be so proud of you. Enjoy the money, enjoy the mirror, because isn't that what the Cog is all about, to YOU, JOEL and WAYNE... MONEY. You bunch of inconsiderate Oxygen Thieves."

Shawn Foss: "Yeah this is tough.... can't bring it back... damage is done.. actually nothing I want more than to work on those old steam engines but the attitude sucks..... I really hate it!"

Barry Stewart: "The altitude is only 6288. Not high enough to bug most people. Maybe you won't be able to smell the oil from there. Anyone know why they couldn't just change the flange down there? Seems if the robots can cut it, an impact wrench could unbolt a stinkin' flange. Maybe replace with another one with valve? I read on some forum that there's another pipe inside this and they can't risk that popping out, doesn't make much sense to me though. Sorry, not Cog related, I know. The steam can be rebuilt, there's a few of us left that have done it. Just need to convince the owners to keep it alive. They own it, it's a free enterprise system (err, it was), they can do what they want. T he steam costs money. Anyone got the money to buy it? I'd buy it if I had the money or financing with a real chance of success. Powerball is my only chance, the odds are not good. I'm surprised to see the 8 dismantled though. Mike, why did they do this? Are they consolidating parts/ engines? Making room in the shop? T his boiler was made with formed steel sheets like the throat piece between outside water leg and barrel and round corners everywhere. Much more work than the Hodge boilers with all welded construction, square corners butted and welded together. The PA company (Monroe I think?) that built the 8 had a lot of trouble with this and threatened to charge much more to build another. I think parts like this were formed with dies in the old days and these no longer exist. Seem to recall stories of sledge hammers and cracking sheets involved here. Most of what I remember is from what Mike told me. The rust don't mean naathin' but it needs a bit of work. Rob could get right on the cab. Is the 3 still together? Please please - no disassemble! Disassemble 2 instead."

Shawn Foss: "I am so super happy bout the colossal attitude I got from Charlie...."

Michael Kenly: "Barry; #3 is sitting in the shop, under cover, perfectly intact. I don't agree with you about the #2; you, Peter and I built that engine, it's really one of the better ones! I'm so glad to have someone with extensive boiler knowledge explain the #8 boiler, and why it should be saved. You're right; exterior rust don't mean nothin - internal rust means everything. The #8 cab had to be taken off to do the boiler work. The #4 just happened to have a very rotten cab. So, temporarily, we put the #8 cab on the #4. Rob actually had all

the new cab parts made for #8 (he still has them), but then the diesel concept came along. Peter is wrong, though. It's not that the owners are not willing to spend money; each diesel is $750,000 each. The last steamer we built I had figured at $250,000. Perhaps when Sylvester Marsh built the railway there were a bunch of teamsters in Gorham that were totally pissed that he was building a "railway to the moon" when they had the monopoly of the carriage road. Union people are like that."

Paul Forbes: "Mike, is the 3 back under cover? It was sitting outside a couple weeks ago. I'd like to see it saved from further deterioration. I'd really like to run it up the mtn again, but I know that won't happen."

Barry Stewart: "I was joking about the 2, it was an old 3 rival. I'm glad the 3 is still there though."



Shop Log: Loco No. 9



Locomotive No. 9 - *Waumbek*

Date	Repairs	Category
1908	Built	*General*
1/1/1929	Loco Out of Service *(1929-1935)*	*General*
6/15/1938	Barrel of boiler new	*Boiler*
5/15/1948	Six top rows of flues new	*Boiler*
6/10/1951	Two bottom rows of flues new	*Boiler*
	New Main shaft with new boxes rear	*Main Shafts (boxes)*
6/15/1956	New piston and rings right front	*Cylinders*
9/2/1956	New cylinder with piston and valve rings left front	*Cylinders*
5/15/1957	Right rear piston rings new	*Cylinders*
7/8/1957	Boiler re-tubed	*Boiler*
8/16/1957	Right rear valve sleeve with valve new	*Cylinders*
	Left rear valve sleeve with valve new	*Cylinders*
9/8/1957	Valve sleeve loose right front pinned	*Cylinders*
6/1/1958	Left rear piston rings new	*Cylinders*
9/14/1958	New Main shaft front with boxes	*Main Shafts (boxes)*
	New crank shaft front with boxes	*Crankshafts (Boxes)*
8/20/1959	New Main shaft rear with boxes	*Main Shafts (boxes)*
9/8/1961	Left rear piston checked O.K., cylinder .007 out of round	*Cylinders*
9/15/1961	New Main Shaft front with boxes	*Main Shafts (boxes)*
10/29/1961	Left front valve checked O.K.	*Cylinders*
	Right rear piston & ring checked O.K.	*Cylinders*
5/1/1962	Right front piston & ring new	*Cylinders*
	Left & Right rear valve sleeves with spool & rings new	*Cylinders*
	Right front sleeve ground, new spool & rings	*Cylinders*

June 23, 1962 - Hydroed boiler: 170 lbs following repairs made – renewed 22 bottom tubes. Renewed 4 broken stay bolts – Renewed left front corner mud plug / entered boiler for internal inspection – tightened 2 front flue sheet braces – renewed 2 pins on same – removed all washout plugs. Washed out boiler applied plugs.

7/8/1962	New crank shaft rear with new boxes	*Crankshafts (Boxes)*
7/9/1962	Front crank shaft re-ground with new boxes	*Crankshafts (Boxes)*
9/1/1962	Left & right rear valve rings only new	*Cylinders*
9/17/1962	Rear crank shaft installed in # 9 in *7-8-62* was also removed to replace broken shaft in # 6	*Crankshafts (Boxes)*
9/20/1962	Front crank shaft which was installed 9-14-58 was removed from # 9 and installed in # 6	*Crankshafts (Boxes)*
5/1/1963	Left & right front valve rings only new	*Cylinders*
	Left & right front cylinders bored, new pistons, new rings (piston rings)	*Cylinders*

Front & rear shafts with boxes new applied - Both front & rear shafts bought from Brad Foote in *8-20-62* and received here *10-22-62*. Shaft is of 4140 steel with heat treatment. *Crankshafts (Boxes)*

7/10/1963	Left & right front valve sleeves ground, new spools & new rings	*Cylinders*
8/24/1963	Left & right rear valve sleeves ground, new spools & new rings	*Cylinders*
9/17/1963	Right front valve sleeve ground, new spool & new 3.585 rings	*Cylinders*
7/12/1964	Left & right rear valve sleeves ground, new spools & new rings	*Cylinders*
	Right front valve sleeve ground, new spool & new rings"	*Cylinders*

8/30/1964 Rear shaft which was installed in 5-63 broke one tooth on *8-29-64* and was replaced by one which was in rear of # 1 Loco and new in *8-8-61*. This shaft was installed with 2 new boxes in rear *Crankshafts (Boxes)*

8/31/1964 Front main shaft was removed from #8 Loco *9/15/1963* and sent for Magnaflux, was O.K. but .021 beng, bearing surfaces were turned down & new boxes applied. This shaft installed in rear of #9 Loco *Main Shafts (boxes)*

7/12/1965 Rear shaft which was installed in *8-20-64* broke on tooth and was replaced by an old nearly worn out shaft which had been ground & boxes fitted for space. This shaft has no record numbers, was installed in rear *Crankshafts (Boxes)*

8/1/1967	New Main shaft front	*Main Shafts (boxes)*
7/1/1968	Boiler re-tubed	*Boiler*
7/2/1969	Rear (crank) replaced - Rbs turned - new boxes - broken tooth in pinion of old shaft	*Crankshafts (Boxes)*
7/20/1969	Right front valve sleeve & spool & rings new	*Cylinders*
1/1/1971	R back valve new rings & valve	*Cylinders*
	L front valve new rings & valve	*Cylinders*
	L back valves rings removed and O.K.	*Cylinders*
	R front valve sleeve O.D. 4 1/8" Sleeve reground & new rings NOTE: Correct measurement for rear valves (top) sleeve is 1 3/4" from valve head shoulder	*Cylinders*
5/1/1971	Gauge checked & hydroed 180 lbs/sq in	*Boiler*
6/1/1971	New Main shaft rear - make note in journal size	*Main Shafts (boxes)*
6/16/1971	New rear axle long & short addendum gears	*Main Shafts (boxes) note crank page*
	New rear crank shaft & boxes	*Crankshafts (Boxes)*

Shop Log: Loco No. 9

6/17/1971	Hydro OK - New dry line - water glass length 21 5/8"	*Boiler*
7/12/1971	New main boxes - front	*Main Shafts (boxes)*
	New rear main shaft & boxes	*Main Shafts (boxes)*
	New rear main shaft spur gear	*Main Shafts (boxes)*
	New rear crank shaft & boxes	*Crankshafts (Boxes)*
	New rear engine wheels	*General*
	New dry pipe	*Boiler*
	New crank brass both front	*Crankshafts (Boxes)*
	New crank boxes front	*Crankshafts (Boxes)*
8/1/1971	New stack & spark arrestor applied	*Boiler*
	Crosshead brass LR applied	*Cylinders*
	LF crank pin bushing applied	*Crankshafts (Boxes)*
	Crosshead bushing on LF applied	*Cylinders*
	Both crosshead pins turned	*Cylinders*
	All brake linings replaced	*Crankshafts (Boxes)*
6/1/1972	New crank box L Front	*Crankshafts (Boxes)*
8/1/1972	Front crankshaft broke	*Crankshafts (Boxes)*

5/14/1976 Mansel Lubricator, injectors, Pop valves, steam gauge, whistle, and tender suction lines removed for shipment to Massachusetts *Boiler*

6/17/1976 Engine loaded on Clark's flatbed & sent to Hodge Boiler works by Pete Thompsons KW *General*

7/3/1976 Engine returned and had hydrostatic test @ 221 lbs - several leaking flues most new rivets lead - some weeping welds, 1 broken stay-bolt L side in cab. Mud ring leaks slightly Seat BTW L. outside sheet & throat sheet leaks at bottom *Boiler*

7/3/1976 Leaking flues rolled & Manzel lubricator reinstalled - Chokes removed from lube lines & lines bled *Boiler*

7/4/1976	Hancock inspirator installed	*Boiler*
	Internal inspection - good condition except 1 broken longitudinal stay	*Boiler*
	New exhaust nozzle installed - spark arrestor was previously upside down - corrected	*Boiler*
7/5/1976	Longitudinal stay repaired - Dome cover, jacked, Pops, whistle installed	*Boiler*
	Engineer's seat replaced	*General*

Steam gauge installed (was tested *7/3* & OK) - Tender assembled & attached bonnet installed. Engine fired up for spark - most leaks in new boiler work tightened up *General / Boiler*

7/6/1976	Made uneventful 1st passenger run	*General*
7/17/1976	Removed center crank bearing	*Crankshafts (Boxes)*
	Center cross member (FWD) tightened & 1 bolt (broken) replaced	*General*
7/18/1976	Removed & tightened R.F. Exhaust nipple	*Boiler*
	Removed L.F. main box & turned over - new wheel installed	*Main Shafts (boxes)*

R.F. wheel removed - main box was dismal, but had already been turned over/new wheel installed *Main Shafts (boxes)*

	All cylinder cocks on front cylinders new	*Cylinders*
7/19/1976	New roller installed in block	*General*
	Leaking welded stay bolt, ctr. Above F.B. door inside, ground welded & area re-padded	*Boiler*
	Patch welded in tender shovel plate	*General*

7/20/1976 Front crank had been removed because both boxes were bad - new front crank boxes, L.F. Binder replaced, front valves timed & reset *Crankshafts (Boxes)*
Both cranks Magnafluxed - O.K. *Crankshafts (Boxes)*
New pin in brake fulcrum (front) *Crankshafts (Boxes)*
Front brake adjusting rods bent to hold shoes square over drum - brakes adjusted *Crankshafts (Boxes)*
Rear valves timed & adjusted *Cylinders*

7/24/1976 Crank box R.F. seized on passenger trip of *7/23* - box hammered off & old box reinstalled *Crankshafts (Boxes)*
R.F. exhaust nipple tightened *Boiler*

7/31/1976 R.R. exhaust nipple replaced - threaded connections (installed) *Boiler*

8/1/1976 New spark arrester & bonnet *Boiler*
New front crank boxes (old ones destroyed due to excessive heating (broken grease line) *Crankshafts (Boxes)*
New oversize exhaust nipple - R.R. & new side stack piping *Boiler*
2 new bolts installed in L.F. cylinder & x-member R.F. cylinder loose - all bolts tightened *Cylinders*
New copper gaskets made & installed in exhaust line. Broken exhaust welded - expansion joint repacked *Boiler*
Large patch welded in tender shovel plate *General*
Rebuilt air valve *General*

8/3/1976 Frame broken right side just ahead of Fr. Glide yoke on passenger trip of *8/2*. Frame realigned, beveled & welded *General*

1976 Total Season Trips: 120 *General*

1981	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Total***
Trips	*4*	*9*	*46½*	*32½*	*14*	*9*	*115*

1992	***May***	***June***	***July***	***Aug***	***Sept***	***Oct***	***Nov***
Trips	*4*	*6*	*11*	*16*			



Shop Log: No. 9 - Coal to Oil Testing - 2005-2006



Dave Moody & Nigel Day stand with No. 9 outfitted to burn oil during Day's fuel conversion effort
- Nigel Day Collection

End of 2005-2006 Coal to Oil Testing

To: Charles G. Kenison, MWRy General Manager
From: Albert LaPrade, Quality Control Manager and Chief Engineer
Date: 24 July 2006
Subject: Conversion Of Engine 9 From Coal To Oil Firing

Background:

During the last year, Engine 9 (*Waumbek*) was converted from coal to oil firing by Nigel Day, Steam Specialist for the MWRy, employing an oil burner of his own design. On 22 June 2006, Wayne Brigham, Chief Boiler Inspector for the State of New Hampshire, witnessed the operation of the conversion with Nigel Day controlling the oil burner.

At that time, Wayne Brigham expressed to me his concern of observed flame instability and flame impingement on the lower portion of the waterlegs immediately above the firebrick. Consequently, he directed the MWRy to increase the height of the firebrick and to conduct tests under full load to determine maximum firebox sheet temperatures through the use of thermocouple instrumentation.

Action:

The MWRy subsequently performed two tests on Engine 9 to determine maximum firebox temperatures using a calibrated twelve channel recorder and type K high temperature thermocouple wire. Two thermocouples were attached to the crown sheet and two thermocouples attached to each of the four side sheets. Both tests were conducted with an empty coach and limited to runs from the base station to Lower Waumbek Switch. Results of the tests are summarized below:

Shop Log: No. 9 - Coal to Oil Testing - 2005-2006

5 July 2006

Engineer: Dave Gooden
Fireman: Nigel Day
Observer: Al LaPrade

All sheet temperatures generally remained below 500 deg F with the exception of the crown sheet temperature which reached in excess of 1600 deg F at the top of Cold Spring Hill.

13 July 2006

Engineer: Dave Gooden
Fireman: Nigel Day
Observers: Al LaPrade, Mike Kenly, Greg Meserve

All sheet temperatures generally remained below 500 deg F with occasional excursions to 700 deg F with the exception of the crown sheet temperature which reached in excess of 1900 deg F and was increasing steadily when the test was terminated.

For comparison, The MWRy conducted a similar test on coal burning Engine 2 whose boiler is identical in design and construction to that of Engine 9. Two thermocouples were attached to the crown sheet and one thermocouple attached to each of the two side sheets. Test results are as follows:

22 July 2006

Engineer:Rob MacClay
Fireman: Unknown
Observers:Mike Kenly, Dave Gooden

All sheet temperatures quickly stabilized between 360-400 deg F with the engineer's side crown sheet stabilizing at 535 deg F on ColdSpringHill.

Conclusions

Based on the test results summarized above,and personal observations of the operation of the Engine 9 oil conversion, I conclude the following:

1.The elevated crown sheet temperatures observed are accurate and are cause for immediate alarm.

2. The suspected instability of the oil flame is resulting in extremely uneven heating of the firebox and extraordinarily high crown sheet temperatures.

3. The sudden and abrupt observed elevation of the crown sheet temperatures at high firing rates is characteristic of the transition from nucleate boiling to film boiling. This condition may result in serious crown sheet overheating and subsequent catastrophic crown sheet failure.

4. The absence of elevated crown sheet temperatures and the overall even distribution of firebox sheet temperatures observed in the test of Engine 2, makes the Engine 9 test results even more alarming and may explain the years of extraordinary boiler life and safe operation experienced by the railway with coal firing.

5. The crown sheet temperatures observed during the Engine 9 tests exceed the maximum mean temperature allowed by the ASME B&PV Code Section II.D by over 600 deg F. at the boilers present 175 psig MAWP.

Recommendation:

In my opinion, the Engine 9 oil conversion in its present form is extremely dangerous and presents a very serious threat to life and property and should not be operated under any circumstances until the issue of uneven firebox heating and elevated crown sheet temperatures is addressed, corrected and brought into compliance with the ASME B&PV Code.

AlbertA LaPrade, Quality Control Manager and Chief Engineer

Shop Log: No. 9 - Coal to Oil Testing - 2005-2006

In April 2023, Al LaPrade & Wayne Presby sat down with Jitney Jr to explain how the Nigel Day Conversion Project came about. LaPrade met Day while in Europe and the U.K. researching a new switch design for the Cog in 2002. "Nigel Day was a self-taught steam guy a hundred percent," LaPrade said. "He loved steam." Day had worked to keep steam locomotives at the Snowdon Mountain Railway, a narrow-gauge rack and pinion mountain railway in Gwynedd, north-west Wales. It is a tourist railway that travels for 4.7 miles from the village of Llanberis to the summit of Snowdon, the highest peak in Wales and still runs "Heritage Steam Express" trains *(below)*.



LaPrade says "They had started introducing diesels, but Nigel wanted to keep the steam there. So he ended up adapting an oil burner that was used in the glass industry… to (a) steam engine. And apparently it worked well… but what had happened is that over there, like here… changing the fuel is an alteration and it has to go through regulatory agencies in order to be approved. Well, he never went through that process. He just cobbled it together, made it work…and it did. I really think that if they allowed him to run it, it'd probably still be there today… he was the kind of guy that knew a lot."

A guy the Mt. Washington Cog Railway ownership group was looking for as a way to reduce fuel costs. "We ended up… hiring him *(Day)* to come over and help us try to oil fire for the Nine," says Wayne Presby. "He was… very meticulous about doing this whole thing… but Nigel was very temperamental." LaPrade says "the big thing he didn't like, 'cuz we had the air stamp and we had the code book… and we had to go by it… it wasn't a choice. There was New Hampshire law. Legally… I was the quality control manager. Up to that time, I'm working with guys, like Mike Kenly, who've been here forever, never once had a problem with him at all, even though I was essentially writing instructions to him *(Kenly)*. And then he *(Kenly)* had the answer to me, but we worked well together." LaPrade tried to explain on Day's first day on the job the steps that had to be taken to meet American code. "And he says, 'No, we're not going by the American code… we're gonna go by the British code.' I said, 'No, no, you don't understand. We have to do it… and I can help you with the documentation, but you've gotta let me know what you're doing.' He didn't like the idea of regulation and he thought we were all out to get him. He took a dislike to just about everybody in the shop… took a very big dislike for me. He just didn't like the idea of what he called 'interference'… and he says, 'You're jealous of me.'" LaPrade says he responded, "I'm not jealous, Nigel, but we gotta do this a certain way."

That certain way included documentation of how the fuel oil burner was affecting the boiler on the engine that became known as *The Victim*. "The state boiler inspector insisted that we put in thermocouple (senors) all over the thing," says LaPrade. "We rented a recorder. They could do 12 channels, and we put a whole bunch of them in… tube sheets… crown sheet… here, there, all over the place." Traversing the relative minimal grade between the Shop and Marshfield "the temperatures were all pretty good," says LaPrade. "Maximum temperature for that material (used to make) these boilers, 700 degrees... and we were around 550 - 600. It was nice. But then as soon as you get on grade, boom," the temperatures would go up says LaPrade. "Nigel claimed...

that we didn't know what we were doing with thermocouples. So Mike Kenley says…what I'd like to do… is to thermocouple the No. 2 *(Ammonoosuc)* that was still all coal, and just see what those temperatures are in that."

LaPrade thought that was a good idea. "Nigel still insisted we didn't know anything about thermocouples," says LaPrade. Charlie Kenison hired a local vocational school teacher Greg Meserve to verify the correct use of the temperature measurement devices. "Greg Meserve had joined the Air Force… went on and got his master's degree in mechanical engineering," says LaPrade. "He was a, a PhD candidate in mechanical engineering at University of Arkansas for the Air Force… then something happened… *(left the Air Force)* never got his PhD, but did all the work. He was an actual rocket scientist. He was designing rockets for the Air Force."

Meserve was in the cab with LaPrade, Day, Kenly and Dave Gooden for a test run on July 13, 2006. "(Meserve) came over and he took a trip with us," says LaPrade. "We got up to the top of Waumbek and he says, 'Let me outta here.'" Meserve had watched the temperatures go from 700 to 1400. "And he says, that's film boiling… a phenomena… discovered in the 1600s. Once you get to a certain point, the flame is heating the (metal) so fast, it forms like a little insulating cushion of steam between the bottom of the the pan and the water… if you have… an intense enough torch, you can actually, even though (it) is full of water, you can poke a hole through (the metal) with the torch, you can burn it." LaPrade had heard the term during his time at the Naval Shipyard helping build nuclear submarines. "Biggest thing that the Navy was always afraid of was film boiling occurring in the reactor. You could have meltdown. Greg Meserve saw that, and he says, 'You're getting into film boiling, I guarantee' he says, 'If I were you, I wouldn't do this again.' So Charlie says, 'I guess you're right.' He said '(We're) shutting it down. That's it. We're done.'"

LaPrade's July 21, 2006 memo to Kenison officially documented the reason for stopping the latest coal to oil conversion effort at the Cog. Despite that Presby and LaPrade say Nigel Day came closest to making it work on Mt. Washington where oil-fired boiler technology had been tried since the late 1930s under Col. Henry Teague's management.

"(Day) was the only one that I know of that ever oil-fired one of the locomotives and got it all the way to the summit," says Presby albeit without pushing a coach. "Nigel did make a couple of trips to the summit," confirmed LaPrade. But Day's fuel conversion idea didn't appear to be as economical as Cog ownership had hoped. "He was going through a 200 gallons of oil (per trip)," says LaPrade roughly ten times needed to power a Cog diesel. And LaPrade says Day's attitude may have also kept him from success. "I think that if he'd been willing to work with everybody here, I think we were gonna come a lot closer to success… I really do. But for some reason, he took a dislike to Mike Kenley… hated Mike Kenley… and he didn't like anybody else except Cookie."



Shop Log: Loco No. 9 - Tilted Cab



Number 9 "Tilt Cab" Explained
by rail photographer Kevin Madore
Facebook - September 2024

"The "tilt cab" in action - When first-time visitors catch sight of Mt. Washington Railway Co. #9 *Waumbek*, their first question is nearly always: "Why are the cab and boiler tilted like that?" This image, captured just moments after the 9 departed Marshfield Station, provides a pretty graphic explanation for this design. The grade on the 3-mile Mt. Washington Cog Railway averages 25%, so historically, the boilers on all of the locomotives, and the cabs on a couple of them, including #9, were tilted so that on average, they'd be level on the mountain. This is particularly important for the boiler, so that the water level would always cover the crown sheet as well as the fire tubes, keeping those critical components from overheating and potentially failing. While the boilers have always been this way since the railway started using horizontal boilers, the idea of putting the cabs on the same plane is newer, and only engines 9 and 10, the last ones made, ever had that modification *(Ed note: No. 10 had a traditional cab at the start of its career. The tilt cab came later)*. It certainly does make the ride more comfortable for the crew. The grade right here, just above Marshfield Station, is pretty close to the average for the line and as can be seen in this dramatic image, that engine is pretty level. Crews do have to be careful on the steeper stretches of the line, such as the 37.4% grade at Jacob's Ladder, and the shallower ones at the base and summit, where they will have to add extra water to the boiler to keep all of the critical components covered." ***Rick Malo:*** "WOW! Great stuff, Kevin! That's one railroad I've always wanted to see." ***Kevin Madore:*** "Rick, like any other steam operation, see it soon, while you can. No one knows what the future holds. I will say this: Steam is still popular with passengers. On this particular trip, they sent two diesels and one steam locomotive up the hill. The first diesel train was about ¾ full. The second one was completely empty....probably sent to collect stragglers off the summit at the end of the day. The steam trip was essentially sold out.....packed. When #9 came to the platform and when she departed, all of the cell phones came out. No one was watching the diesels. There are very few places in the US, or the world, for that matter, where you can see and ride a train that is essentially doing the same thing it was doing 155 years ago and doing it pretty much the same way. This place is a treasure. If you want to see more photos of The Cog from the past 20 years, look here: https://www.flickr.com/photos/112261457@N06/albums/72157716159588727/? ***Dennis A. Livesey:*** "Rick - Kevin is the Madore Man of the Mountain! In 2009 I meet Kevin for the first in person and he led me on an epic day on The Cog. His knowledge about the operation and the best places to be and at what time, was incredible! To cap it off, his photos are always of the highest quality." ***Madore:*** "Dennis, I wish we were all still young, so we could hike the mountain like we did that day. There are so many places there that make spectacular photos, but getting to the spots sure is a butt-kicker." ***Art Poltrack:*** "Looks like Engineer Eli August in control. Yesterday *(9/27)* at 3pm, diesel half full, #9 was sold out." ***Madore:*** "Art, that was actually Cookie *(Sodergren)* running. Not sure who

was firing, but I recognized the fellow as a long-time Cogger. You were braking." ***Poltrack:*** "Martin *(Marchesseault)* was firing and Cookie was In control, while I talked on the way up the hill." ***Paul Forbes:*** "Never liked the tilted cabs on the 9 and 10. They let the rain in more than the others. I call them the wind tunnel!" ***Madore:*** "Paul - Good point, Paul. While the ride may be level, that cab does have a tendency to scoop up the west wind, which is virtually always present and can make it rather cold. I recall riding with the guys a couple of years ago at sunset in October, and that was quite an experience." *(Ed. note: The No. 9's wind scoop got bigger when the cab had to widened so the engineer could see around the sides of the new, wider 70-passenger supercoaches that began being built in 1996.)* ***Madore:*** "A hint of fall in the air *(above)*. The leaves at Marshfield Station are just beginning to show a hint of fall colors as Cog Railway Engineer "Cookie" Sodergren and his crew take the 3PM steam trip across the Ammonoosuc River, on the climb to the summit of Mt. Washington. The power this day is the old, reliable #9 *Waumbek*, one of two steam locomotives that are still maintained in operational condition by the railway and the only remaining steamer that has the cab mounted on the same plane as the boiler, keeping it more or less level on the grade ahead, which averages 25%. I do miss the old, wooden bridge which used to exist here. It had no sides on it, making for a clearer view of the train. It also had that rustic look to it which gave it the feel of an operation that is a century and a half old. There are not too many places in the US where you can ride on a train that is essentially operating the very same way it was 155 years ago. Image *(above)* captured just yesterday, September 24th, 2024." ***Bill Drotar Jr.:*** "Beautiful capture!! While it's not the old bridge, it adds some "texture" to the view. All part of its history."



Filling the 10's boiler through the injector on June 14, 1983 in front of the Shop (1983)
- Courtesy Joe McQuaid / NH Union Leeader photo

Locomotive No. 10 - *Col. Teague*

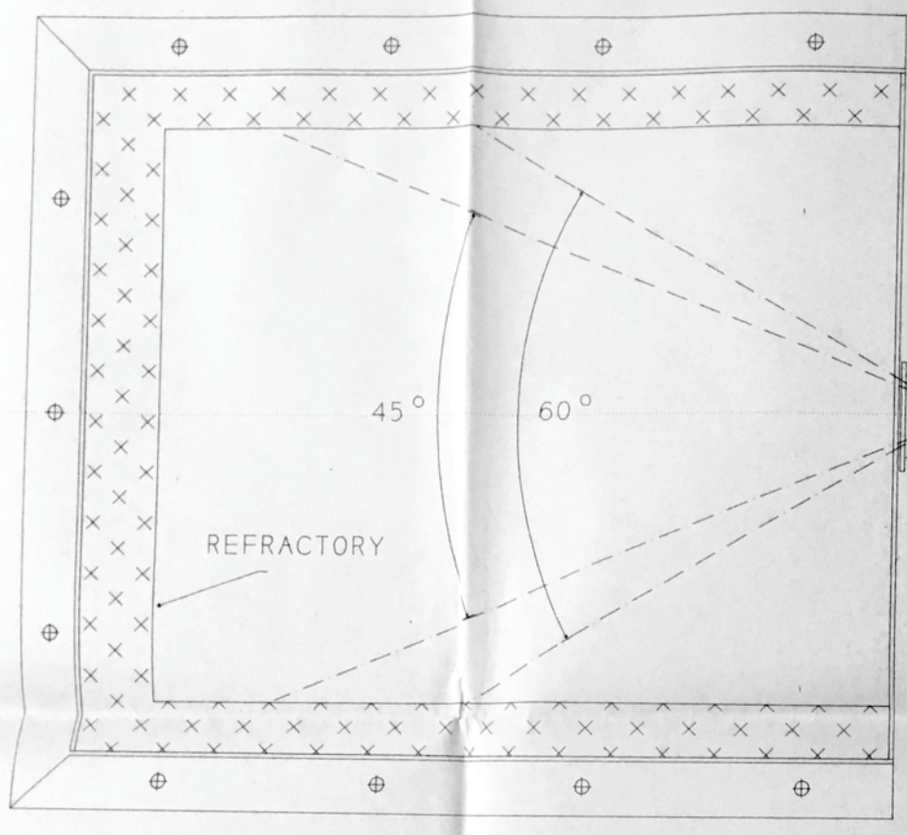
Date	Repairs	Category
9/24/1972	Built by Niles Lacoss at Base - put in service	*General*
7/27/1973	Hi addendum shaft purchase from Bradfoot gear works prior to 1968 installed new 1972. This shaft broke *July 27, 1973* after 129 trips in center bearing area - Replaced with new shaft purchase July 1973 - old boxes re-used	*Crankshafts (boxes)*
5/19/1976	Hydrostatic test @ 221 lbs. - Bottom valve on bottom water glass split - silver soldered 5-20-76	*Boiler*
5/21/1976	Mud-ring cleaned	*Boiler*
5/24/1976	Engine assembled, fired-up for work train on *5/25/76*	*General*
6/7/1976	R. side exhaust lines removed - nipples renewed & new piece fabricated from R.R. Cylinder Exhaust Tee to sidestack	*Cylinder*
6/8/1976	Lost R.F. Main binder on passenger run of *6/6/1976* - 1 stud broken off in jaw - removed by cutting & retapped - binder badly bent - Replaced with # 2's R. R. binder	*Mainshaft (boxes)*
6/13/1976	Firebox door would not stay closed - handle built up w/ weld & ground, latch notch recut	*Boiler*

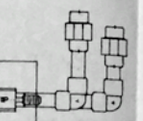
6/21/1976	Removed injector & reground overflow, & forcing tube seats.	*Boiler*
6/29/1976	L.F. eccentric strap and eccentric replaced	*Cylinder*
	L.F. crosshead brass replaced	*Cylinder*
6/30/1976	L.F. valve, rings, sleeve (all new) applied	*Cylinder*
	Rear crank Magnafluxed	*Crankshafts (boxes)*
	Bad crack in tender tank welded	*General*
	1 set grates installed	*Boiler*
7/4/1976	Relined rear brakes & adjusted both	*Crankshafts (boxes)*
7/24/1976	L. injector taken apart & seats ground	*Boiler*
	New piston rings L.F.	*Cylinder*
8/1/1976	Injector removed & completely reworked	*Boiler*
	Valves adjusted & timed	*Cylinder*
	New front brake linings & broken brake band welded	*Crankshafts (boxes)*
	All suction lines to injector tightened	*Boiler*
	Large crack in tender on L. side repaired	*General*
9/1/1976	New screen on bonnet	*Boiler*
	End broke off steam stem on R. injector - final overflow disc fell off on same, both repaired	*Boiler*
	New roller block installed	*General*
	Ground seat on forcer steam valve on r. side inspirator & replaced final overflow disc on same. Repaired overflow hose	*Boiler*

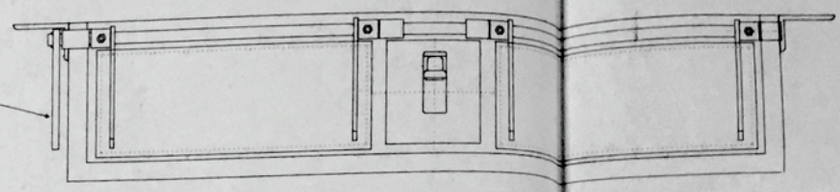
1976 Total Season Trips: 197

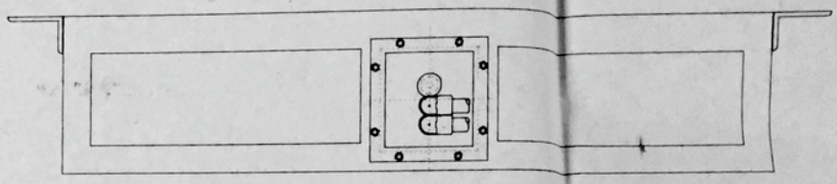
1981	*May*	*June*	*July*	*Aug*	*Sept*	*Oct*	*Total*
Trips	*4*	*0*	*54½*	*52*	*18¼*	*10¾*	*139½*

1992	*May*	*June*	*July*	*Aug*	*Sept*	*Oct*	*Nov*
Trips			*31*	*67*	*8*		

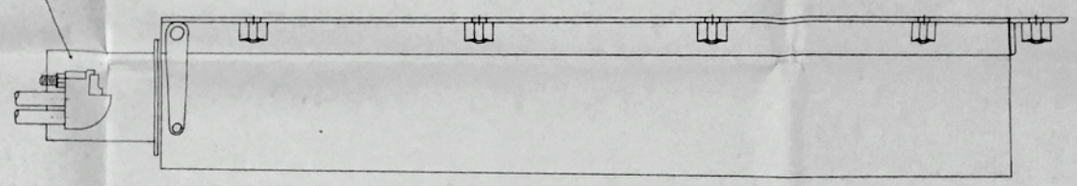


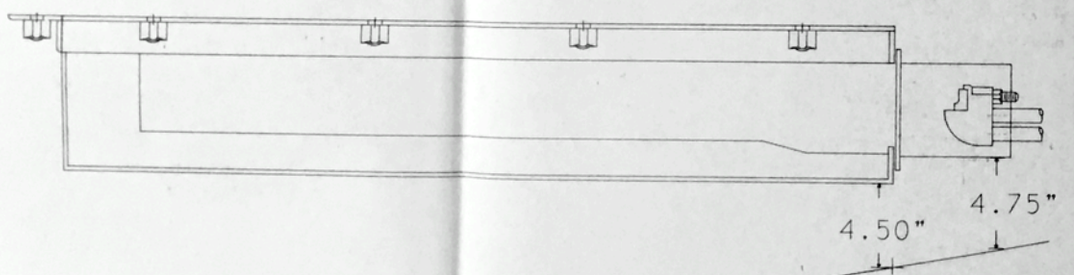


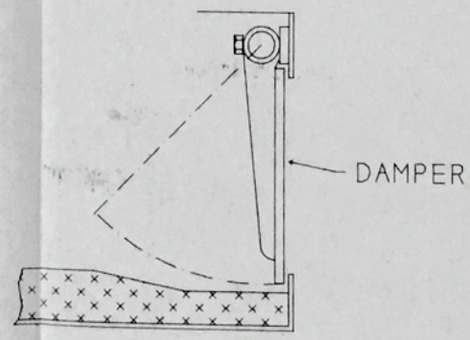




BURNER







PRELIMINARY

FOR DISCUSSION ONLY

REV	DATE	DESCRIPTION	INITIAL	AP'D

CDE

Controls West

207 563-1280

UPPER ROUND POND ROAD BRISTOL, ME 04539

CLIENT: COG RAILWAY
MOUNT WASHINGTON, NEW HAMPSHIRE

TITLE: LOCOMOTIVE NO. 10 CONVERSION
ASH PAN / BURNER ARRANGEMENT
GENERAL LAYOUT

DRAWN RPG	DATE 2-10-89	ISSUE FOR BID ☐ PRELM ☒ INFO ☐ CNST ☐ OTHER ☐	DATE
CHK'D	DATE		
APP'D	DATE	DWG. NO. 10-M-01	REV
SCALE NOT TO SCALE			



No. 10 became a test bed for the effort to use fuel oil to fire the boiler. Seen here on a test run on Jacob's Ladder (1989)
- Rob Bermudes Jr. photo

Mount Washington Cog Railway

Colonel Teague

Engine No. 10 - Coal to Oil Conversion

Controls DownEast

February 10, 1989

Scope

The locomotives of the Mount Washington Cog Railway are of a special design, developed to perform a special task. They are classified as a rack type locomotive utilizing two cog wheels driving by crankshafts to provide the movement on an incline rack railway with an average grade of 26%. Steam power is transmitted from the oiler to four cylinders (two each side), fore and aft in tandem to drive the cogs.

he boilers are single pass horizontal tube types with a working pressure of 180 psig. Steeply inclined to remain somewhat level on the steep grades, they are relatively small in size with heating surfaces ranging from 450 to 550 square feet. However, their maximum output is estimated to be in the neighborhood of 7000-800 pounds of steam per hour, indicating operation in excess of 200% of original rating.

The present method of firing is semi-bituminous coal by hand with a consumption of approximately one ton per trip. At 400 ten-pound shovel fulls per trip, that is one shovel full every 18 seconds. Extensive exercise to say the least.

The justifications for the conversion to oil are many with main reason being the price of coal at $110.00 per ton. At $4.08/Mbtu (million btu) as compared to $3.08/Mbtu for oil, the reduction in fuel cost alone would more than justify the cost of conversion. However, there are many hidden benefits associated with the conversion and this report shall address each of these and their relative importance.

Colonel Teague

Engine No. 10 is somewhat typical in design to all the locomotives on the roster. It does vary however, in specific areas of firebox and tube size. The Boiler was manufactured by Dillon Boiler Works of Fitchburg, Massa-

chusetts in 1959. It has a heating surface of 458 square feet and carries 146 two-inch heavy-duty tubes and effective grate area of 3.5 square feet.

In determining the feasibility of oil firing, the initial problem was to establish a criteria for sizing the burner. This has proved to be the most formidable of the tasks. For many years, manufacturers and operating engineers used a formula based upon heating surface to determine boiler horsepower (bohp) output. Using this methodology, No. 10 was rated at approximately 46 bohp. However, it was common practice to operate boilers at 200 to 300 % of rating, as indeed has been the case with all locomotives on the mountain. This would boost the output to over 100 bohp, based upon the old rating. Based upon the amount of fuel and feed-water being consumed and after discussions with operating and maintenance personnel at the mountain, these performance calculations would not prove out.

The answer finally came in discussion with Mike Kenly. Using approximately 1000 gallons of water per trip, we finally have a direct correlation between input and output. One gallon of water weights 8.3 pounds. Therefore, if all the water is converted to steam, we would have 8300 pounds of steam producer per trip. Using the modern formula for determining boiler performance, where one bohp is equal to approximately 33 pounds of steam, we arrive at 250 bohp. Given losses and errors, it is safe to say that No. 10 is capable of producing 700 pounds per hour steam giving it a horsepower rating of 200-210. From this we can now determine the maximum fuel consumption and establish the appropriate size and pattern for the burner.

This realization of output capability reflects quite adversely upon the present performance while firing coal. Based upon the above, calculating the btus required to fire at 200 bohp or 7000 pph steam indicates that we should consume 520 pounds of coal per trip. At the present rate of 2000 pounds of coal, we arrive at an efficiency of 26%. Part of the reason for this low efficiency is the fact that the boiler is being continually overfired.

W.N. Best

In 1938 W.N. Best Company was approached to provide an oil burner to fire the Cog Railway locomotives. Their initial approach was to provide a burner based upon the given bohp vs. heating area mentioned above. The burner provided was grossly undersized and the result was that the boiler could not be fired to its maximum potential.

It was only after personnel from Best were able to view the application first-hand, that they were able to make proper recommendations for oil firing. It appears, however, that their final strategy was not implemented and the project was shelved.

The approach that Best used in 1938 is still viable. The utilization of a modified ash pan with a burner mounted in the bottom is the most expedient and cost-effective method of conversion and requires the least number of changes to the locomotive.

Air

The major departure from the Best approach is in the handling of the air requirements to the firebox. At the time of the W.N. Best recommendations, the considerations for the amount of air supplied for combustion were just beginning to be explored. The feeling at that time was, "the more air the better". This is still the case in many applications today, although wrongly so.

For proper and complete combustion of fuel, whether it be coal or oil, the excess air (that amount of air above the quantity actually required for combustion" should be kept to a minimum. In the case of "Colonel Teague", the excess air is above 350%. Excess air does many things to a boiler. It reduces steaming rate by cooling the heating surface and increases stack temperature, both due to the increased velocity created.

Two areas that need to be address with respect to the air requirements are the firebox dampers and the stack. The proposed new ash pan will be supplied with an adjustable damper to provide the fireman/engineer with a method of controlling the amount of air that enters the firebox. In addition, every attempt must be made to eliminate tramp air from entering the firebox. Specifically, the firebox door should be gasketed and the existing air ports plugged. The present grates will be removed, but, the reverse arch will remain intact.

At the present time, much of the exhaust from the cylinders is vented to the stack area to provide draft for the firebox via the petticoat. When the conversion to oil is implemented, the required draft will be significantly

reduced to the point where provisions will have to be made for the excess exhaust generated. In addition, the wire screens and the spark arrestor will not be required, although the screens may be left installed to maintain aesthetics.

Fuel

The locomotive fuel, although yet to be specifically selected, will fall into the category of light fuel oil. A slip-in tender fuel storage tank with a capacity of approximately 225 gallons is proposed for this initial project. In addition, a 50-gallon day tank would be mounted on the left side of the locomotive, extending total capacity to 275 gallons. This should be adequate for three trips and it is hoped that when final testing is complete four trips will be possible.

The initial conversion on No. 10 will utilize a pump to provide fuel at a constant pressure to the burner. It is hoped that this pump will be eliminated if it is determined that the gravity feed is sufficient to provide the burner with an adequate fuel supply at various loads. Fuel and steam flow (for atomization) to the burner will be regulated in the cab by individual flow control valves with precision dials for setting the proper flow based upon actual operating conditions.

Performance

The conversion to oil does not necessarily mean an increase in performance for No. 10. It is evident through calculations and discussions with personnel that the performance could be significantly improved with changes in operating procedures and minor modifications. A major increase in performance can be achieved through the control of air to the boiler as mentioned above. Secondly, but as important, is the reduction of exhaust backpressure on the cylinders. On No. 10, the backpressure is primarily due to the piping arrangement of the exhaust system. Design improvements and relocation of the exhaust piping will be made to… improve the overall performance. Overall locomotive reliability will be increased through the firing of oil. Oil will produce more even combustion and therefore a more constant steaming rate. Through the elimination of coal and the associated dust and ash, a cleaner overall locomotive environment will result. This will mean less wear to moving parts, less buildup of grime and less overall maintenance.

Schedule

The time frame for the implementation of the project is estimated at 8-10 weeks from project start date. Although details will be addressed in the work plan, it is safe to say that the conversion and testing can be completed by mid-May and making contingencies for any unforeseen events, No. 10 will be ready for the mountain by June 1st.

Cost Estimates

The cost estimates provided are based upon the purchase of all materials and labor. After discussions with Cog Railway personnel, I am most confident that the vast majority of the work, including fabrication, can be accomplished by them, working from detailed drawings and minimal supervision.

Total Projected Cost $16,300

November 7, 1989

Russ,

I left a message on your machine re: the #10 work. We put the holes in the firebox but they don't want to draw.

We hope to keep the 10 out for as long as possible this fall to continue the necessary tests. Once winter really sets in we will have to make a decision as to the status of the project. Be assured that I am anxious to see this project succeed.

We will continue to test daily now that our passenger season has ended. I am at a loss as to how to modify things at this point.

Signed: R. M. Clement



This picture of the No. 10 Col Teague at Marshfield platform taking on water after descending in the late after spawned a Facebook discussion thread starting January 15, 2021 on Railway to the Moon – The Mt Washington Cog RY & Alumni page:

No. 10 *Col. Teague* Remembered

Kevin Day: "Was this the meanest bronco in the stable?" ***Robert Cal Callahan:*** "I liked the 8." ***Mark Brown:*** "#9 Waumbek" ***Bill Fothergill:*** "The guys at the cog told me this did not fire well." ***Paul Forbes:*** "Bill - it fired fine. It just wasn't as easy to fire as the others. The 8 was similar. Boilers for those two were from a different manufacturer. The 10 could flicker." ***Kevin McKinney:*** "I fired the #9 in the early 60's. Loved that engine! Of course, I was partial." ***Morris Root:*** "Had the rare opportunity to run the fleet in '67. #9 ran the best. #8, late summer, was using water in a big way." ***Roger Clemons:*** "Morris - Lucky you. I ran #3 (nice), #4 (pig), #9 (good, but slippery on the way down), and #6 (touchy, but with a good fireman, perhaps the best to make steam). I ran the #6 on the top of a double in 1971, with Paul Case, a track man, as my fireman. First time firing and Charlie Kenison in the Deuce below me. I explained to him how I was firing it and he followed my instructions and we came into Waumbeck with 125 psi. Left Waumbek and Charlie didn't give us much of a lead, but Paul had 130 psi at Jacob's and we took the siding at Skyline after Charlie suggested it, to wait for the down trains. After that it was hard to keep ahead of the Deuce, which was re-boilered in '69." ***Alan Warner:*** "I got to run the 10 its first full year of service in 1973. It was an absolute dream. Easy to fire once you adjusted to the larger firebox, and fast! Even with the crap coal we were using back then." ***Robert Cal Callahan:*** "Alan - in '74 I told Ed (Clarke) it was asbestos coal. Me and *(Mike)* Kenly had the #1 and it was a bitch to keep moving. We broke a rear crank on the flats out of the base." ***Roger Clemons: "***Alan - We had powerhouse coal, i.e. dust in '70-'71. Nasty stuff that would blow out of the stack before it ignited. The #9 would eat it, but only with the sidestack wide open. All other engines would burp and puke the stuff out, and several engines applied the patented "Acme Tender Extender" on the tender behind (pun intended!)" ***Dave Moody:*** "There were only two "real" engines, the #6 and the #2." ***Mark Brown:*** "Dave - ok... why?" ***Dave Moody:*** "Mark - The #6 was smooth and quiet, #2 was a powerhouse and easy to fire." ***Morris Root:*** "According to G(ordon) C(hase), 1 was #1!" ***Robert Cal Callahan:*** "Dave they were great engines, I liked the 8 because I often got that when I was a weekend guy in late 80's. Always had to do repairs on the engine before a run. But it had power on the steep grades." ***Mark Brown:*** "Dave Moody - is there a list of the locos and where they're now at? Did they actually sell one on eBay??" ***Dave Moody:*** "Mark, One is a static display in Twin Mt, another in Bretton Woods, The rest are all still at the Cog base station. Two are still inspected and operational, no engine

was ever sold on Ebay." ***Thomas Lane:*** "Dave - One did pop up on eBay in 2007? 2008? They were asking for 1.2 Million. Don't know if that was actually the owners or just some prankster."

The thread attached to another picture of the No. 10 *Col. Teague* as the current Base Road billboard continued the discussion.

Michael Thompson: "I'm glad no one has to fire that miserable thing *(No. 10)* anymore" ***Shawn Foss:*** "Michael - why miserable? That engine has a lot of history on that mountain. Spent many days braking on the coach in front of that engine." ***Michael Thompson: "***Shawn - did you ever fire it?" ***Shawn Foss: "***Michael - No I didn't - you?" ***Thompson:*** "Yes"

Brett Hall: " Michael - beat the hell out of firing the #1. Used a ton and a half of coal on a good day and you prayed there was a little rain water in the skyline tank if you couldn't make it to the summit." ***Shawn Foss:*** "Oh wow. Back a bit to have Skyline tank *(aka Gulf Tank to some)."* ***Brett Hall:*** "Shawn - '81 thru '84. Me and Dan Moulin had to hide under that tank when a sudden storm blew in while we were working on the water line from the bar the the summit. The damn thing got stuck by lighting and we couldn't hear for an hour." ***Shawn Foss:*** "Brett - nice ok - I will say I miss the old Marshfield- was awesome feeling building shake and running out to see train as a kid." ***Brett Hall:*** "Shawn - #10 went into service for the first time when I was there. First new engine since the #9 in 1909." ***Shawn Foss:*** "Oh wow ok. I always thought the whistle on the 8 had a really awesome sound echoed off the hills with such a neat sound- not like the diesels Hooooooonk! Haha." ***Brett Hall:*** "Shawn - the whistle on the stream pump house down below the shops was the best ever. It was a five or six chime and could be heard at the summit. It took about 150 hp of (steam) to sound it and was fed with a 2" pipe. If I remember right, Peter Oeschle came up with the 8's whistle somewhere of campus. I'll have to look at some of pics." ***Shawn Foss:*** "Brett - they did a great job with the biodiesel. Just a different experience for sure!!!" ***Brett Hall:*** "Shawn - they could have packaged the diesels in more stylish boxes. I missed the 125th reunion three years ago due to a hospitalization and haven't seen them in person yet. After I left MWRy I went on to Pike's Peak for the years while I was a professor in the winters. Their Swiss diesels were a different experience altogether. Came home clean every night!" ***Shawn Foss:*** "They *(the Cog diesels)* are great, and clean, and quick. They were done well and the IQAN system apparently makes running them near foolproof but definitely lacks the charm."

1987 Mt. Washington Cog Railway
Locomotive Roster
After New Boilers Installed
by Donald H. Bray

No. 1 ***Mt. Washington***- unknown - riveted, probably Hodge

No. 2 ***Ammonoosuc*** - Hodge, Boston MA-welded boiler

No. 3 ***Base Station*** - Hodge, Boston MA-welded boiler

No. 4 ***Summit*** - Hodge, Boston MA-welded boiler

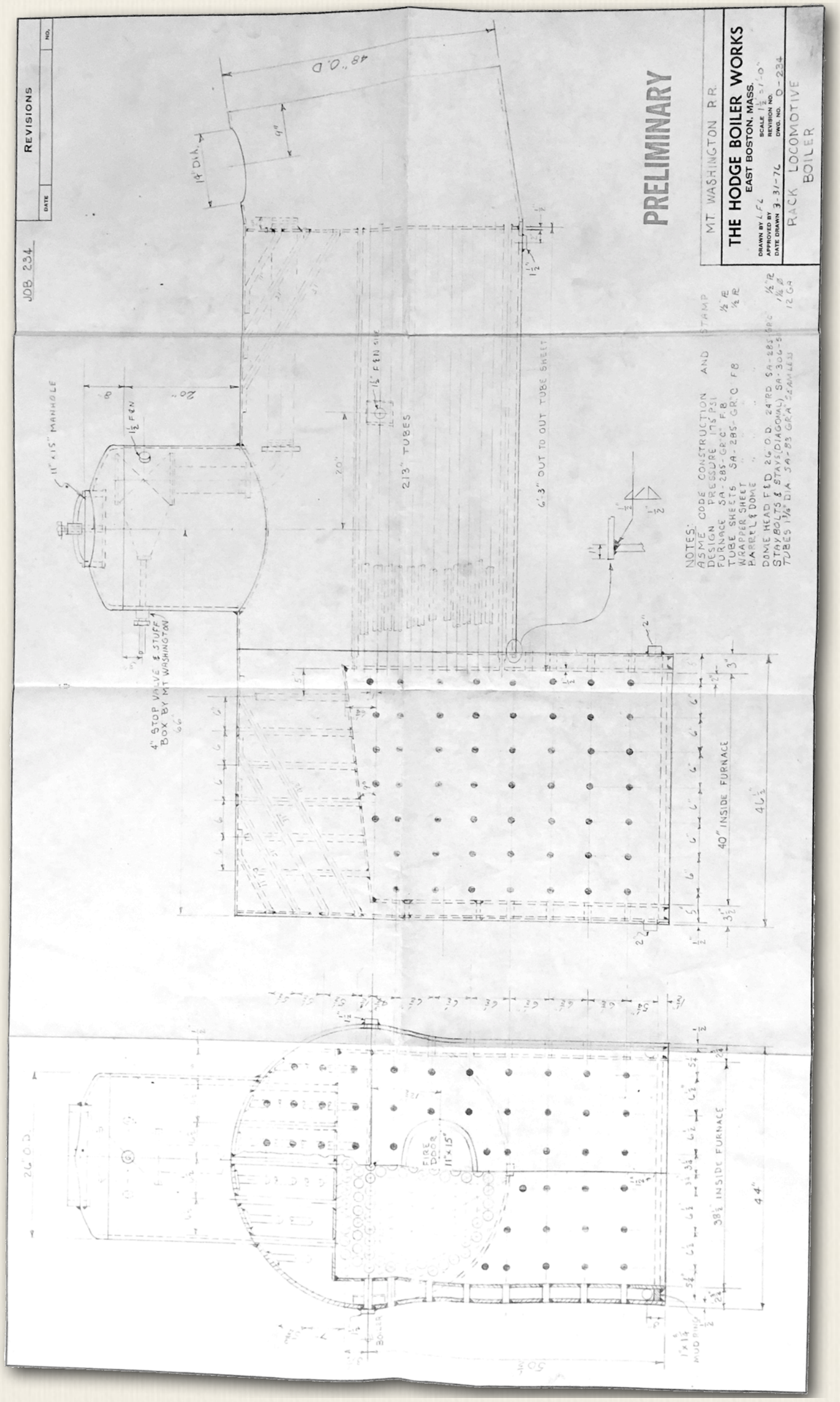
No. 6 ***Great Gulf*** - Hodge, Boston MA-welded boiler

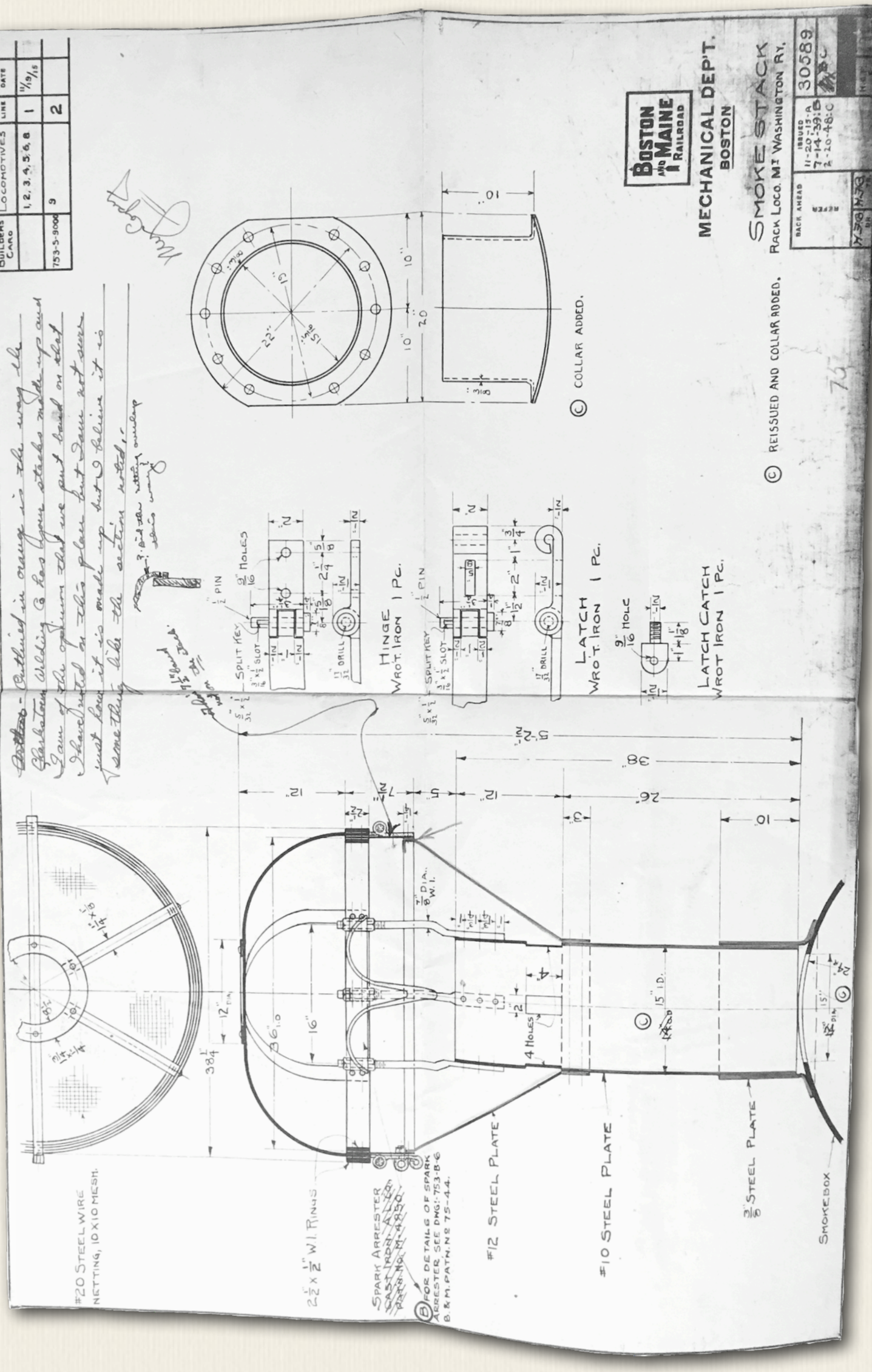
In the winter of 2005-2006, engine No. 6 ***Kancamagus*** *was fitted with the new feedwater pump system, using a trailing cog gear on its tender to power the pump*

No. 8 ***Tip Top*** - Monroe, Pittsburg PA-welded boiler

No. 9 ***Waumbek*** - Hodge, Boston MA-welded boiler

No. 10 ***Col. Teague***- Dillon, Fitchburg MA-welded boiler


PRELIMINARY
MT. WASHINGTON R.R.
THE HODGE BOILER WORKS
EAST BOSTON, MASS.
RACK LOCOMOTIVE BOILER
JOB 234
REVISIONS
213" TUBES
6'-3" OUT TO OUT TUBE SHEET
40" INSIDE FURNACE
38½" INSIDE FURNACE
FIRE DOOR 11"x15"
11"x15" MANHOLE
4" STOP VALVE & STUFF BOX BY MT WASHINGTON
NOTES:
ASME CODE CONSTRUCTION AND STAMP
DESIGN PRESSURE 175 PSI
FURNACE SA-285-GR'C' F.B.
TUBE SHEETS SA-285-GR'C' F.B.
WRAPPER SHEET
BARREL & DOME
DOME HEAD F&D 26" O.D. 24" RD. SA-285-GR'C'
STAYBOLTS & STAYS (DIAGONAL) SA-306-S
TUBES 1¾" DIA. SA-83 GR'A' SEAMLESS


BOSTON AND MAINE RAILROAD
MECHANICAL DEP'T.
BOSTON
SMOKE STACK
RACK LOCO. MT WASHINGTON RY.
30589
BUILDERS CARD
LOCOMOTIVES
LINE
DATE
1, 2, 3, 4, 5, 6, 8
1
11/19/15
753-5-9000
9
2
COLLAR ADDED.
REISSUED AND COLLAR ADDED.
HINGE WROT. IRON 1 PC.
LATCH WROT. IRON 1 PC.
LATCH CATCH WROT IRON 1 PC.
SPLIT KEY
SLOT
DRILL
PIN
9/16" HOLES
9/16" HOLE
#20 STEEL WIRE NETTING, 10 X 10 MESH.
2 1/2" x 1/2" W.I. RINGS
SPARK ARRESTER
FOR DETAILS OF SPARK ARRESTER SEE DWG: 753-B-6 B. & M. PATN. No 75-44.
#12 STEEL PLATE
#10 STEEL PLATE
3/8" STEEL PLATE
SMOKEBOX
4 HOLES
15" I.D.
38"
26"
12"
10"
5'-2 1/2"

Manager Rolli Remembers
1983 - 1985

From a Letter to Donald Bray from former Cog-owner John Rolli following dedication of the new Marshfield Station in 1994. In it he recalls the various mechanical, operational, and Base Station improvements made during his time managing the railroad.

Reliability: "What did I accomplish during my three years? I like to think that I greatly improved reliability of daily train operations. The first thing I did when I got to the Cog was to review all the breakdown reports for the past five years. I found that the cause of the most serious and time-consuming breakdowns was cracked forward steam lines. When this happened, the loco would lose all downhill braking ability, so that it was necessary to send a welder from the shop up the mountain to make repairs, tying up trains for hours. The frame of the loco was subject to great flex, due to no suspension and deteriorating track alignment and surfacing. The stress was transmitted to the forward steam lines, causing their fracture. They had been fitted with Barco ball joint fittings, all mounted upside down, large side facing up! This trapped cinder dust between the surfaces, locking up the fitting, and causing the pipe to break. George Burdick had placed short lengths of flexible rubber hose on the newly-constructed #8, and even before this went into service, I requested that similar but longer pieces be placed on the forward steam lines of all locomotives, and the Barcos removed. Result: no more forward steam line breakage. We followed this by looking at the exhaust side, where many locos had cylinders exhausting into each other by opposing flows, causing high back pressure, and constant failure of the expensive Johnson Flexible Metal hose used to absorb the twist on the exhaust pipes. I had the piping rerouted to resemble auto manifolds, with "Y" style piping, and eliminated the costly Johnson Metal Hoses by replacing them with special oil field rubber hose made only once a year by Gates Rubber Company. I also experimented with the #4, slowest of the fleet, by installing dual exhaust pipes, side stacks, and twin nozzles in the smoke box of varying sizes. (None of these helped much.) *(Ed note: No. 4 Summit had dual side stacks in 1950 - apparently didn't work then either.)*

Crankshafts & Boxes: "I had found much down time caused by "crankbox" and other bearing failure, due to the high rotational speed of the crankshaft, and irregular lubrication due to constant plugging of the hydrostatic lubricators. The engineers favored the mechanical lubricator on engine #9, taken from a liberty ship by Ed Clark, and I had similar ones installed in the rest of the fleet, replacing the troublesome hydrostatic lubricators to everyone's delight. The Hydrostatic lubricators used to flash back steam and oil onto the engine crew during refilling, causing burns and a mess in the cab. It took some time for Mike Kenly to find the best way to hook up the mechanical lubricators, as the rods first used were too heavy, and would bend or break. Finally, he perfected a cable and spring system that was reliable." For other lubrication with the grease guns, Rolli bought "grease in tubes rather than in bulk from barrel, higher quality, less mess."

"I called in an expert from Bearings, Inc. to look at the crank boxes, as I wanted to convert them to ball or roller bearings. He recommended a very heavy-duty roller bearing designed for stone crushers. It took the genius of Earl Temple to make a jig to hold a die rotating in the plain bearing to make the frame and strap cut on the same axis for the roller bearing. We began to convert slowly and found that the conversion worked well. The #9 had a thinner frame in the forward bearing area, and would have to wait for a new frame for its conversion.

"Crankshaft wear was a problem. They were very expensive, and subject to tooth wear if misaligned as the crankboxes wore out. Changing to the roller bearings helped alignment, and I also had Earl Temple work with the manufacturer, Brad Foote Gear Co. on a new design, flame-hardened on the surface, which had not been done previously. This helped considerably. I also had some new rack made up which had flame-hardened spools to combat wear. This was to replace worn rack taken from the mountain to use in the new shuttle track.

Guidebar & Crossheads: "Another item taking much machinist time was the guide bar, a square stock piece with threaded ends, which would break off in the flange or in the yoke. Trainmen were forever tapping guidebars with hammers to detect the off-key sound of a cracked end. We solved this by cutting the threaded ends off, drilling and tapping them, and holding them with schedule #8 bolts. This allowed the guide bars to twist slightly with the flex of the engine, and the cracking problem ended. Riding on the guidebar was the crosshead, which rested on "gibs," shoe-like devices then made of cast iron, which caused serious guidebar wear.

I learned that years ago, the gibs had been made of brass, and no one knew why we had changed. I ordered them cast in brass once again, to the improvement of the wear factor.

"Our most serious delay during 1983 was caused by a seizure of the eccentric and the strap which wrapped around it, both made of steel, a recipe for failure! I had the machinists cut down the eccentrics and shrink fit brass wear rings around them, again improving reliability. At the time he left the Cog, ace machinist Earl Temple was experimenting with round guidebars which would let the crosshead ride in brass sleeve bearings or linear roller bearings, eliminating gibs. He was also experimenting with new design piston rings to replace the multi-segmented ones then used, and ball bearings for rod ends and eccentrics. I don't know if anyone following him continued this research, except on the piston rings, which have now been successfully changed.

Arch Brick: "Engines had been run for several years without arch brick in the fireboxes, due to fragility of the compound used to make them. We contacted the manufacturer, and got a newer, more rugged and more expensive formula mixed, and began again to use arch brick. We had not found the best solution by the time I left the Cog *(1985)*, and were still trying different formulas to cope with the crumbling problem.

Vibration: "Vibration was a problem due to the non-suspension chassis. I had a set of rubber isolated wheels made up for installation on a locomotive, and was working on a vibration-damped crankshaft with the same company, Penn Wheel, when I left the Cog. I don't know how the rubberized wheels worked out, or if development continued on the crankshaft.



No. 4's Big Whistle *next to new coaling station (1985 - Henry Vaughn photos*

Whistles: "The final item concerning the engines was strictly for fun. I had a five-chime whistle from a main line loco installed on the #8, the big whistle from the roof of the pump house installed on the #4, and another big main line whistle installed on the #1 shuttle train. On a good day, these whistles could be heard on the front porch of the Mt. Washington Hotel. Some show!

"Did these modifications help? I believe so. During my first year at the Cog, a fireman could not advance to engineer until he had been involved in a breakdown which involved tying down a cylinder and valve assembly, blocking them off with scrap wood found along the tracks, and bringing the train down the mountain safely on three cylinders' braking effort. By my third year, such breakdowns were so rare that many firemen had not seen such a serious mechanical failure. Of course, frames and yokes still crack, heads punch out, and many other gremlins lurk to make life interesting on the mountain.

Coaches: "I had little work done on the coaches beyond routine maintenance during my tenure, especially embarrassing compared to the beautiful work now being done in the car shop by today's crew. We were slowly working on a new coach, and had the other wooden coaches painted a uniform bright yellow upon your recommendation, Donald. To my despair, Ellen Teague requested that the new wooden coach be painted "a rich, royal, blue," and we reluctantly respected her wishes. I later found that you *(Donald Bray)* had put her up to this!

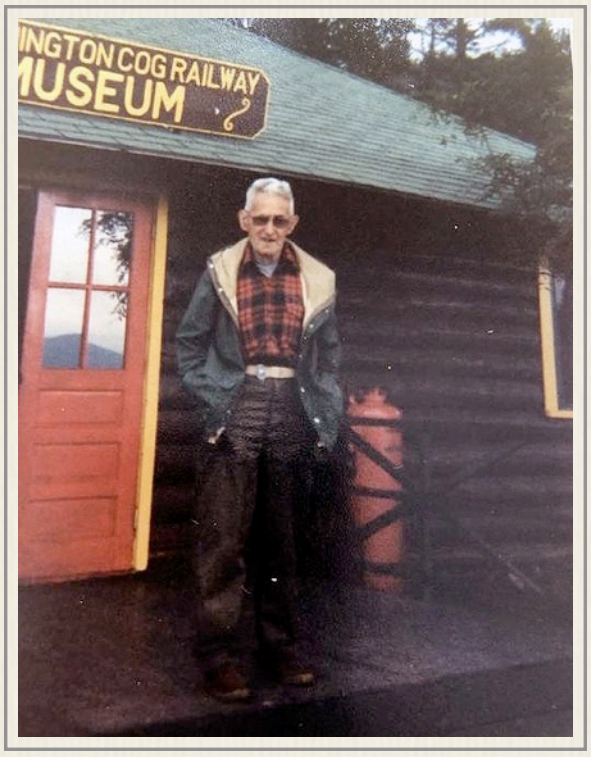


New Shuttle Track *images as seen in September 1985 - Henry Vaughn photos*

Grounds: "The biggest changes to the grounds during my time at the Cog were the construction of the lower parking lots and drainage ditches by Loxley Ness, the shuttle track *(left & next page)* extending down to the transfer table built by Con-Trak, a Vermont company owned by William Drunsik, the conversion of the girls dorm to the Ammonoosuc Station shuttle terminal, planting of flower gardens, and construction of additional restrooms, both inside Marshfield, and in the Middleton annex. Besides allowing the operation of the shuttle train the new track

provided a way to get a train out of the se quence in which it came down the mountain and was parked at night, by running around the queue and descending to the shop. It no longer became necessary to put each train away in the engine and car house each night, as the starting sequence could now be altered by use of the shuttle track. We also found the buildings to be painted any number of colors, including a garish off-yellow in the shop area. We had every building on the property painted a uniform log cabin brown, greatly improving the appearance of the place.





Crawford at the Cog Museum (1981)
- Margaret Machell Corey collection

Museum, Coaling & Gift Shop: "Through the efforts of Brett Hall, we created the museum where the new Marshfield now stands, staffed by 80+ year old Crawford Hassen, who regaled countless tourists with his "blood on the tracks" stories. We converted the former motel office to the administrative office and eliminated the small adjoining cabin. We eliminated the terribly loud groaning water pump in the shop which supplied water to the summit, and installed a quiet new pump in the woods driven by a separate water wheel. We also relocated the coaling area to the opposite side of the tracks under Loxley's direction, and built a new coal bunker there. This greatly eliminated the mess at the base and provided a quicker turnaround for coaling the trains. The old wooden coaling tower was fragile, supported by rusty cables, and reached by driving the "scoop" up a rickety wooden ramp. Picturesque but dangerous. We began to charge admission to the base (and shuttle train ride) at a gate house, and increased gift sales to the delight of gift shop manager Nurnet Bader by placing a barrier pipe to direct all passengers exiting the train into the gift shop.

Track Maintenance: "Little change on the mountain. My track foremen over the three years were Andre Desjardin, Ken Chadwick, John Bolton, and George Walton, with work scrutinized by Walter King of the Public Utilities Commission. In my first year, upon suggestion of George Burdick, we ordered treated timber for the first time in Cog History. *(Ed note: See Arthur Teague opening season letter, Winslow Melvin inspection of 1963 & Jim Gordon description of handling treated track timbers in Roster entry)* This seems to have worked well on everything except side pieces, which continue to crack and split regardless of treatment. In our first two years, the quality of timber was exceptional, with tight, dense, growth rings. Availability of such good wood declined in my third year and has not improved today. We abandoned the military field telephone system with two wires leading up the tracks, in favor of a VHF radio system, first on the Marine band, then on the railroad frequency. A great leap forward in train control and safety! Loxley Ness bought an hydraulic arm for the #2 work train, which was most useful in placing timbers on Jacobs Ladder, and even more so at recovering discarded trestle timber from along the right-of-way. Previously, this wood had to be cut up on the mountain into two-foot lengths, and lifted by hand up to a work train, an arduous and time-consuming job, such that wood had accumulated for a number of years. Using the hydraulic arm, we were able to completely clean everything from halfway house to the base, one autumn with a crew of myself, Steve Giordani, Brad Wecker, Steve Comeau, and Timmy Nelson. The other work train was repainted by resident artist Sheelah Christie to resemble a passenger coach with Crawford Hassen riding on board and caused much comment from the public whenever it went by.

Waumbek Station: "One on-mountain change came very close to happening, only to be cancelled by me at the last minute. This was the construction of Waumbec Station, at a site above the end of the present switch track, which was to be extended. We had a design, a contractor, and we were ready to break ground. This station was to accommodate primarily tour groups, and late afternoon tourists, who wouldn't have time for a three-hour round trip to the summit. I cancelled it because it just wouldn't work around our schedule of summit

trains. The Waumbec train would have to leave from the shuttle track immediately after the second half of the double dropped below the ticket booth for coal, in order to be first on the switch at Waumbec. It could only stay there for either a few minutes or an hour, as it would either need to follow the next double down or wait until the next pair came through an hour later. This would have been too long to stay at Waumbec, even with a food service, which we had planned. In addition, we found that most tourists would rather pay a greater fare and go to the summit, rather than a reduced amount and go part way up. I wonder if a copy of these plans still exists. Perhaps we should have planned it for Skyline, and done a two hour trip. (On busy late afternoons, we would sell such tickets, temporarily renaming Skyline to "Summit Switch," and found that we could squeeze in one extra train, which would follow the two from the previous hour's summit trip down the mountain as darkness fell. We would let the tourists out at Skyline to watch sunset, and get nearly the same price as a full summit run.)

"With the scrapping of the Waumbec Station idea also went our plan to relocate the Waumbec tank further up-mountain between the switch track and the main line. When running doubles, much time was lost at Waumbec due to the need to service the lower half of the double. If the downcomers were already there upon its arrival, it took the switch immediately, and did not water up until they had descended and the top half had left the switch. If the downcomers arrived first, the top train could have watered up, saving time on the turnaround below. (Today's crews are more efficient. We used to lose 12-15 minutes per trip after noon time when running three doubles, and could carry as many people on a busy day using five trains as with six, since with five, we could hold schedule. Crews can now hold schedule with six trains on the mountain, which Bobby Trask relates to their greater experience level today.)

Ticketing: "A change put in by Bob Schafer was little used at the time, but he correctly predicted that it would be the basis for much greater utilization in the future; the origination of the reservation system. Bob felt that the only way to sell out those cloudy days was to have a firm non-cancelable reservation system in place. To do this, we had to begin accepting credit cards, which had not been allowed in the past. We also solved the ticket mix-up which habitually occurred due to having both 48 and 56 passenger coaches in operation, by having ticket books made with the exact number of tickets in them for each run, coded, lettered, and numbered. Worked great, but not as good as today's computerized system. Bob also orchestrated the advertising campaigns, hiring the agency which created the logos, artwork, photos, and television commercials still used ten years later. Wherever those kids who modeled for the brochure are today, they remain there frozen in time pointing out the coach window on their summit ride.

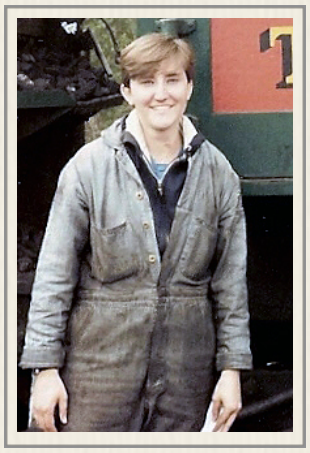
Coal Supply: "I had to learn all about coal as part of my job. I soon learned that there were four major components of the soft coal that we burned: volatiles, carbon, ash, and screening. We had ordered double screened coal, in order to eliminate excess fines, which would blow right up the stack, but we felt that the movement of shipping and handling ground up the coal so that we always had lots of dust. George Burdick had favored coal with high volatile percentage in relation to carbon percentage, which gave more quick heat. I found later in Arthur Teague's records information that lower volatiles and higher carbon percentage worked better. We found by experimentation that neither mattered as much as getting a coal with a low ash percentage. We also discovered that even coal from one mine could vary greatly, depending on where in the seam it came from. My first year saw us getting coal delivered at Fabyans via the Maine Central Railroad. We would then unload and truck it to the Cog with our own equipment. When the old coal pocket collapsed, they helped us rebuild and watched us spend $3000 on the project, only to announce that the Mountain Division was to be immediately abandoned! For the next two years, we had coal which was brought to Portland by rail, then to the Cog by truck. Rail cars were always getting lost or delayed. Our broker was so good to us that one Sunday afternoon when we were low on coal due to a wayward rail shipment, he stole some coal from another customer's pile and delivered to us that night, replacing it with coal from our shipment when it finally arrived.

"One time some hard coal was delivered to us in error. We held it for use in the shop stove, the only source of heat in that building. One day, I discovered the hard coal pile was reduced in size. I asked Dave Hicks, bunker boy, about it, and learned that he had just used the scoop to load it into the #9 loco, about to head up the mountain! At the base, the fire looked normal, and steam was up, so we told the passengers what had happened, and launched the train. We got only up the first hill; the release rate of heat with no volatiles was insufficient to keep up steam, so we backed down, changed coal, and ran 15 minutes late. The passengers took it in good spirits.

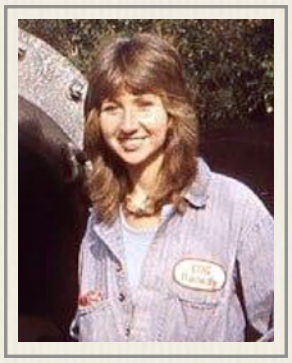
Rolli Recalls 1983 - 1985

Let There Be Light: "The Cog grounds had been black at night, with only a bare bulb or two to light up the way for passengers groping their back to their cars after a late train. We installed quartz lights in many critical areas, ideal since they could tolerate a great range of voltage fluctuation, the norm at the Cog due to our diesel & water wheel generator system. The present electrical connection to Public Service Co. one of the greatest technological events at the Cog, was still several years away.





Train Crew: "Those three years marked another milestone, female train crew members. Laurie White *(left)* was the first *(1983)*. Brought to the Cog by her cousin, Dave Moody, trainmaster, she distinguished herself by moving heavy rocks as a member of Liz Mock's grounds crew. Blond-haired, blue-eyed, and dimpled she had the strength of a blacksmith, and a beauty that shone through the layers of grime and soot on her face. She had no trouble breaking into the man's world of Cog trains, and her crew of Nat Putnam and George Walton were very protective of her. She left after only one year, to our great regret. The next year *(1984)* saw Heather Allen *(right)*, our second trainwoman, start as a brakeman, and graduate to fireman by the end of the season. My final year at the Cog *(1985)* was marked by Heather firing nearly full-time and by the arrival of Cathy Carmen *(left)* as brakewoman on a crew with Walton as engineer and Brad Wecker as trainer-brakeman. Cathy was an athlete and well able to handle the job, as she previously worked as a group leader for Outward Bound in the Maine wilderness.



"My three years at the Cog were the most interesting of my life, yet it was time to leave and allow the business to stabilize for a year or two after so much change in so little time, before embarking on it's next growth cycle. It was nice to see you, Ellen, Ed Clark, and so many people that I worked with still at the Cog on its 125th celebration at the dedication of the magnificent new Marshfield Station."



Track Crew *(L-R) Adam Rolli, Bobby Trask, Steve Comeau & Paul Coburn at Waumbek Switch (1983-ish)*
- John Rolli photo

Hydrostatic Drive System

Ed Clark's mid-70's effort to build a cog diesel locomotive was frustrated by the interconnected front and rear cog wheels that had the engine climbing out of the rack, and by the inability of the transmission to handle the demands of the grade. Clark's Spirit of '76 hydraulic fluid would boil out of the transmission. (See Appendix - Speedy & Patriotic). Thirty years later, Al La-Prade tackled the problem and designed a diesel with independent cog gears and a hydraulic system that would not only provide power to the cogs to drive the train up the mountain, but would also safely provide braking on the way down as the diesels would not have any cylinders air compression like the traditional steam engines. A Northborough, Massachusetts company, The Hope Group (now a SunSource Company) explained their role in the diesel's development and IQAN system in the following blog post that was first captured by the Internet Archives' *Wayback Machine* on February 23, 2020:

https://www.thehopegroup.com/engineered-systems/hydraulic-engineered-systems/hydrostatic-drive-system/



Parker Hydraulics and IQAN Control Drive Cog Railway Bio-Diesel Engines

The owners and engineers at the Mount Washington Cog Railway made a decision several years ago to introduce their first major redesign of the railway engines. IQAN electrical controls were integrated with the hydrostatic drive transmission, which enabled trains to use less fuel when pulling (pushing) its passenger cars to the summit of the 6,288 foot mountain in the White Mountains of New Hampshire. Since 1869 the historical steam engines of the railway have burned through over one ton of soft-grade bituminous coal per round trip to the summit. At the prevailing rate of about $225 per ton (and rising annually) there was a lot of appeal in the concept of a bio-diesel alternative that would reduce the cost to about $60 per trip, a fuel savings of 74 percent.

Beyond the fuel costs, just the annual $100,000 expense for "boiler inspections" had become an economic burden without any obvious solution. Only the elimination of the boiler could stop that expense. Further, with a diesel engine, instead of a boiler, the train could operate with one person in the cab, instead of two, which cut personnel costs in half. And, economics aside, the proposed change reduced the emissions issue, reduced the chance of fires starting along the tracks, and would encourage more riders that otherwise objected to the smoke and dust from the existing engines.

Innovative Hydraulic Solutions

Shop Talk: M-Class Diesels

With the switch from a boiler making steam, to a diesel engine driving a Power Take Off pump, a new age was born. The engineers at the Cog Railway designed a new system from the engine, to the braking, to the overall system control. Working closely with the Cog Railway engineers, The Hope Group team introduced several Parker system solutions, including a hydraulic power train drive and hydraulic controls for the braking system.

Two Parker Denison hydrostatic pumps provide electronically controlled variable pressure and flow to two Parker fixed displacement, axial piston hydraulic drive motors. They are coupled to two planetary gear boxes that drive the locomotive's two Cog gears. The decision to go hydraulic was based on the fundamental advantages of hydraulics when it comes to power density.

Even in descent, there is an important requirement for power, ensuring the train comes down the mountain at a slow, safe speed, and under complete control. (No coasting down!). A Parker Denison fixed vane hydraulic pump runs unloaded during the trip up the mountain, but is used as a brake during the descent. A Parker proportional relief valve controls the pressure of the pump, which induces a load on the power train and applies brakes for the locomotive and the passenger coach during the descent.

IQAN System Control

A Parker IQAN-MDL electronic control system provides integrated system management for the locomotive's diesel engine, hydrostatic drive system, braking system, and cooling systems. The control system functions as a master controller, providing a display for the operating engineer, and providing a data gateway. Through the careful selection of an electronically governed diesel engine, the engineering team was able to integrate the Parker IQAN control system with the engine and other power train components. The control system gathers vital engine data from the engine's CANbus protocol and monitors parameters such as engine speed, oil pressure and cooling water jacket temperature. All of the data is transferred directly via a simple connection through two wires where it can be monitored, analyzed and displayed. The multiple screens display vehicle speed, angle of inclination, train location, vibration, and hydraulic filter status.

Monitoring Hydraulic Fluids

A clean engine is a happy engine. To ensure the safe operation of the engine, it's vital to measure and monitor the hydraulic fluids in the system. The IQAN-MDL constantly reads pressure transducers that monitor pressure levels of hydraulic functions. The system can detect possible leaks and can take appropriate action. To ensure clean hydraulic fluid, the engineers installed a Parker Icount particle counter system to measure dirt particles in the fluid from the drain of the two hydrostatic transmissions. If the particle count becomes too high, the MDL alerts the locomotive operator and slows the train before critical damage to the transmission occurs.

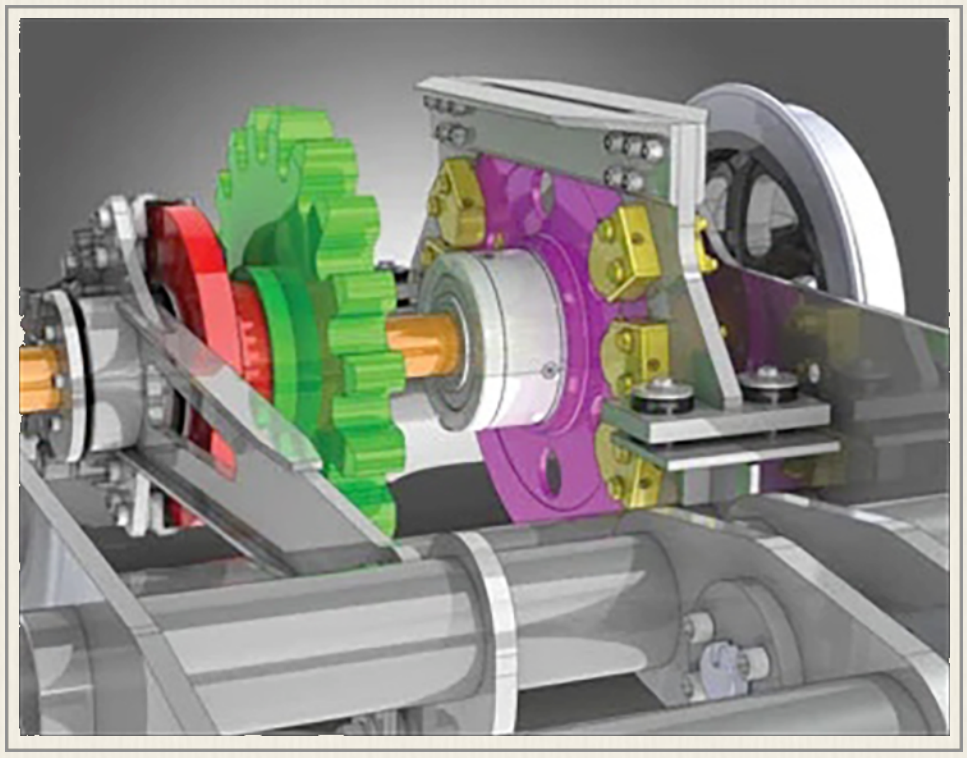
Visitors to Mount Washington now have a choice of a traditional steam powered ascent or the revolutionary bio-diesel powered locomotive's now coming on line. Several of the new engines are operating successfully now and more are on the way. The Cog Railway was a true innovation in 1869 and it continues that reputation as an innovator today. *- The Hope Group – a SunSource Company - 70 Bearfoot Road Northborough, MA*



21st Century Ratchet Lifter

The famous Mount Washington Cog Railway in New Hampshire has been transporting visitors to the highest peak in the Northeastern US since 1869. At the summit, 6,288 ft. above sea level, the mountain experiences some of the most extreme weather conditions in the world with wind chill temperatures down to -102ºF. A directly measured surface wind speed of 231 mph is a Northern and Western Hemisphere record. The 6-mile, 3-hour round trip features an average grade of 25% (some sections approach nearly 38%). The railway fleet currently consists of a pair of steam locomotives, seven biodiesel locomotives and seven passenger coaches. The railway's first diesel-powered locomotive was designed primarily by Al Laprade, now retired and serving as a consulting mechanical engineer. The locomotive was built entirely on-site by the Cog's shop crew. In 2001, LaPrade also designed the unique sprag clutch system installed on the passenger coaches that replaced the original ratchet-

pawl system in use since the late 1800's. The bothersome "dinging" noise created by the older ratchet system during the entire trip up the mountain was a major passenger complaint. In addition, the ratchet could not be trusted as an emergency stop mechanism because if it were suddenly applied with any speed, it would either bend the pawl, break a crossmember, a bearing, or worse, an axle shaft.



There are 12 hydraulic caliper brakes that hold the clutch rotor stationary when applied. To engage the clutch, the brakeman flips a valve which applies hydraulic pressure to the brake calipers, preventing the sprag rotor from rotating (2021)
- Altramotion image

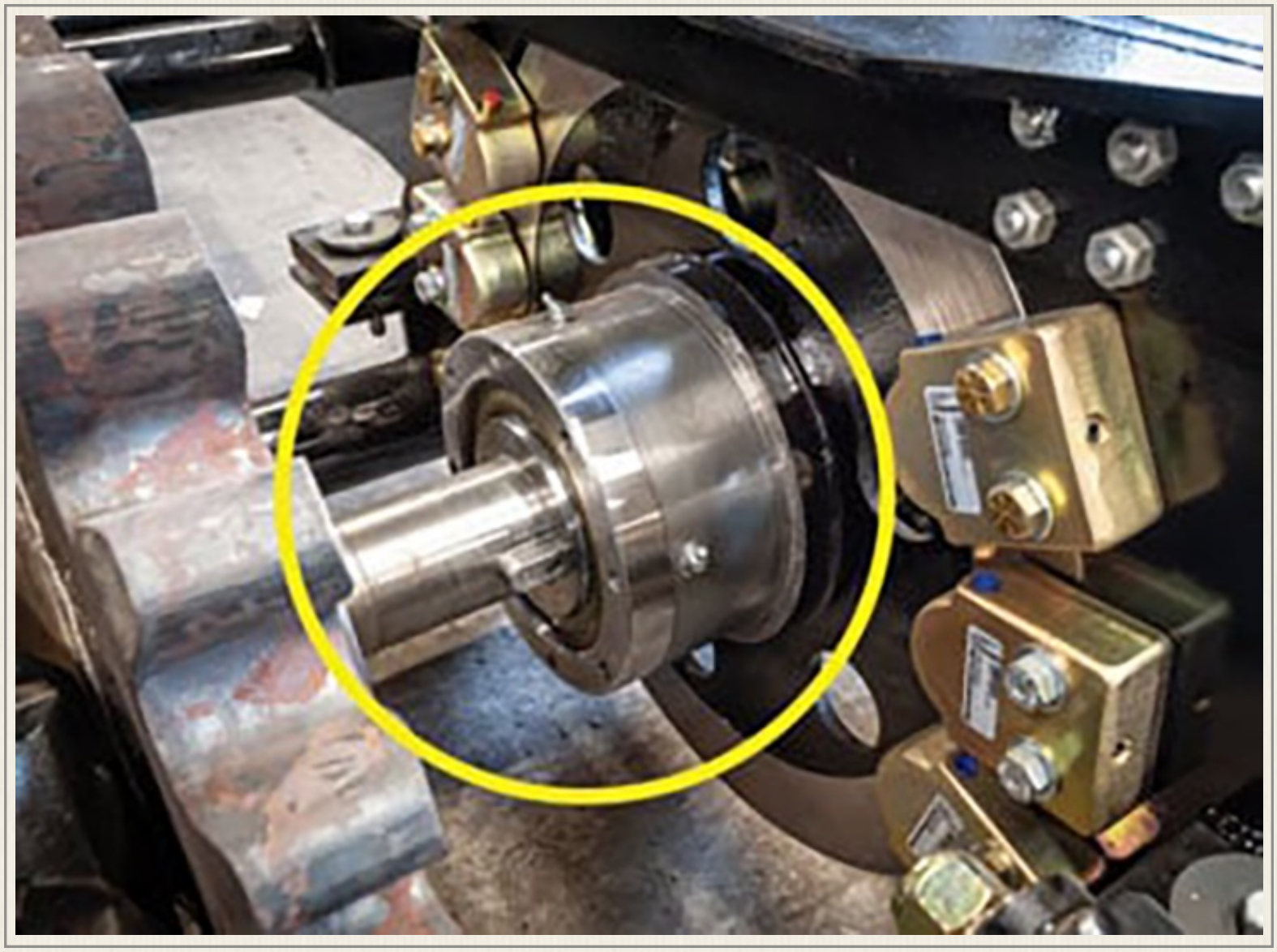
Formsprag FSO clutches were selected to meet the challenging backstopping application requirements and are currently installed on every coach in the fleet. According to Caleb Gross, Mechanical Engineer at the railway, the Formsprag clutches were chosen for several reasons. "Formsprag had the most engineering information available for our reference. Compared to competitors, the clutches also appeared to be thoroughly tested and engineered to give us confidence in using them in our application. Product documentation and honesty was key in our decision." During the early phases of the sprag clutch system development, LaPrade visited Bretton Woods (a ski area located nearby and formerly owned by the owners of the Cog Railway) to view a Formsprag clutch that was installed on a chairlift carousel. Based on the successful ski lift application, no further clutch manufacturers were considered. The ski lift clutch turned out to be a similar model to the FSO unit specified for the railway coach retrofits. The specific Formsprag Model FSO 800 clutches, featuring PCE sprags with Formchrome®and Formsprag "Free-action" retainers, were chosen based on superior 13,000 lb.ft. (17,680 Nm). torque capacity and the general ruggedness of their construction. The compact 10 in. diameter FSO units also fit within the existing hardware and the small space available on the older coaches.

The supplied FSO units are grease-lubricated with lip seals. Grease lubrication was specified because of the concern of lubricating oil leaking onto the adjacent caliper brake rotor which could allow the brake calipers to slip. Also, grease will seep out slower and presumably more visibly than oil allowing more time to identify a leak. "The specified FSO clutch has a lip seal mainly for the slow application shaft speeds (~50 RPM). Our maximum design forward/reverse speed is just shy of 5 MPH and this is a direct-acting clutch," said Gross. "The simplicity of the lip seal allows for easy, inexpensive service if replacement is ever needed." A critically important FSO backstopping sprag clutch is installed on the down-mountain axle of each coach. The sprag clutch is engaged by the brakeman for the up-mountain portion of the trip, preventing any roll-back of the passenger coach. There are 12 hydraulic calipers that hold the clutch rotor stationary when applied. To engage the clutch, the brakeman flips a valve which applies hydraulic pressure to the brake calipers, preventing the sprag rotor from rotating. The settings are left in this configuration (only forward motion allowed) until right before the train leaves the summit. For the down-mountain leg of the trip, the clutch is disengaged to allow downward movement. When the engineer is in the cab and ready to go, he gives the brakeman a signal to flip the valve back and release hydraulic pressure on the clutch rotor brake calipers. The brakeman stands ready at the brake wheel on the down-mountain end of the coach for the entire trip from the summit

The locomotive stays behind (down mountain of) the coach at all times and the two are not coupled (connected). There is an individual manual brake for each (up mountain and down mountain) axle for redundancy. Each shaft also has at least one brake drum or rotor, depending on the design. Newer air ride coaches have 3 modern air brakes which are all simultaneously applied through a parking brake valve. In both designs, the sprag clutch is also an added redundancy that can be quickly applied if needed to stop the coach from rolling downhill. The coach clutches are field-tested often. Every time a train comes to a switch, the locomotive must stop until the brakeman signals an 'all clear' to proceed. Every time this happens, the coach remains in position

and does not follow the locomotive backwards downhill. The railway is very pleased with the long-lasting performance of the Formsprag clutches. "The first clutch was installed on one of our coaches for the 2001 summer season. That coach has been in service since and the clutch has yet to give us a reason to consider replacement," said Gross

- *https://www.altramotion.com/en/newsroom/2021/06/mt-washington-cog-railway-relies-on-backstopping-clutch - Jun 14,2021 press release*

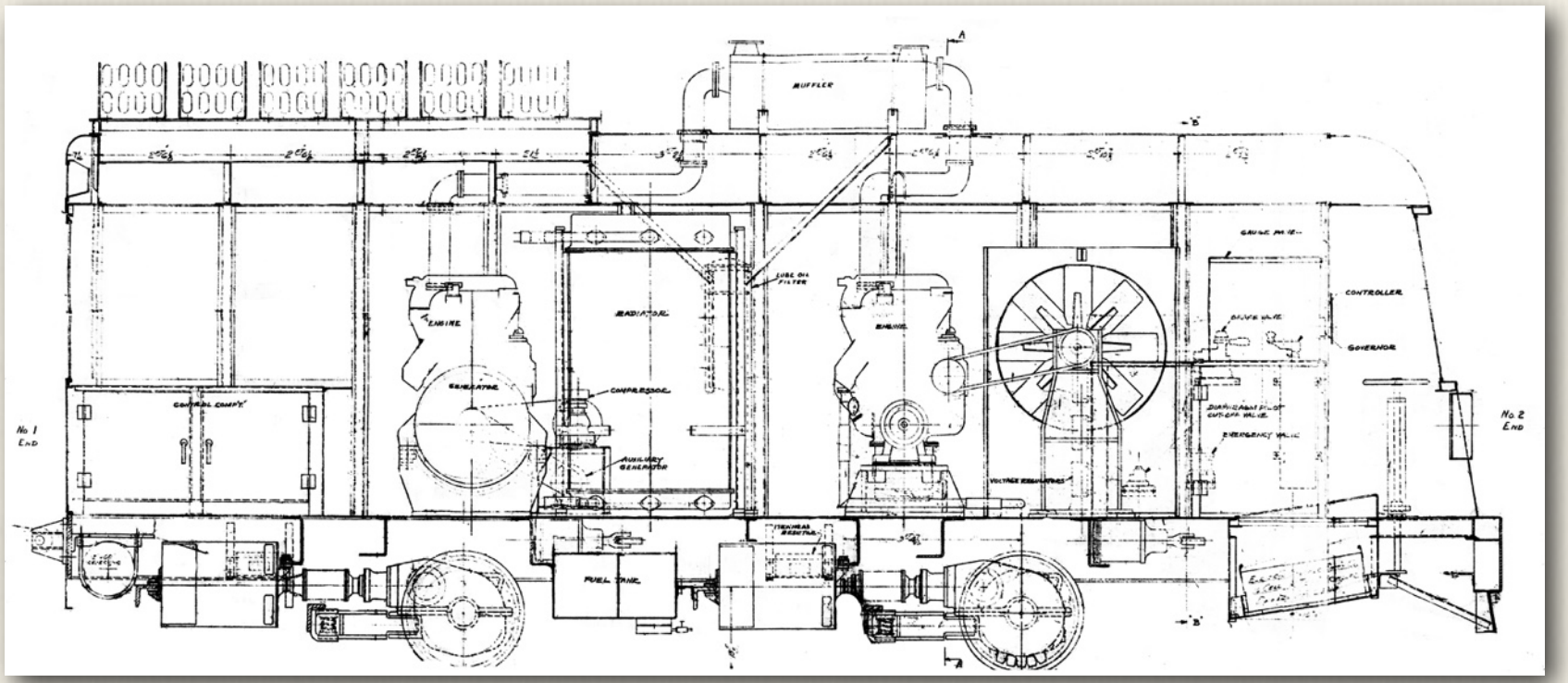


The compact 10 in. diameter FSO units fit within the existing hardware and the small space available. The sprag clutch is engaged for the up-mountain portion of the trip, preventing any roll-back of the passenger coach. For the down-mountain leg of the trip, the clutch is disengaged to allow downward movement. (2021)
- Altramotion image

Mt. Washington Railway Diesel Locomotive Roster

1946-2024

First Designs Considered

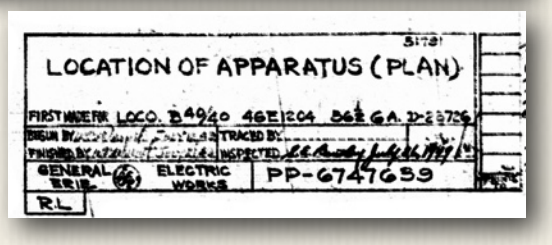


Modified General Electromotive

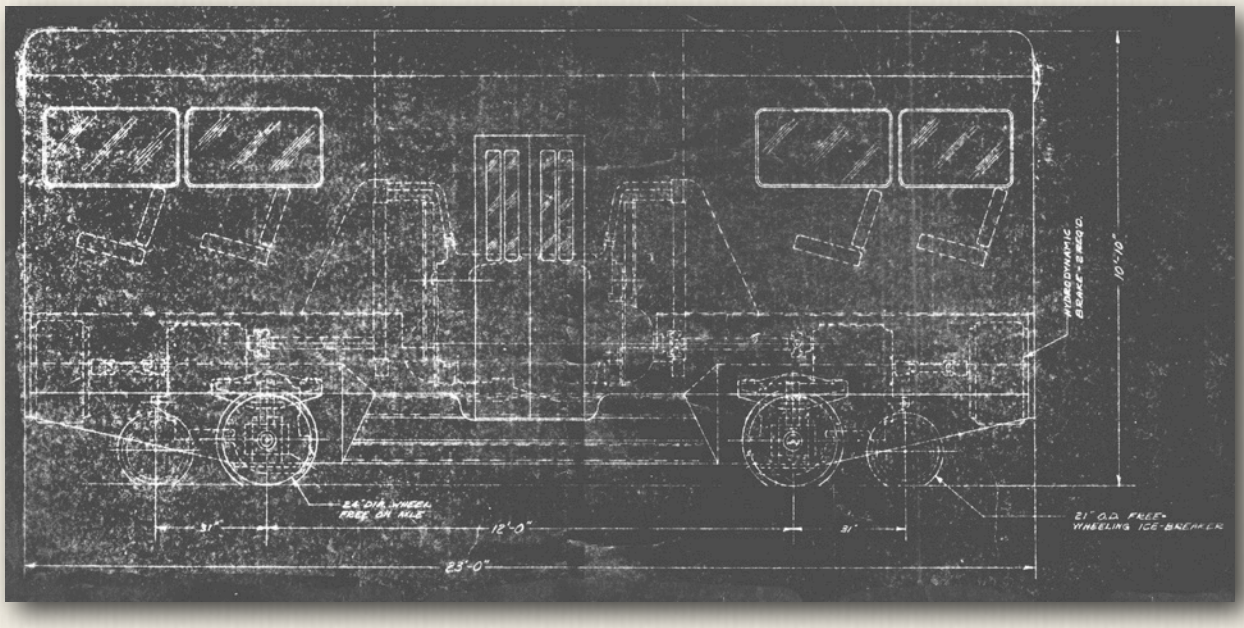
Diesel

1946 - 1949

Prototype



In 1946, General Electric offered to build three diesel cog locomotives for $100-thousand dollars each. The offer was rejected as the debt load would be too heavy for a railroad that had such a short season, and there was concern the engines themselves would be too heavy for the track. A blueprint *(above)* dated July 26, 1949 showed a modification of an existing mainline traction diesel at the General Electric Erie Works. Cog General Manager Arthur Teague tells the N.H. Public Utilities Commission, "The Air Corps is having General Motors Diesel Electromotive Division at LaGrange, Illinois, make up a design for a cog engine to be used by them here on the railway. I hope the 'great white fathers' descend down on us, and we, in some way, manage to get a couple of new engines and cars ourselves someday. During the past 5 years we have spent $135,000 in maintenance of locomotives, cars and equipment and a little over $90,000 in track maintenance. How would you feel if we managed to borrow some money from God knows where to buy a couple of pieces of new equipment? I really think it would be one of the greatest things the state could have done to add to the tourist attractions."



Davenport-Besler Corporation

Diesel

1951

Prototype

The Mount Washington Project file of the Davenport-Besler Corporation begins with a $51,950 quote for mountain-climbing cog diesel engine dated Sept 21, 1951. The locomotive would be built with two diesel engines attached to

torque converter drives. Engineers were able to use the company's standard diesel general specification proposal sheet to describe the loco, but there was a special equipment attachment. That list included air actuated internal expanding drum type brake on each axle, and a hydrodynamic brake connected to each transmission to retard speed on the down grade. A deicing sprocket was provided at each end of the locomotive to clear the cog rack for the two cog wheels. It would carry 12 passengers with a single operator. Failure of a proposed system o clear snow from the tracks and ice from the cog rack ended the project in the spring of 1952. *More on the first two diesel prototypes found in Vol. 4 Appendix - Cold, War & Diesels.*



M1(a)
Spirit of '76
Mount Washington Cog Railway Shop
Diesel
1976
Prototype
First diesel-hydraulic locomotive actually constructed and underwritten by Cog GM Ed Clark used parts from aircraft towing tug from Pease Air Force Base. Testing proved linked cogwheels had the locomotive climbing out of the rack on grades & the power plant was such that hydraulic fluid boiled out of the transmission. Clark was let go as manager. The diesel was parked and finally scrapped in 1977. *More details in Vol. 4 Appendix - Speedy & Patriotic.*

M-1(b)
SnowJet
Canadian National
& Mount Washington Cog Railway Shop
Diesel
2008
Operational
recycled J-57 super-high BTU jet engine that boasts 10,000 pounds of thrust will be outfitted with cog gears and mounted on a Cog Railway carriage to become a high-powered snowblower





M-1
Wajo Nanatassis
Mount Washington Cog Railway Shop
Diesel
2007 - 2008
Operational
First operational diesel-hydraulic locomotive. Designed & built by Al LaPrade, Rob Maclay, Keith Farias and the shop crew. Powered by biodiesel. The name means "mountain hummingbird" in the Abenaki language.

1946-2024 Diesel Locomotive Roster



M-2

Algonquin

Mount Washington Cog Railway Shop

Diesel

2009

Operational

Second diesel-hydraulic locomotive. Powered by biodiesel. Algonquin are Indigenous people who now live in Eastern Canada.



M-3

Abenaki

Mount Washington Cog Railway Shop

Diesel

2009

Operational

Third diesel-hydraulic locomotive. Powered by biodiesel (B20), Abenaki are Indigenous people of the Northeastern Woodlands of Canada and the United States.



M-4

Agiocochook

Mount Washington Cog Railway Shop

Diesel

2010

Operational

Fourth diesel-hydraulic locomotive. Powered by biodiesel. *Agiocochook* is a name some Indigenous peoples use for Mt. Washington.



M-5

Metallak

Mount Washington Cog Railway Shop

Diesel

2013

Operational

Fifth diesel-hydraulic locomotive - designed by Al LaPrace. Built by Rob Maclay, Jack Watkins, Joe . Powered by biodiesel, *Metallak* was a Native American hunter and guide who is honored on a New Hampshire historical marker.

1946-2026 Diesel Locomotive Roster

M-6

LaPrade

Mount Washington Cog Railway Shop

Diesel

2016

Operational

Sixth diesel-hydraulic locomotive. Powered by biodiesel. Named after Al LaPrade, primary designer of the railway's first diesel locomotive.





M-7

Kenison

Mount Washington Cog Railway Shop

Diesel

2019

Operational

Seventh diesel-hydraulic locomotive. Powered by biodiesel. Named after Charley Kenison, general manager of the railway and indirectly his father & shop manager Chub Kenison.

M-8

??????

Mount Washington Cog Railway Shop

Diesel

2022

Under Construction

Eighth diesel-hydraulic locomotive. Cog Railway president Wayne Presby says M-8 will be the last diesel to be built at the Cog Railway. The next engine to be built will be all-electric based on technology tested with a new "speeder" being designed by mechanical engineering students at the University of New Hampshire.

EV-1

Bumblebee ?

Mount Washington

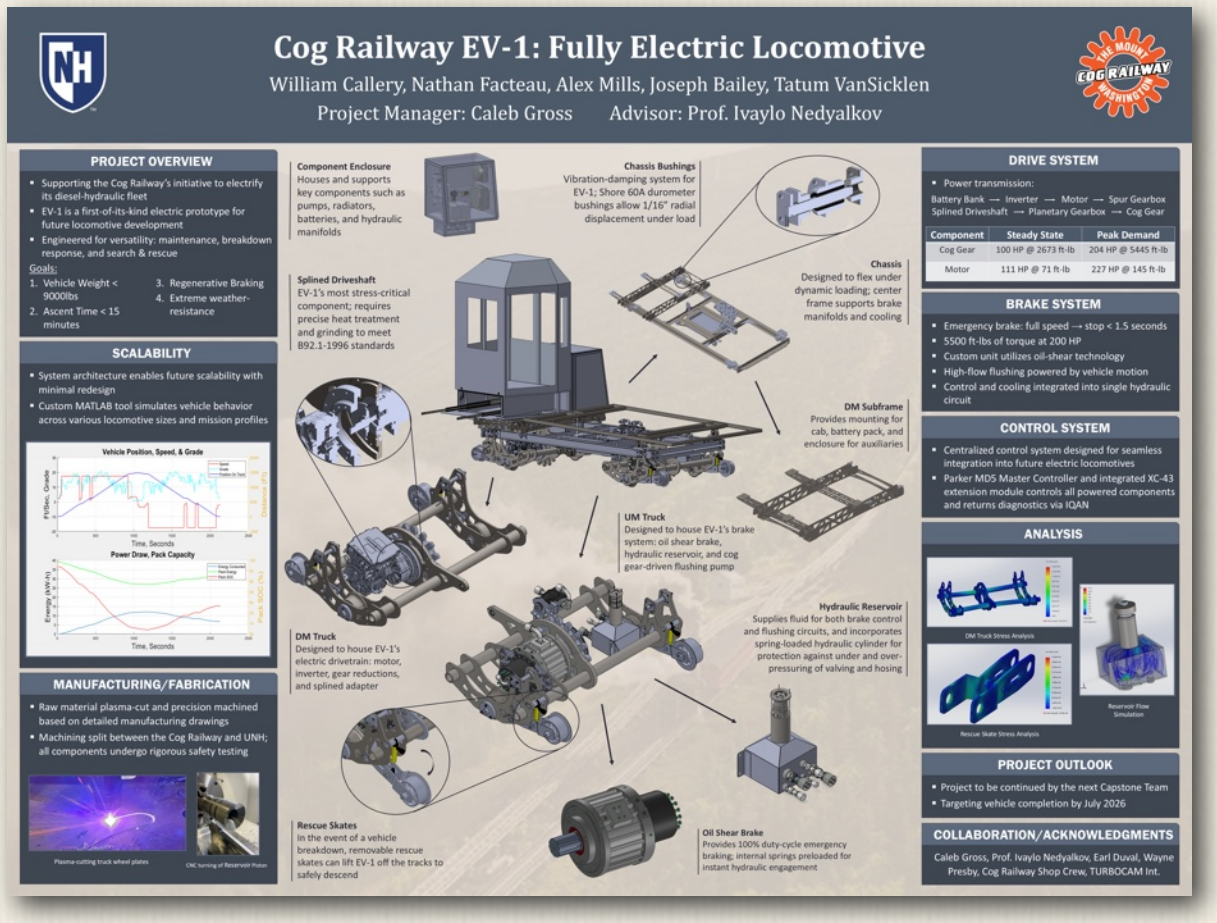
Cog Railway Shop

All Electric

2025-2026

Under Construction

The first fully electric Multi Purpose Track Vehicle.



COG Railway Electric Multipurpose Vehicle

Matthew Yates, Wyatt McLaughlin, Jesse Franklin, Zach Beardsley, Mitch Hauser
Project Manager: Caleb Gross UNH Advisor: Professor Ivaylo Nedyalkov

Department of Mechanical Engineering, University of New Hampshire, Durham, NH 03824

Introduction

Design and validate the **world's first fully battery-powered cog-driven vehicle**.

With grades of up to 37%, Mount Washington is home to the second-steepest cog railway in the world, as well as some of the coldest and windiest weather conditions on earth, presenting a uniquely demanding environment for electric vehicle development.

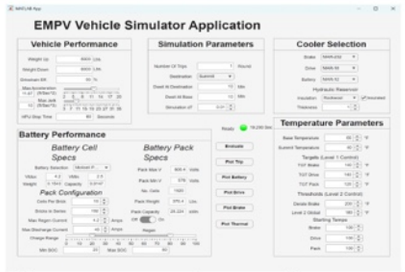
Vehicle metrics:

- Vehicle weight under 6,000 lbs dry
- 12 mph to full stop in under 1.5 seconds
- Ascent time under 15 minutes
- Weather resistant components and structure

Project Long-Term Goals

- Reduce emissions and noise compared with diesel equipment Support the railway's long-term electrification goals
- Provide a multi-use platform for maintenance and emergency response
- Demonstrate the feasibility of battery-electric operation on extreme grades

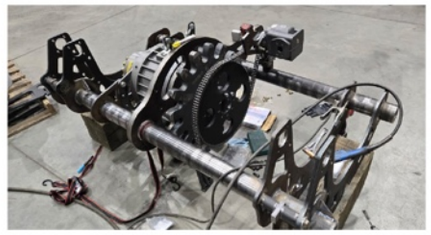
MATLAB Vehicle Simulator



- Calculates accurate physics of mountain trip with real-world track data.
- Models speed control, motor torque demand, and direction-dependent loading on the drivetrain.
- Supports multiple battery chemistry options and allows for implementation of test data.

Mechanical Design Highlights

Down-Mountain Drive Truck



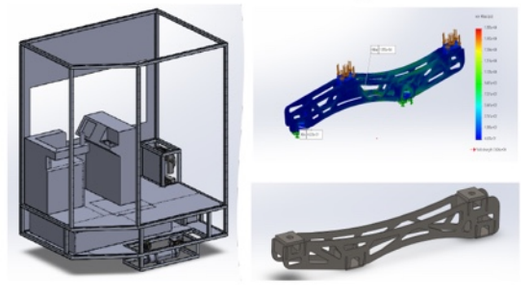
- Electric drive truck for uphill propulsion
- Assembly of traction motor, gear reduction hardware, and cog-drive components
- Capable of 227 HP @ 145 ft-lb of torque

Up-Mountain Brake Truck



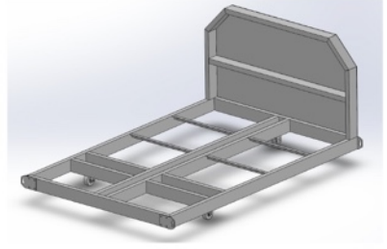
- Custom Force Control oil-shear brake
- Utilizes the fluids viscosity to create a shearing force between the friction discs and drive plates
- Chain-driven flushing system providing 30 GPM cooling flow

New Cab and Subframe Design



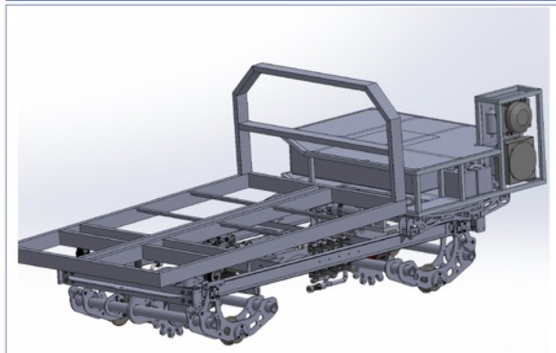
- Redesigned cab structure for improved packaging, visibility, and operator protection
- Integrated with the vehicle subframe and overall EMPV chassis layout
- Reduced subframe weight with Solidworks Simulation

Flat-bed Superstructure



- Flatbed design for maintenance, transport, and multipurpose service
- Modular superstructure mounting on the main vehicle frame
- Open payload space for tools, equipment, and operational flexibility

Current Solidworks Model



- CAD model of the EMPV platform, combining the truck assemblies, chassis, cab, and flatbed superstructure into a single vehicle layout
- Critical in determining the mechanical interactions of components and visualization of final prototype

Project Status and Future Work

- Major subsystems have been designed and integrated into the EMPV architecture
- The UM and DM truck assemblies have been designed, drafted, and fabricated
- The MATLAB simulator is guiding future battery, thermal, and performance decisions
- Rolling chassis and truck assemblies have been fabricated and stand on Cog infrastructure
- Future work will include integration of control and subsystems for a service-ready vehicle

Fabricated Components



Current Rolling Chassis on Shop Rails



DM Drive Truck (Electric motor/ inverter and gear reduction system)

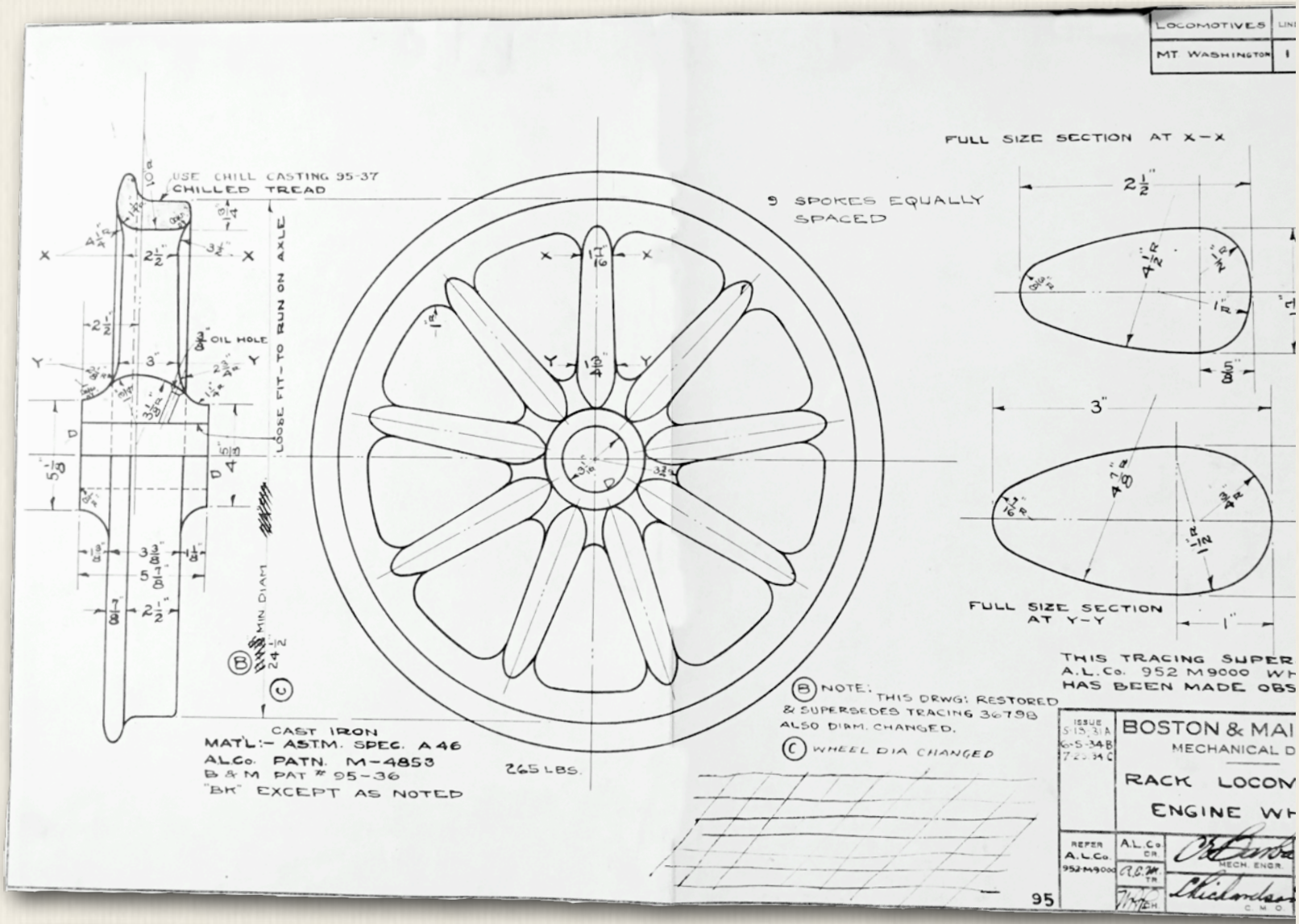


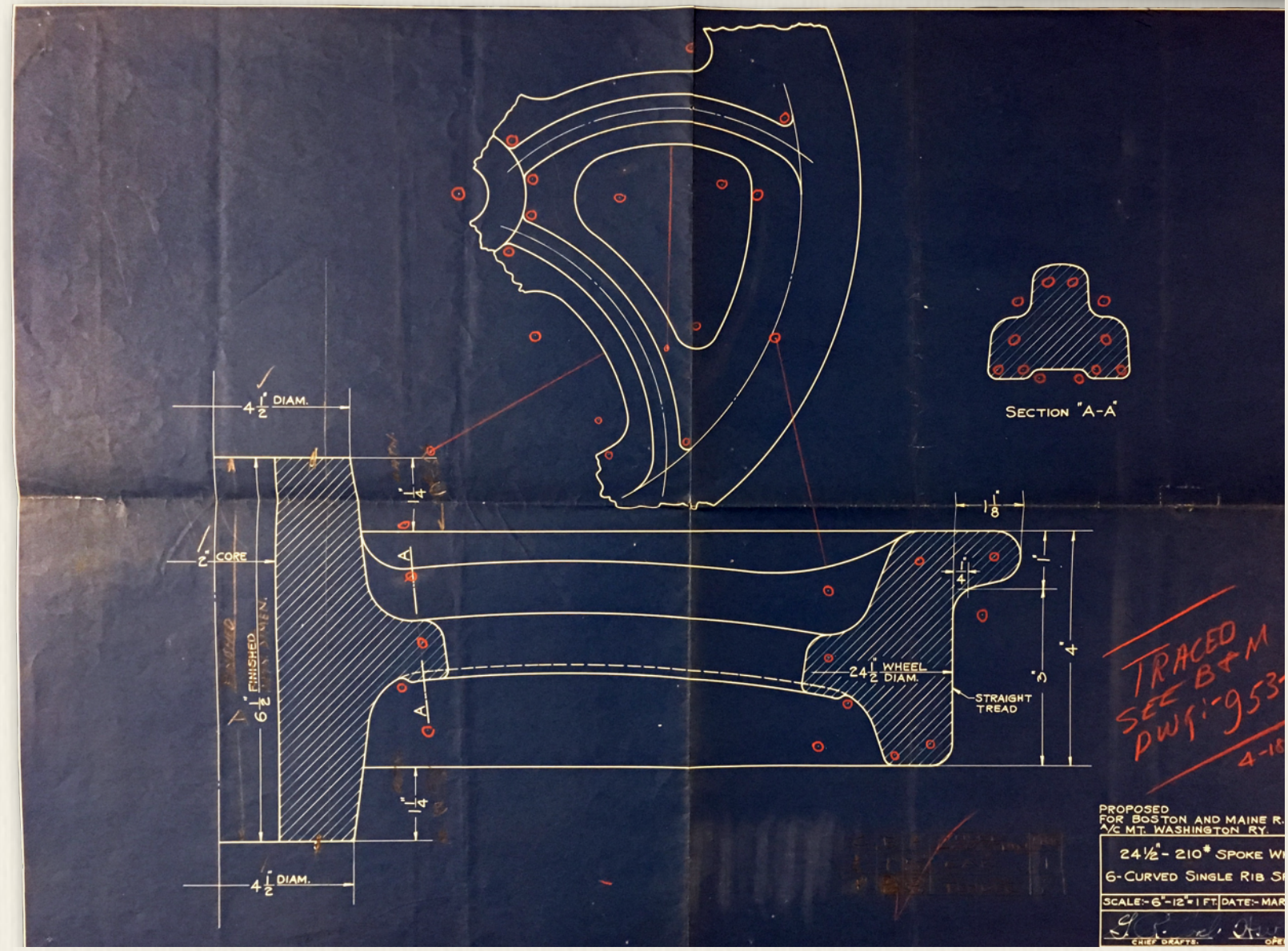
UM Brake Truck (Oil shear brake, hydraulic reservoir, and flushing pump)

Acknowledgements

- Mount Washington Cog Railway Management
- Caleb Gross for project support, and design collaboration
- University of New Hampshire Department of Mechanical Engineering, Ivaylo Nedyalkov.
- Industry partners and suppliers who contributed technical input to battery and subsystem development, including Notchland Energy and Lion Technologies

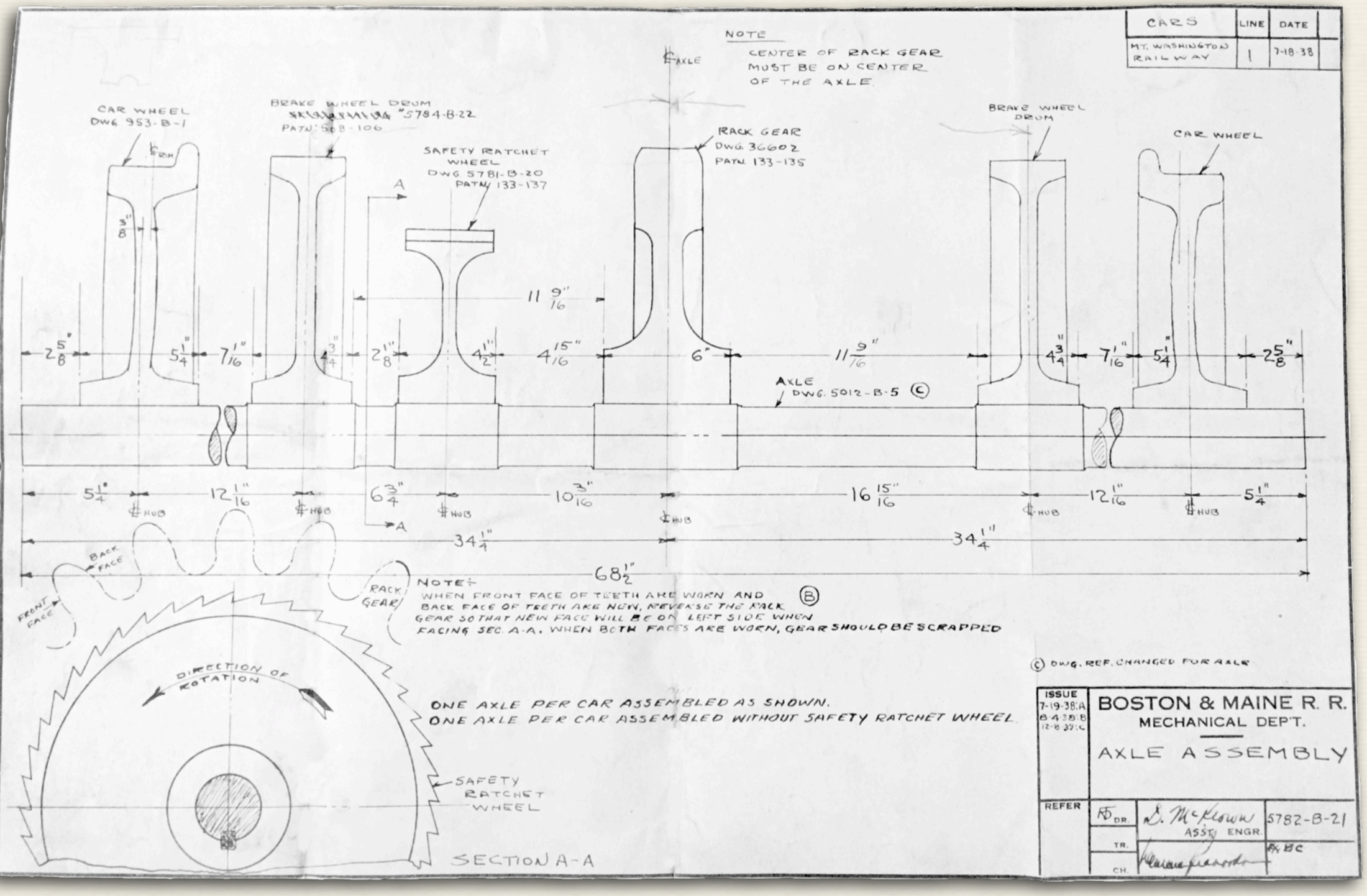
Shop Log: Castings





CARS	LINE	DATE	
MT. WASHINGTON RAILWAY	1	7-18-38	

NOTE
CENTER OF RACK GEAR MUST BE ON CENTER OF THE AXLE.

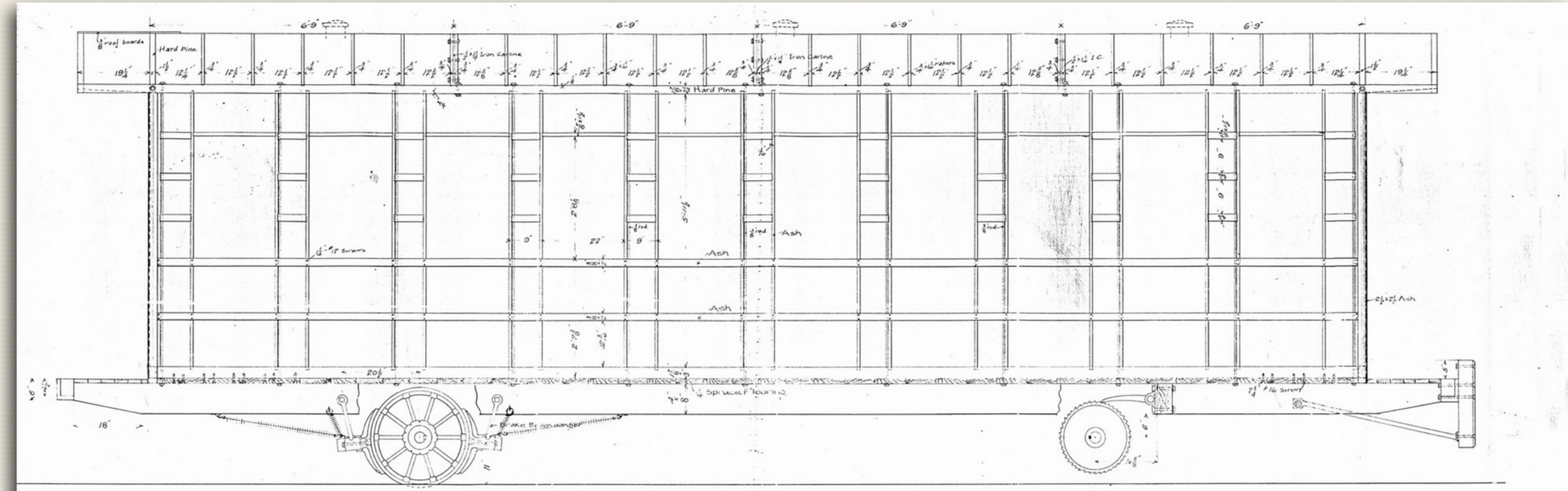


NOTE÷
WHEN FRONT FACE OF TEETH ARE WORN AND BACK FACE OF TEETH ARE NEW, REVERSE THE RACK GEAR SO THAT NEW FACE WILL BE ON LEFT SIDE WHEN FACING SEC. A-A. WHEN BOTH FACES ARE WORN, GEAR SHOULD BE SCRAPPED (B)

ONE AXLE PER CAR ASSEMBLED AS SHOWN.
ONE AXLE PER CAR ASSEMBLED WITHOUT SAFETY RATCHET WHEEL

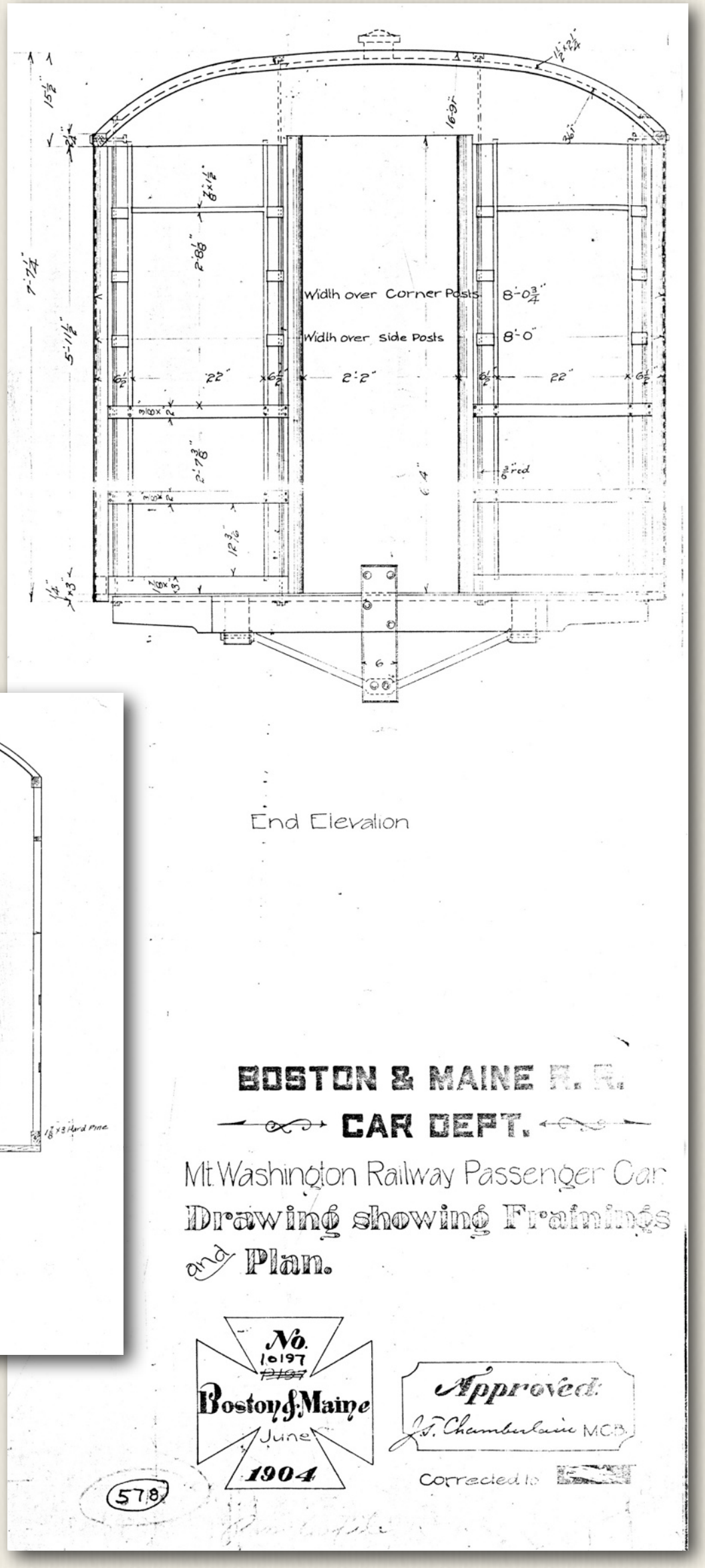
© DWG. REF. CHANGED FOR AXLE

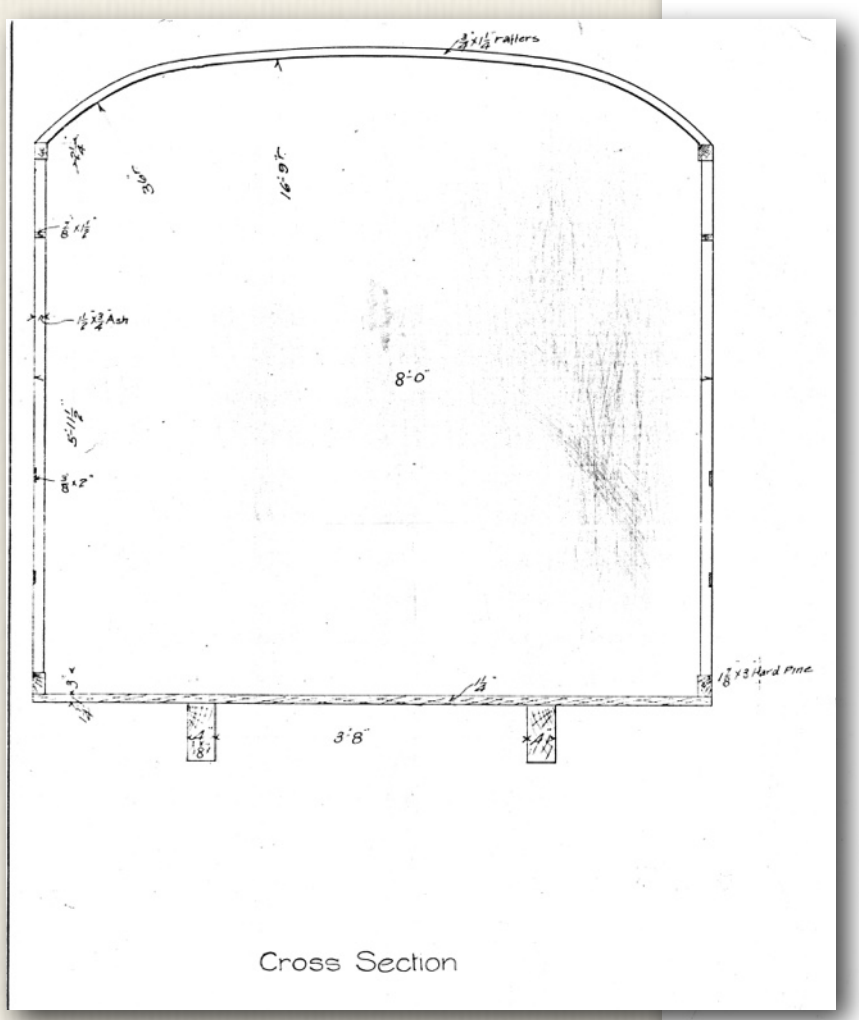
ISSUE	BOSTON & MAINE R. R. MECHANICAL DEP'T.		
7-19-38 A 8-4-38 B 12-8-39 C	AXLE ASSEMBLY		
REFER	DR. RD	D. McKlown ASST. ENGR.	5782-B-21
	TR.		
	CH.		BC


roof boards
Hard Pine
Iron Carline
Hard Pine
Ash
Ash
Ash
Spruce Flooring
Brake Beam
Side Framing
Car Wheel
Brake Wheel
Sprocket Wheel
Ratchet Wheel
Brake Wheel
Car Wheel
Lever Guide
Spruce
Spline
Spruce Flooring
Posts (Ash)
Plan

1904 40-passenger Coach Blueprints:
"Car No. 11 of the Mount Washington Railway has been shipped from the builders and will shortly be ready for service. Its most striking feature is the seats, which are the Wheeler pattern, made by Heywood Bros. & Wakefield, of Wakefield, Mass., and are of a type much used on long-run trolley lines. There is no side arm and the back pulls along the seat to reverse; without turning over. There is a convenient hand-hold on the end of the back by the aisle which is useful to turn the seat or to hold on by if one is standing. the roof is arched and much higher than is the old cars. The seats are upholstered in green plush.."

- Among the Clouds - Sat, Jul 16, 1904







Passenger Coach No. 1

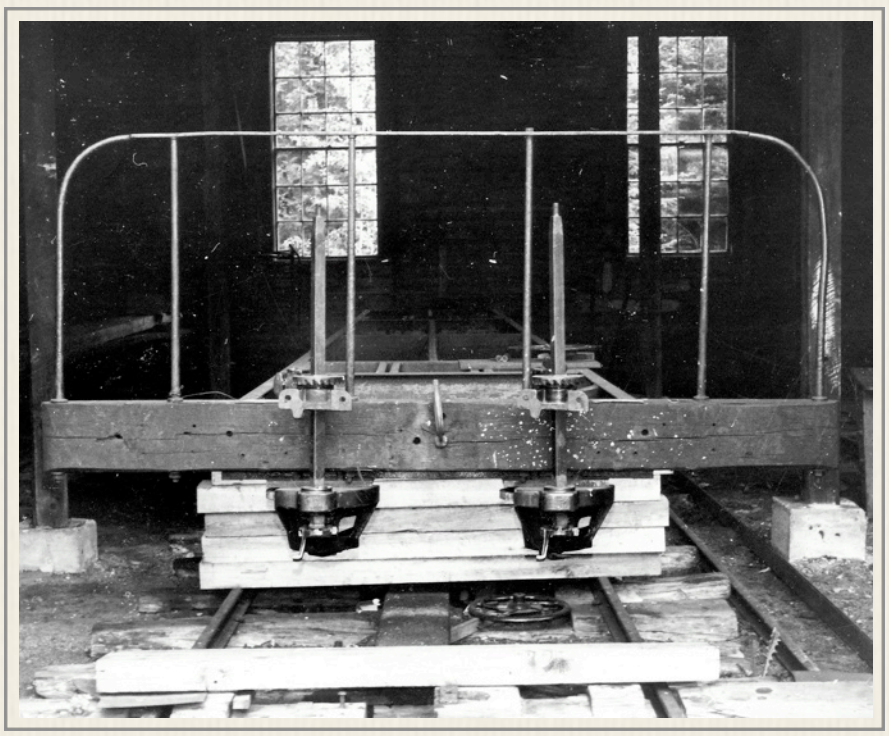
Date	Repairs	Category
1869	Built by Laconia Car Works - 40 passenger	*General*
1936	Extended at Cog RR to 48 passenger	*General*
1939	Lined brakes, new shafts, new wheels (present design) - Bearing & wheel bore 2 7/8"	*Main Shaft*
1966	New rear babbit poured, enclosed beam & steel reinforcement, new plywood end & engineers side added	*General*
1967	Steel brakes on front	*Main Shaft*
1970	New front beam & steel steps added	*General*
1970	Car refinished	*General*
9/6/71	Sign finished, new wheel down mountain fireman side, new bearing down mountain fireman side, rebuilt steel brake, relined steel brake	*Main Shaft*
1966	Refinished yellow & red *(? - trl understood this to occur after 1967)*	*General*

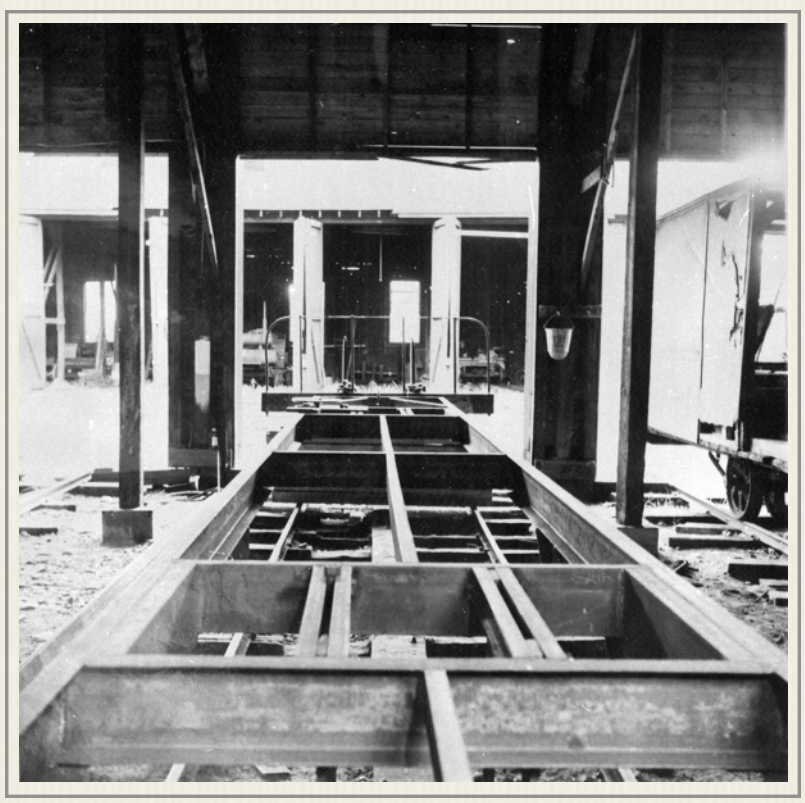


Up at the summit on car #2. No date on photo. Kodachrome Slide (pre-1950)
- Robert J. Girouard Collection

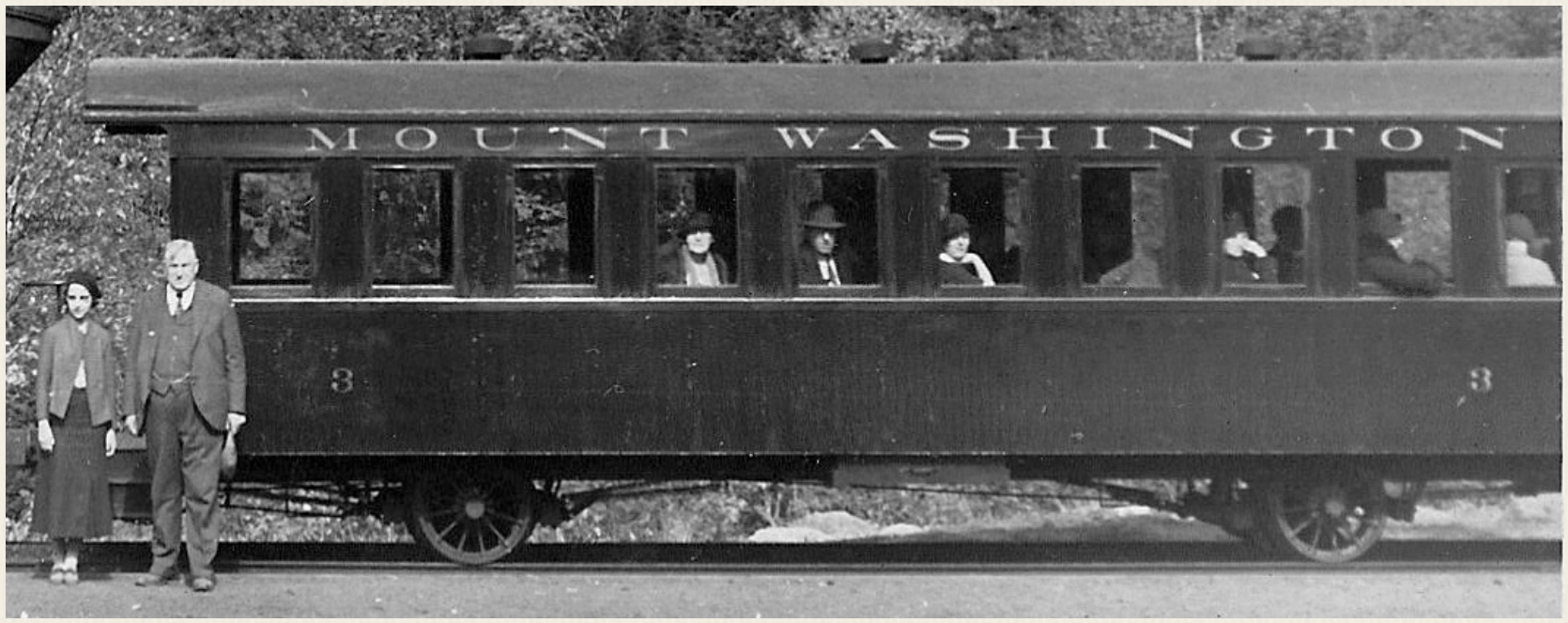
Passenger Coach No. 2

Date	Repairs	Category
1872	Built by Laconia Car Works - originally built as 48 passenger car (?)	*General*
1939	Lined brakes, new wheels & shafts added	*Main Shafts*
1963	Car entered car shop in 1963 for rebuilding - steel frame *(below)* and new 17" brake drums - added roller bearings - rear & engineers side of car replaced in plywood and entire inside paneling replaced, re-finished as the original in 1970, rebuilding completed in Sept 1970	*General*
1970	Front brakes relined	*Main Shafts*
9/6/71	Sign finished	*General*





Shop Log: Coach No. 3



New railway owner, Col. Henry N. Teague with unidentified woman (left) poses with Car No. 3. Passenger Coach 3 was not noted in the in Shop Log book (1932)
- Anne Teague Koop Collection

Passenger Coach No. 3

Date **Repairs** **Category**

Editor's note: Any reference to the 40-passenger coach No. 3 seen above in the B&M era paint scheme was not found in the Shop logbook with the other coaches in this section. Coach No. 3 was expanded to 48 seats in the late 30s. It was carrying 24 passengers to the summit in a rain-storm on August 10, 1946. The engine had stopped at Lizzie's to rebuild steam when a runaway flatcar of trash from the summit smashed into the car all the way to third passenger window. *(See Appendix - 1946 Flatcar Collision)* The metal parts of the car were salvaged. The wooden pieces were burned alongside the track.



Official accident photo by Winslow Melvin (1946)
- N.H. Public Utilities Commission



Car No. 4 on Jacob's for June 4, 1946 photo op with mainline headlight atop roof (1946)
- B&M Publicity photo / Alan E. MacMillan Collection

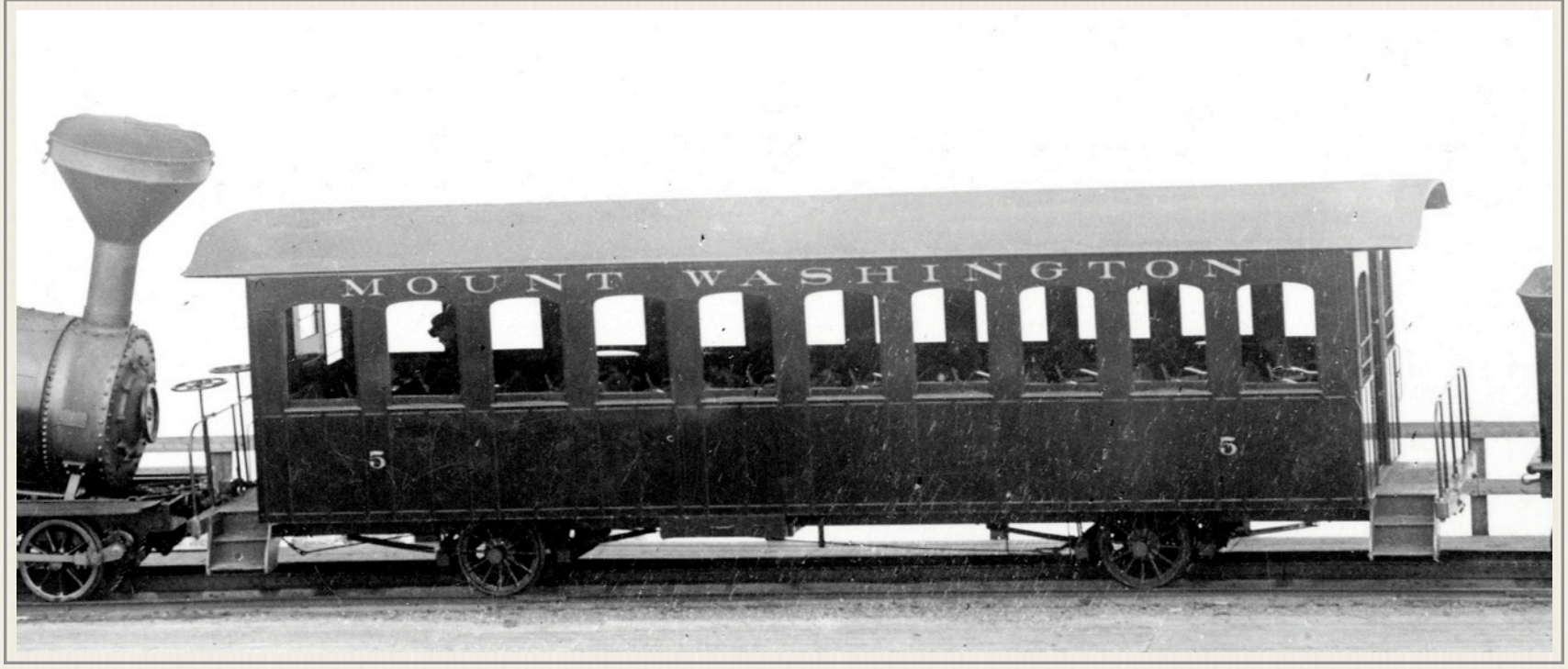
Passenger Coach No. 4

Date	Repairs	Category
1895	Built in 1895 (approx) by B&M RR	*General*
1936	Built as 40 passenger coach - extended to 48 at Cog RR	*General*
1939	New lined type brakes, new shafts, new wheels applied	*Main shafts*
1965	Interior refinished	*General*
1965	Cable operated brakes with improved leverage installed - new linings installed	*Main shafts*
1968	New rear babbit poured (both bearings)	*Main shafts*
9/6/71	New rear babbit poured down mountain fireman side, up mountain bearing repaired - new wheels down mountain axle, patched frame, car withdrawn from service *8/71* - Frame broken and pillar block smashed down mountain engineers side. New frame started. Windows repaired. Both sides repaired	*General*



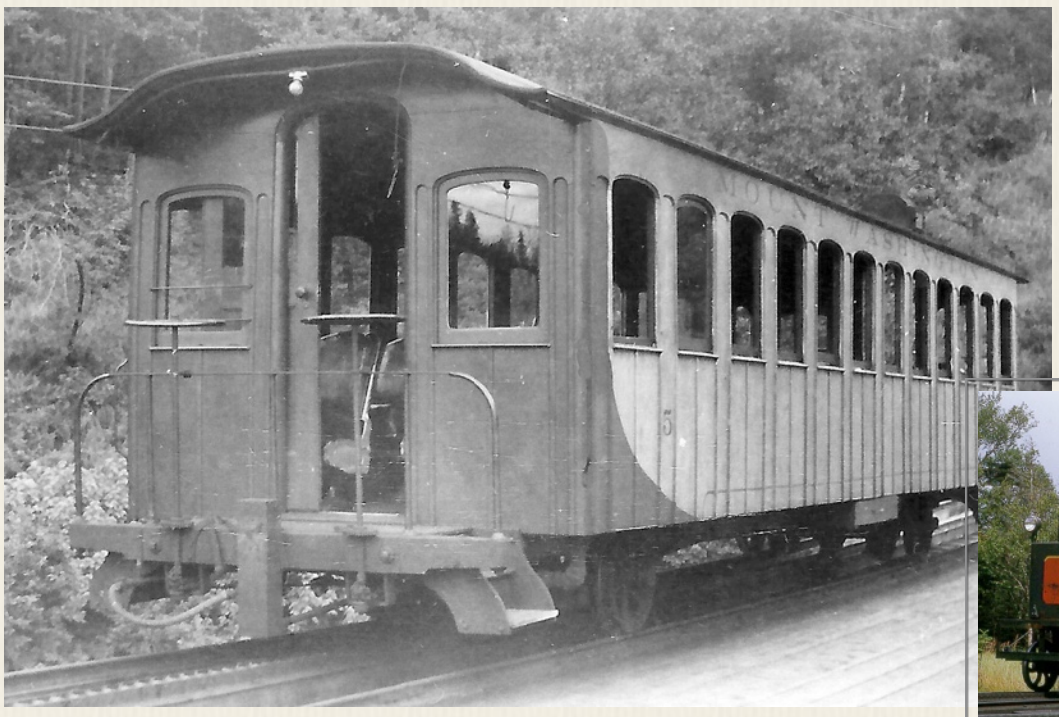
Car No. 4 alongside Base switch (1965)
- Elvira Murdock photo / Anne Teague Koop Collection

Shop Log: Coach No. 5



Passenger Coach No. 5

Date	Repairs	Category
1882	Built by Laconia Car Works	*General*
1939	Built as 40 passenger car extended to 48 at Cog R.R.	*General*
1939	New shafts, lined brakes, new wheels	*Main shafts*
1962	Engineer's side rebuilt with plywood	*General*
1965	Interior refinished	*General*
1968	Steel brakes	*Main shafts*
1970	New rear bearings poured	*Main shafts*
1970	New end beam & wider bumper block and new steel reinforcing added	*General*
1968	Plywood side built on fireman's side	*General*
1969	New front bearings poured	*Main shafts*
9/6/71	Steel brake refined and aligned - new windows, new door down mountain. Repainted and sign finished - new canvas on roof - new window strips.	*General*





Car No. 5 in 48 passenger configuration at Base platform (1939)
- Gary Irish Collection



Car No. 6 leaving Marshfield Station ahead of the No. 8 (1966)
- Elvira Murdock photo/ Ellen Teague Collection

Passenger Coach No. 6

Date	Repairs	Category
1906	Built by B&M RR	*General*
1936	Built as 40 passenger car - extended to 48 at Cog RR	*General*
1939	Lined brakes, new shafts, new wheels	*Main shaft*
1952	Aluminum windows added	*General*
1967	New side constructed of plywood on engineers side and steel brakes (one set)	*General*
1970	New steel reinforcing added to rear end, new front beam & steel steps added	*General*
9/6/71	New wheel down mountain engineers side	*Main shaft*





Shop Log: Coach No. 7

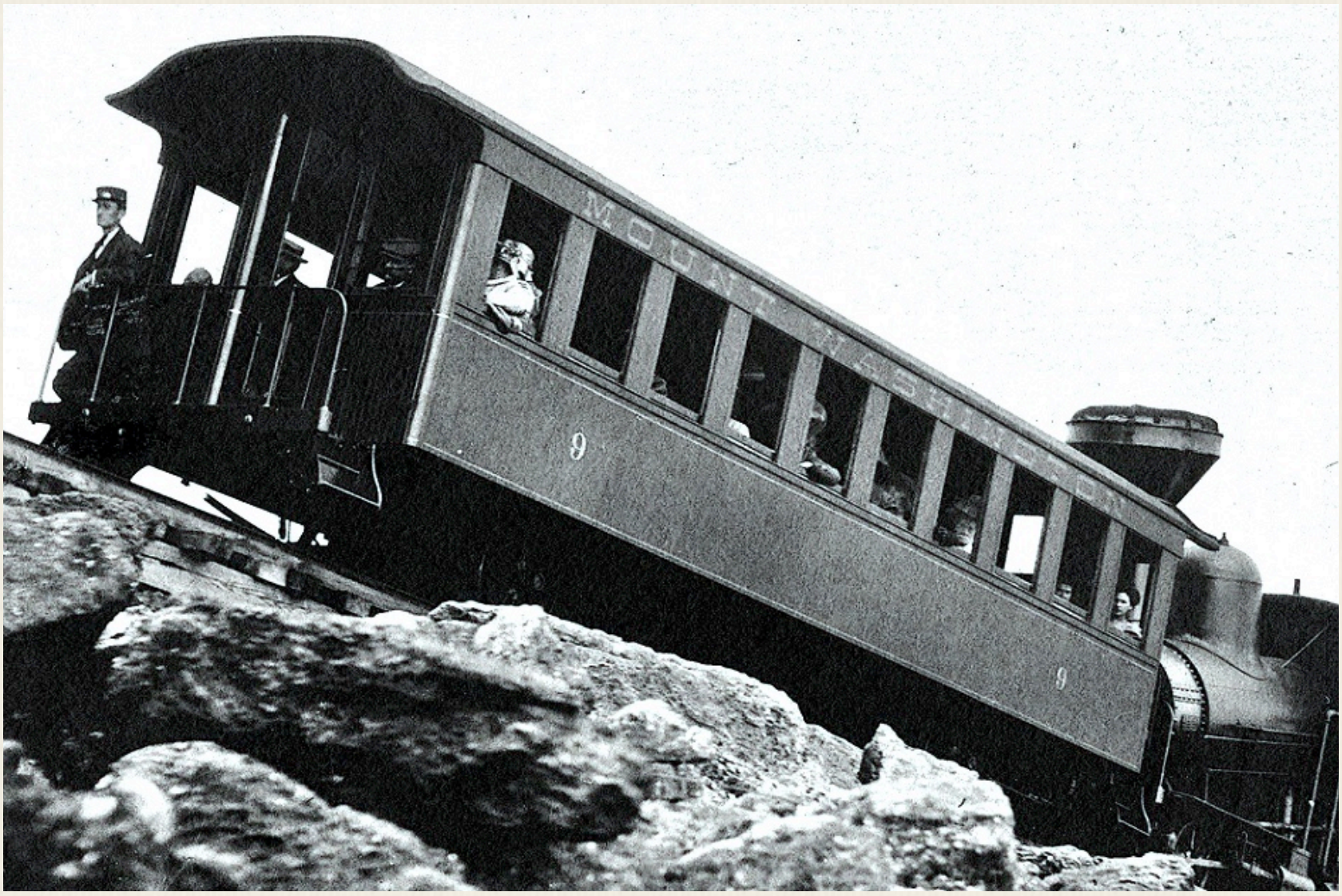


Car No. 7 (needing work on siding) moves past Appalachian Trail crossing near Skyline ahead of the No. 9
- Dick Smith photo/ Ellen Teague Collection

Passenger Coach No. 7

Date	Repairs	Category
1937	Built at Cog RR - built as 48 passenger car - retains original brakes, shafts, wheels - journal size - 2 7/8" for bearings & wheels	*General*
1965	New end beam added (rear)	*General*
1966	Front beam added	*General*
1967	Steel brakes added	*Main shaft*
9/6/71	New uprights engineer's side - rebuilt siding - replaced with plywood, both sides - 12 new windows engineer's side, other windows rebuilt - Car painted maroon for first time, sign finished - new interior panels, New wiring 7 descend Jacobs Cloud lilton	*General*





Car No. 9 at list pitch to summit(Aug1910)
- Robert J. Girouard Collection

Passenger Coach No. 9

Date **Repairs** **Category**

Editor's note: Any reference to the 40-passenger coach No. 9 seen above in the B&M era paint scheme was not found in the Shop logbook with the other coaches in this section. It is not known whether it was taken out-of-service or rebuilt and renumbered.



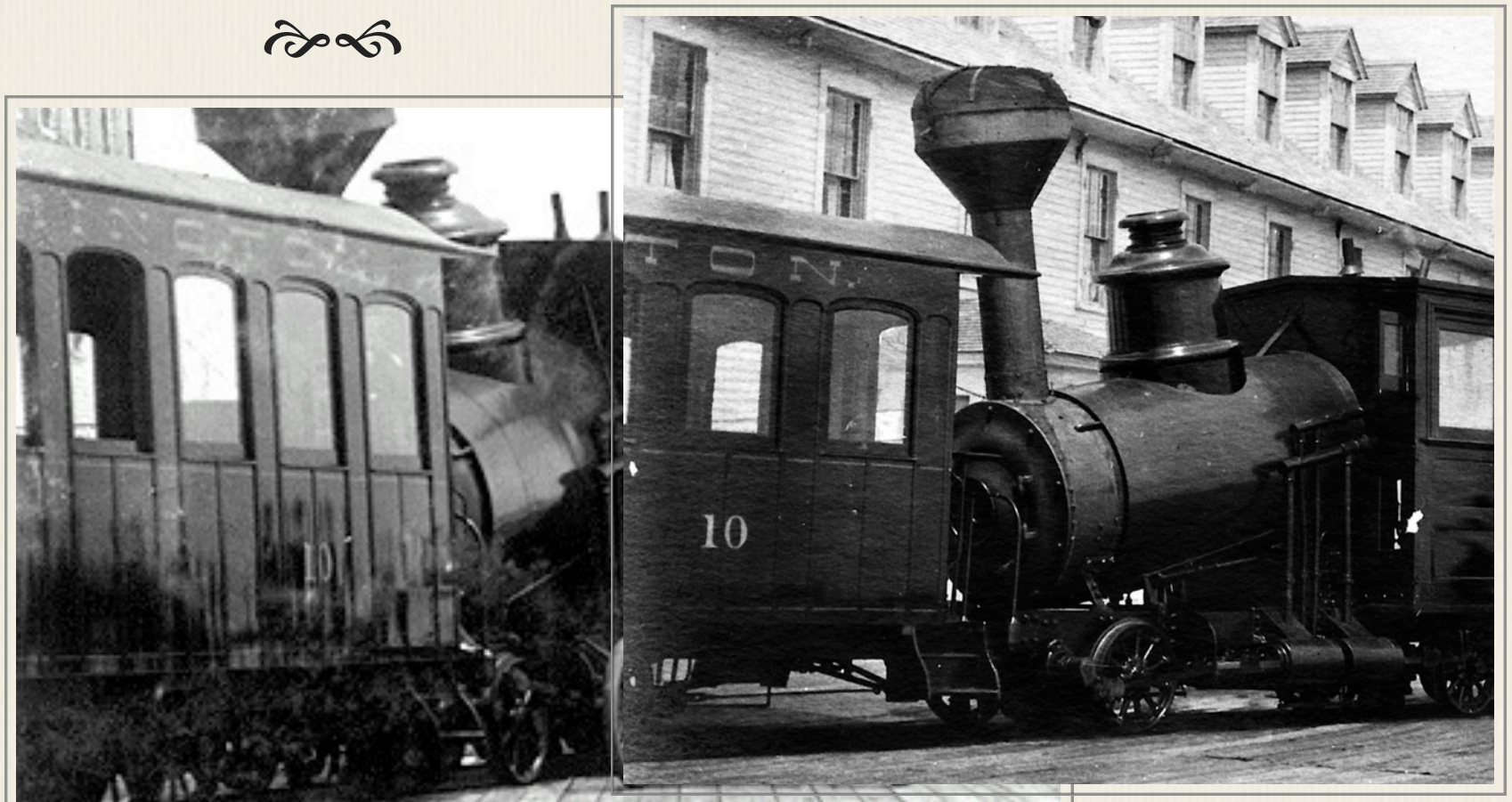
Car No. 9 at Waumbek with wood burning locomotive (pre-1910)
- Girouard Collection



Passenger Coach No. 10

Date **Repairs** **Category**

Editor's note: Any reference to the 40-passenger coach No. 10 seen in the B&M era paint scheme starring in publicity photos with a Stanley Steamer auto in 1904 was not found in the Shop logbook with the other coaches in this section. It is not known whether it was taken out-of-service or rebuilt and renumbered or destroyed.





Passenger Coach No. 11 - *Chumley*

Date	Repairs	Category
1956	Built at Cog RR - built as 54 passenger car - 3 1/16" bearing journal size, spherical roller bearings, 17" brake drums, wheel journal size 2 3/4"	*General*
1958	Placed in service	*General*
9/17/1967	Wrecked	*General*
Winter 1974-75	Rebuilt by Ed Clark at shop below the station master's house in Fabyan	



Passenger Coach No. 12 - *Thelma / Taylor Made*



Car No. 12 on Skyline Switch on August 3, 1963 awaiting a meet on a down-mountain run (1963)
- Woody Thompson Collection

Passenger Coach No. 12 - *Thelma* (Taylor Made)

Date	Repairs	Category
1961	Built at Cog RR in 1961- built as 54 passenger car by Douglas Taylor - wheel journal 3 in.	*General*
9/15/62	Placed in service	*General*
1970	New rear shaft added	*Main shaft*
1970	rear brakes relined	*Main shaft*
9/6/71 rebuilt	Eight (8) sash type windows installed, - new wheel down mountain fireman side, ratchet lifter	*General*





Car No. 12 was the second of the aluminum 54-passenger coaches built at the Railway. Construction began under the direction of Ed Chumley who had built the first aluminum car and was completed by Douglas Taylor's team - thus it was the Thelma for Chumley's wife and Taylor Made to recognize Doug's work. Here Col. Arthur S. Teague is seen with the two sides of the new car (1961)
- Teague Family Collection

Mt. Washington Railway Coach Roster

1971 - 2001

Donald H. Bray

Cog historian & former Cogger Donald Harrison Bray assisted in restoring a number of cars beginning in the Ellen Teague era of ownership and continued into the Littleton group ownership. His Mt. Washington Railway: book *They Said It Couldn't Be Done* was published in 1984 by the new owners. His follow-up manuscript examined the development of the Cog's passenger coach fleet.

1990 Coach Roster

after No. 7 rebuild



No. 1 - built by Ranlet 1871, yellow with red striping, 48-passenger

No. 2 - built by Ranlet 1872, yellow with red striping, 48-passenger

No. 4 - built by the B.&M. R.R., dark red with gold striping, 48-passenger

No. 5 - built by Laconia 1882, solid medium green, 48-passenger

No. 6 - built by B.& M. R.R., dark blue with white lettering, 48-passenger



No. 7- built by B.& M. R.R., radical two-toned pink, 48-passenger

No. 11 - built by M.W. Railway, aluminum, named *Chumley*, 56-passenger *(w/front platform)*

No. 12 - built by M.W. Railway, aluminum, named *Thelma*, 56-passenger *(w/front platform)*

56 Passenger Coaches

1990-1991 - a completely new 56-passenger wooden car body was built in the insulated part of the car shed and was ready for the 1991 operating season. The new car was very nicely constructed and rivaled the quality of the old Cog Railway coaches. There were 14 windows per side with a double seat aligned with each one. The same window pattern as the rebuilt number 7 had been followed, in that square-cornered rectangular window sashes were accented by arches in the letter boards above them to emulate the arched window sashes of coaches number 1, 2 and 5. New running gear and other hardware was not manufactured for the new 56-passenger coach. The entire running gear, end platforms, railings, steps and seats were cannibalized from the old number 5 Laconia-built coach for use on the new one. The body of the old coach was set out to temporary pasture opposite the old pumping station.

Passenger Coaches 1971 - 2001



The new 56-passenger coach became **number 5** and, in effect, the second number 5 led to the construction of two more 56-passenger wooden coaches.



Like number 5, the running rear and the rest of the iron was taken from the very old Ranlet coach number 2 and the dilapidated B&M coach number 4. Their numbers also appeared on the new coaches.

The **new number 4 was completed in 1992** and was painted bright yellow with red striping.





The new **number 2 was completed in 1993** and was painted light gray with aquatrim. The three new 56-passenger wooden coaches would have a surprisingly short service life.

Shop Log: 70 Passenger Coaches

SUPERCOACHES

70 passenger

Between 1996 and 2001, a total of 6 supercoaches were built in the Base Station car shop through the winter months, with sometimes two being built through the same winter.



Number 2 - Two-tone aqua *(built winter of 2000-2001)* first coach to have the new hydraulic ratchet (Sprag clutch) winter of 2005-2006 while supercoach number 2 was being reconditioned, and fitted with first batch of wooden flip seats



Number 6 - Bright red *(right)*

Winter 1998-99 70-passenger coaches #8 & #9 built from No. 12 *Thelma* & No. 11 *Chumley* by Rob Maclay, Bruce Houck, Sean Slattery & Jon Sykes



Wheels, cog gears, brake mechanisms and other iron components were cannibalized from the older coaches, whose bodies were either scrapped or left out among the weeds. A section of the body of the rebuilt pink coach number 7 was cut off and placed on the rear of one of the work flats *(next page)* to shelter the track crewmen from the rain of cinders when going up the mountain. The rest of the coach body was scrapped. The alumi-

Number 3 - Cathouse pink with red trim *(left)*

Number 1- Yellow

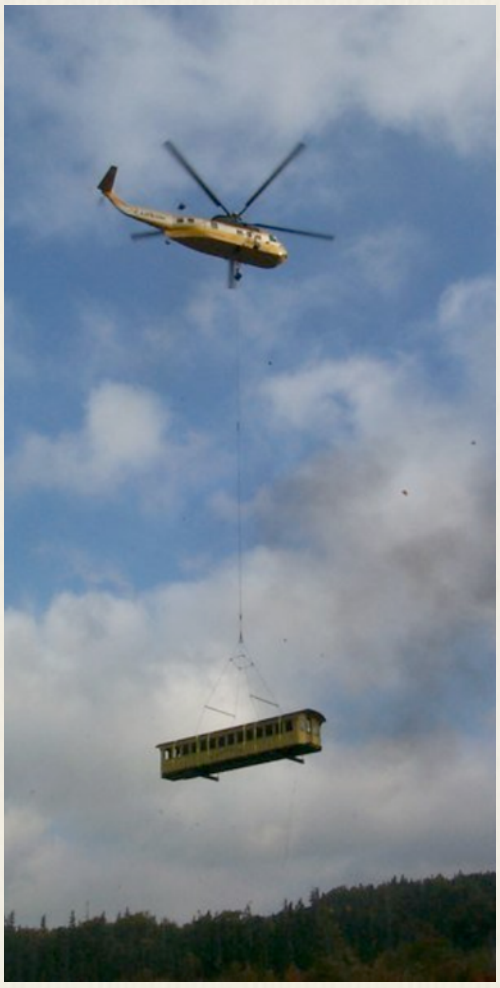


Number 8 - Green with yellow trim *(left)*

Number 9 - Purple *(1999)*







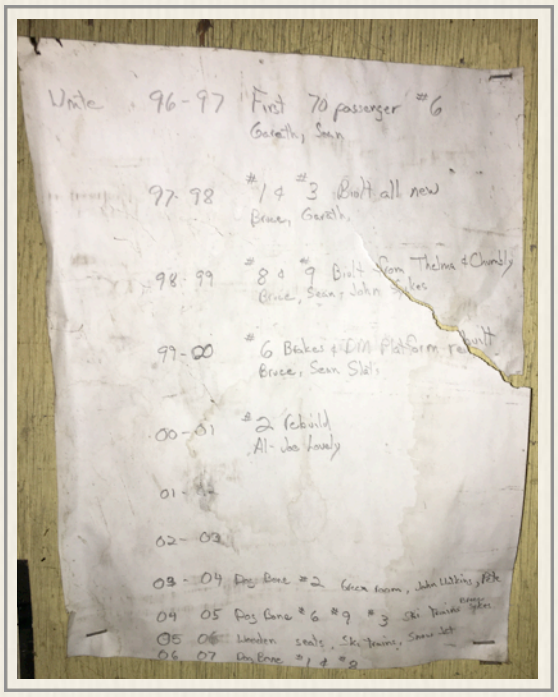
num donut box coach bodies that Arthur Teague had built, number 1 Chumley and number 12 Thelma, were both scrapped.

Meanwhile, the three 56-passenger wooden coaches were progressively retired after less than a decade since they were new. **Of the three 56-passenger wooden coaches, the body of number 4** (painted yellow) was hoisted by a large helicopter *(left)* and flown across the valley to the summit of West Mountain on September 29, 1999 for use as a skier's warming hut. The **body of gray and aqua number 2** was broken up for scrap and burned. Only the **dark red and gray-trimmed number 5** was saved, and it was stored in one of the engine house stalls where it remains at the time of this writing." Coach 5 would be repainted and become part of the static display in Twin Mountain where it lost its roof during a storm.



70-Passenger Coach Construction Log

Rob Maclay started working mostly in the car shop five years after he started at the Cog Railway. He has posted a hand-written construction log *(right)* on the car shop's wall. It outlines winter work as the new 70-passenger coaches were built to replace the 48-passenger wooden coaches and the 54-passenger aluminum cars, and who worked with him to build and rebuild the Cog's coach fleet.



Winter	Work Done	Builders
1996-1997	First 70 passenger #6	*Gareth Slattery, Sean Slattery*
1997-1998	#1 & #3 Built all new	*Bruce Houck, Gareth Slattery*
1998-1999	#8 & #9 Built from *Thelma* & *Chumley*	*Bruce Houck, Sean Slattery, Jon Sykes*
1999-2000	#6 Brakes & DM Platform rebuilt	*Bruce Houck, Sean Slattery*
2000-2001	#2 Rebuild	*Al LaPrade, Joe Lovely*
2001-2002		
2002-2003		
2003-2004	Dog Bone #2 Green room	*John Watkins, Pete Steady*
2004-2005	Dog Bone #6, #9, #3 Ski Trains	*Bruce Houck, Jon Sykes*
2005-2006	Wooden seats, Ski trains, Snow Jet *(right)*	
2006-2007	Dog Bone #1 & #8	



Maclay's list ends at 2007, but more rolling stock was built.

2009-2010 Grappling Flatcar



2017 -2018 #4 Self-Braking Coach



2018-2019	Re-railing work car *(left)*	
2019-2020	Coach Interior Woodwork Rebuild	
2021-2022	New passenger coach	*Rob Maclay*





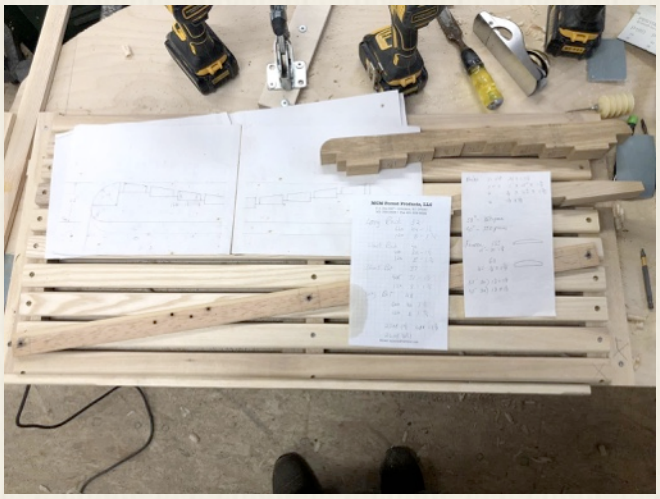


Shop Log: Coach Seat Manufacturing

70-Passenger Coach Seat Construction

Illustrated Description by Paul Forbes April 2024

Paul Forbes: "Seats for the Cog Railway. I was asked to build a set of seats for a Cog Railway Coach. I was pleased and honored to do so. The fact they are going in the "steam" coach made it all the better. It was a big job that had to be done as accurately as possible. I had to follow Rob Maclay's footsteps. Rob was a master craftsman and I tried to live up to his work. I'm not sure I've done a whole lot of projects I am this happy with. In the last email I got from Rob, he told me to "enjoy every project." I think they are OK, Rob, and I really did enjoy the project."



Forbes: "Working off Rob's original notes and sketches."



Forbes: "Every piece is well thought out and required several steps. These are for the backs."



Forbes: "200 back slat supports."



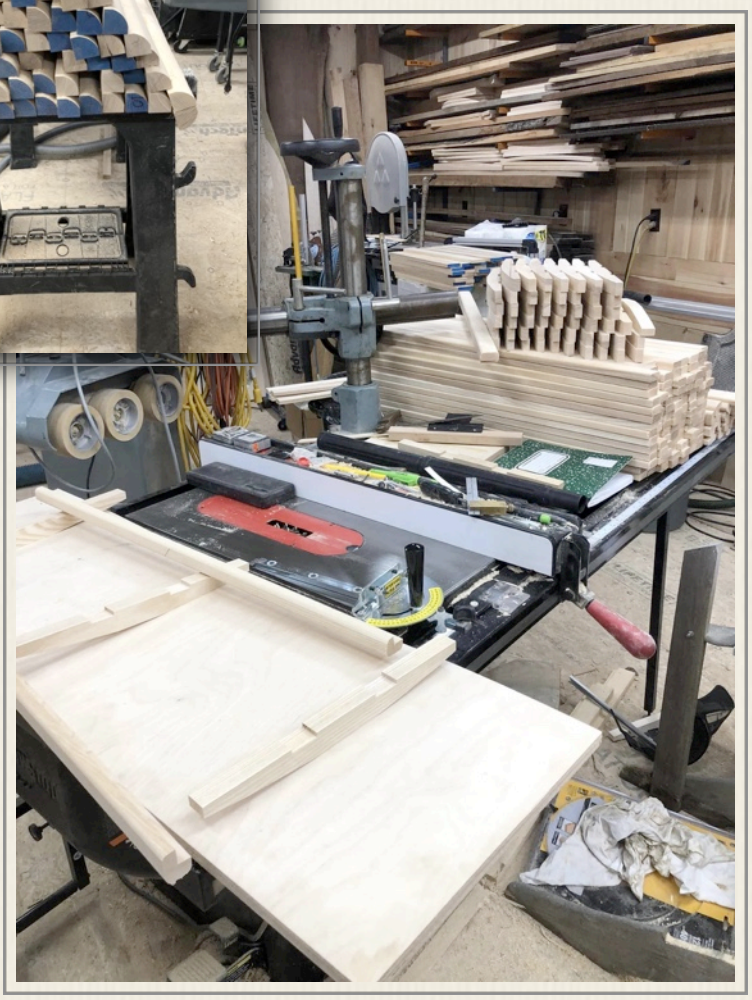
Forbes: "200 bottom seat supports. There are 10 dadoes in each piece. A seat slat fits into each dado."



Forbes: "Seat bottom supports."



Forbes: "Seat fronts."



Forbes: "Backs laid out for assembly."



Forbes: "Router table set up for rounding edges of slats."

Shop Log: Coach Seat Manufacturing



Forbes: "Short (engineers side) backs ready for delivery."



Forbes: "First back completed."



Forbes: "Short (engineers side) delivered to the shop."



Forbes: "Seats hanging for varnishing. A.J. (Guthridge). a professional painter at the Cog, did the finish work."

Susan Gummerus Presby: "*(As a co-owner)* It's easy for me to brag about the incredible crew and craftsmen and craftswomen we have at the Cog. Yes I am the proud daughter of a machinist and love being in the shop but I am always in awe of the work done in our woodshop. I have often spoken about the talent that our Master craftsmen Rob Maclay put into each piece of woodwork he created. Sadly Rob passed away but Paul Forbes has stepped in to, as Paul puts it "follow in Rob's footsteps." His work is beautiful. He not only followed Rob's notes and sketches to create the new seats he has included pics of the steps in the process. Hope you enjoy them. Great job Paul."

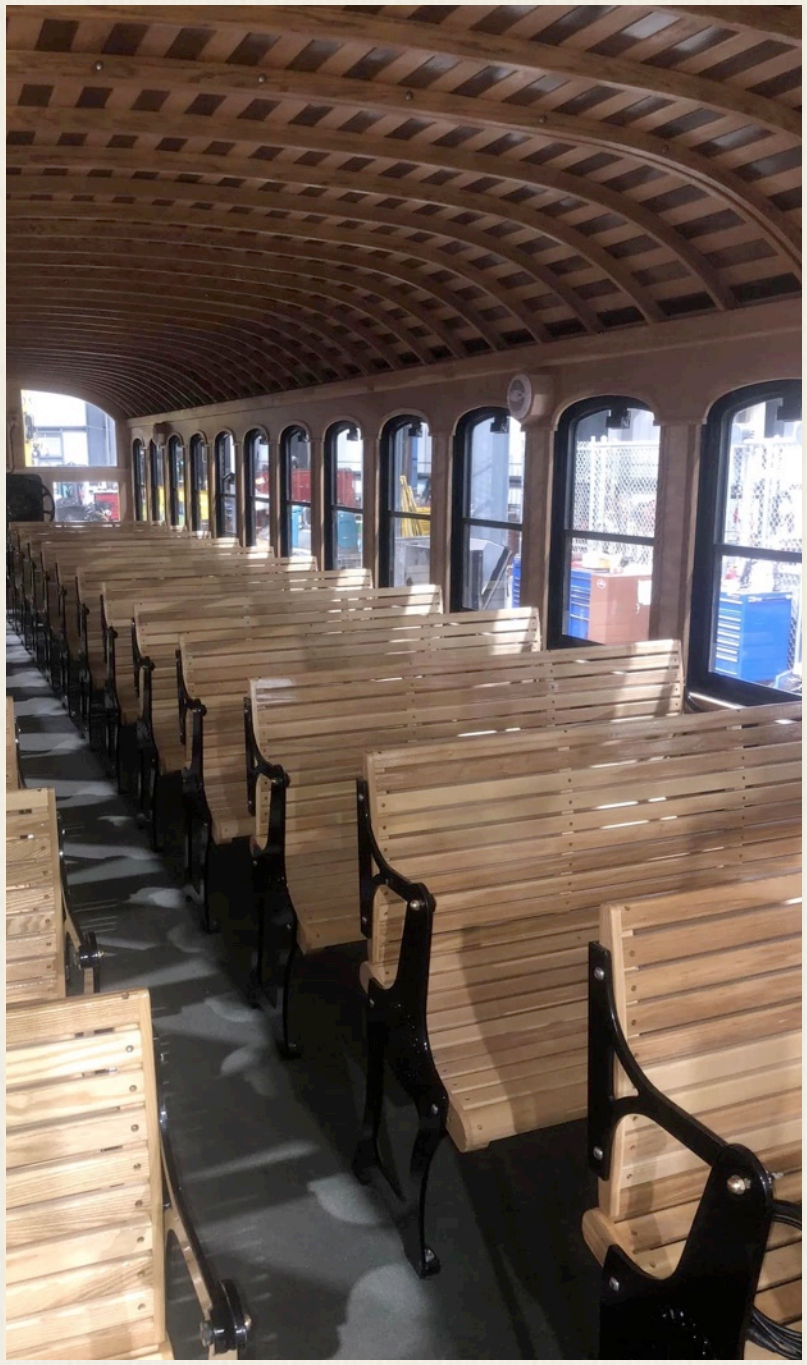
Shop Log: Coach Seat Manufacturing



Emma White Westcott *(Rob Maclay's daughter)*: "Welp, I'm blubbering like a fool.. These are stunning Paul!! They look SO good in the coach! Dad would have stood there admiring these by your side for ages. Arms crossed over her belly, hat backwards, pencil in his ear, rocking back on his heels.. Love seeing his notes and handwriting all over the project progression pics also… Thank you for keeping him alive in us all and the projects Paul, I'm sure he was smiling down watching you "enjoy the project" no doubt! I can't wait to sit in them, beautiful, beautiful work Paul" !"



Forbes: "Short (engineers side) seats installed."

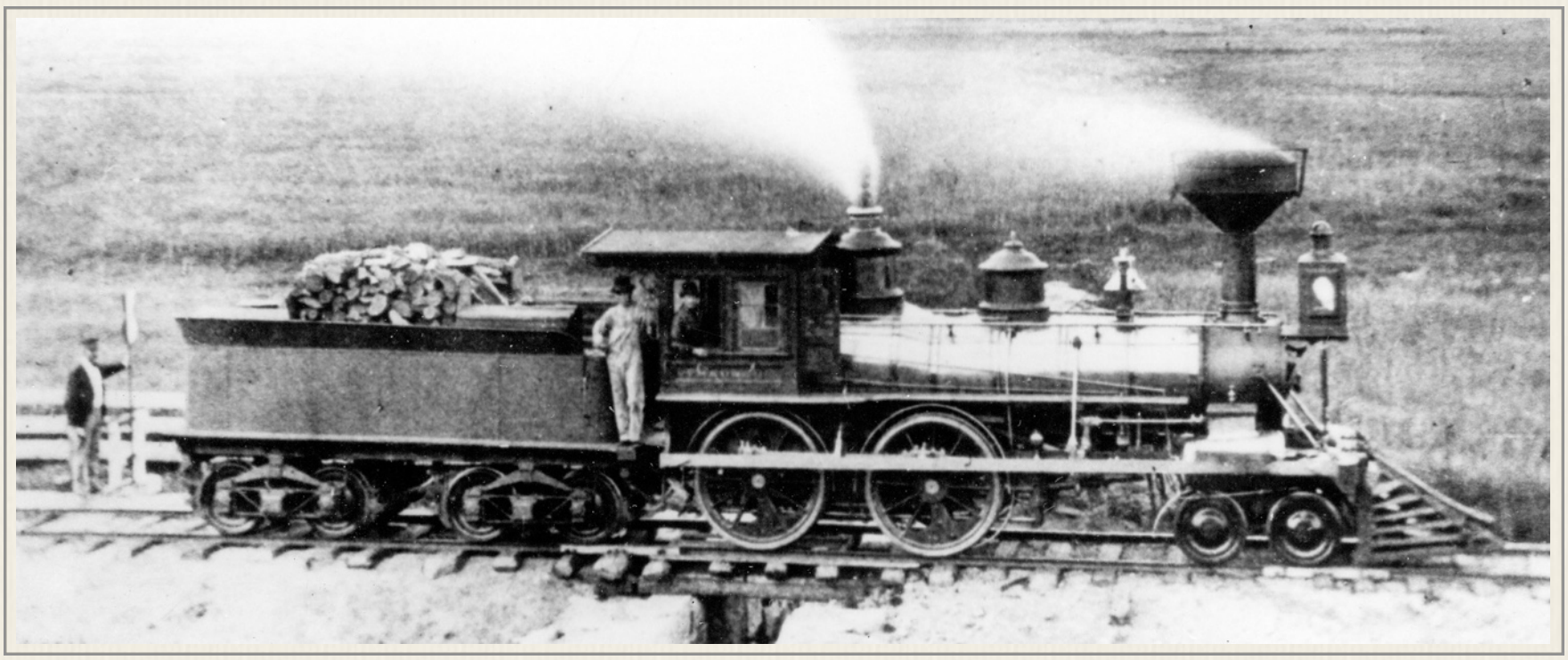


Forbes: "Long (fireman's) side seats installed. I haven't done a whole of of projects that I am as proud of. I think they're OK, Rob."

Spur Line Locomotive Roster
1876-1931

BC&M extended its line to the Base, bought a special locomotive, the *Mt. Washington,* No. 29, (which was the first ten-wheel locomotive every in New England) and special observation cars to run from Fabyans to the Base. However other engines worked on the line. In 1919, F. W. Lougee wrote to the *Warren News Press*: "In 1876 they built the road between Fabyan and Base of Mt. Washington. I was firing for John Swain at that time. There were four engines doing the work – the *Belknap*, *Pehaungun*, *Winnipesaukee* and *Paugus*. We had the *Pehaungun* and this was the first engine that run a passenger train over that road. Dr. Ordway's party from Lowell. We had only one car and that was all this locomotive could handle. Mr. John E. Lyon and Mr. J. A. Dodge were riding on the engine at that time. They had a new engine built named *Mt. Washington* to run on this road and when they opened it up in July this engine was put onto the train; Geo. A Ferguson was engineer and John F. Marsh, fireman. They run this engine in the summer months and in the winter, it was taken to Lakeport (then Lake Village) and stored on account of being too heavy to run on the main line.

Boston, Concord & Montreal Railroad



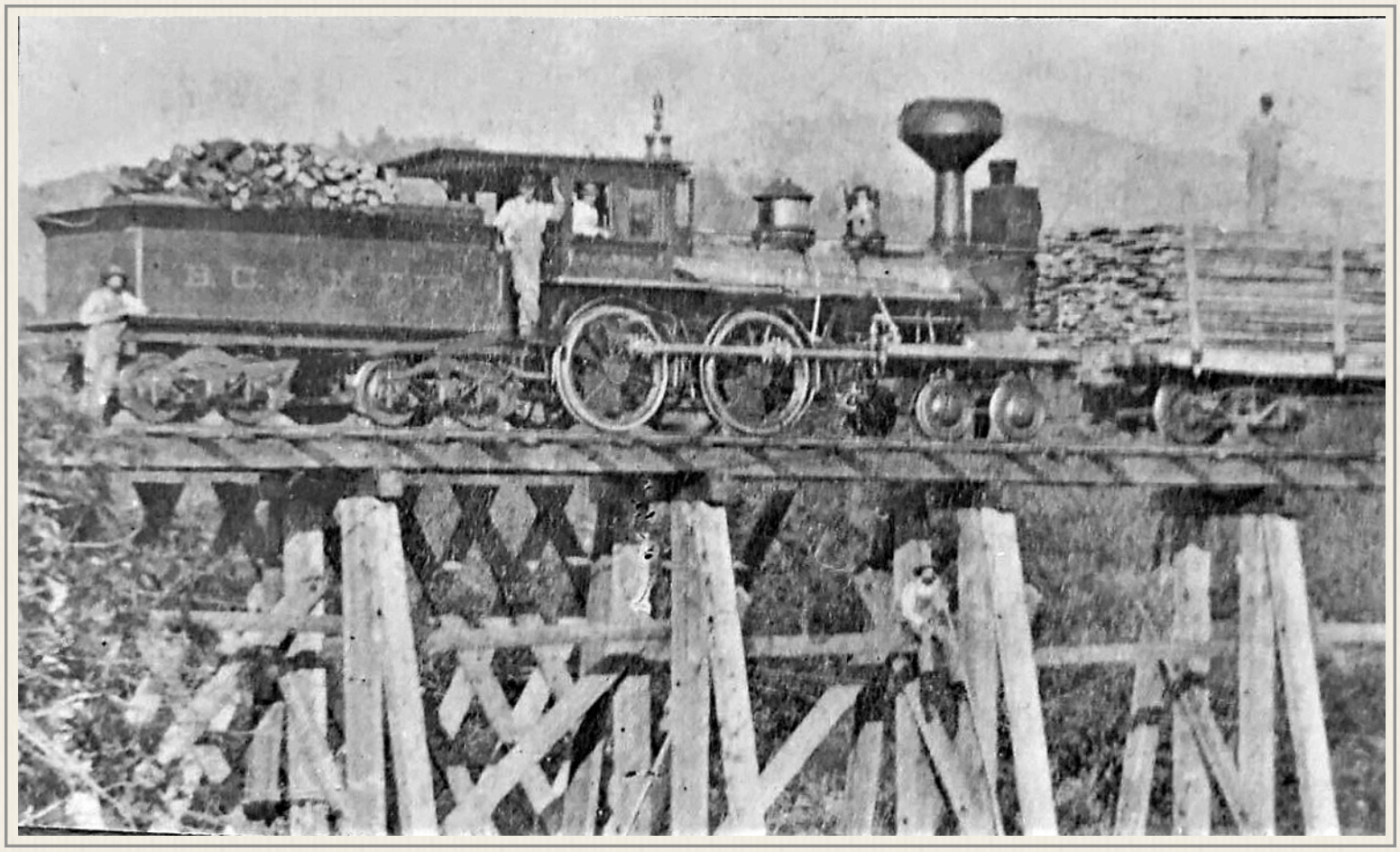
Locomotive - *Pehaungun No. 8*

Boston, Concord & Montreal RR No. 8 *PEHAUNGUN* above at Fabyan, N.H. c1878. 24 tons - Built by Boston Locomotive Works 1853. This loco hauled the first passenger train over the Fabyan Branch to the base of Mount Washington in 1876. Digital image made from photograph in Boston & Maine Railroad Historical Society Archives. Gift of and copyright Walker Transportation Collection, Beverly (Mass.) Historical Society. Learn more about the B&MRRHS at www.bmrrhs.org. Photo 3246. In 1875, the *Pehaungun's* engineer was Sam Kimball. In 1882, the Penhaungun was a helper engine run by C. F. Sanborn. F. W. Lougee told Caswell at the *Warren News Press*: "The *Pehaungun*...(was) cut up back of the engine house at Lakeport and put into scrap." William H. Durant of Somerville, Mass recalled a trip on a cattle train as a youth: "In the spring of 1869 I had my first real ride on a railroad. George Hutchins, engineer, running the *Pehaugun* invited me to ride with him a part of the trip, and when I alighted at Lake Village no youth felt prouder of a journey." Caswell explained, "Durant was a lad in the old wood burning days. His father kept a boarding house at Wells River, Vt., just across the (Connecticut) river from Woodsville and many of the railroad men boarded there in the early B.,C.&M. days."

Locomotive - *Paugus*

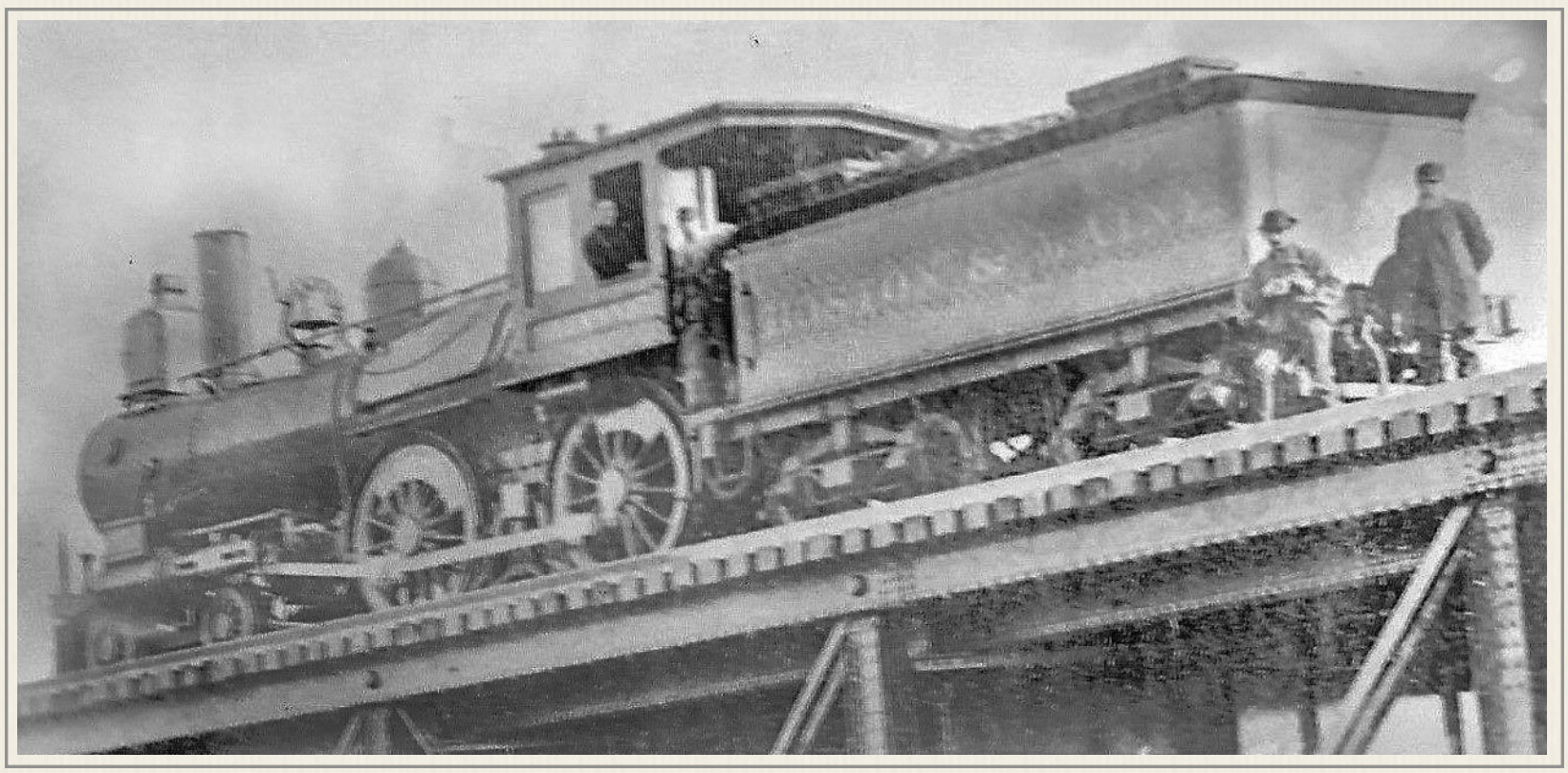
Paugus was a gravel *(hauling)* engine of the same size, but weighed four ton more than the Pony. She was a four wheeler, and those four wheels were the drivers, which were only 4½ feet high. The *Paugus* was built in the company's shops at Lakeport. In 1875, the *Paugus's* engineer was Nelson Bedell. J. Weston Lyons recalled his time on the Paugus. Lyons had started working for the B.C.&M in 1863 at the age of 16. He would become an

engineer and work on the line until 1881: "When the freight went to Lancaster I hauled it with the *Paugus*. Martin Perkins fired, Ezra Mann conductor. I cannot give dates. George Lyons was running the *Granite State* with work train; when he got through with that he took the *Paugus* and hauled the freight and I went back on my old train, the freight, with the engine *Ammonoosuc.* I kept that run a number of years."



Locomotive - *Belknap*

Boston, Concord & Montreal RR *BELKNAP - (above & below)* built by Manchester Locomotive Works in 1870 / 4-4-0. In 1875, the *Belknap's* engineer was Sam Kimball. In 1882, the *Belknap* was running freight with C. F. Sanborn at the throttle. J. F. Leonard of Woodsville told Caswell how engineer Joe "Hooker" used to run the Belknap. "It is true that he used to put his feet on the throttle, lean back in his seat and drop off into a gentle slumber but he was a light sleeper and had the happy faculty of waking up at the right time and never had any serious trouble. He used to carry a long whip on the old *Belknap* and whenever she got to going slow on a hill or got to slipping bad he would open the front window of the cab and lean out and lash her with the whip I broke behind him on way freight for some time and got pretty well acquainted with his ways."



Locomotive - *Paugus*

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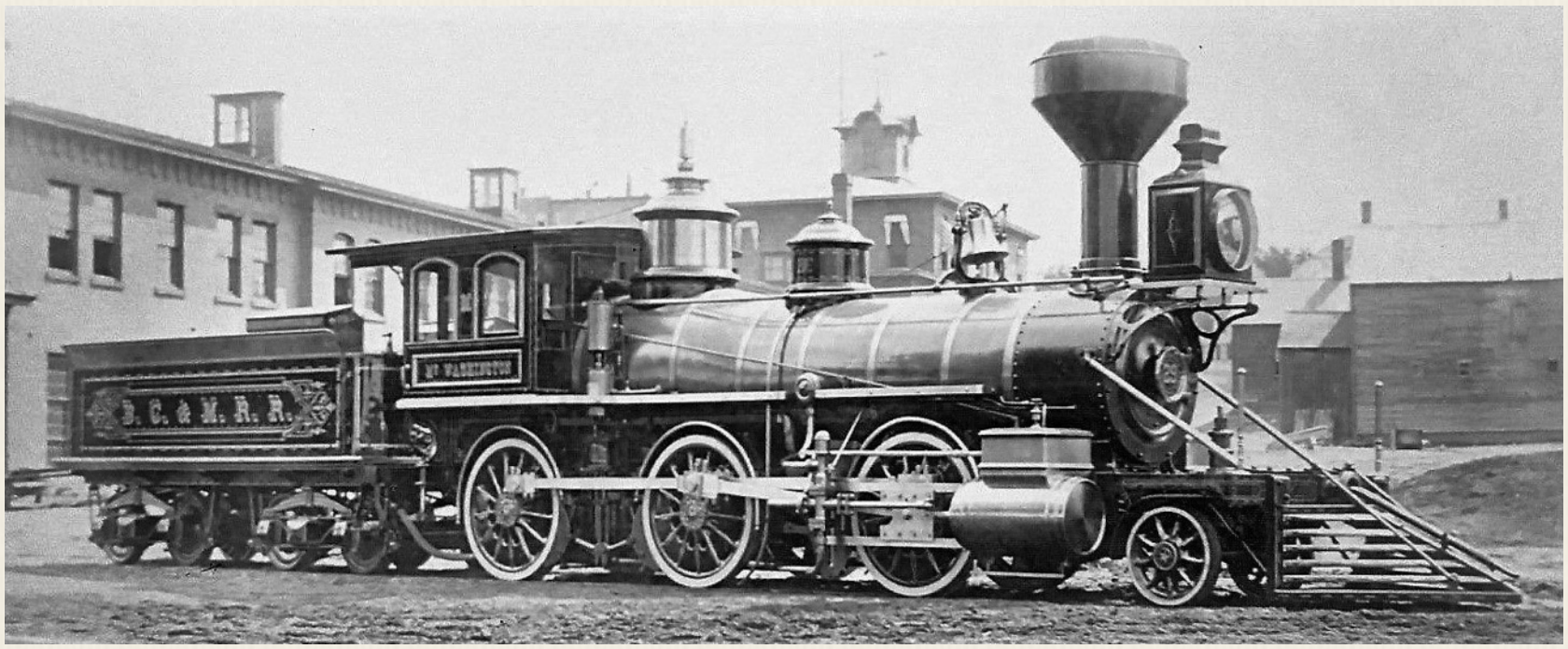
Locomotive - *Winnipeasaukee*

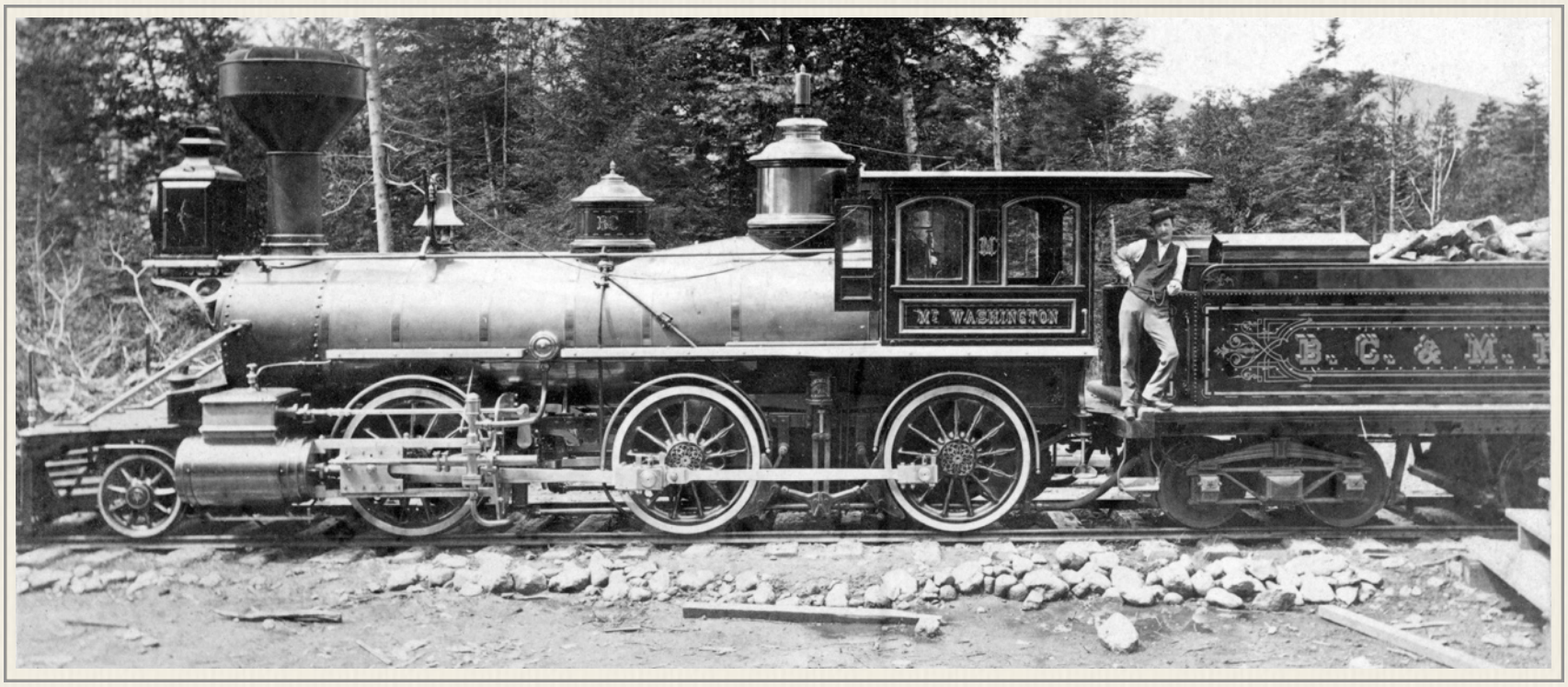
Boston, Concord & Montreal RR No. 7 WINNIPISAUKEE at Fabyan, N.H. 24 tons - Built by Boston Locomotive Works 1853. According to and taken from Caswell's 1919 history of the B.C.&M, "*Winnepesaukee* was a freighter of 24 tons and 5 foot drivers. *Pehaungun* was the same size, weight and almost identically the same pattern as the *"Winnie"*, as the boys used to call her. In 1875, the *"Winnie"* was run by Martin Perkins. In 1882, "Winnie" was running freight with various engineers. Since writing it a number of times there has come to my knowledge that the name on the old engine No. 7 was spelled *Winnipisseogee* and not the modern way of spelling the lake today *(1919)*. This old engine was a part of the road itself in early times, and every engineer on the road forty to fifty years ago run her, and she was actually worn out and had to be scrapped. The *"Winnie"* was in memory of an Indian tribe. Like the red man, she was tough, and endured much grief."

Shop Log: Spur Line Locomotives



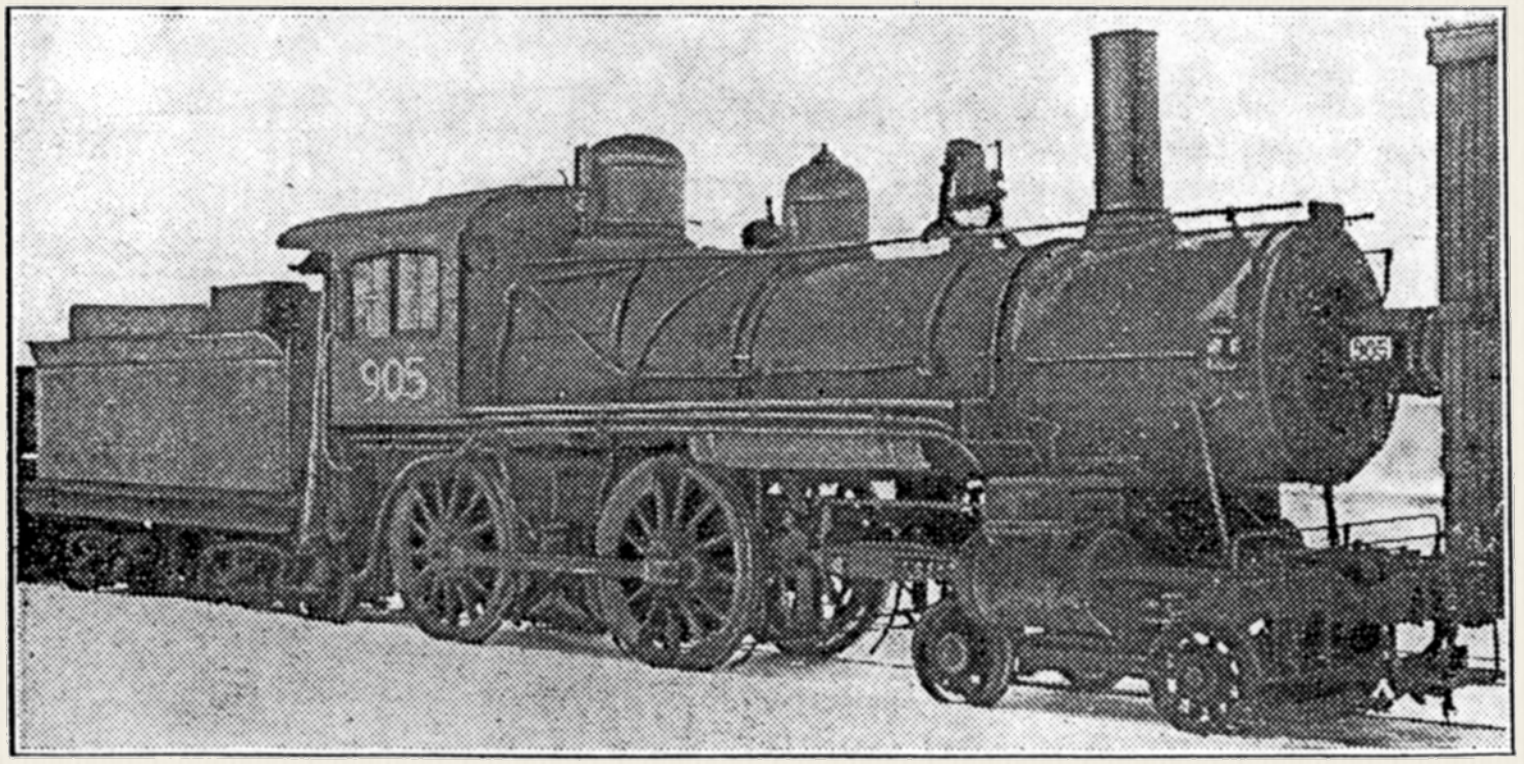
Locomotive - *Mt. Washington No. 29*

No. 29 *Mt. Washington* was built by the Manchester Locomotive works in 1876 *(above)* for the Boston, Concord & Montreal railroad *(Build record next page)* BC&M records in the Boston & Maine Railroad Historical Society for September 30, 1881 reported the *Mt. Washington* run by engineer J. F. Marsh had run 7,369 miles in the prior six months and had used just 92½ gallons of oil, repair cost 29.01 yielding a cost per mile run of .00'39. Six month later on March 31, 1882 engineer Marsh had run the Mt. Washington another 1,500 miles while using 8½ gallons of oil. The cost of repairs during those six month was $1.83 for a cot per mile of .00'02. Between September 1882 and March 31, 1883, the Mt. Washington had gone 3,675 mile with engineer J. F. Marsh. 27½ gallons of oil had been used for lubrication. $16 had been spent on repairs for a .00'43 cost mile. A year later, six month figures at the end of March 1884 had 2,025 miles run, 13½ gallons of oil with just $1.87 spent on repairs. Cost per mile run was .00'09. Engineer Marsh was still at the throttle



Mt. Washington *& engineer (J.F. Marsh?) pose at Ammonoosuc Station transfer station after backing up tourists from Fabyans (~1877))*
- Rob Bermudes Jt. Collection

Later she became Concord & Montreal railroad #82 and then Boston & Maine railroad #782 (pre-1911 number). She spent 31 years on this short, steep and famous vacation spur line before being scrapped in 1907.

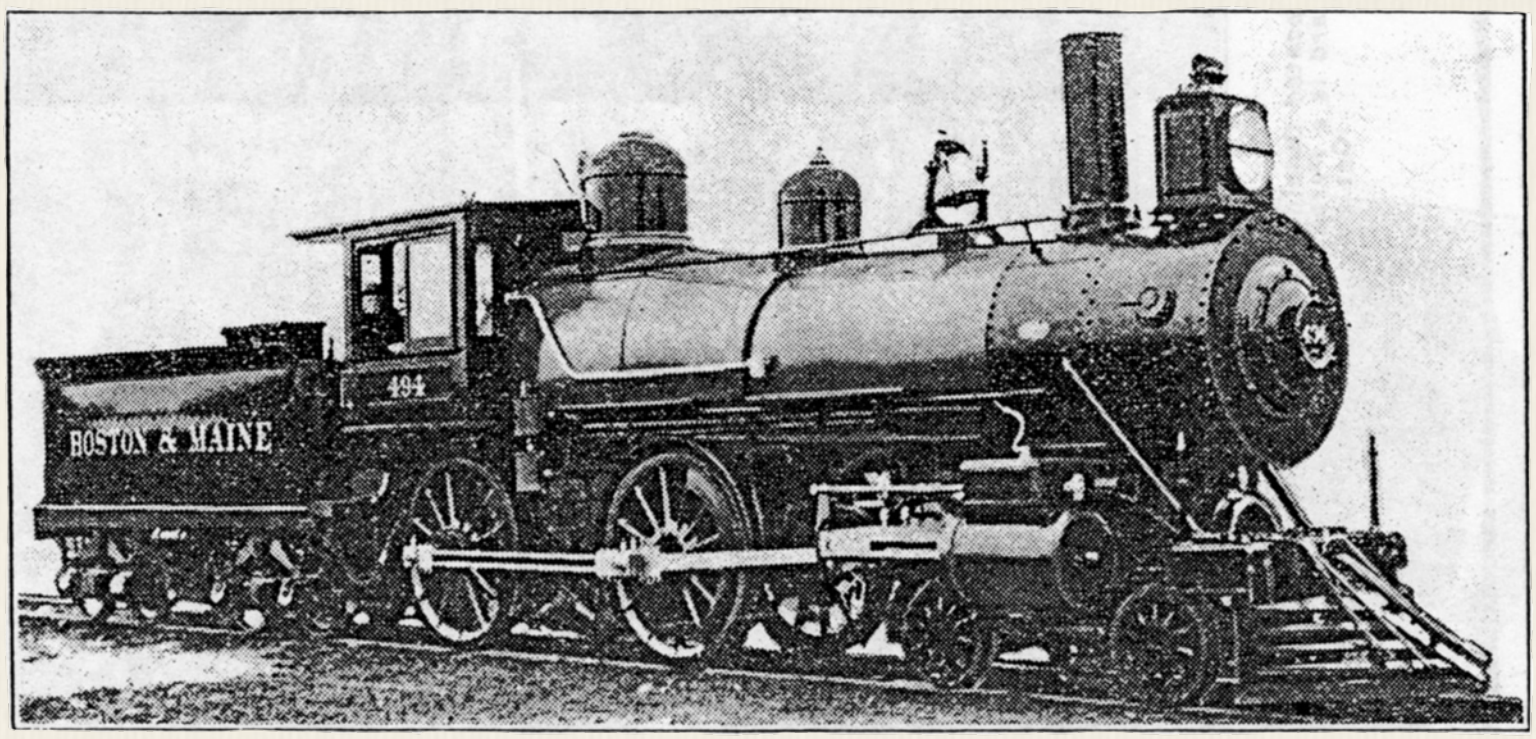


The Boston & Maine's 905, Formerly the 494, as She Looked Before Railfans and Volunteer B&M Shopmen Gave Her a Thorough Overhauling for Exhibition at "The World of Tomorrow." (See Page 69.) This Shot and the One at the Top of Page 71 Were Sent to Us by Artemas O. Wilkins, President of The Railroad Enthusiasts, Inc., 42 Main St., Everett, Mass.

Boston & Maine Railroad
No. 396



The job was then taken up by Boston & Maine No. 494 that was also built at the Manchester Locomotive Works in July 1892. The engine would be renumbered to No. 905 *(above)* and end its career hauling cars of coal from Fabyan to the Base Station of the Mount Washington Cog Railway. Following retirement it was stored in Portsmouth, New Hampshire where it rusted awaiting a final trip to the scrap pile. But it was salvaged and renovated *(right)* by the New England Division Railroad Enthusiasts Inc. for showcasing at the 1939 World's Fair. Railfan Jerry Bergen saved the before & after images



And Here Is the Same B&M Engine, Restored to Her Former Condition and Again Displaying Her Original Number, 494. Seated in the Cab Is Her Old Engineer, L. B. Newhall, Now Retired. You Can't Snap an Unobstructed Picture Like This at the Fair, Because the 494 Is Sandwiched Between an Antique NYPB&W Passenger Coach and a Fence. (The Fence Doesn't Show in the Photo on Page 72; but Just Behind It Is a Little House, Used in the Pageant, "Railroads on Parade." This Gives You a Clue as to Where the 494 Is Located)

38

Manchester Locomotive Works, March 3d 1876.

38

One. ENGINE No., 731. Mogul Engine.

Boston Concord & Montreal R. R.

BOILER. 50¾" Dia. Waist. DOME, 28 Dia.

FIRE BOX. 35" × 60" × 59" high GRATE, 60" Adam's cast Ironpan

TUBES, 184. 11' 6" Long, 2" Dia.

STEAM PIPE. 6½. Dia. Long.

THROTTLE, 6½ balance.

CYLINDER, 17. Dia. 24 Stroke, 82" C. to C. across.

PORTS. 15 × 1 1/8" Exhaust port, 15 × 2½"

VALVE. 5". Travel, Outside Lap, ¾ Inside Lap. 7/16"

PISTON, 17. Packing. Dunbar with Spring Ring, Cast Iron

PISTON ROD. 2 5/8". 49¼ long.

6 WHEELS, 4 ft — 49¼ dia. over tyre. 44" under tyre.

CRANK PINS, 3 & 4". Dia. Dia. ends. 4 7/8"

ECCENTRICS, Dia. 2½" Throw, Hole. 7"

4 PAR RODS. 90" ——— C. to C. Boxes. 3" dia.

MAIN ROD, 89". C. to C.

6 DRIVING BOXES, 7" Dia. 8" long.

3 DRIVING AXLES, 7 Dia. 68½ Long.

1 TRUCK " 4½ Dia. 66½" Long.

4 TENDER " dia 3¾" × 5¾" long Dia. 79" Long.

STYLE OF TRUCK. Steel rolls. Bogie. CENTRE PIN, 7" 12½" Long.

2 TRUCK WHEELS, 28" Dia. Ford & Kimball

8 TENDER " 30 Dia. " "

TRUCK SPRINGS. 34½" 10 Leaves. 3 × ⅜ French & Co.

TENDER "all Side Springs 11 Leaves. for.d & 12 back. 4" offset. 48" long

6 RIDING " Twelve leaves. 12 Leaves. ⅜.

TENDER FRAME. Iron. Double brakes & Westinghouse

TANK. 17' Long, 7' 6" Wide, 40 High. 24 & 26" legs.

CAB. 69 Long, double. LAZY COCK.

SMOKE STACK, Fountaine. Wood. 17. Dia Height from Rail. 13' 11"

CONE, Fountaine. NETTING. 10 × 10

FRAMES, 4 × 3. Front Frame. 4 × 3.

YOKE, by pattern 7/8" thick SLIDES. 3½ × 2½ × 58".

FOOTBOARD, Common. RUN BOARDS. Iron edges.

2 PUMPS, through the yoke Brass. finished all over ——

AIR CHAMBER, Brass. Square Corners.

LOWER CHAMBER, Cast Iron.

FEED PIPES, Brass. LONG, FEED COCKS. Brass.

INJECTOR, None.

CHECKS, Common.

STEAM GAUGE, STEAM GAUGE STAND. Brass.

2 FLAG STANDS, High, Brass. FLAG ROLLS, 2 Brass.

HEAD LIGHT, Buffalo.

PILOT, Horizontal slat. & Hook Bolts.

EXHAUST TIP. 3" Dia. Send. one in the Rough. High Patt.

OIL CUP, Steam Chest. Ourown. & also a pair of ourown in the Cab.

" " Slides. ~~Common~~. New York

" " Rods. New York.

CYLINDER CASING, Brass.

" HEAD CASINGS, Brass.

STEAM CHEST CASINGS, Brass. CHECK CASINGS. Brass.

" " TOP CASINGS, Iron. Brass edges.

DOME CASINGS, 28 Brass. DOME TOP. Brass.

SAND BOX, Iron. TOP. Brass.

To have Westinghouse Air Brake attachments complete on Engine & Tender with Driver Brake between the two back drivers —

Painted in good style as their Engines are usually. Wheels in Red —

Photograph courtesy Manchester Locomotive Works Records, Baker Library, Harvard Business School

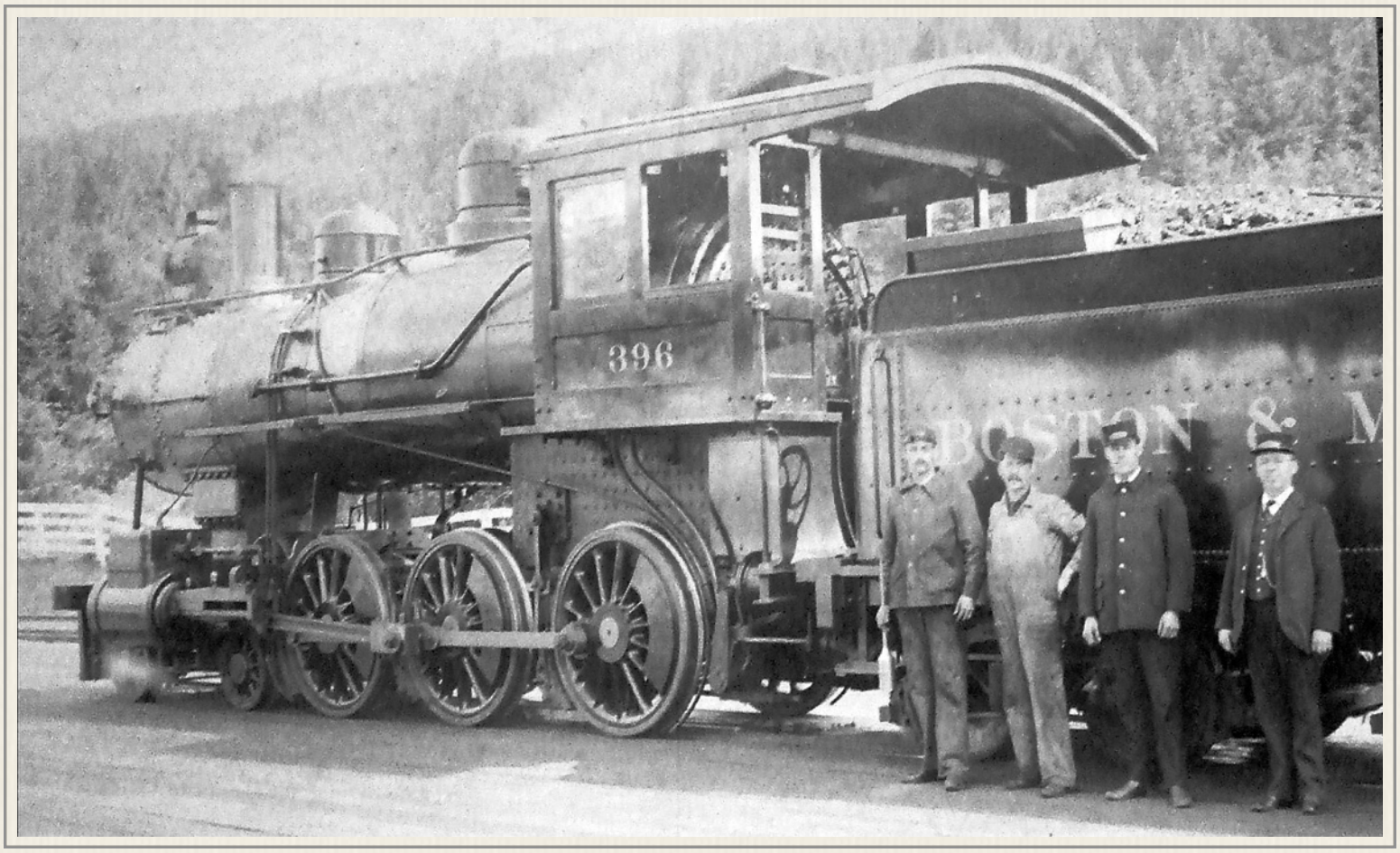


No. 494 at White River Junction: *Marty Bernard captures the rescued locomotive (left) as it sat on display in mid-August. A roof was later built over the engine to protect the engine from the elements. (Aug 16, 1970))*
- Marty Bernard photo

from the August 1939 *Railroad Magazine* article about #494 currently on display in White River Jct., Vermont. The volunteers working on the overhaul included B&M machinist and Cogger Earl C. Cone. Following the '39 World's Fair, No. 494 was stored at the Fitchburg and Lowell yards for several years. Again facing the cutting torch in the mid-1950s, a Boston-based group acquired the engine and found a permanent home in the Town of Hartford, Vermont in 1957. The engine remains on display today at this historic hub of railroad activity in the Connecticut River valley. *- See Vol 4 - A Hero's Odyssey*

Boston & Maine Railroad
No. 396

The 99-page *Locomotives of the Boston & Maine* roster put together in 1914 by Herbert P. Yeaton of Washington, D.C. in the B&M Railroad Historical Society archives says the No. 396 was first attached to the No 175 *Pemberton* of the Boston & Lowell Railroad. The 4-6-0 *Pemberton* had been built in Schenectady, New York in 1886 and became No. 396 when it was rebuilt in 1901. The name *Pemberton* was removed from the cab panels during the 1892 changeover. The locomotive would be renumbered again 1926.



No. 396 at Fabyans: *Conrad Ekstrom"Looks like this was one of the locomotives used to go up to the Base Station on the Cog. Nice group. Anyone known any of these hardworking guys? I purchased these from an estate sale in the Conway/Bethlehem area. (~1902-1903))*
- Conrad Ekstrom Jr. Collection

Shop Log: Observation Cars

Spur Line Observation Cars
1876-1931



Laurence Breed Walker spent much of his youth in the mountains of New Hampshire. His recollections have fortunately been preserved in a series of essays which he left to the Beverly (Mass.) Historical Society, along with a vast collection of New England transportation photos and reference material. Walker's recollection of the open observation cars on the Base Station branch was printed in the *Boston & Maine Bulletin - Winter 1978-1979* issue pg. 24 & 25 and appears below.

"If during the night the wind had veered to the north and the day dawned with a cloudless sky, we knew that the tourist business to Mount Washington would tax the capacity of the famed cog railroad. During the years that my family would be vacationing at the Mount Pleasant house at Bretton Woods, we would scamper away once breakfast was over, to Boston & Maine observation car #1798 that would be on the siding at the railroad's Bretton Woods station. We would get cloths from the hotel housekeeper. Talk about eager beavers, they had nothing on us as we dusted the chairs in the car, swept out the accumulated cinders and made everything spick and span. By mid-morning, B&M engine #396, the big ten-wheeler assigned to the branch, would come over from Fabyans, couple onto car #1798 and away we'd go over the Ammonoosuc bridge into the train yard at Fabyans. In appreciation for what we'd done to make things ship-shape, we'd be allowed to ride over and then back on the regular train to the Base Station.

"Three observation cars were available for the Base Station Train. #1797, #1798 and the combine #1799 that was identical with the other two except it had a closed-in compartment for baggage and mail. The combine was used on every trip, and #1797 was kept in the yard at Fabyans to use if there were more passengers than the combine could accommodate. #1798 was held in reserve for those perfect days when the other cars could not handle the crowds. When the weather was ideal, the three cars were sure to be used.

"These cars had been designed and built by the Boston, Concord & Montreal Railroad when service to the Base Station was first inaugurated. They had been numbered #3, #4, and #5 in their B.C. & M. days, and outside of the addition of the baggage compartment on #1799, they were virtually as they had been built. Every spring they were trundled back to the B&M's Concord shops to be revarnished and by mid-June they had returned looking like brand new cars. They were wooden cars, of course, with round tops and open sides. Huge awnings were rolled up inside for use in the event of a sudden thunder shower. Before train time, the moveable individual chairs were arranged two by two along the sides. This was one of our chores. We could just as well have ridden to the end of the line, but it would have meant that we would have missed our dinner at the hotel, and that was something we didn't intend to do, as the train would not return until late afternoon and there was no eating "establishment" at the Base Station in those days. The only stop on the line was at the B&M's Bretton Woods station, which was connected with the Mount Pleasant House by a covered walk. The engine always pushed the observation cars up the branch because of the grade. In fact the three cars taxed the capacity of the heavy freight engine. The engine would run in back wards, then on the return trip it would be headed in the normal direction. In addition to safety, this procedure had the advantage of not showering the passengers with cinders. That was important in that the cars had no windows other than in the bulkhead doors. The number of passengers was always telephoned ahead to the Mt. Washing ton Railway when the train left Fabyans so that a sufficient number of trains would be ready to climb the mountain.

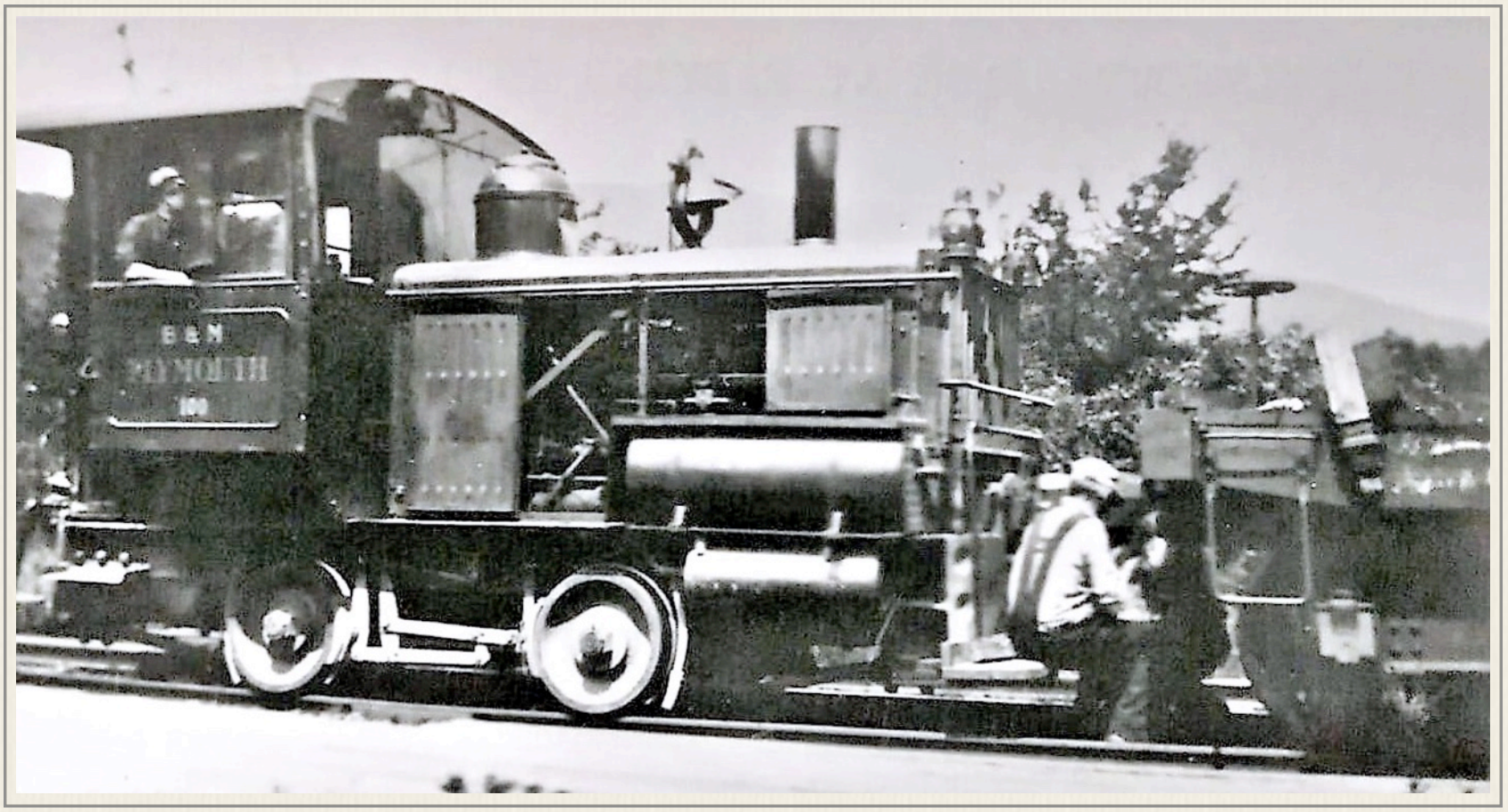
"Probably no cars in the history of American railroads ever carried such celebrities as these three observation cars. Included were various Presidents of the United States and assorted "big-wigs" of every description! Presidents Grant and Taft, Chief Justice Hughes; the list is limitless. And everyone on every trip had their picture taken by Peter Eddy at Fabyans. He took photographs of each car's passengers on every train. With real artistic skill he would arrange them so that each person would show in the picture. A sign would be hung be neath the car window s to show the train number and the date. By the time the train returned from the Base Station in the late afternoon, copies of the photographs would be ready for anyone desiring one. The transaction had to be a quick one, as the Maine Central train for Bartlett usually arrived before the B & M train from the Base appeared. This popular feature of the trip continued each summer for over 28 years.

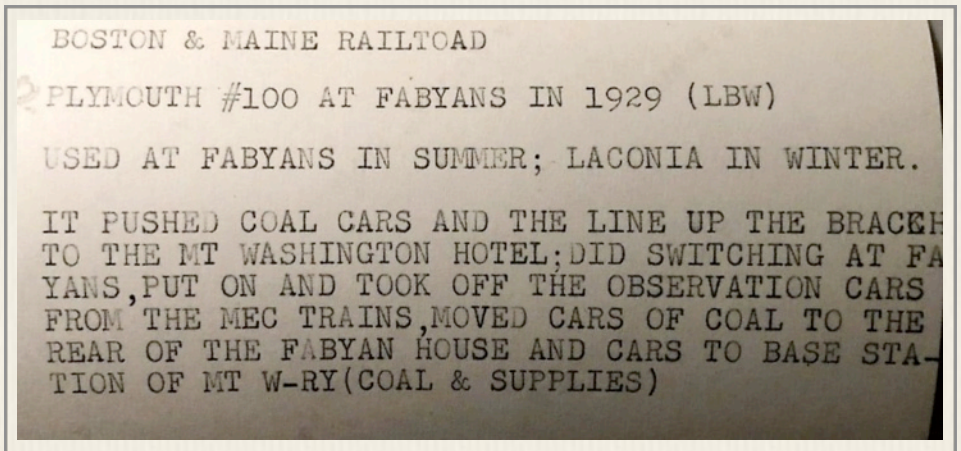


"Eventually, with the improvement in highway travel and touring in motor cars, rail transportation to the Base Station became unnecessary. The Branch was removed except for a short section to the power house of the Mt. Washington Hotel. The quaint observation cars were taken away and scrapped. It is a great pity that one of them was not preserved. It was so much more fun than riding an auto to the Base; really thrilling!"



Shop Log: The Spur Line Tug




BOSTON & MAINE RAILTOAD

PLYMOUTH #100 AT FABYANS IN 1929 (LBW)

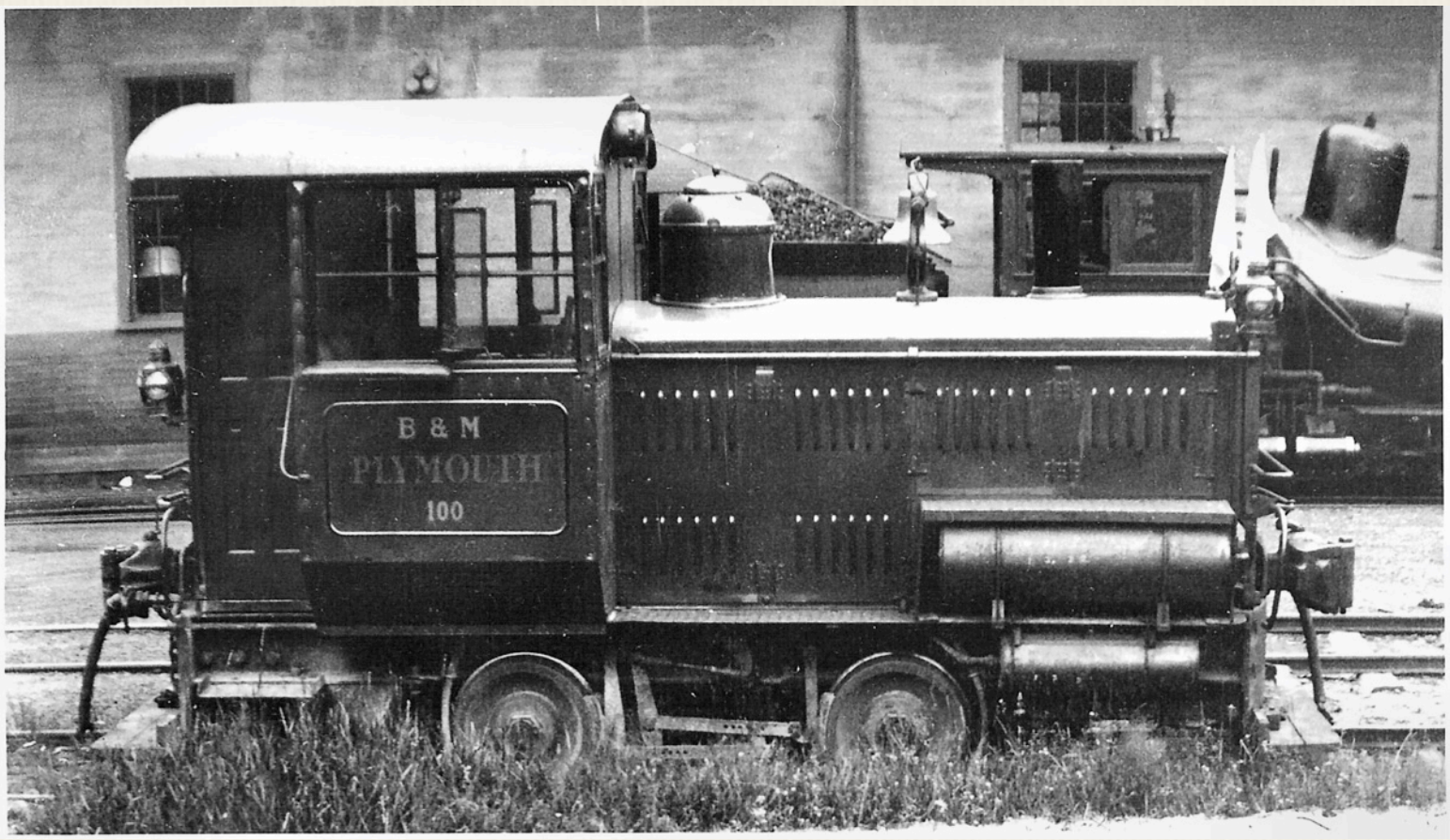
USED AT FABYANS IN SUMMER; LACONIA IN WINTER.

IT PUSHED COAL CARS AND THE LINE UP THE BRACE
TO THE MT WASHINGTON HOTEL;DID SWITCHING AT FA
YANS,PUT ON AND TOOK OFF THE OBSERVATION CARS
FROM THE MEC TRAINS,MOVED CARS OF COAL TO THE
REAR OF THE FABYAN HOUSE AND CARS TO BASE STA-
TION OF MT W-RY(COAL & SUPPLIES)

February 22, 2022 - Conrad Eckstrom posts on his *The Railway to the Moon! Facebook* page: "Look at this *(above)*. The photo back explains it better than I can. Very interesting. Enjoy." ***Tim Lewis:*** "Conrad - this is brand new to me. I haven't run into this "tug" - I knew the coal came up the branch line in railroad cars but thought that was handled by the larger Mogul engines that brought the tourists up. 1929 means it only had to run two more summers. Thanks for opening up a new line of inquiry with my friends at the Boston & Maine Railroad Historical Society. Where did you find the image?" ***Ekstrom:*** "In the RB Sanborn Collection. Yes, it is new. WOW and new to you also. OK. As you said a new line of inquiry! The back *(right)* says a lot." ***Art Poltrack:*** "Something new for me too!" ***Lewis:*** "Conrad - yes, very helpful. Most Cog testimony about the coal cars coming to the base involved "bitching" about having to hand shovel the cars empty and the various ways to make the right noises of doing the work without actually doing it *(while never saying what was pushing the cars into place.)*" ***Eric Cunningham:*** "Hard to imagine this little guy hauling much all the way up to the Cog, wasn't that a pretty steep grade?" ***Brian Dame:*** "Eric - 5.59%" ***Bruce Davison:*** "Here is a shot *(next page)* at the Cog Ry base, that has been around for a while. Shots of this little critter are pretty scarce. I hiked part of the base station line roadbed, from the Mt Clinton Rd towards the base station, and it is indeed a pretty steep grade! I am sure this little guy struggled mightily on that grade." ***Conrad Ekstrom: "***Bruce - Thank you. Nice post about a chapter just being revealed. WOW! UPDATE - I added Bruce Davison's post of #100 at the Base Station. Wow! two rare photos in two nights! Thanks Bruce Davison."



Boston Maine 16T Plymouth #100 (above) at Concord, NH in December (1936)
- Houghton's Rail Images



Tim Lewis: "Found some links to more info.... https://railroad.net/b-amp-m-plymouth-switchers-t82358.html AND https://www.datazap.net/sites/2088/BM_1.html for the curious. Still need to contact my B&MRR Historical Society folks for details as to deployment to spur line, etc but this was a good couple of days - Bruce - great shot - may have been around for awhile but I had not stumbled over it in my seven years of research - Thank you - now I'm adding a section to the *Ops Manual* with images of the various spur line locos and the Plymouth 100 - yay!" ***Rick Nowell*** of the Boston & Maine Railroad Historical Society says records there show the "Plymouth 100 - 16 ton (Cons No.) 3506 Built 6-25-1930 Gas-electric. Sold in 1941 to Draper Corporation's Beebe River RR. Beebe River RR tracks taken up in 1942.







Plymouth 100 on display at the Depot Shopping Center in Lincoln, N.H. (left) with shot of engineer's controls in the cab (right) and the view out the engineer's front window. (2012)
- Photos by bumthum / Railroad..Net

"But wait, Will there be More...?"

Maybe?: You are reading one of the final versions of *The Jitney Years* manuscript. The "Sunset Special" was the last train up the mountain. This is an online update to the March 2021 document posted out in an effort to collect additional Cog employee names, information and stories. As 2024 comes to a close, *The Jitney Years* project continues to prepare a last run up the mountain before committing to a final print-out of the manuscript. This continues to be a "last call" for any information that should be included in that printout.

If you or your relatives worked on the Cog Railway, please contact Jitney Jr. so he might include your family's mountain tales in this manuscript.

And if you would like to receive notification when newer versions of the manuscript are posted, please contact Jitney Jr. at the following email address:

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