HISTORY OF THE DEVELOPMENT OF BRIDAL VEIL, OREGON

AND

THE BRIDAL VEIL LUMBERING COMPANY

REPORT FOR MULTNOMAH COUNTY

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Bridal Veil
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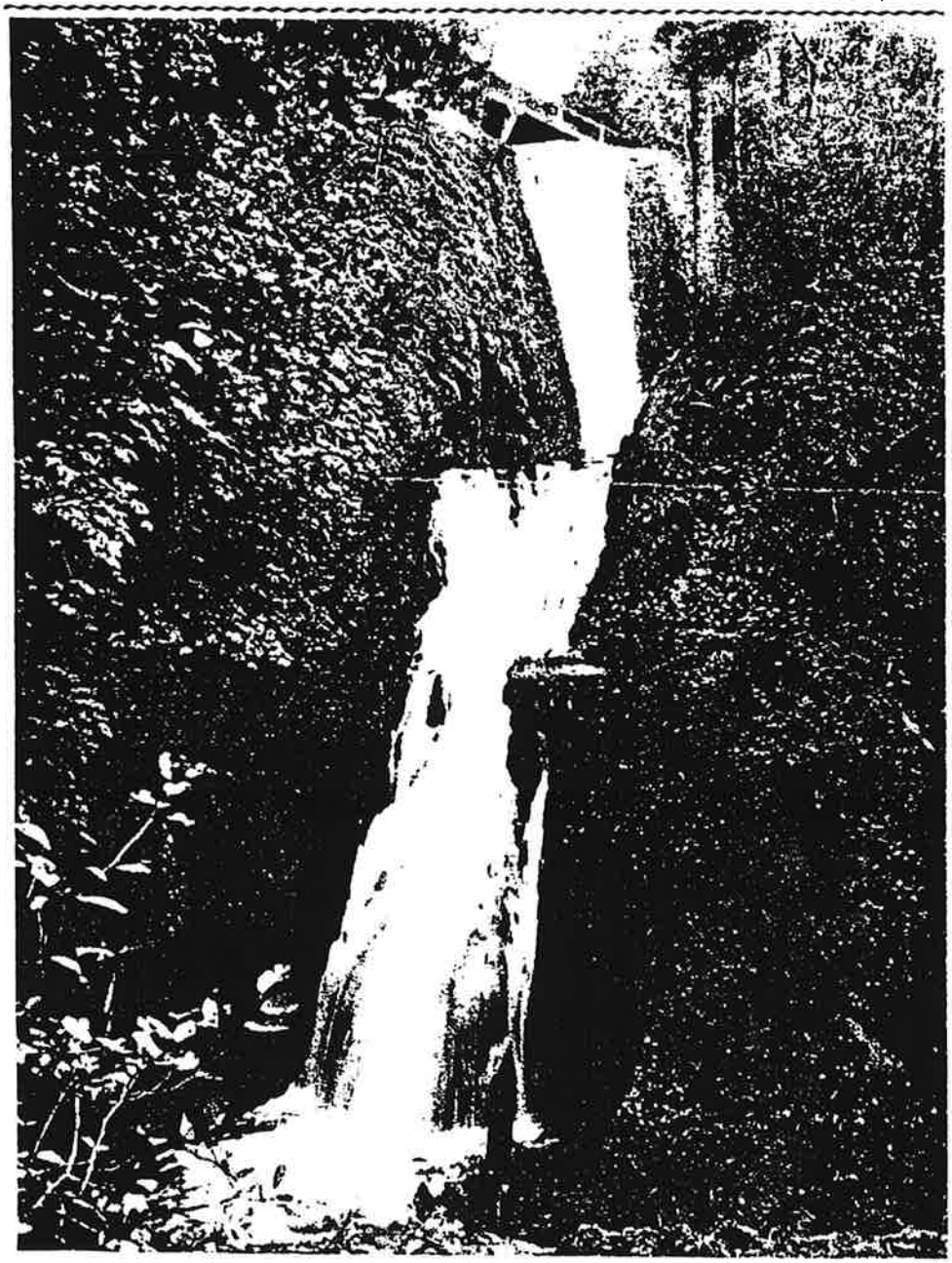

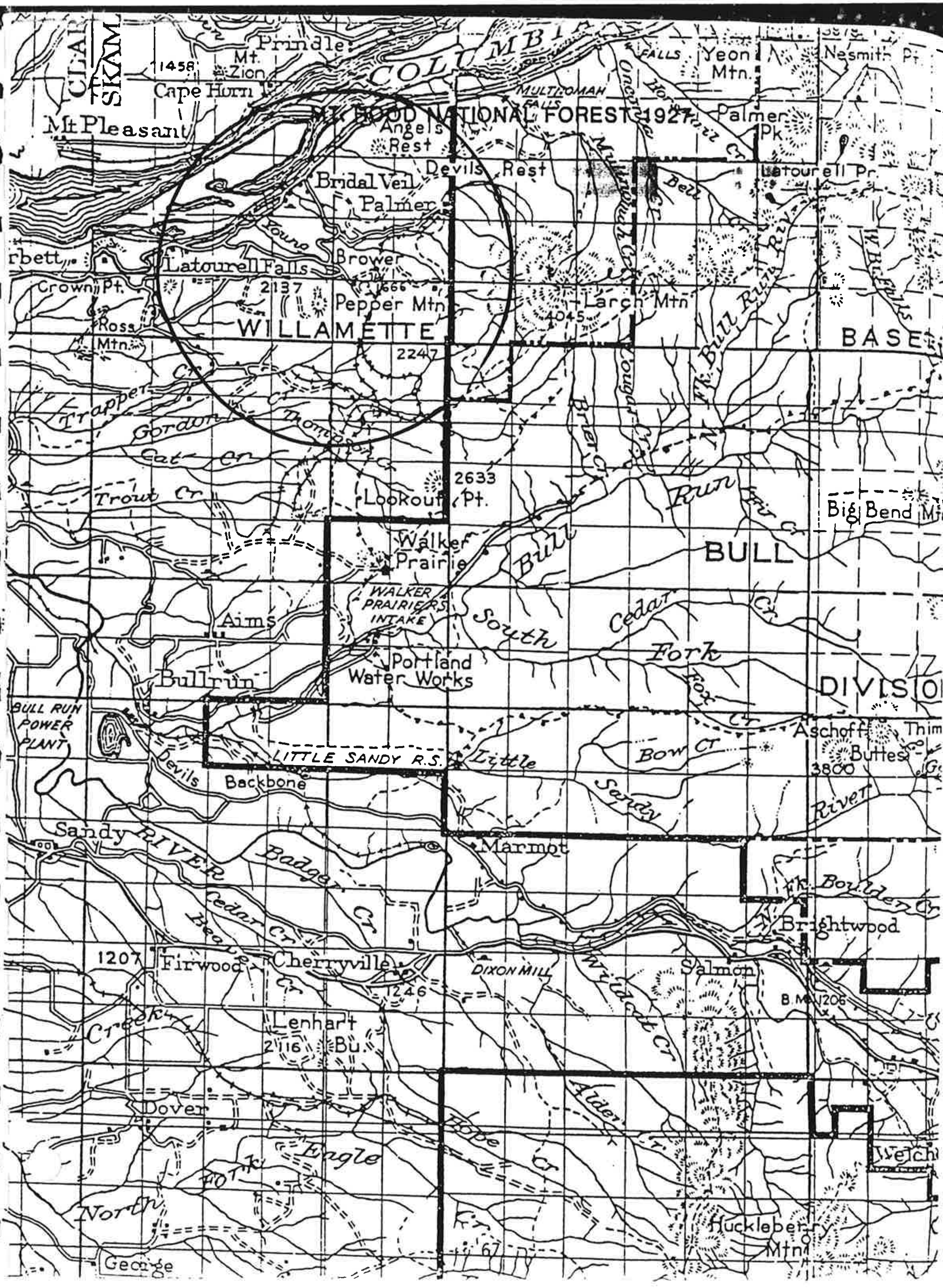
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Volume II, Number [illegible] BRIDAL VEIL, OREGON DECEMBE

EXECUTIVE SUMMARY

HISTORY AND SIGNIFICANCE OF BRIDAL VEIL, OREGON

Oregonians are proud of their historic, architectural, archaeological, and cultural heritage. They are honored when properties and sites of significance in their community and State are identified in cultural resource inventories or entered into the National Register of Historic Places. The historic buildings in a community are the tangible links with our State and the Nation's heritage. Cultural heritage and natural resources provide a sense of identity, value and stability and help interpret the past to our present and future generations.

Oregon is one of the few states that has its cultural and economic identity closely associated with its magnificent trees and a legacy of the growth and development of the timber industry. The red cedar, hemlock, larch, oak, sugar pine, yellow pine and the Oregon pine grew in a variety of localities around the state, where the natural conditions perpetrated their luxurious growth. The forest lands west of the Cascade Mountain Range in Oregon are generally more dense and difficult to access, especially the thick forests which grew along the steep hills and canyons lining the Columbia River Gorge. At one time, the majestic red fir and the gigantic sugar pine trees grew in thick clusters throughout the Larch Mountain area.

For over 100 years, the small picturesque community of Bridal Veil, Oregon, has been identified with the lumber and wood products industry. Bridal Veil is a small company mill town located along the south banks of the Columbia River. Today, the community of Bridal Veil contains thirteen homes of mill workers and company managers, a post office, mill site, log pond, church/community hall and historic cemetery, which continue to interpret the heritage of an Oregon logging and sawmill Company town.

Bridal Veil is historically and culturally significant for several reasons. Bridal Veil is the earliest remaining Company lumber mill town in the state of Oregon that still portrays its sense of community and the hierarchy of a Company town.. Bridal Veil contains the oldest

remaining collective examples of mill workers cottages, managers homes, a community hall, church, and post office associated with an Oregon Company town located in the the Columbia Gorge.

Bridal Veil had one of the first paper mills in Oregon. Many of the "first" logging techniques and designs for equipment needed to log the dense forests on Larch Mountain were invented and developed at Bridal Veil. Bridal Veil's identity and significance began and remains with the economic development of the Oregon timber industry, traditional cultural values, events and settlement patterns of communities in the Columbia Gorge.

Bridal Veil has evolved as a Company mill town since the 1880's, when the first paper mill was established on Bridal Veil Creek, followed by the Bridal Veil Falls Lumbering Company logging and lumber mill on Larch Mountain and the establishment of a planing mill at Bridal Veil. Bridal Veil is also significant as one of earliest remaining examples of Company mill towns which reflect the growth and importance of the logging industry to the Columbia Gorge, the state of Oregon and the Pacific Northwest. Although devoid of the planing mill and other original mill buildings, the Bridal Veil community continues to reflect the community settlement. Bridal Veil conveys the cultural, social, historic and economic development of people living in an isolated company lumber and sawmill town in Oregon.

Bridal Veil's historic and cultural significance is enhanced by the fact that Oregonians have overlooked the educational importance of interpreting the heritage of their timber and lumber industry. Limited examples of Oregon's lumber industry heritage remain available for the public to enjoy today. Bridal Veil's significance is further enhanced when the cultural heritage landscape is combined with the important archaeological heritage of the Palmer Mill Site, other logging camps, wagon roads, and communities that remain to interpret the lumbering history of Larch Mountain. Bridal Veil is also significant for its association with several prominent Northwest lumbermen who have owned or managed the various Bridal Veil Lumber Companies.

Although the Bridal Veil mill workers houses are small vernacular structures, they evolved over time as financial conditions changed with ownership of the Company town. The houses are culturally significant and convey the hardworking lifestyle of the Company mill workers and their families. The mill workers houses have been neglected and should be restored as soon as possible to reflect their historic significance. The Company manager's homes located next to the Columbia Gorge Scenic Highway maintain their dominance on the hillside. The managers houses have been neglected and should be secured and restored as soon as possible to their former elegance. The Post Office has served many historic functions in the history of the Company town and should be preserved and restored. The Post Office provides a sense of community identity and should be kept open for the public to use and enjoy. The community hall/church should continue to serve the public needs and be preserved as a bridal chapel, church, and community center. The historic cemetery should be fenced, marked and cared for in perpetuity. The mill site, not including the existing metal buildings, should be preserved and interpreted through signage and pathways. Original timbers should be salvaged and incorporated in any future buildings the community may restore. All wooden mill buildings should be photographed and recorded before any demolition is permitted. If intensive investigation demonstrates that the mill buildings are in stable condition and historically significant , they should be preserved. No earth should be removed from the paper mill, planing mill site, or sites associated with the Company town until a complete archaeological investigation has been conducted.

Many communities in Oregon contribute their heritage to the development of the lumber industry. Unfortunately, few traces of early logging communities remain to be interpreted to the public. Bridal Veil is the oldest remaining lumber community in Oregon which still possesses enough of the original homes, buildings and sites necessary to interpret the social, cultural and settlement patterns of people living and working in the lumber industry on Larch Mountain in the Columbia Gorge.

Bridal Veil is significant for other reasons: The history of the community is closely associated with the Native Americans, Lewis and Clark, Geology, Archaeology, Fishing & Fishwheels, Shipping, Railroads, Columbia Gorge Scenic Highway, Flora and Fauna, Lumbering, Logging, and Milling. The potential for interpreting the historic, cultural and natural landscape of the Bridal Veil area is an exceptional opportunity for Multnomah County.

Other Oregon communities such as Valsetz, Oregon, a lumber company town established in the 1920's on the slopes of the Oregon Coast Range, was completely destroyed in 1989. Brookings Lumber Company, established at the turn of the century, has only a few buildings remaining. What is left has been incorporated into the development of the city. Kinzua Pine Mills Company, established in the 1928 in Wheeler County, has demolished all of its buildings associated with the lumbering industry.

The best example remaining of a Company lumber town in Oregon is the Gilchrist Timber Company. Established in 1937, Gilchrist has remained as an intact example of a Company town. Although Gilchrist is more comprehensive with over 100 residential and mill buildings, it is important to remember that Gilchrist was founded over 50 years after Bridal Veil Falls and Lumbering Company had been in operation in the Columbia Gorge. Gilcrist should not be evaluated in the same context as the Bridal Veil Falls and Lumbering Company. Gilchrist is significant for interpreting a much later era of logging practices in Oregon and should be evaluated under different locational, settlement and social criteria.

The residents of the Bridal Veil area are very interested in having their community preserved and restored. Community residents want to interpret their cultural landscape through the development of pathways, exhibits, and tours to sites of natural and cultural importance. Community residents want their homes restored so they can interpret the cultural and historic "mosaic" that has made their community so significant--everything from the history of the logging industry and forestry practices to the people and the operations of the planing mill.

Bridal Veil has the potential to be an exciting cultural heritage/ecotourism attraction. Multnomah Falls is the most visited tourist destination is Oregon. Over 66 % of the visitors

traveling in the Gorge visit Multnomah Falls. The Columbia River Scenic Highway attracts almost 50% of the visitors and Vista House attracts nearly 30% of the visitors to the Gorge. Bridal Veil is strategically located between all of these attractions and offers the potential for becoming an exciting tourism experience, different than most attractions associated with the natural resources. Bridal Veil offers the potential to disperse the economic impacts of tourism throughout the Columbia Gorge National Scenic Area.

Therefore, the consultant makes the following recommendations.

RECOMMENDATIONS

Based on primary and secondary research and documentation, historic photographs, interviews with former Bridal Veil residents, and the complete business history of the Bridal Veil Lumbering Company operations between 1880's-1960's (filed at OHS and in private ownership), the consultant has determined that "there is enough of the physical fabric/heritage at Bridal Veil, Oregon to convey the "historic cultural, social, and economic evolution" of a Company town. There are enough structures remaining in the Bridal Veil community to understand and interpret the settlement patterns, cultural landscape, and hierarchy of use in a Company mill town located in the Columbia Gorge.

Immediate Recommendations

1. Amend the Multnomah Country cultural resource survey and inventory to include all significant natural and cultural resources associated with the heritage and evolution of the Bridal Veil Falls Lumber Company community.
2. Complete a intensive level cultural resource survey of all structures associated with the the development of the Bridal Veil community.
3. Research the possibility of an expanded historic/archaeological National Register District for Bridal Veil, which may include the Palmer Mill site, and other sites associated with lumbering on Larch Mountain and the Bridal Veil Falls Lumber Company.
4. Establish a "master plan task force" comprised of all groups and individuals interested in the preservation/restoration/interpretation of the Bridal Veil community. Encourage a cooperative working relationship whose purpose is to develop a quality comprehensive master plan, which will interpret the historic, cultural & natural landscape of Bridal Veil.

5. Develop an "interim action plan" to secure and protect all the houses and buildings which are presently vacated until a restoration plan can be developed and implemented.
6. Photograph and document the commercial mill buildings on the mill site.
7. Restore the existing Post Office. Keep the Post Office open for public use.

Future Recommendations

1. Conduct an intensive level archaeological/historical survey of Bridal Veil, Oregon.
2. Incorporate concepts for a Columbia River Gorge National Scenic Area Landscape Gallery into master plan.(See attachment provided by landscape architect)
3. Research the preparation of an expanded National Register Archaeological/Historical National Register nomination for Bridal Veil and other relevant historic logging and lumbering sites located on Larch Mountain and at the Palmer Mill site.
4. Develop a master plan to protect, interpret and enhance all priority viewpoints and significant components of the cultural landscape at Bridal Veil. The preservation, use, and modification of the natural environment should maintain and enhance the use of natural resources.
5. Do not remove any earth for site development or improvement until a thorough archaeological investigation has been completed at the Bridal Veil mill site.
6. Integrate all future plans into a cultural heritage/ecotourism development program. The preservation, use, or any alterations to the cultural environment should maintain and enhance the existing community, while striving for quality preservation and interpretation of the existing cultural resources.
7. Recommend that the present Bridal Veil site remain as a cultural landscape. Any infill projects should be discouraged. The one exception, may be the reconstruction of the original Bridal Veil Company Store, which could serve as a central interpretive facility in the future.

8. Based on a tour of the mill site, I recommend that the significance of the mill buildings be evaluated before they are demolished. The master plan should determine their importance for any future development. (7/14/92)

9. If mill buildings are to be demolished, the lumber should be saved and reused in the preservation and restoration of the existing structures at Bridal Veil.

10. Any remaining sections of original flume or artifacts associated with the lumbering industry should be preserved for future interpretation.

8. Conduct an intensive level historic resource survey of all historic and cultural resources in the Multnomah County portion of the Columbia River Gorge.

Respectfully submitted,

Sharr Prohaska
Consultant

July 1, 1992

HISTORIC CONTEXTS

Background

To qualify for the National Register, a property must be significant; that is, it must represent a significant historic context in the history, architecture, archeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that context.

The significance of a historic property can be judged and explained only when it is evaluated within its historic context. Historic contexts are those patterns or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within history or prehistory is made clear. Historians, architectural historian, folklorists, archaeologist, and anthropologists use different words to describe the phenomena such as trend, pattern, theme, or cultural affiliation, but ultimately the concept is the same.

The concept of historic context is not a new one; it has been fundamental to the study of history since the 18th century. Its core premise is that resources, properties, or happenings in history do not occur in a vacuum but rather are part of larger trends or patterns.

In order to decide whether a property is significant within its historic context, the following five things must be determined.

1. The facet of prehistory or history of the local area, State, or the nation that the property represents.

2. Whether that facet of prehistory or history is significant:

3. Whether it is a property type that has relevance and importance in illustrating the historic context;

4. How the property illustrates that context; and finally

5. Whether the property possesses the physical features necessary to convey significance.

FOR DETAILS: SEE ATTACHMENT

HOW TO EVALUATE A PROPERTY WITHIN ITS HISTORIC CONTEST

Criteria

1. Identify what the property represents: the theme, chronological period, and geographical limits that provide a perspective from which to evaluate the property's significance.

   A. An event, a series of events or activities, or patterns of an area's development.
   B. Association with the life of an important person
   C. A building form, architectural sty, engineering technique, or artistic values, based on a stage of physical development, or the use of a material or method of construction that shaped the historic identity of an area.
   D. A research topic

2. Determine how the theme of the context is significant in the history of the local area, the State, or the nation.

3. Determine what the property type is and whether it is important in illustrating the historic context.

4. Determine how the property represents the context through specific historic associations, architectural or engineering values, or information potential.

5. Determine what physical features the property must possess in order for it to reflect the significance of the historic context.

FOR DETAILS: SEE ATTACHMENT

NATIONAL REGISTER OF HISTORIC PLACES

The National Register, which recognized the value of properties as diverse as primitive rock art to the Columbia Gorge Scenic Highway has helped many people to appreciate the richness and diversity of our heritage. Listing properties in the National Register changes the way communities perceive their historic resources. It gives both the public officials and the private citizen the opportunity to preserve these resources as living evidence of the way of life in their communities. Historic properties provide a sense of specialness in knowing that the traditions of the past may be preserved for future generations to enjoy.

The National Register is a mechanism which ensures that existing cultural and historic resources which may be affected by Federally licensed or funded projects are considered in the Federal planning process. The Register is one tool to help a community in the planning process. Listing in the National Register is Federal recognition that a property posses cultural and historic values which should be considered worthy of preservation.

Listing on the National Register

Listing in the National Register results in the following for historic properties.

(1) Consideration in planning for Federal, federally licensed, and federally assisted projects.
(2) Eligibility for Federal Tax provisions. If a property if listed in the National Register, certain Federal tax provisions may apply.
(3) Qualification for Federal grants for historic preservation when funds are available.
(4) Owners of Oregon properties entered into the National Register of Historic Places, including those properties which have been designated as contributing features of historic districts, may apply for special assessment status--a freeze of the true cash value for a 15 year period.
(5) In some cases, National Register properties are eligible to be considered for waivers of certain normal code requirements in the interest of preserving the integrity of the property.

Criteria for Evaluation for the National Register

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components many lack individual distinction; or

D. That have yielded, or may be likely to yield, information important to prehistory or history.

HISTORY OF THE DEVELOPMENT OF BRIDAL VEIL, OREGON
AND
THE BRIDAL VEIL LUMBERING COMPANY

Overview

Oregon is one of the few states in the United States that has its economic and cultural identity closely associated with its magnificent trees and a rich legacy of the logging and of lumber industry. The red cedar, hemlock, larch, oak, sugar pine, yellow pine and the Oregon pine grew in a variety of localities around the state, where the natural conditions perpetrated their luxurious growth. The forest lands west of the Cascade Mountain Range in Oregon were generally more dense and difficult to access, especially the thick forests that grew along the steep hills and canyons that line the Columbia River Gorge.

At one time the majestic red fir and the gigantic sugar pine trees grew in clusters throughout the Larch Mountain area. Often the timber stands were so thick that the roots of one tree became entwined with those of another. The average diameter of many of these splendid trees exceeded six feet at the base. In some places, a rain forest effect was created by a thick mosslike web that spanned from one limb to another, creating a woven canopy which prevented the sun from penetrating the underbrush or fallen timber on the mossy forest floor. In some areas the forests were almost impenetrable, except by the most skilled and determined lumberman.

The timber industry is one of the Pacific Northwest's oldest businesses. As early as the 1820's, immense quantities of wood and timber from the forests of Oregon and Washington, were cut and shipped by the Hudson's Bay Company to places as far away as South America, Australia, South Africa, China and Hawaii. During the 1850's timber from the Oregon forests was cut and sent to San Francisco to help the city build homes, commercial buildings and bridges during an era of rapid growth and construction. Massive timbers of fir that were cut from the forests of Oregon.were internationally known for their strength, width and long lengths. Shipments to foreign destinations often included pieces of lumber that were more than twenty-four inches wide and over `one hundred feet long.

The Pacific Coast was a treasure house for forest products. At one time about three-fourths of all timber in the country was located in this area. The magnificent forests of Oregon and Washington were famous throughout the world. Mother Nature blessed the giant forests with an abundance of rain and other climatic conditions that created a natural environment for the growth of the spectacular trees Where ever lumber was used, the wood products of these states were represented. Ocean going vessels built of Oregon timber would last as long as those made of oak. Some of the finest ships masts and spars in all the world were cut from the forests in Oregon.

The importance of lumber to Oregon's economic development is almost incomprehensible. Statistics show that for many years there was more money invested in the production of wood products than in any other manufacturing industry in the country. For several years more men gained their livelihood and more families were supported by persons employed in the production of lumber than any other industry.

The large forested western slopes of Larch Mountain were no exception. Located 30 miles east of Portland in the Columbia Gorge, Larch Mountain which climbs to a 4000 foot summit, contained some of the best fir, hemlock larch, and majestic cedar trees in the country. The proximity of the Larch Mountain to the Columbia River and Portland, with its shipping ports, made the establishment of lumber mills and logging operations very attractive to Northwest businessmen. Most of the vast expanses of forests and timber lands in the Columbia Gorge remained uncut into the 1880's. About this time small timber companies began forming throughout the state to meet the increasing demand for lumber. Within a few years, several small lumber companies decided to build sawmills and logging camps on the forested slopes of Larch Mountain.

During the 1880's and 1890's, lumber companies began operating on Larch Mountain under the business names of Bridal Veil Lumbering Company, Brower and Thompson Company, Douglas, Siefer, and Kee Company, and the Latourell Falls Wagon Road and Lumber Company, etc. Overnight magnificent trees, many of them centuries old, began to fall to the loggers axe and saw. One of the most prominent new businesses engaged in the lumbering in the 1880's was the Bridal Veil Lumbering Company in Bridal Veil, Oregon.

Early Development of the Bridal Veil Site

The Bridal Veil site is located in the Cascade Mountains, thirty miles east of Portland, adjacent to what was once the O.R. and N. Railroad line. The secluded site is nestled in some of the most picturesque scenery of the Columbia River Gorge. For many centuries this area and the falls was a favorite gathering place for the Native Americans who lived along the Columbia River. The waters of the Bridal Veil Falls provided both spiritual, economic, and social benefits to the native peoples.

In 1879 Amos James Moore learned that a paper or lumber mill was to be established near the Columbia River at or adjacent to Bridal Veil Falls. Moore quickly filed for and was granted a homestead claim just east of the Bridal Veil Falls. Moore was the first recorded person who was interested in settling and logging in this specific area on Larch Mountain.

Moore and his four brothers had been operating a sawmill at Albina. As the supply of ready timber grew smaller in Albina, the Moore family decided to move to the Bridal Veil site in 1879-1880. They walked around the site and surveyed their options for lumbering. The falls at Bridal

Veil offered the Moore family the opportunity to build a small pulp mill. The Moore brothers decided to move. They brought finished wood from their Albina Mill over primitive wagon roads in order to reach the Bridal Veil area. The Moore family built the first two houses in the area.. One house was built for Amos James Moore and his family and the other house was constructed for the four Moore brothers.

The site of their paper mill is referenced in the abstracts of title for the property. In 1879 the Oregon Railway and Navigation Company received access for a right of way across their property. In 1884 the R.R. & N built a railroad along the south shore of the Columbia River, across the land belonging to the Amos Moore homestead.

In November 1882, J.Frank Buchanan, Richard Oakley, and Willard P. Hawley acquired title to property around the site of the paper mill. Within a short period of time, new homes were built for the Will Hawley and his brother, Harris Hawley. Another house was constructed for the Pusey family who also moved to Bridal Veil to work in the mill business.

The title to the property included land from the Columbia River to a point above the falls on the creek known as "Big Gall Creek or Bridal Veil Creek". They received the "right to take water from the creek at a distance of not more than 60 feet above the top of said falls to an amount equal to 55 horsepower based upon a 95 foot fall by Laffels measurement".

Will Hawley started construction on the paper mill at Bridal Veil creek. With the abundance of wood in the area, he was guaranteed an unending supply of fuel to operate his paper mill. Hawley built his mill but ran into difficulty when the freight trains that passed through the tiny community twice a day would stop only sporadically. Due to the unpredictable circumstances, Hawley sold the paper mill at Bridal Veil and moved to Oregon City, where he started the Hawley Pulp and Paper Mill. Before moving Hawley married Dell Pusey, the daughter of one of the families living in this isolated community. Their son Willard was a baby at the time they left, but matured to later became manager of the paper mill in Oregon City after his father's death. Hawley Pulp and Paper Company grew rapidly in Oregon City and proved to be a very financially successful move for the Hawley family.(See obituary)

Harris Hawley, brother of Will Hawley, worked in the mill for a short time. If he was paid like the other workers, he worked for 18 cents per hour for ten hours a day. Harris Hawley and his wife moved back to Portland after a few years of living in Bridal Veil. He became an active member of the Portland police force. Hawley also was president of Boys and Girls Aid Society for many years.(see reference material)

It can be assumed the mill was constructed about this time because on January 12, 1885, a complaint was filed asking for a receiver to protect the mill and other property "in the manufacture of paper". The operation was fairly small as is indicated by the size of the best bid at the receiver's sale, which was $1,060,00. The amount of money was judged inadequate, so

the court ordered the property be resold. In February 1887 the property was sold to S.A. Neppach for $4000.00.

The Community of Bridal Veil, Oregon

For over 100 years, the small picturesque community of Bridal Veil, Oregon has been identified with the lumber and wood products industry. Bridal Veil was a small company mill town located in a clearing adjacent to the south shore of the Columbia River. At present there are thirteen homes, a post office, church/community hall, mill buildings, water tank and a cemetery which continue to interpret the heritage of an earlier day Oregon logging and sawmill community. Bridal Veil is historically and culturally significant for several reasons. It is the earliest example of company mill town that operated continuously for almost 100 years in the Columbia Gorge. It is perhaps the earliest remaining example of a company mill town in the state of Oregon which still retains enough identity to portray the hierarchy of company mill town. Bridal Veil's identity and significance began and remains with the development of the Oregon timber industry, settlement patterns within the Columbia Gorge, and the cultural landscape associated with a company mill town.

Bridal Veil has evolved as a company town since 1886 when the Bridal Veil Lumber Company began logging on Larch Mountain. Bridal Veil may be the longest continually operating company lumber mill west of the Mississippi River. It certainly is one of the few earliest remaining examples of company mill towns which reflect the growth and gradual demise of the logging industry in Oregon and the Pacific Northwest. Although devoid of the original planing mill and other early commercial buildings, the Bridal Veil community continues to reflect the early settlement and the cultural, social, and economic development of people living in an isolated company lumber and sawmill town through its homes and community structures.

Bridal Veil, Oregon is beautifully situated in the Columbia River Gorge, 30 miles east of Portland. Bridal Veil is known for its beautiful creek and waterfall as well as its lovely view of the Columbia River and the distant mountains. Bridal Veil received its name from a lady who was traveling along the Columbia River on a stern-wheeler,. Bailey Gatzert. When the lady saw the cascading waterfalls from the stern-wheeler, she exclaimed that the falls reminded her of " a delicate misty brides veil". Through the years her remark has become a "legend" as more and more people began to refer to this special place in the Columbia Gorge as Brides Veil, Oregon.

When the first post office opened at the site, the community was officially named, "Bridal Veil". About the same time, the O.R.& N Railroad built a small train depot and the train schedule officially named the stop, Bridal Veil. (Judd: 1)

Early Development of Larch Mountain Lumbering Companies

The early lumber companies on Larch Mountain began in the 1880's by hauling fallen trees out of the forest using teams of small oxen, horses and mules. Within a few years additional skidroads, wagon roads, tramways and flumes were constructed to help slide the logs from the higher steep elevations to the sawmills and railroads cars that waited on the level ground below. Bridal Veil Falls Lumbering Company started their operations in 1886 and the Latourell Falls Wagon Road and Lumber Company began their business in 1887. The two companies were the largest logging and sawmill operations on the Oregon side of the Columbia Gorge during the early years of lumbering. The access to the railroad and water transportation along the Columbia River made Larch Mountain lumbering an attractive business option if the difficulties of logging on a steep terrain could be mastered.

Latourell Falls Wagon Road and Lumber Company

"Latourell Falls Wagon Road and Lumber Company was formed on April 28, 1887, with the intention to "engage in, carry on, and prosecute a general sawmill, lumber, logging, planing, and manufacturing business in connection therewith to conduct saw mills, planing mills, logging camps and lumber yards, and to do all things necessary or convenient to the property conduct of a general sawmill and lumber business and lumber manufacturing business". (Woodward: 2)

In 1887 the Latourell Falls Wagon Road and Lumber Company acquired the sole right to build a tram road, railroad, and logging road and flume or aqueduct over the S 1/2 S 1/4 of section 15, T1S5E. In return the owner had the right to travel over the road and also to work on the construction, receiving for his work, one share of stock for each day's work.

The Latourell Falls Wagon Road and Lumber Company built a wooden plank wagon toll road that started on the western slope of Larch Mountain and extended to the Oregon Railway and Navigation Company railroad line, which was located near the shores of the Columbia River. The construction of the railroad was viewed as an excellent opportunity to ship the mill products to the ports in Portland. The Latourell Falls Wagon road completed its construction to Latourell Falls in 1888. A wooden flume was constructed the same year to get the timber down the mountain to Latourell Falls. Logs or rough cut lumber could be sent down the flume to a small mill operated by Brower and Thompson. Brower and Thompson operated a small mill on Larch Mountain about three miles southwest of the Larch Mountain summit at an elevation of 1800 feet. From the Brower and Thompson mill, lumber was sent by wooden flume down

Young Creek to Shepherds Dell before it reached the rail yard at Latourell Falls. The Latourell Falls logging camp consisted of a barn, a cookhouse, an office and warehouse, and 2 bunkhouses, and was located on Pepper Mountain. (Woodward 1975) The construction of the Latourell Falls Wagon Road and the development of the flume were responsible for the development of large scale logging in the dense forests on Larch Mountain.

For the next two years the Latourell Falls Wagon Road and Lumber Company expanded their operations by building more tent camps, roads, flumes and lumber yards. In 1898 a complete inventory of the mill buildings, logging equipment, utensils, animals, groceries, warehouse and cookhouse goods at the sawmill and logging camp was taken by the logging company. This important inventory has been housed at the Oregon Historical Society. It gives a good perspective on the cultural way of life in a logging community at this time in history. The inventory has compiled by John Woodward and is included in the this report.

In 1886 Loring C. Palmer and Theodore H. Smith decided to form the Bridal Veil Falls Lumbering Company. Palmer , a veteran of the Civil War, had previously operated a sawmill in Vancouver, Washington. He dismantled his mill and moved the all the equipment to the Bridal Veil site during the summer of 1887. Hawley's paper mill, a post office, and a few small homes were located near the proposed new sawmill site.

Smith built his sawmill and a few houses about one and one-half miles above on a hillside overlooking the small community of Bridal Veil. "A wagon road was built under the direction of Kee Sing, a Chinese contractor, from Bridal Veil to the sawmill site. Machinery for a small portable sawmill used in building the permanent facility was hauled up this road and Jones & Calvin Logging Company was contracted to furnish the logs used in the construction (Hagen 1937) O.A. Palmer, a logger from Vancouver, Washington, and the brother of Loring Palmer, was contracted by the Company to supervise the logging operations". (Carr 1991)

> On July 6, 1887 the Vancouver Independent newspaper stated that: " The new Bridal Veil lumber mill is now finally at work, turning out lumber for houses to be built near the mill, lumber for the flume, and some for market. Quite a number of Vancouver men are at work there and more are to go. Palmer's scow took up the household effects of a number this week, and more will be sent up later. Among those who will live there are Thomas Thorton, James Baker and J.A Sawyer. Messrs. Palmer & Brown will in a few weeks be doing an extensive lumber business in the new mill." (Horton 1964)
>
> According to the Vancouver Independent dated August 17, 1887, " A few weeks ago we mentioned the fact that the machinery of Palmer's sawmill had been removed from Vancouver to Bridal Veil Falls. This move had been contemplated for some time, because of lack of proper facilities for carrying on the business in Vancouver. The proprietors had asked for a franchise to reach the river with a tramway for shipping facilities, and had been refused. This embarrassed the business in one way, while the available timber was also getting scarce in the vicinity of the logging tramway, and no

more could be had without extensions of the track, that would cost considerable money. Laboring under such difficulties, Mr. Palmer concluded to dismantle the old mill, and with associates moved the business to Oregon. But he has not left Vancouver entirely, as with a lease of the Lucia Mills he is still doing something for the town". (Horton 1964)

Finally, on December 14, 1887, the Vancouver Independent reported that " The Bridal Veil Lumbering Company have just finished their flume which is one and a half miles in length and the very best constructed flume in the Northwest, and has ample capacity for a timber 16x16x60 feet long. This company is admirable situated as regards timber and outlet, having the finest body of yellow fir, larch and cedar anywhere in the country, and having the Columbia river and OR & N RR as outlets. The capacity of their mill is 75,000 feet per day, per Portland Oregonian". (Horton 1964: 21)

On August 29, 1887 L.C. Palmer and his wife Catherine A. Palmer officially deeded the property to the Bridal Veil Falls Lumbering Company, (corporation) for a consideration of $2;000. The V-shaped wooden flume supported on high wooden trestles and an operating saw mill combined to put Bridal Veil Falls Lumbering Company ahead in the competition with Latourell Falls Wagon Road and Lumbering Company for domination of lumbering interests on Larch Mountain. In June and July 1889, legal rights were transferred by the owners of the mill site to the Bridal Veil Falls Lumbering Company.

The following year the Latourell Falls Lumber Company was fully operating and cutting 15,000 board feet per day. Its competitor, the Bridal Veil Falls Lumbering Company was changed to the Bridal Veil Lumbering Company in July 1889. On July 8, 1889 Anthony Moore, J.F. Miles and The Bridal Veil Falls Lumbering Company with L.C Palmer listed as President and T.H. Smith as Secretary acknowledged before a Notary Public that John G. Fleming, S.A. Neppach, and H.B. Nicholas had the right to build, maintain, extend and operate their main water pipe and such other pipe, flume or flumes as they may deem necessary from their Paper Mill or from where their pipe or flume is not situated, up and along Bridal Veil Creek across the 80 acre tract of land, to a point on said Creek not higher up than ;60 feet above the third of big falls thereof,, said falls being about 2000 feet up from the said Paper Mill, and the right tot take and divert from said creek at any point not higher than 60 feet above said fall the same quantity of water which they are now entitled to take form the top of the falls as specified in the deed from Anthony Moore to W.P. Hawley, J.F. Buchanan, and R.B. Oakley dated November 1882. They also granted to the men the right of way for a wagon road 30 feet wide from the West end of the present Count;y Road at the Bridal Veil Railroad station, to a point at right angles to said road and not less than 200 feet from the Railroad right of way limit. (Book 123 of Deeds, page 359. 1889.)

a

Early logging techniques on Larch Mountain

Logging techniques slowly progressed from oxen teams, mules and horses in this mountainous area to new sources need to drag the logs between the rails on planks. The power source was a small wood burning locomotive. At the pond the logs were loaded on disconnected trunks and railed to the sawmill at Palmer. Once the logs reached the sawmill at Palmer, they were rough sawn to a size that would fit in and slide down the wooden flume. At this point after being cut to proper size, the lumber was flumed down the canyon to Bridal Veil, a vertical drop of about 1800 feet. Occasionally, brave or perhaps foolish loggers would ride down the flume on a plank for the sport of the adventure.. Some men were successful while others took several months to recover from the injuries they incurred from their foolishness.

An Oregonian article of March 4, 1887 written by a traveling correspondent for the Pittsburg Dispatch, recorded his impressions upon visiting the site at Bridal Veil. He describes the Bridal Veil Lumber Company logging road and lumber operations as follows:

> "There is a railroad in this state over which passes enormous traffic, although the line does not possess a single car. It is located upon one of the highest elevations of the west slope of the Cascade mountains, in the heart of what has been almost inaccessible region. Its length is five miles, and it circles and twists in that distance until it resembles the trail of a mammoth serpent. It represents the most difficult achievement of the lumbermen in Oregon.
>
> The only feature of the road except the line itself resembles the ordinary narrow-gauge railroad is the 13 ton Baldwin locomotive, the power that pulls the freight. This freight consists of logs which will average of a size equal to that of the engine boiler. These logs are formed from the trees which are felled by the red shirted lumbermen in the employ of the Bridal Veil Lumber Company. After being cut, the logs are rolled to the nearest point on the railroad. They are then arranged in a line, huge staples driven in each end sections of heavy chain attached to the staples forming a train of logs. The foremost of these logs is then chained to the engine, which hauls it and its companions upon the roadbed of the line.

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The railroad is narrow-gauge, three feet. It is constructed on the same principle adopted by the regulation roads over which cars pass, with one exception.Stout plank is nailed to the ties, and it is upon this foundation that the logs rest as the engine pulls them along. The rails act as guards is to prevent the logs leaving the track. In this manner, the timber is conveyed from the point at which the engine takes it in charge to the beginning of the two-mile flume that leads from the end of the first section of the road to what is called the chute pond, a small body of water located about a half-mile from the mill where the logs are turned into lumber.

The roadbed, or rather, its foundation, is not, of course, like that of the great lines over which passenger and freight cars roll but, although roughly constructed, it has surprising strength. While , as stated, the logs are rolled form the point at which they are cut to the most convenient place on the railroad in many instances. The chute is called into play at what is known as the upper pond. This pond is to be found near the starting point of the line, and to it, from various sections of the mountain side, where trees are being felled, flumes or chutes are fun. The logs then, instead of being moved with difficulty to within "reaching distance" of the locomotive are placed in the chute and down they go to the bottom into the pond.

Once in the water, a detail of men fastens the logs together just as described in outlining the make-up of a train. A stout incline runs from the water to the railroad track. The train of logs is poled along until the foremost lies at the foot of this incline. A chain is then fastened to the logs.the other end thereof being attached to the engine. The locomotive pulls and the logs confined within a high curved channel are brought up onto the track and start on their journey to the mill . This is the process adopted at the upper pond.

The journey of the logs to the two-mile flume is uneventful. When the flume is reached the engine is detached from the log train and the logs from which all the chains are removed, are diverted into the mouth of the flume. Once started, it takes a log but a small fraction of time to make its way to the lower pond. Here the process of forming the big like trunks into trains is repeated in the same fashion as the upper pond. The process of getting them on the track however is much faster. At this point, the track runs in such a way that logs and toad are almost side by side, so the engine has but little difficulty in transferring freight from the water to the roadbed. Now the logs are beginning the conclusion of their journey for from the lower pond the line of the road runs without break to the mill where the "dogs" are turned over to the sawyers."

The writings of Alva Horton reflect the logging techniques used during a later period of growth.

" I went to Bridal Veil in the fall of 1889. The railroad then, as now, defined the town. Looking east from the west end of town we first see that the railroad crossed the Bridal Veil Creek on quite a high bridge. On the left there was a nice large house setting up on

high posts to keep it above the high-water line. A switch from the railroad went to the paper mill. There was also a flume sitting on high stilts to bring firewood down to the paper mill from the Palmer sawmill. There was one house between the paper mill and t he railroad.

In those days the trains were pulled by steam locomotives so the engines had to have water. There was a high stand-pipe next to the main line of the railroad so the engines could stop and get water when they needed it. The railroad company had three parallel tracks through town. The main line was on the north, the passing track was in the middle, and the track for loading the lumber into cars was next to the lumberyard. The depot and the agents' residence and the section foreman's residence and the company store were all north of the main line.

On the lumber yard and next to the loading track was a large derrick for loading heavy timbers onto flat cars. The lumber that was to be sold rough was piled on the lumberyard next to the loading track. The lumber that was to planed was taken into the planing mill and after it was planed it was put in the dry-kiln. After it was dry it was graded and stacked in sheds, close to the loading track, ready for shipping. (Horton: 1964: 13-14)

The early method of cutting immense logs was to bore a hole from the top side to the center with an auger and another at right angles until both holes met in the center, thus affording a draft. A fire was started in the lower hole, and would continue to burn a green log off almost as straight as if sawn. This was a strange sight. To see the smoke billowing out of a number of these holes at an equal distance from each other, the entire length of a 150 foot log, was rarely done in other parts of the country.

The logging industry started with the use of oxen, mule and horse power. Within twenty years as the industry grew, methods of logging began to change. The handspike, logging chain, bob sleigh, oxen and skidway were superseded by donkey engines, cables and cars. By means of the portable engines and cables, one or two acres could be "yarded" within a comparatively short time, after which the cables and donkey engines were moved on sleighs or trucks, specifically constructed for the purpose. The "bull donkey," with its endless cable attachment removes the logs from the yard to the railroad, which in turn conveyed them by steam to the mill.

As the industry continued to grow, new equipment was designed to meet the needs of the lumber industry. By 1902 approximately eighty men were working in the logging camps at Palmer and another seventy five men were employed in the planing mill at Bridal Veil. In September of that year a disastrous fire in the Columbia Gorge consumed the mill site at Palmer and the community of Brower. The Donahue and Kelley logging camp and the Bridal Veil mill was not destroyed. The fire put an end to the earlier era of logging techniques on Larch Mountain.

HISTORY OF BRIDAL VEIL LUMBERING COMPANY

In a quiet scenic community in east Multnomah County, a short distance from Portland, are eleven vernacular company houses, a tiny wooden post office, church/community hall and a historic cemetery. All the structures are directly associated with one of the earliest logging and mill towns in Oregon. The Bridal Veil Lumbering Company was well known for the outstanding quality of lumber they processed and sold. The high quality fir lumber planed by the Bridal Veil mill was used often used for flooring material. The fine grained wood from the larch trees was used for making doors and window casings. Although the Bridal Veil Lumbering Company logged Larch Mountain by rail for over 50 years, time has erased the memory of any people that worked in the early years of timber operations on Larch Mountain. However, several "living treasures" remain today, willing to share their fond memories of the evolution of lumbering and living in the Bridal Veil community after 1920.

The story of the area that grew to be the Bridal Veil community begins on May 17, 1872, when Governor L.F. Grover sold a portion of land along the Columbia River to E.F. Russell and George Woodward for $1.00 per acre. Land was conveyed under an act of Congress for the sale of swamp lands, approved October 26, 1870. Russell and Woodward purchased 1557 .90 acres for the price of $1557.90. Their purchased entitled them to lots 1,2& 3 of the S.E> 1/4 of N.W. 1/4 of Section 22, T.I.N.R.5.E., which contained 99.118 acres. (Other real estate was included in the transaction. It appears they were responsible for draining the land and making it fit for cultivation.

Five years later on August 8, 1877,George Woodward and M. Ellen Woodward, his wife deeded their half interest in the property (1506.76 acres) to Buchtel and Stolte for the price of $450.00 The described lands is listed in Swamp Land Certificate No.43. E.H. Stolte and his wife Mary U. Stolte deeded their interest in the swamp land to Joseph Buchtel on December 13, 1878. On November 6, 1879, Joseph Buchtel granted a right of way deed for a strip of land 100 feet in width, 50 feet in width upon each side of a center line of the railroad to the Oregon Railway & Navigation Company for $1.00 consideration. Edwin F.Russell and his wife Carrie F. Russell deeded their right of way interest in the railroad parcel to the O.R. & N. RR on September 19,1881 for $100.00 consideration.

In 1884 the Oregon Railway and Navigation Company extended their main line up the Columbia River. For the first time, new timbered areas in the Gorge opened up for logging. The completion of the main railroad line created new markets for Oregon timber, especially in the east. Almost overnight there was an increased demand for logging and milling operations throughout Oregon.

When Anthony Moore heard about the possibility of the railroad being developed through the Columbia Gorge, he decided to file for a homestead claim for lands adjacent to the proposed railroad line. On December 30, 1882, United States President Chester A. Arthur granted to Anthony Moore the "Southeast 1/4 of the Northwest 1/4 and the Northeast of the Southwest 1/4 of Section 22, T.!.N.R.5.E. of the Willamette Meridian in Oregon, containing 80 acres," to Anthony Moore. The land was given to Moore and his heirs "subject to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of Courts." (Book 88 of Deeds, Page 192. Recorded September 17, 1886.)

On September 21, 1882, Anthony Moore deeded one half interest in the tract of land to J.F. MIles for the consideration of $300.00. Moore and Miles, unmarried men, gave a warranty deed to J.Frank Buchanan, Richard S. Oakley and Willard P. Hawley on November 27, 1882. The deeded "entitled the men the right to use the lands from the center of the Creek known as Big Fall Creek or Bridal Veil Creek, at the distance of 50 ft. from the center of the main track of the O.R. & N. Co. as now laid, to an area 50 feet from the base of the falls in said Creek known as Bridal Veil Falls to an area not more than 60 feet above the top of the falls which would be necessary to generate an amount equal to 55 horse power, based upon a 95 fall by Laffels measurement. They were also granted the right of way across Moore's lands for the purpose of building, constructing, altering, and repairing such dams, flumes, ditches, pipes and other works as they may desire to build, construct, alter, or repair for the purpose of conducting said water. And together with a right of way for a wagon road and other purposes over and across the lands of grantors.An area was also reserved for the right of way for the corporation known as the Big Creek Wagon Road Company." Interest in the property was divided the following way: J.Frank Buchanan 1/4 interest, Richard S. Oakley 1/4 interest, and Willard P. Hawley, 1/2 interest". (Book 58 of Deeds, Page 311)

W.P. Hawley and his wife, Eva Adele Hawley gave a special warranty deed to Anthony Neppach on March 17, 1883 for a full undivided one quarter interest in the property. (Book 69 of Deeds, Page 42) The following year on November 17, 1884, United States President Chester Arthur signed a patent to Frederick Lusher for lot No. 3 of Section 22, containing a 17.50 acre tract of land. (Book 119 of Deeds, Page 273) This legalized the transaction of May 26, 1883, when Fred Luscher, a single person deeded lot 3 to Idah E. Buchanan who deeded his 3/4 interest in the land to Anthony Neppach and Willard P. Hawley, and R.S. Oakley on November 1, 1883 for $100.00 (Book 70 of Deeds, page 303)

Anthony Neppach mortgaged his interest in the property to S.A. Neppach on December 11, 1883 for the consideration of $4000. (Book 41 of Mtgs. Page 143) The mortgaged was

satisfied on August 20, 1886 as acknowledged by W.C. Neppach, Jr. S.A. Neppach assigned his mortgage to William Neppach< Jr. on July 31, 1885. R.S. Oakley mortgaged his interest in the property to Blanche F. Oakley on December 11, 1882. The mortgaged was satisfied on July 25, 1887 and acknowledged by her attorney H.R. Nicholas.(Book 41 of Mtgs. Page 147.)

Oakley, Hawley, and Neppach mortgaged 3/4 interest in the land to William Druck on October 18, 1883 for consideration of $3000.00. On May 6, 1884 William Druck assigned his mortgaged to C.A. Aliskey. The mortgage was fully paid and satisfied on April 2, 1900. The transaction shows that S.A. Neppach granted to J.F. Buchanan and wife, W.P. Hawley and wife, R.S. Oakley and wife, and A. Neppach the acknowledgement that the mortgage was paid, satisfied and cancelled. (Book 195 of Mtgs. Page 251)

W.P. Hawley and his wife gave a quit claim deed to George W. McCoy on August 3, 1886 for his interest in the paper mill site including all mills, water rights, easements and privileges associated with the property. He also grated all out right of redemption from Receiver's sale made July 7, 1886.(Book 90 of Deeds, Page 393) J.F. Buchanan also gave a quit claim deed for his interest in the paper mill site to George W. McCoy on August 19, 1886. (Book 887 of Deeds, Page 299)

About the same time Anthony, Albert, and Amasa Moore deeded the Big Creek Wagon Road Company to L.C.Palmer on September 17, 1886 for consideration of $1.00 with the understanding that $6500 would be paid in the future for the property.(Book 38 of Deeds, page 346) The transaction conveyed the Moores interest in the road owned by the Company and gave Palmer all the rights, title and interest in the Big Creek Wagon Road Company. The Moores also signed an agreement with Palmer for $2000 cash, with the promise of an additional $45000 , to be paid fora large portion of real estate: "the undivided 1/2 of the Southeast 1/4 of the Northwest 1/4 and the undivided 1/2 of the Northeast 1/4 of the Southwest 14 of Section 22, (excepting the portion conveyed by Moore and Miles to Buchanan, Oakley, and Hawley dated November 27, 1882) Upon the payment of the $4500, the Moore's agreed to relinquish, release and convey to L.C. Palmer, all of their lands, including the Big Creek Wagon Road Company, the and rights and title and interest in the water flume rights, road or trail sights.(Book 38 of Deeds, Page 247)

The county feet book registered a complaint (No. 6905) on January 12, 1885 filed by C.A. Aliskey, Plaintiff, vs W.P. Hawley and Eva A. Haley, R.S> Oakley and Sara R. Oakley, Anthony Neppach, I.R.Dawson, Thomas Jordan, William Druck, Thomas Pusey, P.D. Butler, Ben Lusher, George E. Pusey, and a minor, H.H. Hawley and H.F Pusey, Defendants. A petition was filed on March 30, 1886, by plaintiff for the appointment of a receiver to take charge of the mortgaged premises and to care for and protect the machinery.

Ch. H Carter, was appointed Receiver of the property and to dispose of the property as directed by the Court. The petition was filed on April 30, 1886 to obtain the judgement foreclosing the lien of a certain mortgage dated October 18, 1883. Hawley, Oakley, and Neppach had agreed to secure payment of a promissory note for $3000 with interest at 10% per annum and the note was insolvent, no part of the said sum had been paid." A large portion of the property in said mortgage consisted of a certain mill and building, and machinery for the manufacturing of paper, and that owing to financial embarrassment said defendants have never placed the mill in working order. "That said mill is rapidly going to waste and needs care and attention, and that no care which the Receiver can bestow will save the same from great depreciation in value and perhaps total loss. That it is greatly to the interest of all persons interested that the same be sold by the Receiver and upon execution, and that the proceeds be pain into the Court to await the final determination of this suit". The complaint was sighed by Henry Ach, attorney for the plaintiff.

On May 3, 1886 (Journal 34, Page 397) C.A. Alisky, Plaintiff filed against Hawley and Oakley, an Order of Sale in the Circuit Court of the State of Oregon for the sale of the paper mill. The Order of Sale stated that "the mill buildings and machinery are rapidly going to waste an constantly deterioration in value and that the property's entirely unproductive, and that the same cannot be property cared for except at great and increasing expense, and that there is no way except by an immediate sale of said property by which the value thereof can be realized". Order of sale was signed by Loyal B. Stearns, Judge. The property was sold under the order of sale to George W. McCoy for $1060, but numerous objections, affidavits, etc. were filed to said Receiver's report and the Court by order dated September 224, 1886, set the sale aside and directed the Receiver to make a re-sale of the property.

Catlin & Nicholas, Attorneys for the plaintiff, George H. Durham, attorney for H.H. Hawley, Butley and the Puseys, R.G. Morrow, attorney for W.P. Hawley and his wife, and H.R. Nicholas, attorney for defendants Oakley and Anthony, William and S.A. Neppach directed Charles H. Carter to sell the property at Public auction. The case is referred to as No. 7224, Neppach vs. Buchanan, and was a suit to foreclose the mortgage recorded in Book 41, Page 108. The suit was never dismissed nor any further proceedings followed.

On December 23, 1866 George W. McCoy and his wife Hulda McCoy deeded their interest in lot 3 and a portion of lot 2 to H.B. Nicholas.

On February 23, 1887, C.A. Alisky, Plaintiff vs W.P. Hawley, Defendant reported the sale of the property. The sale was held at 10 A.M. on February 11, 1887 at the County Court House. It was offered for sale at public auction and was sold to S.A. Neppach for the sum of SS$4000, he being the highest bidder. An additional fee of $270.00 was paid for the cost incurred in advertising in the "Sunday Welcome and the Oregonian and for charges associated

with hiring of a Watchman. On March 18, 1887 a receivers deed was given to S.A. Neppach for the property.

The earliest records and research indicate that Mr.Willard R.Hawley, who operated a lumber mill in Vancouver, Washington, wanted to start operating a paper mill near Bridal Veil Falls. Hawley purchased the land and built a small paper mill just below the falls on Bridal Veil Creek. He worked Amos James Moore and some Chinese laborers to prepare the land build the paper mill. It is not known whether Oakley and Neppach actively worked at the mill or if they were private investors. Unfortunately for the paper mill business, the twice daily freight train service was too sporadic. On several occasions the train did not make a routine stop at Bridal Veil to pick up paper products. The irregular train schedule made it difficult for Hawley to ship the products being made in his paper mill. As a result of several misfortunes, Hawley was forced to sell the paper mill. Hawley, his wife and son moved to Oregon City in 1892, where he started the very successful Hawley Pulp and Paper Company.

Will Hawley married the Dell Pusey, who also lived in the tiny community of Bridal Veil. Together they had one child, Willard S. Hawley, who assumed responsibility for the business in Oregon City after his father died. Will P. and his son Willard Hawley became very wealthy and socially prominent in Oregon as a result of their investment in the Oregon City Pulp and Paper Company.

Will Hawley was born in Franklin county, New York. He learned the paper mill business at an early age under the direction of Clark Week, a wealthy New York businessman. In 1877 he moved to California because of poor health. A few years later he moved to Oregon. After spending a short time in trying to establish a paper mill at Bridal Veil, Will Hawley, his wife, and son Willard, who was then about 11 months old moved to Oregon City in 1892. Hawley became superintendent of the Crown Mills. In 1908 he purchased the site of the old Portland Flouring Mills at Oregon City. Hawley became president of Hawley Pulp & Paper Company Mill, the St. Helen's Pulp & Paper Company, and the California Bag and Paper company. (Lockley, p. 141-145)

Records indicate that Loring Curtis Palmer, who had successfully operated a large sawmill in Vancouver, Washington for several years, decided to move his mill into the dense woods on Larch Mountain, located the south side of the Columbia River. Palmer was interested in expanding his timber holdings in the Northwest. Palmer chose the mouth of Bridal Veil Creek as the site for the construction of his new mill. Although isolated, the site provided easy access to the forests as well as an abundance of water power and access to the O.R. & N. Railroad line which ran parallel to the nearby Columbia River. The site Palmer chose to settle was most likely near same isolated site where Will Hawley had first established his paper mill a few

years earlier. Research indicates that Palmer and Hawley worked together at the sawmill in Vancouver, Washington, before coming to settle in by the Bridal Veil creek.

In 1886 Loring Curtis Palmer sold his interests in the Palmer sawmill located in Vancouver, Washington (one of the oldest in the Northwest) and moved his equipment to Bridal Veil Falls where he organized a sawmill company. The move had been contemplated for some time, because the business community in Vancouver made it difficult for him to carry out his business. Palmer had asked the city of Vancouver for a franchise to build a tramway from his mill to the river in order to get his lumber to the shipping facilities along the Columbia river. The city was reluctant so Palmer decided to dismantle his mill and move his timber operations to Larch Mountain in Oregon.

His purpose in coming to Oregon was to create a timber company that could cut the large stands of timber which grew throughout the mountainous area on Larch Mountain, plane the trees into lumber and ship it to other destinations. On Palmer's started building his mill in 1886. On October 1, 1886 Anthony, Amasa W. and Albert Moore deeded a parcel of land to LC. Palmer in consideration of the sum of $2000, cash paid in had, with the further sum of $4500, to be paid on or before five years from the date the deed was signed. (Book 88, page 247) Palmer began full mill operations in 1887. To get the logs from the forest lands of Larch Mountain to the mill, Palmer had to build a flume down Bridal Veil Canyon. Palmer was able to complete construction on his flume a year prior to another flume that was being built by the Latourell Falls Wagon Road and Lumber Company, their friendly competitor in on the mountain.

Palmer established the Bridal Veil Falls Lumber Company in 1886. The Bridal Veil Falls Lumbering Company was officially incorporated in July 1887, with a capital investment of $30,000, for the "purpose of constructing a flume over the site of the paper mill". The flume was to be designed "to not create any danger to either the mill or the people that worked in the area around the mill" The Company was financed by the sale of 1,000 shares of stock selling for $100 each. (see attachments)

Palmer established his logging operations on Larch mountain southeast of the community of Bridal Veil. The rough fir lumber from the Palmer Mill was cut and flumed to Bridal Veil, where another sawmill which utilized the water power from Bridal Veil Falls, was used cut and process the lumber. <u>The finished lumber was the finest to be found anywhere in the United States.</u>

The Bridal Veil Falls Lumbering Company was formed "to manufacture lumber and to flume lumber from the mill owned by the Bridal Veil Falls Lumbering Company to Bridal Veil Station and to build a railroad from Bridal Veil Station by way of the Bridal Veil Falls Lumbering Company sawmill, in a generally southeasterly direction to the base of Mt. Hood,

namely to the center of Section One, Township 2 South, 7 East", a point a few miles southwest of Bull Run Lake".

Loring Palmer and Theodore H. Smith joined together to purchase timber in the area of Bridal Veil. Together they formed the Bridal Veil Fall Lumbering Company--a large scale logging company, whose purpose was "to log the Noble fir trees, often referred to as Pacific Coast Larch, which grew on the densely covered slopes of Larch Mountain".

Palmer was elected president of the Bridal Veil Falls Lumber Company. T.H. Smith was appointed Secretary. Anthony Moore and J.F. Miles granted to John Fleming, S.A. Neppach, and N.B. Nicholas several water rights and rights-of-way to the property. It is assumed that they were partners or investors in the mill business. Smith was responsible for building a sawmill on a level site about a mile and one-half above Bridal Veil. Over the next few years the sawmill developed into a community that became known as "Palmer".

According to a report by archaeological technician,Bill Carr, "the wood of the Noble fir is very soft, close-grained and when dry is very light. The lack of pitch makes it valuable for interior finish and for all kinds of molding. Since the wood takes the paint well, much of the lumber was made into bevel siding and used for exterior work. The Noble fir around Larch Mountain had straight, symmetrical stems often reaching 300 feet in height, with 1500 to 180 feet clear of branches.. The diameter of the trees ranged from 3 to 9 feet at the base". (Carr:1991)

In order to expand production, Smith decided to build a remilling and shipping plant at Bridal Veil. The milling facilities were constructed at Bridal Veil along with boarding houses for loggers and some family housing which was located near the Oregon Railway and Navigation Company railroad tracks. Smith assumed responsibility for all aspects of the timber operation..

Greater access to the heavily forested steep slopes of Larch Mountain was also needed. Under the supervision of Kee Sing, a Chinese contractor, work started on the building of a wagon road. The road was desperately needed to get the logging equipment into the woods and the mill site area. The brother of Loring Palmer, known as O.A. Palmer, had worked together in the lumber and sawmill business in Vancouver. O.A. Palmer was hired to supervise the Larch Mountain wagon road and logging operations.

An Oregonian article of March 4, 1887 written by a traveling correspondent for the Pittsburg Dispatch, recorded his impressions upon visiting the site at Bridal Veil. He describes the Bridal Veil Lumber Company logging road and lumber operations as follows:

"There is a railroad in this state over which passes enormous traffic, although the line does not possess a single car. It is located upon one of the highest elevations of the west slope of the Cascade mountains, in the heart of what has been almost inaccessible region. Its length is five

miles, and it circles and twists in that distance until it resembles the trail of a mammoth serpent. It represents the most difficult achievement of the lumbermen in Oregon.

The only feature of the road except the line itself resembles the ordinary narrow-gauge railroad is the 13 ton Baldwin locomotive, the power that pulls the freight. This freight consists of logs which will average of a size equal to that of the engine boiler. These logs are formed from the trees which are felled by the red shirted lumbermen in the employ of the Bridal Veil Lumber Company. After being cut, the logs are rolled to the nearest point on the railroad. They are then arranged in a line, huge staples driven in each end sections of heavy chain attached to the staples forming a train of logs. The foremost of these logs is then chained to the engine, which hauls it and its companions upon the roadbed of the line.

The railroad is narrow-gauge, three feet. It is constructed on the same principle adopted by the regulation roads over which cars pass, with one exception.Stout plank is nailed to the ties, and it is upon this foundation that the logs rest as the engine pulls them along. The rails act as guards is to prevent the logs leaving the track. In this manner, the timber is conveyed from the point at which the engine takes it in charge to the beginning of the two-mile flume that leads from the end of the first section of the road to what is called the chute pond, a small body of water located about a half-mile from the mill where the logs are turned into lumber.

The roadbed, or rather, its foundation, is not, of course, like that of the great lines over which passenger and freight cars roll but, although roughly constructed, it has surprising strength. While , as stated, the logs are rolled form the point at which they are cut to the most convenient place on the railroad in many instances. The chute is called into play at what is known as the upper pond. This pond is to be found near the starting point of the line, and to it, from various sections of the mountain side, where trees are being felled, flumes or chutes are fun. The logs then, instead of being moved with difficulty to within "reaching distance" of the locomotive are placed in the chute and down they go to the bottom into the pond.

Once in the water, a detail of men fastens the logs together just as described in outlining the make-up of a train. A stout incline runs from the water to the railroad track. The train of logs is poled along until the foremost lies at the foot of this incline. A chain is then fastened to the logs.the other end thereof being attached to the engine. The locomotive pulls and the logs confined within a high curved channel are brought up onto the track and start on their journey to the mill . This is the process adopted at the upper pond.

The journey of the logs to the two-mile flume is uneventful. When the flume is reached the engine is detached from the log train and the logs from which all the chains are removed, are diverted into the mouth of the flume. Once started, it takes a log but a small fraction of time to make its way to the lower pond. Here the process of forming the big like trunks into trains is repeated in the same fashion as the upper pond. The process of getting them on the track however is much faster. At this point, the track runs in such a way that logs and toad are almost side by side, so the engine has but little difficulty in transferring freight from the water to the roadbed. Now the logs are beginning the conclusion of their journey for from the lower pond the line of the road runs without break to the mill where the "dogs" are turned over to the sawyers."

Palmer's newly reconstructed sawmill at Bridal Veil was in complete operation the same year. The famous one and a half mile log flume was constructed at the Palmer site so the rough hewn logs could be sent from the top of Larch Mountain.down Bridal Veil Canyon to the mill site below. Wood from the sawmill was used to construct the houses in the company town at Bridal Veil.

According to the December 14, 1887 edition of the Vancouver Independent newspaper, the Palmer log flume was "the very best constructed flume in the Northwest". The Palmer flume was finished a year before a similar flume was constructed by a competitor, the Latourell Falls Wagon Road and Lumber Company.

The Latourell Falls Wagon Road and Lumber Company was formed in 1887. In order to compete with the Bridal Veil Lumbering Company, the Latourell Falls Wagon Road and Lumber Company built a flume similar to the one between Palmer and Bridal Veil To remain competitive the companies needed to be able to move the rough sawn lumber off the slopes of Larch Mountain to the railroad cars that were located on the O.R. & N RR holding track near the Columbia River. The Latourell Falls Wagon Road and Lumber Company built a logging camp on Pepper Mountain.

During the same year, Theodore Smith began construction on a shipping facility near the Oregon Railway and Navigation Company railroad tracks that passed through the the townsite of Bridal Veil. In order for the timber business to grow on a larger scale and be successful, it was imperative that the timber products be shipped out of the area by rail. Smith was also responsible for the design and construction of the well known wooden V-shaped flume. The two mile flume that carried the wood down Bridal Veil canyon was very impressive. Constructed of large pieces of timber supported on wooden trestles, the flume could support lumber as large as 60 feet long and 16 inches wide.

As signs of their progress, a reporter for the July 6, 1887 issue of the Vancouver Independent Newspaper wrote:

" This new lumber mill is now finally at work, turning out lumber for houses to be built near the mill, lumber for the flume and some for market. Quite a number of Vancouver men are at work there and more are to go. Palmer's scow took up the household effects of a number this week, and more will be sent up later. Among those who will live there are Thomas Thorton, James Baker and J.A. Sawyer. Messrs. Palmer and Brown will in a few weeks be doing an extensive lumber business in the new mill."

Another article printed in the December 14, 1887 issue of the Vancouver Independent Newspaper stated that:

"the Bridal Veil Lumbering Company have just finished their flume which is one and a half miles in length and the very best constructed flume in the Northwest, and has ample capacity for a timber 16x16x60 feet long. This company is admirable situated as regards to timber and outlet, having the finest body of yellow fir, larch and cedar anywhere in the country, and having the Columbia river and the OR & N RR as outlets. The capacity of their mill is 75,000 feet per day".

A Chinese man, Mr. King See, was hired by the Oregon Railway and Navigation Company to engineer a two mile wagon road from the OR & N line along the Columbia River up into the

steep canyons of Bridal Veil Creek.The terminus of the road was a high plateau, which was named Palmer. Within less than two years, the wagon road had been completed and a small sawmill was erected at Palmer. To avoid hauling the lumber down the steep and extremely treacherous wagon road, a lumber flume was constructed down the canyon. It was used to carry the logs and mill products down to the tracks of the Oregon Railway and Navigation Company. The flume terminus and planing mill of Bridal Veil was located on the Columbia River adjacent to the tracks of the O.R.& N. Company.

Palmer was transferred to an area two miles above Bridal Veil into uncut timber country. His responsibility was to design another mill town, which later bore his name, the Palmer Mill. Amos Moore sold the company the land they needed to construct the planing mill and lumber yard. Palmer assumed responsibility for the mill operations of the mill at Palmer. He built a home for his family, about two miles up the mountain from Bridal Veil Creek. Soon a small logging community developed whose life revolved around the sawmill and log pond in a settlement known as "Palmer". A wooden trestle across the upper canyon carried logs to the mill. After the logs were rough sawn into a manageable size, they were sent down the wooden flume to the lower pond to await processing. In 1898 Palmer opened their first post office and small country school . Bertha Palmer, L.C. Palmer's daughter served as the first postmistress.

With the growth of the lumber industry came the need for a school to educate the children of the families and millworkers who lived in the Company town.. Records indicate that the school district was founded in 1887, the same year the post office was established. Two school houses were constructed in the district in 1888. One school house was built at Bridal Veil and the other at the Palmer Mill on land belonging to and donated by Amos J. Moore.

Amos and Martha Moore deeded one acre of land to District 42 on September 25, 1890, for consideration of one dollar. Provisions were made that the land would revert to the Moore family or estate if it was used for anything other than educational purposes. In the midst of the tall fir trees at the east end of the Bridal Veil community was the first schoolhouse. It was a symbol of cultural growth for the community, beyond the business functions of the new railroad depot and the boarding house hotel.

The school house constructed at Palmer was called Palmer # 1. "The school house was about 32' x 48' and two story. The upper story was a lodge hall and used for dances or any civic purposes. I know one year there were 64 kids on the roll call. Metsger was the teacher in 1898. Church was always held in the school room. There were three large hanging kerosene lamps. The bowl held about 1 gallon of oil. There was never electricity at Palmer # 1. There was a gas light motion picture projector. " (Personal letters of Lloyd Trickey: 1972)

In addition to the timber owned by the company, other trees were purchased from the settlers living in close proximity to the mill. In the summer of 1889 the Bridal Veil Falls

Lumbering Company was reorganized. As part of the reorganization, the company name was changed to the Bridal Veil Lumbering Company. In the 1890's the Larch Mountain Investment Company had gone bankrupt.

The extensive timber lands located to the south of Palmer were added to the Bridal Veil Lumbering Company's holdings. After the change in ownership, the Company was reincorporated with capital stock of $100,000 (1,000 shares sold at $100 each) as the Bridal Veil Lumbering Company. The word "Falls" was dropped from the title of the Company. The primary stockholders in the new company were L.C. Palmer, E.L. Brown, and T.H. Smith. The main reason for reorganizing was to permit the company to expand their operations through the development of additional flumes and an expanded logging railroad.

In September 1892, Smith and Brown sold out their interest in the Company and left the business. J.M. Leiter, J.S. Bradley and Charles Brown formed a company partnership to operate the Palmer.mill. J.S. Bradley remained active in the Bridal Veil Lumbering Company, serving as both the general manager and treasurer.until 1910, when management of the company was assumed by Charles Briggs and H.H. Holland. Bradley built a large house overlooking the mill at Bridal Veil.

On September 22, 1892, an abundance of legal transactions were filed in the Circuit Court over the rights of property owners who had financial interests in the lands, railroad, and water rights associated with Bridal Veil. Judgements were assessed against A.W. Moore, Anthony Moore, Marcena Maple, J.F. MIles, Albert Moore, J.Frank Buchanan, Richard S. Oakley, Willard P. Hawley, Anthony Neppach, S.A. Neppach, William Druck, George W. McCoy, Big Creek Wagon Road Company, L.C. Palmer, H.B. Nicholas, Charles H. Carter, Bridal Veil Falls Lumbering Company, John G. Fleming, Bridal Veil Lumbering Company, Bridal Veil Paper Mill Company, J.S. Bradley, Fred Lusher, John S. Bradley, Neppach Estate, Kate Nicholas, I.C. Sanford and Edward Cookingham.

The purpose of the company remained the same but T.H. Smith and E.L. Brown were no longer part of the Company. In their place the names of J.M Leiter, J.S. Bradley and Charles Brown appeared as partners in the business. Capital shares in the business were increased to 1290 shares. John Stone Bradley became manager. He settled in the the community, assumed more administrative responsibilities and constructed a large home west of the falls that overlooked the falls and the Bridal Veil mill.

Bradley would go to the sawmill everyday in a horse and buggy. The road to the mill and log pond was very rough with the grades reaching up to 28 percent. The mill was located at the 1900 foot elevation in the Southwest 1/4 of Section 24, 1.N.5.E. From this site a narrow gauge railroad ran to a pond and a re-loading area called the Donahue Pond. The Donahue

Pond was located on the section line between section 25 and 36, 1.N.5.E., about a quarter of a mile west of the range line, at an elevation of approximately 2,200 feet.

Logging Operations in the 1890's on Larch Mountain

As demands for finished lumber from the planing mill increased, so did the need to increase the supply of logs to the sawmill. The first logging operations at Palmer started by using oxen teams to pull the heavy logs out of the timber onto skid-roads. The oxen teams which x x supplied the logs to the mill were soon replaced by a steam locomotive.

The Bridal Veil Lumbering Company purchased a new Baldwin locomotive--the 18 ton "Peggy". The locomotive was delivered to the Bridal Veil site and moved up the wagon road in sections. Once "Peggy" reached the Palmer site, the engine was reassembled and put to work hauling logs to the mill at Palmer. When the railroad was completed, "Peggy" encountered some difficulties. Due to the nine percent grades, the engine was unable to keep many of the loaded cars from slipping way and running down the slope.

In an attempt to solve the runaway problem, a decision was made to plank over the railroad ties. Then a combination of water and grease was put on top of the planks, so the locomotive could follow the logs without using the rail cars. This technique gave 'Peggy" the ability to handle between 5 and 10 thousand board feet at a time without the danger of becoming a runaway train..

In a short time the Company completed construction of two miles of flume, which started at the Palmer saw mill and extended down to the lumberyard at Bridal Veil. When the logs reached Bridal Veil, the lumber was planed on the site and dried in a kiln. After the wood was dried and processed, the lumber was ready to be sent out of the area on railroad cars.

In 1891 there were two logging contractors were supplying logs to the company railroad. At one end of the railroad the Donahue and Kelly camp logged timber using an oxen team. The Donohue and Kelly camp was located on the north and west side of Larch Mountain. Another company, the Apex Transportation Company, used oxen for logging until about 1896. They later changed their practices and installed a cable system using a Mundy donkey engine with a series of cables wound on two huge drums. The haul was one and a half miles long with half of the distance covered by a chute built like a railroad trestle with the haulback lines underneath. Up to thirty thousand board feet of timber could be hauled up the chute by using this technique.

The Smith and Watson donkey engine was the pride of the loggers. For the first time there was enough power to haul in the largest size logs. Due to the terrain, the Smith and Watson donkey engine could pull fallen timber by cable from the canyons, up to the top of the Palmer

landing where the logs could then be planed into lumber. Before the donkey engine, the huge trees often rotted in the inaccessible mountainous areas because they were unable to be retrieved by oxen due to the steep terrain.

One of the best descriptions of the logging techniques used on Larch Mountain was an article about Bridal Veil written in 1891:

"the Bridal Veil operation is laid out as follows: a five-mile section of narrow-gauge track has been constructed from the upper slopes of Larch Mountain to the Bridal Veil Creek Canyon and then to a point where a flume began at the 1,250 foot level. Near the upper beginning of the railroad was the "upper pond". A number of log flumes and chutes led from higher slopes to this pond. Near this location at about 2,200 feet, was the Donohue logging camp. The small camps were located even further up the mountain. At the lower end of the railroad a log flume ran down Bridal Veil Canyon to the "chute pond" located about one-half mile from the Bridal Veil mill. A short rail line ran from the chute pond to the mill.

The process of logging began with the sawing of the trees on the upper slopes of Larch Mountain by " the red-shirted" loggers. After the trees had been trimmed with the double-bitted "Yankee axes", they were moved by oxen, mules, or steam donkey along greased skid roads to points either near the railroad or to chutes leading to the upper pond. If the logs were chuted to the upper pond, they were then arranged in the pond in a line by several men. Huge staples called "dogs" were driven in each end of the log with hardwood mauls and then chained together through the "dogs" to form a " train of logs". The engine pulled these log trains out of the pond along an incline running from the pond to the track.

The Bridal Veil loggers devised an unique system for moving the logs along the track. Cars were not used, instead planks were nailed between the ties and the logs were pulled between the rails, much as they had been pulled by oxen or mules along the skid roads. This avoided the dangers of slippage or car derailment. A small but powerful 18 ton Baldwin saddle tank, steam locomotive, named "Peggy" performed this job during the early years. Later a larger steam locomotive named "Jumbo" was used. At the lower end of the railroad, the log trains were unchained, detached form the engine and diverted into the flume which carried the logs rapidly down 1,200 feet to the chute pond. At this point the logs were chained together into trains once again and pulled by a locomotive onto a railroad that had been built parallel to the pond. The locomotive them pulled the log train a half-mile to the Bridal Veil mill. This innovative operation was the "most difficult feat of lumbermen in Oregon" (Oregon Historical Society SB5:64)

As the logging operations improved during the 1890's, more families moved to the Bridal Veil community to work in the timber industry. Small businesses developed to meet the growing needs of the isolated settlement. One of the first businesses to open was a company store which supplied both the Palmer Mill and the Bridal Veil with groceries and the bare necessities. Everyday a horse drawn wagon from the company store would carry the supplies up to the Palmer Mill which was located two miles above Bridal Veil. (Judd 1964:3)

Bridal Veil Lumber Company and company town continued to grow in the 1890's due to the construction of the new sawmill on the north side of Bridal Veil Creek and a log pond at Palmer. Wooden railroad trestles traversed the canyons high above the mill site. Bridal Veil Paper Company expanded their operations. They started a rag paper and straw mill next to the

main sawmill facility . Water needed for power to operate the mill came from the Bridal Veil Falls. The paper mill went out of business within a short period of time.

In a February 1894 article in the the Puget Sound Lumberman, the reporter stated that the Bridal Veil lumber company produced 7,690,000 board feet of lumber in 1893.

In 1895 Charlie Bell, the Bridal Veil train depot agent retired. He was replaced by Mr. Frank Wilmot who stayed in his job as long as the Bridal Veil Company was in operation.

In 1896 O.A. Palmer, brother of Loring Palmer, was hired to manage Apex Transportation Company. Apex Transportation operated a narrow gauge railroad that supplied the timber to the Palmer sawmill. "Under the direction of Apex Transportation Company, a unique system of moving logs to the sawmill was constructed. A steam "bull donkey", manufactured by J.S. Mundy, with two 10 x 16 inch cylinders, providing the power to yard 30,000 board feet of logs at a time was put into operation. This new approach was implemented to lower logging costs, in areas where oxen were too slow or railroad construction was unfeasible. The 5 ton "bull donkey" was capable of skidding logs from over a mile out in the woods to a level landing. At the landing the logs were lowered down another wooden chute, a distance of three-quarter of a mile, to a pond capable of holding about 2 million board feet of logs. From this holding pond, the logs were transported to a sawmill by "Peggy", where close to 100,00 board feet of lumber per day was sent to the planing mill at Bridal Veil." (Carr: 4)

Bridal Veil Lumbering Company was the first to use a cable system to yard logs out of canyons. Their method consisted of stretching a cable form the top to the bottom of a canyon and mounting a carriage on the cable. The logs were then attached to the carriage and the "Bull" donkey at the top of the hill would yard the load up to the landing. Previous methods had used the donkey engine in the bottom of the canyons. (The Columbia River and Oregon Timberman, Oct. 1904: 21)

Description of Logging and Timber Operations at the Turn of the Century

An article written by E.K. Bishop and published by Lucius J. Hicks, circa 1897, describes the operations of the Bridal Veil Lumber Company very well:

"Among the prominent firms engaged in the lumber business is the Bridal Veil Lumber Company, which has a very complete and expensive plant. As one alights on the platform of the little station, he sees only the yards and planing mill of the establishment. The sawmill like Mohammed, has gone to the mountain. On account of the topography of the country, it was deemed best to locate the saw mill back in the mountains, where the logs would be more accessible, the lumber being conveyed to a station by means of a flume. In this respect the plant is almost unique among those in the country.

In order to commence at the beginning, one must ascent the steep road to the mill and take the locomotive on the logging railroad to the camps beyond, though on the way he will be forced to pause to take breath, and at the same time admire the tremendous energy and daring

of Mr. L.C. Palmer, the man who conceived the idea of locating such a plant in these mountain vastnesses, and whose ceaseless efforts have contributed so much to its success.

The logging railroad which extends from the mill 5 miles back into the timber, is of substantial construction, and a good sample of railroad building in a mountainous country. The eighteen ton locomotive is of Baldwin make, and a ride on "Peggy" as it is familiarly called, with her ever pleasant presiding genius is a common occurrence with the employees, and a genuine treat for a stranger unaccustomed to such sights.

The road winds its way up the mountain, at first following closely the tortuous course of a little creek, crossing many bridges and ascending every foot of the way, which is more apparent when a regular horse shoe curve reveals the road, over which the engine has traveled, many feet below, and some one volunteers the information that in two miles the ascent is 600 feet. The route then lies through deep and fragrant forest, where the sunlight seldom penetrate, and over high trestles, one being 81 feet above the creek, till soon the end is reached, high upon the side of Larch Mountain.

Here is located the camp of Donahue & Kelly, who have a contract with the Bridal Veil Company to log a certain portion of its land. The camp is the terminus of the railroad. It is under the management of M.c Donahue who is well known to all on the mountain and is one of the best loggers on the coast. About a mile away, on another part of the mountain, is situated the camp of the Apex Transportation Company, an enterprising firm which has rented the railroad and which has a contract to supply the mill with logs. The company is under the management of C.A. Palmer, who has been logging on the mountain for 8 years, and who gives his personal attention to the work. The crew in the woods are under the efficient foremanship of James Brown, who is also the Secretary of the company.

A logging crew at work presents a busy sight, which is rendered all the more striking by the contrast with the sombre depths of the forest. To one not familiar with such sights, there is something very impressive about these magnificent trees which tower upwards for hundreds of feet and count their age by centuries, but such sentiments have little effect upon the loggers, who very prosaically set to work to lower these monarchs of the forest, as the first step in converting them into a more useful form.

The advance guard of the crew are the timber fellers, who work in pairs. After selecting a tree suitable for the purpose, each man cuts a notch in its side and into this a spring board is inserted, from which point perhaps another is placed higher up, or even a third, in order to escape the bulge and accumulated pitch near the butt. Standing on this apparently insecure perch, all the work with axe and saw is done. Men engaged in this business become very expert, and call fell a tree in any desired direction in a way that astonishes the novice. Even when leaning heavily in one direction, it can be made to fall in the diametrically opposite by the use of wedges. It is a thrilling sight to see one of these magnificent trees come to earth. Slowly the majestic top begins to lower, then rapidly, amid a tremendous crash and roar, the giant measures its length upon the mountain side, with a thud that seems to shake the very earth.

Close upon the tree fellers follow the cross-cut sawyers, who cut the trunk into logs of convenient length, and the barkers who, with axe or "spud" clean the log down to the white wood. There is a continuous race of one set of men after another, of the barkers to keep up to the sawyers, of the swampers and road builders to open routes by which the logs can be brought out as fast as prepared, and of the men with the teams to haul them away.

One of the principal points of logging is road building, which is considerable more of an art than the uninitiated might suppose. An immense amount of work is involved in this branch of

the business, from cutting out the simple path to some few logs, up to building innumerable skid roads which penetrate all land that is logged. It requires the skill of the civil engineer in the men whose duty it is to lay out these skid roads, as a false direction, a too sharp curve, or abrupt descent means an additional cost on each log hauled over it.

After the logs are cut and barked, the next step is to gather them from their various locations to some central point--yarding them out, as the process is called--where thy can be made into trains ready to be taken away.

Messrs Donahue & Kelly do all their yarding with a team of oxen, which extricates the logs from even the most difficult locations with great skill. The Apex Company does this work by the help of a "donkey," which does not mean a quadruped, as some have supposed, but refers to the powerful little donkey engine. By means of a wire cable and tackle under the skilled management of the "hook-tender," the logs are drawn through all obstacles down to the puffing donkey, unless, as is said to have once happened, the Wisconsin hook-tender carefully arranged for the logs to move in the contrary direction, presumable for some mill located on the summit. The donkey is mounted on a heavy sled and can pull itself into any desired location on the mountain.

The logs, now formed in a train by being hitched end to end with dogs--heavy iron hooks driven deep into the wood--are turned over to the tender mercies of the "bull puncher," who, with his team of twelve or fourteen oxen, hauls them away to the railroad. No small amount of skill is required in these men who handle the long strings of slow and clumsy beasts. There is a legend among bull punches that the bovine understanding works only in the midst of ejaculations of a sulphurous nature; but, however that may be the onlooker does not wonder that the cries of "Gee, Baldy," "Haw, Rody," are mixed with admonitions of a stronger king, and thinks if any such language escapes the ear of the Recording Angel it should be of those engaged in the patience-trying business. On this mountain are found those who are masters of forcible expression, but also a representative of the kind who can successfully manage a team with merely a crack of the whip and a quiet command.

As the train moves away, we see the use of the skid road, which is built with a skid, or small log, every 5 feet, raised above the surface of the road, and on whose greased face the logs slide with the least possible friction, though even now it requires a steady and strong pull on the part of the oxen all together, to get such a heavy load in motion and keep it so till the train is landed on the railway ready for the locomotive. Donahue and Kelly, with their two teams of seven yoke each, can haul in 24,000 feet of logs at a trip. The work of the men in the woods is largely governed by the capacity of the teams to care for the output. A train scaling 12,000 feet is considered a good load and to successfully haul it requires an excellent "bull puncher." At one or two places, there is an upgrade of 4% on the skid road. The camp has been in operation for 6 years, and towards the east there is a fine body of timber with many millions of feet in sight, thus making the camp one of the best in the country.

Under the direction of the Apex Transportation Company, a system of handling longs has been recently instituted which makes this camp one of the best equipped in this part of the country, and enables them to have an output of 100,000 feet of logs per day at a minimum expense. As logging continues in any one section, the cost of transportation is necessarily increased with the added distance, and it is a question for careful thought how the logs can be conveyed to the mill or market at the least cost. A long haul by cattle is slow and expensive, and there are many places where it is not practicable to put a railroad.

The motive power in the method chosen in this instance is what is known as a "bull donkey," which works a series of cables in a manner that reminds the onlooker of a city cable car system. The donkey, which was built by J.S Mundy, is an immensely powerful machine

with its two large drums loaded with cable. Steam is supplied by a battery of two boilers to the cylinders, 10xl6 each, one on each side. By means of gearing, the power is so applied that 30,000 feet of logs can be moved at one time, which means a load of about 120,000 pounds.

From the smaller drum, a light cable extends out along the skid road to any desired point within one mile and a half, passing over an idler and returning to the donkey, where it is attached to the 7/8 inch cable on the large drum, and thus forms the means of drawing the latter out into the woods. The size of the machine may perhaps be realized by considering that this drum, which is 30 inches in diameter and 5 feet between flanges, wit its gear wheel, tips the scales att 5 tons. The large cable draws the logs from a point a mile or more out in the woods, over the skid road to the power house, in the usual way, with the exception that the distance and load are greatly increased; but from this pint on the power is applied in a more novel manner.

A very fine chute has been built for a distance of 3/4 of a mile, the greater part on a 6 percent grade with a sharp fall at the lower end. The entire work is some distance above the ground and it is timbered much as would be a narrow-gauge railroad, with the ties laid close together to form a continuous surface for the logs to slide upon, and with a guard-rail to keep them from rolling off. The half mile from the power house to the crest of the steep descent is traversed by an endless cable, one-half moving on the surface of the ties, the returning portion being below. At the power house the cable makes four turns around two grooved wheels, one attached to the main shaft of the donkey and the other a snub wheel, which is done in order to apply the power to the cable without slipping, thus reproducing on a small scale the immense cable car systems of San Francisco and Chicago.(Instead of moving cars loaded with pleasure seekers or the busy workers of a great city, this cable conveys the logs from above down the shady aisle cut through the forest.

Unlike most places where a cable is used, the hold is taken at the rear end of the last log, which pushes the others in front of it, the grip automatically releasing when the logs move faster than the cable, only to take a fresh hold on overtaking them. Thus, the heavy load moves slowly onward till, at the top of the hill, each log rushes at a tremendous speed down the steep chute to bury itself in the water of the pond below, which has been formed by a log dam across the canyon, making a reservoir for holding about 2 million feet of logs. It is estimated that 50 million feet of logs are within reach of this chute.

This new chute and cable system have been installed at the expense of much time and money, and the company deserves great credit for carrying it through to successful operation in the face of many difficulties. The question is supplying logs to the railroad may be considered closed for some time to come, as the single cable from the donkey may be extended or its direction changed, so as to cover a considerable area of country. The new plant was put in under the careful direction of the mechanical engineer, which is a guarantee that the work was executed in a substantial and scientific manner.

The logs are transferred from the railway, or the pond, to the mill, by, the locomotive. The grade of the railroad is so steep, being 9 percent in places, that it was found that a loaded train of cars was liable to run away with the locomotive, and this method of transporting the logs was abandoned for the one now in use. The ties between the rails were covered with vertical grained boards running lengthwise, and on the surface, well greased and watered, the engine pulls the train of logs just as is done by the team of cattle on the skid toad, though the speed of the motive power is vastly different. The long train winding down the canyon looks like a huge snake.

If one is in search of a thrilling ride, he should make the return trip on a hand car with gravity furnishing the power. Under the direction of the section boss, this car speeds down the

canon at a rate that would shame a "vestibuled limited," and almost before the new passenger had time to promise himself not to touch another had car, if he escapes from this one with sound bones, he is landed safe at the mill. On one eventful trip the section boss was so anxious to get to his destination that he overtook and attempted to ride over a train running at full speed, luckily with more damage to the car than the occupant.

From five thousand to ten thousand feet of logs constitutes a load for the engine. The long train winding down the canyon, looks like a huge snake, and at full speed it is a subject of wonder that the rails hold the logs to the track around such curves, making one appreciate that most careful management is required on the part of the engineer. The journey ends on a trestle near the mill, and , as the engine is drawing water for the next trip, the logs are rolled off into a pond below, formed by again damming the canyon. This has a capacity of about 250,000 feet of logs and contains the immediate supply for the mill.

As for the sawmill itself, the long roof is relieved by the smokestack and little clouds of steam that come in puffs from the exhausts, while grouped near are the homes of the men, the mess house, and all the general outbuildings of such an establishment, not forgetting the shop where the jovial follower of Vulcan presides at this forge, ever ready with a joke as he executes the orders that come to him, from a bolt for the chute to a link of bull chain.

The mill is, of course, the center of attraction, with its great mouth yawning towards the pond, with an insatiate appetite for logs. As the pond man forces the selected log into reach of the "bull chain," which draws it into the mill, where the canting gear rolls it on the carriage and the "dogs" are driven in, one realizes that the last trace of the proud form of the tree soon to be lost, and that the minutes are numbered before it will reappear as lumber. the success of this metamorphosis depends in great part on the head sawyer, who must be experienced in the management of saws and, with the filer, keep the big double circulars running cool and turn; must be quick to lay out the log and signal his setter, and, above all, be a judge of logs in order to cut each one to the best advantage.

Looking down from the head saw, the mill presents a busy sight, the long lines of rolls carrying the lumber onward, the carriage moving rapidly back and forth under the control of the steam feed, and the men in their different positions busily engaged in the various operations. The whole is carried on to a perfect Babel of sounds, from the harsh noise of the big circulars and the roar of the edger, to the sharp singing cry of the trim saws.

As the slabs drop from the saw on the live rolls, the off-bearer" presses a lever and they advance at the rate of four hundred feet a minute to the slasher, which machine cuts them into four-foot lengths for the lathe mill. Live rolls, so called form the motive power of steam, are one of the greatest labor-saving devices of the modern mill. Now is quick succession, fall pieces of various thicknesses, according to signals given by the sawyer to the screw turner, on the carriage, or the heavy cants which are taken off for the double purpose of saving time and, when clear, of getting the desirable vertical grain lumber, which is secured by cutting as clearly as possible at right angles to the grain. When the pony, as the smaller saw on the other side of the mill is called, these ants are transferred to its carriage for re-sawing, or they may pass on with the thinner stuff to the edger, stopping on the way if an unwielding length to be cut in two on the cut-off saw.

The edger is a dangerous looking machine, with its heavy iron rolls ready to dray anything that comes within reach against its six movable saws, turning about 1200 revolutions a minute. It is designed to supplement the big saws, taking the boards and planks of indefinite width and uneven edges from the latter and, by means of the movable saws which can be readily set any distance apart, turning them out into lumber of merchantable sizes. It requires the skill of long practice on the part of the man in charge of this machine to cut each piece to the best possible

advantage, avoiding knots and pitch seams, and at the same time keeping a watchful eye on the bills in order to follow the intentions of the sawyer.

Combined with the edger is the flooring gang of four saws which, when the pony is not running, handles all the flooring cants in a very satisfactory manner. Behind the edger, the off-bearer separates the edgings form the lumber, the former being transferred to the slasher, the latter moving to the gang trimmer, where it is cut to even lengths, the ends trimmed off, and defects cut out. This useful machine has a table like surface with a saw beneath at every two feet. As the lumber is carried over the table, the saw at any desired point is raised by the pressure on a corresponding treadle, cutting the piece to exact length and with ends perfectly square. Here at last is rough lumber ready for market or to be manufactured into some finished form.

The equipment of the mill includes double 56-inch circular saws of Hoe make, pony circular re-saw, and W.A. Campbell gang edger, slasher and gang trimmer. A full capacity if 100,000 feet of lumber per day. All the work at the mil is under the watchful eye of the foreman, whose value in the Company's eyes may be judged by the long years of his service. He enjoys the distinction of being the only man who,when the mill and flume were being built in the stormy enter weather, continued at the work till it was completed.

On the floor beneath the one where all these operations have been going on is the realm of the engineer. Here are the engines, two Phoenix of 125 horse power each, which run the main saws; the third a Russell of 125-horse power, which furnished the power for the machines at the back of the mill. Near by are the boilers in two batteries of four and two respectively. A conveyor carried the sawdust to the furnaces which are self-feeding, the surplus dropping into a small flume where it is rapidly conveyed some distance down the canyon to a point where the accumulation of several years has formed quite a mountain of the material. All refuse wood is disposed of by being dropped into a second flume and carried to a different part of the canon. The place of everlasting fire is generally considered a most excellent spot to avoid, and it may be noted that this system forms an effective means of doing away with the "hells" found at many mills, a desirable feature, even if reference is only made to one of masonry, in which to burn refuse.

One of the most interesting features of the plant is the large flume which conveys all the lumber to the station. It is of V-shape, make of two 2 x 16 planks on each side and , at the intersection, a triangular piece or back-bone is inserted. Supported most of the way on trestles and once by a high bridge, it extends down the canyon to the river. All the lumber and timbers slide from the end of the mill into this flume and begin their downward journey, carried onward by a stream of water diverted from the creek. The descent in a "Little less than two miles is twelve hundred feet, so, necessarily, the trip is a rapid one, occupying only about four minutes.

Timbers as large as 16x16x60 feet long go down this flume. It is quite a novel sight to see a big timber make the decent, throwing a cloud of spray in all directions till it lands on the yard platform. Without the water, it would gain a momentum which would carry it out of the flume at one of the numerous curves, but it is held to its course by this medium, which prevents the speed being accelerated beyond a certain point, as well as supplying a cushion that keeps the lumber from being marred by contact with the flume. So much water is thrown out that it is necessary to introduce more, which is done by feeders from the creek.

To slide down in the flume has ever had an alluring sound to those of a daring turn of mind, but the majority have contented themselves with descending a small part of the way, mounted on a board, stopping on one of the level stretches. Recently a man of an enterprising spirit went to the mill with the firm determination of making the adventurous trip, but on

carefully looking over the ground, the maxim about discretion being the better part of valor rose vividly before his mind, and he appreciated as never before what a very wise maxim it is. A dog got into the flume one day by accident and went all the way through without a scratch, but a man who attempted the trip spent the ensuing there months in a hospital.

Arrived at the end of the flume, the lumber is picked up and sorted by the flume gang, being then passed on to the truckers, who wheel it to its particular part of the yard, or to the planing mill. Here under the skillful management of the planer man, it may be converted into flooring, of which the Oregon fir makes the best in the world, into rustic, or other form of the finished product.

As the trucks behind the planers are piled high with the flooring or other products being manufactured, they are wheeled away to the large dry kiln, conveniently near at hand, a draft of hot air form whose opening doors makes one have a thought of Turkish baths or of the nether regions. The kiln has a capacity of 75,000 feet of lumber. Beyond are the extensive sheds for storing the dried lumber, where one may see the dressed stock in all its beauty, the fine fir flooring, or the close-grained larch, which makes such remarkable good inside finish and door stock.

The shipping is done on the Oregon Railway and Navigation line, a road which is justly celebrated for its magnificent scenery, as it follows the Columbia river through the Cascade Mountains in one of the most beautiful rides in the country. It has lately emerged from the hands of a receiver, and under the management of its new President E. McNeill, will again take it place among the gild-edge railroad properties. The road is conducted in a manner equal to any line touching the coast, and to the efficiency of the freight department, the Bridal Veil Lumbering Company bears witness, having only good to say of their treatment at its hands. The siding of the road extends the entire length of the yard and sheds, giving good shipping facilities, and cars are rapidly loaded by the efficient shipping department.

The yards and planing mill are under the direct supervision of Mr. Leiter, the Secretary of the Company, whose long experience enables him to manage this department in a way that contributes no small amount of success on the concern. The Company maintains a general merchandise store, at one side of which is found the office of the concern. Here in his private office, can be seen at any time Mr. Bradley, the Treasurer and General Manager, whose sterling character and pleasant manners have won the esteem of every employee of the Company as well as a high reputation in the business world.

The Timber owned by the Bridal Veil Company is yellow fir and larch, also called silver fir. The latter is a valuable timber not as abundant as other kinds. The tree is a beautiful one, growing large and smooth with no branches till near the top, making fine logs to saw, as frequently there are no knots to the very heart. Larch makes a fine-grained lumber, particularly suitable for door or finishing stock.

We have now followed, in a superficial way, the various processes involved in lumber making, from the tree in the forest, through all the different operations, till the lumber is on the cars ready to be shipped to the scene of its usefulness. where perhaps it may figure in the construction of a home or help to timber a Western mine, from the finish of a building at some distant point, or supply the material for some railroad bridge". (Bishop: 1897 p.199-208)

Early Social Life in the Company Town

Although life was hard in the logging community, people also took time to develop strong friendships with the families that lived in close proximity to each over. Alva Horton's memoirs reflect on their lives:

:"I went to Bridal Veil in 1889.socially, in those days there were no movies, or theaters to go to. Once in a while somebody would get up a home-talent show. I remember one man came along with a phonograph and we paid ten cents to hear him put on a concert. Mrs. Bradley proposed an evening of reading. We had no library available so she invited everyone to her house, two evenings each month for a reading circle. Each person would take a turn at reading. The first book was "Corporal Cy Cleg". This was a Civil War story. The next book was "Aunt Samantha at the World's Fair". There would be fifteen or twenty people in attendance and the program would last about two hours. It was a democratic situation where the owner of a bug business opened his house to his most humble employees.

Our first home was very interesting. Our father, Henry C. Horton, a widower, my brother Walter R., and I, Alva O.and I were bachelors. We had to do our own cooking. Father was the leading cook. We seldom had beef. There was no butcher shop in that location. We had plenty of ham and bacon. I can remember the ritual for breakfast. Father would mix a batch of sour-dough bread. We would have biscuits for breakfast and then a pan of loaf bread was cooked so we would have bread for noon and supper meals. We would have must and potatoes warmed over, which were left from supper. Once in a long time we might have a pheasant for a meal. Occasionally we had fish, but not often. While we lived near the river we did not have tome to go fishing. In the berry season, if we could get time to go on the mountainside, we could get huckleberries and blackberries. We could get cherries from the Prindle farm and plums from the Shepperd place. Part of the time we had a garden plot and raised vegetables for our own use. Part of the time we had honey because father kept a few hives of bees". (Horton: 13-14)

Jay Moore, son of Amos James Moore, the original owner of the Bridal Veil Land, recalled the time in 1894 "when the river rose and the railroad tracks were covered by three feet of water. He talks of John and Carl Larson, husky men who handled the lumber and worked for 18 cents per hour for ten hours a day. John Larson married Clara Latourell and moved to Troutdale. Mrs. Larson became the first mayor or Troutdale after it was incorporated.

The diptheria epidemic in November and December of 1894 took the lives of four of the Luscher children in one weeks time. Jessie Amend, a Bridal Veil girl, also died. They are all buried in the Bridal Veil Cemetery. Ben Luscher who had a home east of Jay Moore's home is also buried in the Bridal Veil Cemetery.

Two young boys by the names of Earl Smith and Charlie Phillips were wading in the Columbia River one day in June in 1892. They fell into dep water and Charlie was drowned. Alva and Walter Horton got a boat and went out into the river and saved Earl Smith's life. Charlie Phillips body was buried in the Bridal Veil Cemetery.

Moore also talked about a man by the name of Candiani who operated the fish wheels and traps in the Columbia River near Bridal Veil . The fish wheels were used for catching salmon. Myra Bradley married C.H. Labbi, the French Consul in Portland. She died in childbirth.

L.C. Palmer and his wife had four children, Bertha, Elva, Clarence, and Faust. The whole family died except for Faust."

Walter Horton wrote that he moved to Bridal Veil with his brother in 1889 from the "Sisters of Charity" in Vancouver, Washington, the the Moore boarding house in Bridal Veil, Oregon. He was seven year at the time. His father worked in the paper mill at Bridal Veil. He had no mother. Bridal veil was a thriving mill town--the paper mill and the lumberyard and mill were all operating. There were several graves when he moved to Bridal Veil in 1889. They left in September 1902.

Horton recalled that in front of Bridal Veil there was a large sand island in the Columbia River. In the winter time the east wind would pick up the dray sand and create sand hills. Back in the 1890's there would be snow storms that would last for two or three days. The wind would blow the snow and the drifts would then be covered with a heavy coat of sand often two to three feet deep. In the summer the snow would still be covered with sand. The men in the community would take shovels and gunny sacks and go over t the island, dig away the sand, and fill the sacks with ice. They would take it back to Bridal Veil and use the ice for ice cream.

Back in the 1890's there were quite a few men that traveled by walking along the railroad. We called them "foot passengers". They were mostly men looking for work. About a mile wet of Bridal Veil where is a cave in a rock bluff close to the railroad. This cave was used by the transients for night shelter. One morning a couple of men stopped in Bridal Veil to say they spent the night in the cave and there was a stranger in the cave who died during the night. Some of the men in Bridal Veil went to investigate. My father was one of these men and he let his two small sons go with him. There in the cave was the body of the dead man. It was on a wide board that had been his bed. His body was dressed in a well-worn blue uniform such as was used during the Civil War. He had a little satchel with him. His body was wrapped in a blanket and buried in a temporary grave outside the cave. The satchel was sent to Portland.

Community Development

circa 1900

In February of 1898, the people living in community of Palmer were thrilled when their first post-office opened. L.C. Palmer's daughter, Bertha Palmer, served as the first postmistress, in addition to working as a secretary for her father. A new wood frame one-story country school opened across the canyon from the mill. Small wood framed workers cottages, a boarding house, and the Palmers large two story house located above Bridal Veil Creek, added a sense of community to the isolated area. It is estimated that approximately 180 people worked in the mill at this time. The school was in operation to serve the children living in the area.

It is estimated that the consumption of timber in Oregon for the year 1900 was about 900,000,000 feet, as follows: By mills, 500,000,000 and for fuel, etc., 400,000,000. It was estimated that nearly 2,000,000,000 feet of lumber were destroyed by fires. The value of the cut, allowing $ 10 per 1,000 (a fair price at the time) exceeded $5,000,000. Of the total , Portland had nine mills that cut about half, or 250,000,000 feet, valued at $2,500,000. In 1900, Portland's lumber industries shipped by rail alone, over 10,000 cars of lumber and nearly 6;000 cars of shingles. It can be assumed that the Bridal Veil Lumbering Company supplied a good portion of the lumber for shipment to other destinations.

On April 23, 1900, L.G. Gurnett and his wife, who had financial interest of the land at that time, deeded their interest in the site "together with the paper mill and the water power", to the Oregon Pulp and Paper Company. The consideration given for the sale of the property was $30,000. Gurnett mortgaged the property the same month to A. Neppach for $6000. On June 20, 1900 the Oregon Pulp and Paper Company , in order to secure a loan for $10,000, gave a mortgage to the First National Bank of Portland.

The following year on July 5th, the bank asked that the mortgage be decreed a first lien against the Oregon Pulp and Paper Company. President L.G Gurnett stated the company was insolvent and asked that a receiver be appointed. W.C. Alvord, second assistant cashier of the bank stated that "if the property is operated by a receiver, it can be made to pay a large amount of its debts." Several foreclosure and bankruptcy petitions were filed. (See attachments)

Neppach filed a complaint on July 12, 1901. The complaint stated that he had sold the property to Gurnett on April 1 1900, and took back a mortgage for $6000, part of which was the purchase price. In October of 1901, Judge Arthur L. Frazier issued a decision in favor of Neppach.

On January 17, 1902, the property owned by Oregon Pulp and Paper Company was sold to the Bridal Veil Lumbering Company for $7575. John S. Bradley, Treasurer and J. M. Leiter, Secretary, made the highest bid for the 19 acres, the paper mill and the water. Mill production was reported to be four tons a day.

On January 25, 1902 the Bridal Veil Lumber Company, acknowledges and declares the annexed map and plat to be scosrrect plat of Sesction 22 T L, N.R.%.E.W.M. and said that the trasct has been and is named "First Addition to Bridal Veil". That the fifteen lots as representeds on the annexed map aare of the sizes and aare situated as shown upon the plat. Bridal Veil Lumbeing Company does hereby dedicate to the use of the public all the roadways and streets as shown on the map and plat. Document signed by Bradley, Wilmot and Leiter. Although it is difficult to prove when the houses were built, research indicates that they were built after 1902 and before 1918, when a mechanics liien was filed on January 17, 1918 for $60.00 , "for labor and material upon these certain buildings or imporvements known as ten tenement houses and the land upon which the same are located, situated on the North side of the new connecting road between the OR & N depot at Bridal Veil, ORegon and the Columbia Highway:". (File No. 139895)

As the lumber business capability increased, to did the orders for processed timber goods. Box cars and flat cars lined the railroad loading track, just waiting to be filled, so the timber products could be shipped to other parts of the country. At the time the little company was enjoying its greatest success, a disastrous fire struck at the mill .

Fire at Palmer Mill in 1902

Fires in the timber lands were a common and often tragic occurrence. The first major fire to severely impact the logging operations started on September 8, 1902. On a hot and dry fall day, with a strong wind blowing down the gorge from the east, scattered sparks from a passing freight train ignited the grass and quickly united with a blaze that was already burning in the canyon. The problem was compounded when another fire from the east swept down the Columbia Gorge into the Palmer area. Soon the fire that was out of control and headed for the Palmer mill site. The fire alarm was sounded at midnight. The air was thick with smoke and falling ashes.

Some families ran to the millpond and stood waist deep in the water. They watched helplessly as the fire consumed their town and their homes. The camp and the lumber mill were destroyed. Most people escaped with only the personal effects they were carrying. Bertha Palmer, daughter and bookkeeper of L.C.Palmer, hastily dug a hole in the ground and buried all the government documents and company records, in order to prevent their destruction. Almost everyone was able to flee to safety except for the two small Hamilton boys who became trapped in a shed and burned to death.

The fire is best described in a letter written by Lloyd Trinkey to Orval and Dorothy Klock.

"On the night of September 11, 1902 about 11 P.M., a forest fire took our place and we barely got out with out lives. About 2 hours later it hit Palmer and cleaned the canyon bare. Two of the Hamilton boys were caught and cremated there. Their father, James Hamilton woke up the two young boys (Cecil and Jerold) and told them to get out and follow him. They got up and slipped on their overalls, grabbed their shoes and took off after their father who was carrying the baby about 14 months old. Live coals were falling with other burning bark and leaves, so the boys stopped in a shed by the road to put on their shoes and a burning snag fell across the end of the shed and shut them in.

After the fire, Dr. H.L. Power who practiced medicine in Bridal Veil, Palmer and Brower sorted the debris and put the bones of both boys in an apple box and buried the boys. Cecil was 13 years of age and Gerald was about 11 years of age. We were in the same class in school. There was no school till the fall of 1903. New Palmer was about 3 miles further up on Bridal Veil Creek. It was a tent town about a month after the fire and a crew of men were building the bridges up from Old Palmer. A man by the name of Jesse Eberhard had steamed-up the two locomotives and ran them up the canyon where there was a spring by the track and the ground stayed wet. The engines were intact except the cab was burned off one of them.

The first supplies were hauled by wagon road and down to the new town site until the railroad was repaired. There was a few logs left in the pond there and a small mill was set up to cut lumber for the new mill and houses. Dad got a tent and some of the 1 x 12 from the old sawdust flume that was left. Got some dairy cows and more horses and furnished milk and did the freighting for Palmer. Also bought beef cattle as it took as much as a beef each day to keep up the demand. In 1904 were had 38 or 40 milk cows for the town and two logging

camps. The School was a 2 story like the old one but not quite as large. The bell was about the same (400 lb), A lot of the old Palmer workers did not come back. There was Palmers, Dickson, Turners, Lathrops, Powers, Emerys, Brooks, Hertels, Robinsons, Gregory, Masons, Peoples, Hardys, Browns, Fagues, Thrustons, Harrises, Schulenberg, and Trimble that came back " (Trinkey: 1972)

An accurate first-hand description of the fire of 1902 was written by Harry Lathrop, a student at Palmer school. His experience is recorded in John Woodward's book.

"Soon the whole side hill was one sheet of fire. It was dark and the fire made it look horrible. The men at the saw-mill did all they could to put the fire out, but it was too large to be put out. Before long the mill began to burn. The fire drove the men from the mill. As soon as the mill began to burn, the supply of water for the town stopped. Then the cry arose, "leave the town!" Then all of us went up a road that led to a farm. We found that it was too dangerous there so we went on. Beyond us was the fire. Once we heard the boilers of the mill explode. There were eight of them. Soon we came to a deep canyon.

At the bottom of this canyon is a deep creek through which we had to wade. We went along this road from Bridal Veil for one and one half miles. We could hear the fire crackling on all sides. We came to a bank of fire across the road. As we could not get through this fire, we had to go back again. The fire made it look like day. A man got a wagon and told us to get in, but thee was not space in the wagon for all of us so we took turns running and riding. We traveled until we came to another farm. It seemed quite safe so we stayed a little while. The fire crept around the place we we decided it was better to leave.

We rode on for about five miles until another farm was reached. Here it was safe enough to stay a few days. At last we started for home. We went to Latourelle and from there took a freight train for Bridal Veil. We then climbed the toad that led to Palmer. Here a sight met our eyes! All the iron and steel works of the mill were bent almost double. You could hardly believe that anybody had ever lived there. Those that lived on the hill found that their houses had not burned. Others camped down in the ruined town". (Woodward: 12-16)

When news of the disastrous fire at Palmer reached Portland, offers of help poured in to those who had lost their homes and all their belongings. Meier and Frank Company of Portland was exception in their support. The M & F Company filled cars full of clothing, bedding and food products, and had the goods immediately delivered to the people living in the devastated Palmer community. Loss of the mill alone exceeded $60,000. The town was destroyed and so was the small community of Brower. The Donahue and Kelley logging camp survived the fire although several homes had been destroyed at the camp ten years before.

Palmer made the decision to rebuild the mill and the community structures as soon as possible. He selected a new site about a mile and one-half above the old Palmer mill,next to the holding pond which had been built to serve the original mill. Everyone in the community pulled together to rebuild the town. A new schoolhouse, post office, boarding house and cook house were the top priorities. The Palmer's built a large three-story house for their family.

A new sawmill was constructed a mile higher in the mountains which required another mile of flume to be constructed, so lumber could be sent down the mountain to the planing mill. In

full production the mill was able to produce 100 thousand feet of temper per 10 hour shift. The former site the the Palmer mill was never reused. The fire also destroyed the heritage of the community associated with the school, boarding house, blacksmith's shop, and the 32 company houses.

"By 1903 new housing, a larger mill, a new school and other buildings had been constructed. The school, cook house, bunk house and sawmill were on the north side of Bridal Veil Creek drainage. The family dwellings were on the south side. The new school house was similar to the original although smaller in size." (Carr:20)

Timber cutting practices on Larch Mountain did not cease with the 1902 fire, although, this catastrophic event is often regarded as the time when the era of Victorian large-scale timber cutting practices began to subside. By the 1940's, traces of the early logging camps and sawmills had disappeared. The skid roads were dismantled. Modern logging techniques had replaced the colorful steam locomotives and the teams of oxen. Only a few scattered remnants of the earliest logging camps and mills remain in the hills and canyons of Larch Mountain today.

In 1903 a second locomotive was purchased from the Oregon Portage Railway. The engine was quickly named "Jumbo. The sawmill began operating in July 1903 after new machinery arrived and was installed. The sawmill was 220 feet in length and 47 feet wide. Power for the sawmill came from 6 steam boilers connected with 450 horse-power engine. (Carr: 1991)

In 1904/1905, a new box factory and planing mill was built at the lower end of the flume at Bridal Veil . The Bridal Veil Box Factory was incorporated with a capital stock of $25,000. H.N. Aldrich, Frank Wilmot and W.E. Linnett were the officers of the new company that was located next to the Bridal Veil Lumbering Company. (Carr: 1991) On September 7, 1904, the Bridal Veil Lumbering Company;y deeded the East 1/2 of Lot 20 to the Trustees of the Methodist Episcopal Church, Bridal Veil, Oregon for $1.00.

The factory permitted the new mill at Palmer to cut only rough planks which were send down the flume for planing at the factory next to the O.R. & N. railroad spur at Bridal Veil. People working at the Palmer sawmill had to begin working fifteen minutes earlier each day, because it took that length of time for the lumber to traverse the flume and arrive at the planing mill in Bridal Veil. The mill was producing about 70,000 board feet of lumber per day with less than 500,000 board feet of logs in the storage pond. Concern was expressed the the prices the company was receiving for their finished product was too low. Their problems were compounded due to a shortage of water to use in the flume from Palmer to Bridal Veil. The water shortage forced the Bridal Veil Lumbering Company to work in the evening to maximize the use of the limited water. Carr states that " by the end of the year the Company had

produced 45,000 boxes for Hood River fruit packers and another 75,000 boxes for Los Angeles orange packers. (Carr: 1991)

The following year the Bridal Veil Lumbering Company expanded to meet the increasing demand for wooden boxes. The Donahue and Kelly logging camp, Apex Transportation Company and the Latourell Falls Wagon Road and Lumber Company went out of business.

Bridal Veil Lumbering Company was anxious to increase their business. They decided to promote their wood products at the Lewis and Clark Exposition being held at Guilds Lake in Portland. In the massive log framed Forestry Hall structure, Bridal Veil exhibited large planks of noble and fir lumber cut from Larch Mountain. The Company also donated a "log 6 feet long and 48 inches in diameter as part of a veneer cutting display the forestry center'. (Carr:: 22)

During 1905 O.A. Palmer left the business and Bridal Veil and went to work for a lumber company in Boring. Faced with a smaller demand for timber products, the stockholders of the Bridal Veil Lumbering Company decided to sell the business in 1906. Palmer sold his interest in the Company and moved with his family to Vancouver, Washington. He built a large colonial home on the Washington shore of the Columbia, known as the "Castle by the River". Palmer died in 1912.

John M. Leiter, the Company secretary, moved to Portland and began working in lumber related real estate. J.S. Bradley retired in April. Bradley became president of the Bradley Logging Company and a few years later entered a partnership with John Leiter to operate the Portland Mousoleum Company. (Carr: 1991) The Bridal Veil Lumber Company was sold to local lumbermen, Holland and Briggs, along with other lumber investors from the East. A new manager, E.B. Hazen was hired to run the Company. Under his directorship, over 7,000 acres of timberland were added to the company holdings.

Expansion of Bridal Veil Lumber Company in 1906

According to a headline in the June 30, 1906 Oregonian: Big Timber Deal--Bridal Veil Lumber Company Increases Stock, Adds Thousands of Acres.

"One of the largest transactions in timber lands which has taken place in the Northwest for some time has just be completed in Multnomah County, in the increase in the holdings of the Bridal Veil Lumbering company. Approximately 7000 acres of land, covered with the finest fir and larch timber, has come into possession of the company, in addition to the large tract already held. By the transaction the owners of several different tracts have been brought together into the corporation.

Documents have just been filed with the Secretary of State by the company raising the capital stock of the corporation to more than four times the previous volume. The capitalization has been $150,000 up to the present and the change increased it to $675,000. The company is

already one of the largest lumbering concerns in the state, and its scope will be greatly enlarged from now on.

The increased capital is due to the consolidation of the present company with other interests, which puts it in control of a large amount of timber land in addition to the big tract which it has owned and from which it has been cutting to supply its large sawmill. The officers of the firm are L.C.Palmer, president, J. M. Leiter, secretary, and J.S. Bradley, treasurer and general manager, W.W. Edwards of Ohio and Mr Bushong, a Michigan lumberman are the chief owners of the timber land which has been consolidated with the holdings of the company. Holland & Briggs, a Portland firm, are also interested.

Between 6000 and 7000 acres of rich timber land have been added to the tract of the company by the deal which has been consummated. This gives the firm control of between 11,000 and 12,000 acres of land, all of which lies in Multnomah County southeast of Bridal Veil. There is upon the land between 400,000,000 and 400,000,000 feet of standing timber.

The capacity of the large sawmill owned by the company will be raised form approximately 30,000 feet in one hour, which is the present output to between 100,000 and 125,000 feet. With the additional machinery which will be installed, the plant will be able to turn out 250,000 feet of lumber by running nights. This sawmill is located four miles form Bridal Veil and the lumber is flumed to that place. The present planing mill at Bridal Veil will be discarded and a new mill erected to correspond with the increased growing capacity of the plant".

The new planing mill was in operation 1908. "The main building was 114 x 140 feet and included two Woods fast feed, 15 x 6 inch, matchers (designed for running such forms as flooring, ceiling , drop siding, and similar products at speeds between 100 and 400 feet per minute; a No. 94 Berlin flooring machine; a Berlin surfacer; an American Boss timber sizer; a Mershon band resaw; a Smith resaw siding machine; a Berlin inside moulder; and a Berlin self-feed resaw. Powering the planing mill was a four valve, 22 x 27 inch, automatic Atlas engine. the a building was equipped with four, 60 x 16 inch, high pressure boilers and also housed a General Electric steam turbine for generating electricity for lighting. The entire planing mill was illuminated with arc lights as well as hundred of light bulbs. The North Coast dry kiln was installed and consisted of 4 kilns each measuring 120 x 21 feet with eight tracks and a drying capacity of 100,000 board feet per day. A lumber storage shed was built and equipped with 6 compartments measuring 100 x 306 feet. The box factory had also undergone modernization and now had a production capacity of 25,000 board feet per day. Fire protection for the mill and box factory was provided by a Grinnell automatic sprinkler system. Additional protection was furnished by a 300,000 gallon reservoir at the base of Bridal Veil Falls. The Company provided a hotel and lodging house facilities for its employees as well as homes for those employees with families." (Carr: 19;91)

In June 1910, H.H. Holland and Charles C. Briggs, working with a group of investors from the Middle East, acquired the interest of John S. Bradley and associates. Officers of the company were Joseph T. Peters, president, Charles Briggs, vice president, and Harvey

H.Briggs, secretary and Eldridge H. Thompson, mill superintendent. Edward B. Hazen was hired in 1908 as general manager and treasurer of the Company. Hazen brought the expertise he had developed from managing the Chehalis Lumber Company in Washington and the Tongue Point Lumber Company in Astoria. Hazen moved into the large home that had been formerly occupied by John Stone Bradley.

Supplementary articles were filed that increased the operating capital of the Company to $650,000. Additional supplementary articles were incorporation 1917 which increased capital to $750,000. This new investor group operated on a greatly expanded scale, cutting the trees located on the upper slopes of Larch Mountain. In 1911 the Company opened a business in Portland as part of their expansion process. The managers of the Company were busily traveling around the country looking for people interested in purchasing Bridal Veil products. In June of the same year the logging railroad was extended into the woods. A new Mershon resaw was installed within the planing mill."the planing mill was cutting an average of 100,000 board feet during a 10 hour shift with 12 men working on the floor of the mill. In April the box factory increased its output to 15,000 apples boxes per day on the advice of Nelson Emery, manager of the Company's Hood River outlet, who expected the fruit growers to produce over 1,000,000 boxes of apple in 1912". (Carr: 1991)

In 1913 the employees of the planing mill built the community hall at Bridal Veil, which was used for dances, parties, and week-end social gatherings. The following year Hazen became concerned because of the decrease in demand for lumber products. New technology was replacing some of the more tradition needs for wood products. After a trip to the East he returned to Bridal Veil with enough Company business to reopen the planing mill that had been closed four months. Within a short period of time, the company was producing an average of 130,000 board feet of lumber per day with a 10 hour shift.

According to Carr, " with World War I creating a need for lumber products, Bridal Veil was contracted to supply boat planking that would be used on submarine destroyers. The planking was milled at Bridal Veil and sent east where the boars were constructed on the Atlantic Coast and then sent over to Europe.

During the month of January 1916, the Company won a $2500 settlement from Multnomah County as a result of damages to its property caused by the construction of the new Columbia River Highway". (Carr: 1991) On August 25th members of the West Coast Lumberman's Association travelled by automobile over the recently completed Columbia River Highway to Bridal Veil. A salmon lunch was served and a tour of the Company's planing mill was provided along with a visit to the sawmilll at Palmer and the logging operations on Larch Mountain.

(The Timberman September 1916: 35)

Bridal Veil Timber Company invested in railroad development on the all sides of Larch Mountain. By 1916 the railroad had reached the 3200 foot level. In that year alone with the improved logging techniques the Company had cut enough trees on the hillsides to produce 27 million board feet of lumber.

During this time of expansion, another Baldwin O-6-0's locomotive, named "Betsey" was added to the company. Betsey joined "Peggy" and "Jumbo" , an 0-6-0TT that was originally used by the Oregon Portage Railway. Other pieces of equipment in use included 11 steam donkeys of various manufacture and a Smith & Watson 12x 13 compound geared, special convertible yarder in use on a 1800 foot skyline operation. Annual production reached 27,000,000 board feet.

In the spring on 1917 Edward Hazen, traveled to Chicago and returned to Bridal Veil, having purchased the holdings of the Wind River Lumber Company at Cascade Locks. The sale cost approximately $1.500,000. The Wind River holdings included a mill at Cascade Locks, the large tracts of timber hear Wind River, Washington. The Wind River Lumber Company elected I.E. Earle,president, Charles G. Briggs, vice president, and Ed Hazen, secretary and treasurer. Elmer Ellsworth, the acting general superintendent at Bridal Veil was selected to also serve as superintendent for the the Wind River project. The wood products were marketed by the Douglas Fir Lumber Company. Combined the two companies produced almost 45,000,000 board feet during the year.

By October of 1917 the Wind River logging camp was operating 3 sides and had ordered an 11 x 13 Willamette combination engine (steam donkey) The sawmill at Cascade locks was averaging 135,;000 board feet per day. In November more timber holdings were acquired, this time near Hood River on the east fork of Neal Creek. The Bridal Veil Lumbering Company then constructed a new sawmill to handle the new stand of timber. By December the weather had suspended the operations because of heavy show. Because of a prolonged snowy season, on Larch Mountain, Palmer mill had operated only 5 months during 1917. (Woodward: 25)

During the spring of 1918 Bridal Veil increased its capital stock from $750,000 to $1,000,000. "The war effort had a direct connection with the Company when a small contingent of Army men, from the Spruce Production Division worked at Bridal Veil for a few months. The Division helped the loggers in the Northwest cut select trees for use in aircraft production. Several women were employed in the mill s to replace men that had been shipped to France.

At the beginning of the operation season in 1919 the sawmill at Palmer started cutting nearly 130,00 board feet per day. The Company's policy of bucking logs in the woods for fuel was dropped and, instead, all the logs were sent to the Palmer mill pond where the scull logs that were suitable for fuel were bucked into the required lengths by a drag saw and then split with a

steam powered splitter. The resulting fuel for the donkeys and locomotives was then sent back to the logging operations on a special firewood car. The Company produced 25,000,000 board feet of lumber in 1919 and the Wind River Lumber Company operations produced an additional 15,000,000. The box factory at Bridal Veil turned out nearly 8,000,000 board feet, up about one million form the 1918 figure(Carr: 1991)

Irregardless of all their hard work, the Company decided to close the post office at Palmer. Mail was delivered every day from the post office at Bridal Veil.

Development of Bridal Veil Lumber Company in the 1920's

By the 1920's plans were made to increase the width of the gauge of the railroad operations in order to increase the hauling capacity of the cars. A new railroad was built from the mill site into the Gordon Creek watershed. The road was built to standard gauge replacing the three foot former gauge. By 1924 the locomotives had been refurbished to accept the standard gauge width.The conversion of "Betsey" and "Jumbo" was accomplished in two months. "Peggy" operated under the narrow gauge format for a longer time, intent on finishing the logging on the older three foot lines. When the work was done "Peggy was converted, too. The old three-foot track was then abandoned.

During 1920 the box factory at Bridal Veil operated on an 8 hour shift. The factory was producing 40,000 board feet of box shook each day. " Most of the shooks (short, thin pieces of lumber) were used to manufacture meat crates and fruit boxes. The factory included the following equipment: a planer; a pony planer; 4 cut-off saws; 4 rip saws; one vertical resaw; one twin vertical resaw; a combination matcher and gluer; one box printing press; one recess machine, one cleat machine; one nailing machine; one corrugated-tape fastener machine; one typing machine; one box shook squeezer; and a scrap wood cut-off saw. The company purchased a Ross lumber carrier that was powered by rechargeable Edison batteries and could travel at speeds up to 12 mils per hour both forward and backward. The carrier could handle a daily production of 100,000 board feet of lumber and eliminated the need for over 300 hand carts, 6 men and 67 horses in the planing mill operations. Claude McClean was superintendent of logging operations at Palmer and was known for inventing a log loading device called the McClean Boon. In July the subsidiary Wind River Lumber Company;y purchased 125,000,000 board feet of timber in the Columbia National Forest. The price for the Douglas fir and western red cedar was $1.50 a thousand board feet, with white pine $4.00 a thousand and western hemlock $ .50 a thousand". (Carr: 1991)

The winter of 1920 and the spring of 19;21 was not a good time for the company. The Wind River sawmill was closed. Heavy winter storms had forced the logging camps to remain idle.

By summer the bookkeeping office in Portland had closed their office in the Yeon Building and moved back to the Bridal Veil planing mill office. In November several winter storm in the Gorge had covered Bridal Veil with snow and ice. The weight of the ice and show toppled and destroyed the smoke stacks on the boilers. The Palmer flume broke is several places due to the weight of the ice. Water systems throughout the hillside either broke or froze. The roof covering the lumber storage shed at the planing mill collapsed under the weight of the snow.

As the Company struggled for survival, they exchanged 120 acres of forested land in the Mt. Hood National Forest for 3,459 acres of logged off land that stretched across the slopes of Larch Mountain In September of 1922, the Company was purchased by a group of investors. The name was changed again, this time to the Bridal Veil Timber Company. The physical assets, consisting of plants and timber, were acquired by the new company, the Bridal Veil Timber Company, capitalized at $500,000, the stockholders being local people. William E.Dubois of Vancouver, Washington was elected president. Howard H. Holland, vice president, Robert H. Noyes, treasurer, and J.J. Donovan, secretary. Offices were maintained in the Yeon Building. Alber M. "Ole Hagen became general manager. Ed Hazen left and entered the retail lumber business.

Hagen had previously worked at the Carlisle Lumber company;y in Washington and for the Booth-Kelly operations at Springfield, Oregon.

During the summer of 1922 there was a shortage of water in Bridal Veil Creek which slowed operation of the flume from Palmer and also the water turbines at the mill in Bridal Veil. As a result, the operations at Bridal Veil were curtailed and output dropped to about 100,000 board feet from a high of 150,000 per day". (Carr: 29)

"The sawmill operation at Palmer would start up each morning 15 minutes before the mill at Bridal Veil since lumber traveling the 4 miles of flume would make the trip in about this amount of time. At this time the sawmill at Palmer was steam driven, the power being supplied by 2 upright water-tube boilers, developing 500 horsepower, and a pair of twin sliding valve engines. The plant at Bridal Veil was driven by a Pelton waterwheel with an 800 foot head that produced 1000 horsepower. Three Prescott gasoline powered tractors and one Elwell-Parker electric tractor were used in the mill to haul and stack the finished lumber". (Carr:30)

Due to another bad winter, production at Palmer sawmill did not begin operations until April 1923. Within a short time they were producing 130,000 board feet per day.The sawmill at Palmer was steam driven, with power supplied by 2 vertical boilers, developing 500 horsepower, and a pair of twin sliding valve engines. The boilers were brought up to Palmer from "Bridal Veil by two trucks--one going forward, the other using reverse gear-wit a boiler between on their beds (Graff 1938) Other machinery at the mill included a 9 foot band saw, 12-inch gang saw, slasher, edger, and automatic trimmer. The Bridal Veil planing mill held a

pony edger, short wood slasher, ;7-foot Mershon saw, sorting chains, bull planer, moulder,and a blower kiln to dry the timber. The planing mill was driven by a Pelton Waterwheel with an 800 foot head that produced 1000 horsepower. (Carr 1991)

By the middle of the year the Company had cut all of its timber holdings on Larch Mountain that could be reached by the company owned logging railroad. Due to the need for more timber, the company began surveying and assessing the timber stand between Brower and Gordon Creeks. They also began surveying for the possibility of expanding their railroad line. After assessing the product, the timber cruisers estimated that there was enough standing timber in this area to keep the company in business for the next 10 to 15 years.

The Company sold their Wind River sawmill at Cascade Locks to David Eccles, president of Sugar and White Pine Lumber Company and former president of Oregon Lumber Company;y. In July the Bridal Veil Timber Company;y and the U.S. Forest Service formed the Larch Mountain Fire Protection Unit. One month later they had to work together to fight a fire that destroy several donkey engines.

During the late 1920's and early 1930's the Bridal Veil Timber Company began changing the narrow-gauge railroad to standard gauge.(4 feet 8 1/2 inches between the steel rails) In 1936 a standard gauge Lima Shay locomotive was brought to Bridal Veil. It was put on a sled and yarded up to Palmer by an 11 x 13 steam donkey where it joined the other three engines.

Lima Shay had been previously owned by Milton Creek Logging Company who ran out of logs to harvest in 1925. The owners of Milton Creek had part interest in Bridal Veil. Evidence indicates that the locomotive may have been used by Bridal Veil Timber Company for ten years before she was purchased. With the improved railroad and the more efficient locomotives, the lumber company was setting production records.Most of the processed timber was being sent to the east. The company celebrated a record October cut of 3,600,000 board feet of lumber. Twenty four loads of logs per day were brought to the sawmill and 5,000,000 board feet of lumber was decked at Bridal Veil Two more miles of railroad were built into the newly acquired stand of timber. (Carr 1991) Plans were made to develop a new logging camp.

In January 1925 the Palmer sawmill and Bridal Veil lumber mill were closed for repairs. The economy appeared stable. Orders for mining timbers and railroad ties continued to pour in from the Eastern States. In the spring the mills reopened to a flurry of activity. Over 3 miles of new flumes that had been damaged previous fire were rebuilt. The railroad was expanded, houses were updated with modern kitchens, a new bunkhouse for loggers was constructed, and the cookhouse was extended to accommodate 180 workers.

Ben Hazen left the Company in 1920 and went to Portland were he founded the Benjamin Franklin Savings and Loan Association. Frank Shull, an executive the the flour milling business, was appointed president. Ben Hazen remained as secretary-treasurer. On June 24

fire struck again at the Palmer sawmill and destroyed a half million board feet of felled and bucked timber. By the end of 1925 Bridal Veil had experienced the decline in the lumber market and produced only 36,000,000 board feet of lumber. Logging operations at Palmer went into a slump. Some lumber was stored in order to supply Bridal Veil mill with enough wood to get them through the winter. Ed Hazen remained in touch with his brother but took a job with Central Coal & Coke Company, who also owned the Oregon-American Lumber Company of Vernonia, Oregon.

The beginning of the depression years had its impact on the small community, not only financially but spiritually. John Leiter died on January 19, 1926 followed by John Stone Bradley the following month. James Gawdon was crushed by a log and died in December 1926.(see obituaries) Although the company production was its highest in 1926, the business began to slowly decline.

On January 24, 1927 the company purchased more timber from the Government Land Office. Bridal Veil paid nearly $41,000 for 240 acres of land near Larch Mountain. During the year only 75 men were working at Palmer. Ten donkey engines were in use in the woods along with the locomotives. In addition to the 3 locomotives the rolling stock was comprised of 24 sets of disconnected trucks; one flat car, 2 tank cars; and one speeder for hauling the men to the woods. Late in the year the company installed an electric crane at the planing mill for handling the rough cut lumber in the storage yard. Production figures for the year totaled nearly 30,000,00 board feet. (Carr 1991)

The following year the Forest Service began reforesting land on Larch Mountain that was previously owned by Bridal Veil. The reforestation crew worked eight hours a day replanting seedlings three year old trees that grew in the Wind River Nursery. Each man could plant between 600 to ;700 trees per day. Total cost of the planting was estimated to be about $12.00 an acre. The Company was primarily engaged in the production of lumber for making ladders.

In 1929 a fire started in the blacksmith shop and Palmer and destroyed the facility. "During the year 70 men were working in the woods and the sawmill. The logging operations were mainly highleads with one and a half sides doing the work. Two Baldwin locomotives were still in use on the railroad which not stretched out from Palmer a total of 12 miles. Forty-five pound rail was used, with the rolling stock consisting of 32 sets of disconnected trucks, 3 flat cars and one speeder. William Burns was still the logging superintendent. At Bridal Veil the planing mill was turning out over 100,000 board feet of material in an 8-hour shift.

A person interview with Louise Rhodes, who lived at Bridal Veil during the 1920's and 1930's, reveals some aspects of the community life. "Everyone was just one big family. My son had the most wonderful childhood. She remembers Ed Harmon, the man of Hindu extraction, who was very dark skinned. He was passing though Bridal Veil with his uncle

and stopped for a drink of water. He was offered a job and stayed to work at the mill for several years. The Japanese were also a wonderful addition to the community. Rhodes recalls about four Japanese who worked first for Mr. Hagen as landscapers. Mr Hagen always had lovely parties for the people that worked at the company." (Interview May 1992)

Bridal Veil Lumber and Box Company

The Depression Years at Bridal Veil
circa 1930

Bridal Veil purchased 40 acres of O &C grant land in Multnomah County on February 17, 1930. With demand lumber production declining, the Bridal Veil and Palmer schools began to consolidate. Upper division students living at Palmer were driven to the Bridal Veil school in a grocery delivery truck that had been outfitted for the students comfort. Within a few months the all students from both Palmer and Bridal Veil were sent to school in Corbett. The schools never reopened.

"The Depression era marked the end on the large scale logging operations on Larch Mountain. Due to increasing costs of operating the railroad and sawmill, hemlock was cut and delivered to the mill at Bridal Veil by chain-drive log trucks. In 1935, with its timberlands on the mountain almost logged off, the Bridal Veil Timber Company obtained a contract on some down and standing timber in the Bull Run Watershed that the Portland Water Bureau had for sale".(Carr:36).

Times were extremely difficult for the Company during the great depression years. The Company owned all the houses at Palmer and Bridal Veil and the store at Bridal Veil. Operations were continuous during the whole time but at constant loss, the store and houses incurring accounts receivable many which were never recovered and the stumpage being sacrificed along with previously accumulated funds. There was less lumber sold in the United States in 1932 than in any year between that year and the Civil War. The average selling price of the lumber the company sold in 1932 was $8.02. At Bridal Veil some of the loyal workers at the planing mill had to be laid off as well as the loggers at Palmer.

In 1934 Ben Hazen began travelling to advocate for the importance of the lumber industry as a way to diminish the hardships of the depression. Hazen was president of the Oregon Savings & Loan League and director of the Portland Federal Home Loan Bank. He and his brother Ed continued to work with the Pacific Coast division of the National Wooden Box Association. Friday Veil continued to be productive primarily as a result of a contract to help supply wood and timbers for construction of the Bonneville Dam project.

In 1935 a drive occurred to unionize all lumber and logging in Oregon , Washington and California. The Bridal Veil Timber Company was a 4L mill (Loyal Legion of Loggers and Lumbermen.). On May 7, 1935, demands were made to Sheriff Pratt of Multnomah County. They refused and shortly thereafter the operations were shut down. On June 1st a petition signed by a majority of the crew, requested the operations be resumed under a new 4L wage scale which had been adopted in the meantime. In spite of threats from union organizers, the mill reopened.

Some further history of these labor troubles is told in a letter to Sheriff Pratt, letter to Governor Martin, and newspaper accounts of the organized march on the Bridal Veil plant by a group of union sympathizers. The confrontation of this group by Deputy Christoferson and two assistants at the entrance to the plant, owing to the courage and firmness of the deputies, was successful and the crowd turned around and returned to Portland.

After that time the making of lumber continued uninterruptedly, subject to gradually decreasing harassment such as attacks on individuals and efforts to black list the company products, until November 9, 1936, when a fire destroyed a large part of the installation at Bridal Veil. Due to the severity of the economy, it was decided to not rebuild the mill at Bridal Veil or Palmer because the relatively small amount of timber remaining did not justify the cost of rebuilding. A log dump and boom was constructed at Corbett.where the logs were delivered by truck and rafted and sold on the open market.

Fire at Bridal Veil in 1936

Several small fires occurred on Larch Mountain during the 1920's They were quickly brought under control but not without the loss of large amounts of timber. On November 9, 1936, a second major fire stared at the planing mill at Bridal Veil. A broken electric wire ignited the sawdust and spread quickly due to strong easterly winds. An article from the Oregonian of November 10th, 1936 states: :"$100,000 Damages Caused By Blaze." The blaze started at 5:40 A.M. apparently from a short circuit in the mill, and was fought by a hundred men for two hours before it was brought under control. A fire truck from Portland and one from the Columbia Gorge ranger station at Herman creek helped combat the fire. Ranger Roy Weeman was in charge of the forest service crew.

Fire fighters were aided by a brisk north wind, which though dry, was blowing away from the main plant. Property destroyed included two sorting tables, a lumber shed, the monorail structure, part of the lumber yard and some stock. Full insurance was carried. Plans for rebuilding were started at once. It was estimated that reconstruction would require 60 days.

Meanwhile the company will be able to ship, but not cut, lumber." (Oregonian: January 23, 1935 pg.1)

When the fire was over the resaw room, filing room sorting shed, drying shed and part of the flume system were completely destroyed. The old Bradley-Hazen house was severely damaged. For the next three years clean up operations took place around the mill but an economic decision was made to not rebuild the mill because most of the timber supply on mountains was depleted. With the Palmer mill no longer is operation, the railroad was abandoned. The locomotives were left at the Palmer site until they were sold for scrap to help finance World War II. The historic era of lumbering operations on Larch Mountain and at Bridal Veil came to a close.

The Bridal Veil Timber company sold all the equipment and buildings at Bridal Veil and Palmer in March 1937. Purchases of the equipment was International Wood Products Company of Niles, California. The company was formed by C.H. Kraft and J. Leonard Kraft in 1924 to make wooden boxes for the cheese products produced for the Kraft Cheese Company. The company had owned a sawmill and box factory in New Westminister, British Columbia, which provided the material for the Kraft Cheese boxes made in Canada. The company operating in Niles, California was closed in 1936.

In all the interviews, everyone talked about how nice Mr. and Mrs. Kraft were to their employees. For example, the first dance hall was torn down in the 1930's. Kraft supplied the wood for the people to build a new community hall that occasionally served as a church after the war. He appreciated the sense of community and did everything he could to foster a cooperative spirit. The men living in the community built the hall on the week-ends when they had a few minutes. Many parties and dances were held in the building. Almost every week-end there was dance and people would come from throughout the Columbia Gorge to have a good time. Some people would dance all night and then catch the early train back to Portland.

Kraft was a strong supporter of women's rights and fought for a long time against the Union for the woman's right to work in the mill.

Bridal Veil Lumber and Box Company

A new company, the Bridal Veil Lumber and Box Company, began installing new equipment at the old planing mill. the entire plant was converted to electric power. Older equipment from the the Palmer site was removed. If it could not be reused it was sold. Justus H. McLaughlin, a Portland electrical engineer, had the contract to install the new wiring and mill equipment. (The Timberman, April 1937: 26) "New equipment at mill included a single 36-inch Mershon resaw, two twin 36 -inch Mershon resaws, and a 54 inch resaw used to split

the rough lumber into smaller sizes. Women worked on the sorting belt. In addition to cheese boxes the Bridal Veil Lumber and Box Company began producing various types of mouldings and meat crates. Homer Leash was manager of the company and Leonard Kraft was his assistant. J..F. Habenicht was the general mill superintendent, with J.V. Powers supervising the dry kiln operations. L.C. Washburn was the chief engineer at the mill and E."A. McElroy was the head saw filer. The Bridal Veil Timber Company continued to log the last remaining stands of hemlock on its land even though it had sold both its mills. In December Justus McLaughlin replaced Mr. Habenicht as mill superintendent.

On February 28, 1938, Mr. Mr Laughlin was severely injured in an automobile accident. Harry Austin supervised the logging operations for the Bridal Veil Lumber company. Logs were transported to a log dump at Corbett with trucks used by contractor Clarence L. Dietrich.The haul from the logging operations to Corbett was nearly 18 miles and the trucks travelled part of the distance over a plank road.

In a personal interview with Bea Davis "They were wonderful to have in the community. At Christmas they would invite us over for saki, bamboo shoots. and those little fishes with their eyes open". We gave them our Victrola and some records to keep them company. They appreciated it very much. Her husband built a hot tub for the Japanese to enjoy since it was such a part of their culture. During the war they had to leave Bridal Veil. Roy, the head Japanese landscaper, came to our houses and told everyone good-bye

During 1939 the Bridal Veil Lumber and box Company purchased nearly 9;000 acres of pine timber near Heppner, Oregon.Lumber was cut at the Wray-Smith mill at Heppner and shipped via the Union Pacific Railroad to Bridal Veil where it was made into boxes. By the end of the year Wray-Smith had cut and shipped over 4,;000,000 board feet of lumber.

In January 1940 Homer Leash purchased the former Roles Brothers Shingle company property on Multnomah Channel and began construction of a new rotary lathe shook mill. The mill would supplement the production of spruce shook form the plant at Cathlamet, Washington, and then ship the material by truck 30 miles to Bridal Veil for drying and final manufacturing (The Timberman March 1940:47) On April 17th the Heppner Lumber Company was formed by Homer Leash, Leonard Kraft, Orville Smith and P.W. Mahoney. The new 6-foot band mill that was built took over the cutting previously done by Wray Smith.

During the spring of 1941 operations at Cathlamet were shut down and transferred to the recently completed International Wood Products Company mill at Linnton. (The Timberman May 1941:66) The mill at Linnton made the tops, sides and bottoms for Kraft cheese boxes out of rotary cut noble fir while the mill at Bridal Veil provided the box ends manufactured form ponderosa pine. By the end of the year, Bridal Veil Timber Company completed logging the last of its timber and went out of business". (Carr 1991)

During World War II the Bridal Veil Lumber and Box Company manufactured ammunition storage boxes and boxes for C-Rations and K-Rations. In a personal interview with Erma McCredie, she describes how busy the Bridal Veil Lumber and Box company was during the war. Women worked in several areas of the mill. Many of the younger men moved to Portland to work in the ship yards where they could make better money than in the mill. The mill operated continually. Regardless of the stressful conditions, the community continued to operate as "one big family'. Ms.McCredie also remembers how the company used to make Lincoln Logs and other wooden toys for Fisher Price.

Rather than have the mill remain empty after the fire, the Bridal Veil Timber Company was sold Kraft Cheese Company and incorporated as the Bridal Veil Lumber and Box Company. With the transfer of ownership the Bridal Veil plant was revitalized as a wood working plant. In 1937, the Bridal Veil Timber Company sold all their inventory to George M. and Homer Leash. J.Leonard Kraft, C.H. Kraft and Homer E.Leash officially purchased the stock .

`The purpose of the Bridal Veil Lumber and Box Company was primarily to manufacture wooden cheese boxes for Kraft Foods Company. The plant reached a record production in 1943 by using 1,250,000 feet of lumber in one month. The production line also focused on the manufacturing of ammunition boxes for the war effort. After the war the plant had many requests for other types of wooden boxes, (box shook) including the wooden boxes for Kraft cheese. During the next few years, the wooden boxes were replaced by fiber cartons.

In an interview with Erma McCredie, who moved to Bridal Veil in 1937 and worked in for the Bridal Veil Lumber and Box Company from 1941-1944, McCredie describes how the women of the Bridal Veil community went to work for the Company during the war years. "The community was told that the company would close if they could not fill the government orders for wooden ammunition boxes as well as boxes to hold the C- & K rations. Several of the younger men had gone to war, so the women worked side by side with the men to fill the orders. During this time the Company was also were making apples boxes for Hood River, wooden toys for the Fisher Toy Company, bed slats for cribs, and large orders of mousetraps for a company in Pennsylvania. The company discontinued making wooden boxes for Kraft cheese because the weight of the wood made it impractical to ship overseas during the war. After the war the women had the option of continuing to work at the mill, however, most of the women returned to the challenge of raising their families."

Leonard Kraft, president of the company decided to update the operation by converting part and restoring part of the mill into the manufacturing moulding and window and door fames. A plant modernization program began in 1950. At the time the Bridal Veil Lumber & Box Company employed 102 men. By 1955 employment had increased to 180 men.

Each year the company was producing about 40 boxcars of box shook, 18 carloads of window and door frames each month, and 4 carloads of luggage shook per month. By 1956 it was expected the plant would produce at least 6 cars of luggage shook. The company continued to produce toy stock and and blanks for other types of wood products.

Due to the diversification of the company stock, it was necessary to add new equipment to the mill, Some of the older mill buildings were remodeled. Plans were made to develop a more comprehensive woodworking operation.

By this time Bridal Veil Lumber and Box Company was mainly working with pine lumber. "The pine stock was received at the ripsaw section of the plant where it was ripped into specific lengths. At this point two lumber carriers made by Hyster would pick up the lumber and deliver it to the saw line at the front of the building, where a line of eight Irvington semi-automatic cutoff saws trimmed the lumber to specific lengths.

The area that cut up the lumber was located in a separate area of the plant. It was conveniently located so lumber would be processed and stored without impacting the rest of the mill. Lumber was pre-assigned in groups of four to the different saws. Each group of lumber was cut to a specific width.

From the cut up line, box shook material was sent to the rip and cleat saw section. Lift trucks delivered the frame stock to the moulding section. Box material was ripped by four leat saws and two push rips. The shook stock then goes to three in-line twin-band resaws. Complete shook and cleat stock is conveyed by belts to a wire tying machine, to be be strapped in bundles. The moulding department, one new Mattison 5-head 8 inch moulder has been added to the sticker line for the manufacture of window and door frames. Altogether four machines handle production at this point; a new Mattison No. 229, a 12-inch Woods, a 4-inch Mattison and a 4 inch Paulson.

The moulding department material is transported by lift trucks to the two new No.565 Greenlee tenoners, one of which is equipped with a framing and sill horning attachment. Hydraulic scissor lifts serve both these machines, the lifts being loaded from gravity floor storage rolls. Frame parts to be nailed go to a new Morgan nailer. All frame stock then goes to the strapping department. Here two in-line strappers using Gignode flat strapping, bundle the frame parts ready for loading into rail cars. About 50,000 window and or frames are produced each month."

The new look at Bridal Veil Box and Lumber Company was far cry from the one expected close down in the early days of 1937. The diversification of production to keep pace with the changing conditions brought new life and a permanent operation to Bridal Veil, together with increased employment and production.

Key personnel at the plant include Leonard Kraft, president and general manager, A.D. Jones, vice-president and production manager, Clyde Hambrick, foremen of the box shook department, Emar Mickelson, foreman of the window and door frame department, Lloyd DeMain, night foreman, Willis Bowen, loading foreman and Dean Burkholder, yard foreman, P.A. Derrick is maintenance foreman, P.H. McCredie, moulding department foreman, Don West, sales manages, and E.W. Norgard, office manager".(Timberman Sept .1955)

Times were very hard for the people living in Bridal Veil during the great depression years. The company owned all the houses at Palmer and Bridal Veil and the Store at Bridal Veil. Operations were continuous during the whole time but at constant loss, the store and houses incurring accounts receivable many which were never recovered and the stumpage being sacrificed along with previously accumulated funds. There was less lumber sold in the United States in 1932 than in any year between that year and the Civil War. The average selling price of the lumber the company sold in 1932 was $8.02.

In 1935 a drive occurred to unionize all lumber and logging in Oregon , Washington and California. The Bridal Veil Timber Company was a 4L mill (Loyal Legion of Loggers and Lumbermen.) On May 7, 1935, demands were made to Sheriff Pratt of Multnomah County. They refused and shortly thereafter the operations were shut down. On June 1st a petition signed by a majority of the crew, requested the operations be resumed under a new 4L wage scale which had been adopted in the meantime. In spite of threats from union organizers, the mill reopened.

Some further history of these labor troubles is told in a letter to Sheriff Pratt, letter to Governor Martin, and newspaper accounts of the organized march on the Bridal Veil plant by a group of union sympathizers. The confrontation of this group by Deputy Christoferson and two assistants at the entrance to the plant, owing to the courage and firmness of the deputies, was successful and the crowd turned around and returned to Portland. (See attachments)

After the turbulent times of unionizing, the making of lumber continued uninterruptedly, subject to gradually decreasing harassment such as attacks on individuals and efforts to black list the company products. On November 9, 1936 a fire destroyed a large part of the mill installation at Bridal Veil.

In assessing the damage and cost of rebuilding, it was decided that the relatively small amount of timber remaining on the mountain did not justify the cost of rebuilding the mill. To process the logs, a log dump and boom was constructed at Corbett. where the logs were delivered by truck , rafted and sold on the open market.

The War Years

Little information has been written about the live at Bridal Veil during the war and in the years that followed. However, interviews with Evelyn Bird, Bertha Davis, Erma McCredie,and Bernice Mickelson all tell of the "wonderful sense of family that existed for anyone that lived in the Bridal Veil. Evelyn Bird lived in Bridal Veil between 1942 and 1977. She recalls the "good times and how the Union would give money for the Christmas party that would then be matched by the Kraft family. Gifts were purchased for the children and the employees at the mill. The community hall was always active with local events and dances on Saturday evenings".

Bertha Davis worked in Bridal Veil at the Lumber Company from 1936 to 1954. "Several years before the war the Union members met and voted to "keep the women out" so that women could not be part of the Union. Therefore, the women could not work. When the male population diminished during the war (many of the younger men went to Portland to work in the shipyards where they could make more money) the women were asked to work in the mill. Davis was employed for 18 years and worked on the little resaw and the band saw. Before the war the Company printed the lettering on the boxes that held Kraft Philadelphia Cream Cheese. The boxes "were printed, cut but not assembled before being shipped out. The Company also made Lincoln Log toys before the war orders arrived.

Davis recalls the lovely home on the Columbia Gorge Scenic Highway that Company managers, Mr. Hagen and Mr. Kraft lived in. Mrs. Davis also described the five Japanese men who worked for Mr. Hagen and Mrs. Kraft. "They kept the landscape in beautiful condition. They planted lots of unusual trees and flowers on the hillside, especially along the wooden plank and crushed stone pathways that connected the homes to each other and to the mill site". Mrs. Davis's husband built a wooden hot tub for the Japanese workers for which they were forever grateful. They also gave the Japanese workers a Victrola and some records which they enjoyed very much. The Japanese men (she does not recall any women) lived in housing above Palmer Mill road near the Scenic Highway. "The Japanese were wonderful. At Christmas they would invite everyone over for saki , bamboo shoots, and little fishes with their eyes open." The Japanese landscapers all left the Bridal Veil area during the internment years and did not return after the war." (Personal interview)

Bernice Mickelson remembers living in the Company houses and that "her family found Chinese newpapers stuffed in the walls of her house. The papers were discovered during a remodeling project. The family presumed the papers were put in the walls by some of the early Chinese inhabitants, probably for insulation purposes."

Due to many factors, the Bridal Veil Lumber and Box Company went out of business in 1960. Unfortunately, the Forest Service burned the abandoned Company buildings in Palmer

on February 16, 1944. The cultural heritage of the two communities on Larch Mountain was slowly being destroyed due to many extenuating but ominous circumstances.

Sale of Bridal Veil Lumber and Box Company in 1960

In 1960 the Bridal Veil Lumber and Box Company ceased their operations. Kraft sold the property to Machinery Sales. Machinery Sales purchased the proepty ti 1962. They are an Oregon corporation with officed at 65 N.E. Columbia Blvd. in Portland, Oregon. Officers of the business are Orrin Halson, Presidenst and W.A. Thompson, Secretary-Treasurer. It is owned by the Halston and Thompson families.

Since acquiring the property, Machinery Sales worked to improve the nineteen houses located on the property. The company made improvements which included installing electric water heaters, new roofs, paining the houses and general maintenance.Two men at Bridal Veil are employed by Machinery Sales to keep up the property. Kenneth Werner served as property manager. Some of the larger buildings are rented to manufacturing busineses. One of the businesses manufactured a soil conditioneer made from inorganic materials.

Machinery Sales insstalled a sewage disposal plant to serve the comunity. They advocated for more people interested in living in the area that was free from the smog and noise of the city. Unfortunately, Machinery Sales sold the propety in 1964.

An Oregonian article by written by columnist Gerry Pratt upon the sale of the property, stated:

"the relentless gorge winds are sending a chill through the buildings at the Bridal Veil Lumber Company". Even in the sunshine it is quiet, and somber there for the old mill is finally dying. Brisk men from the Milton J. Wershow Auction Company will move in and with a few rigorous blows of the hammer removed the heart from the place, the machines, the lift trucks and even the early American Seth-Thomas clocks from the office and lunchroom walls.

Bridal Veil Company and the people of the Lilliputian community on the shoulder of the gorge have tried everything they know to keep their mill alive. Boxes for cheese, boxes to hold ammunition during the war , boxes for whiskey bottles, and there is even a special machine for making mouse traps. All of these helped to bring in the dollars that keep the 25 homes, 80 payroll community going for the past 73 years. But little by little the economics of trying to operate a pine lumber mill in a Douglas fir region, coupled with the over sold state of the pine market, killed them.

And now it is out of their hands, turned over to Wershow and real surgery begins. To Ed Potter, the Oregon president of the Wershow Company, the death of a small mill to the gorge is nothing sentimental--nor unusual. He knows Bridal Veil is dead as a lumber mill and his eyes are not on the history of the place but are where his money is--in its future. Watching Potter's auctioneers lay bare the assets of the place Wednesday with their calls for bids you may think he is burying the place forever, selling out every thing worth while from the shovels and saws to the safe and office machines..

But listen to him a moment off the block " Only 25 minutes from the heart of downtown Portland." he said cruising up the gorge highway, as he passed Troutdale Airport, and only 10, maybe 12 minutes from the nearest airfield. Water? We bought the grandfather rights and half the falls. (Bridal Veil) There's millions of gallons! Power? Who could ask for more power than Bridal Veil? The highway, the mainline railroad right by the door, its perfect. This place really excites me, he confesses."

Potter cruises through the vacant sawmill like a conquering colonel. These machines will go real good, he promised himself, "That one isn't five years old. And then to a crew lining up the goods for sale". No, we don't sell those power installations and leave the steel plate on the floor. To replace those things would cost a small fortune,"he explained, Potter admits this isn't the way to sell out a mill you intend to bury.

He stopped a few minutes to to talk to a forest service laborer who wanted to rent one of the Bridal Veil plant houses. "Twenty five a month and no leases, Potter said in a take it or leave it attitude. " Okay said the worker, "I'll take it and if the mill ever get going again, I'd be on the spot for a job. You may not have to wait as long as you think, Potter said with grin. The houses were are going to leave and the store. It would make a good office building. All of these mill buildings, except the boiler houses. That's out and it goes. "Maybe a furniture factory, maybe a canning plant--we have a million ideas for this place. Just give us a little time. Sure the mill is dead, you can buy any part of it tomorrow, But not Bridal Veil, for this place, this can be the beginning, he promised." (Oregonian, November 1, 1960)

Changes of Ownership since 1964

In 1964 the Bridal Veil site was sold to Hershel McGriff. McGriff purchased the property and operated the Millington Lumber Company. Before the scenic area became legal in 1986, McGriff agreed to have his property classified as a special management area under the authority of the forest service. McGriff, a professional race car driver and businessman, owned the Bridal Veil lumber mill town for 25 years. He put the property on the market for $1 million. Greenhill Lumber Company which leased the mill on the property closed their operations and moved away.

Until the property was sold, McGriff who has raced cars at Portland Speedway since 1945, was going to use site for a race car shop. McGriff leased the saw mill at Bridal Veil for four years before he bought the property 25 years ago. McGriffs father who is a minister spent time fixing up the Bridal Veil church. Some of the lumber mill houses were been town down but 16 were rented to people in Bridal Veil. In 1990 McGriff sold the property. During McGriffs ownership the country store, the company lunchroom, two houses and a mill building were demolished. Cosmetic changes were made to the exisiting properties. In 1970 McGriff asked Willard Martin, architect of Pioneer Square in Portland, to design a plan for the development of Bridal Veil. (see enclosure)

The sale of the property was complicated by its recent inclusion in the Columbia Gorge National Scenic Area. Throughout the last decade concerned residents, local businessmen, local, state, and national government organizations, and the politicians have been working to

determine the best use of this area of scenic and natural beauty. As early as 1977 Gorge activists began to lobby throughout both states of Oregon and Washington for legislation to protect the environment and prevent further development. In 1981 draft legislation was circulated. Between 1982-84, Senators from Oregon and Washington held public meetings on the proposed bill which would create a national forest scenic area in the Gorge.

After many meetings the legislation was modified to reflect the majority opinion of the best way to preserve the Gorge. In 1987 after the Gorge bill was passed, the Columbia River Gorge Commission was formed to oversee the development of a management plan. The 12 member bi-state Commission is working closely with the U.S. Forest Service who is responsible for administering the management plan.

On March 7, 1991 the 102 year old Bridal Veil property was conveyed to the Trust for Public Lands. The Trust plans to turn the 58 acre tract into a park in order to restore the wetlands of Bridal Veil Creek and the nearby salmon spawning grounds. If this is accomplished, the park will be sold to the U.S. Forest Service. The abandoned sawmill, post office, a church and company town houses may be destroyed so Bridal Veil Creek can be restored to its natural beauty.

At the present time, local residents are very concerned that the Trust (TPL) will destroy Bridal Veil and all traces of its cultural, historical, social, and economic heritage, by tearing down the company mill worker homes and buildings which have been identified with Bridal Veil for over a century. Local residents are opposed to any destruction of and buildings on the important historic/archaeological site. They argue that the Bridal Veil community should be added to the Multnomah County comprehensive paln, designated a historic site, or possibly a historic/archaeological district. They want to use thier community to to interpret the cultural history of of the Bridal Veil and its relationship to lumbering at Palmer mill and other sites on Larch Mountain, and within the Columbia Gorge, Oregon, and the Northwest. ."Its a major part of the history of the gorge. To allow it to be wiped off the face of the earth would be terrible', said Laurel Slater, owner of a bed and breakfast near Bridal Veil and a descendant of the early day Bridal Veil residents. (Gresham Outlook 3-90-91)

Within the "special management area" plan of the Columbia Gorge Scenic area is the "special Columbia Gorge company mill town" of Bridal Veil--a small community of several remaining company town mill worker cottages and managers homes which portray the evolution of one of the first 1880's company mills towns in Oregon The quaint post office, modest homes, and a very interesting cemetery still contain enough integrity to interpret the families and lives associated with the Bridal Veil Lumber Company. Of the three cultural sites listed in the scenic area inventory, Bridal Veil represents the largest and longest example of commercial logging activity.

Opponents to preserving the communities heritage, feel that because the Bridal Veil community was not identified in the Multnomah County survey of historic sites or other resource inventories, it may not be historically significant. Due to the basic survey process, these important cultural resources are occasionally overlooked. It is only when an intensive survey is completed which examines a site in context with the historic, cultural, and economic development of the surrounding area, and its relationship to the development in Oregon, that the true historic, cultural and architectural significance of a site can be determined. Based on the information contained in this report , the photo collections at the Oregon Historical Society and in private ownership, and the complete collection of business transactions of the Bridal Veil Lumbering Company from the 1880's to the 1960's which is housed at the Oregon Historical Society, it is my opinion that the Bridal Veil community, it's houses, post office, church, and cemetery should not be destroyed. A task force representing all parties involved in the future of Bridal Veil needs to begin working together to meet the challenges of preserving the collective heritage of the remaining buildings and archaeological sites associated with this important company mill town and the logging heritage of Larch Mountain.

The Columbia River Gorge is a spectacular place to visit for its natural and cultural resources. It offers unsurpassed scenic beauty as well as important structures which interpret the development of the Columbia River Gorge over the last century. The future challenge for everyone who loves and cares about the Gorge will be to integrate the cultural, historic, social, and economic heritage of the loggers, the timber industry, fishermen, pioneers, homesteaders, dam builders and road developers within the context of its historic scenic, natural and cultural resources.

BRIDAL VEIL SCHOOL, DISTRICT 42

The Bridal Veil school house was built in the fashionable architectural style of the 1880's. Beautiful clear lumber was donated by Bridal Veil Lumber Company. The outside walls were made of a fine grade of lumber, The outside of the two-story building was finished in a rustic manner was with ornate gingerbread woodwork The school house which was located on a steep hillside with a magnificent view of the Columbia River. A flight of ten steps led to a lower porch across the front of the schoolhouse and from each side of the porch another flight of eight steps led to a higher more ornately designed porch. Double doors entered an anteroom. Above the upper porch was a balcony and above that an enclosed belfry with a cast iron bell that was used to call the children to school. The American flag was attached to a pole on top of the belfry.

The interior of the schoolhouse was finished with tongue and groove lumber, stained a dark color, and then finished with a high gloss varnish for easy maintenance. The flooring was made of highest grade fir. The first floor served as a classroom. The upper floor functioned as a community meeting and social gathering place. The upper floor could be accessed by an outside stairway.

As with many of the early smaller schools, the students advanced at their own ability.through the first five grades. Usually there were no more than twenty pupils in attendance.Later the system was expanded to include eight grades. In the early 1900's two years of high school were added to the curriculum All ten grades were taught by one teacher in the one room school house. Some of the early teachers were a Miss Hays, Ida Everhart, and Myra Bradley, the daughter of J.S. Bradley, owner of the lumber company. Myra Bradley left her teaching position to marry C.H. Labbe, the French Consul with offices in Portland.
The students were the children of the mill executives, mill workers, railroad workers, fishermen and nearby farmer. Those who lived west of town had to walk through the mill to reach the school. In the spring of 1894 the waters of the Columbia rose above the railroad tract. For a brief time the children had to row their boats to school.

In November and December of 1894 an diphtheria epidemic struck the Bridal Veil community, killing several young children.. In one week four of the Luscher children, who lived just west of Bridal Veil, died with diphtheria. Jessie Amend, a young Bridal Veil girl, also died from the epidemic. Ben Luscher, brother of Fred Luscher, also died. They are all buried in the Bridal Veil Cemetery.

Attendance at the school was directly related to the number of people working in the lumber industry. Local tax funds to maintain the school came from the current owners of the mill and from the railroad. The mill company owned all the housing and the businesses in Bridal Veil.

When the mill was in full production the attendance was height at school. On some occasions two teachers were needed to instruct the students. Attendance at school was directly related to the demand for timber. During an economic downturn or mill closure, school attendance dropped suddenly.

As in most small communities, the social life of the community centered around the school house. Entertainment for community meetings was generated by local talent. The students often contributed to the richness of the programs through their sharing of academic or artistic skills. Occasionally a traveling entertainment show or religious revival group would pass through the mill town. They would stop by the community room at the school to present a program or people working in the isolated areas. Until the completion of the Columbia river Highway, the only access to the isolated community was by railroad or riverboat.

In 1930, students in the upper grades were transported by the Bridal Veil grocery delivery truck form Palmer to Bridal Veil. High school students from both schools were taken to Corbett. In 1931 the upper grade students were able to attend school in Corbett. However, a year later both schools were closed. School District 42 consolidated with Corbett, District 39, on March 9, 1934.

In a letter dated April 30, 1934, to the School District No. 39., it states that the Bridal Veil Timber Company (Manufacturers of Old Growth Yellow Fir, Clears, Yardstock and Timbers) "are willing to furnish bus service for the following school year at $125.00 per month, or, they would sell the bus to the District at $1400.00 on the basis of the school district paying equal monthly installments for two school years including interest at 6%. Mr. A.M. Hagen, Manager of the company said that the company would prefer the latter plan, as they felt that they would rather not operate the bus."

On December 28, 1934, a letter from the Bridal Veil Timber company to Mrs. Geneva Johnson in Corbett, states that the company is " enclosing a certificate of title for the school bus which is in the name of School District # 42 by reason of our having gotten license for $100 a year. The consolidation of districts should automatically change the title to School District # 39.

After Kraft Cheese Company purchased the Bridal Veil mill, the school house was used as a community hall. Over the next several years the building began to deteriorate. In 1938 the state fire marshall declared it a constant hazard. When District 39 attempted to dispose of the property, Mr. H.Ray Moore, son of Amos J. Moore, claimed the property as a provision of the 1890 deed.

Mr. Moore sold the school building and it was demolished.. However, one part of the school in still in use. Mr. Moore gave the bell, cast in 1887, to the Village, a retirement

community near Gresham. The bell was mounted in a metal stand. It is used to call the people living in The Village to meetings, movies, and parties.

DONOHUE AND KELLY LOGGING CAMP

No description of the plant of the Bridal Veil Lumbering company would be complete without a discussing the logging camp operated by Donohue & Kelly. The camp was located on the side of Larch Mountain, five mils from the saw-mill and forms the present terminus of the railroad. Under the management of M.c Donohue, many millions of feet of timber have been cut at this camp. Mr. Donohue is well known to all on the mountain, and is one of the best loggers on the coast, many years of experience in the business having made him thoroughly practical in all its details.

The logs are delivered to the locomotive on a large railway, from which a skid road extends into the woods for a distance of two miles. Here are found the men, busy as bees, each at his allotted task in helping prepare the logs for the mill. During fine weather, it is a healthful and pleasant life out in the fresh mountain air, and one of more excitement than might be supposed. No little danger is involved in felling one of these lofty trees which often brings down several others with it. Another place of peril is within reach of the rigging presided over by the hook-tender. When a "dog" comes out of a log under the tremendous pull of an ox team, it flies with great force and can easily send a man to his last reckoning.

Two ox teams of six yokes each are employed in hauling the logs from the woods, the work of the men being largely governed by the capacity of the teams to care for the output. A train scaling 12,000 feet is considered a good load, and to successfully haul it requires an excellent "bull puncher." At one or two places, where there is an up grade of 4 percent on the skid road, the latter mingles with the cracks of his whip, an additional quantity of the gentle words of encouragement for which the class is noted. Forty thousand feet of logs are frequently hauled in one day.

The camp has been in operation for six years, and during that time nearly 30,000,000 feet of logs have been cut and delivered. The size of this figure may be better realized by considering that, if the logs had been cut into boards, 1 x 12, and these placed end to end, they would reach considerably over 5,000 miles, or in other words, from London to Chicago. If all this lumber were transported by railway, it would require 1,500 cars, making a train nine miles long.

The camp is within a short distance of the finest scenery in the mountains, and is on the route of parties headed for the summit of Larch Mountain. Towards the east there is a fine body of timber with many millions of feet in sight, thus making this camp one of the best in the country. (Bishop:9)

During the years between 1887 and 1942 some form of timber operations were conducted at the Bridal Veil site. During this time the total country logged extended roughly from the bluffs

successor, ran eastward around the mill pond crossing the range line about at the quarter corner between section 24, In%E and Section 19, 1N63 and harvesting the west and south slopes of Larch Mountain and reaching the saddle between Larch and Little Larch.

As these two railroads had logged nearly all the timber to be reached by them, it was necessary for the Bridal Veil Timber Company to construct a completely new line on a lower elevation, and capable of reaching particularly the timber in T1S5E. At this line crossed all the branches of both Bridal Veil Creek and Gordon Creek after they had developed fairly deep draws, it was a major undertaking, particularly as no timber was reached until it entered Section 2, 1S 5 E. At the same time the company bought second hand standard gauge disconnected trucks and widened the gauge of the two wood burning locomotives. These locomotives burned slab wood form the sawmill.

The only major equipment purchase was a Marion gas electric caterpillar tread shovel which built practically all the mileage constructed. With a horse to pull it, a sled delivered gas and powder to the construction crews which consisted of two or three men, working often quite far from the rest of the crew, and building the road very economically.

The cut-over lands at the end of the company's existence were put into a new corporation, the Gordon Creek Tree Farm. Natural regeneration has been on the whole fairly good though fires set back some areas. The country was subject to high east winds. Two of the worst stubborn fires occurred, not in the summer but one in March and the other in late October. Fire fighting W8S handicapped in the days of railroad logging. Rails and ties were picked up a~ soon as an area was logged. No access thereafter existed except on foot. Bulldozers were unknown. Fire trails were made by hand. The company had water pumps and hose on the locomotive tenders, on home built tank cars, and at one time developed quite a system of laying pipe lines from water holes to every landing. But wood burnlng " donkeys and locomotives were a continuous hazard" The diary of a member of an early canoe party, somewhat subsequent to Lewis & and Clark, described vividly the awesome sight and the crashing sounds from a forest fire enveloping what could well have been Crown Point. This was say, over a hundred years before the Bridal Veil Timber Co. was organized. Sections 3, 9, and 16 in T 1 S 5 E were featured by a distinct line between the perhaps 250 year old timber that existed over most of that Township and the young timber to the west, at place~ too small to consider cutting, and maybe ranging in age up to a maximum of a hundred year~.(Bishop;8-10)

BIOGRAPHICAL SKETCHES & OBITUARIES OF PEOPLE ASSOCIATED WITH BRIDAL VEIL COMPANY TOWN

JOSEPH B. ACTESON

Joseph B. Acteson was born at Port Daniel, Canada, in 1846. He moved to Wisconsin when 21 years of age, where he worked at his trade in carpentering during the summer, but turned his attention to logging in the winter. He was married April 28, 1873. In 1885 he went with his family to Vancouver, Washington, working in his trade in that city until 1888, when he came to Bridal Veil, the mill having just started to run. He has been engaged in the woods most of the time since, working at various branches of the logging business. In 1889 he took a contract to log for the Bridal Veil Company. He has been hook tender for the yarding donkey, and was foreman of the crew for eighteen months. He managed the boarding house at the camp for three years. (Bishop: 16)

MARY H. ACHESON

Mary H. Acteson, the cook of the Apex Transportation Company's logging camp, was born in Denmark in 1854, and went to Oshkosh, Wisconsin, with her parents at the age of fourteen. Two years later she went to Oconto, and in 1873 was married to J.B. Acteson. They moved to Angelica, Wisconsin, immediately after their marriage. She has cooked in logging camps for ten years. The camp on Larch Mountain is so isolated it is difficult to obtain all the market affords, but she has no trouble in setting a table to please the most fastidious. Mrs. Acteson has three daughters, one being in Portland, the second one at Spokane, while the youngest is attending school at home. (Bishop:16)

ROBERT H. BARR

Robert H. Barr was born in Canada, December 4th, 1871. He lived on his father's farm till he was seventeen years of age when he decided he was not designed for a farmer, and went to Wisconsin, where he worked for two years at driving logs. He came to Oregon in 1891, and worked as hook tender for Brower and Thompson for two years and a half, and another year as foreman of the logging crew. He owns one of the choicest claims on Larch Mountain, and also one on the Nehalem River, the former being estimated to contain from twelve to fourteen million feet of larch and fir. He spent some time driving logs for Geo. Broughton, of Oregon City, receiving $135.00 a month. In 1894 he commenced work for the Bridal Veil Company as hood tender for an ox team, but was soon transferred to the same position at the yarding donkey, where he beat all previous records by delivering on the road an average of 50,000 feet per day. The position of hook tender includes the management of the crew which operates the yarding donkey, and get the logs in readiness for the bull donkey. In the fall of 1896, when the bull donkey and chute were being installed, great trouble was experienced in getting a termination for the chute, which is under water, to stand the terrific blows of logs descending three- quarters of a mile. After two or three unsuccessful plans had been tried, Mr. Barr was entrusted with the work of making a new termination of his own design. This has been entirely satisfactory, and is a piece of work worthy of high approval. (Bishop: 14)

JOHN STONE BRADLEY

John Stone Bradley, Treasurer and general Manager of the Company, was born in Massachusetts. His first business experience was in a country store in that State. Having determined to become a civil engineer, he went to Union College to study for that profession, but in his sophomore year the war broke out and he responded to his country's call by enlisting in the Thirty-seventh Regiment of Massachusetts Volunteers, in which he served with

distinction during the entire war. At the close of the war, he returned to his native State, and for the following two years was with the Smith Paper company of Lee. In 1867 he removed to Bay City Michigan, and entered into the lumber business which occupied his attention for the next eleven year. Bradley's next move was to Newark, Ohio, in 1878, where he still dealt in lumber. In 1889, he came to Oregon, entering the Bridal Veil Lumbering Company. (Bishop:10)

CHARLES G. BRIGGS

Charles G. Briggs, was born in Saginaw, Michigan, October 28, 1879 and was educated in the Saginaw schools, Lawrenceville Prep school and Michigan College of Mines. He came to Oregon in 1895 and became a partner in a lumber firm in Portland. Briggs was married in 1905 to Katherine Helen Bates, who died in 1938.. In January 1946 he married Emma N. Drain of Eugene. He had a daughter, Mrs. J. Hobart Wilson. He was a member of the Arlington club and the Waverly Country Club. He moved to Eugene shortly before his death to become general manager of the Booth-Kelly company.He was also president of the Booth-Kelly Lumber company, Springfield Plywood corporation and the Oregon Pacific & Eastern Railway company. Briggs died at 67 years of age. (Oregonian, May 27, 1947, p.13)

JAMES BROWN

James Brown, the secretary and foreman of the Apex Transportation Company, was born in Manitoba County, Wisconsin, in 1857. From boyhood he has been engaged in logging and river driving. In 1879 he went to Kansas and spent one year at farming, but discovered that logging was more to his taste, and he moved to the camps in Colorado. Here he remained four years, turning his attention to mining part of the time. In 1882 he went to Southern Oregon to engage in mining, and left there in 1889 to come to Bridal Veil, where he has remained ever since, working in the woods. Four years was spent in tending hood, and his industry and thorough knowledge of logging secured him the position of foreman of the crew. He was one of the organizers of the Apex Transportation Company, and was elected secretary of the company. (Bishop: 13)

JOSEPH BUCHTEL

Buchtel was one of the very important pioneers of Oregon. He was born in Stark county, Ohio, in Uniontown, November 22, 1830. Buchtel first worked as a tail but later became a Deputy Sheriff of Champaign county, Illinois; and while acting in that capacity he had frequent occasion to meet both Abraham Lincoln and Steven A. Douglas. On April 23, 1852, Buchtel crossed the plains to Oregon in the company of Mr. I.R. Moores. Buchtel was responsible for driving one of the large ox teams employed in hauling a heavily loaded emigrant wagon. Due to massive hardships Buchtel reached Portland in a destitute condition in September 1852.

He worked cutting wood and loading vessels with lumber, and later worked on a boat, the Shaolwater. For five years he worked on the Willamette River. In 1853 he started a daguereotype business in the Canton house which he operated in Portland for 35 years. Buchtel was the pioneer artist in Portland.He was also an expert baseball player, as pitcher, and was captain of the pioneer club for twenty years. He was also a champion foot racer. In 1865 he was elected chief engineer of the fire department. He was a Royal Arch Mason and a member of the I.O.O> F. In 1888 he sold his art gallery and engaged in the real-estate business, in partnership with Mr. Ball, the firm being Buchtel and Ball, and they have invested in several tracts of land. They have platted and placed on the market several valuable tracts for others. Buchtel was elected Sheriff of Multnomah county, Oregon, June 1882 and served in that capacity for two years. He was married in 1855 to Miss Josephine Latourette, a native of Michigan and a descendant of one of the French families who settled early in American They had seven children. A daughter, Lillie, became the wife of Norwood L. Curry, son of the late Governor George L. Curry.

W.A. CAMPBELL

Campbell was employed by the Bridal Veil Lumbering Company as a mechanical engineer, was born in Canada of Scotch parents, the late Sir Alexander Campbell being his great-grandfather. His grandfather was the first to settle in what is now Hamilton, Ontario, and the well-known landmark on the mountain side, known as Campbell's Corners, is a monument to the family name. At the age of 12, he gave evidence of the possession of mechanical genius by the construction of a miniature saw-mill with a complete system of railroads and steamers. The little tin saws cut cucumbers into boards and plank, to the loss of his mother's garden and the delight of his less ingenious comrades. When 14 years old, he was bound out to serve an apprenticeship in the Gould Iron Works, one of the largest in the Dominion, and when 19 years of age had filled every position in this concern from the moulding room to the office of master mechanic. The following four years found him on the a Northern Railroad as engineer of the "Reindeer." At the closer of the war, he came to the United States, locating at Detroit, Michigan, where he soon became chief engineer of Ward's Steamship Line, running between Detroit and Mackinac. The owner of the line was largely interested in the lumber business along Lake Huron, and he placed Mr. Campbell in charge of his mills. From that time he made saw-milling his constant study and has built some of the best mills in Michigan, Wisconsin, Ohio, Florida, Georgia, Alabama, Mississippi, and the Pacific Coast. He has exercised his ingenuity in making numerous improvements in mill machinery, on which he holds over thirty patents. These include a gang edger, slasher, head block, steam feed, conveyor, saw girders, canting gear, live rolls, engines, etc. These inventions are well represented in the equipment of the Bridal Veil mill. He was the first to put many labor-saving devices into successful operation on this Coast. Previous to coming West, he was for may years superintendent of the Mariette Iron Works, of Mariette, Wisconsin, and later, of the A.F. Bartlett Iron Works, at Saginaw, Michigan. In 1887, he located in Portland and shortly after became President of the Park & Lacy Machinery Company, selling out his interest in 1891. Since then, he has planned and built the fine mill owned by Governor Pennoyer in Portland. He came to Bridal Veil in the early 1900's.(Oregonian, January 4, 1926)

M.F. DICKSON

M.F. Dickson, who is the foreman of the saw-mill, is a native of Oregon, having been born in Washington County, near Forest Grove. His boyhood was spent upon the farm and his experience in saw-milling dates from the age of 18, when he was engaged in the mill of Lee & Laughlin in Washington County. This mill, in which almost all the work was done by had, bears a very slight resemblance to the one Mr. Dickson now superintends with its labor-saving devices and modern equipment. After that, he was engaged in different lumbering concerns, among them, the McClure mill and Perkins & Co., various short intervals being spent on railroad work and as a carpenter. In 1886, he moved to Vancouver, Washington, securing employment in the Lucia mill, operated by L.D. Palmer. The latter moved to Bridal Veil in the following winter and commenced the construction of the mill, where he was followed by Mr. Dickson in July, some time before the completion of the work.. He was placed in charge of the crew of men engaged in building the mill, and when the plant was ready for operation, he took position of edgerman. In September, 1888, he was advanced to the present position of mill foreman. (Bishop:12)

CHARLES S. DODGE

Charles S. Dodge, the efficient foreman of the section crew on the logging railroad, operated by the Apex Transportation Company, was born 39 years ago at Webster, Massachusetts. His parents moved to Salem, Oregon, when he was quite young, and at fourteen years of age he started out to make his own way in the world, being about Salem most of the time until 1885. At this time he went to California, Nevada, and Washington, engaging in various pursuits. In 1888 he commenced to work for the Oregon & Pacific R.R. at Yaquina Bay. He was foreman of a stevedore crew for a year and the following fifteen months was station master at the same point. The three succeeding years found him as section foreman on the same road. He then went to Cascade Locks, where he had full charge of all track laying work in the yards till the completion of the Locks. In May, 1896, he came to Bridal Veil to become foreman of the crew on the railroad. The steep grade and numerous curves renders it a difficult road to keep in repair, but by his superior knowledge of such work, "Shorty" is enabled to maintain it in first-class condition. (Bishop: 15)

L.G.GURNETT

L.G.Gurnett, for many years identified with the paper industry in this section, was killed at Portland, Maine in an automobile accident. Mr. Gurnett since leaving here about 1905. had been interested in paper concerns in Maine, and at the time of his death was financial manager of the Brown company at Portland, the largest producer of pulp in that section. He was about 70 years of age.

Gurnett was a native of New York, came to this section shortly after the establishment of the old Willamette Pulp & Paper company plant, now the Crown Willamette plant, at West Linn in 1888, and became manager for the company. Mr. Gurnett was with the Willamette plant until about 1892. He afterwards built and operated a mill at Bridal Veil. This mill was later sold to the Crown Columbia concern and the machinery moved to Camas, Washington. After leaving Bridal Veil, Mr. Gurnett went to East Bangor, Maine, where he was associated with the Eastern Manufacturing company. Gurnett left Oregon in about 1906; he had been interested in paper concerns in Maine, and at the time of his death was financial manager of the Brown company at Portland, the largest Shortly afterwards he became connected with the Brown company with which concern he was associated until the time of his death. Mr. Gurnett owned a large ranch at Rodeo, New Mexico and it was there that his family lived. About two years ago he was a guest of Mr. Thompson at 1063 Westover. (Oregonian, April 17, 1931, p. 1

A.M. "OLE"HAGEN

Hagen was a veteran Northwest lumberman. He went with the Bridal Veil Timber company when the firm was organized in 1922. He served as general manager until the operation was finished in 1937. Hagen was associated with the Booth-Kelly firm at Springfield and with the Carlisle Lumber company at Onalaska, Washington. Hagen then joined Timber Structures, Inc. but retired because of failing health and recently conducted a consulting engineer business in sawmill design and structure. He died at 76 years of age. His home was located at 1953 N.W. Flanders street in Portland.

WILLARD P. HAWLEY, SR.

Willard Hawley was a leader in the paper industry in Oregon and in the west, and was responsible for many improvements in the manufacturing processes. At one time, just before his retirement from business because of illness May 2, 1929. Mr. Hawley was president of the Hawley Pulp and Paper company , the St. Helen's Pulp and Paper company and the Affiliated company, the California Bag and Paper Company. He came to the west all alone and rose in the leadership through ability and work. Hawley was born February 28 1856 in New York, the son of a retired Civil War war veteran. His mother's name was Emma Holden whose family lived in Middlebury, Vermont. Hawley remembered being so poor that the children in the family would wear worn out soldier uniforms from the Civil War. He lived in Maine until he was 16 years old, when he went to California with an emigrant train. Hawley learned the paper mill business form a wealthy man named Clark Weed. For a dollar a day he was taught the business of making news paper and wrapping paper. The heat in the mill caused him to have health problems so he moved to California. He received his first job in a paper mill in Stockton, California, the beginning of his notable career in the paper business. For many years he managed mills in California, developing new methods and improvements. While working in the mill he met and married Eva Adele Pusey, whose family had been in the paper making business in England for over 200 years. Hawley moved to Oregon and in 1882 became superintendent of the Crown-Willamette company which produced eighteen tons of paper a day. He employed forty men. Hawley became president of the company and purchased the California Bag and Paper Company, which was affiliated with the St. Helen's Company. His principal hobby was paper making though in his earlier years he was interested in historical research and traveling. In 1908 he purchased the site of the old Portland Flouring Mills at Oregon City, and also acquired the power rights. Hawley was a member of the Episcopal Church. At the time of his death he was 75 years of age. He was survived by his wife and one son, Willard P. Hawley and a brother Henry H. Hawley. He died December 2, 1931. (Oregonian, 1/12/31/p.2)

JAMES A. HENNAGEN

James A. Hennagen was born in New Brunswick in 1871. He spent his first sixteen years on a farm, and then went to Maine, where he worked in a saw mill on the Kennebeck River for a year. The next four years found him in Minnesota, logging and river driving, and he then went to Humboldt County, California, where he spent six years in the redwood camps. His next move was to Butte County, California. After two years in the pine timber there he came to Bridal Veil in 1890. He has worked here continuously since then as hood tender and building skid roads, part of the time being in the employ of Brower and Thompson. By faithful work he as obtained a reputation as a boss "skidder" not equaled by any one on the mountain. (Bishop: 15)

W.G. HICKS

Willis G. Hicks, the engineer in charge of the big "bull donkey" which furnishes the power for the new logging system on the mountain, was born at Conneaut, Ohio, in 1864. His experience with a steam engine dates from an early age, as he took charge of a small engine

running a brick machine for his father, when only 18 years old. In 1885, he went to Jefferson, Ohio, and for a year and a half ran a fifty horse power engine in the planing mill of George H. Sheldon at that place. The next season found him as a fireman at the canning factory of D. Cummins, Conneaut, and in 1887, he removed to Oregon. He accepted a position as engineer of the Cranston Milling Company, in 1890, where he remained till the company sold out a year later. The following year and a half he spent in Idaho, being engaged there as an engineer. On returning to Oregon in 1893, he found employment with the Bridal Veil Lumbering Company y and in February, 1894, he was placed in charge of the yarding donkey, which position he held till October of this year, when he was promoted to his present position of engineer of the new bull donkey.(Bishop: 12)

H.H. HOLLAND

Holland was a prominent in the timber and lumber industries of the Pacific Northwest for more than half a century. Mr. Holland was born at St. Clair, Michigan, October 1, 1876. He was reared at Saginaw where his father operated a sawmill when that city was a lumber capital of the world. In 1897 he left for the Klondike but got no further than Seattle where he went to work in a sawmill. After serving in the Philippines with the 2nd Oregon Volunteers, he teamed up in the lumber business with the late Charles Briggs and Bob Noyes.
The firm first operated near Rainier and later expanded to other parts of the Northwest, with Mr. Holland doing most of the cruising and buying of timber. He worked through Oregon, Washington, northern California and Idaho. The firm had the Bridal Veil Lumber Company on the Columbia River for many years. The Noyes-Holland Logging Company operated the famed Kerry logging railroad. Later, M. Holland became associated with the late Orville Miller and after 1942 had direct charge of the Mt. Jefferson Lumber Company which had mill and logging operations at Lyon on the Santiam River. Mr. Holland was a life member of the Arlington Club. He also was a member of the Multnomah Club, Waverly Club and the AAA. (Oregonian, December 11, 1959, p.32)

WALTER HORTON

Recollections of Walter R. Horton: " It was the fall of 1889 when my brother Alva and I moved form the boarding school of the "Sisters of Charity" in Vancouver, Washington, to the Moore boarding house in Bridal Veil, Oregon. I was seven years old then and Alva was one and a half years older. Our father worked in the paper mill at Bridal Veil, Oregon. We had no mother. Bridal Veil was a thriving mill town. Both the paper mill and the lumberyard and mill were operating. (Horton)

LEONARD KRAFT

Leonard Kraft was the president of Bridal Veil Lumber and Box Company. He.was born in Chicago on September 1, 1911. Kraft was a nephew of the director of Kraft Foods Company. He was a member of the board of trustees of Lewis and Clark College, the Arlington club and was a member of Bridal Veil Lodge No. 117, AF & AM. He was a resident of Portland for 30 years. Kraft was a member of the board of trustees of Lewis and Clark College, the Arlington Club and of Bridal Veil Lodge No. 117, AF & AM. He died at 59 years of age. of a virus infection he contracted while vacationing in Memphis, Tennessee. He was survived by his wife Annette and two sons, Charles E. and Gerald T., and a daughter Leanne. He lived at 12717 SW Terwilliger Blvd. (Oregonian, October 8, 1970, p. 14.) (Oregonian October 13, 1970, section 3, p.9, c.8..

MR AND MRS. HENRY LATOURELL

On the occasion of their 77th Anniversary in the Pioneer Gorge Home.On September 7, 1879, a young man and woman who had lived with their families in the same settlement in the Columbia River gorge, decided to get married. They climbed into a rowboat on the Columbia and rowed upstream to be married in a town in Washington near what is now Stevenson.
They returned to Latourell Falls, and Mr. and Mrs. Henry Latourell have lived there ever since. In 1956 at the time the article was written, Mr. Latourell was 996 years old dn his wife was 98, but their memories are very clear.
"The river was our road in those days," Mr. Latourell said. "Going to Portland was a big journey--two days by boat--and we didn't go very often. Maybe once or twice a year. Today the highways bisect the gorge, but the community of Latourell Falls has not changed tremendously with the years. Leaving the old Columbia River highway, it is reached over a winding road and its few old houses and two or three roads seem to take a traveler back to a quit land of yesterday, a time when such little settlements in the wilderness formed almost their own world and contact with other places was slight.
The community was founded by Latourells father, a sailor known as "Frenchy" Latourell. Latourell was born there and his wife came there with her family by boat when she was 19.
Her husband to be lived with his parents on a farm near their present home. When she first came to the community, Mrs. Latourell lived with her family in a log cabin near Larch mountain and got a job as tutor to Latourell, two years her junior. A couple of years later, when she was 21 and he was 19, they were married.(Oregonian 10/9/1956, p.1)

JOSEPH LATOURELL

Joseph Latourell came to the region in 1857 at 23 years of age. He was born in Kessville, New York. He sought a farm and one that was close to nature. The beautiful falls which became known as Latourell falls became his home. He obtained a land grant and soon was raising cows, sheep, chickens, and horses on the land between the falls and the river. Ten years later in 1869 he married Grace Ough, who was born in Tualatin country in in 1843, daughter of a trader employed by the Hudson's Bay company. Mr. and Mrs. Latourell had eight children.
Latourell gathered a colony of settlers around him into a village of about 60 people. To find employment the men of Latourell work in the mill at Bridal Veil, a few miles beyond, or upon the railroad, or the highway, or kindred properties. Joseph Latourell died November 3, 1911 and his wife died March 6, 1917. At the time of his death only a daughter, Mrs. Alice J. Courter lived in Latourell. (Oregonian, March 24, 1929)

GEORGE M. LEASH

George M Leash was a mechanic for the lumber mill at Bridal Veil. Born in Teagarden, Indiana, June 15, 1874, he had lived in Portland for 30 years. Mr. Leash was a member of the Elks Lodge. At the time of his death he lived at 15140 NE Sandy Blvd. and was married to Anna M. Leash. (Oregonian, June 29, 1966.]

JOHN MARTIN LEITER

John Martin Leiter was real estate investor and timber broker.operator. Mr. Leiter , for a number of years was superintendent and general manager of the Bridal Veil Lumber company and more recently engaged in the real estate and timber business in Portland. Leiter was 75 years of age when he died and for 18 years had been a resident of Portland.
Mr. Leiter had a heart attack while talking with guest at the home of his daughter, Mr. G.J. Newell. He had just returned from a meeting of the Royal Arcanum lodge, of which he was the oldest member in the state . Leiter was born near Miamisburg, Ohio. January 24, 1850. After working at various occupations in his boyhood and young manhood he formed the firm of J.M. Leiter and Company in the lumber business at Wapakonta, Ohio in 1869. Several

years later (1883) he became a member of the firm of Foss Belter at Bay City, Michigan engaged in wholesale lumber and logging operations.
Leiter sold his interests in Michigan in 188 and like many other lumberman in search of a new location, turned toward the vast timber resources of the Pacific Coast.He came to Oregon in 1890, bought an interest in the Bridal Veil Lumbering Company. He soon became superintendent and general manager of the Bridal Veil Lumber company at Bridal Veil. He sold his interests there about 16 years ago and since that time had been living in Portland and engaged in real estate and timber business. He was active in the Chamber of Commerce and in various enterprises and a life long member of the Republican party, the Royal Arancum, he also was a member of the United Artisans and the Lang Syne society. He had been a member of the Royal Arancum for 45 years and in addition to being the oldest member of the lodge in Oregon, he was one of the oldest members in the country. At the annual picnic of the Royal Arcanum, tow years ago held on the farm of Rufus C. Holman near Molalla, a large yew tree was dedicated to Mr. Leiter in recognition of his long membership.
Leiter was survived by his son, O.C. Leiter, managing editor of the Telegram, a daughter , Mrs. Gilbert J. Jewell and a brother Joseph A. Leiter of Hillsboro. His wife, Adele Leiter died and a son Rufus Leiter died three year prior. (Oregonian, January 21, 1926, p.3)

FREDRICK LEO "FRITZ" LUSCHER

Luscher was considered by Gorge residentS as the last of the Gorge pioneers. Luscher was born December 27, 1895, and until his death June 23, 19- he lived on a homestead taken up by his father, Fredrick Luscher, near Bridal Veil. The original 200 acre homestead included what is now Rooster Rock State park. For many years Fritz Luscher ran the Bridal Veil Dairy, and as late as 1920, Union Pacific passenger trains stopped at the farm to take milk and eggs to Portland, Troutdale and Cascade Locks. The family house stood about 300 feet from the Union Pacific Railroad track but about 50 feet higher.The Union Pacific gave him a pin several years before his death. His greatest hobby was signaling to the railroad people. he always waved to the crews. He had a chain over his bed and at night he switched on the light to say "hello" to them. Even yet every engine blows it horn as it passed by. Luscher said Fritz's father came from Switzerland as a bachelor and after establishing his homestead wrote back to Switzerland for a bride. He was married for 43 years to the woman who answered his letter. They had 10 children. Friends of the family said two brothers and sisters died of diptheria within in week in 1894.

The first home in which Fritz Luscher lived had a dirt floor. In 1913 a bigger house was built but it burned down and in 19;20 a smaller house was constructed. it still stands. A barn built in 1876 also still stands. It was part of the dairy until Fritz Luscher gave up farming lin 1973. Indians often knocked on the door of Fritz home when he was boy and asked for flour and sugar. Our grandmother always gave it to them. The Union Pacific track and the Columbia River Highway were built through the homestead. Rooster Rock State Park was carved out of it. When Fritz died only about 15 acres were left. At one time the gorge pioneer had run cattle on an island in the Columbia and in the hills on the southern edge of the gorge,, all part of the homestead. For years Fritz Luscher used a team of horses to drag nets out of the Columbia for fisherman. Fritz also helped build the highway for $4 a day for himself and $8 for a team of horses. All of the money went to his father. Fritz Luscher was married about 50 years ago, but the marriage ended in divorce, about 1930. There were no children.

KATE M. NEPPACH

Kate Neppach was a native of the Pacific northwest. She was born at Vancouver, Washington. She was a daughter of the late Louis and Tirsa Sohns, pioneer residents of that place. At the time of her death on March 27, 1924, she was survived by her husband Anthony Neppach; a brother Louis Sohns or Portland and three sisters. She lived in Portland for 28

years prior to her death. The family residence was located at 255 North 25th Street. Oregonian March 27, 1924 p.4

CHARLES ,S PALMER

Charles S. Palmer, the son of O.A. Palmer, was born in Springfield, Dakota in May 1876. When quite young he moved to Vancouver, Washington, with his parents, where he went to school till 1888. The family then moved to East Portland, and he continued at school in that city until the death of his mother in 1890. In that year his father came to Bridal Veil and he commenced work in the woods where he has been employed every since. His hard, faithful work was appreciated by the company and he has recently been advanced to the position of engineer of the yarding donkey. (Bishop:16)

LORING CURTIS PALMER

Palmer was the President of the Bridal Veil Lumbering Company. He died in less than two years after retiring wealthy from the lumber business, in which he was engaged at Bridal Veil, Oregon, Loring Curtis Palmer, 66 years old and a veteran of the Civil War, who marched with Sherman to the Sea, died at his beautiful home overlooking the Columbia River three miles east of Vancouver, Washington. He had not been well for six months when he suffered a paralytic stroke.

Palmer was born in Clinton County, Iowa, June 9, 1846. When but 17 years old he joined the third Wisconsin Volunteer Infantry in 1863, and served until peach was declared. He fought in many famous battles, including Resaca, Kenesaw Mountain, the siege of Savannah, the fall of Atlanta and was with General Sherman on his march to the sea. After the war he went to the Dakotas and married Miss Catherine A. Judd. He then engaged in the same business in Nebraska. and came to the Coast, locating n Vancouver in 1880, For six years he controlled the lumber business of that city, owning one mill and managing another, there being only two in the city at that time. He sold his interests in Vancouver in 1887,and moved to Bridal Veil. which then had nothing to distinguish it from the surrounding wilderness. A large body of tine timber was known to exist on Larch Mountain, but the experts of a mill company who had already examined it, reported that the timber was inaccessible and could never be brought out. Undaunted by this adverse report, Mr. Palmer organized a company for the purpose of building a mill on the mountain and a flume to transport the product, a proceeding which was looked upon by many as a reckless experiment. After founding the Bridal Veil Lumber company, J.S. Bradley and J.M. Leiter and others later became interested. About six years ago he sold his interests and came back to Vancouver two years abo and built a mansion on the north bank of the Columbia River, three miles from Vancouver. He had just completed this and was beginning to enjoy his declining years when he was taken ill. HE is survived by his wife and six children, four daughters, Mrs. W. H.Hudson , Mrs. G.W. McMillan, Misses Elsie and Hazel Palmer, and two sons, Clarence and Faust Palmer at home. (Bishop:10)(Oregonian 2/8/1912:10)

O.A.PALMER

Palmer was the Manager of the Apex Transportation Company. He was born in Iowa but his family moved to Wisconsin when he was quite young. His boyhood was spent on a farm in that State. In 1870 there was a strong tide of emigration towards the West and under its influence he moved to Dakota, where he engaged in farming on an extensive scale. Later, various kinds of business occupied his attention, among them carpentering, moving buildings, and freighting for Government posts along the Missouri River. After spending eleven years in Dakota, he again moved westward, locating this time at Vancouver, Washington. He was in the dairy business for a time at this place and after that ran a camp supplying logs to the mills of L.C Palmer. He moved to Bridal Veil in July, 1886, while the mill was in course on

Thompson,the President of the Apex Transportation Company.He was born January 16, 1846, at Killingsworth, Middlesex County, Connecticut of Scotch-English parentage. His father, who was a manufacturer, moved to Illinois with is family in 1858. was a civil war veteran and the postmaster of Bridal Veil, Oregon. He was commissioned aide-de-camp on the staff of the commander in chief of the Grand Army of the Republic. When he was 16 years of age, Mr. Thompson, on July 4, 1862, enlisted as a private in C company, 67th regiment of Illinois volunteer infantry. He was discharged at Chicago three months later, but shortly after he enlisted as a private in Renwick's Elgin battery, afterward known as the 5th Illinois light artillery. He transferred September 1, 1873 at Louisville, Kentucky as a private in A company;s 17th regiment of the veteran reserve corp. Mr. Thompson also saw service in the navy, transferring June 4, 1864 at Cairo, Illinois as an ordinary seaman in the Mississippi squadron. He was later appointed acting master's mate and resigned April 7, 1875. He came to Portland from Rockford, Illinois, in 1882, in company with Orlando Clark, and established the Portland Iron Works. In 1888, he sold his interest and engaged in the Lumber industry with George W. Brower, at Brower, Oregon, becoming manager of the business. In the spring of 1896, Mr. Thompson with others organized the Apex Transportation Company. MR. Thompson was a member of George Wright post, No.1, G.A. R. Department of Oregon. (Oregonian February 1, 1921, p.5.)(Bishop:13)

ULCID SICOTT

Uclid Sicott, assistant hook tender for the yarding donkey, was born in Canada, in 1869, of French Canadian parents. He did not understand English till he moved to Nebraska, where he worked two years on a farm. At the age of 21 he moved to Portland, working there a year, and then went to a logging camp on the lower Columbia. In 1893 he entered the employ of the Bridal Veil Company, where his diligence won him his present position, which calls for discretion and care as well as hard work. (Bishop:15)

MRS. E.H. THOMPSON

Mrs. Thomson, age 63, wife of E.H. Thompson of the Bridal Veil Lumber Company died in 1910. For several years prior to her health , Mrs. Thompson had been an invalid. She was active in the First Methodist Episcopal church. She was married to Mr. Thompson in Jeffersonville, Indiana, May 14, 1866. Mrs Thompson was a resident of Oregon for 37 years, coming here from Rockford, Illinois.

MACK TRIMBLE

Mack Trimble, the deservedly popular blacksmith of the Mill, is a native Oregonian, having been born in Douglas County, in 1858. He lived in Canonville until thirteen years of age, when his family moved to a farm in Josephine County, where his boyhood days were spent. He has been associated with blacksmith work since early youth, his father having run a shop in connection with his stock business. At the death of his father, the oldest son took charge of the shop and Mack, with another brother, worked under him. Later, two years were spent in tunnel work on the Southern Pacific Railroad, when that line was being built in Oregon but since 1884 he has worked continuously at his trade, six years of that time being spent at Smith River, Del Norte County, California, where he was in business for himself. He worked for the Oregon Transfer Company in Portland for a year and from there he came to Bridal Veil, where for six years he has had charge of the shop at the mill. A resemblance to a certain prominent statesman has been traced in the genial countenance of the blacksmith, but be that as it may, it is certain that the former cannot manage affairs of the government any better than the latter does his shop. (Bishop: 14)

FRANK WILMOT

Wilmot was 78 years of age at the time of his death. Born July 26, 1862 , in Fenton, Michigan, Mr. Wilmot came to Oregon in 1889. For 15 years he was employed in Bridal Veil at the old O.R and N. R.R. , now a part of the Union Pacific system. In 1903 he came to Portland to enter the timber business. Eleven years later he purchased the controlling interest in the Pioneer Paint company later sold to the National Lead Company.. He continued as local retain manager until failing health demanded his retirement. He was a member of First Presbyterian church, Masonic lodge, No. 55, A.F. & A.M. and was past grand regent of the Royal Arancum of Portland, having been an active member for nearly 5 50 years. He was survived by his widow, Maud E. and a son Leonard F.. He lived at 2438 N.W Johnson Street Oregonian 6/9/1940

ALFRED L. WOODWARD

Alfred L. Woodward was born near the Cascades in 1864. At the age of seventeen he left home and commenced work on a steamboat running out of Portland. After two years of this he became a track walker on the O.R. and N. R.R., remaining in this position until 1887, when he went to Latourell Falls. He was one of the organizers of the Latourell Falls Wagon Road and Lumber Company, and assisted in building the road to Brower. In the fall of 1888 he accepted the foremanship of the Brower and Thompson mill, remaining there till the business closed in 1894. Shortly after commencing work for Brower and Thompson, he was married to Amelia E. Campbell, of Scappose. In June, 1896, he became edgerman at Bridal Veil Mill, the duties of which position he executes in an entirely satisfactory manner. (Bishop:15)

MAGGIE ALICE YOUNG

Maggie Alice Young was born at Gillett, Oconto County, Wisconsin, on March 2nd, 1879 and lived at that place until her parents moved to Vancouver, Washington, in 1890. Here she attended school till July, 1896, when she came to Bridal Veil to take the position of assistant to the cook at the camp boarding house. She has here performed her duties to the satisfaction of all concerned, which is greatly to her credit when it is considered how many there are to please. (Bishop:16)

OTHER BRIDAL VEIL PIONEERS MENTIONED IN HORTON'S BOOK

Charlie Bell-depot agent retired when Frank Wilmot moved in.

J.S. Bradley-joined company as General Manager in 1889. Superintendent of first Sunday School.

Mrs. Bradley-more influential tthan any other person. Always kind.

Orin Brooks-operated Jumbo

Dixon-foreman at Palmer sawmill. Three children-Chaarlie, Arthur & Lillian.

Jess Everhart-operated Peggy

Bailey Gatzert-Columbia Riveer sternwheeler

Alva,Walter, and Louis Horton-lived with widowed father at Bridal Veil.

Norton Curtis Judd- wood forman, married Gussie Moore in 1903.

J.M. Leiter-joined company as secretaary and Manager in 1890.

Marie Luscher Livisee-first girl born in the locality. Married Percy Livisee.

Fred Luscher-took up homestead in 1883. Married Anna B. Zuercher.
Amasa Moore-carpenter and bridge builder-built the boarding and rooming house for the Moores. Built the first bridge across the Santian River and also across Sullivan's Gulch in Portland.
Charlie Phillips-drowned in the river.
Rose Phillips-sister of Charlie Phillips. Married Frank Devroy.
Frank Preston-foreman of dry shed. Married Elba Warren and they bough the Ben Luscher place.
Tom Small-relation of Mrs. J.S. Brrradley. His two nieces Ruth and Louise Small lived with the Bradleys.
Frank Wilmot-depot agent at Bridal Veil.

Amos James Moore-took out homestead along the Columbia River. Built first house in Bridal Veil. Built houses for Pusey family, Willard Hawley and Harris Hawley.
Marcene Maple--sister of Amos James Moore

HISTORIC COLUMBIA RIVER SCENIC HIGHWAY

For generations American tourists have been traveling to Europe, returning with great enthusiasm over the many beautiful places they have seen or visited. Those among the fortunate to travel these distances have viewed the beauties of France and countryside of Britain, or have looked down from the heights of the mountain roads of Switzerland and Italy. Stories of splendid roads, unspoiled vistas, and scenic beauty have inspired others to seek the thrill of such a holiday, travel the beautiful highways, and view the scenery.

European roads have always been portrayed as some of the finest examples of road building in the world.It was only after the turn of the century that Americans came to realize that there is in the United States scenery more beautiful, more inspiring and a more accessible than anything in distant places. One of the most scenic assets of the Pacific Northwest went relatively unnoticed until the some men with vision saw the potential for building a wonderful paved roadway through the Columbia Gorge--one that incorporated some of the best engineer skills available. The great Columbia River Highway takes the traveled along the Columbia river shore, along overhanging cliffs, past filmy waterfalls, across canyons and around the base of shouldering mountains, with the marvelous panorama of the Columbia Gorge ever in view. In all the world there are few things to be compared to this.

The Columbia River Highway was designed to open the door to the treasure box to the beauty and grandeur of the gorge and the mighty Columbia River. The early history of travel long the banks of the Columbia was a history of hardship endured by courageous men and women who were inspired by the stories of Lewis and Clark. They pioneered their way way, telling stories filed with romance, suffering, and hardship.

Actual work of the Columbia River Highway was begun in August of 1913, when the County Commissionaires of Multnomah County (Portland) engaged Samuel C. Lancaster, a noted engineer, to make surveys for a road to run from Portland to the eastern live of Multnomah County. Mr Lancaster, anticipating the Panama-Pacific Exposition, was to have the first fifty mile stretch of road completed before the great travel to San Francisco, a fair portion of which Portland expected to get either coming or going to the exposition. MR. Lancaster and the county Commissioners, decided that the best modern practice should be followed in building a road suited to the times, the traffic and the place. Such a road had to have a minimum with of twenty four feet,with extra width on all curves, no radius less than one hundred feet and a maximum grade of five percent.

Work was accomplished at a cost of over one million dollars and Mr.s Lancaster had the satisfaction of witnessing the official opening on July 6, 1915.

The the first great section of the Columbia River Highway was open to the public. Another and longer stretch of the highway, extended form Portland to the Pacific, a distance of one hundred and ten miles. When work was completed on the roadway to Pendleton in eastern Oregon, the Columbia River highway was paved for its full length of three hundred and seventy miles.

In the spring of 1856 a wagon road was built from Bonneville to Cascade Locks, a distance of about six miles. It was not until the fall of 1872 that the Oregon Legislature appropriated $50,000 to build a wagon road form the mouth of the Sandy River in Multnomah County, through the Columbia River Gorge to the city of the Dalles. Within a short time the funds appropriated for building the road were exhausted. Four years later the Oregon Legislature appropriated another $50,000 to complete the road bed. The early roadway was very narrow and was designed with many sharp curves and steep grades, in order to accommodate the terrain of the Columbia River Gorge and the hills of the Cascade Range. The Columbia River Canyon was considered so rigged that no attempt prior to 1913 had been made to build a permanent road because it was almost deemed impossible.

The Cascade Mountain Range is unbroken from British Columbia to Mexico, except in three places--the Fraser River in the North, the Columbia River between Oregon and Washing, and the Klamath River between Oregon and California. It is along the Columbia River route that the Columbia River Highway was guilt--a highway recognized as one of the most scenic attractions of the Pacific Coast. The magnificent gorge of the Columbia River provides some of the most spectacular scenery in the word.

In 1862 the first railroad line was constructed through the Cascades along the Columbia River between Bonneville and Cascade Locks. The Oregon Pony, a small steam engine, provided the power for the railroad. In 1883 the Oregon-Washington Railroad and Navigation Company constructed their railroad line along the southern bank of the Columbia River, following the old wagon road which had been constructed thirty years earlier between The Dalles and the Sandy River.

In 1910 Henry Wemme, an automobile enthusiast from Portland circulated a petition to have a road built from Bridal Veil Falls easterly to the Hood River county Line. Their early plan called for a narrow road with many sharp curves and a road grade of up to 9 percent. By 1912 less than two miles of the road had been constructed east of Bridal Veil Falls. This section was relocated two years later to conform to state highway standards that said a roadbed needed to be 24 feet wide.

At the same time Governor Oswald West began using convicts to help build roads throughout Oregon. Simon Benson donated $10,000 to help build a road around Shell Rock Mountain in Hood River County. Convict labor was used to help construct the Shell Rock Mountain road.

Gradually more interest was drawn towards the need to construct a road along the Columbia River.

In 1912, Samuel Hill began to advocate for the building of a scenic road or highway along the banks of the Columbia river. As an advocate of the good road movement, Hill joined with his friends, C.J. Jackson, publisher of the Oregon Journal, Simon Benson, a wealthy lumberman form Portland, John B. Yeon, a prominent citizen of Portland, and Rufus C. Holman, Multnomah County Commissioner and other individuals interested in a project of this magnitude.

Encouraged by their support, Hill was convinced that if a highway were to be built, it should be constructed in the best possible manner. Hill took Samuel C. Lancaster, an employee of the road department of the United States Government and a Major H.L. Bowlby, a well known engineer, to Europe to observe the building techniques used in constructing roads in Switzerland, Italy, and France. Upon their return, Lancaster was appointed consulting engineer of the Columbia River Highway. John B. Yeon, a made who had made his personal fortune in the timber industry, was appointed roadmaster without pay.

John Yeon started his work in the fall of 1913 and for two years he diligently carried out his work on the highway. Simon Benson, who had accumulated his wealth in the logging operations in the Pacific Northwest, helped finance the construction. He also purchased the 300 acre Benson Park and gave it to Multnomah Country. Multnomah Falls and Wahkeena Falls were included within the park boundaries.

The state highway department was also created in 1913 and they soon became active participants in the project. Samuel Hill continued to exert his influence by inviting members of the legislature to come visit him at his magnificent estate on the Columbia River. He also used the occasion to educate the legislature about the importance of a quality state road system. The State Highway commission was thus created.

Multnomah County initially spent $750,000 in the construction of the Columbia River Highway. The county then voted a bond of $1,250,000 to pay for its share to hard surface the Columbia Highway and other trunk roadbed. Money for grading the road and building the concrete bridges was raised by direct taxation. Over 649,632 square yards of pavement were used to surface the road at the cost of $1,039,131.80. The total cost of the highway in Multnomah County was approximate $1,500,000. The cost of the Warrenite pavement was approximately $15,000 per mile.The project was completed without the assistance of any state or federal aid.

For the first fifteen miles east of Portland, the Columbia River Highway meanders through a fertile farming countryside. After crossing the Sandy River, a roadway was cut through a rocky bluff more than 200 feet high. It then begins its gradual ascent along the Columbia

River where it climbs to Crown Point, an elevation of 700 feet above the river. The bluff on which Crown Point is located is very steep. When work was started on this portion of the road it was necessary to suspend the working men with ropes until a foothold was reached. A 24 foot wide niche was cut into the bluff so the road could wind it way gracefully around the bluff. On a clear day from the top of Crown Point you can look up the gorge for thirty-five miles or down the river fro twenty-fives miles to view where the Willamette River empties into the Columbia River.

From the majestic vistas of Crown Point,t he road meanders around through the bluffs to Latourell Falls. Latourell Falls is 100 feet high and 240 feet long. From Latourell Falls Bridge to the next bridge at Sheppard's Dell is one and a half miles. After leaving Sheppard's Dell, the road winds past Bishop's cap to Bridal Veil Falls. At Bridal Veil Falls, a bridge which is 110 feet in length, courses directly over the falls. From Bridal Vel the road takes you other waterfalls,past Benson Park, to Wahkeena Falls, and then to the famous Multnomah Falls.

Multnomah Falls, more than 900 feet high, are the second highest waterfalls in the United States. Two miles beyond Multnomah Falls is the next point of interest, Oneonta Gorge. The Gorge is formed by two walls of solid rock several hundred feet high--a waterfalls is located one and one-half miles up the gorge and is accessed by climbing through the narrow fissure cut in the rock. One-half mile further along the Columbia gorge Highway is Horse Tail Falls, with its continue spray that keep the roadway moist.

The Columbia River Highway was completed in 1917. Access to a paved road gave the local people greater access to other nearby communities. Prior to the opening of the Highway, the Bridal Veil community was dependent on either the railroad or boats for transportation.

Today the Columbia River Highway extends from Seaside through the Cascades and into eastern Oregon.

COMMUNITY DEVELOPMENT IN THE COLUMBIA GORGE

CORBETT, OREGON

Corbett, in Multnomah County, is located on the Columbia River and the O.W. R & N. Co. With the coming of the Columbia River Highway, the city grew. Formerly the town was known as Taylor. Taylor and his wife crossed the plains to Oregon in 1852. They took up a donation land claim nine miles east of Vancouver, on which the Hudson's Bay Company had built a sawmill in 1835. In 1863 Taylor sold his claim to Capt. Lewis Love, who built a grist mill on the site of the old Hudson's Bay mill. In the 1860's Taylor would take produce to Portland in a scow. Later he owned and operated a side-wheel steamer called the Minnehaha. In 1875 a school was opened which stood where the Chanticleer Inn was later built. In 1884 Taylor gave the school district an acre of land and a school house was put up where Corbett grade school is located. Taylor's Landing post office was established in 1884. In 1888 the first store opened. Corbett was 22 miles form Portland by trail. Early settled did their trading by walking in over the trail by way of Powell Valley, through the heavy timber to Portland.

HOOD RIVER, OREGON

Hood River, which lies sixty-six miles east of Portland is located on the Columbia River, the Columbia River Highway and the O.W. R.R. & N Company line. W.D. Laughlin and Doctor Farnsowrth moved from The Dalles in 1852 and Mr. Laughlin took up the land on which the town of Hood River was later built, as his donation land claim. Laughlin moved back to The Dalles in 1853. In 1854 Nathaniel Coe, with his wife and four sons took up the claim. Coe built a log cabin and four years later built a larger home.When the Coes took up residence they changed the name of the river from Dog River to Hood River, which previously had been named Labieshe's River by member of the Lewis and Clark expedition. The Indians called it Waucoma, because of the cottonwoods that grew near the mouth of the river. The coming of the railroad caused the founding and growth of Hood River. The first store to be built inside the limits of Hood River was a general merchandise store built by John Parker in July, 1881. The second building was the Mount Hood Hotel, built by T.J. Hosford in August, 1881. The townsite of Hood River was platted in the spring of 1881. It was not a logging community.

MOSHIER

The town of Mosier on the Columbia River was also locateed on the main line of the O.W. R & N. Co. It was the first town you came to after leaving Hood River for The Dalles. The town of Mosier is located on the donation land claim of Jonah H. Mosier. Jonah Mosier was born in Pennsylvania, went to the California gold mines in 1849 and worked as a millwright, iron worker and carpenter. From California he went to the Willamette Valley and in the fall of 1852 he came to The Dalles. In 1854 he took up land on what is known as Mosier Creek. He put in a sawmill and operated the mill by water power. He built a landing which was known as Mosier Landing in the old steamboat days. He cut about 4,000 feet of lumber a day and sold it to the Dalles at $25 to $50 a thousand. He built a scow operated by a sail when there was no wind, by sweeps, in which he took his lumber to The Dalles. High water washed the mill away. Mr. Moshier rebuilt the mill and it was washed away again. In 1868 his third mill was washed away so he quit the sawmill business and became a stock-raiser.

LYLE, WASHINGTON

Lyle was located along the Evergreen Highway and the S.P. and S. Road, near the mouth of the Klickitat River. In the spring of 1878 James O. Lyle purchased the claim of J.M. Williamson and two years later platted a town on his farm, calling it Lyle. The post office was established in 1878 under the name of Klickitat Landing, which was later changed to Lyle. Lyle built the first store in the town. The townsite grew when the work on the Columbia River and Northern Railroad was started in 1902.

THE DALLES, OREGON

The city of The Dalles takes its name from a title bestowed by the Old Hudson's Bay French voyageurs on the falls of the Columbia, which was an Indian fishery for salmon. When the Dalles was first settled, it was called "The Landing," but the name was later changed to The Dalles. The first white men to visit the site now occupied by The Dalles were the members of the Lewis and Clark overland expedition. They camped at the mouth of Mill Creek, in the Indian village of Win-quat. In 1820 the Hudson's Bay Company established a post at The Dalles, but it was abandoned. In 1838 the Methodists established an Indian mission there. In 1848 a Catholic mission started at The Dalles. From 1843 on, for many years, the emigrants considered The Dalles as the end of their trip by wagon, for here they built rafts, loaded their wagons and belongings and floated down the Columbia River to Vancouver.

In 1850 the United States Government sent a company of soldiers to The Dalles to protect the settlers from the Indians. This established the city. In 1850 a store was opened. The first house was built in 1851. Wasco County was established in 1854 and The Dalles became the

county seat. The United States surveys had not been made until February, 1860, so it was not till April 19, 1860, that the corporate authorities of the Dalles made application for the land.

STEVENSON, WASHINGTON

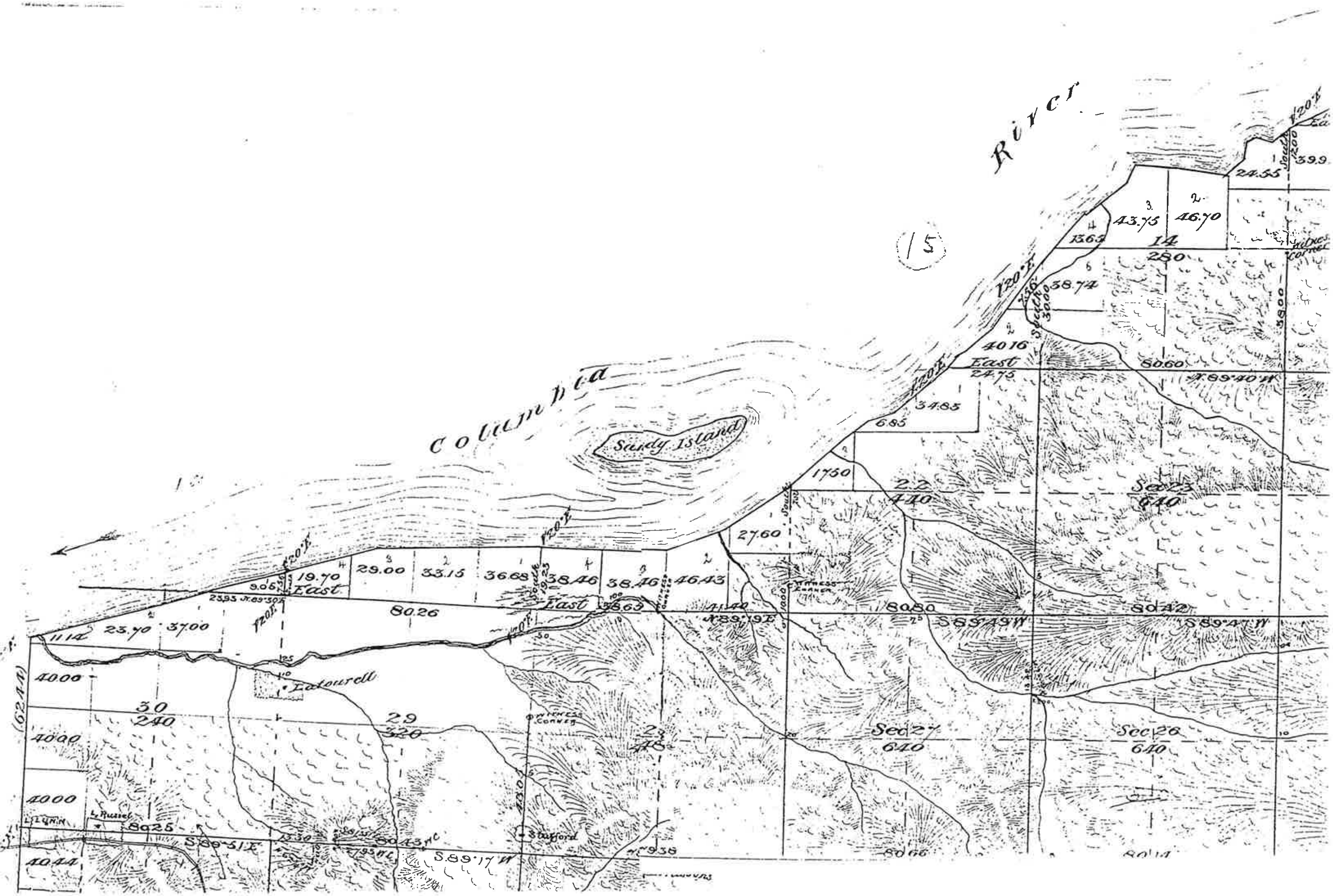
Stevenson is located on the north bank of the Columbia. The town was platted and named for George H. Stevenson, who for years operated a fish wheel opposite Bonneville, which proved very profitable. Stevenson was born in Missouri in 1857 and moved to Washington Territory in 1882. He was a member of the Territorial Convention in 1889 that drafted the State Constitution. For many years he had charge of railroad interest in Skamania County.

WHITE SALMON, WASHINGOTN

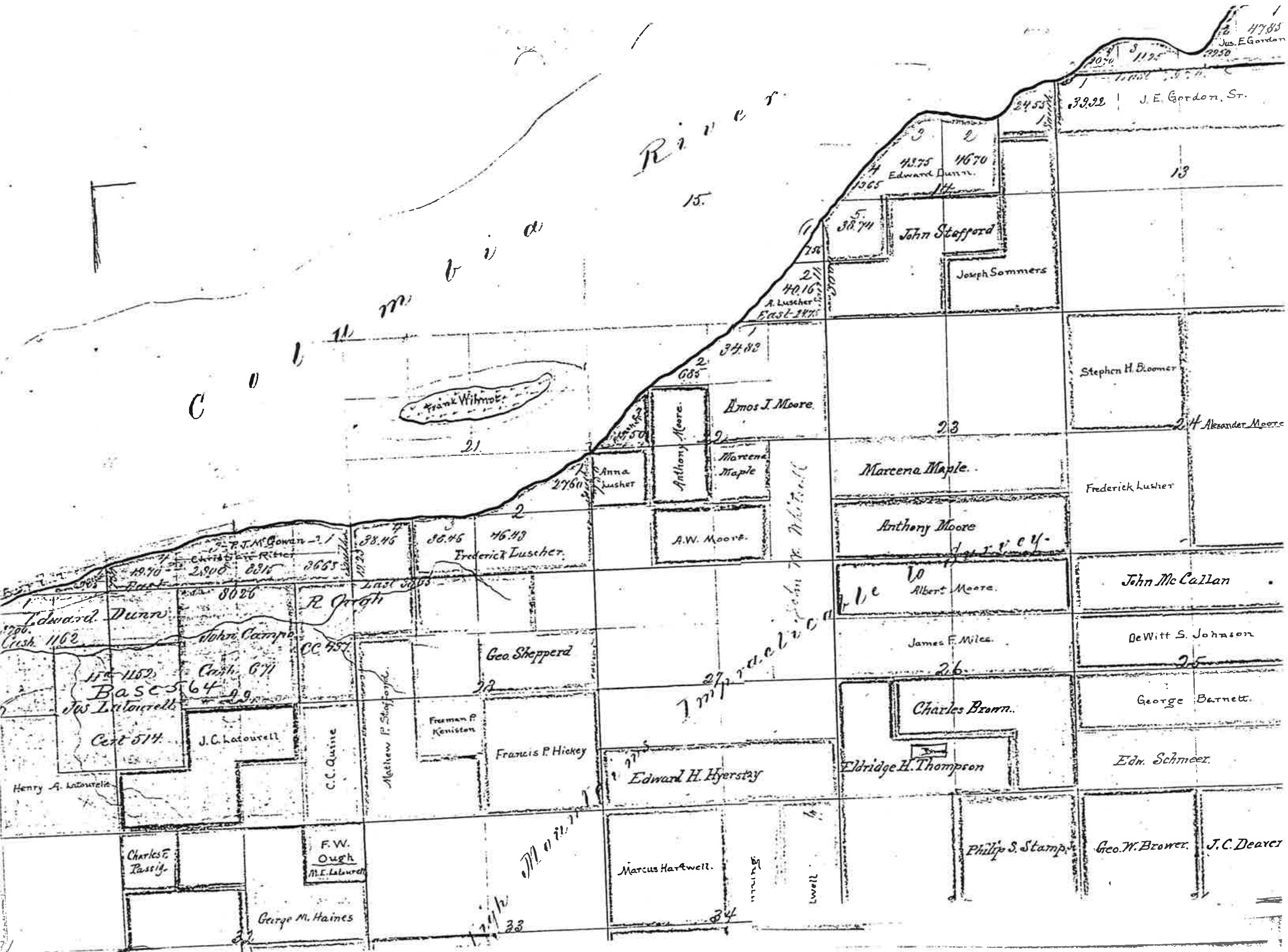
The town was named White Salmon by the Indians. The river used to be the spawning grounds for Steelheads. A.H. Jewett was the father of White Salmon. Located on the high bluffs across from the town of Hood River, Jewett laid out the first lots on his homestead.It served as the trading point for the White Salmon fruit district. The first settler near the site of White Salmon was E.S. Joslyn, who settled there in 1852. The post office was established at White Salmon in 1868. It grew to have a blacksmith shop,drugstore, good hotel and eight or ten mercantile establishments. It did not have a sawmill.

In the 1890's the Larch Mountain Investment Company went bankrupt. The extensive timber lands located to the south of Palmer were added to the Bridal Veil Lumbering Company's holdings.

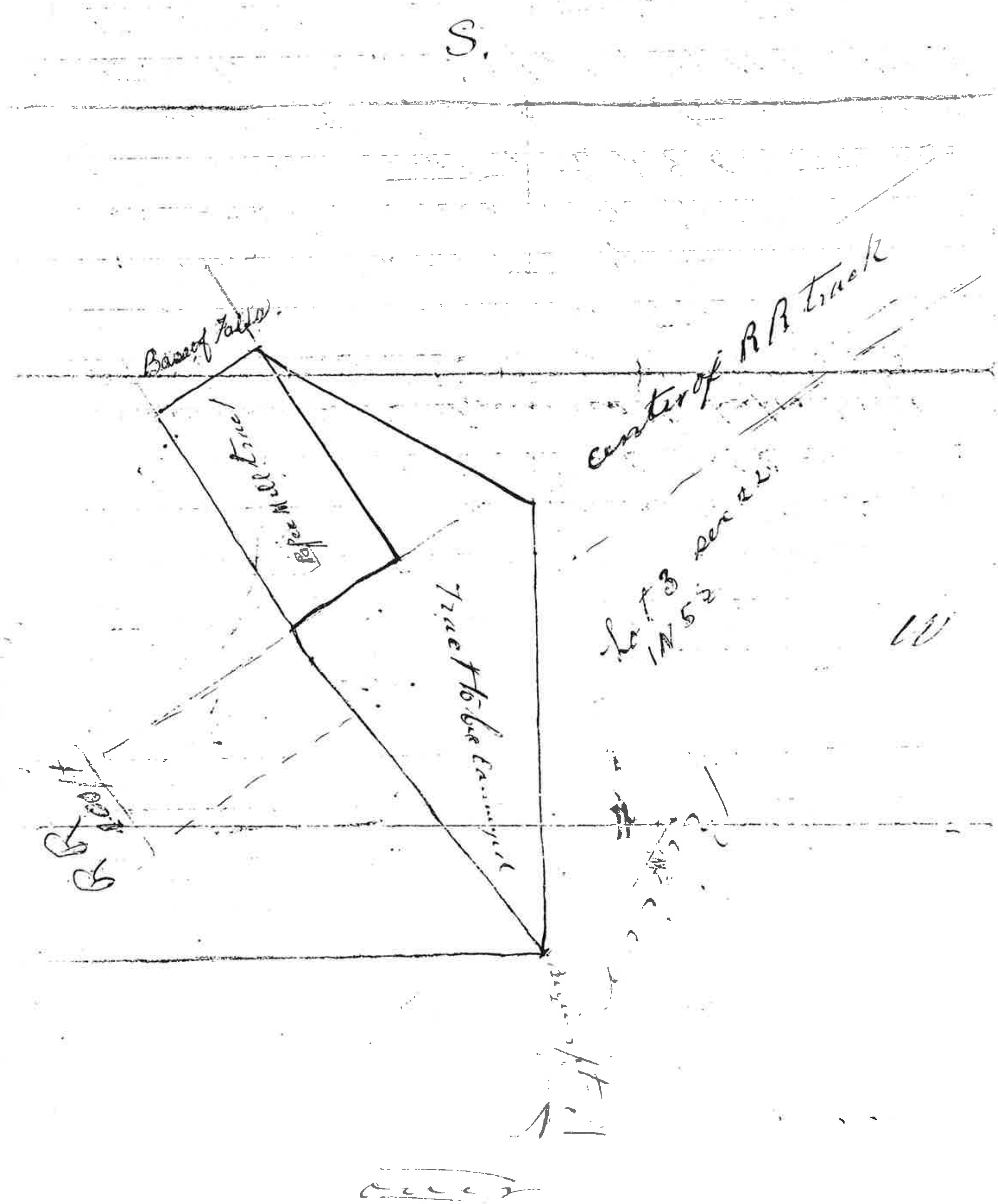
By the 1920's plans were made to increase the width of the gauge of the railroad operations in order to increase the hauling capacity of the cars. A new railroad was built from the mill site into the Gordon Creek watershed. The road was built to standard gauge replacing the three foot former gauge. By 1924 the locomotives had been refurbished to accept the standard gauge width.The conversion of "Betsey" and "Jumbo" was accomplished in two months. "Peggy" operated under the narrow gauge format for a longer time, intent on finishing the logging on the older three foot lines. When the work was done "Peggy was converted, too. The old three-foot track was then abandoned.



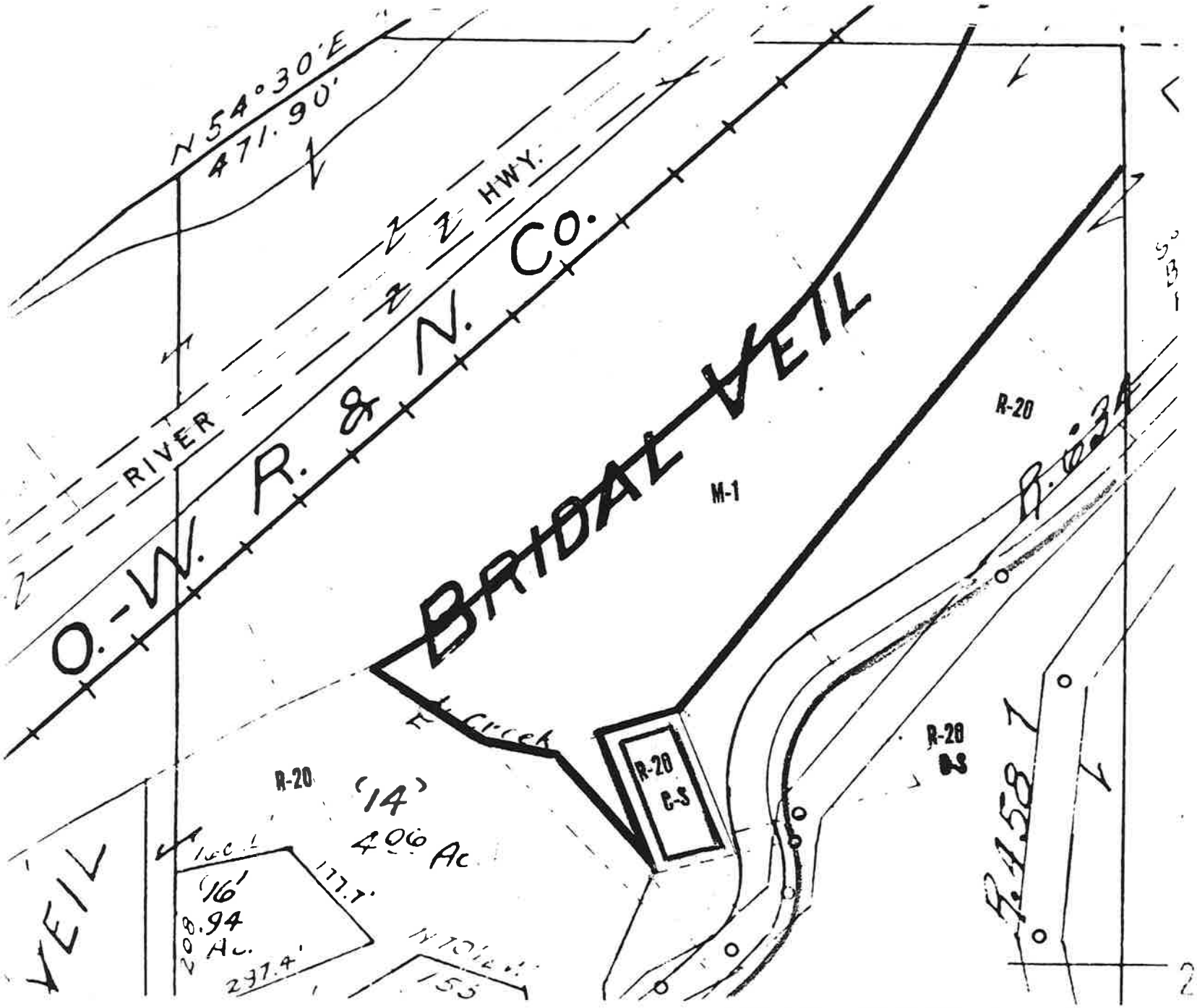
Columbia River
Sandy Island
15
Latourell
Stafford
Witness Corner
14
280
22
440
Sec 23
640
30
240
29
320
Sec 27
640
Sec 26
640
East
80.26
80.80
80.42
80.25
S 89°51' E
S 89°17' W
N 89°19' E
S 89°47' W
N 89°40' W



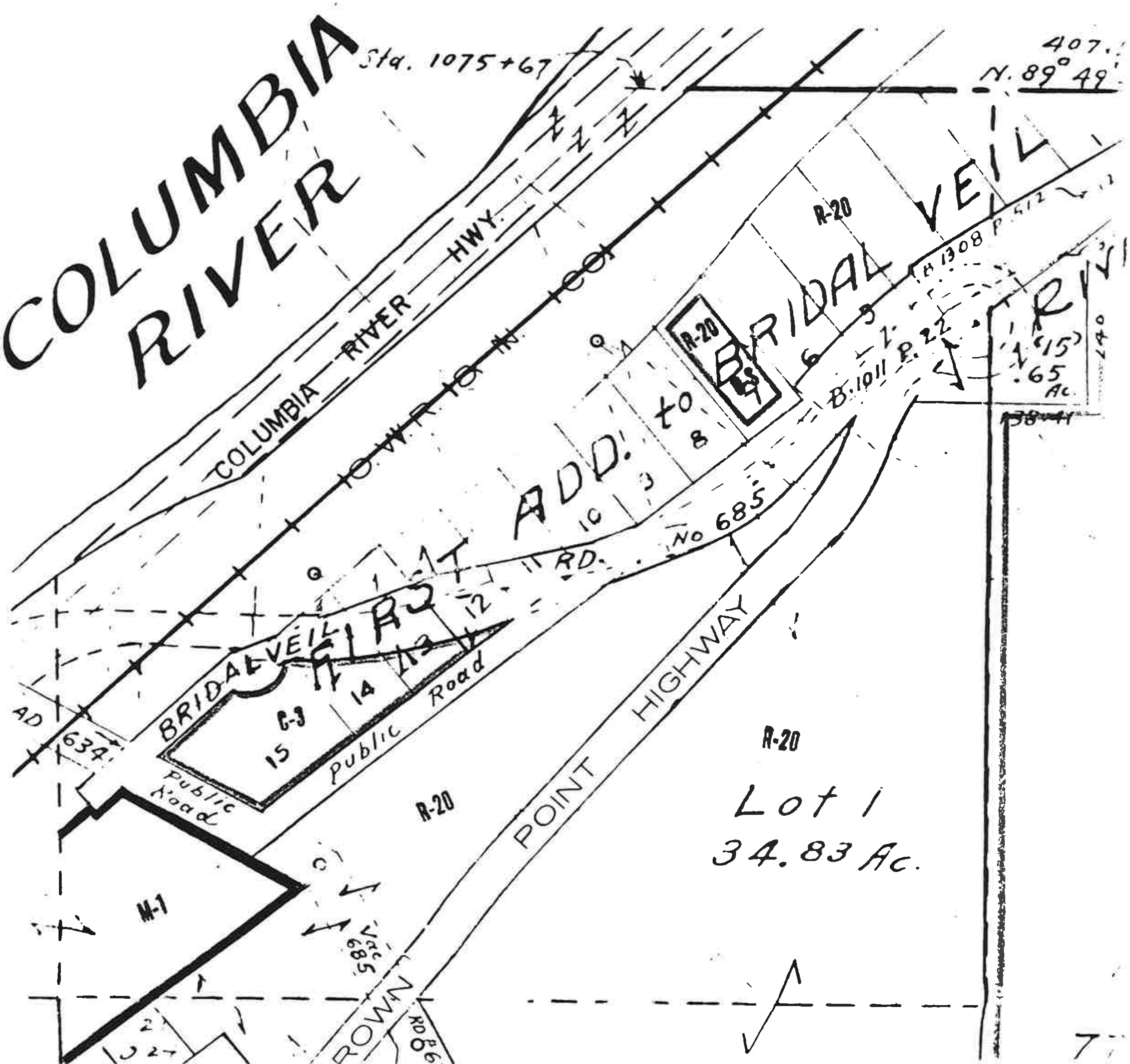
Columbia River
15
13
21
23
24
25
26
27
Jas. E Gordon
J. E. Gordon, Sr.
Edward Dunn
John Stafford
Joseph Sommers
A. Luscher
Amos J. Moore
Stephen H. Bloomer
Alexander Moore
Frank Wilmot
Anna Lusher
Anthony Moore
Marcena Maple
Frederick Lusher
A.W. Moore
Frederick Luscher
P. J. McGowan
R. Ough
Geo. Shepperd
John McCallan
Albert Moore
James F. Miles
DeWitt S. Johnson
Impracticable
Charles Brown
George Barnett
Edw. Schmeer
Eldridge H. Thompson
Edward H. Hyerstay
Francis P. Hickey
Freeman P. Keniston
Mathew P. Stafford
C.C. Quine
J. C. Latourell
Jos Latourell
Base 564
Cert 514
Henry A. Latourelle
F.W. Ough
M.E. Latourell
George M. Haines
Marcus Hartwell
Philip S. Stamp
Geo. W. Brower

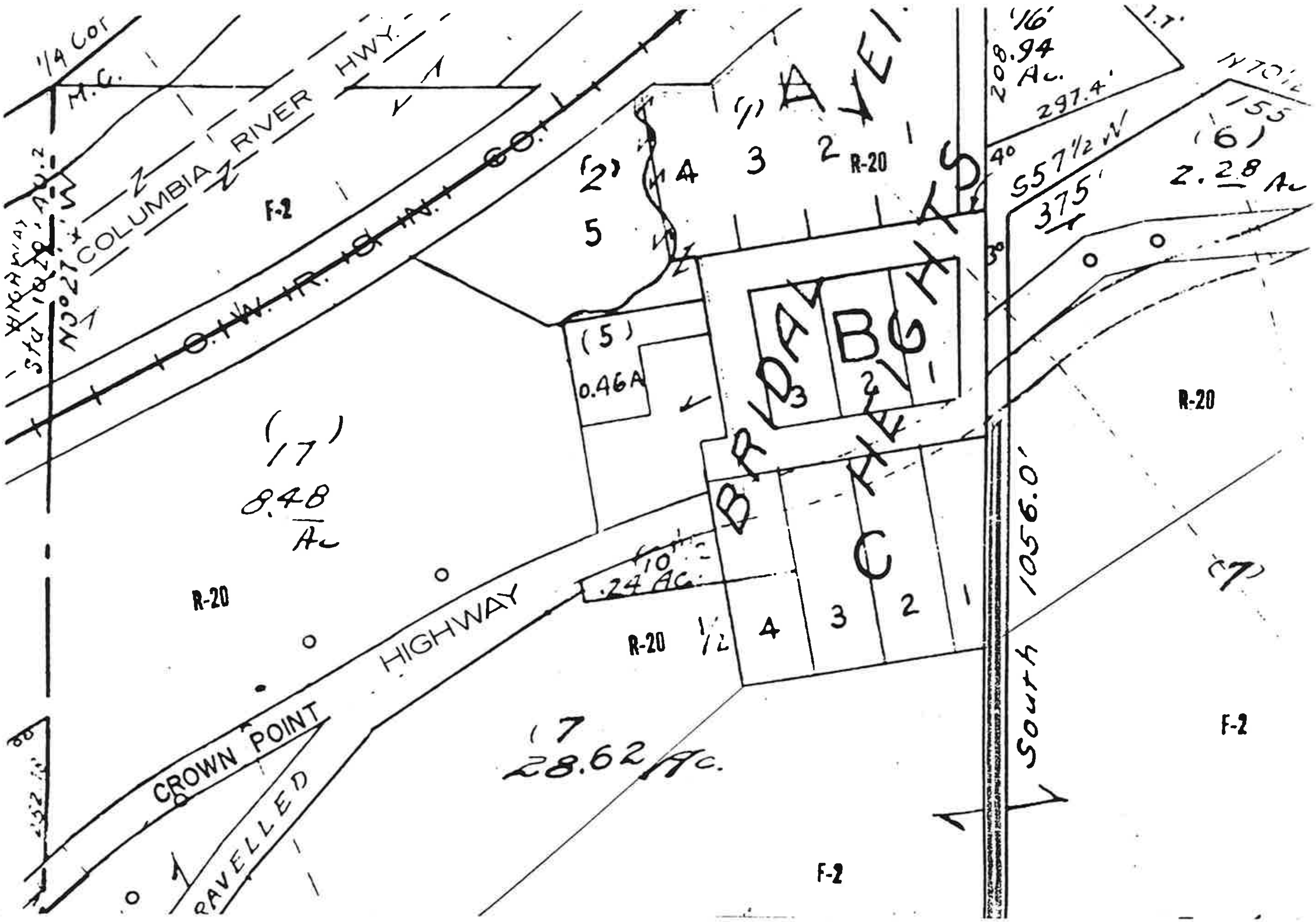


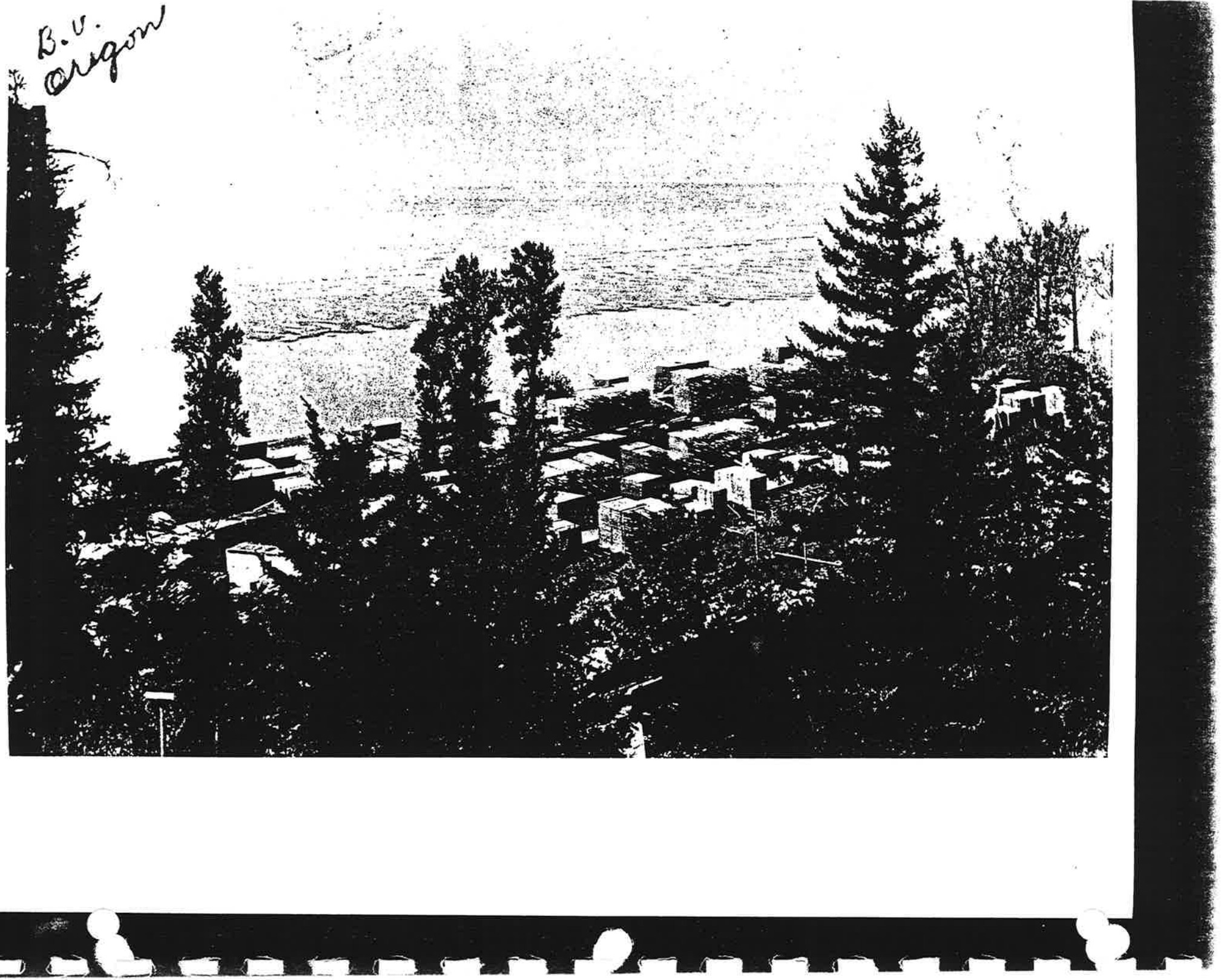
S.
Base of Falls
Paper Mill tract
Tract No to be conveyed
center of RR track
Lot 3 Sec 22
1N 5E
W
RR 100 ft



NW 1/4 SEC.22, IN-5E

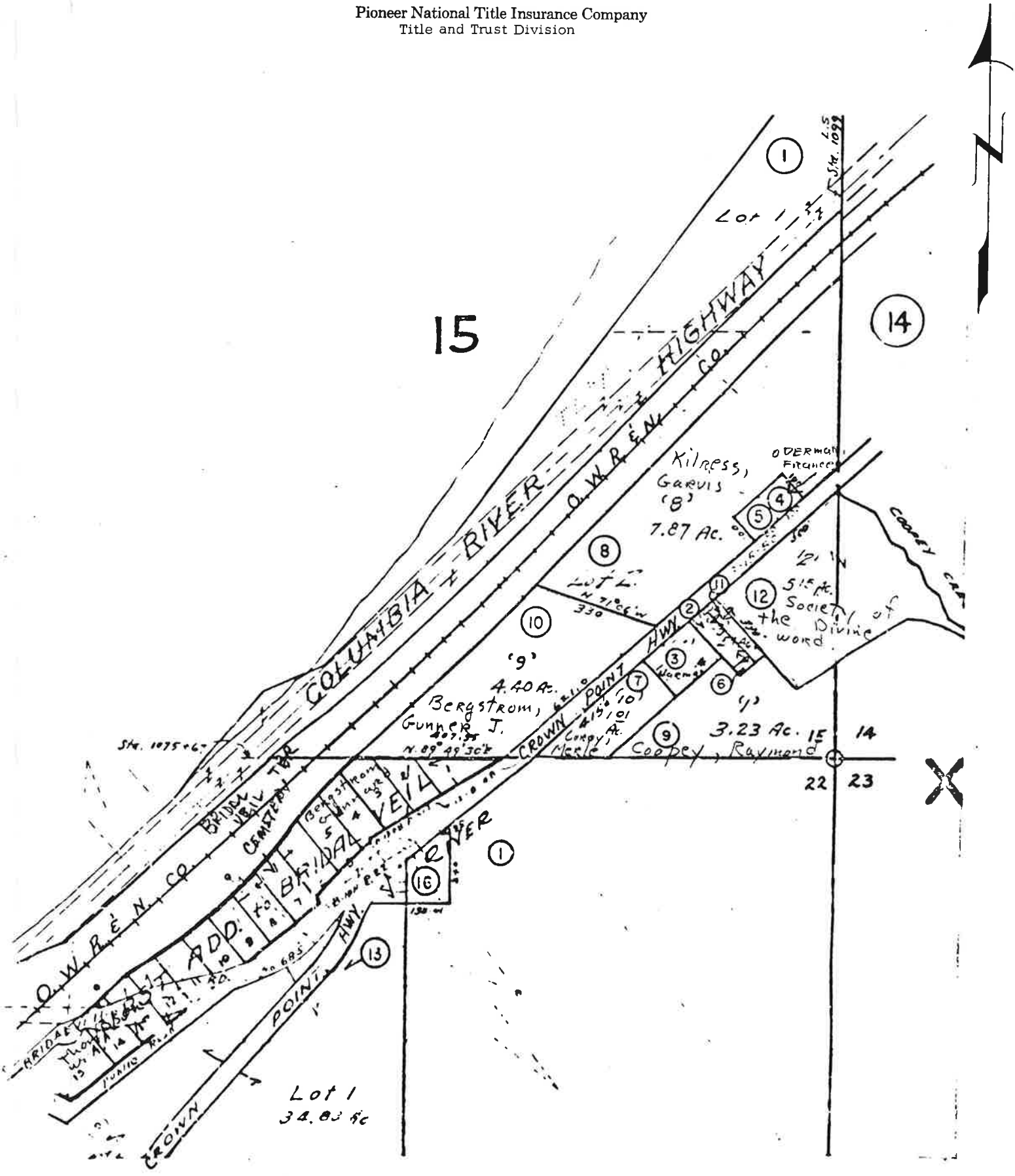

COLUMBIA RIVER
Sta. 1075+67
407.
N. 89° 49'
COLUMBIA RIVER HWY.
O.W.R. & N. CO.
R-20
BRIDAL VEIL
B.1308 P.512
FIRST ADD. to BRIDAL VEIL
R-20
B.1011 P.22
(15)
.65 Ac.
RD. No 685
BRIDALVEIL
C-3
Public Road
634
R-20
POINT HIGHWAY
R-20
Lot 1
34.83 Ac.
M-1
CROWN
7


1/4 Cor
M.C.
COLUMBIA RIVER HWY.
O.W. R. & N. CO.
F-2
R-20
A
B
C
(17)
8.48 Ac
(5)
0.46A
.24 Ac.
(16)
208.94 Ac.
297.4'
S 57 1/2 W
375'
(6)
2.28 Ac
R-20
1056.0'
South
HIGHWAY
CROWN POINT
RAVELLED
(7
28.62 Ac.
R-20
F-2
F-2


B.U.
Oregon

The sketch below is made solely for the purpose of assisting in locating said premises and the Company assumes no liability for variations, if any, in dimensions and location ascertained by actual survey.

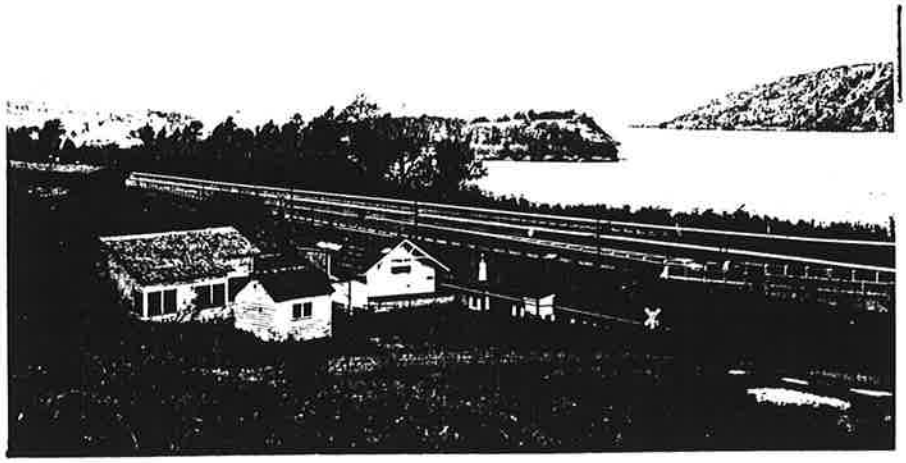
Pioneer National Title Insurance Company
Title and Trust Division



Bridal

Veil

Property



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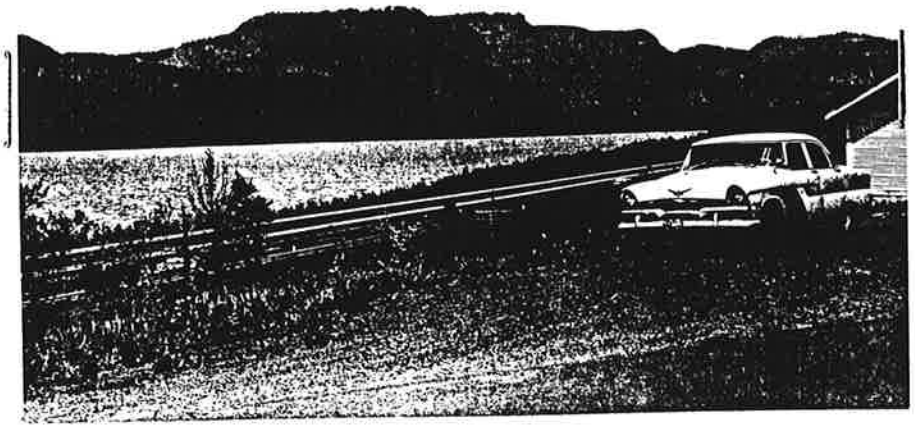
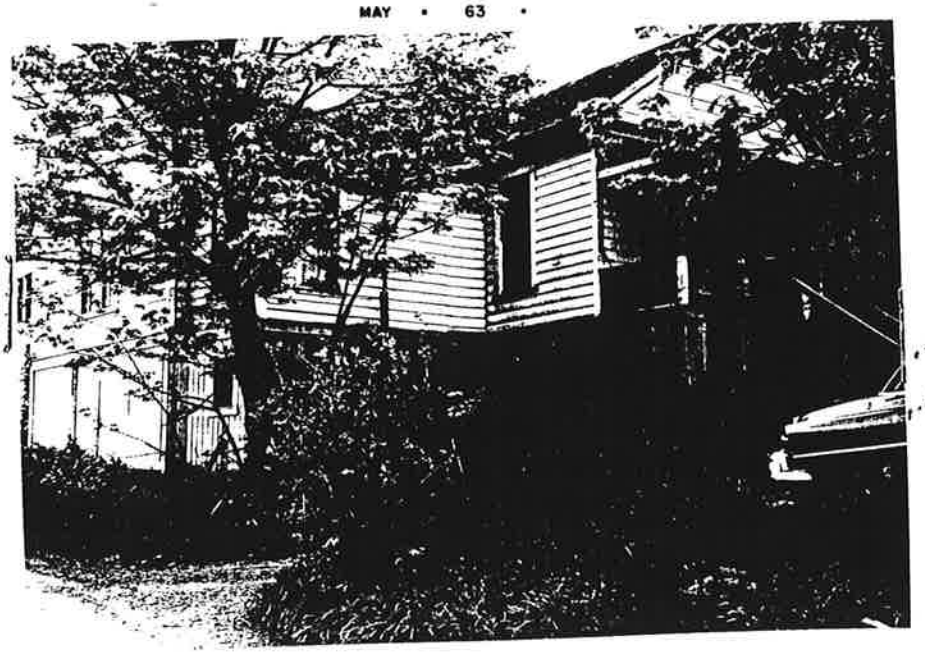


MAY • 63 •



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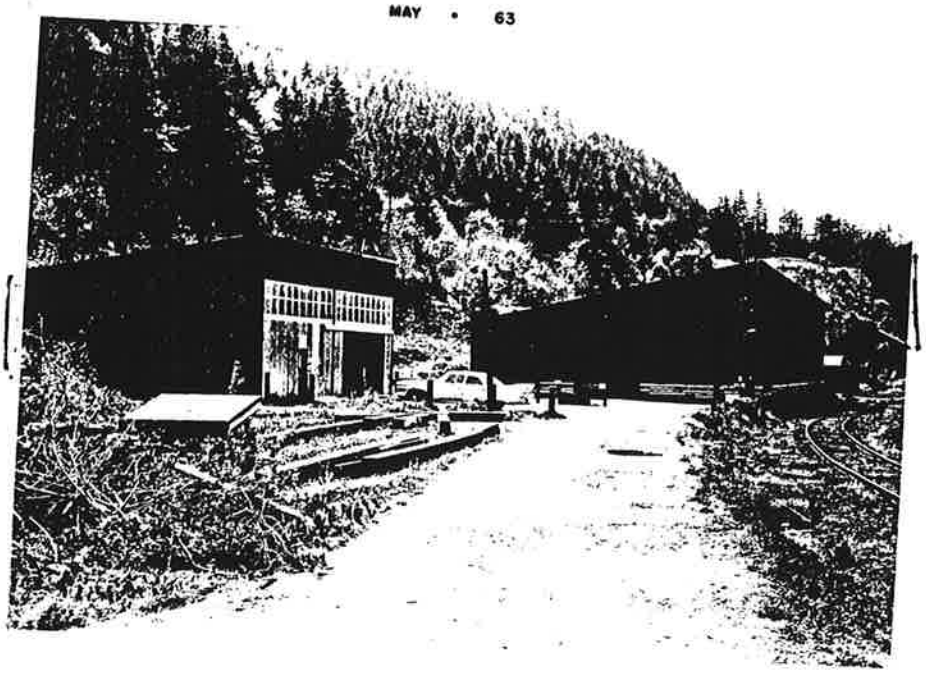

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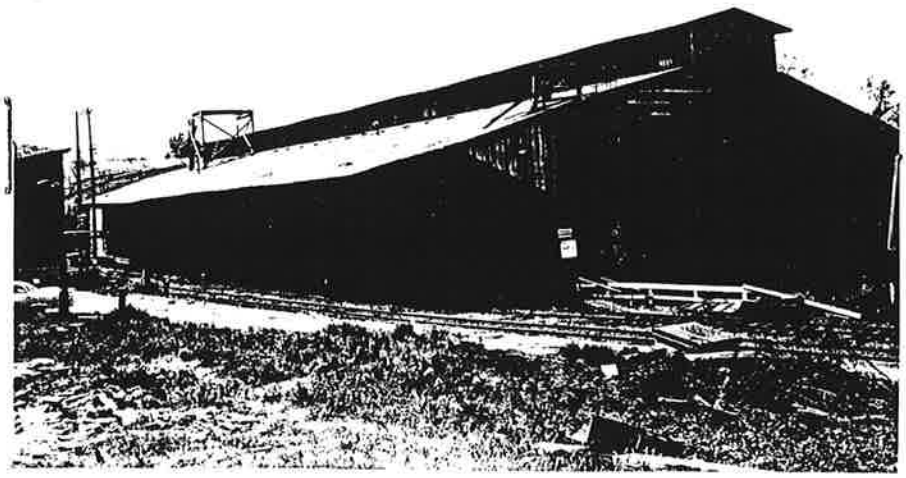

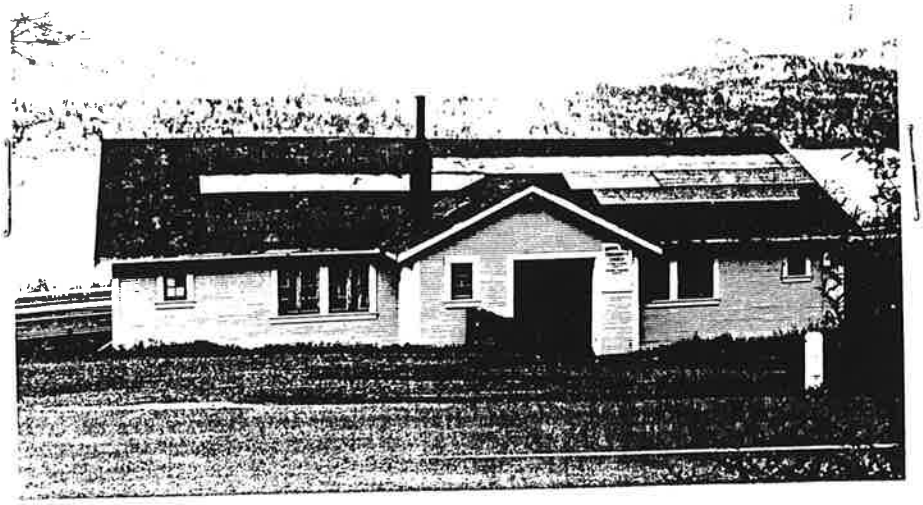

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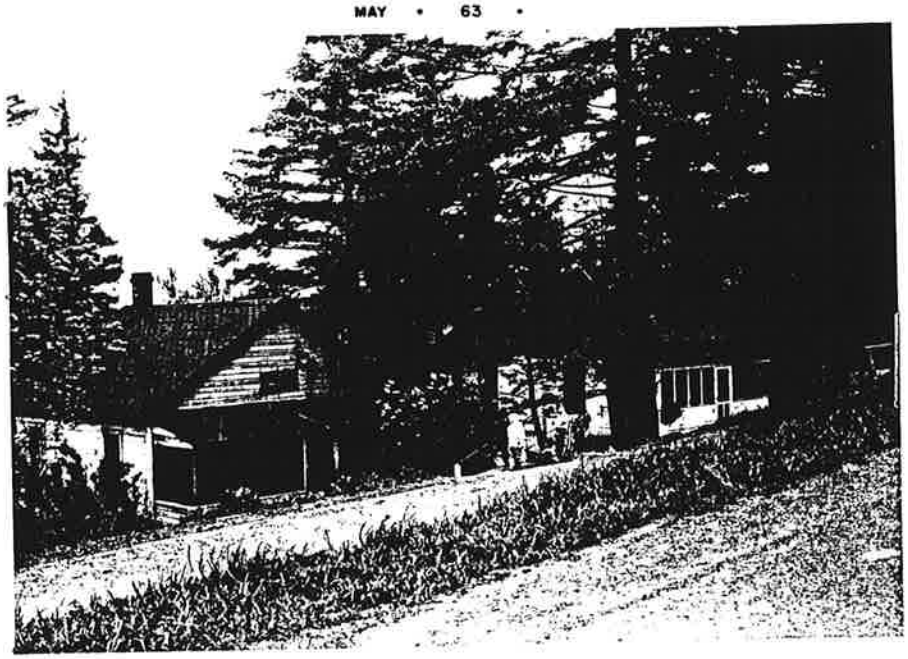

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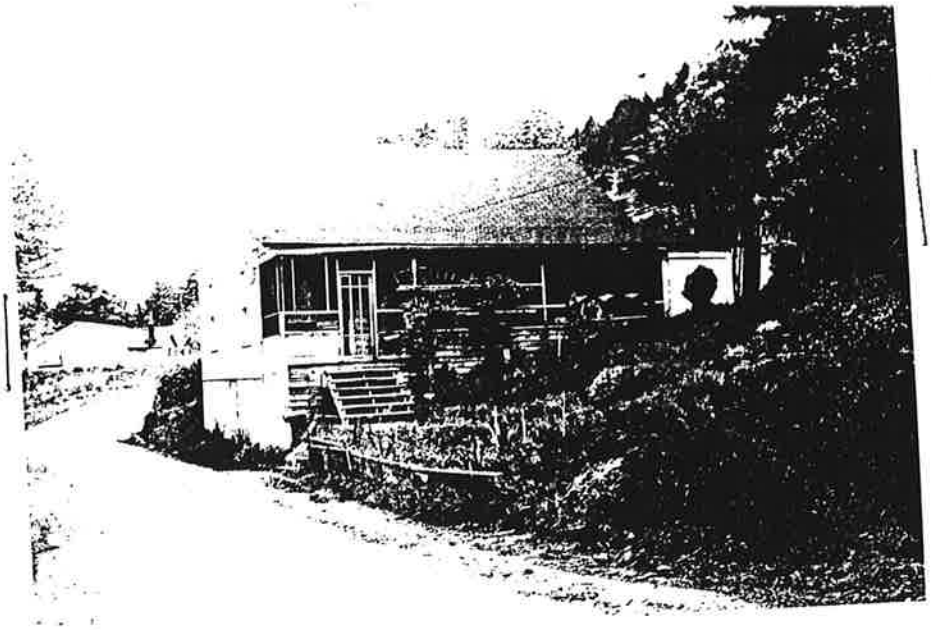

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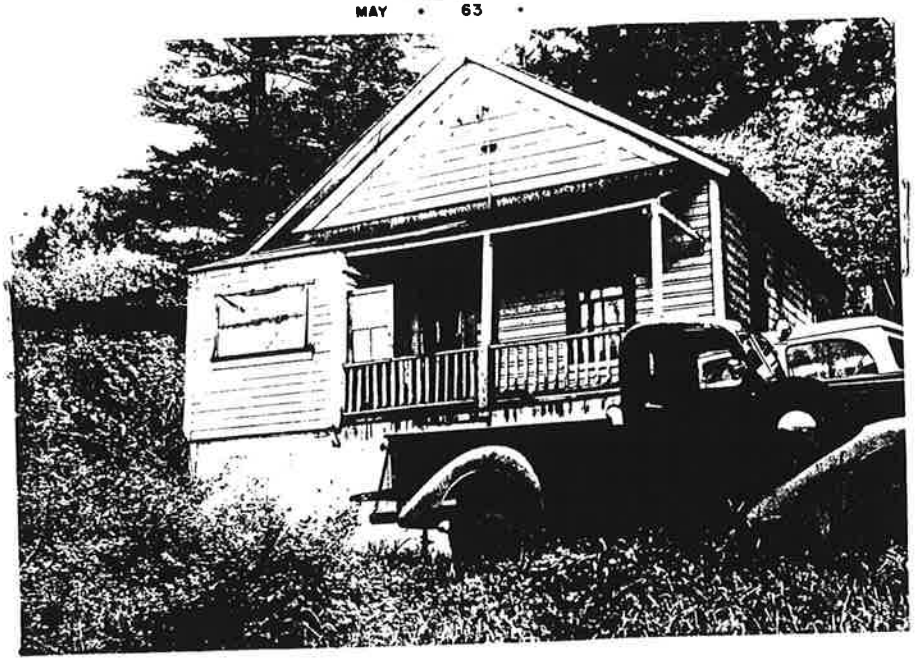

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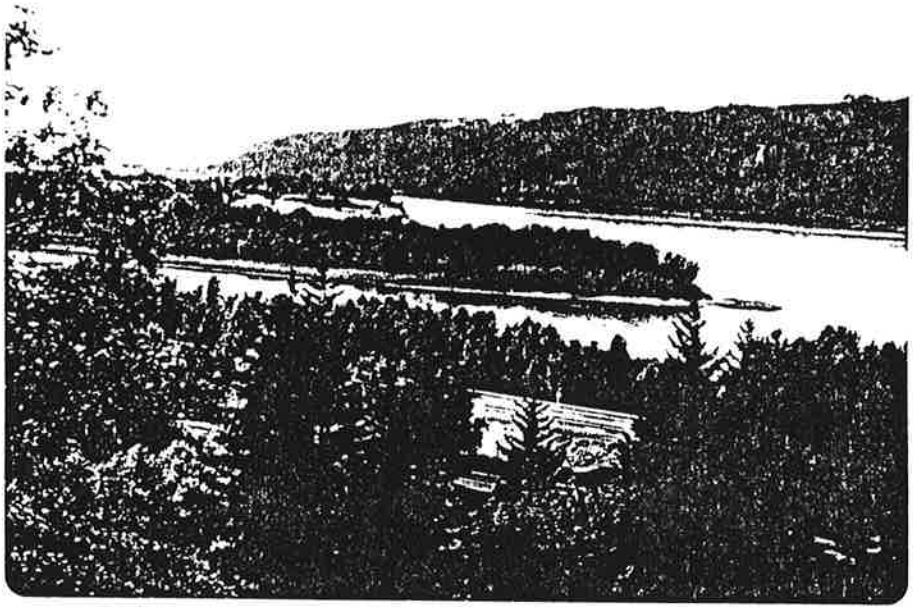

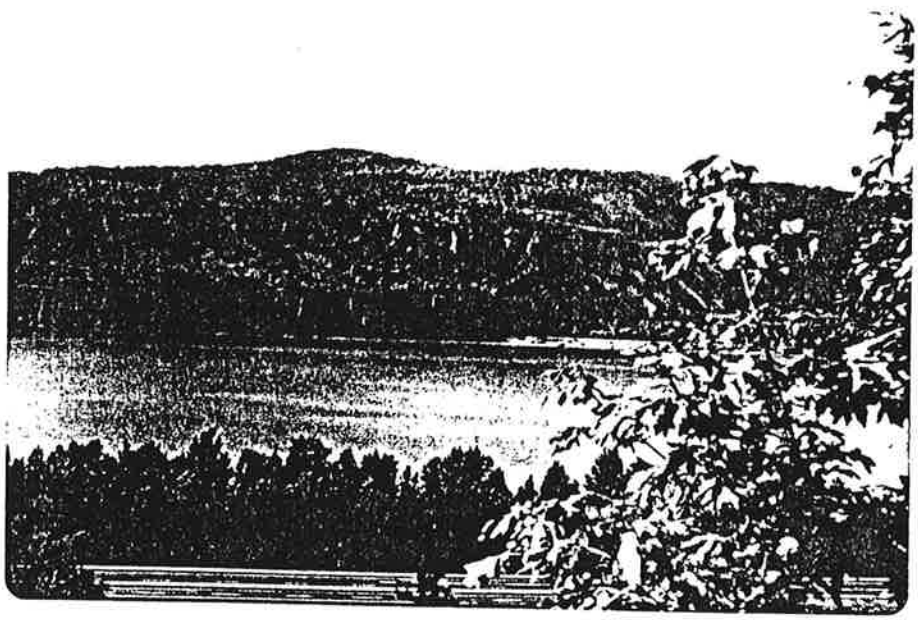

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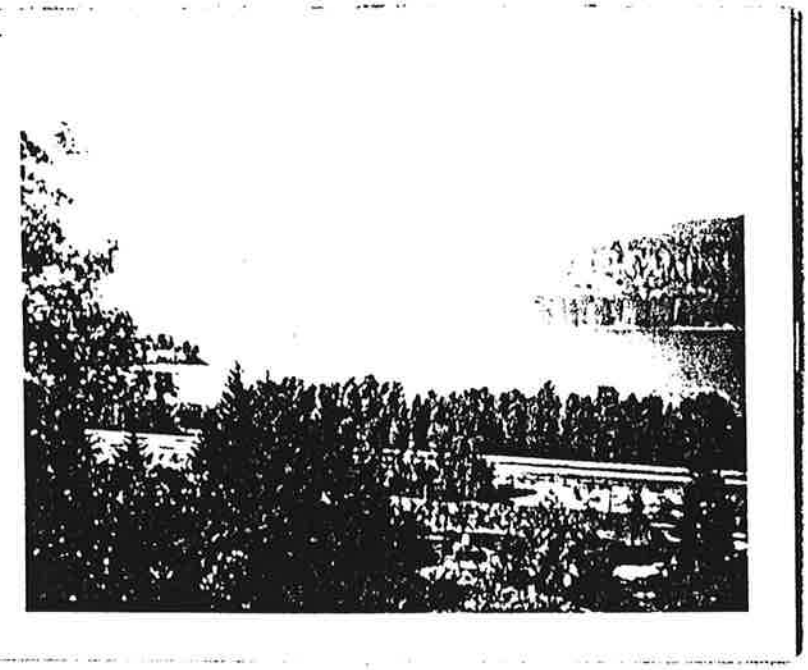
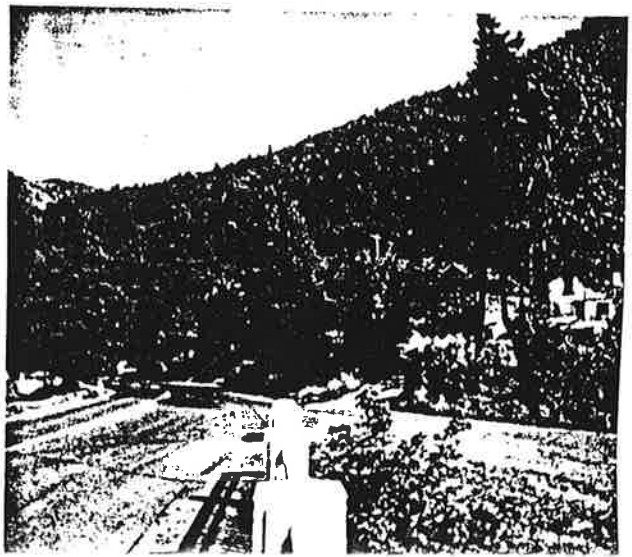
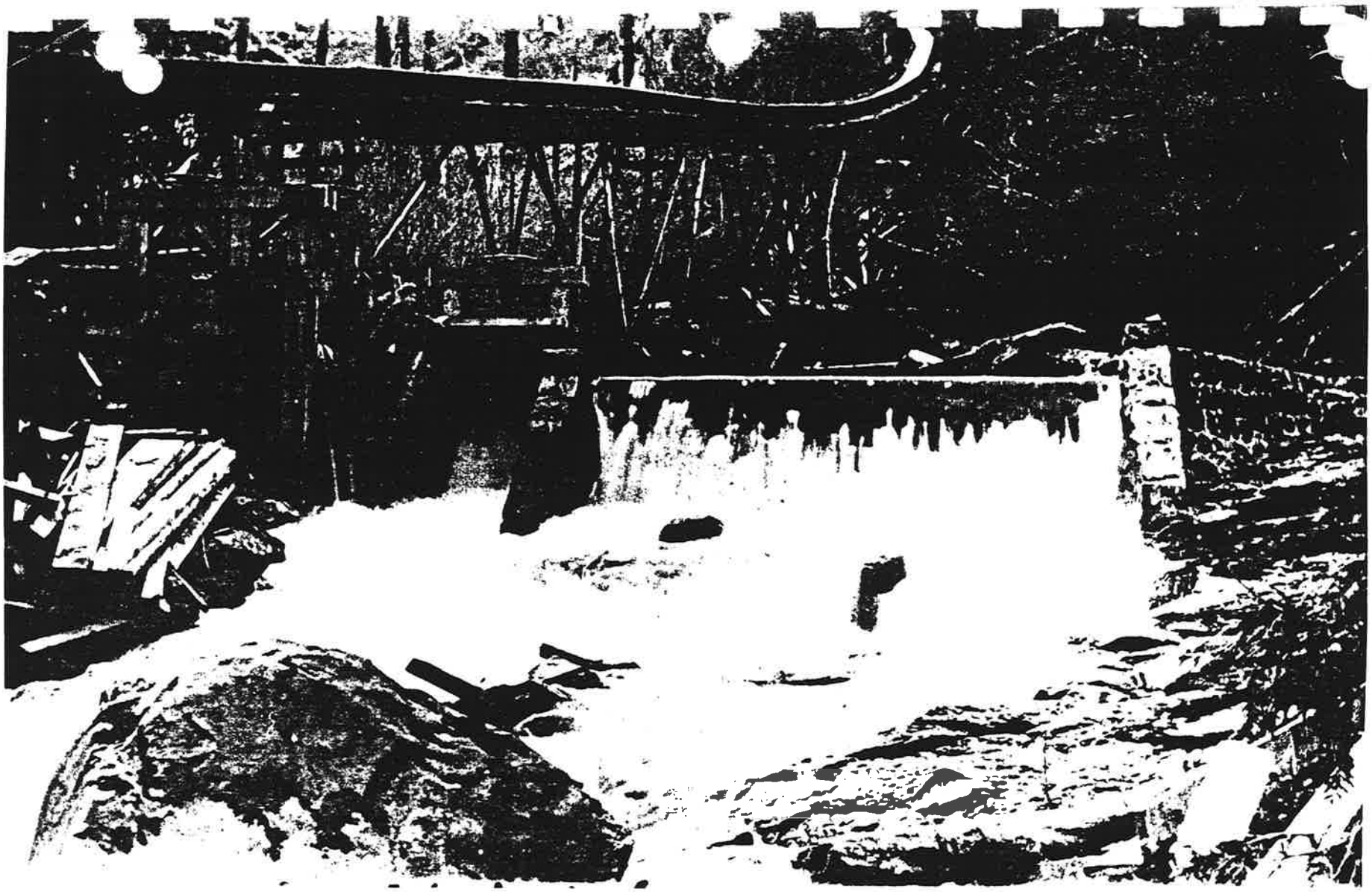
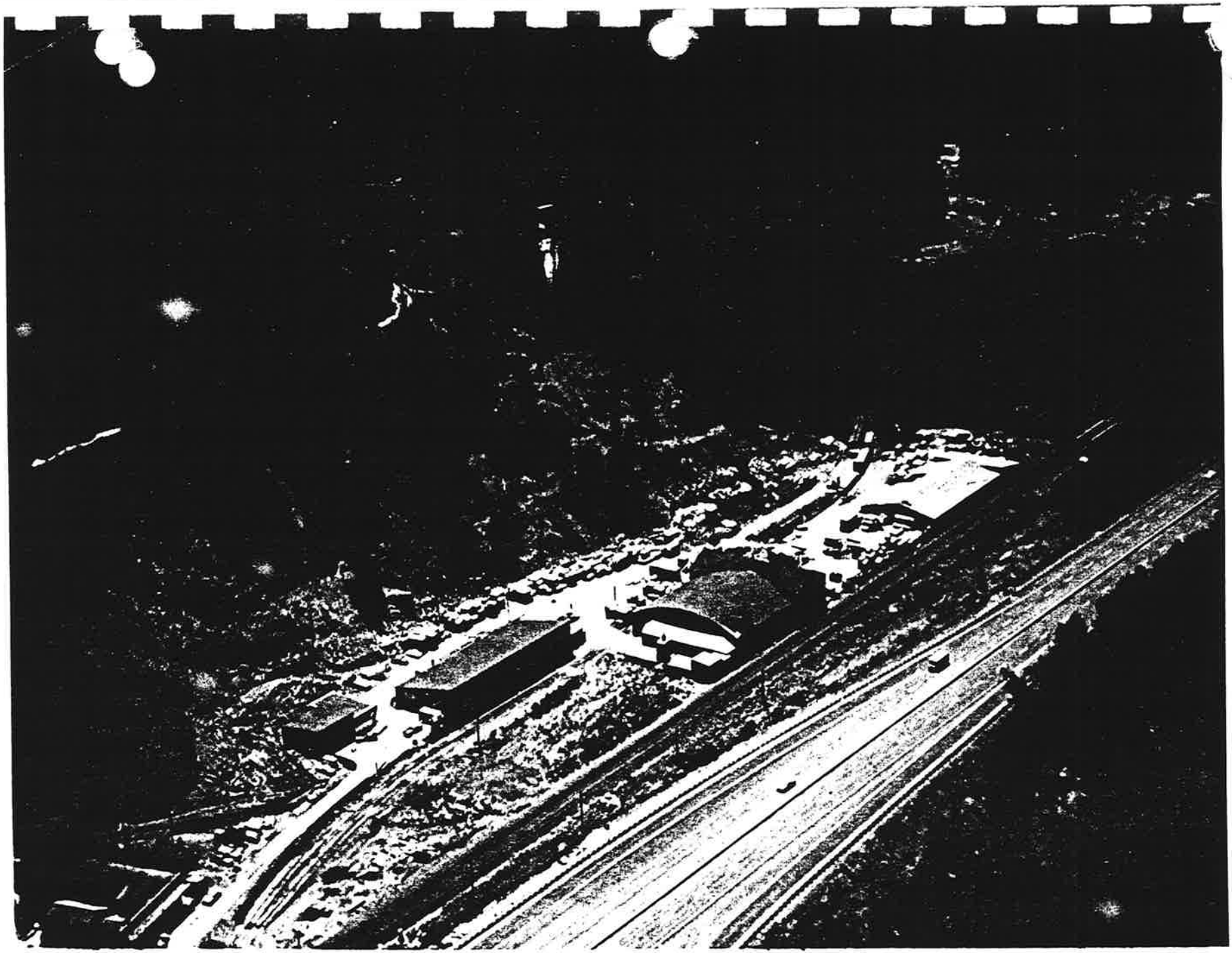


Veil

Property







ABBREVIATED DESCRIPTION OF BRIDAL VEIL LUMBER AND BOX COMPANY PROPERTY LOCATED AT BRIDAL VEIL, MULTNOMAH COUNTY, OREGON.

For complete legal description, see mortgage copy, on file in vault.

Beginning at the intersection of the north line of Section 22 with the center-line of the Columbia River Highway,(this point to be found at the entrance of Angels Rest Trail), said beginning point being also S 89 44' 30" W, 599.75' from the witness corner to the Section Corner at the northeast corner of said Section 22,(beleive this witness corner to be sixteenth corner); thencealong the center-line of the Columbia River Highway to the center-line of Bridal Veil Creek.

Thence leaving the Columbia River Highway N 3 34' W along the center of Bridal Veil Creek 44.74'; thence N 20 50'E, 194.6'; thence N43 50'W, 206.6'; thence N 80 W, 100'; thence N 57 52' W, 187.1'to the southeasterly line of the right of way of the O W R & N R.R.; thence leaving Bridal Veil Creek and along said right of way northeasterly 377.95' on the arc of a curve to the left having a radius of 2183.68' and initial tangent bearing N 57 53'E; thence N 48 00'E 506.25'

Thence northeasterly 424.57' on the arc of a curve to the left having a radius of 1055.37'and tangent to the last mentioned course; thence N 24 57'E 161.55'; thence N 48 32' E 795.34'; thence N 60 05' E 161.62'; thence northeasterly 347.52' on the arc of a curve to the left having a radius of 1055.37' and tangent to the last mentioned course; thence N 41 13' E, 360'; thence northeasterly 172.96' on the arc of a curve to the right having a radius of 855.37' and tangent to the last mentioned course, to the north line of said Section 22; thence N 89 44'30"E along section line 424.68' to the point of beginning.

Also, all of those portions of Goverment Lot One, that portion of the northwest quarter of the northeast quarter of Section 22 which lies southerly of the center-line of the Columbia River Highway. The southwest quarter of the northeast quarter of said section 22 which lies on the southerly and easterly side of the center-line of the Columbia River Highway.

INDEX

TEAL, WINFREE, McCULLOCH, SHULER & KELLEY

JOSEPH N. TEAL
1858-1929
ANDREW B. WINFREE
WILLIAM C. McCULLOCH
JOHN W. SHULER
ALFRED P. KELLEY
WILLIAM B. ADAMS

SPALDING BUILDING

PORTLAND, OREGON

June 2, 1937.

Mr. Leonard Kraft,
2805 S.E. 14th,
Portland, Oregon.

Dear Mr. Kraft:

I hand you herewith abstracts of title covering the Bridal Veil property recently purchased, consisting of three photostatic reproductions of original abstracts, together with a certificate of the Bridal Veil Timber Company that the opinions of Platt & Platt relative to such titles are true and correct copies of the original opinions in their files. As stated to you, we regard Platt & Platt as careful title examiners and would be willing to accept their certificates. In addition to the three phostatic reproductions we also hand you extension covering the same property from the closing certificate of the photostatic reproductions to the first of April, 1937, prepared by Title and Trust Company. We examined this extension and found no liens or changes affecting the title subsequent to the Platt & Platt certificates.

Very truly yours,

TEAL, WINFREE, McCULLOCH, SHULER & KELLEY,

By A. B. Winfree

ABW-NO

ACKNOWLEDGEMENTS

Historic logging on the slopes of Larch Mountain in Multnomah County, Oregon is essentially the story of the Bridal Veil Lumbering Company. The Company was formed in the 1880's during the period when trees were felled with axes and cross-cut saws and logs were hauled with teams of oxen. The Company reached its heighth in the era of the steam donkeys and logging railroads. Its end came at the beginning of the 1940's when the chainsaw and log truck were beginning to dominate the timber industry.

This study traces the history of the Company through its methods of logging, the equipment used in its mills, and the people and places associated with its operations. It also makes comparisons with other lumbering companies operating in.

I would like to thank the Corbett Historical Society and in particular Chuck Rollins, Bea Graff, Juanita Graff and the late Clif Graff. Their help and personal involvement with this study is greatly appreciated. A special debt of gratitude goes to Ann Hazen Davol and Robert Hazen for sharing their reminiscences and the use of their family photographs.

Bill Carr
Archaeological Technician
Estacada Ranger District
April 1991

SECTION 1 (1886 - 1902)

Large-scale logging on Larch Mountain began in 1886 when Theodore H. Smith purchased timber in the area and together with Loring C. Palmer organized and founded the Bridal Veil Falls Lumbering Company. Their associates in the new venture were E.L. Brown, Charles Brown and George Barnet. Larch Mountain was named for the Noble fir trees that were growing on its slopes and was called Pacific Coast larch by lumbermen of the time (The Columbia River and Oregon Timberman Dec. 1902:37). The wood of the Noble fir is very soft, close-grained and when dry is very light. The lack of pitch makes it valuable for interior finish and for all kinds of molding and since it takes paint well, much of the lumber was made into bevel siding and used for exterior work. Second-grade wood was turned into lumber for boxes used by the fruit packers in Oregon and Washington. The Noble fir around Larch Mountain had straight, symmetrical stems often reaching 300 feet in height, with 150 to 180 feet clear of branches. The diameter of the trees ranged from 3 to 9 feet at the base.

In 1886 Mr.Smith began the construction of a sawmill and houses approximately one and one-half miles and 1200 feet in elevation above the town of Bridal Veil. A wagon road was built under the direction of Kee Sing, a Chinese contractor, from Bridal Veil to the sawmill site. Machinery for a small portable sawmill used in building the permanent facility was hauled up this road and Jones & Calvin Logging Company was contracted to furnish the logs used in the construction (Hagen 1937). O.A. Palmer, a logger from Vancouver, Washington, and the brother of Loring Palmer, was contracted by the Company to supervise the logging operations.

In 1887 Mr. Smith started construction of the re-milling and shipping plant at the town of Bridal Veil adjacent to the newly completed railroad tracks of the Oregon Railway and Navigation Company, that connected to the Union Pacific

Railroad (This vital rail link would provide Bridal Veil with numerous markets across the United States for its lumber products). Mr. Smith also constructed a wooden V-shaped flume, made of two 2 inch x 16 inch planks on each side, supported mostly on trestles, from the sawmill to the planing mill at Bridal Veil. Mr. Smith used only a carpenter's level to maintain the grade and elevations of the flume (The Timberman Mar. 1923:30). In less than two miles the flume dropped 1200 feet in elevation. Rough cut lumber as large as 16 x 16 inches and 60 feet long could go down this flume in about a 5 minute trip. One day a dog slipped into the flume and went all the way down to Bridal Veil without getting a scratch. A logger who attempted to ride the flume spent three months in a hospital (Bishop 1897). While all the construction was going on, Loring Palmer sold his interests in some Vancouver, Washington, sawmills and moved to Bridal Veil where he took over as president of the Company. Loring Palmer was born in Iowa (as was his brother) and entered the lumbering business first in Dakota and later in Nebraska, operating sawmills before moving to Vancouver in 1881.

On April 28,1887, the Latourell Falls Wagon Road and Lumber Company was formed. This company also planned to use the O.R & N. Co.'s mainline along the Columbia River for shipping its mill products. In order to get the logs or rough-sawed lumber to the railroad a wagon toll road was constructed from the west slope of Larch Mountain to the loading facilities at Latourell Falls. The wagon road was completed by 1888. A flume similar to the one at Bridal Veil was also completed in 1888. The flume went down Young Creek to Shepherds Dell and then on down to the mill at Latourell (C.Graff 1983). The Latourell Falls logging camp consisted of a barn, a cookhouse, an office and warehouse, and 2 bunkhouses, and was located on Pepper Mountain (Woodward 1975).

Thus began the large-scale lumbering operations on Larch Mountain. In 1889 Mr. Smith and E.L. Brown sold their shares in the Company to John Stone Bradley and John Martin Leiter (later on George Barnet and Charles Brown also sold their shares). Mr. Smith moved to Salt Lake City where he entered into the wholesale lumber business, remaining there until his death in 1935. Mr. Bradley was born in Lee, Massachusetts, September 1, 1842 and in 1867 entered the lumber business in Michigan (The Timberman Feb. 1926:130). In 1878 he moved to Ohio and continued in the lumber trade until he moved to Oregon in 1889 and purchased the holdings of Mr. Smith. Mr. Leiter was born in Ohio in 1850 (Carey 1922). After working 5 years with the Cincinnati, Hamilton and Dayton Railroad, he began working in the lumber business and moved to Michigan in 1883. From there he moved to Oregon and joined John Bradley in purchasing some of the holdings of the Bridal Veil Falls Lumbering Company. (Shortly thereafter the "Falls" was dropped from the Company name.) Mr. Bradley became general manager and treasurer of the Company and built a house near the plant at Bridal Veil. Mr. Leiter became secretary of the firm with Loring Palmer remaining president. Mr. Palmer built a house at the sawmill on Bridal Veil Creek and the community that developed there was named Palmer. The sawmill consisted of the following equipment: two 56-inch Hoe circular saws; one pony circular resaw; one Campbell gang edger; one slasher; and one gang trimmer. Steam power was provided by 2 sets of boilers, one consisting of 4 boilers and the other comprised of 2 (Hagen 1937).

In 1891 the Donahue and Kelley camp began operating on the north and west sides of Larch Mountain. The Company had recently acquired this sizeable area from the bankrupt Larch Mountain Investment Company. Under the management of M.C. Donahue, the logging camp had a contract to supply logs to the Company.

Logging at the Donahue and Kelley camp was done primarily with 2 ox teams of 6 to 7 yokes each (Bishop 1897). The logs, after having the bark removed, would be hauled from the woods by the oxen over greased skidroads to loading points along the tracks of a narrow gauge railroad. Here the logs were lined up end to end between the rails, on boards placed over the ties, and hitched together with dogs (two heavy iron hooks, connected with chain links, driven into the logs). A team of oxen could skid logs scaling up to 12,000 board feet in each turn. Then the logs were skidded to the sawmill at Palmer by an 18 ton Baldwin (0-6-0T) saddle tank, steam locomotive, affectionately called "Peggy" (Holst 1972). Later as the technology improved, logs were placed on flatcars and pushed ahead of the locomotive with a string of logs still being skidded behind to aid in braking on the descent, which in some places was over a 9 percent grade, to the sawmill. (Bridal Veil was among the first companies to successfully utilize trailing logs behind a locomotive.) Within six years the Donahue and Kelley camp would fell and skid nearly 30 million board feet of logs for the Company. During this period the Bridal Veil Paper Company began operating a straw and rag paper mill at Bridal Veil. The mill was adjacent to the Company's plant and shared the water from Bridal Veil Falls as a power source. Lincoln Gurnette was the superintendent and had previously worked at Willamette Pulp and Paper Company. The mill was poorly equipped with outdated equipment that was constantly in need of repair. With rags becoming scarce and wood replacing the straw as a material for manufacturing paper, and its inability to compete with more modern facilities, the Bridal Veil Paper Company eventually went out of business in 1902 (Adams 1951).

In 1894 the Brower and Thompson mill, which had been the first supplier of lumber to the Latourell Falls Lumber Company, closed its operations on Pepper

Mountain. Eldridge Hill Thompson, who had formed the milling operation with George W. Brower, then organized the Apex Transportation Company in 1895 and became its president. Mr. Thompson, born in Connecticut in 1846, came to Oregon from Illinois in 1882, and established the Portland Iron Works. He sold his interests in this company in 1888 and with Brower opened the Brower and Thompson mill the same year (Bishop 1897). O.A. Palmer was hired to be the manager of Apex. Under lease from the Bridal Veil Lumbering Company, the Apex Transportation Company took over operation of the narrow gauge railroad that delivered logs to the sawmill at Palmer.

In 1896, under the direction of Apex, a unique system of moving logs to the sawmill was constructed. A steam "bull donkey", manufactured by J.S. Mundy, with two 10 x 16 inch cylinders providing the power to yard 30,000 board feet of logs at a time (a load of approximately 120,000 pounds) was put into use (Bishop 1897). This was done to lower logging costs, where oxen were too slow or railroad construction unfeasible. This 5 ton machine was capable of skidding logs from over a mile out in the woods to a landing. At the landing the logs were lowered down a chute a distance of three-quarters of a mile to a pond capable of holding about 2 million board feet of logs. The chute was constructed much like the narrow gauge railroad with ties laid close together to form a continuous surface for the logs to slide on (Hagen 1937). A guard rail was used to keep the logs from rolling off the chute. From this holding pond the logs were transported to the sawmill by "Peggy", where close to 100,000 board feet of lumber per day was sent to the planing mill at Bridal Veil. Bridal Veil was the first to use a cable system to yard logs out of canyons (The Columbia River and Oregon Timberman Oct. 1904:21). Their method consisted of stretching a cable from the top to the bottom of a canyon and

area around Portland (Morris 1934). Fires were burning at Rocky Butte, Gresham, Molalla, Multnomah, and Springwater, as well as at Bridal Veil. The smoke was so dense in Portland that it made peoples' eyes sting, and the streets were eventually covered with a thick layer of ash. Street lights were necessary by mid afternoon in the city and the captain of the sternwheeler "Bailey Gatzert" on the Columbia River was forced to use the steam boat's search light by 11 o'clock in the morning (Morris 1934). In addition to Bridal Veil and Palmer, some of the communities reporting large fire losses in their vicinity were Troutdale, Dodge, Highland, Springwater, Lents, Salmon River, Gresham, Orient, Damascus, Viola, Logan and Eagle Creek Valley. The summer of 1902 would become the most disastrous on record in Western Oregon in terms of lives and farms lost to forest fires. At the time of the Bridal Veil fire the community of Palmer consisted of the sawmill, the school, a boarding house for the loggers, a blacksmith's shop and 32 houses. Approximately one hundred and eighty persons were employed at Palmer and in the camps. All this was destroyed by the fire with little if any personal belongings being saved. The locomotive "Peggy" was saved from total destruction despite having its cab and tender completely burned off. Some of the townspeople survived the fire by getting into the water at the millpond or laying in Bridal Veil Creek. Bertha Palmer, daughter of Loring and the postmistress at Palmer, took time to bury the post office equipment and thus saved it from being burned (Hagen 1937). Immediately after the fire, the Meier & Frank Company in Portland sent a train loaded with clothing, bedding and food to the people of Palmer (Judd 1964). A few logs that remained in the millpond and at the holding pond above Palmer were used to construct a temporary sawmill that would begin the building of "new" Palmer. The original townsite was abandoned after the fire and never reoccupied.

SECTION 2 (1903-1960)

The new Palmer community was about one and one-half miles above the old burned-out townsite and was located on the site of the log holding pond. Machinery was salvaged from the ruins of the mill and a temporary sawmill began operating day and night with two 10-hour shifts and turned out over 60,000 board feet of lumber per double shift in the last few months of 1902. Heavy snows slowed construction and forced the workers to spend the winter in tents. The new sawmill and houses were finally completed by the following winter.

At the beginning of 1903 new living quarters, a larger saw mill, a new school and other buildings were in place at "new" Palmer. The school, cook house, bunkhouse and sawmill were located on the north side of Bridal Veil Creek drainage while the family dwellings were on the south side. The new schoolhouse was similar to the original although smaller in size. The second floor was still used by the members of the I.O.O.F. The 400 pound bell was recovered from the first school and installed in the new building which was now finished inside with planed lumber. The new school was one of the first country schools in Oregon that had electricity which was generated by the steam-powered sawmill (Klock 1973). Enrollment was never more than 40 children and varied greatly with winter weather and lumber market conditions which would mean a fluctuation in the amount of workers hired by the Company. Another mile or so of flume was constructed owing to the added distance from Bridal Veil to the new sawmill site. The sawmill began operating in July 1903 after the arrival and installation of machinery from the East. The sawmill building measured 47 x 220 feet and equipment consisted of: one 9-foot (diameter of the wheel upon which the belt-like saw runs) Clark band headsaw; one 30 x 8-inch Wickes gang resaw; a Tatum & Bowen edger; and automatic slashers and trimmers (The Columbia River and Oregon Timberman Nov. 1902:6). Power for the sawmill came from 6

steam boilers connected with a 450 horse-power engine. During March 1904 the Bridal Veil Box Factory was incorporated with a capital stock of $25,000. H.N. Aldrich, Frank Wilmot and W.E. Linnett were officers of the new company which operated adjacent to the Bridal Veil Lumbering Company (The Columbia River and Oregon Timberman Apr. 1904:24). By July the Factory had presented a bid to a New York firm for larch boards on which to wind cloth and had given another bid for larch and fir box ends to a St.Louis firm. The logging camps were all operating at this time and were trying to cut enough trees to keep the new sawmill running. The mill was producing about 70,000 board feet of lumber per day with less than 500,000 board feet of logs in the storage pond. At the Company's annual meeting Mr.Leiter reported that the volume of business was good but the prices for the Company's products were much too low. By the end of the summer the Company was shipping bridge timbers to Colorado, Kansas and Nebraska, and was shipping considerable quantities of mixed products and clear fir to points in New York, Massachusetts and Connecticut. September brought a shortage of water for use in the flume from Palmer to Bridal Veil. As a result the box factory was forced to operate nights in order for the sawmill to make use of all the water to flume logs to Bridal Veil during the day. By the end of the year the Bridal Veil Box Factory had produced 45,000 boxes for the Hood River fruit packers and another 75,000 boxes for Los Angeles orange packers. The Factory had also filled orders from Portland for 16,000 flour boxes (The Columbia Riverand Oregon Timberman Nov. 1904:33). Bridal Veil had enjoyed a good year in spite of low prices for its lumber. The mills produced 15,000,000 board feet of fir; 2,000,000 board feet of larch; and 200,000 board feet of cedar. During September the Company had shipped 97 freight cars of lumber throughout the country. By comparison, other companies in the area such as the

Boring Junction Lumbering Company and the Oregon Fir Lumbering Company (Boring, Oregon) produced 8,200,000 and 3,500,000 board feet respectively.

The year 1905 marked the first of a series of expansions by the Company. By this time the Donahue and Kelley logging camp had ceased operations as well as the Apex Transportation Company and the Latourell Falls Wagon Road and Lumber Company. Loring Palmer sold his holdings in the Company and together with his son formed the Beaver State Lumber Company and later operated a brick yard at Willamina, Oregon. Mr.Palmer died at his home, (known to area residents as the "Castle by the River") a few miles east of Vancouver, Washington, in 1912. By May 1905 the Box Factory had built a 40 x 90 foot warehouse for its box shook stock adjacent to the Oregon Railway and Navigation Company's mainline (The Timberman May 1905:24D). The Factory was producing boxes for the California and Snake River (Idaho, Oregon, and Washington) markets, as well as supplying the fruit-growers in Hood River. The Lumbering Company was planning to construct at Bridal Veil a 100 x 150 foot planing mill, a 100 x 50 foot dry kiln, and some additional storage sheds. This expansion was brought on by large irrigation projects in the region, the accumulation of railroad orders and the growth of the building industry. To advertise the Company's products, Bridal Veil sent a larch (noble fir) and fir lumber exhibit to the Lewis and Clark Exposition that was being held at Guilds Lake in Portland (The Timberman May 1905:24D). Two larch (noble fir) planks, each 3 inches thick, 40 inches wide and 12 feet long were part of the exhibit. The Company also donated a log 6 feet long and 48 inches in diameter as part of a display for the cutting of veneer. During this time period O.A. Palmer left Bridal Veil and became a business partner with Ralph Duniway, John Kane and George C. McDonald, in the Boring Junction Lumber Company which had its mill at Boring Junction (now the town of Boring) along the tracks of the Oregon Water

Power and Railway Company (The Timberman Sept. 1905:56A). The mill had a daily capacity of 30,000 board feet (compared to about 100,000 at Palmer), with the lumber being shipped to Portland. Logging was done with horses. On June 28th Myra L. Bradley, daughter of John Bradley, married C. Henri Labbe, an attorney and the French Consul for Portland (The Timberman July 1905:34). The wedding was an open air ceremony performed on a bluff above the town of Bridal Veil and overlooking the Columbia River. During the summer of 1905 probably with the memory of the 1902 fire fresh in their minds, the Company experimented with its wood burning locomotives and changed them to oil burners in order to reduce the risk of sparks igniting a forest fire. The experiment turned out to be too costly and the locomotives soon returned to using wood (eventually the conversion to diesel oil would become general policy in the woods for all large scale logging railroads).

In July 1906 Bridal Veil increased its capital stock from $150,000 to $650,000 when its principal stockholders sold their shares to a group of lumbermen that included W.W. Edwards and J.H. Edwards, of Leipsic, Ohio, and I.N. Bushong, of Gladstone, Michigan (all from the Buckeye Stave Company), the firm of Barnes & Mauk, wholesalers of Toledo, Ohio, and Charles Briggs and Howard H. Holland, of Portland (The Timberman July 1906:36). The new stockholders merged their timber holdings with Bridal Veil's making a total of nearly 500,000,000 board feet of standing trees on 12,000 acres of land. By late fall a new planing mill was being constructed at Bridal Veil and by year's end the lumber production of the Company amounted to just over 20,000,000 board feet.

With the takeover of Bridal Veil by the new stockholders now accomplished, John Leiter left the Company and moved to Portland in 1907. There he opened an

office in the Swetland Building, located at 5th and Washington, and began dealing in timber lands, real estate, and lumber and logs. In March the Company purchased 2 miles worth of 40-pound rail to extend their logging railroad (for a total of approximately 12 miles) and added 10 new flat cars to their rolling stock. In April John Bradley left the Company and was replaced by Edward D. Kingsley, of the West Oregon Lumber Company, Clatskanie, Oregon. Mr. Kingsley continued to operate his own sawmill at Clatskanie while managing the Bridal Veil planing mill (The Timberman Apr. 1907:26). (John Bradley became president of the Bradley Logging Company after purchasing the Pelton-Armstrong Company's holdings at Cathlamet, Washington. He later organized the Portland Mausoleum Company with former associate John Leiter as vice president.) In May the Company took over control of the machinery and business of the neighboring Bridal Veil Box Factory. By the beginning of summer the Company was installing a new sorting table at the end of the flume in Bridal Veil in order to facilitate the handling of their lumber. Plans were also being developed to place a resaw and edger between the siding and the mainline track of the O.R. & N.Company. A storage yard would be put in north of the mainline and next to the Columbia River. A fire on October 13th destroyed the machine, blacksmith and car shops at the Palmer mill that were valued at $4000.

By spring of 1908 the new planing mill was completed and was one of the most modern mills on the entire Pacific Coast (The Timberman May 1908:26). The main building was 114 x 140 feet and included two Woods fast feed, 15 x 6 inch, matchers (designed for running such forms as flooring,ceiling,drop siding and similar products at speeds between 100 and 400 feet per minute); a No.94 Berlin flooring machine; a Berlin surfacer; an American Boss timber sizer; a Mershon band resaw; a Smith resaw siding machine; a Berlin inside moulder; and a Berlin

self-feed ripsaw. Powering the planing mill was a four valve, 22 x 27 inch, automatic Atlas engine. Marshall Brothers, a well-known cement contractor of Portland, had constructed the boiler (24 x 36 feet) and fuel bin (24 x 34 feet) out of hollow block and reinforced concrete. The building was equipped with four, 60 x 16 inch, high pressure boilers and also housed a General Electric steam turbine for generating electricity for lighting. The entire planing mill was illuminated with arc lights as well as hundreds of light bulbs. A North Coast dry kiln was installed and consisted of 4 kilns each measuring 120 x 21 feet with eight tracks and a drying capacity of 100,000 board feet per day. A lumber storage shed was built and equipped with 6 compartments measuring 100 x 306 feet. The box factory had also undergone modernization and now had a production capacity of 25,000 board feet per day. Fire protection for the mill and box factory was provided by a Grinnell automatic sprinkler system. Additional protection was furnished by a 300,000 gallon reservoir at the base of Bridal Veil Falls. The Company provided an hotel and lodging house facilities for its employees as well as homes for those employees with families. During the summer Edward B. Hazen was hired as general manager and treasurer of the Company replacing Mr. Kingsley (The Timberman Aug. 1908:40C). Mr. Hazen had formerly been manager of the Tongue Point Lumber Company, of Astoria, Oregon and prior to that was with the Chehalis Lumber Company, of Littell, Washington. Ed Hazen moved into John Bradley's former house and began the task of remodeling it. Eventually the new home would feature a wooden tennis court and a wooden swimming pool. Officers of the Company at this time were: Joseph T. Peters, president; Charles G. Briggs, vice president and assistant manager; Harvey H. Briggs, secretary; and Eldridge H. Thompson, mill superintendent.

In 1909 Dan Fahey, logging superintendent, left the Company and became superintendent of construction work for West Oregon Lumber Company's new sawmill at Linnton, Oregon. He was replaced by Elmer E. Ellsworth.

At the end of January 1910 Harvey Briggs left on a trip that would take him to Colorado and Utah where he hoped to find markets for the Company's lumber products. Returning to Bridal Veil in June he travelled to Hood River and spent some time at one of the Company's sales yards. In September Ed Hazen came back to Bridal Veil from a business trip through the Mississippi Valley. Like Harvey Briggs, Mr. Hazen had also been looking for sales outlets for the Company's lumber products.

In February 1911 Elmer Ellsworth applied for and received a patent for a spark arrester that had been tested in the woods during the summer of 1910 (The Timberman Feb. 1911:48E). The device separated firery wood cinders from the locomotives' smoke by means of a wire mesh screen and deposited them into two 6 inch diameter pipes. The cinders were stored until cool and then were dropped out the bottom of the pipes onto the railroad grades. The Company opened a general sales office in March at Portland's Yeon Building with C.C. Patrick as sales manager. In June the logging railroad was extended an additional 2 miles into the woods and a new 7-foot Mershon resaw was installed at the planing mill. The planing mill was cutting an average of 100,000 board feet during a 10 hour shift with 12 men working the floor of the mill. In the fall Joseph Peters moved from Bridal Veil into a newly purchased eight-room colonial house that was located on Portland's Willamette Heights (above the Guilds Lake area and the former Lewis and Clark Exposition site).

C.C. Patrick accepted a job with the Douglas Fir Sales Company of Portland (organized in 1911 to market rail shipments of lumber products from mills in

the Portland and Willamette Valley areas) in January 1912 and was replaced by W.H. Anderson, formerly a travelling sales representative for Bridal Veil. In April the box factory increased its output to 15,000 apple boxes per day on the advice of Nelson Emry, manager of the Company's Hood River outlet, who expected the fruit growers to produce over 1,000,000 boxes of apples that year (The Timberman Apr. 1912:32E). In July an eleven-room Dutch Colonial residence was being built for Ed Hazen in Portland's Arlington Heights (above Washington Park). When it was completed Ed moved his family to Portland and continued to use the Bridal Veil house only when business kept him at the mill or when the family needed a vacation (Davol 1988). By year's end the Company had increased its capital stock from $650,000 to $750,000.

During 1913 Ed Hazen travelled to the Midwest to study the developing lumber markets and to find buyers for the Company's products. He visited cities in Iowa, Kansas and Nebraska and found that lumber consumption was on a decrease and in some cases lumber was being replaced by other building materials (The Timberman Nov. 1913:48B). During the summer employees of the planing mill built an amusement hall at Bridal Veil for dances, basketball games, and social gatherings.

In April 1914, with the beginning of a recession, Ed Hazen once again travelled east and spent two months along the Atlantic Coast checking the lumber markets. The planing mill, which had been closed down since Christmas, was started up and began averaging 130,000 board feet of lumber per day with a 10 hour shift and 13 men working the floor. The Company installed two Wickes Brothers 250-horsepower standard vertical boilers in the sawmill to increase efficiency. Ed Hazen returned from his Eastern trip in time for his younger brother Ben's wedding on June 29th to Dana Willcox of Lovilia, Iowa. The

ceremony took place at Ed's home in Portland (Davol 1988). Ben Hamlin Hazen had been employed as a secretary for the Company since 1909. (He had formerly been a timekeeper for the Tongue Point Lumber Company before coming to Bridal Veil). In December the Douglas Fir Sales Company went out of business and was quickly replaced by the Douglas Fir Lumber Company (a sales organization that was operated by Bridal Veil). Ed Hazen became the general manager since he had temporarily been acting in that role during the final months of the now defunct Douglas Fir Sales Company. In spite of the low lumber prices that resulted from the Recession the annual production figures for the Company totaled nearly 25,000,000 board feet.

In February 1915 Ed Hazen travelled to California and gave a speech at the Western Retail Lumbermen's Association in San Francisco. He visited San Diego before returning to Portland and then went on to Chicago. There he selected the following sales representatives for the Douglas Fir Lumber Company: George T. Mickle Lumber Co., Chicago, Illinois; Harland Wentworth, Minneapolis, Minnesota; H.A. Black, Sioux City, Iowa; McCormick & White, Omaha, Nebraska; D.H. Elder, Denver, Colorado; R.C. Angel Co., Salt Lake City, Utah, and Pocatello, Idaho; and C.S. Rogers, for Eastern Oregon. With World War I creating a need for lumber products, the Douglas Fir Lumber Company obtained an order for Bridal Veil for boat planking that would be used on submarine destroyers (The Timberman Oct. 1915:57). The planking was milled at Bridal Veil and sent east where the boats were constructed on the Atlantic Coast and then sent over to Europe.

During the month of January 1916 the Company won a $2500 settlement from Multnomah County as a result of damages to its property caused by the construction of the new Columbia River Highway (The Timberman Feb. 1916:28).

Ben Hazen became the secretary and sales manager for the Douglas Fir Lumber Company in January and the following month he travelled to Denver to participate in the Mountain States Lumber Dealers' Association meeting. In March the Douglas Fir Lumber Company received a contract for 3 carloads of fir lumber to be delivered to Cincinnati. This was a big accomplishment for Bridal Veil since, traditionally, yellow pine lumber was the top competitor east of an arbitrary line that ran north and south through Iowa. In April Ben Hazen returned from an Eastern business trip that took him to Pittsburg, Kansas City and Minneapolis, where he met with his sales representatives and discussed the growing lumber retail trade resulting from the War. On August 25th members of the West Coast Lumbermen's Association travelled by automobile over the recently completed Columbia River Highway to Bridal Veil. A salmon lunch was served and a tour of the Company's planing mill was provided along with a visit to the sawmill at Palmer and the logging operations on Larch Mountain (The Timberman Sept. 1916:35). At the time the Company was using 3 Baldwin locomotives ("Peggy", "Jumbo", an 0-6-0TT that was originally used by the Oregon Portage Railway and "Betsy" an 0-6-0) on its logging railroad (Holst 1972). Other pieces of equipment in use included 11 steam donkeys of various manufacture and a Smith & Watson 12 x 13 compound geared, special convertible yarder in use on an 1800 foot skyline operation. By year's end heavy snows forced the logging operations and mills to close at Bridal Veil. The logging camps were literally buried under 16 feet of snow. The annual lumber production for the Company reached just over 27,000,000 board feet. In comparison the Cameron-Taylor Lumber Company, operating at the town of Bull Run, only produced about 9,000,000 board feet of lumber for the year.

In the spring of 1917 the Company began to expand its operations as a

result of one of Ed Hazen's trips to Chicago. While there he purchased the holdings of the Wind River Lumber Company located at Cascade Locks, Oregon for nearly $1,500,000 (The Timberman May 1917:49). The Wind River holdings consisted of a mill at Cascade Locks, and stands of timber near Wind River, Washington. Officers of the new subsidiary Wind River Lumber Company were: Dr. I.E. Earle, president, from Hermansville, Michigan; Charles G. Briggs, vice president; and Ed Hazen, secretary and treasurer. Elmer Ellsworth, general superintendent at Bridal Veil also became the mill superintendent for Wind River. Lumber from the new company was marketed by the Douglas Fir Lumber Company and together with Bridal Veil totaled nearly 45,000,000 board feet for the year. In September Bridal Veil increased its capital stock from $675,000 back to $750,000. By October the Wind River logging camp was operating 3 sides and had ordered an 11 x 13 Willamette combination engine (donkey used for yarding and roading). The sawmill at Cascade Locks was averaging 135,000 board feet per day. In November more timber holdings were acquired when sales representative Nelson Emry purchased a tract near Hood River, Oregon, on the east fork of Neal Creek. The Company, in turn, then constructed a sawmill near there to handle this new stand of timber. By December the Palmer sawmill had suspended operations for the winter because of snow. Palmer had operated only about 5 months during 1917 because of an unusually late Spring that was caused by deep snow in the Larch Mountain area.

During the spring of 1918 Bridal Veil again increased its capital stock from $750,000 to $1,000,000. In October W.H. Anderson, the production superintendent for the Company became an officer in the 20th Engineers (Forestry) just before the end of World War I. The Forestry Section of the 20th Engineers had the job of providing lumber products from the French forests

to the Allied war effort. (The commanding officer of the 20th was William Greeley who would later become Chief of the U.S. Forest Service in 1920.) (Morgan 1961). The war effort had a direct connection with the Company when a small contingent of Army men, from the Spruce Production Division, worked at Bridal Veil for a few months. The Division helped the loggers in the Northwest cut select trees (usually spruce) for use in aircraft production. Several women were even employed in the mills to replace men that had gone off to France (Hagen 1937). At the beginning of the operating season in 1919 the sawmill at Palmer started cutting nearly 130,000 board feet per day. The Company's policy of bucking logs in the woods for fuel was dropped and, instead, all the logs were sent to the Palmer mill pond where the cull logs that were suitable for fuel were bucked into the required lengths by a drag saw and then split with a steam powered splitter (The Timberman May 1919:62). The resulting fuel for the donkeys and locomotives was then sent back to the logging operations on a special firewood car. Ed DeSpain was the sawyer as well as the sawmill superintendent at Palmer at this time. The logging camp (Camp "A") was handled by Walt Thompson. The general supervisor of the Bridal Veil plant was H. Wilkinson, with the box factory being under the supervision of Henry O. Fry, a veteran in the box manufacturing trade. Ed Boyce operated the planing mill and A.O. Johnson was the storage yard supervisor, with J.W. Hepner his foreman and plant dispatcher. In December the post office at Palmer ceased operations and the mail for the community was brought up from the post office at Bridal Veil (Helbock 1982). For the year, the Company produced 25,000,000 board feet of lumber and the Wind River Lumber Company operations produced an additional 15,000,000. (The Cameron-Hogg Lumber Company formerly Cameron-Taylor, at Bull Run, Oregon, produced 12,500,000 board feet of

lumber.) The box factory at Bridal Veil turned out nearly 8,000,000 board feet, up about one million from 1918 production figures.

At the beginning of 1920 the box factory was operating on an 8 hour shift and was turning out 40,000 board feet of box shook per day (The Timberman Feb. 1920:80C). Most of the shooks (short, thin peices of lumber) were used to manufacture meat crates and fruit boxes. The box factory was operating the following equipment: a planer; a pony planer; 4 cut-off saws; 4 ripsaws; one vertical resaw; one twin vertical resaw; a combination matcher and gluer; one box printing press; one recess machine; one cleat machine; one nailing machine; one corrugated-type fastener machine; one typing machine; one box shook squeezer; and a scrap wood cut-off saw. The Company had purchased a Ross lumber carrier for use in the planing mill. The carrier was powered by rechargeable Edison batteries and could travel at speeds up to 12 miles per hour both forward and backward. The carrier could handle a daily production of 100,000 board feet of lumber and eliminated the need for over 300 hand carts, 6 men and 6 horses in the planing mill operations (The Timberman Sept. 1920:56). Claude McCLean was the superintendent of logging operations at Palmer during this period. (He was known for inventing a log loading device appropriately named the McClean Boom.) In July the subsidiary Wind River Lumber Company purchased 15,000,000 board feet of timber in the Columbia National Forest (name later changed to the present Gifford Pinchot). The price for the Douglas fir and western red cedar was $1.50 a thousand board feet, with white pine $3.00 a thousand and western hemlock $.50 a thousand.

In late spring 1921 the Wind River sawmill was shut down and the logging camps in Washington continued to remain idle after the winter snows had melted. In July Bridal Veil moved its bookkeeping department from Portland

back to the planing mill office. The sales staff, however, remained at the Yeon Building (located at 5th and Alder) in downtown Portland. At the end of November a series of storms moved through the Columbia River Gorge depositing snow and ice and stopping the logging and mill operations in the surrounding areas (The Timberman Dec. 1921:47). At the planing mill the smoke stacks on the boilers were toppled and destroyed. The flume from Palmer was broken in a number of places and all the water systems were either frozen or broken. The roof over the lumber storage shed at the planing mill collapsed under the weight of the ice, which varied in thickness from 12 inches to 6 feet.

Early in 1922 the Company exchanged 3459 acres of logged-off land on the slopes of Larch Mountain for 120 acres of forested land belonging to the Oregon National Forest (name later changed to Mt. Hood). In the fall the holdings of the Company were purchased by a group of investors and the name was changed to Bridal Veil Timber Company (Hagen 1937). William E. Dubois of Vancouver, Washington, became the new president with Howard H. Holland, vice president; Robert H. Noyes, treasurer; and J.J. Donovan, of Vancouver, Washington, secretary. Offices for the new company were in the Yeon Building. Albert M. "Ole" Hagen was appointed general manager, replacing Ed Hazen (who had left the Company and entered into the retail lumber trade). Prior to coming to Bridal Veil Mr. Hagen had been manager of the Carlisle Lumber Company, Onalaska, Washington, and before that had managed the Booth-Kelly operations at Springfield, Oregon. In late summer there was a shortage of water in Bridal Veil Creek which slowed operation of the flume, and also the water turbines at the planing mill. As a result operations at Bridal Veil were curtailed and output dropped to about 100,000 board feet from a high of 150,000 per day.

After a four month closure due to snow the sawmill at Palmer began

producing about 130,000 board feet per day during April 1923. The planing mill had been operating one shift since the end of February, using the winter stockpiles of rough-cut lumber. The sawmill operation at Palmer would start up each morning 15 minutes before the planing mill since lumber traveling the 4 miles of flume would make the trip in about this amount of time (The Timberman Sept. 1923:140). At this time period the sawmill was steam driven, with the power being supplied by 2 vertical boilers, developing 500 horsepower, and a pair of twin sliding valve engines. The boilers had been brought up to Palmer from Bridal Veil by two trucks - one going forward, the other using reverse gear - with a boiler between on their beds (Graff 1983). Machinery that was in operation at the sawmill consisted of: a 9-foot band saw; an 8-inch edger; a 12-inch gang saw; a slasher; and a 40-foot automatic trimmer. Equipment at the planing mill consisted of the following: a 7-foot Mershon resaw; a pony edger; a short wood slasher; and extensive sorting chains. Three Grand Rapids and one Northwest blower kilns were used for the drying of the lumber. Three No. 77 matchers, a bull planer, and a Yates inside moulder and sticker were also in use at the mill. The planing mill was driven by a Pelton waterwheel with an 800 foot head that produced 1000 horsepower. Three Prescott gasoline powered tractors and one Elwell-Parker electric tractor were used in the mill to haul and stack the finished lumber (The Timberman Sept 1923:140). James Gaydon was the sawmill superintendent as well as the sawyer; Charles Rohr was the filer; and A. Brocke was one of the engineers. The planing mill foreman was C. Platt and the purchasing agent was L.C. Stewart. William Burns was the logging superintendent. By the end of June the Company had cut all its timber holdings on Larch Mountain that were within reach of its logging railroad. As a result the Company began surveying a new railroad grade into a large stand of timber

between Brower and Gordon Creeks. Timber cruisers estimated that this new stand of timber would provide the Company with timber for the next 10 to 15 years. The new grade was named the Gordon Creek & Palmer Railroad (Lovegren 1924). At the beginning of summer the Company sold the Wind River sawmill at Cascade Locks to David Eccles, president of the Sugar and White Pine Lumber Company and former president of his late father's (David Eccles) Oregon Lumber Company. In July the Bridal Veil Timber Company joined with the State and the U.S. Forest Service and formed the Larch Mountain Fire Protection Unit, with C.L. Henson of Sandy, Oregon, in charge. This new association got its first test on September 1 when 8 Forest Service lookouts all reported a smoke on the southwest flank of Larch Mountain. The fire quickly spread through logged over land and swept through all of Section 5 and a small portion of Section 6 (in Township 1 South, Range 6 East) before being stopped at the boundary of the Bull Run Reserve. Five logging railroad trestles and one donkey were destroyed along with 3 other donkeys being damaged by the fire (The Timberman Sept. 1923:95). In late October Ed Hazen (with E.R. Blair and H. Wilkinson as partners) formed a new lumber firm under the name Douglas Fir Corporation. The firm had recently purchased the sawmill of the former Albany Lumber Company of Albany, Oregon.

By the early part of 1924, the Bridal Veil Timber Company began converting its narrow-gauge railroad to standard gauge (4 feet 8 1/2 inches between the steel rails) as well as refitting its locomotives. A 2-truck Lima Shay locomotive was purchased and brought out to Bridal Veil where it was loaded on a sled and yarded up to Palmer by an 11 x 13 steam donkey. The donkey had started down from Palmer and made the round trip in one month (Graff 1983). The lumber produced at Bridal Veil was being shipped almost exclusively to the

eastern United States at this time period. The daily cut from the sawmill was averaging 120,000 board feet. In September another fire broke out on Larch Mountain but this time the Protective Association was able to contain it to about 30 acres. Damage was confined to logging cables and some standing timber. Two pumps and 3000 feet of hose were used by men from the Company and the U.S. Forest Service to fight the fire. In November the Company celebrated the record October cut of 3,600,000 board feet of lumber by passing out cigars to the millworkers (The Timberman Nov. 1924:256). Twenty-four loads of logs per day were brought to the sawmill and 5,000,000 board feet of lumber was decked at Bridal Veil. Two more miles of railroad were built into a newly acquired stand of timber and a new logging camp was being planned (Camp "B") as the year closed out.

In January 1925 operations were shut down for the winter at Palmer and repairs were being made at the planing mill. Ground was being prepared for the construction of a number of additional bunkhouses and a new mill hotel for employees of the Company. Continued orders from the Eastern States, with increasing demands for mining timbers and railroad ties, caused increased activity at both Palmer and Bridal Veil. By spring 3 miles of the flume were being rebuilt, together with the new construction of a supply flume to aid in fire protection during the summer. The railroad was being extended further into the woods; kitchens were added to all the houses; another bunkhouse was completed; and the cookhouse enlarged to provide food for 180 workers. Ben Hazen,(who had left the Company in 1920) founded the Benjamin Franklin Savings and Loan Association, in Portland, during this period. He appointed Frank Shull, a well known flour milling executive, as president since his name familiarity would help to draw customers to the new business (Davol 1988). Ben

was the secretary-treasurer. In May the Company purchased 120 acres of timbered land around Larch Mountain from the United States Land Office in Portland for $18,291.51. Fire again struck the logging operations at Palmer, on June 24, destroying about a half million board feet of felled and bucked timber. Because of a slump in lumber market conditions, the mill at Bridal Veil began operating only one shift through the summer and by the end of 1925 had produced about 36,000,000 board feet of lumber. The logging operations at Palmer operated 2 sides during the summer and kept a few million board feet of logs stored in order to provide a continuous supply of lumber to the Bridal Veil mill. In September Ed Hazen arrived in Kansas City, Missouri, to begin his new job as general sales agent for the lumber department of the Central Coal & Coke Company (owners of the Oregon-American Lumber Company of Vernonia, Oregon) of that city (The Timberman Sept. 1925:77). Another tract of timber was purchased from the Federal Government in late September by Bridal Veil.

The new year was just a few weeks old when John Leiter died suddenly on January 19, 1926 at the age of 75 (The Timberman Jan. 1926:222). Ever since leaving the Company he had lived in Portland and remained associated with the timber industry. Within a week of his passing, John Bradley (83 years old) died in Portland on January 24 (The Timberman Feb. 1926:130). He had been manager of the Bradley Logging Company up to the time of his death. During this time Ed Hazen had resigned from his job with Central Coal & Coke Company and accepted a similar sales position with Long-Bell Lumber Company (which also had a sales office in Kansas City).

The year 1926 saw a renewed demand for Western lumber from the East and Midwest and so an additional section of the railroad was constructed into the recently purchased new stands of timber. In an effort to prevent fires in the

woods during the summer the Company established some new regulations (The Timberman July 1926:170). The smoking of cigarettes in the woods, as well as on the train going to and from the logging operations, was prohibited during the fire season. For the logging operations, a special watchman was constantly on duty. Extra attention was given when moving the steam donkeys from one setting to another and the ground around the donkeys was watered down several times a day to keep sparks from igniting a fire. The hooktenders and engineers were instructed to guard against fire hazards, even if it meant a slight decrease in production. By November 15th, when logging operations shut down for the winter, 6,000,000 board feet of logs had been decked for the sawmill. Daily production at the planing mill had been running close to 150,000 board feet by the end of the year. All Company operations came to a halt December 4th to the 6th because of the tragic death of James Gaydon on December 3 (Mr. Gaydon was crushed by a log on the saw carriage and died instantly). During 1926 Bridal Veil produced 32,000,000 board feet of lumber in comparison to the Cameron-Hogg Lumber Company at Bull Run which cut about 15,000,000 board feet and the Clear Creek Lumber Company at Estacada which produced 6,500,000 board feet. This was to be the highest production figure for the Bridal Veil Timber Company. After 1926 the production figures would slowly begin to decline and would never return to the levels of the "boom" years.

On January 24, 1927 the Company once again purchased timber from the Government Land Office. Bridal Veil paid nearly $41,000 for 240 acres of land near Larch Mountain. During the year only one side was handling the logging operations with a total of 75 men working at Palmer. Ten donkey engines were in use in the woods along with the locomotives. In addition to the 3 locomotives the rolling stock was comprised of 24 sets of disconnected trucks;

one flat car; 2 tank cars; and one speeder for hauling the men to the woods. William Burns was still supervising the logging operations. Late in the year the Company installed an electric crane at the planing mill for handling the rough cut lumber in the storage yard. Production figures for the year totaled nearly 30,000,000 board feet.

In 1928 the Mt. Hood National Forest began reforesting land on Larch Mountain formerly owned by Bridal Veil (The Oregonian May 20, 1928). Approximately 1500 acres of burned or cut-over land was planted by a crew of 30-35 men. Julius Frank Kummel was in charge of the U.S. Forest Service crew. The men lived in a large cluster of tents about 2 miles east of Palmer on the north side of Larch Mountain. Three year old trees from the Wind River Nursery (U.S. Forest Service) at Carson, Washington, were brought to the camp by pack trains from Palmer. With a flagman to keep the planting lines straight, the trees were planted in rows at regular 8 foot intervals. The crew worked eight hours a day, with each man planting between 600 to 700 trees per day. Total cost of the planting (which included the cost of the seed, nursery expenses, hauling the trees to the area and the actual planting) was $12 an acre. By the end of the year the Company produced just over 30,000,000 board feet of lumber. During this time the Company was specializing in the production of lumber used for the manufacturing of ladders. One order alone had been for 6 carloads of fir and hemlock ladder material (The Timberman Dec. 1928:108).

On January 31, 1929 a fire started that completely destroyed the blacksmith shop at Palmer with a resulting loss valued at nearly $500. During the year 70 men were working in the woods and the sawmill. The logging operations were mainly highleads with one and an half sides doing the work. Two Baldwin locomotives were still in use on the railroad which now stretched out from

Palmer a total of 12 miles. Forty-five pound rail (weight per 3-foot length of rail) was used, with the rolling stock consisting of 32 sets of disconnected trucks, 3 flat cars and one speeder. William Burns was still the logging superintendent. At Bridal Veil the planing mill was turning out over 100,000 board feet of material in an 8-hour shift. Officers of the Company continued to be William Dubois, president, Howard Holland, vice president, and "Ole" Hagen, general manager. The planing mill superintendent was Hugo Hallin. Other key personnel in the Company included: Harry Austin, Bridal Veil purchasing agent; James E. Sprague, Palmer purchasing agent; Carl Miles, storage yard superintendent; Jack Powers, superintendent of the dry kilns; Ed Bennett; saw filer; and Pete Lofquist, the master mechanic. During the year Ed Hazen formed a new lumber sales company called Facilities Lumber Company, which had its offices in Portland's Spalding Building at Third and Washington (The Timberman Apr. 1929:27). Before forming Facilities Lumber, Ed had been sales manager of Gerlinger Lumber Company of Portland (after leaving Long-Bell).

Bridal Veil purchased 40 acres of O&C grant land (land formerly deeded to the defunct Oregon & California Railroad Company) in Multnomah County on February 17, 1930. In June Ed Hazen formed the Hazen Lumber Company with a capital stock investment of $30,000. His associates in the company were Harold D. Langille and J.R. Blair. Later during the 1930s Mr. Hazen moved to California and became manager of the Home Building Company, of San Francisco. (At one time he tried to market pre-fabricated houses but the concept was slightly ahead of the times and failed.) (Davol 1988)!. At the start of the school year in the fall, the upper grade students at Palmer were driven down to the Bridal Veil school in the grocery delivery truck (a GMC panel truck that had been fitted with benches in the rear for the children to sit on). The high

school students from both Bridal Veil and Palmer were taken to school at Corbett (Klock 1973). Also in the fall the Progressive Business Men's Club, of Portland, had completed construction of a hiking trail on Larch Mountain and formed an organization known as the Trails Club (Oregon Historical Quarterly 1931). With the Great Depression starting to affect the lumber industry, production figures for the Company closed out the year at nearly 24,000,000 board feet.

During the 1931 school year the upper grade students from both Bridal Veil and Palmer were taken to school at Corbett in the GMC, which by now had a small bus body attached to the chassis (Klock 1973). In October the Hazen Lumber Company opened new offices in Portland's Securities Building at 53 4th Street on the Westside of the Willamette River.

The Depression began to affect all aspects of the lumber industry in the early part of the decade. At Bridal Veil some of the workers at both the planing mill and the sawmill (as well as some of the loggers) had to be laid off. When the school year ended in June 1933 the schools at Palmer and Bridal Veil were closed and never reopened (Klock 1973). From then on all the grade and high school students that remained in the two communities attended classes atCorbett.

In early January of 1934 Ben Hazen began travelling throughout the Pacific Northwest lecturing to groups, such as the Kiwanis Club of Portland, on the importance of the lumber industry to the recovery of the country from the Great Depression (The Timberman Jan. 1934:58). Ben was president of the Oregon Savings & Loan League and director of the Portland Federal Home Loan Bank. His brother Ed had by now moved to San Franciso, California, to work with the Pacific Coast division of the National Wooden Box Association. In May Bridal

Veil installed a new smooth-end trimmer (manufactured by Sumner Iron Works of Everett, Washington) and made some changes to the chain lumber conveyor at the planing mill (The Timberman May 1934:85). Lumber production reached nearly 20,000,000 board feet for the year. This was mainly due to the Company getting a contract to supply lumber and timbers for the Bonneville Dam construction project on the Columbia River.

On January 22, 1935 the Company purchased an additional 117 acres of O&C land in Multnomah County for $10,272.50. In April 1935, with its timber holdings almost logged off and now cutting the lower grade hemlock trees, the Company obtained another contract, this time for some down and standing timber in the Bull Run Watershed, (near Walker Prairie) that the Portland Water Bureau had for sale. On July 8th William Burns, who had been logging supertintendent for nearly 14 years, died suddenly (The Timberman July 1935:76). Harry Austin, Mr. Burns' assistant, was appointed as his successor. On July 29th, Theodore H. Smith (former Company founder) died at the age of 83, of pneumonia, in Salt Lake City, Utah (The Timberman Aug. 1935:74).

On November 9, 1936 a broken electrical wire caused a fire to break out in the east end of the planing mill (Hagen 1937). Fire fighting was hampered by strong east winds and the large quantities of wood within the mill and on the dry docks. In less than 2 hours the resaw room, the filing room, the sorting shed, one drying shed, and part of a mono-rail system used in transporting lumber within the mill were totally destroyed. The resulting damage was estimated to be nearly $100,000. Burning cinders were carried by the wind into the Bridal Veil Creek drainage where they destroyed portions of the flume and nearly destroyed the old Bradley-Hazen house. After the fire the Company continued to ship lumber that had not been burned and even planned to rebuild

the mill by January. Because of economic considerations (and also the fact that their timber holdings were nearly logged off), rebuilding did not take place and the Company closed both its mills and moved out of Palmer, thus ending the historic lumbering operations on Larch Mountain and at Bridal Veil.

In March 1937 the Bridal Veil Timber Company sold all the equipment and buildings at Bridal Veil and Palmer to Homer E. Leash and George M. Leash, officers of the International Wood Products Company of Niles, California (The Timberman Mar. 1937:88). Homer Leash had formed the company with J. Leonard Kraft and C.H. Kraft in 1924 to make cheese boxes for the Kraft Cheese Company, which later became the Kraft-Phoenix Cheese Corporation. International later acquired a sawmill and box factory in New Westminster, British Columbia, to provide material to the Canadian division of Kraft Cheese. The Niles operations were shut down in 1936 and the company moved to Cathlamet, Washington. The new enterprise, Bridal Veil Lumber and Box Company, began installing new equipment at the old planing mill site and made the plant totally electric powered. Machinery from Palmer was removed and what could not be reused was sold off. Justus H. McLaughlin, a Portland electrical engineer, had the contract to install the new wiring and mill equipment (The Timberman Apr. 1937:119). Equipment at the new mill included a single 36-inch Mershon resaw, two twin 36-inch Mershon resaws, and a 54-inch resaw used to split the rough lumber into smaller sizes. Women were used at the mill to work the sorting belt (The Timberman Oct. 1937:26). In addition to cheese boxes the Bridal Veil Lumber and Box Company began producing various types of mouldings and meat crates. Homer Leash was manager of the company and Leonard Kraft was his assistant. J.F. Habenicht was the general mill superintendent, with J.V. Powers supervising the dry kiln operations. L.C. Washburn was the chief

engineer at the mill and E.A. McElroy was the head saw filer. The Bridal Veil imber Company continued to log the last remaining stands of hemlock on its land even though it had sold both its mills (The Timberman Mar. 1937:88). In December Justus McLaughlin replaced Mr. Habenicht as mill superintendent.

On February 28, 1938 Mr. McLaughlin was severely injured in an automobile accident, sustaining a broken pelvis, a fractured skull, 6 broken ribs, and both lungs punctured, as well as a punctured bladder (The Timberman June 1938:22). In the spring Harry Austin continued to supervise the logging operations for the Bridal Veil Timber Company. Logs were now being transported to a log dump at Corbett with trucks used by contractor Clarence L. Dietrich, of the town of Bridal Veil. Mr. Dietrich had 5 trucks that were used in the hauling operations: Mack Dietrich drove truck No.1, a Reo with a Teco dual-axle trailer; No.2 was an Indiana with a Teco dual-axle trailer, driven by John Beagle; Mr. Dietrich drove a new White Logger Model 704K with a Walker dual-axle trailer; No.4 was another Reo, driven by R.W. Irwin; and Ray Koethe drove truck No.5, another new White. Another contractor that occasionally hauled for Bridal Veil was Lloyd Irwin and he used a GMC with a Pierce dual-axle trailer. The haul from the logging operations to Corbett was nearly 18 miles and the trucks travelled part of the distance over a plank road. One side was logging the hemlock with both gas and steam donkeys and a D8 "Caterpillar" that was used in a "swing" operation from a cold deck. J. Hebert was the Cat skinner. A new Skagit Steel and Iron Works donkey was used to load the logs onto the trucks. E.F. Hanley was the "puncher". Gordon Spear was another puncher on a 10 x 12 loader. Other key people in the logging operations were: Mike Udey, head loader; W.M. Udey and Orvil Hunt, hook tenders; Jim Udey, puncher on a Willamette Iron and Steel 10 x 11 donkey;

George Dodd, donkey "doctor"; Bill (Hi-lead) Stromberg, high climber; A.E. O'Rourke, supervised the felling, bucking and scaling; Harold Husband, head rigger; and Charles Sealander, saw filer (The Timberman July 1938:24). In the fall Justus McLaughlin (recovered from his accident) left the Bridal Veil Lumber and Box Company and returned to his electrical contracting work. Mr. Habenicht resumed his former position as mill superintendent.

During 1939 the Bridal Veil Lumber and Box Company purchased nearly 9000 acres of pine timber near Heppner, Oregon (The Timberman Feb. 1939:50). John Zornes was the contractor responsible for logging and transporting the logs to the Wray-Smith mill at Heppner. After preliminary cutting at the mill, lumber was shipped via the Union Pacific Railroad to Bridal Veil where it was made into boxes. By the end of the year Wray-Smith had cut and shipped over 4,000,000 board feet of lumber.

In January 1940 Homer Leash purchased the former Roles Brothers Shingle Company property on Multnomah Channel (near Linnton, Oregon) and began construction on a new rotary lathe shook mill. The mill would supplement the production of spruce shook from the plant at Cathlamet, Washington, and then ship the material by truck 30 miles to Bridal Veil for drying and final manufacturing (The Timberman Mar. 1940:47). On April 17th the Heppner Lumber Company was formed by Homer Leash, Leonard Kraft, Orville Smith and P.W. Mahoney. The new 6-foot band mill that was built took over the cutting previously done by Wray-Smith.

During the spring of 1941 operations at Cathlamet were shut down and transferred to the recently completed International Wood Products Company mill at Linnton (The Timberman May 1941:66). The mill at Linnton made the tops, sides and bottoms for Kraft cheese boxes out of rotary cut noble fir while the

mill at Bridal Veil provided the box ends manufactured from ponderosa pine. By the end of the year and America's entrance into World War II the Bridal Veil Timber Company finally completed logging the last of its timber and then went out of business (The TimbermanMar. 1941:62).

During World War II the Bridal Veil Lumber and Box Company manufactured ammunition storage boxes. On February 16, 1944 Mt. Hood assistant Forest Supervisor Foster Steele and Columbia Gorge District Ranger Albert Wiesendanger directed the burning of the "ghost town" of Palmer to prevent any accidental or arson caused fires at the site from spreading across Larch Mountain and into the Bull Run Reserve (Oregon Journal Feb. 17,1944). Foremen Frank Rypczynski and Orville Richmond, with their crew of conscientious objectors from the Wyeth Camp in the Gorge, doused the snow covered buildings with oil and gasoline to make sure that everything would be burned. The forty year old site was reduced to blackened rubble in a few hours.

After World War II the Bridal Veil Lumber and Box Company returned to producing cheese boxes full time and continued to do so until it went out of business in 1960. The end for Bridal Veil could easily be summed up in the favorite phrase of Eldridge Thompson: "Well, it's a hard world and very few of us will ever get out alive" (Hagen 1937).

CONCLUSIONS

The Bridal Veil Lumbering Company was not entirely unique in its methods of operation compared to other companies along the Columbia River and west of the Cascades. All the "pioneer" logging operations started with oxen and horses or mules and gradually turned to steam power after the invention of John Dolbeer's "donkey" engine in 1881. Most large scale companies used locomotives as a means of transporting logs from the woods to the mills and, where practical, made use of water power to flume lumber and logs to the sawmills. Eventually the internal combustion engine, fueled by diesel or gasoline, replaced steam powered equipment and the "modern" era of logging and lumbering began with logs being transported to the mills by trucks.

The Bridal Veil Lumbering Company was notable, however, in a number of ways. First of all, the logging that was done was confined to a relatively small area due to an abundance of prime old growth timber and to a tree species, noble fir, that had been largely ignored by early day lumbermen. By installing a sawmill in the midst of the stands of timber and fluming rough cut lumber to their planing mill, the Company was able to keep transportation times and costs to a minimum. As soon as the rough lumber was milled the finished products could easily be shipped East and West by the Union Pacific Railroad that was located practically on the mill's doorstep.

Second, the Bridal Veil Lumbering Company was in continuous operation for 50 years, even though it went through a few name changes. After selling both its mills in 1937 logging continued for nearly 5 more years until all vestiges of the original Company ceased operations at the end of 1941Since 1937 the site of the planing mill at Bridal Veil has been in use by other mills up to the 1980's.

And third the Company was one of the first to trail logs over skids behind a

locomotive. This concept was developed in order for the logs to act as a brake and slow the small steam locomotives on the descent to the sawmill. The Company was also credited with being the first to use a yarding engine at the top of a hill and pulling logs uphill rather than the convential method of yarding downhill.

APPENDIX

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The Columbia River and Oregon Timberman

The Oregonian

The Timberman

CHRONOLOGICAL EVENTS OF THE BRIDAL VEIL LUMBERING COMPANY

1886 T.H. Smith purchases timber, organizes and founds the Bridal Veil Falls Lumbering Company with partners Loring C. Palmer, E.L. and Charles Brown and George Barnet.
Smith begins construction of sawmill at Palmer.
O.A. Palmer supervises logging for Company.

1887 Smith begins construction of the re-milling and shipping unit at Bridal Veil and flume from Palmer.
Palmer sells interest in Vancouver, Washington mills and becomes president of Company.

1889 Smith and E.L. Brown sell interests in Company to John S. Bradley and J.M. Leiter.
Name changed to Bridal Veil Lumbering Company.

1891 Donahue and Kelley camp begins operation.

1895 Apex Transportation Company organized by Eldridge Hill Thompson, president. O.A. Palmer general manager. Operates railroad under lease from Company.

1896 "Bull" donkey and chute installed.

1898 Post office established at Palmer.

1902 Fire destroys Palmer.

1903 New sawmill in operation replacing small temporary mill in use soon after fire of 1902.

1904 Bridal Veil Box Factory incorporated.

1905 Palmer sells holdings in the Company.
Donahue and Kelley and Apex Transportation Co. cease operations.
Company has exhibit at Lewis and Clark Exposition.
O.A. Palmer leaves Company.

1906 W.W. and J.H. Edwards, I.N. Bushong, the firm of Barnes & Mauk, Charles Briggs and Howard Holland become stockholders in Company.

1907 Bradley and Leiter leave Company. Edward Kingsley becomes manager.
Company buys out Bridal Veil Box Factory.

1908 New planing mill at Bridal Veil completed.
Edward Hazen replaces Kingsley as manager.

1909 Ben Hazen hired as secretary of Company.

1911 Douglas Fir Sales Company organized.

1914 Douglas Fir Lumber Company replaces bankrupt Douglas Fir Sales Co.

1916 Ben Hazen becomes secretary and sales manager of Douglas Fir.

1917 Ed Hazen negotiates purchase of Wind River Lumber Company.

1918 Spruce Production Division works at Bridal Veil.

1919 Palmer post office ceases operation.

1920 Ben Hazen leaves Company.

1921 Wind River ceases operation.

1922 Group of investors purchases Company.
Name changed to Bridal Veil Timber Company.
Edward Hazen leaves Company. "Ole " Hagen becomes manager.

1923 Gordon Creek & Palmer Railroad established to log new stand of timber.
Wind River operations sold to David Eccles.
Larch Mountain Fire Protection Unit established.

1924 Railroad converted from narrow-gauge to standard-gauge.

1926 Highest lumber production figures are established.

1928 U.S. Forest Service begins planting trees on Larch Mtn.

1933 Schools closed at Palmer and Bridal Veil.

1935 Company purchases down and standing timber in the Bull Run Watershed that is offered for sale by Portland Water Bureau.
T.H. Smith dies.

1936 Fire destroys portion of planing mill operation.
Company shuts down both mills and moves out of Palmer.

1937 Company sells equipment and buildings to Homer and George Leash.
Bridal Veil Lumber and Box Company is formed.
Bridal Veil Timber Company continues to log remaining stands of hemlock.

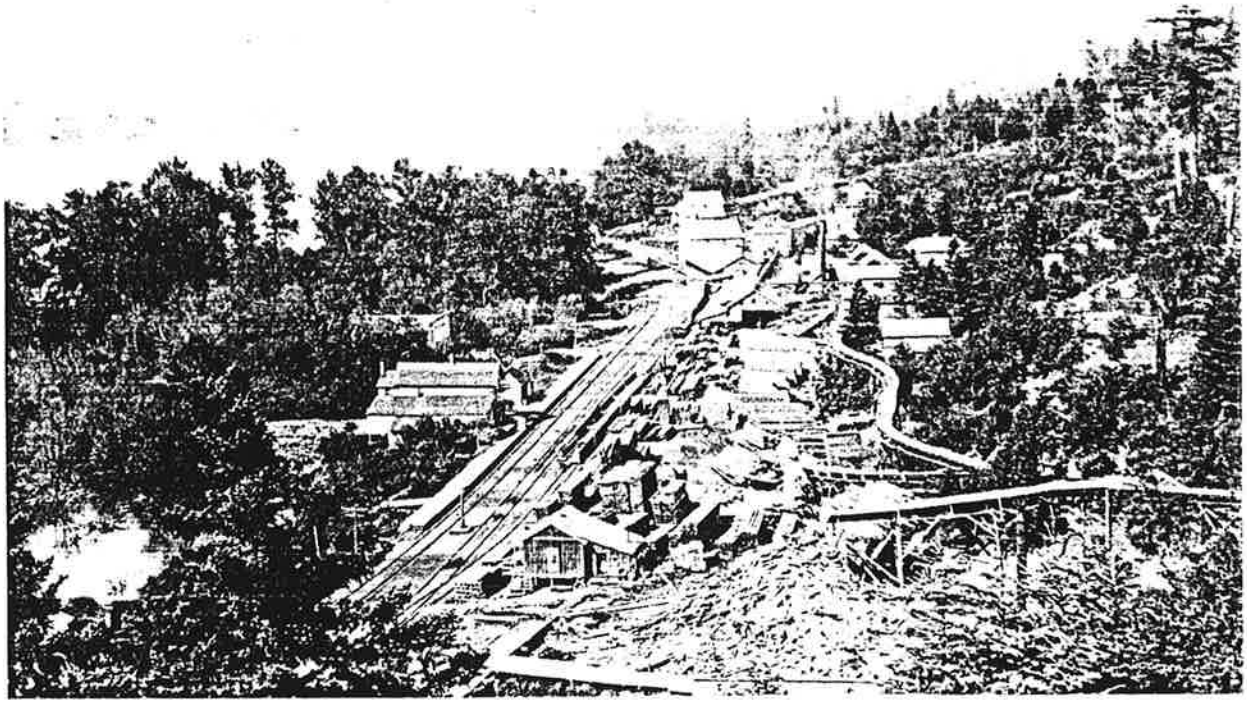
1941 Bridal Veil Timber Company ceases operations.

1944 Forest Service burns "ghost town" of Palmer.

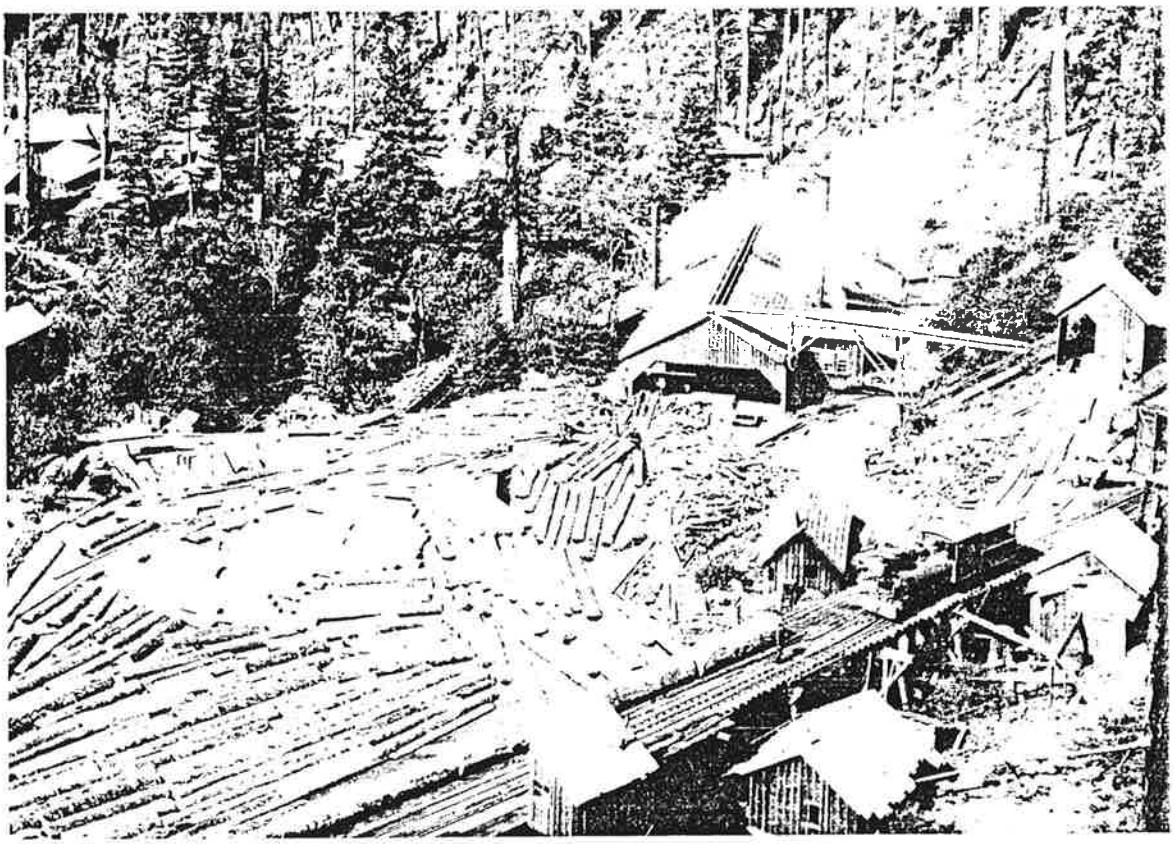
1960 Bridal Veil Lumber and Box Co. ceases operations.

ILLUSTRATIONS

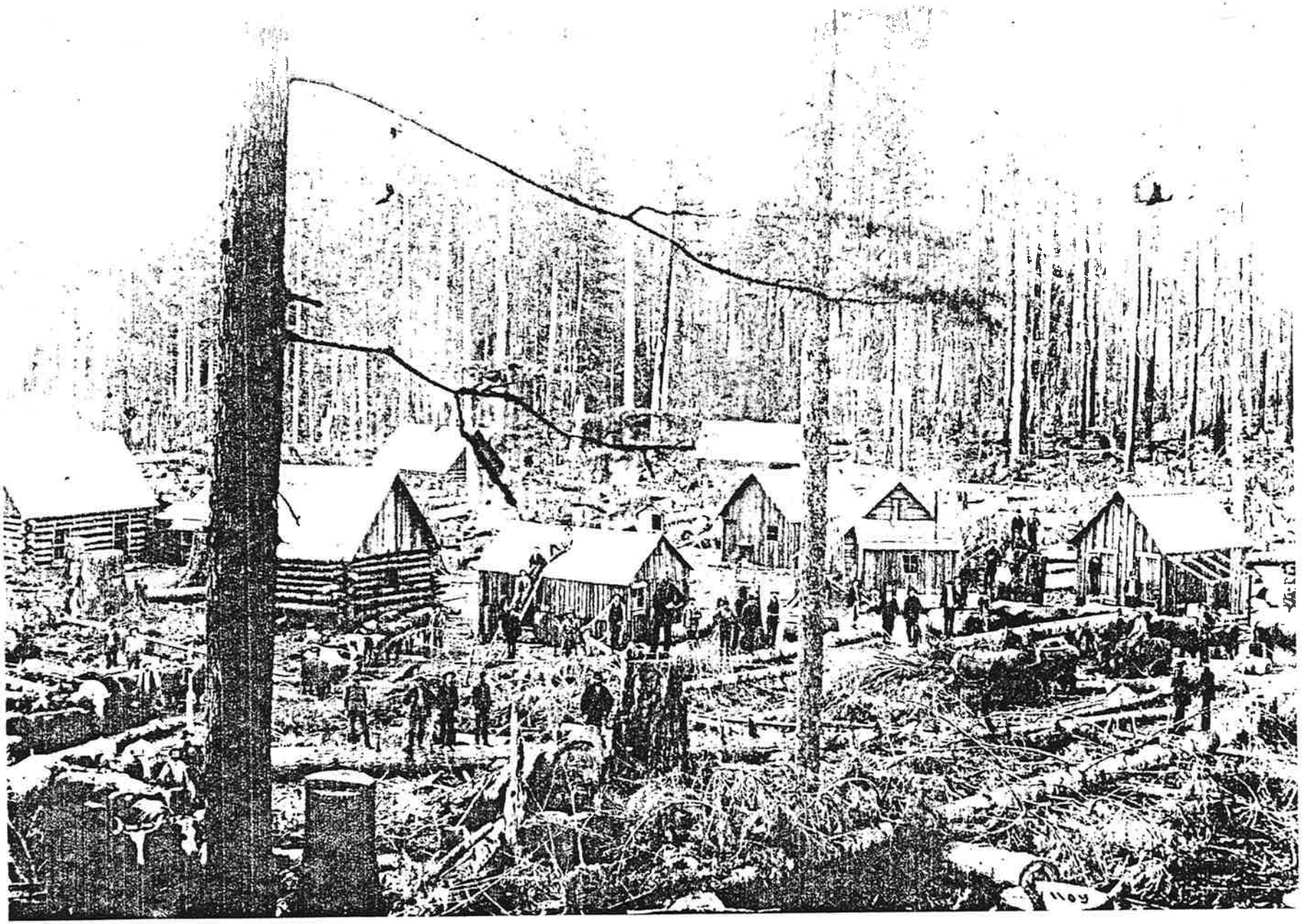
Oregon Historical Society, Negative #83522
Page from Company brochure published around 1896.



Oregon Historical Society, Negative #9538
Mill and town of Bridal Veil with flume from Palmer in right corner. Oregon Railway and Navigation Company tracks in center with Columbia River in left background. About 1900.

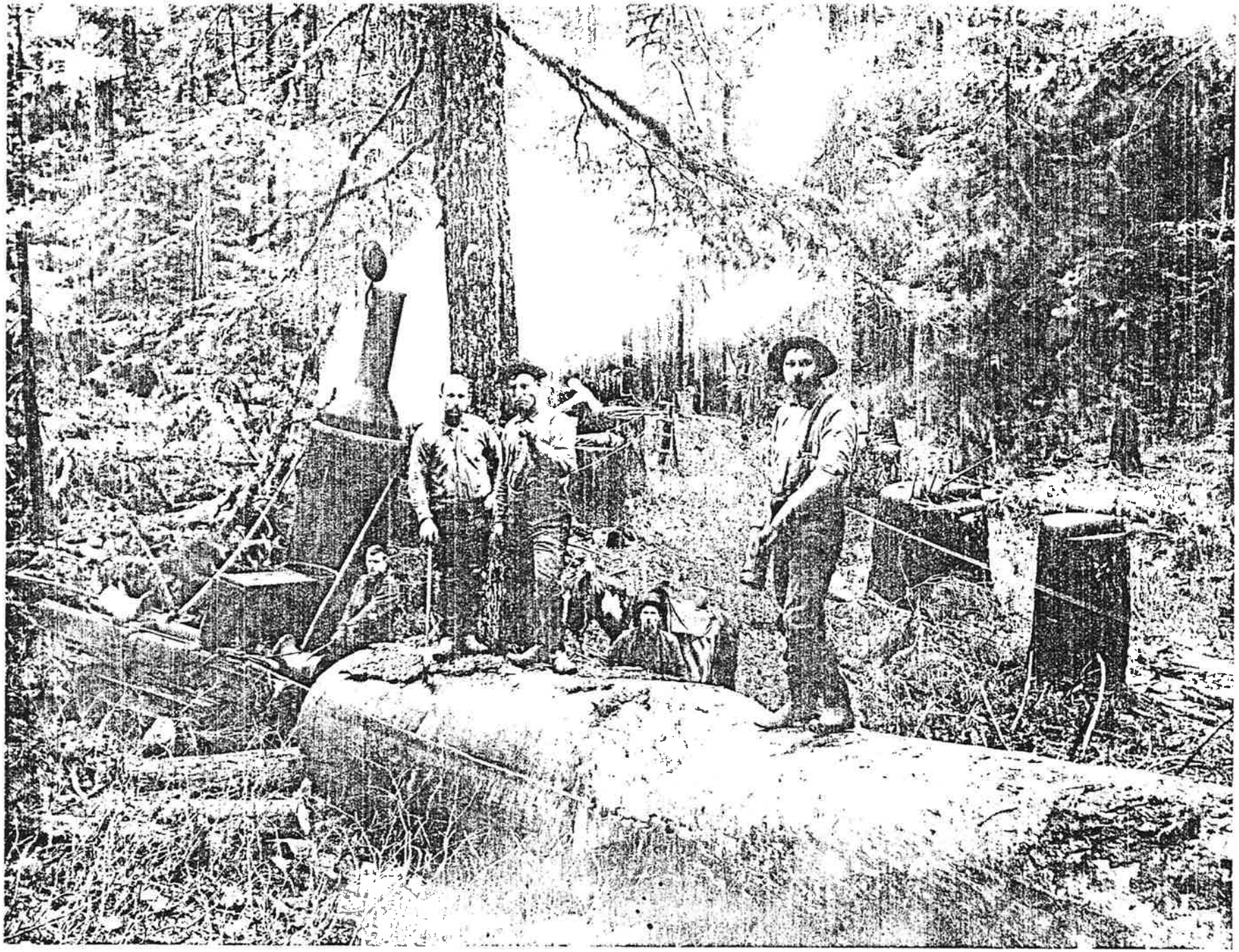


Oregon Historical Society, Negative #45791
Sawmill and houses at "old" Palmer with locomotive "Jumbo" and turn of logs. About 1896.



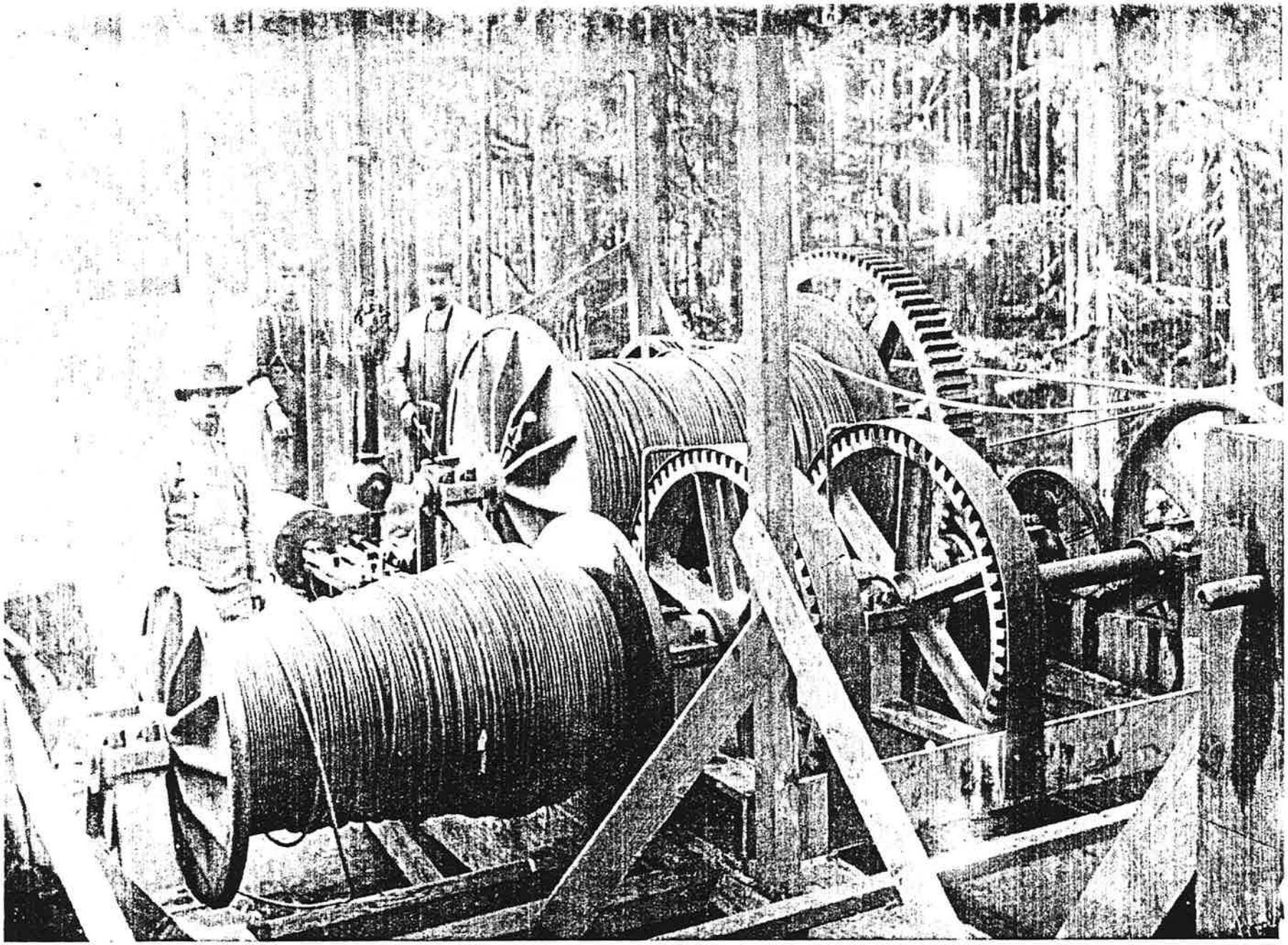
Oregon Historical Society, Negative #44631
Donahue and Kelly logging camp. About 1896.

Oregon Historical Society, Negative #44630
Bunkhouses of the Apex Transportation Company. About 1896.

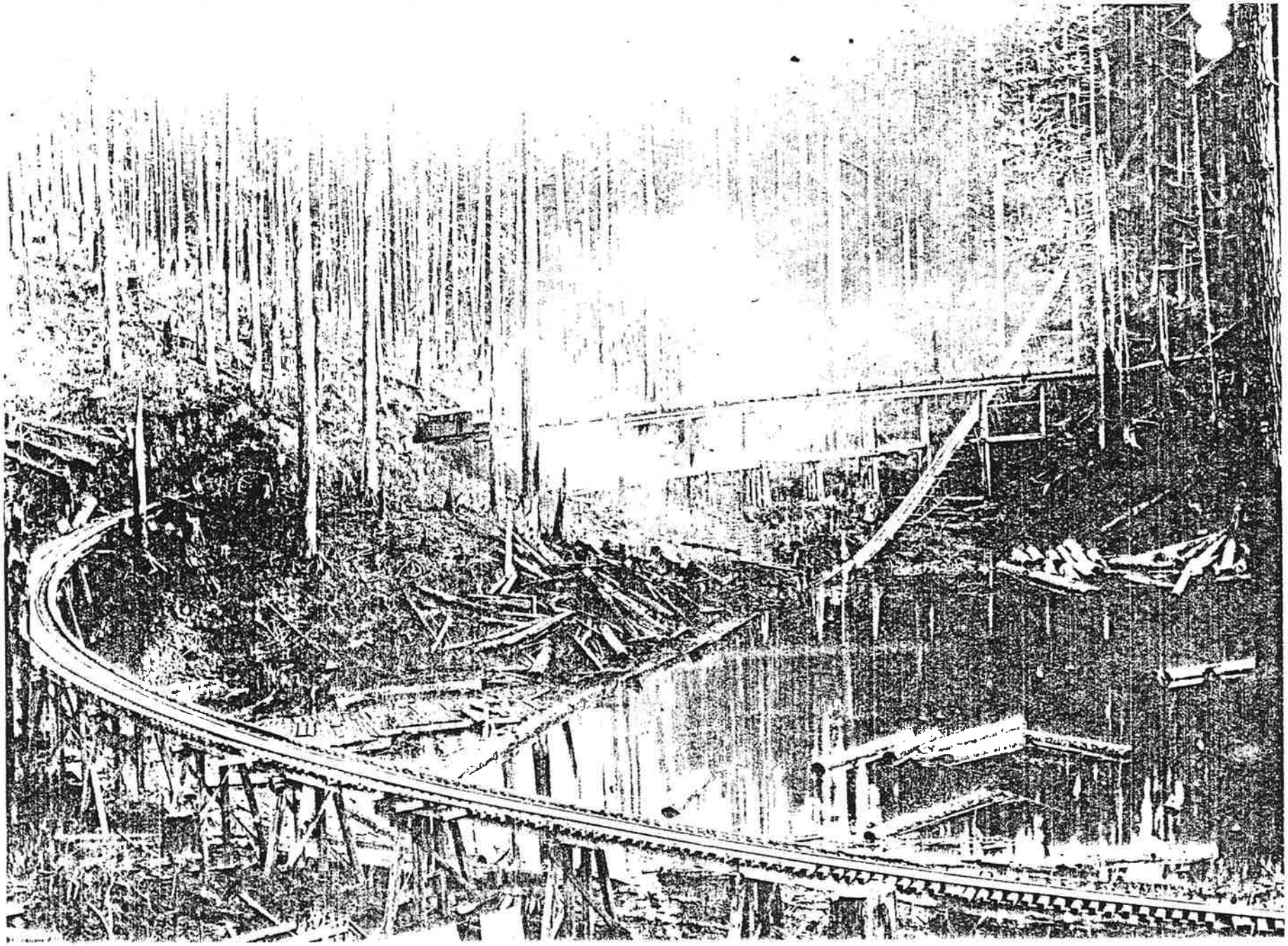


Oregon Historical Society, Negative #46239
Yarding crew with a turn of logs. About 1896.

Oregon Historical Society, Negative #66275
Skidroad about 1896. Blocks at bottom left helped keep cable clear of road.

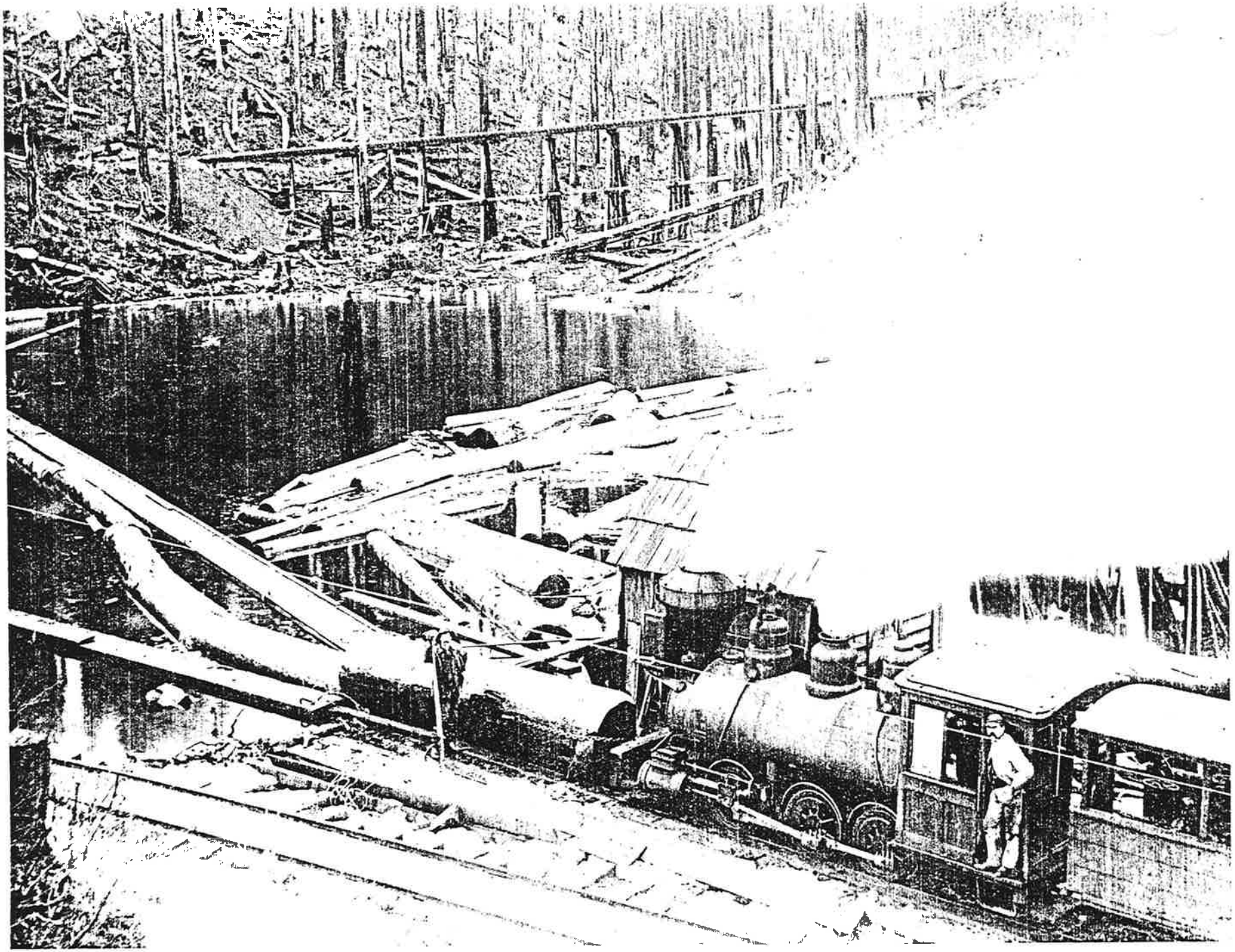


Oregon Historical Society, Negative #020088
"Bull" donkey engine. About 1896.

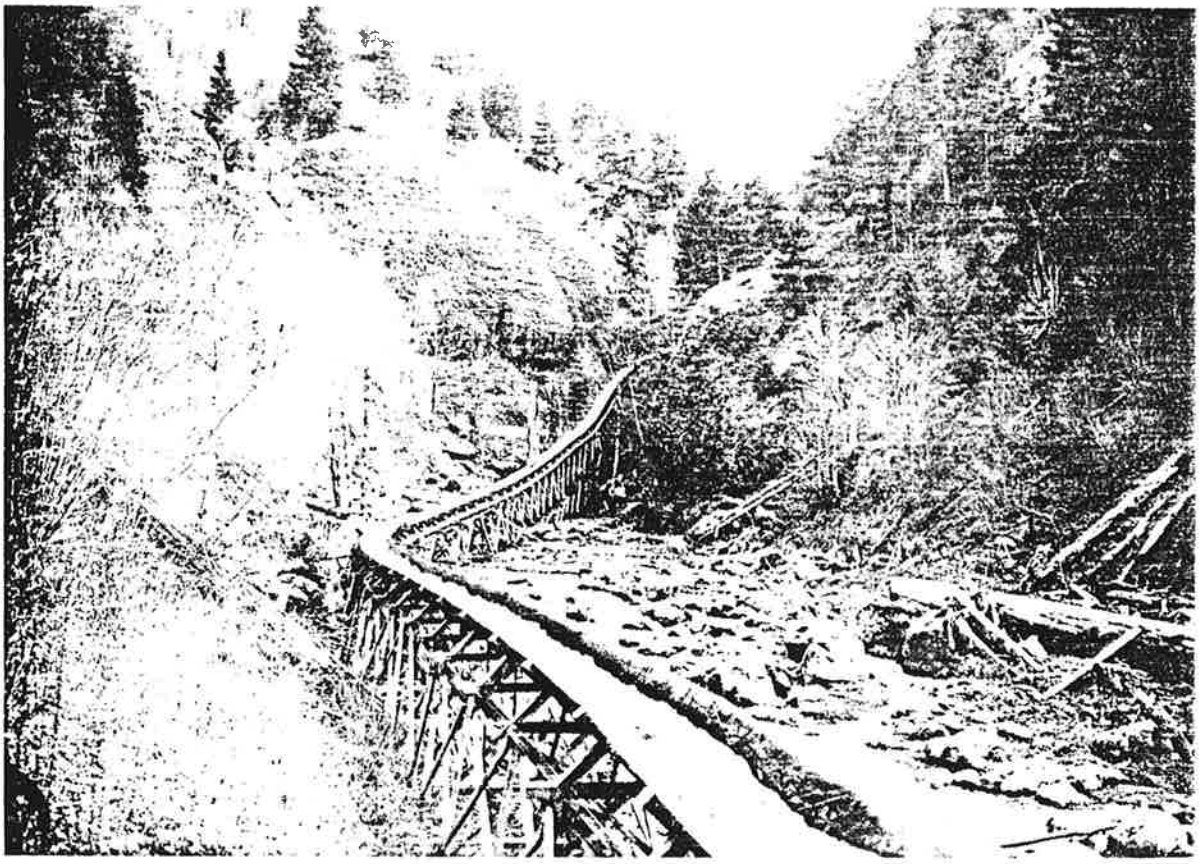


Oregon Historical Society, Negative #66269

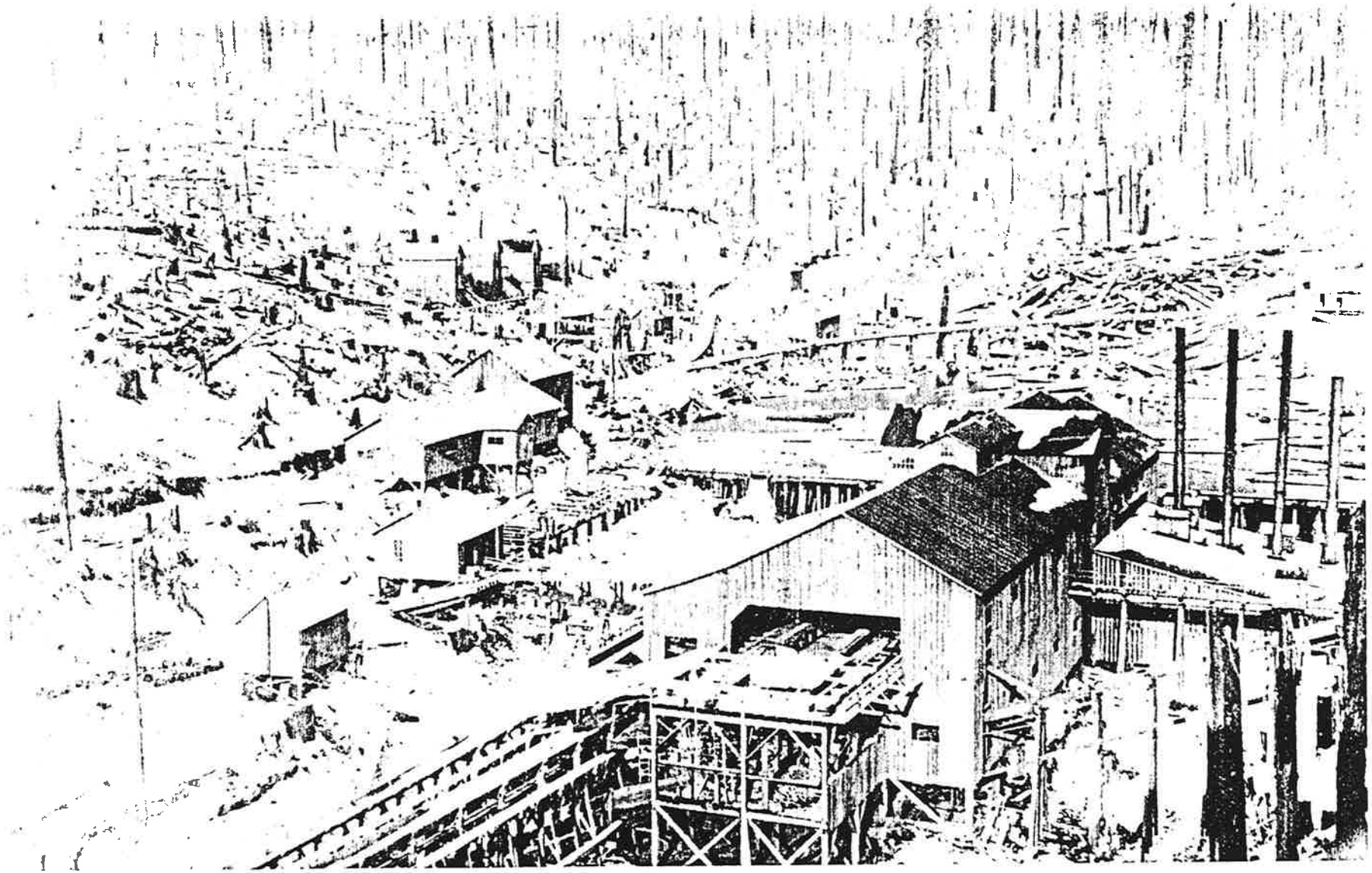
Holding pond for "old" Palmer about 1896. Notice the "bull donkey" incline coming into the pond at right. "Jumbo" is bringing in a turn of logs. This pond was expanded and became the sawmill pond for the "new" Palmer after the 1902 fire.



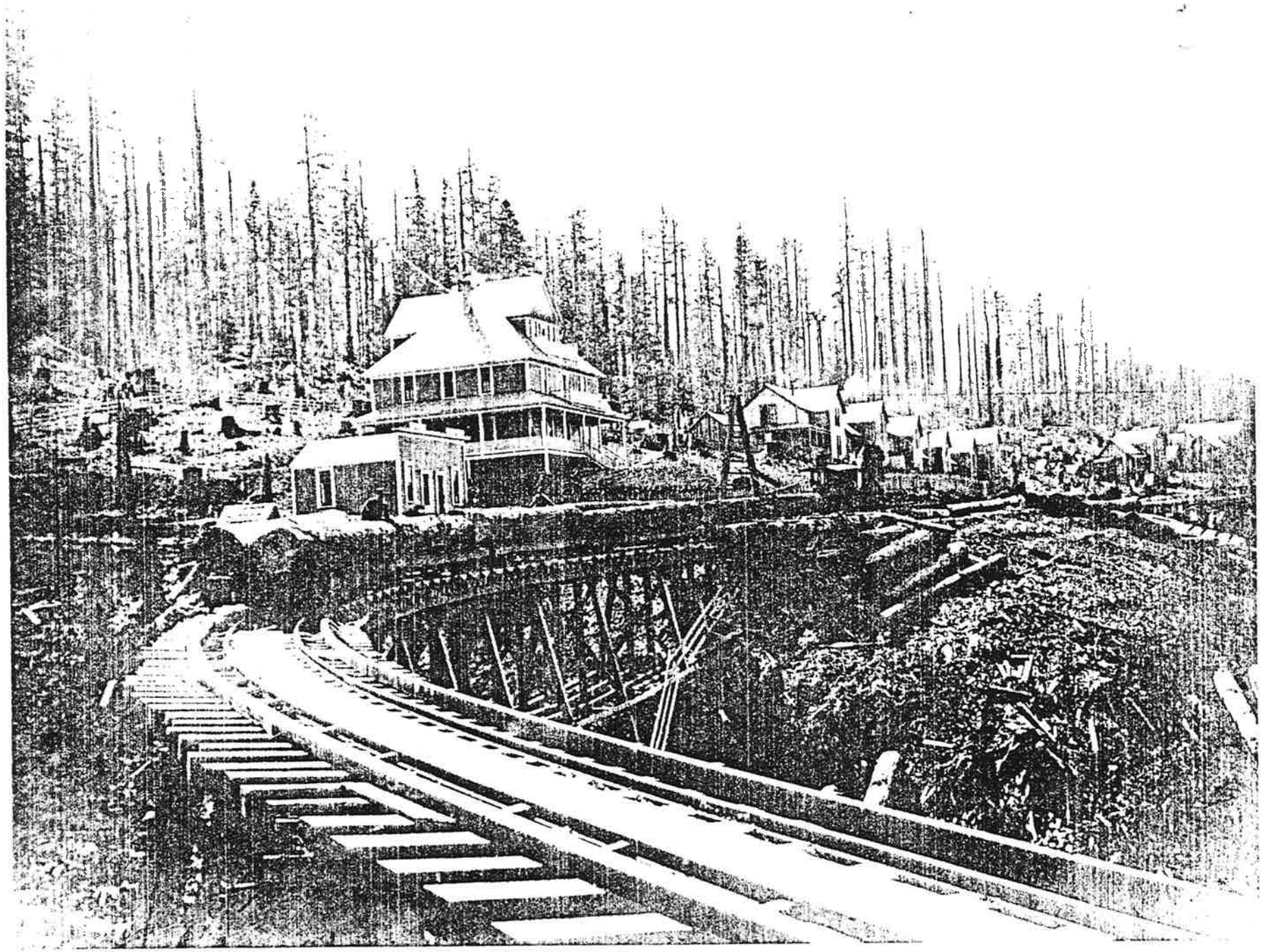
Oregon Historical Society, Negative #46238
"Jumbo" pulling a string of logs from the holding pond. About 1896.



Oregon Historical Society, Negative #7872
Flume from sawmill at Palmer to mill at Bridal Veil. Scene is near town of Bridal Veil. About 1896.

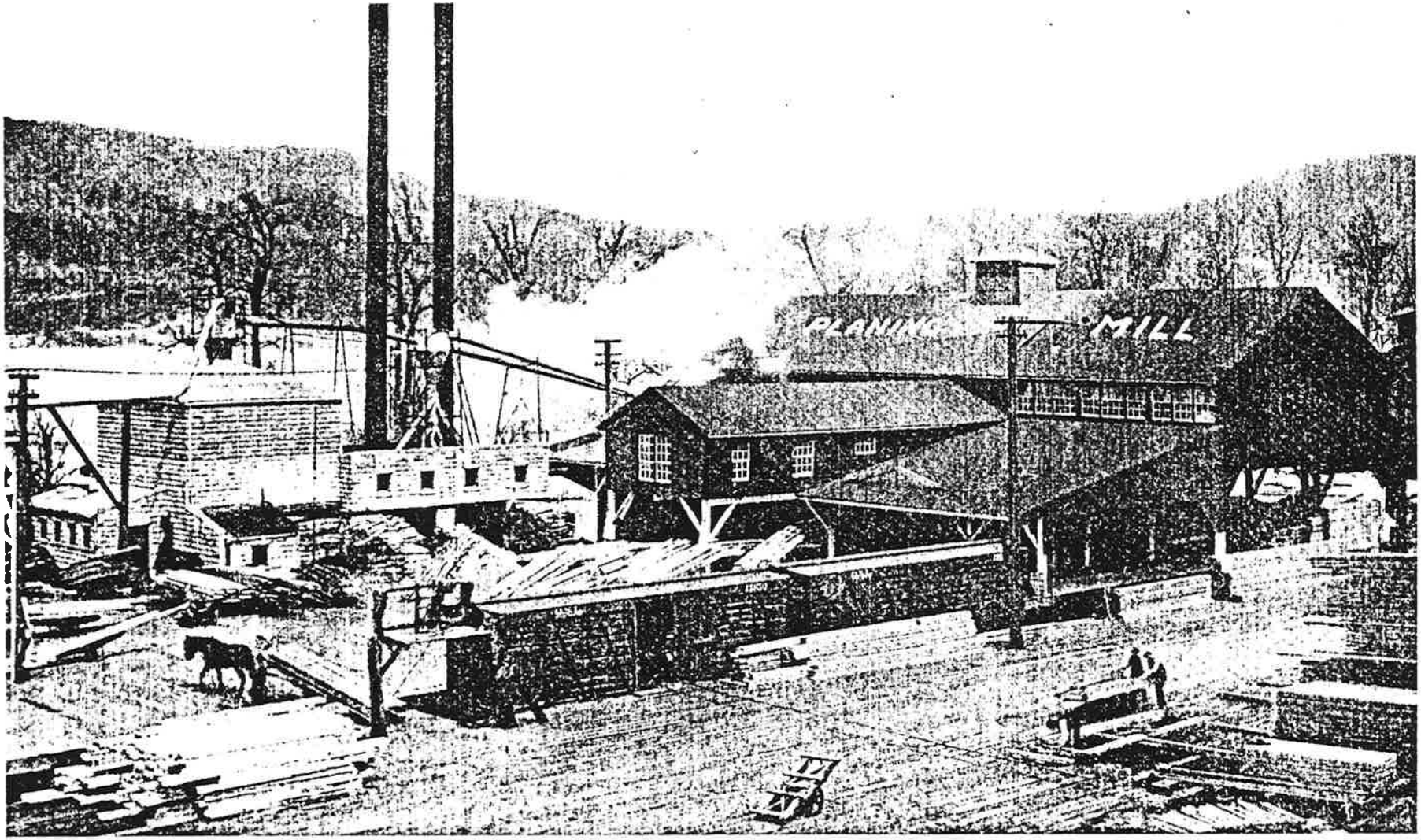


Oregon Historical Society, Negative #003020
"New" Palmer shortly after the 1902 fire.

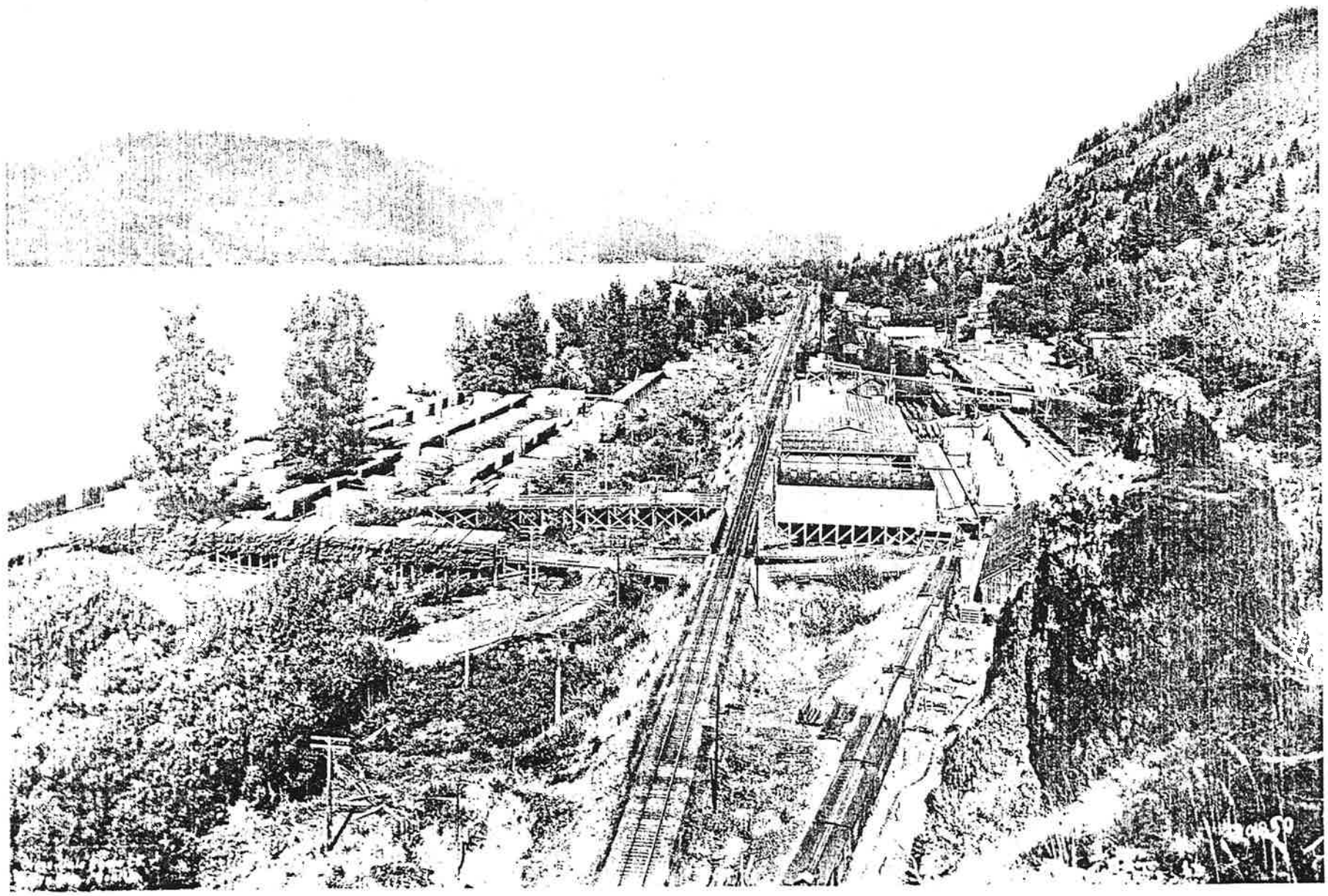


Oregon Historical Society, Negative #44514
Office, boarding house and family dwellings at "new" Palmer.

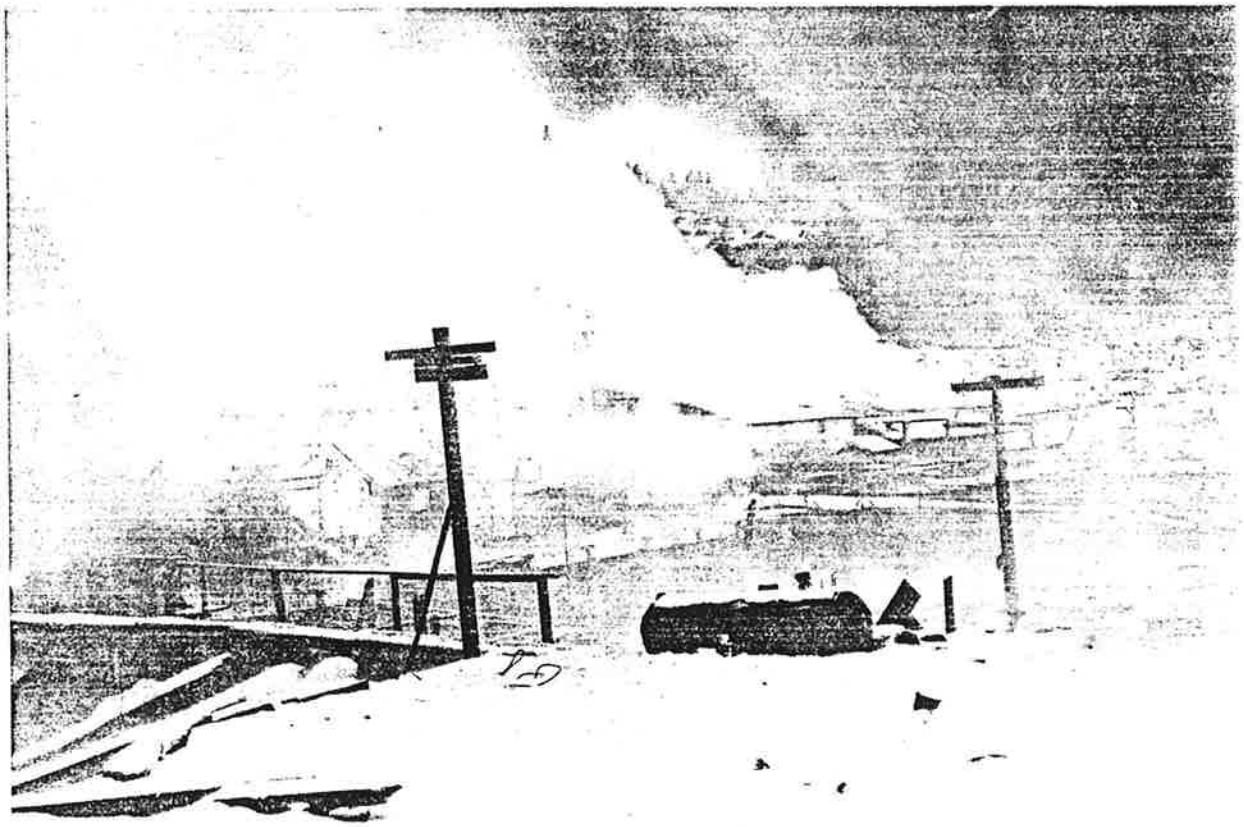
Oregon Historical Society, Negative #81171
Edward B. Hazen



Oregon Historical Society, Negative #81441
Power plant and planing mill at Bridal Veil in 1908.



Oregon Historical Society, Negative #81187
Bridal Veil planing mill.



USDA Forest Service, Nt. Hood National Forest
Sawmill and town of Palmer in flames, February 16, 1944

LETTERS

1/25/02

I am staying with an old friend but we take our meals at the boarding house we go out every morning to work on the train about three miles and come down on A car in the evening so that way we can stay at the mill in stead of up in the woods.

2/7/02

I am falling timber we are not working this after noon so I thought I would write.

2/18/02

Sunday I worked in the after noon and went to preaching at night.

2/24/02

I went out to camp three on sunday where Ed is working and did not get back till late it is about seven miles so it make quite a walk and as the court meets most every sunday evening I did not get time to write to you I am a member of said Kangaroo Court no(.)one and when there is any bisness on hand I am always there and if I am not there I shud bee so are the rules of the Court. we have some awful times down here. there is A good crowd of boys here and we almost tear the house down some times.

3/16/02

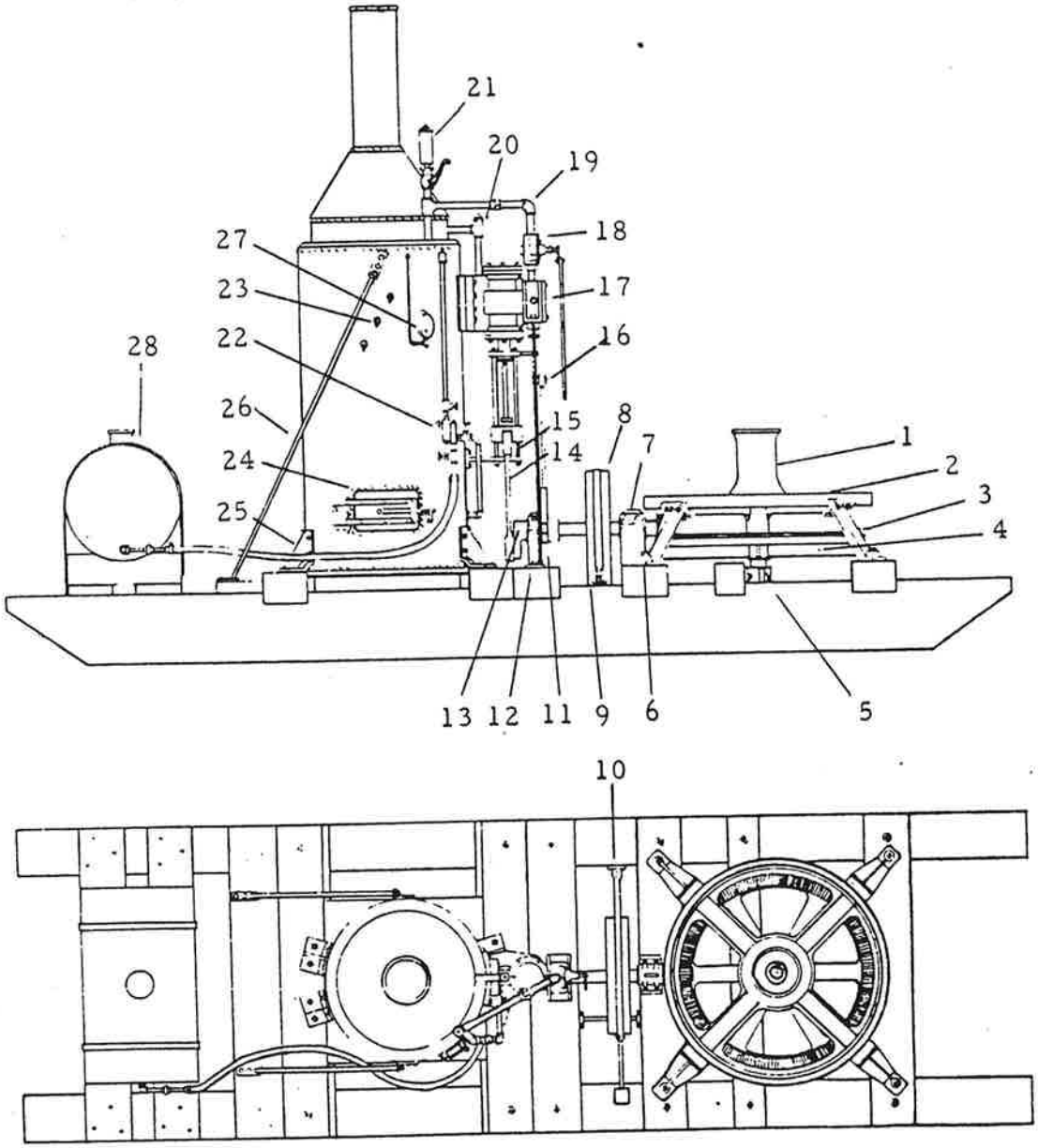
there is about seventeen inches of snow up there at there camp and there is Just A little down here Just in spots. well I got that pond Job that I told you About there were two pond men drown over at the other mill Just A few day I hart Ed will get A pond Job in about ten days that is what he worked at when he was here before he is the best man they ever had on the pond you said you suposed they wer settled they are but not permenant they will moove down to No two whe he comes down to work there.

Mar 23/02

it has been snowing and raining here for the last week there is no snow on the ground down here but they say there is about thre feet up at camp three So you think I had not or to have A pond Job will I dont know about that Edd has worked on the pond for several years and he thinks there is no Job like it. of course not anymore dangerous than driving team the kind of ground they have to haul on well sweet heart we have had an Ofel time in our court here the last week some of the folks of Palmer wanted to see A kangaroo trial so we gave one over in the hall for the binifit of A man that got hurt here A few days ago and talk about A crowd but we had one and they said it was better than any of the show that came along. I am the highest member of the court I hav taken thirty four degrees... A bran new waiter from Eugean to day and I think Johnie will smite on her Ed Perry I don't think likes it very much down here every thing is so different from what he is use to you wanted to know where bobie was he was working for O. L. Co. the last I knew of him.

From, History of Bridal Veil Lumbering Co. CARK: 46

Glossary



1. CAPSTAN
2. PLATFORM
3. LEGS
4. BULL GEAR
5. LARGE PILLOW BLOCK
6. PINION GEAR
7. INTERMEDIATE PILLOW BLOCK
8. FLYWHEEL
9. BRAKE PEDAL
10. BRAKE BAND BRACKET
11. ECCENTRIC
12. SMALL PILLOW BLOCK
13. CRANK
14. MAIN ROD & CROSSHEAD
15. CROSSHEAD GUIDE & BRACKET
16. VALVE GEAR JOINT
17. CYLINDER & STEAM CHEST
18. THROTTLE VALVE
19. STEAM INLET PIPE
20. STEAM EXHAUST PIPE
21. WHISTLE
22. INJECTOR
23. TRI-COCKS
24. FIREBOX DOOR
25. BOILER BRACKETS
26. BOILER BRACES
27. STEAM GAUGE
28. WATER TANK

GLOSSARY

block ---------- pulley

board hole --------- a hole cut by fallers in a tree for springboards.

brake hickey ------- club for setting brakes on logging cars.

brow log ---------- log at end of rollway usually parallel to and next to track or roadway, forms support for top skids on rollway; big log to protect log cars during loading and unloading at landing and log dump, also called brow skid.

buck ---------- to cut trees into log lengths.

bull block --------- a large open-mouthed pulley block.

bull wheel --------- a large-toothed gear wheel; usually applied to biggest one on a donkey.

butt hook ---------- hook on butt rigging to which choker is secured.

butt rigging ------- system of swivels and clevises connecting haulback and mainline and to which chokers are fastened; short lines between chokers and mainline.

cant ---------- a large timber either squared out of a log by slabbing of the bark or the half of such square. Properly a sawmill term, but cants were used in bridge building on logging railroads.

cant hook ---------- a small stout pole equipped with a swinging hook on the side and 2 teeth on the end; used for turning logs.

choker ---------- steel cable with hook end to put around logs.

HISTORY OF BRIDAL VEIL LUMBERING CO
by BILL CARR

crotch line -------- a cable spread by a bar (often a piece of railroad track) from which tongs are hung in loading logs.

cut ---------- a truckroad or railroad excavation through a rise of ground.

direct-connected --- a rod engine, as opposed to geared types.

disconnected truck - a 4 wheel railroad truck equipped with sharp-faced bunks; logs laid across two trucks made a car to be coupled up in a log train.

dog ---------- a short metal stake, sharp on one end, with an eye on the other, driven into a log it gave a hold to tie to another log.

donkey ---------- a logging engine with drums.

drag saw ---------- a crosscut saw powered by a gas engine (or steam in a sawmill).

drum ---------- part of a donkey engine on which cable is wound.

dutchman ---------- a block on a line to keep logs off track, or to divert course of logs.

end hook ---------- hook used in loading logs.

eye ---------- a loop splice in end of a cable.

fairlead ---------- lead consisting of 4 rollers, 2 vertical and 2 horizontal placed on front of donkey sled to make the line spool evenly on the drum when moving.

fall ---------- to cut timber

fid ---------- a short sharp steel tool used in splicing wire rope

fore-and-aft ------- a V-shaped trough made of logs; used in ground lead shows for yarding long distances, or across swampy or other unfavorable terrain.

ground lead -------- old style logging in which logs were dragged from woods to landing by oxen or horses, later by donkey engine with vertical spool; line was returned to woods by horse.

jack -------------- steel appliance hung in spar tree to carry skyline.

Merry widow -------- a voluminous screen used on donkey engine stacks as a spark arrester.

nubbin ------------ steel sleeve on end of wire rope for purpose of engaging slot in choker or butt-hook.

passblock ---------- small block which is strapped to the top of a spar tree, and is used to rig the tree.

peavy ------------- heavy handled tool equipped with spike point and free-swinging hook, used in rolling logs.

pig ---------------- sled used in skidroad to bring hooks back

pike pole ---------- long pole equipped with spike and hook for shoving logs around in pond.

pinion ------------ smaller of two gears on a donkey.

reel -------------- drum on which cable is wound on donkey.

rigging sled ------- in old days of animal logging, a flat sled or hollow log used to haul dogs and other gear back to the woods.

rod engine --------- the usual type of steam locomotive, direct-connected from cylinders to driving wheels.

saddle tank -------- small locomotive with water tank mounted over boiler to increase weight on driving wheels, hence, increase tractive effort.

screw jack --------- used in days before power loaders to jack very large logs onto railroad cars.

shackle ---------- a clevis, or heavy iron loop used in rigging. Usually it is passed through an eye spliced in a wire rope, anchoring the rope to a swivel, block or hold of some kind.

sheave ---------- the wheel in a block, grooved to hold the line which is run through it.

side ---------- a complete yarding and loading, falling and bucking show and crew.

skidroad ---------- road on which logs are dragged

skids ---------- in the old bull team days, small logs laid across the line of haul to keep logs from bogging down in mud.

skidway ---------- a loading dock built of logs.

sled ---------- sled on which donkey sits.

slide ---------- a rough chute for transporting logs, may be as simple as steep wet ground cleared of debris, or poles laid roughly parallel to make a crude trough.

sluice ---------- a log flume

snatch block ------- a block which can be opened on one side to permit cable being laid in the block, instead of threading it through (a closed block).

soft hammer -------- a hammer used in cutting cable.

South bend --------- spark arrested in shape of inverted cone, fitted inside the stack of a donkey or locomotive.

spark cap ---------- conical mesh spark arrester

spool ---------- a drum holding logging cable

·ingboard -------- heavy plank on which fallers stand.

---------- a short steel cable with an eye on each end.

ımway ---------- a means of transporting logs; in some places applied to a railroad made of wooden poles; in others a cable system, partly donkey-powered partly gravity-operated.

t·ee plate --------- steel plate with hook at bottom spiked to spar tree to prevent cutting of wood by cables at point where guy cables and straps are hung.

·ire ax ---------- old double-bitted ax driven into stump, other edge used as cutting face to sever cable by pounding it with a hammer.

y ---------- a track for turning a locomotive around.

Bridal Veil Timber Co., a corporation of Oregon and having its principal office in Portland, Oregon

to

The United States National Bank of Portland, a corporation organized and existing under and by virtue of Acts of Congress of the United States of America and located at Portland, Oregon, Trustee

DEED RECORDS

Book 1009, page 303

Date July 1, 1925

Rec'd. July 3, 1925

Cons. $200,000.00

All of the following described real and personal property situated in Multnomah County, State of Oregon and more particularly described as follows to-wit:

All descriptions lie North of the Base line and East of W.M; in T. 1 N. of R. 5 E.;

In Section 22; East half of S.E.$\frac{1}{4}$ East half of N.E.$\frac{1}{4}$ S.W.$\frac{1}{4}$ of N.E.$\frac{1}{4}$ and lots 1 and 2 and also First Addition to Bridal Veil excepting 1.085 acres deeded to School District No. 42 in Deed Book 146 on page 261 and also excepting property described in deed book 380 on page 330 deeded to the Trustees of the Bridal Veil Methodist Episcopal Church and also excepting right of way of the Oregon-Washington Railroad and Navigation Company; also excepting a right of way 8 feet wide over and across the same of the Pacific Telephone and Telegraph Company and right of way of the Columbia River Highway and county roads.

In Section 22; S.E.$\frac{1}{4}$ of N.W.$\frac{1}{4}$ East half of S.W.$\frac{1}{4}$ and West half of S.E.$\frac{1}{4}$ excepting tract described in agreement recorded in Miscellaneous Book 7 on page 17; also excepting that part lying in the Paper Mill tract as described in Deed Book 146 on page 221; also excepting that part of the S.E.$\frac{1}{4}$ of the N.W.$\frac{1}{4}$ and of the N.E.$\frac{1}{4}$ of the S.W. $\frac{1}{4}$ lying S.W. of said Paper Mill tract and N.W. of the tract first hereinabove excepted also excepting the right of way of the Oregon-Washington Railroad and Navigation Company and the right of way of the Columbia River Highway. (And other property)

and July 1 in the years 1929 to 1935 inclusive, with interest at 6½% per annum, payable on the 1st days of July and January of each year. (Contains provisions for pre-payment of all or any of said bonds).

The party of the first part with the approval of the Trustee may sell timber, lands, machinery or other property mortgaged herein to the party of the second part as Trustee provided that in the case of timber $2.00 per thousand feet shall be deposited in said sinking fund by the party of the first part and in the case of lands, machinery and other property that the whole of the purchase price as received by the party of the first part shall be deposited in said sinking fund. The party of the first part may also with the approval of the Trustee trade timber or lands or other property for timber or lands or other property of equal value and upon an exchange being made the same shall forthwith come under the lien thereof.

Two Witnesses to each corporation — Bridal Veil Timber Co.

(Corporate Seal)

By W. B. DuBois, President

Attest: J. J. Donovan, Secretary

The United States National Bank of Portland

(Corporate Seal)

By R. M. Alton, Asst. Trust Officer

Attest: M.H. Erz, Asst. Trust Officer

Acknowledged July 2, 1925 by W. B. DuBois and J. J. Donovan, president and secretary respectively of Bridal Veil Timber Co., by authority of its Board of Directors.

Acknowledged July 3, 1925 by R. M. Alton and M. H. Erz, Asst. Trust Officers of The United States National Bank of Portland, by authority of its Board of Directors.

Re-recorded July 29, 1925 in Book 240, page 305 Chattel Mortgage Records.

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AGREEMENT

Oregon-Washington Railroad & Navigation Company, an Oregon corporation, hereinafter called the "Railroad Company"

and

Bridal Veil Timber Co. an Oregon corporation hereinafter called the "Licensee"

DEED RECORDS.

Book 1031 page 138.

Dated Jan. 2, 1926.

Rec'd Nov. 14,1925.

Cons (see below)

Renews Dept No 8905 Audit No 9714.

THIS AGREEMENT made and entered into this 2nd day of January 1926 by and between the above parties *****WITNESSETH:

WHEREAS the Licensee desires to maintain and operate a six (6) inch sewer pipe line (hereinafter called the "Pipe Line") across the right of way and underneath the roadbed and track or tracks of the Railroad Company at or near Bridal Veil, County of Multnomah, State of Oregon in the location described as follows:

Said pipe line extends across the right of way and passes under the center line of the main Track, Main Line, First Division at Engineer's Station 1470 plus 51.3 as indicated in red upon the plat hereto attached which plat is hereby made a part of this agreement.

(Standard form of resolution adopted and on file in Auditor's office)

The parties hereto agree as follows;

1. The Railroad Company for and in consideration of the payments and covenants hereinafter mentioned to be made kept and performed by said Licensee does hereby license and permit said Licensee to construct and thereafter during the term hereof to maintain and operate the said pipe line in the location hereinbefore described.

2. This agreement shall be effective from and after the 1st day of Jan. 1926 and shall continue in full force and effect until terminated as hereinafter provided and all of the covenants and conditions herein contained on the part of the Licensee to be kept observed and performed shall attach to and run with that portion of Lot 1 Sec 22 T1 North R5 East, W.M. which is now owned by the Licensee.

3. The Licensee shall pay to the Railroad Company upon the execution of this license the sum of $5.00.

Here follows conditions in relation to maintenance, renewal and removal of pipe line, expenses, damages &c.

11. The Licensee shall not assign this agreement or any of the rights hereunder without the written consent of the Railroad Company.

12. This agreement shall be binding upon and inure to the benefit of the Railroad Company its successors and assigns the Licensee and the heirs, executors, administrators successors and assigns of the Licensee.

No Corp. Seal. Oregon-Washington Railroad & Navigation Company

By J. P. O'Brien, General Manager

Corporate Seal. Bridal Veil Timber Co

By W. B. DuBois, President

Attest: Jos. J. Donovan, Secretary.

Acknowledged by W. B. DuBois as President and Jos. J. Donovan as Secretary of the Bridal Veil Timber Co., Oct. 16, 1925 in Clarke County, Washington.

Acknowledged by J. P. O'Brien, General Manager of the Oregon-Washington Railroad & Navigation Company, Oct. 28, 1925 in Multnomah County, Oregon.

(Blue Print attached)

Oregon-Washington Railroad & Navigation Company, an Oregon corporation hereinafter called the "Railroad Company"

and

Bridal Veil Timber Co., an Oregon corporation, hereinafter called the "Licensee"

DEED RECORDS.

Book 1076 page 444.

Dated Jan. 2, 1927.

Rec'd Dec. 29, 1926.

Cons (see below)

Audit No 10387-10396 Form 3100 Local 9-13-1000

THIS AGREEMENT made and entered into this 2nd day of January 1927 by and between the above parties *****WITNESSETH:

WHEREAS the Licensee desires to maintain and operate a six inch sewer pipe and a twenty four inch tail race pipe line, (hereinafter called the "Pipe Line") across the right of way and underneath the roadbed and track or tracks of the Railroad Company at or near Bridal Veil, County of Multnomah, State of Oregon, in the location described as follows:

Six inch sewer pipe extends across the right of way and passes under the center line of main track, main line, first division, at Engineer's Station 1461 plus 45.9; Twenty four inch tail race extends across a portion of said right of way and passes under said center line at Engineer's Station 1452 plus 88; as indicated by red lines on the blueprint maps, Drawings Nos. A. D. 2581 and A. D. 2476 hereto attached and by this reference made a part of this agreement.

The parties hereto agree as follows:

1. The Railroad Company for and in consideration of the payments and covenants hereinafter mentioned to be made, kept and performed by said Licensee, does hereby license and permit said Licensee to construct and thereafter during the term hereof, to maintain and operate the said pipe line in the location hereinbefore desibed.

2. This agreement shall be effective from and after the

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1st day of January 1927 and shall continue in full force and effect until terminated as hereinafter provided and all the covenants, agreements and conditions herein contained, on the part of the Licensee to be kept, observed and performed, shall attach to and run with that portion of the Northwest Quarter (NW¼) of Section 22, T1N R5E W.M. which is now owned by the Licensee.

3. The Licensee shall pay to the Railroad Company upon the execution of this license the sum of $5.00 to cover the cost of preparation hereof.

(Here follow conditions in relation to maintenance, renewal, and removal of pipe line, expenses, damages &c.)

10. The waiver by the Railroad Company of the breach of any condition, covenant or agreement herein contained, to be kept and performed by the Licensee, shall in no way impair the right of the Railroad Company to avail itself of any subsequent breach thereof.

11. The Licensee shall not assign this agreement or any of the rights hereunder without the written consent of the Railroad Co.

12. This agreement shall be binding upon and inure to the benefit of the Railroad Company, its successors and assigns the Licensee and the heirs, executors, administrators, successors and assigns of the Licensee.

Oregon-Washington Railroad & Navigation Company
By J. P. O'Brien, General Manager

Bridal Veil Timber Co.
Corporate Seal. By W. B. DeBois, President
Attest: Jos. J. Donovan, Secretary
Address Bridal Veil, Oregon.

Acknowledged by W. B. DeBois, President of Bridal Veil Timber Co., Nov. 24, 1926 in Multnomah County, Oregon.

Acknowledged by J. P. O'Brien as General Manager of the Oregon-Washington Railroad & Navigation Company, Dec. 9, 1926 in Multnomah County, Oregon.

(Attached is Blue Print)

Oregon-Washington Railroad & Navigation Company, an Oregon corporation, hereinafter called the "Railroad Company"

and

Bridal Veil Timber Co., an Oregon corporation, hereinafter called the "Licensee",

DEED RECORDS.

Book 1132 page 247.

Dated Jan. 2, 1928.

Rec'd Feb. 20, 1928.

Cons (see below)

WHEREAS the Licensee desires to maintain and operate a four-inch sewer pipe line (hereinafter called the "Pipe Line") across the right of way and underneath the road bed and track or tracks of the Railroad Company at or near Bridal Veil, County of Multnomah, State of Oregon, in the location described as follows:

Said pipe line extends across a portion of said right of way and passes under the center line of the main track, main line, first division, at Engineer's Station 1460 plus 45.

As indicated in red upon the plat hereto attached, which plat is hereby made a part of this agreement.

The parties hereto agree as follows:

1. The Railroad Company for and in consideration of the payments and covenants hereinafter mentioned to be made, kept and performed by said Licensee does hereby license and permit said Licensee during the term hereof to maintain and operate the said pipe line in the location hereinbefore described.

2. This agreement shall be effective from and after the 1st day of Jan. 1928, and shall continue in full force and effect until terminated as hereinafter provided, and all the covenants, agreements and conditions herein contained, on the part of the Licensee to be kept, observed and performed shall attach to and run with that portion of the SE¼ NW¼ of Section 22, T1N R5E W.M., which is now owned by the Licensee.

The Licensee shall pay to the Railroad Company upon the execution of this License the sum of $5.00 to cover the cost of preparation hereof.

The Licensee shall bear the entire expense incurred in connection with the construction, maintenance, renewal and removal of said pipe line, including all expense incurred by the Railroad Company in connection therewith for supervision, inspection or otherwise, and all work performed and materials used in connection therewith within the limits of the right of way of the Railroad Company shall be done under the direction of and be satisfactory to the Roadmaster or Section Foreman of the Railroad Company.

Here follow allegations in relation to safety of tracks, modifications, renewal of pipe lines, maintenance, damages, claims, revoking license without notice in case pipe line be permitted to be in bad order, removal of property of licensee, waiver &c.

11. The Licensee shall not assign this agreement or any of the rights hereunder without the written consent of the Railroad Company.

12. This agreement shall be binding upon and inure to the benefit of the Railroad Company, its successors and assigns the Licensee and the heirs, executors, administrators, successors and assigns of the Licensee.

Oregon-Washington Railroad & Navigation Company,
By J. P. O'Brien, General Manager.

Bridal Veil Timber Co.,
By W. B. DuBois, President,
Attest: J. J. Donovan, Secretary.

Acknowledged by J. P. O'Brien, General Manager, Jan. 31, 1928.

(Attached is map)

The United States National Bank of Portland (Oregon) a national banking association &c. Trustee

to

Bridal Veil Timber Co., an Oregon corporation.

MORTGAGE RECORDS.

P.S. Book 67 page 57.

Dated Jan. 8, 1930.

Rec'd Jan. 20, 1930.

*****does hereby certify and declare that a certain Indenture of Mortgage or Trust Deed dated the 1st day of July, 1925, made and executed by Bridal Veil Timber Co., an Oregon corporation as mortgagor to said The United States National Bank of Portland (Oregon), as trustee or mortgagee, and recorded in the office of the County Clerk of Multnomah County, State of Oregon, in Book 1009 of Deeds on pages 303 et seq., on the 3rd day of July 1925, also recorded in records of chattel mortgages of said County in Book 240 page 305 on the 29th day of July, 1925, together with the indebtedness thereby secured, is fully paid, satisfied and discharged.

And said The United States National Bank of Portland, (Oregon), as trustee, does hereby release from the lien of said Mortgage or Trust Deed all of the property of said company therein referred to, and does hereby forever quit-claim unto said Bridal Veil Timber Co., its successors and assigns, all of the right, title and interest which said The United States National Bank of Portland (Oregon), Trustee, may have acquired in and to said property or any part thereof by virtue of said Indenture of Mortgage or Trust Deed. This instrument is executed in conformity with the covenants and conditions of said Indenture of Mortgage or Trust Deed.

` orate Seal.

Witnessed.

The United States National Bank of Portland (Oregon), Trustee
By E. C. Pierce, Assistant Trust Officer.
Acknowledged Jan. 8,1930.

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EASEMENT

Bridal Veil Timber Company,

to

The Pacific Telephone and Telegraph Company, a California corporation.

DEED RECORDS.

P.S. Book 54 page 386.

Dated Jan. 17, 1930.

Rec'd Jan. 30, 1930.

Cons (see below)

In consideration of $5.00 receipt whereof is hereby acknowledged, the undersigned hereby grants a perpetual easement to The Pacific Telephone and Telegraph Company, a California corporation, with the right to place, construct, operate and maintain, inspect, reconstruct, repair and replace poles, crossarms, wires, cables, anchors, guys, fixtures, underground conduits, cables and manholes, upon, over and/or under and/or adjacent to the the following described property, situated in Multnomah County, State of Oregon:

Thru the N.W. quarter of the N.E. quarter of Section 22 T1N of R5E, W.M. Said land lying northwesterly of the O. W. R. & N. Co. right of way. The location of said easement to be as surveyed at this date.

The location of said easement shall be determined by and become permanent upon the construction of a line of poles and/or underground conduit on said property, except that in the event the grantee, having once constructed a line of poles, desires to construct an underground conduit, then such conduit may be constructed adjacent to the location of such pole line.

Grantee shall at all times have the right to remove any or all of said poles, crossarms, wires, cables, conduits, manholes anchors, guys, fixtures and appurtenances, or to increse or decrease as size, weight and/or number thereof, or to change their position along said line; and to trim or cut down (fruit and nut trees excepted)

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all trees and brush within forty (40) feet or which in falling could reach within ten (10) feet of said line (it being understood that grantee shall trim all trees by it felled and burn or otherwise dispose of the trimmings or brush to grantor's satisfaction, and that logs therefrom shall remain the property of grantor); and shall have full and free ingress to and egress from the above described property for all purposes herein mentioned, provided that grantee shall be responsible for all unnecessary damage it causes grantor by the exercise of the rights and privileges herein granted.

Grantor, for himself and all others acting by, through or under him, hereby covenants (a) that no buildings or sheds will be erected or rubbish, brush piles or any inflammable substance will be permitted on said property within fifty (50) feet of said line; (b) that no digging or excavating will be done or permitted within ten (10) feet of said line which will in any manner disturb its solidity or unearth any portion thereof; (c) that no blasting or discharge of any explosives will be permitted within 300 feet of said line, nor will any object of sufficient height to strike or contact said line be moved through, under or across the same without giving grantee at least ten (10) days written notice of the date thereof; (d) that no electric current transmission line will be constructed or any right or permit granted for the construction of such electric current transmission line nearer to the line placed by the grantee than the minimum distance specified in the following table: ******* except that any such transmission line may be constructed across grantee's line at an angle of not less than 35 degrees, provided that said transmission line shall be constructed and maintained as to reasonably guard against physical contact with grantee's [illegible]. The rights, conditions and provisions of this easement shall inure to the benefit of and be binding upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

Corporate Seal.

Bridal Veil Timber Co.

By H. H. Holland, Vice President.

By Robert H. Noyes, Treasurer.

Acknowledged.

In the matter of Legalizing that portion of Columbia River Highway, being Road No. 754 from Road angle 251 being the end of Road No. 754 "A" at Bridal Vale Northeasterly to the Multnomah County Line, a distance of 14.63 miles

Final Order

Filed April 10, 1930

At this time the board takes up for consideration the matter of legalizing that portion of Columbia River Highway, being Road #754 from road angle 251 being the end of Road #754 "A" at Bridal Vale Northeasterly to the Multnomah County line, a distance of 14.63 miles.

And it appearing to the board that through omission and defect doubt may exist as to the legal establishment of that portion of Columbia River Highway above described since the original location and survey; and it appearing further that heretofore this board ordered that said road as used and traveled by the public be surveyed and platted and that copies of the field notes, plat and profile of said survey are on file in the office of the County Clerk:

And it appearing further that proceedings for legalizing said portion of said Columbia River Highway were initiated on February 19, 1930 by a resolution of this board, requiring that notice be given by the county surveyor to all persons concerned, to the effect that said board contemplated the legalizing of said portion of said Columbia River Highway, which resolution provided for a hearing upon said matter of legalizing said portion of said Columbia River Highway, said hearing to be held on March 26, 1930 at Room 402, Court House, Portland, Oregon.

And it appearing further that notice of said meeting was

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vided by law, by posting the same at the place of holding County Court and 3 public places in the vicinity of the road proposed to be legalized and also one additional notice posted on each mile post of said road so to be legalized; and

It appearing further that proof of posting of said notices has been made by said County surveyor, by affidavit filed in the office of the County Clerk: and it appearing further that no claims for damages has been filed on or before the date fixed for hearing, namely March 26, 1930.

Now therefore, it is hereby Ordered that the road included in said survey is, and hereafter shall be, a lawful County road, and it is further Ordered that the field notes be recorded by the County surveyor in suitable books kept for the purpose in his office as in the case of the establishment and alteration of highways.

Dated March 26, 1930.

(Co. Comm. Seal)

Board of County Commissioners

By Clay S. Morse, Chairman

By Fred W. German, Commissioner

By Grant Phegley, Commissioner

TAXES

1924 to 1936 inc. taxes — Paid.

1937 taxes - Sec. 22

- Tax Lot 1 (N.E.¼ of N.E.¼; S.W.¼ of N.E.¼: Gov. Lots 1 & 2 (and other property) except 1st Add. to Bridal Veil and church and school tracts) - $315.59 ✓
- Tax Lot 8 (S.E.¼ of N.W.¼: N.E.¼ of S.W.¼, except amend tract: W.½ of S.E.¼; S.E.¼ of S.E.¼ (and other property) - $734.95
- 1st Add. to Bridal Veil - Lots 1 to 15 except 7 - $98.14

1937 taxes - Sec. 27 - Tax Lot 1 - 74.70 ac. - $12.36 ✓

CITY LIENS

This abstract does not include an examination of matters relating to assessments preceding the same becoming fixed and shown as a lien; all matters relating to vacating, opening or other changing of streets or highways preceding the final termination of the same; records of Water Bureaus of any incorporated city.

Outside the City of Portland.

CERTIFICATE

Uniform Certificate Compiled and Adopted by Oregon Title Association

Title and Trust Company, an Oregon Corporation, hereby certifies:

That the foregoing abstract of title comprises a correct abstract of all matters of record in the official records in and for the County of Multnomah, State of Oregon, affecting the title to the described in the caption of this abstract;

That no judgments appear in the dockets of any court of record in said County against any person as named in the within chain of title which are liens against the premises as described in said caption, other than as shown in the abstract.

This abstract does not include an examination of or report on:

1. Any contracts for conditional sale of personal property or leases thereof containing a conditional right to purchase where the notice indorsed thereon or attached thereto at the time of this certificate does not describe any real property or describes real property otherwise than by metes and bounds or by lot and block number of a recorded plat.

2. Existing County Roads, State Highways, Roads of Public Easement, and proceedings for laying out or changing such roads, highways, and roads of public easement; mineral rights or matters relating thereto; water rights and matters relating thereto.

3. Special assessments other than as shown in this abstract; the effect and operation of municipal laws, ordinances and regulations; proceedings for street, sewer, and sidewalk improvements, or for opening, widening and/or other changes in streets or alleys.

This abstract consists of 17 pages, numbered from 1 to 17 both inclusive, and covers the period of time from May 27, 1925 at 8:00 A. M. to April 1, 1937 at 8:00 A. M. both inclusive, and is made for and at the request of and liability hereunder is limited to such party.

Dated at Portland, Oregon, this 1st day of April 19 37

Liability under this certificate is expressly limited to $1000.00

TITLE AND TRUST COMPANY

By Walter M. Daly
President

OREGON TITLE ASSOCIATION

Attest: [illegible] Assistant Secretary

No. 135729

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PACIFIC NORTHWEST LUMBERING: RECOGNIZING PAST TECHNOLOGIES ON LARCH MOUNTAIN

JOHN A. WOODWARD, PH.D.

Mt. Hood Community College

ABSTRACT

During the 1890s lumbering techniques employed on Larch Mountain were regarded as the Pacific Northwest's most innovative lumbering operations. This paper describes the techniques utilized to systematically move cut timber from the woods of Larch Mountain, Oregon to the Columbia River finishing mills, documenting specific methods of falling, yarding, skidding, fluming, river log driving and the use of railroads. Archaeological, archival, photographic and folklore-informant data sources are employed in this documentation, and recommendations for future research are discussed.

INTRODUCTION

The late nineteenth century lumbering industry of the Pacific Northwest was the subject of Victorian literary and photographic romanticism. In a manner similar to that applied to Amerindian "chiefs" and "gunfighting" cowboys of the same period, popular writers and photographers often created visual stereotypes and anecdotes of red-shirted Paul Bunyan types, living in giant hollowed logs and shaving with double-bladed axes. These images continue as American folklore, renewed by the publication of popular books replete with the familiar photographs of the lumbering industry's most colorful characters and scenes. Unlike the intense efforts of early ethnographers to document Amerindian culture, students of field ethnography did not devote attention to debunking the popular stereotypes of northwest lumbering subculture. Nowhere did a Franz Boas of lumbering appear to question and record the behavior of those whose lifeways were adaptations to the special social and physical conditions of working and living in forests.

Until recently, industrially based North American subcultures of the late nineteenth century have been neglected by archaeologists, somewhat in the manner of communal studies of ethnic minorities. Ethnicity has recently received increasing attention by historical archaeologists, and a wide range of published papers are now available (e.g., Schuyler 1980). Hopefully, this increased diversity of interest will also expand

to include industrial subcultures. Such research in the Pacific Northwest should focus on archaeological remains of technologies and lifeways associated with nineteenth century industries.

The question of what should be documented regarding both material and nonmaterial aspects of late nineteenth century lumbering subculture within the Pacific Northwest has received little direct attention. The following study will pursue aspects of the question, focusing on the archaeological research of lumbering as practiced on Larch Mountain, Oregon, during the late nineteenth century.

The late nineteenth century timber industry of Larch Mountain provided an ideal opportunity for the integration of historical and archaeological data. Research advantages can be summarized as:

1) The lumbering activities of Larch Mountain were temporarily restricted (1887-1902), geographically isolated, and representative of an industrially based subculture with clearly defined material and social dimensions.

2) A forest fire in 1902 forced the total relocation of industrial townsites and facilities. This fire suddenly and totally destroyed the mill and town of Palmer. Historical accounts indicated that inhabitants fled without removing items from their homes, thus functional articles were abandoned rather than discarded. Lumbering and communal facilities were not subsequently rebuilt on their original

location, and the forest-covered townsite was relocated and house sites were archaeologically samples.

3) The community of Donohue, an important center for oxen logging prior to 1902, had been relocated and included an intact blacksmith's dump accessible for archaeological excavation. The dump provided an opportunity to recover *in situ* a sample of the tool types manufactured and repaired by the blacksmith serving the logging activities.

4) Primary manuscripts and photographs relevant to the pre-1902 lumbering industry of Larch Mountain were readily available.

5) Individuals, who had as children lived in Larch Mountain communities, were located and thus served as informants. The informants enabled the relocating of community and school sites and the identification of several of the structures in Palmer and Donohue. In 1974 the last living participant in the river-driving of lumber in the Larch Mountain area during the 1920s, supplied a lively account of this practice. Little information could be gained relevant to adult community life or lumbering practices on Larch Mountain during the early period, since even the oldest informants were all young children prior to the 1902 fire.

A certain urgency prevailed in 1974 when the Larch Mountain archaeological project was initiated because both the Palmer and Donohue town sites were soon to be logged, potentially destroying

their archaeological remains. Little time was also left to interview surviving informants who could provide impressions of a Larch Mountain lifestyle from the perspective of children growing up in the mountain's lumbering communities.

Five research methods were used in the Larch Mountain project:

1) historical manuscripts were examined, 2) selected archaeological testing was conducted on the two pre-1902 townsites, 3) surface collections were made on these and other sites, 4) photographs were studied for lumbering activities and sites on Larch Mountain prior to 1902, and 5) informants were located and personal interviews were held to record data concerning former lifeways and the lumbering practices on Larch Mountain.

The Larch Mountain historic archaeology and ethnography project involved students from Mt. Hood Community College enrolled in summer anthropology classes from August 1974 to August 1978. The primary archaeological research was conducted on two pre-1902 sites, Palmer and Donohue.

The Palmer site was examined through: 1) surface collection of visible artifacts on dumps and structure sites, 2) test excavations conducted on the boarding house and four house locations, and 3) photographs taken of all existing features including the mill foundation.

The Donohue site was examined through: 1) collection of visible artifacts associated with a cookhouse, 2) the complete excavation of a blacksmith's dump and 3) photographs of the site features including a lone apple tree.

Additional field research was undertaken from 1978 to 1980 by the author, directed toward locating extant remains of roads, flumes, mills and camps associated with the pre-1902 lumbering of Larch Mountain; features and artifacts were photographed but no excavations were conducted. Several sites were located through the use of early nineteenth century maps and information supplied by Mt. Hood Community College forestry staff and other individuals.

A summary of the 1974 excavations on the Palmer and Donohue sites, historical and informant data relevant to Larch Mountain lumbering was published by the author and Mt. Hood Community College, Gresham, Oregon. The report is titled Oxen, Axes and China Teacups: Six Papers on the Pioneer Lumbering of Larch Mountain, Multnomah County, Oregon (1975).

LARCH MOUNTAIN LUMBERING: 1887-1902

Lumbering is one of the oldest Euroamerican industries in the Pacific Northwest. Beginning as a supportive industry of the fur trade (Ross 1975), lumber was exported to Hawaii as early as the 1820s from Fort Vancouver, Washington (Hussey 1957). The influx of Euroamericans into Northern California and the Northwest after 1848 provided new significant markets for the

region's timber. Despite this early logging, the vastness of the forests allowed large sections to remain uncut into the 1880s. Such was the situation on the western slopes of Larch Mountain, a 4000 foot high volcanic peak located to the south of the Columbia Gorge about 30 miles east of Portland, Oregon (Fig. 1). The heavy rainfall of the western Cascade environment resulted in a dense forest of giant cedars, firs and hemlock (larch) on the mountain. The uncut timber on Larch Mountain and its proximity to the transportation facilities of the Columbia River and the important port of Portland attracted several lumber companies which established mills and camps on its slopes. During the 1880s and 1890s, lumber companies with the names of Brower and Thompson, Douglas, Siefer and Kee Company, the Latourell Falls Wagon Road and Lumber Company, and the Bridal Veil Lumbering Company began to exploit the wood resources of the mountain. Starting as small oxen and skid road enterprises in the early 1880s, logging on the mountain by 1900 involved miles of flumes, wagon roads, tramways and logging railroads.

Original written documentation of Larch Mountain's lumbering history included lumbering company records and correspondences, a total inventory of a logging camp, newspaper descriptions prior to the 1902 fire, newspaper accounts of the fire, and an essay written by a child who had witnessed the destruction of the Palmer community in 1902.

LATOURELL FALLS LUMBER COMPANY

Lumber company sources relevant to the logging of Larch Mountain included original correspondence detailing the formation of the Latourell Falls Lumber Company in 1887. Manuscripts indicate that the intention of the company was to

> "engage in, carry on, and prosecute a general sawmill, lumber, logging, planing, and manufacturing business and in connection therewith to conduct sawmills, planing mills, logging camps and lumber yards, and to do all things necessary or convenient to the proper conduct of a general sawmill and lumber business and lumber manufacturing business" (Oregon Historical Society Manuscript File 1144).

Plans were drawn up for a plank or clay wagon toll road to run from the western slope of Larch Mountain down to the Oregon Railway and Navigation Company railroad line along the Columbia River. The terminus of the road was Latourell Falls. This project was completed by June 1888. A flume was also constructed in 1888 which made possible the rapid chuting of logs or sawed lumber down the northwest slope of Larch Mountain to the yard at Latourell Falls. By this time a small mill had been constructed on the mountain by Brower and Thompson, and lumber from this enterprise was the first to be flumed to the railyard at Latourell Falls.

The wagon road and flume clearly opened up the forests of the Larch Mountain wilderness to large-scale logging. The Latourell Falls Wagon Road and Lumber Company continued to develop their plans in the decade of 1888 to 1898 with the construction of additional roads, flumes, yards and camps. One

inventory dated December, 1898, of the sawmill and logging camp of this company has survived, and because of its uniqueness it is reproduced in its entirety (Table 1). The camp was located about three miles southwest of the summit of Larch Mountain at an elevation of 1800 feet (Fig. 1).

Although no information has survived revealing the number of workers at this logging camp, Hogan (1921-71) using informant descriptions of logging crews on or near Larch Mountain about 1900 lists a typical crew as composed of about 31 individuals: "a foreman, an engineer, 2 fallers, 2 bucker sawers, a skid maker, 10 laborers, 2 under cutters, 2 barkers, 3 hook tenders, 2 cable and signal men, 2 teamsters, 1 skid greaser, and a cook and helper." Table 2 briefly describes the duties of the crew members listed by Hogan. In the Larch Mountain area in 1900, all would typically be adult Euroamerican males except the cooks (often women) and the skid greasers (usually boys). The ledgers of the Latourell Company show that in 1898 their logging crews were paid on a daily basis with a pay scale ranging from $1.75 to $4.00 for a 10-hour day. The wages were unchanged from the pay schedule paid 10 years earlier (Oregon Historical Society M.F. 1144).

Informants' directions led to a site tentatively identified as the location of the pre-1902 Apex logging plant of the Bridal Veil Company. Surface surveys, conducted in 1976 and 1981 in a section of old regrowth woods, identified a number of significant

archaeological remains. In situ features included: 1) refuse dumps associated with the cook and bunk houses 2) a silted-in log pond; 3) massive gears of a horizontal-spool steam donkey located at the top of an incline (Fig. 2), 4) a system of hillside water run-off, diversion ditches probably constructed to stabilize the pond level (Fig. 3), 5) lower sections of a tram incline with steel rails on a plank bed terminating at the pond, and 6) a log dump near the pond. No excavations were conducted on the site. However, artifacts exposed on camp dumps at the time of the survey duplicated items listed on the Latourell logging plant inventory (i.e. Table 1). A U.S.G.S. map, surveyed between 1907 and 1911, did not indicate facilities or structures remaining on the site, so it has been inferred that structural remains were no longer visible ca. 1907-11.

The 1898 Latourell inventory reference to 2¼ miles of tram road and three tram cars (Table 1) can be compared with archaeological remains of a plank bed incline with steel rails located on the Apex site below a steam donkey. McCulloch (1958:199) identifies a tram as a "wooden railway on which carts were pulled by oxen or horses". In situ remains at the Apex favor the interpretation of this site as a dead incline, a system for lowering logs on cars by a cable from a stationary engine. Inclines were pioneered on the lower Columbia River in the late nineteenth century with the last operating in Oregon in 1943, (McCulloch 1958:94). Unfortunately, no photographs have been

located showing the Latourell Falls Company's tram; however, a similar incline was photographed in use nearby the Bridal Veil Company about 1890 (Figs. 4, 5, 6)

BRIDAL VEIL LUMBERING COMPANY

The most ambitious logging enterprise on Larch Mountain was the Bridal Veil Lumbering company formed in 1887 by L.C. Palmer. Palmer's problem was to move, as efficiently as possible, the timber from the mountain's slopes to the Oregon Railway and Navigation Company's railroad along the Oregon shore of the Columbia Gorge. Palmer's solution resulted in an elaborate multi-stage operation involving skid roads, two sawmills, chutes, flumes and a five-mile, narrow-gauge logging railroad (Fig. 7). This system was called the "most difficult feat of lumbermen in Oregon" by an eastern newspaper reporter in 1891. (Anonymous N.D.).

Associated with Palmer's facilities on Larch Mountain, several communities were founded where the loggers, teamsters, sawers, railroad men and their families established homes. Schools were built and small farms developed in clearings to supply the communities with seasonal produce. However, community life and the lumbering industry of Larch Mountain were drastically altered in September 1902 by a forest fire which destroyed the sawmill, caused the relocation of remaining facilities and communities, and damaged the remaining uncut

timber resources of the mountain.

L.C. Palmer operated a sawmill at Vancouver, Washington, for several years prior to moving his mill during the summer of 1887 to the south side of the Columbia River in order to exploit the timber resources of Larch Mountain. Palmer selected as his new mill site the mouth of Bridal Veil Creek. This location provided level ground, water power and access to the main east-west railroad along the Columbia River.

A small community with farms, a paper mill and a post office had existed at Bridal Veil since the early 1880s. Palmer's new mill at Bridal Veil was in operation by the end of 1887. A flume one and one-half miles long, having a capacity for logs up to 16 inches in diameter and 60 feet long, was built to bring the logs down Bridal Veil Canyon from the Larch Mountain forests. According to the Vancouver Independent of December 14, 1887, this flume was "the very best constructed flume in the Northwest" (Horton 1964:21). It was completed about one year before a similar flume built by the rival Latourell Falls Wagon Road and Lumber Company several miles further west. The capacity of Palmer's sawmill was 75,000 board feet per day. Wood from the mill was used to construct a company town at Bridal Veil. The Puget Sound Lumberman of February, 1894, listed the output of lumber in 1893 as 7,690,000 board feet.

The technical methods utilized by the Bridal Veil Lumbering Company between 1887 and 1902 were reconstructed from manuscripts

and from archaeological features still extant on Larch Mountain in 1974-81. Small collections of photographs taken on the mountain between 1890 and 1897 also were found to be valuable documentation of technical methods, architecture, attire of the timber workers and other aspects of labor and residence on the mountain. Unfortunately, primary documents of the Bridal Veil lumbering Company are believed to be lost, perhaps destroyed by the 1902 fire. Table 2 lists the reconstructed chronological evolution of the Bridal Veil Lumbering Company from 1887 to 1938.

Palmer's approach to the logging of Larch Mountain's steep slopes followed the Northwest logging adage "Always fall the tree toward the mill" (Lucia 1975:19). Linking a system of skidroads, chutes, railroad track and flume, the lumbering practices utilized gravity and the topography of the mountain to allow the timber to "flow" consistently and rapidly downward to the finishing mill and shipping facilities at Bridal Veil on the Columbia River. Palmer's operation functioned with a range of devices and techniques developed in the Northwest lumbering industry during the 1870s and 1880s.

TECHNICAL LUMBERING PROCESSES OF BRIDAL VEIL: 1891-1902

The methods employed by the Bridal Veil Lumbering Company crews to move timber from the woods of Larch Mountain to the finishing mill at Bridal Veil are shown diagrammatically in Figure 7.

The stages of this process were reconstructed through the use of archival sources, photographs and archaeological data. Each stage involved different skills, tools and personnel. The falling stage included timber felling, barking and bucking (See Table 3). The logs were then yarded, i.e. moved to a central spot (upper pond), using steam plants, animal teams, and other methods. The logs were then railroad skidded from the upper pond with locomotives pulling the logs in trains over greased planks laid between rails. Once the logs reached the lower pond at the Palmer sawmill, they were dumped over a rollway, i.e. an inclined log ramp, into the pond. Pond men then led the logs to the jackladder, a mechanized lift bringing the logs into the sawmill. The Palmer mill cut the logs into rough timbers called cants. The cants were hand placed into a flume leading from the Palmer mill to the chute pond at Bridal Veil. A locomotive then pulled loads of cants on cars to the finishing mill.

FALLING TIMBER

The falling of timber by Bridal Veil crews involved the selection of woods with numerous very large healthy trees, especially red cedar found in small valleys on Larch Mountain. Cruisers, i.e. timber estimators, selected such stands and the brush and small trees were cleared to build roads and prevent the shattering of falling trees. Evidence remaining today on Larch Mountain indicates that timber was generally felled downhill with

lines of logs often parallel to each other. Although many noncommercial trees were left standing in an area being cut, the falling and swamping, i.e. brush clearing, produced great amounts of slash, i.e. broken branches, tree limbs, bark, etc. on the floor of the woods; a factor contributing to the intensity of the 1902 Larch Mountain fire. Modern clear cutting methods utilized on Larch Mountain involve the falling of all trees within a unit, the removal of commercial timber, the intentional on-site burning of slash and replanting of trees of desired species to be harvested later as a homogeneous stand of like-sized trees. The environmental impact of clear cutting has been the source of recent controversy (Wood 1971).

A clear summary of the falling in the Larch Mountain area in the late nineteenth century is found in Hogan (1921:75).

> The first man to reach the tree is the faller. He picks the place for the tree to fall and cuts the notches on each side of the tree to hold the spring-boards upon which the fallers stand while chopping the tree. A kerf is chopped in the tree at right angles to the path which the tree would take when it falls, in order to act as a fulcrum in guiding the fall. The width of the kerf depends upon the size of the tree. The sawing is started on the side of the tree opposite the kerf. As the sawing progresses, steel wedges are driven into the saw cut, and the direction that the tree is to fall controlled by the depth to which the wedges are driven. It has been said that so accurate were the fallers in handling their trees, that they could start to drive a stake in the ground a few feet from the base of the tree, and finish driving it with the falling tree.
>
> The next men to work on the tree are the buckers, who saw the tree in to the designated lengths. The swampers follow and clean away the underbrush, and any other obstructions, so that the log can be easily hauled out. The barkers then clear the bark from one side of the tree so that the log will slide easily; the hook-tender fastens his tackle to the log, and it is jerked out ready for shipment to the mills.

Archaeological and photographic evidence confirm that the largest trees, principally red cedar and douglas fir, were cut with the double-bitted, drop-forged axes of the profile often called "Michigan" (Fig. 8). Smaller trees, including most hemlock, were cut with both axes and crosscut saws.

Prior to 1880 single-bitted axes were more commonly used in Pacific Northwest falling than the double-bitted varieties. Large trees were generally chopped rather than sawed. An innovation of Northwest fallers during the 1880s was the utilization of large narrow cross-cut saws, similar to the bucking saws used for sectioning a cut tree, to fall standing timber (Cox 1974). The standard equipment of fallers included double-bitted axes, spring-boards, falling saws, oil bottles and wedges; and was characteristic of Pacific Northwest lumbering from the mid-1880s to the widespread introduction of efficient power saws between 1928 and 1940. Figure 9 shows diagrammatically the process of falling with axes, saws and wedges from a springboard.

Fallers would stand on spring-boards or stable platforms a meter or more above the base of the tree (Fig. 8). This method was widely employed in Cascade Mountain lumbering because of the steep, slippery slopes and old growth trees. Mature trees often had huge "swellbutted" bases which were difficult to cut and of less value than wood further up. Identifiable hardware remains from spring-boards were not located on Larch Mountain, but

evidence of their use is retained by deep notches on old stumps. Such notches consist of a narrow cut made in the tree to hold the iron on the spring-board. Spring-board notches do not, however, necessarily indicate that a tree was cut prior to 1900. Spring-boards continued in use in some northwest forests until the 1930s or later. Tools utilized by fallers are shown in numerous Larch Mountain photographs taken prior to 1902 and confirmed by surface surveys and archaeological excavation of the Donohue blacksmith shop dump. A popular recent publication (Williams 1976) includes clear color illustrations of the standard tools used in nineteenth century northwestern falling.

YARDING TO THE UPPER POND

The second stage of lumbering began after the trees were debarked, delimbed, bucked into manageable sections and end snipped (a bevel cut on the end of a log making it easier to pull over the skid roads). Tools used for these tasks were the double-bladed axes and bucking saws. The weight of the logs and the steepness of the slopes in Cascade logging provided advantages favoring the use of extensive skid roads, i.e. relatively level paths about two meters or more in width constructed of small logs or truncheons covered with a lubricant (usually grease) over which the logs were pulled or yarded (Fig. 10). The term skid road was used later to describe urban tenderloins and the series of alcoholic establishments lining the

road as it entered settlements, and was often incorrectly transformed to the term skid row (McCulloch 1958:167, Crown Zellerbach n.d.:17). Numerous sections of rotting skid roads still remained on Larch Mountain in the 1970s. However, the modern practice of clear cutting on the mountain has destroyed most of their fragile remains. With increased clear cutting, remains of these trails will be totally obliterated.

The method of pulling logs on a skid road consisted of linking a train of logs together with metal dogs and chains which could then be attached to a steam donkey. Bridal Veil probably only used steam and oxen. Latourell and other operations also utilized horses (Fig. 10).

Hogan (1921:76) states that in 1901, Bridal Veil used three steam yarding donkeys and three bull donkeys (Fig. 11). Steam donkeys were first developed during the early 1880s in the redwood lumbering industry of northern California by John Dolbeer who combined an upright boiler, twin pistons and a windlass, mounting this simple machine on a sled. Most nineteenth century yarding donkeys could pull single large logs less than 1000 feet to a yard (i.e., the circular area to which logs were pulled). The earliest steam donkeys with upright wood-burning boilers and single rums were used primarily in the Pacific Northwest between 1889 and 1985. They were employed in yarding logs located short distances from a skid road. On the skid roads themselves, animals were employed for further pulling (McCulloch 1958:49).

After 1891 the more powerful bull donkeys began to replace many of the bull teams pulling trains of logs along the major skid roads, although oxen continued to be used well after 1900 in topography too muddy for steam power (Cox 1974:233). Bull donkeys also called roaders were very large steam plants that had drums that could hold as much as "10,000 feet of 5/8 inch haulback" (McCulloch 1958:151).

A spool (drum) from a donkey manufactured by Murdy Bros. with an 1890 patent date was located on one Bridal Veil skid road (Fig. 12). A ca. 1895 photograph of a Bridal Veil operation shows a steam donkey with three horizontal drums in use on Larch Mountain (Fig. 13). Also shown in this photograph is the method of using both dog-attached chain and wire rope for pulling logs to a yard or area for chaining into the skid road train. A horse visible in the photograph was probably used to return the line to the choke-setter who attached it to the next log. Most steam donkeys were bolted onto two massive logs; these log skids could still be identified on Larch Mountain in the 1970s.

The Bridal Veil Lumbering Company constructed the upper pond, also called Donohue Pond (Noyes 1968:4), at the 2200-foot elevation of Larch Mountain. Logs were splashed into this pond from the converging skid road system. A chute lowered logs down a steep plank bed into the pond from a steam donkey above (Fig. 5).

Located near Donohue Pond was the Donohue camp where the bullpens were kept for Palmer's yarding operations.

THE DONOHUE BLACKSMITH SHOP

In 1975 the pre-1902 blacksmith dump at the teamsters' logging camp of Donohue was located (Fig. 14). The site had escaped both recent logging and activities of relic collectors, and was carefully excavated (Fig. 15). The dump provided information on three aspects of 1887-1902 Larch Mountain blacksmithing: 1) the blacksmith tools made and used by the smith, 2) the logging tools made and repaired by the smith, and 3) the material items associated with the domestic lifeways of the smith and other occupants (wife?) of the associated home-shop structure (Wahlke 1976).

Artifacts recovered from the dump indicate that the smith's duties included the preparation of oxen shoes and the manufacture and repair of a range of logging hardware. Particularly significant was the recovery of the blacksmith forged iron ring from a beetle, a heavy, long-handled mallet used traditionally to drive fence posts and iron wedges (Bealer 1976, Hunt 1974, Sloane 1964). Beetles were used on Larch Mountain to drive in and knock out dogs (iron hooks used to chain logs together). The dogs used on Larch Mountain to attach chains or rope for overland pulling were also called L hooks following traditional lumbering

vocabulary of nineteenth century loggers in the Southeast (Clarkson 1964:360,366).

Broken smith-forged dogs were also recovered from the dump, as were chain links used for pulling logs on skid roads. The links also appeared to have been made by the smith. When used in the woods for temporary repairs, they could be closed by a cold shut, also called a lap link, or coupler (Clarkson 1964:358), a method of hammering shut a cold link until the ends lapped together (Wahlke 1976:52). Splice repaired wire rope was also recovered. Wire rope was used with steam donkeys employed in the timber industry during the late nineteenth century to pull the logs along the skid roads. A double-bladed axe and a snatch block of the size suitable for wire rope was also recovered from the dump (Wahlke 1976:52). Snatch blocks were pulleys opened on one side to allow the wire rope to be laid in the pulley instead of threading it through from one end.

The archaeological evidence from the Donohue blacksmith's dump indicated that both oxen and steam were used by the Bridal Veil Company to move timber prior to 1902. Photographs confirm that both steam and oxen were used on the mountain as early as 1889.

RAILROAD SKIDDING TO A LOWER POND

The third stage of Palmer's operation, railroad skidding to the lower pond, involved pulling the logs from the upper

(Donohue) pond in trains of six or more logs. The engine, working backwards, skidded logs over greased planks laid at right angles to the rails down five miles of grade (Fig. 16). At the lower pond, located at the 1250-foot elevation, the log trains were dumped over a rollway into the lower pond (Fig. 7).

The railroad locomotive used by the Bridal Veil Lumbering Company prior to 1902 was an 18-ton Baldwin rod engine (Fig. 16). This was a standard steam engine, directly connected by piston rods from the cylinders to the driving wheels and used on main line logging roads, as opposed to geared engines used on spurs (McCulloch 1958:152). Many late nineteenth century Northwest logging railroads, unlike Palmer's operation, utilized geared, rather than rod engines, for the greater traction.

Prior to 1891 the logs were individually maneuvered from the lower pond into a V-shaped flume, (an elevated wooden water trough) which carried them rapidly two miles to the chute pond, (bottom pond) near the Bridal Veil mill 1200 feet below. Noyes (1968:4) states that riding this flume on a log was considered an exciting escapade; however, Lucia (1975:20) discounts the folklore of riding the Bridal Veil flume as too rough for riding. The flume constructed by Palmer after 1902 contained cross supports that would have made flume riding on the cants extremely dangerous if possible. The earliest flume, however, built prior to the construction of the Palmer sawmill, flumed logs and may

have been constructed in a manner more suitable for such adventures.

A short rail line then pulled the logs from the chute pond to the mill. This operation was improved between 1891 and 1895 with the construction of a sawmill, and the town of Palmer, at the lower pond. Logs were subsequently cut into cants which were flumed to Bridal Veil for sawing into finished lumber (Fig. 17).

SAWING AT PALMER MILL

Data concerning the 1891-1902 sawmill and town of Palmer at the lower pond is incomplete. An archaeological survey of the mill location in 1974 located the band saw blade in situ on the burned mill site (Fig. 18). Excavations on a Palmer cellar depression, believed to be that of a company-owned 1895-1902 boarding house, recovered 750 unused replacement teeth for "Henry Disston and Sons Patent Chisel Point Circular Saw" (Woodward 1976). Late nineteenth century Pacific Northwest sawmills frequently used band saws to cut large logs lengthwise, while circular cutoff saws trimmed the logs into desired lengths. Steam-powered band saws, first used in Pacific Northwest sawmills in the mid-1880s, are regarded by Cox (1974:236) as "an innovation as important in the milling of lumber as the steam donkey and logging railroad were in getting logs out of the woods".

The location of the sawmill at Palmer could have permitted water power to be used for the operation of one or more of the saws. However, an eye-witness account written in 1904 emphasizes the explosion of eight mill boilers during the 1902 fire, an indication that steam power was employed (Lathrop 1974). Photographs of the Palmer mill taken prior to its destruction show a number of stacks from steam-powered machinery. Thus, it is improbable that water power was used. In Fig. 17, a V-shaped flume can be seen emerging from the mill and cants assembled to be flumed to the finishing mill at Bridal Veil.

RIVER DRIVING OF LOGS

The Bridal Veil and Latourell Falls companies solved the challenge of rapidly moving logs and cants from Larch Mountain to the Columbia River by constructing efficient flumes. Another solution to the problem of economically transporting logs or cants was to use the Sandy River (See Fig. 1) as a natural flume.

Peripheral to the major lumbering operations of the Bridal Veil and Latourell Falls companies were numerous smaller scale enterprises that logged the western and southern slopes of Larch Mountain from the early 1880s through the late 1920s. One of these companies, the Ridge Lumber Company, moved about 1920 from between the towns of Gresham and Sandy to near where Trout Creek empties into the Sandy River. Lumber was flumed from the mill about one-quarter of a mile up Trout Creek to the Sandy River,

and from there was allowed to float down the river several miles to the town of Troutdale. At Troutdale a log boom, i.e., barrier, stopped the lumber which was then loaded onto a railroad siding for shipment. Periodically, a small crew was sent down on a lumber drive to free cants that had become entangled or beached. In the early 1920s Mr. Fay Davis participated in what is believed to be the last lumber drive down the Sandy River. The following account is included in this paper because it deals with technological and humanistic aspects of Larch Mountain lumbering. It also emphasizes the nature of data that can be derived from key informants documenting otherwise unrecorded practices occurring 50 years earlier. This story of the last lumber drive down the Sandy River, as told by Fay Davis to William Wahlke and Peggy Estes on March 9, 1975, follows:

I was with Ridge Lumber Company and that was at Trout Creek. I worked there between 1921 and 1926. I worked in the mill most of the time. On this tie drive I guess the mill was shut down or something, so it took three of us to drive the ties down to Troutdale. I think it took us three days.

The ties were 7" by 9" by 8' long. They were like a standard railroad tie. The railroad did the treating. I don't know where they (the ties) went. I suppose some of them went back east. Douglas fir was used. They'd get special orders from the railroad company, but they sawed lumber besides ties. They would have to square the log up into cants. All that sawing that was done to get it squared up went into 1", 2" and 3" lumber; 1 by 4's clear up to 1 by 12's and 2 by 12's. Most of their cutting was railroad orders. They did sell locally. A lot of the mills were railroad orders; Palmer and all the rest of them. I don't think Palmer cut many ties. They cut a lot of big timbers for the trestles and buildings in Portland.

They didn't drive them (the ties) often. Mostly in the spring after the water went down. After the spring freshets went down, then the ties were left upon the edges and sand bars. They'd go down and clear the river out. The water would be low enough; there wouldn't be any high freshets to wash them back

out. The drive I was on was the last down the Sandy, and that was in March.

They generally flumed them (the ties) from the mill down to the river, then just let them shoot out into the river. Then they'd float down the river. Some of them would hang up. Along during the season they'd hang up and then they'd have to have a tie drive. Three or four guys would start down the river from where the flume was and pick up the ones that went out on the bank, and out into eddies, log jams and so on. They had a boom (at Troutdale) to stop them (the ties) from going on down the river. That boom was just this side of the railroad bridge. They took them (the ties) out with this chain that came up and out of the river. It was a wide enough chain to pick up the ties. They elevated them up to a platform. Gondolas on a railroad side track would be run up next to that and they would load them on the gondolas. Fellows down below would have a pike pole that had a handle in it about 2" around and probably 16' long. The logs in the boom were connected by dogs. You'd drive those into the boom pole and put the chain through them. Some of the more permanent ones would have a big hole bored in them and the chain poked clear through the log.

They'd generally take a peevy, pike pole and a pickeroon along (on a tie drive). Some of them you'd hook with a pickeroon and drag them from the river. Some of them, if they were in a log jam or something, you might have to roll some logs out of the way. High water washed a lot of trees and so on that fell in the river. You'd have to sort them out of log jams. sometimes you'd have to carry them a hundred yards. They'd get out on a sand bar and then the river would go down and you would have to carry them or drag them, whichever was easiest. If I had to go down the river a couple hundred yards or further, I would get two ties together and sit on them and float down. It was easier than walking down through the brush. You'd float down the river and then when you'd get down to where you wanted to go you'd jump off and let the ties go. I was in it (the water) up to my chin where I could just hold my head up and breathe through my nose. That was coming out and crossing the river there at Troutdale, wading across that slough.

You'd wear (on the drive) heavy wool underwear like the loggers always wore. Real thick underwear and a wool shirt with just regular overalls. It was pretty cold when you went in the water first thing, because the cold water would get you soaking wet. The advantage of that wool underwear was that enough water would stay in it and your body would heat that. Then you didn't feel the cold so much after you got that water warmed up in your underwear. If you got out in the sun long enough, if there was any sun, you'd get some of that water drained out of your clothes. Then when you went in again it was cold. It wasn't too bad.

It wasn't really dangerous work as long as you could swim. I started across the river one time in the riffle. We had to get to the other side and it wasn't a place that I could float across because the water was swift. With a pickeroon and a pike pole, I started to wade across the river. The rest of them went across. They were tall, big men, you know! I was always a little runt and I got out in the middle with the tools and I couldn't make it. It was going to wash me clear down the river. It was up to my waist and swift, and those old rocks were slick in that river. So I hollered out to a fellow by the name of Arthur Johnson and told him I couldn't make it unless I threw the tools away so I could swim. Well, he said just stay there a minute if I could, he would come out. So, he threw his tools down, came back out, got on the upper side of me, and held onto my hand. Part of the time my feet would fly out from under me, but he was big and heavy, so I made it across without having to throw the tools away.

The technical significance of this account is that, although the actual events described are somewhat later than the major focus of this paper, the tools used, clothing worn, technological acts and perhaps work attitudes of the river hog crews, i.e. loggers on river drives, were largely unchanged since 1900. The account emphasizes that Larch Mountain lumber workers (Mr. Davis also worked at several jobs for Bridal Veil in the early 1930s) often possessed a range of skills needed for lumbering operations.

ARCHAEOLOGY OF THE OLD PALMER SITE

Although the primary focus of this study was the delineation of the technical process of Larch Mountain lumbering, a brief summary of the archaeological surveys of the Old Palmer townsite is required. From 1974 to 1976 the Palmer 1891-1902 site was mapped and archaeological testing was conducted on five

structural sites and three associated refuse dumps. Photographs of the Palmer community and sawmill personnel indicated that a small, compact cluster of individual homes were probably occupied by families that have been built primarily of finished lumber, painted and set on wooden posts or rock foundations.

Palmer was the largest community on Larch Mountain and the center of social activity associated with the logging, sawmilling and railroad skidding crews prior to the 1902 fire. Palmer had at least two telephones, a school, which also functioned as a meeting hall, a post office, boardinghouse for unmarried men and was the site of the residence of L.C. Palmer. Supplies were brought up a wagon road from Bridal Veil to be sold in a company store. The residential situation of the lumber workers and their families in an isolated company town very near their work was a pattern to be followed by many northwest timber companies from 1900 until the 1950s. This closed and managed social context increased the companies power to maintain "dry" (nonalcoholic) and "union free" communities of skilled workers with their families. The archaeological excavations on the Palmer site confirmed the success of at least these two company goals; artifacts associated with children were very commonly found, and containers for alcoholic beverages were very rarely encountered.

Archaeological survey confirmed the historical descriptions of the rapidity of the 1902 forest fire, forcing inhabitants to abandon their homes without removing most contents. A range of

artifacts were recovered, including items indicative of surplus cash, i.e. factory-made toys, transfer-decorated "ironstone" and French and Asian ceramics.

> A study of the Old Palmer artifacts emphasizes a different stereotype--that of a Victorian American, stiff with collar buttons and carefully prepared mustaches. The women of Old Palmer purchased Haviland teacups; the little girls played with French bisque dolls,and some of the men drank coffee from mustache cups designed to keep their lip ornaments clean. There is nothing in the Old Palmer artifacts suggesting that the inhabitants were timber workers of the Paul Bunyan era. Suggested instead is a stable, prosperous community with the tastes and material goods of Victorian America (Woodward 1976:42).

Very little was found archaeologically on the Palmer townsite that could be directly associated with the technical processes of lumbering. The tools of the workers were probably not brought home but their lifestyle, as seen archaeologically, reflected the relative prosperity of the households whose incomes were derived from those processes.

The surface surveys of Donohue (Wahlke 1976) and Apex occupied during the same period as Palmer, revealed somewhat different artifact assemblages. Tools, including axes, were observed on those townsites and artifacts associated with children, i.e. marbles, doll fragments, infant tonics, were rare or absent. Broken china was entirely of the plain ironstone varieties, whereas that at Palmer included transfer decorated wares as well as porcelains. The archaeological differences noted in the surveys may be associated with the different composition of the inhabitants at Donohue and Apex where in

contrast to the Palmer community, few if any families were present.

CONCLUSIONS

William White, addressing the archaeology of the Euroamerican past, commented that, "It is fertile because there are three sources of information about a site: the site itself, historic records, and people who lived at the site" (1975:156). The Larch Mountain archaeological project emphasized the interrelationships of these sources and made apparent how limited any one source may be in the documentation of a late nineteenth century technology and associated lifeways. Archaeological features and artifacts allow inferences to be made of cultural behavior not recorded in historical documentation while photographs and informants' accounts clarify these inferences. Late historical archaeology can also provide a debunking function, not typically required for prehistoric archaeology. Features and artifacts are not simply seen as trait list increments to the assemblage of knowledge about a past culture, but as ongoing validation of other data sources obtained about the same cultural phenomenon.

The archaeological study of the Palmer townsite indicated that the community's material culture, as shown by surviving artifacts, was not distinctively associated with lumbering. The study of the Palmer site can debunk a stereotype that all 1900

Northwest lumbering communities consisted of rude log cabins with oxen occupying the muddy streets. Indeed, such lumbering communities did exist (Donohue had both log buildings and oxen), but other towns presented quite different appearances. This variation can be shown both archaeologically and with contemporary photographs (Fig. 19). The archaeological study of technologically linked sites (i.e. Palmer, Donohue, etc.), and the use of photographs and informant data provide a more composite perspective of Northwest lumbering as an interrelated system of technical processes and social interaction than any one source can do. Mr. Davis's personal account of the river lumber drive provides insight into not only the tools used to perform the required technical acts, but the attitudes and problems of the workers performing those acts.

Twelve major types of sites could still be archaeologically identified on Larch Mountain in 1981: skid roads, inclines, log dumps, ponds, residential sites, mill sites, blacksmith sites, flumes, a water diversion system, a bridge foundation, railroad beds and trestles. Most of the sites were shallow and fragile, involving either 1) modification of topography or vegetation cover, i.e. clearings for a structure, ponds, etc., or 2) wooden structural features generally in a very deteriorated state, i.e. flumes. Table 4 shows the surface features associated with each of these types of sites.

Significant damage was noted to have occurred from logging and other activities between 1974 and 1981. The value of fir and hemlock now maturing on Larch Mountain and the expected future demand for timber make the preservation of the still extant archaeological features unlikely. Most sites identified with the pre-1902 periods are located on private land suitable for clear cutting during the next decades. Confronted with the nearly certain destruction of most 1880-1902 archaeological sites on the mountain by 2000, the Larch Mountain archaeological project surveyed, collected and documented what could be found in the 1970s. The product of this project has been a contribution to understanding early northwestern lumbering, the most significant technology in the post-fur trade industrialization of the Pacific Northwest. However, if research concludes at this level, a great wealth of information will be lost. Before extensive clear cutting continues, attempts should be made to:

1) Evaluate more fully the range of environmental impacts of the pre and post 1902 lumbering practices on the forest cover of Larch Mountain and similar areas.

2) Evaluate the efficiency of the past lumbering technological systems through the study of stump size and felled timber still remaining in logged areas undisturbed since 1902 or earlier.

3) Archaeologically study the post 1902 sites of towns, mills and other lumbering installations with reference to the changing technology of lumbering on Larch Mountain.

An expansion of related research beyond the Larch Mountain case could involve a range of projects including:

1) Tracing the evolution of late nineteenth century lumbering technologies in the northwest in reference to the diffusion of methods from earlier lumbering centers, including California, the Great Lakes, New England and the Southeastern United States.

2) Locating and documenting archaeologically lumbering sites in all areas of the northwest with surviving historical evidence of late nineteenth century lumbering technologies different from those on Larch Mountain.

3) Researching the question of ethnic origin of the lumber workers in the Pacific Northwest and how different origins may have been related to different preferences for technological processes, i.e. many loggers on the central Oregon Coast were Amerindians, many loggers in British Columbia were Chinese, those who worked on Larch Mountain were primarily of Western European origin.

Serious researchers of all backgrounds should receive encouragement in their quest to locate, record and conserve the

wealth of early northwest lumbering data still scattered and largely unexamined in historical museum collections, company records, archaeological sites and informant memories. Hopefully, in future decades, the Larch Mountain Project will be viewed as one beginning in a greatly expanded interest in the role of historic archaeology to further the understanding of the evolution and diversity of early northwest lumbering technology and associated lifeways.

ACKNOWLEDGEMENTS

I would like to give special thanks to Bill Wahlke for his work with the blacksmith artifacts and to Fay Davis for aid in locating sites and describing past lumbering practices. Helpful suggestions were made by Loren Williams, Al and Virginia Woodward and Ron Cummings regarding the description of lumbering technology in this paper. Herb Beals helped with the illustrations, as did Sharon Woodward, who also gave many days of her time to classifying artifacts, locating sites, typing reports and providing encouragement.

To many students at Mt. Hood Community College, my thanks is given for participation in the excavation of sites. I am also appreciative for Gordon Creek Tree Farm's management granting permission to excavate important sites at Palmer and Donohue.

TABLES

TABLE 1

COMPLETE INVENTORY OF LATOURELL FALLS WAGON ROAD

AND LUMBER COMPANY'S LOGGING PLANT, DECEMBER 1898

Buildings: 1 barn, 1 cookhouse, 1 office and warehouse, 2 bunkhouses

Sawmill Equipment: 15,000 foot capacity, 1-52" saw, 1 cut-off saw, 1 Atlas engine 35,000 H.P., 1 boiler 35,000 H.P.

Hand Equipment at the Sawmill:

1½" California planer
1 hand edger
1 headblock, extra
2 branding axes
1 peevy
2 crow bars
1 clamp, closed
2 lumber trucks
3 dollies, iron
2 shovels, scoop
1 wheelbarrow
1 log turner
1 vice
1 grindstone
1 emery stand
5 gal. engine oil
5 gal. block oil
½ sack coal
various pieces of cast iron rod and pipe

Equipment at the Logging Plant:

4 oxen yokes
8 oxen yoke bows
5 connecting chains
2 iron snatch blocks
2 small double blocks
200 ft. ⅝" steel cable
3 cross-cut saws
7 wedges
9 axes
4 shovels
3 grubbing hoes
1 pick
3 peevies
1 timber jack
1 shovel, scoop
1 pitchfork
1 feed cutter
1 set of harness for mules
1 set of harness for horses
1 3½" Stroughton wagon
3 tram cars
2 ¼ miles of tram road
2 telephones

Hardware in the Supply House:

3 inch leather belt
4 inch leather belt
8 inch leather belt
14 inch rubber belt
1 saw handle
4 prs. hinge straps
2 prs. med. hinge straps
1 box small screws
1 box red chalk
1 box med. screws
4 brooms
5 door latches
7 hasps and staples
4 med. bricks
1 box cupboard latches
1 doorknob
1 emery stone
3 windows
4 planer side heads
2 planer knives
1 box planer knives

TABLE 1 (Cont.)

Animals at the Logging Plant:

1 cow named Daisy
1 cow named Minnie
1 mule named Jack
1 mule named Jim
1 Clydesdale horse named Jim
1 Clydesdale horse named Charlie
10 oxen

Groceries in the Cookhouse:

brown sugar	118 lbs.	toothpicks	4 pkgs.
granulated sugar	75 lbs.	Magic yeast	6 pkgs.
Alliance flour	4½ sacks	cream of tartar	2 cans
bacon	31 lbs.	canned quince	2 cans
ham	85 lbs.	baking powder	1¾ cans
macaroni	1½-10 lb box	hominy	24 lbs.
vermicelli	1½-10 lb box	nutmeg	5 sacks
vinegar	1 gal.	salt	1 sack
lard	25 lbs.	cornstarch	3 pkgs.
soap	6 bars	soda	2 pkgs.
coffee	13 lbs.	coconut	3 pkgs.
tea	6¼ lbs.	dried peaches	45 lbs.
canned tomatoes	14 cans	syrup	½ gal.
corn	14 cans	onions	½ sack
potatoes	2¼ sacks	apples	2½ sacks
pepper	¼ can	butter	21 rolls
pearl barley	19 lbs.	carrots	1 sack
oatmeal	23 lbs.	tapioca	25 lbs.
rutabagas	½ sack	beef	147 lbs.
meat, pork	90 lbs.	cabbage	60 lbs.
salt salmon	¼ bbl.		

Cookhouse Utensils:

17 soup plates
17 dinner plates
9 cups and saucers
8 sauce dishes
6 vegetables
7 small vegetable dishes
2 square vegetable dishes
1 round vegetable dish
1 long vegetable dish
4 milk pitchers
4 syrup mugs
2 butter dishes
2 sugar bowls
4 salt & pepper shakers
15 caster bottles
4 tin tablespoons
6 silver plated forks
3 silver plated knives
19 tin teaspoons
5 iron forks
large pie tins
3 small pie tins
1 cooking range
1 chair
1 fruit press
1 potato slicer
1 grater
1 meat grinder
1 small roaster
1 frying pan
1 griddle cake
1 graniteware kettle & cover
2 covered steamers
1 double rice kettle
2 cast iron pots
2 dishpans
1 bread raiser
2 stoneware jars
1 water pail
1 aluminum coffee pot
1 aluminum stew pan
1 chopping knife
1 spice cabinet
1 meat saw
1 kraut cutter
2 heating stoves
1 egg poacher

TABLE 1 (Cont.)

Warehouse Goods:

rolled barley	22 sacks
oats	5 sacks
shorts	7 sacks
Alliance flour	5 sacks
Hillsboro flour	2 sacks
Graham flour	1 sack
peameal	1 sack
oatmeal	2 sacks
hominy	1 sack
brown sugar	1 sack
granulated sugar	1 sack
beans	1 sack
potatoes	1 sack
vermicelli	4-10 lb box
macaroni	2-10 lb box
hams	1-300 lb crate
salt	3-50 lb sacks
dried apples	1-50 lb box
dried pears	1-50 lb box
condensed milk	1 case
syrup	12-1 gal cans
syrup	1-½ gal can
lard	2-10 lb pails
lard	3-5 lb pails
Magic yeast cake	28 pkgs
canned tomatoes	6 cans
mustard	1 bottle
compressed hops	4-1 lb pkgs.
coconut	1 pkg.
assorted spices	¼ lb.
toothpicks	19 pkgs.
string	--
paper sacks	--
Seal NC tobacco	37-2 oz pkgs.
Pedro tobacco	21-2 oz pkgs.
Star tobacco	4-2 oz pkgs.
cigarette papers	1½ boxes
Gold Drop washing powder	4 pkgs.
tea	10 lbs.
soap	6 cakes
Frazer axle grease	1 tin
rivets	6 pkgs.
peevy handles	2
pepper	1 case
bacon	55 lbs.
dried apples	47 lbs.
currants	40 lbs.
cornstarch	24-1 lb pkgs
gloss (laundry) starch	7-1 lb pkgs
Royal bakingpwdr	1 can
Price's bakingpwdr	3 cans
Arbuckle coffee	18 pkgs.
celery salt	9 bottles
pepper sauce	8 bottles
granulated sugar	65 lbs.
beans	46 lbs.
wintergreen extract	11 bottles
lemon extract	20 bottles
nutmeg	1 lb
vanilla extract	9 sm. bottles
allspice, whole	5 lbs.
cloves, whole	5 lbs.
peppercorns	5 lbs.
cinnamon sticks	1 pkg.
soda	1 pkg.
cream of tartar	22-½ lb. cans
canned corn	4 cans
Rath brick	2 cans
ax handles	2
mattock handles	2
small bolts	25
hinges	4 pair
rubber cement	2 cans
apples	4 sacks
ax bits	2
lantern globes	6
oil can	1
lamp chimneys	4
ox bows	4
heating stove	1
nails, 4 P.W.	90 lbs.
nails, 6 P.W.	65 lbs.
nails, 1 P.W.	75 lbs.
nails, 40 P.W.	90 lbs.
rice	30 lbs.

TABLE 2

CHRONOLOGICAL EVOLUTION OF THE BRIDAL VEIL LUMBERING COMPANY: 1887-1938

1887	Company founded, sawmill facilities built at Bridal Veil, log flume constructed down Bridal Veil Canyon, Donohue becomes center of teamsters, oxen and steam plant used to yard logs.
1891	Sawmill moved to Palmer on Larch Mountain, finishing mill remains at Bridal Veil, cants from sawmill flumed to Bridal Veil. Railroad built from upper pond to Palmer mill, incline built to lower logs into upper pond from skid roads. Oxen and steam plants used to yard logs.
1902	Palmer Mill and community totally destroyed by forest fire, timber resources damaged on lower slopes of Larch Mountain.
1903	New Palmer sawmill and community relocated at upper pond, Palmer and Donohue sites abandoned.
1905	Extension of railroad tracks to upper slopes of larch Mountain, steam plants and oxen replaced by gasoline plants and mechanized equipment.
1930	Reduced market conditions for lumber, extended labor conflict and destruction of Bridal Veil mill by fire results in cessation of Larch Mountain lumbering, Palmer mill closed and community dismantled (1938).

TABLE 3

DUTIES OF A TYPICAL LARCH MOUNTAIN

LOGGING CREW CA. 1900

POSITION	DUTIES
Foreman (Woods Push)	On site direction and management of logging operation
Engineer (Donkey Puncher)	Operation of steam power plant used to pull logs with wire rope
Faller (Feller)	Felling timber with crosscut saws or axes
Bucker Sawer	Cutting the felled trees into lengths with bucking saws
Skid Maker	Cutting small logs into sections laid crossways (skidroad) over which logs were pulled
Laborer (Swamper)	Brush clearing and construction of roads, etc.
Undercutter	Expert faller who made first notch cut in a tree with an axe, determining direction of fall
Barker	Peeling off bark from the felled trees with axe and peeling tools
Hook Tender (Chokersetter)	Attaching wire rope to logs with a variety of hooks
Cable and Signal Men (Whistle Punks)	Passing signals from the hook tenders to the engineer
Teamsters (Wrangler)	Driving bulls, horses or mules pulling logs or wagons
Skid Greaser (Grease Monkey)	Placing a lubricant on the skidroad for the logs to skid over
Cook and Helper	Providing meals for the logging crew

TABLE 4

TYPICAL SURFACE FEATURES ASSOCIATED

WITH 1887-1902 LUMBERING SITES ON LARCH MOUNTAIN

SITE	FEATURES
Skid Road	Straight or broadly meandering level paths covered with vegetation less mature than surrounding woods. Logs laid crosswise or patterns of moss indicative of buried and/or rotted logs. 1.5-3 meters wide, less than 1000 meters in length.
Incline	Straight paths down steep slopes covered with vegetation less mature than surrounding woods. 1.5-2 meters wide, less than 500 meters in length. Planks laid crosswise or patterns of moss indicative of buried and/or rotted planks. Large logs laid at right angle to planks at sides and beneath planks. Concentrations of nails. Iron rails and spikes may remain if not salvaged. Machinery parts or evidence or structure may remain at top of incline.
Log Dump	Numerous bucked logs remaining where yarded.
Ponds	Streams blocked with timber dams, partially filled with silt, bucked logs and debris.
Residential Sites	mature level or hillside areas with vegetation less than surrounding woods, relatively free of slash Exotic plants, i.e. daffodil bulbs, fruit trees. Scattered bricks, cellar and outhouse depressions, refuse dumps, scattered shards of glass and ceramic, small nails, water pipes, iron stove fragments.
Mill Sites	Associated with ponds at bottom of valleys, concrete or stone block foundations, scattered iron hardware, especially bolts and large nails.
Blackmith Sites	Level areas with coal and clinkers, i.e., fused masses of hard stony material formed in a forge from impurities in coal. Iron fragments and other refuse may be visible. Bricks not present because of the use of portable forges.
Flumes	Scattered wood planks and collapsed cribbage extending along canyon slopes, small intact sections may have V or U profile.

TABLE 4 (Cont.)

Water Diversion System	Hillside ditches, some stone lined, altering drainage into pond. System still diverts runoff in a pattern different from natural flow.
Bridge Foundation	Concrete slabs for wood support posts.
Railroad Beds	Level depressed paths, 2-3 meters wide, excavated along hillside contours. No ties or rails are known to be visible probably because 1902 fire burned ties and caused relocation of rail line.
Railroad Trestle	Massive timbers once supporting railroad beds over small canyons, burned and dismantled trestles indicated by presence of numerous large bolts, nuts and washers.

FIGURES

1. Map of western slope of Larch Mountain showing sites discussed in text.

2. Massive gears from stationary bull donkey at top of inclined chute used by Bridal Veil Company, Apex site.

3. Rock wall of stream diversion ditch constructed by Bridal Veil Company, Apex site.

4. Stationary bull donkey above inclined chute of Bridal Veil Company, ca. 1895.

5. Inclined chute of Bridal Veil Company. Bull donkey using wire rope lowered logs into pond, ca. 1895.

6. Differential drying of moss cover in late summer allowed red-filter photography of rotted plank bed of Bridal Veil Company's inclined chute, Apex site.

7. Diagrammatic view of Bridal Veil Company's operations on Larch Mountain, Oregon prior to 1902.

8. Classic Pacific Northwest logging scene, ca. 1895. Fallers on spring-board display double-bitted axes; whiskey bottles hooked to tree contained saw oil for cross-cut saw visible against tree.

9. Diagrammatic stages of falling using axes, saw and wedges with spring-boards. A) Spring-boards and staging were usually used to get above the flared-out root system at the base of the tree. A soft bed of dirt and brush was smoothed out to keep the tree from shattering on impact. B) working opposite

each other on the side towards which the tree would fall, two choppers made the undercut with their long-handled, double-bitted axes. C) With the undercut complete, two men began to haul on a long saw from the side opposite the undercut. D) As the saw cut into the tree, wedges were driven in behind to relieve pressure on the saw and nudge the tree precisely into the line of fall. Once the tree was down and the limbs cut away, it was bucked into desired lengths for transport to the mill.

10. 1897 photograph of a Latourell Falls Company's logging crew using four horses to pull logs over a skid road. Beetles, axes and grease bucket for skid road are visible on right.

11. Early single-spool yarding donkey in use with wire rope in the northwest.

12. Murdy Bros. steam donkey spool with 1890 patent date abandoned on Bridal Veil Company skid road.

13. Bridal Veil Company horizontal spool steam donkey yarding a sniped log. Dog, chain and wire rope are visible. Man on log holds a hardwood beetle with iron ring, used to drive-in and knock-out, ca. 1895.

14. Camp of Donohue and Kelly. Nearly all-male community was center of oxen teams contracted by Bridal Veil Company from 1887 to 1902. Building on right with smoke stack was identified archaeologically as blacksmith's shop and home. Log structures on left were probably bunk and cook houses.

15. Excavated kitchen-shop dump of Donohue blacksmith with artifacts *in situ*.

16. Upper pond of Bridal Veil Company, ca. 1895. Trestle and inclined chute are visible in background. A train of debarked logs destined for Palmer sawmill is shown being pulled up ramp from pond. Note rails laid on greased planks over which logs were skidded by locomotive.

17. Palmer sawmill and company town prior to 1902 fire. Flume can be seen emerging from mill. Cants were flumed to finishing mill at Bridal Veil on Columbia River.

18. *In situ* band saw on site of Palmer sawmill destroyed by fire in 1902.

19. Apex, a Bridal Veil Company camp established for logging-railroad workers. The two women are camp cooks, ca. 1895.

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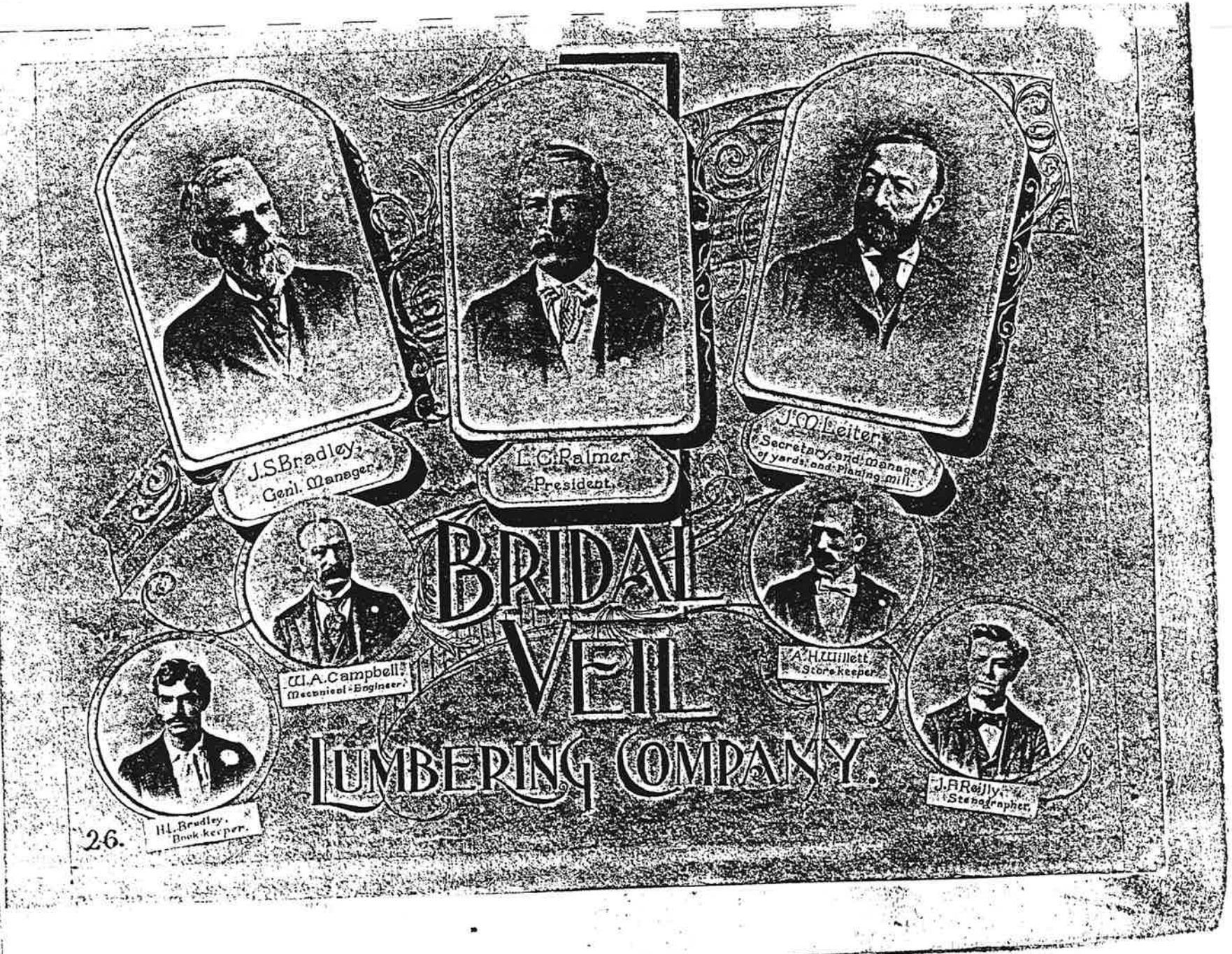

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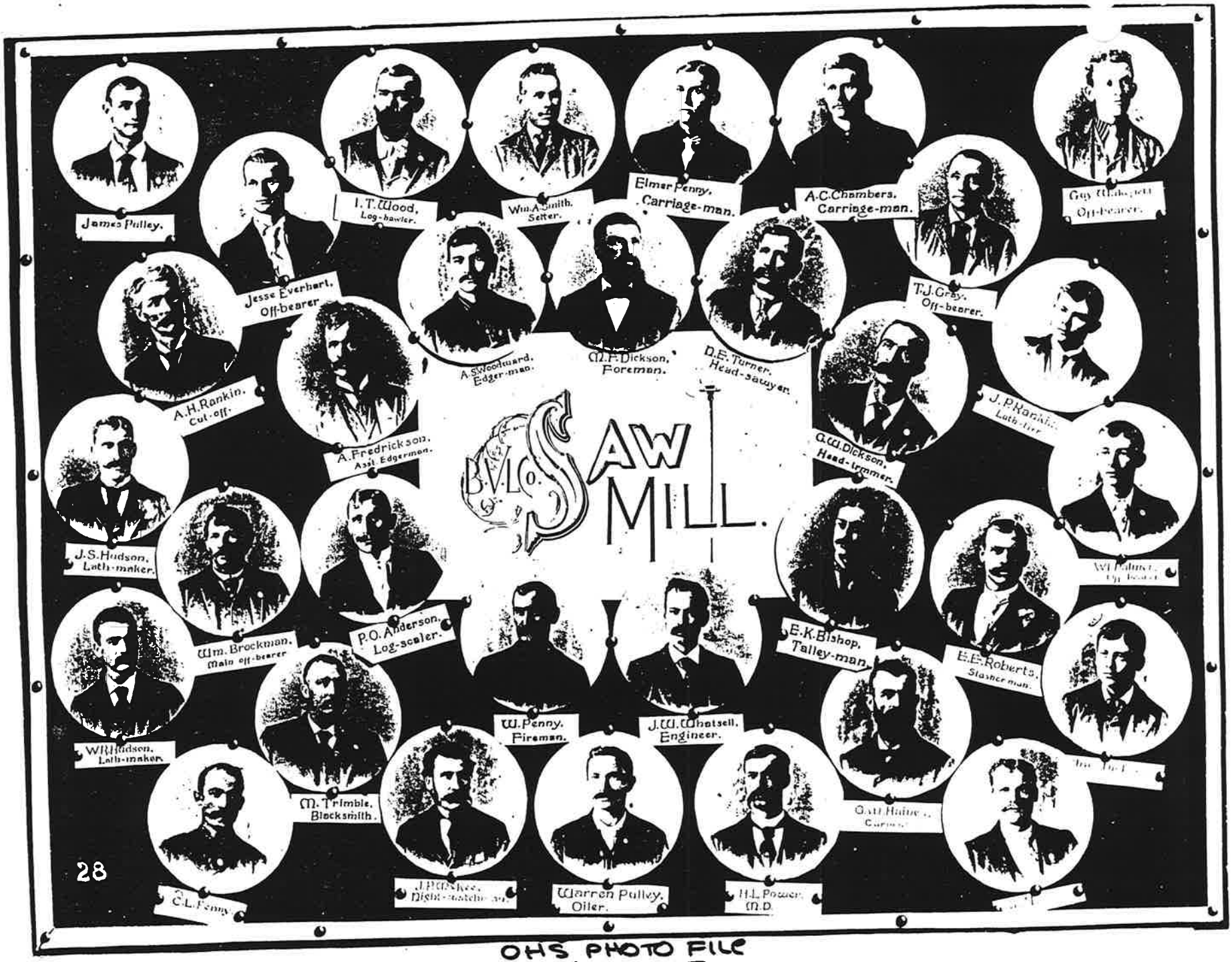

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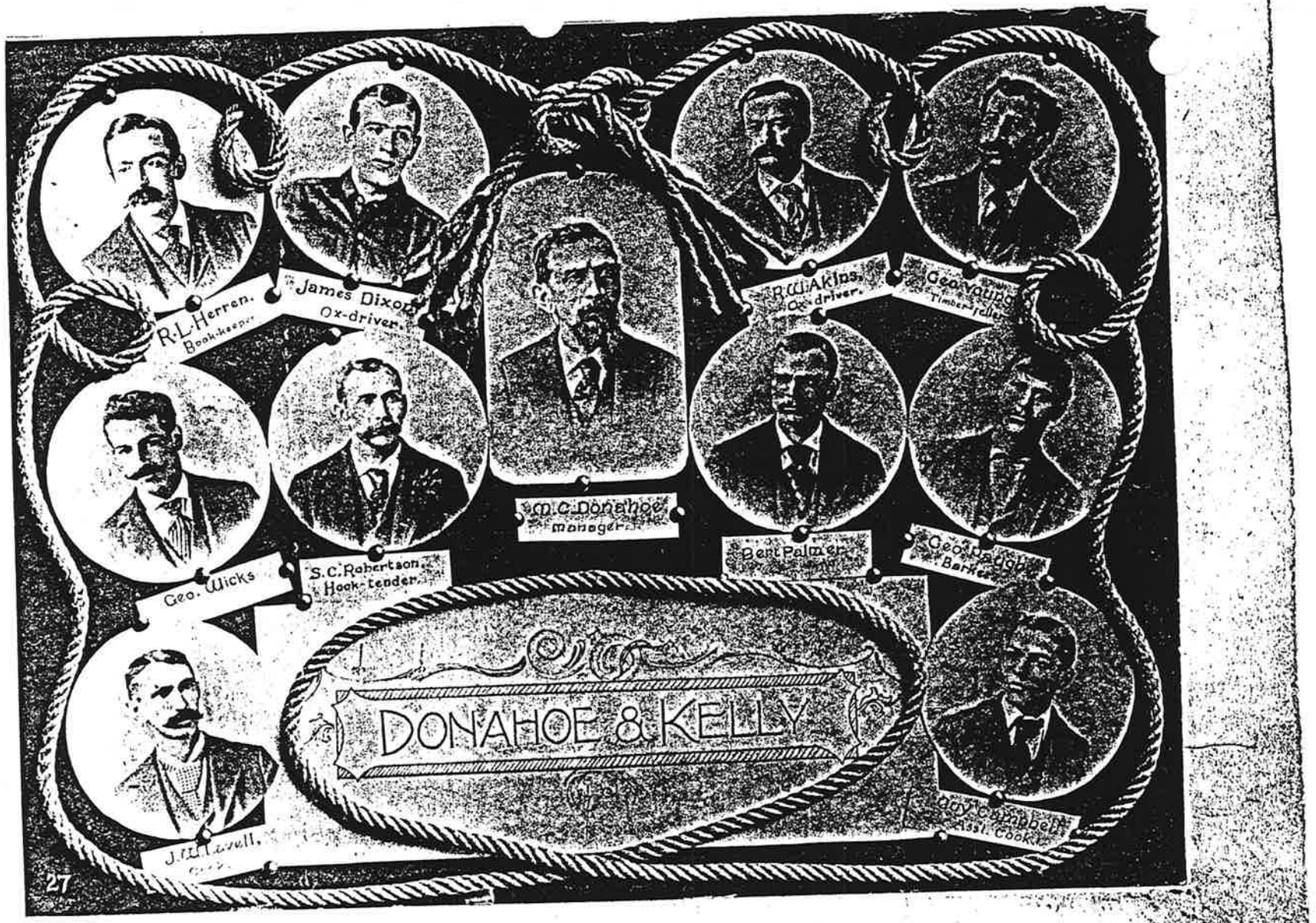

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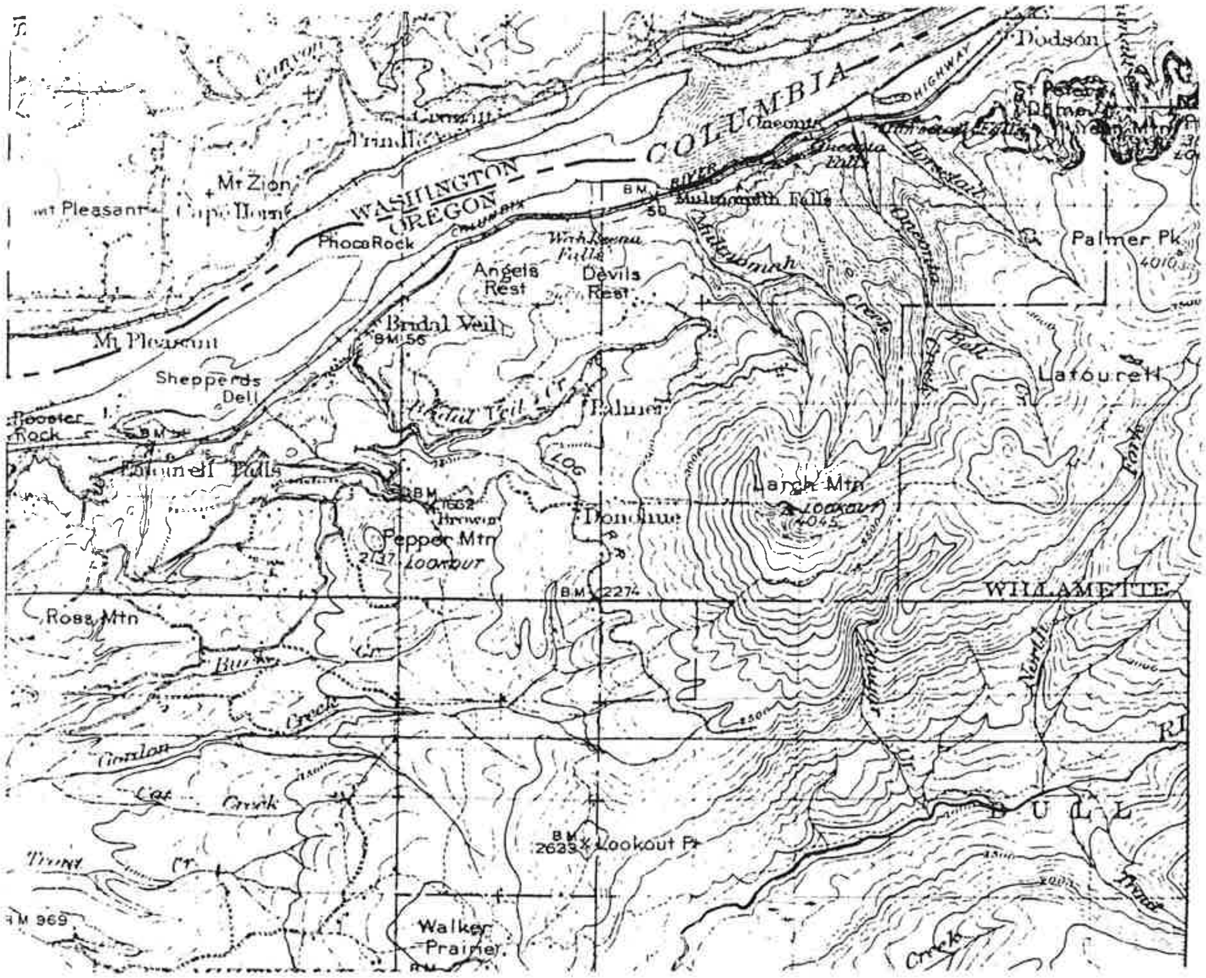
FIGURE 1

U.S. Geological Survey Map showing the lumbering communities of Latourell Falls, Bridal Veil, Palmer, Brower, and Donohue. The map was surveyed between 1907 and 1911.

FIGURE 2

A turn of the century photograph showing a logging crew in the Northwest using a steam "yarding donkey" to haul logs along a skid road with wire rope. Photo courtesy of Oregon Historical Society.

PHOTOGRAPHS FROM
A General History of Lumbering on Larch Mountain
Woodward: 1974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Phoca Rock
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Angels Rest
Devils Rest
Bridal Veil
Mt Pleasant
Shepperds Dell
Rooster Rock
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Larch Mtn
Pepper Mtn
Donohue
Ross Mtn
WILLAMETTE
Lookout Pt
Walker Prairie
BM 969

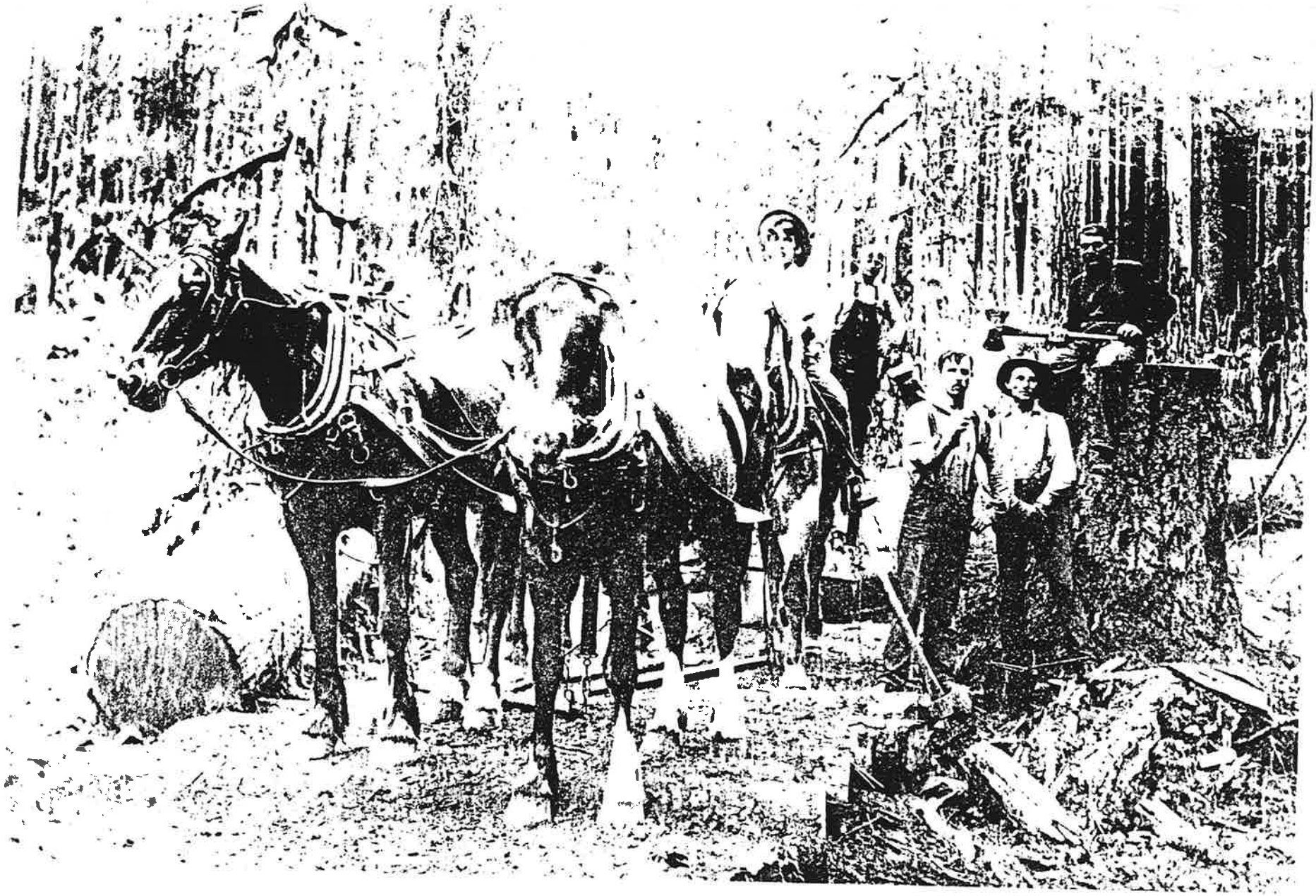
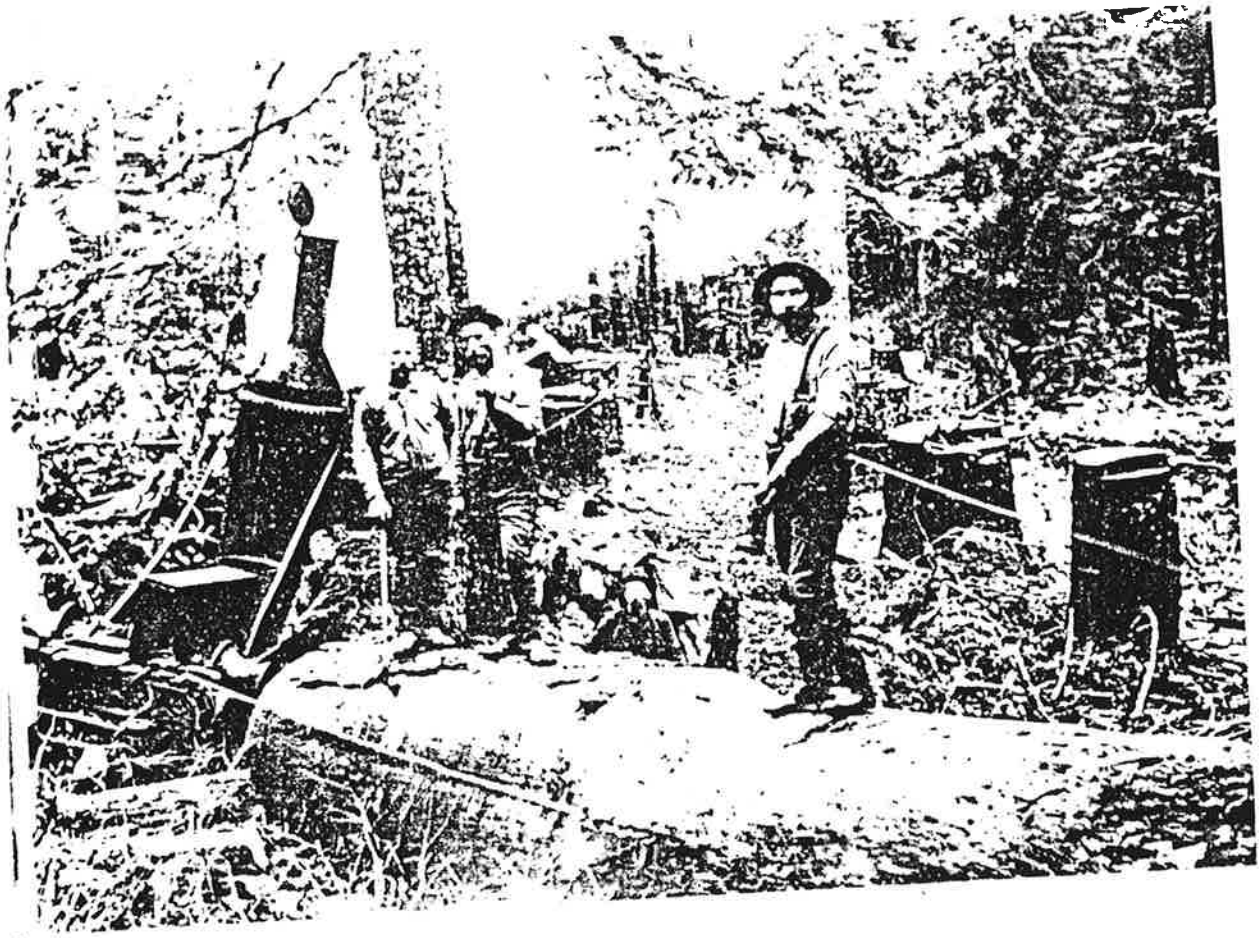


FIGURE 4

A Bridal Veil Lumbering Company yarding crew about 1890-1895. An early steam donkey is shown pulling a log with a combination of wire rope, chain and dogs driven into the log. The man standing on the center of the log is holding the maul used to drive in the dogs. Photo courtesy of Oregon Historical Society.

FIGURE 5

A Bridal Veil Lumbering Company Baldwin steam locomotive pulling a train of logs out of Donohue Pond about 1890-1895. Note the log chutes in the background and the planks between the rails along which the log trains were pulled. From Donohue Pond the logs were pulled to the sawmill at Palmer. Photo courtesy of Oregon Historical Society.



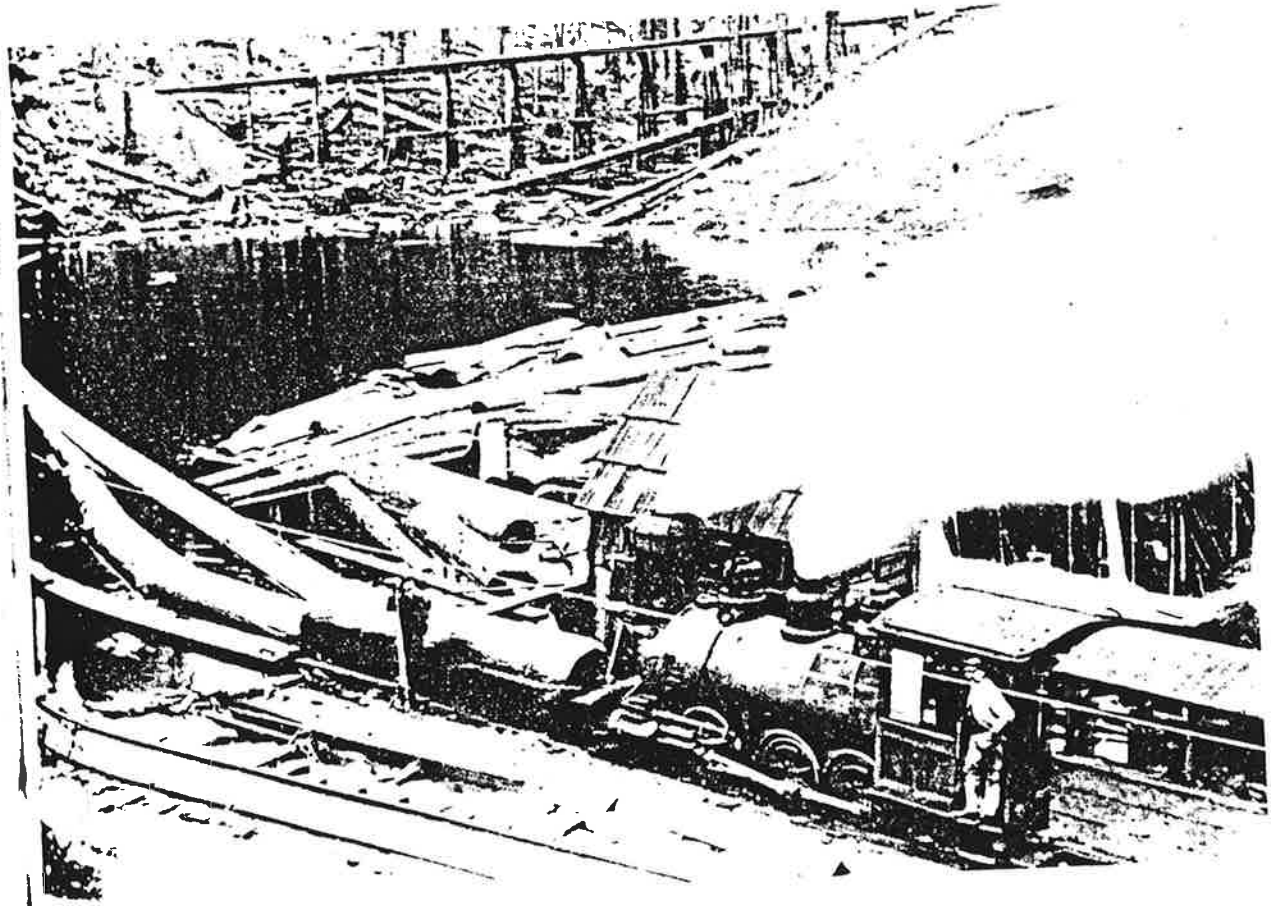
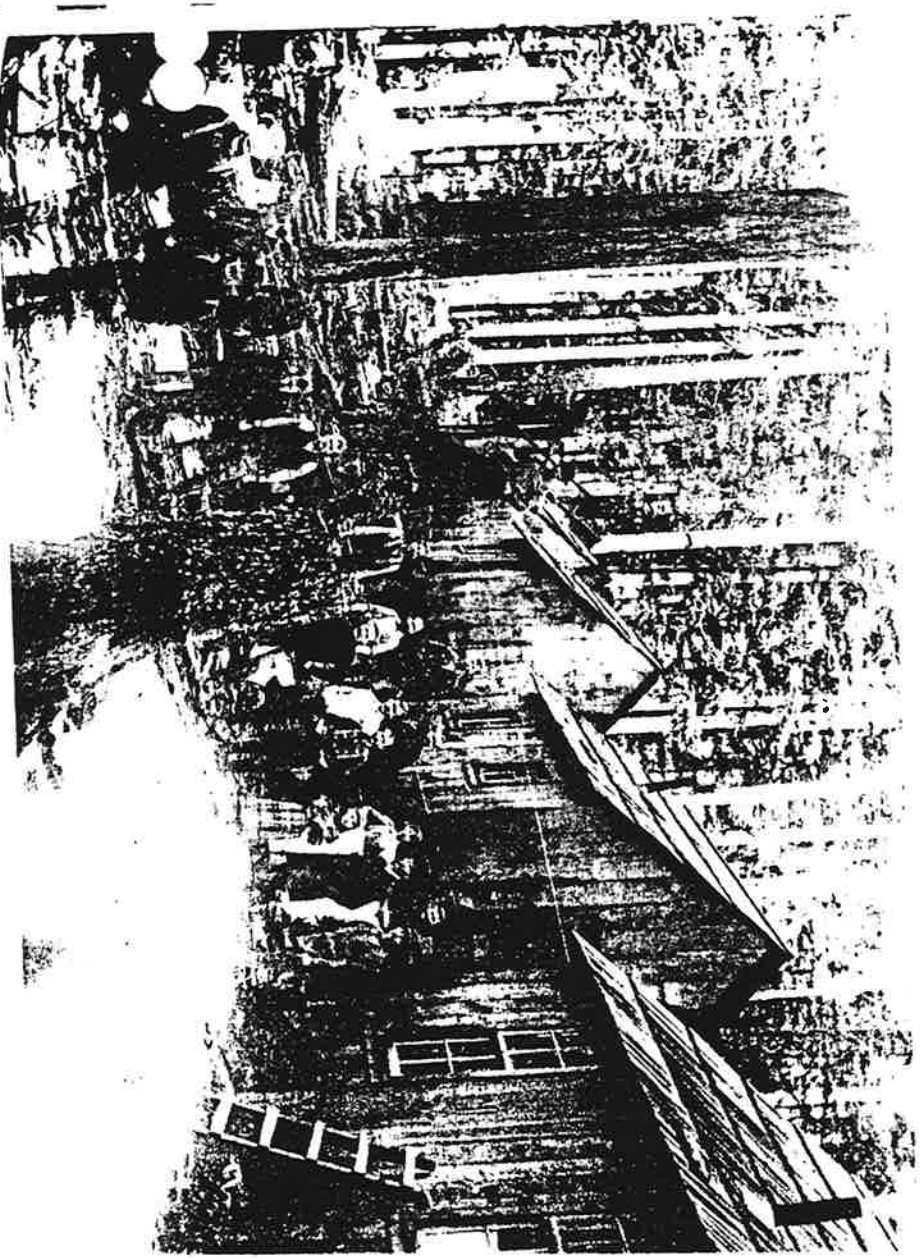


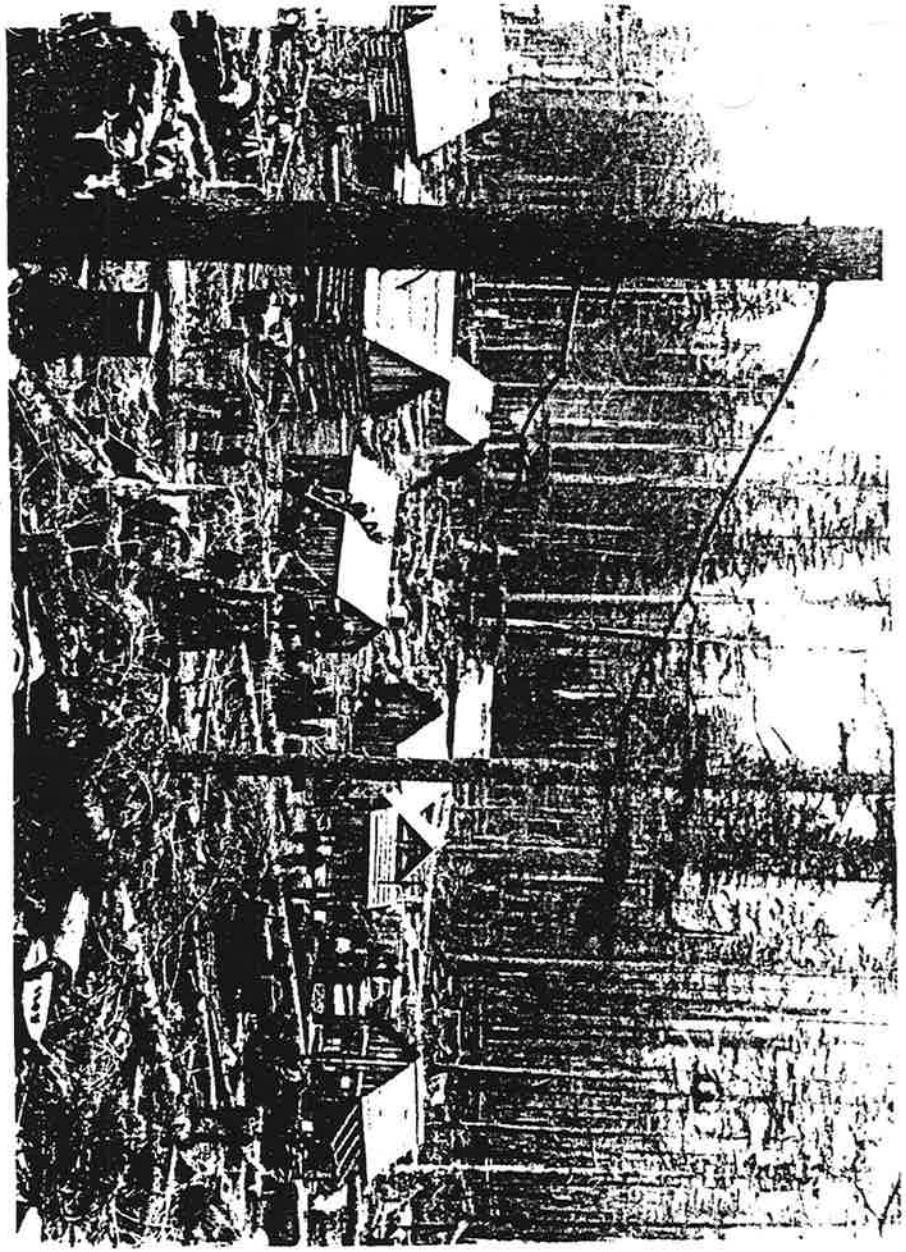
FIGURE 7

The logging camp of Donohue and Kelly about 1890-1895. The frame building second from the right with the smoke stack is believed to be the blacksmith shop. The large log building on the far left is probably the cookhouse. This Larch Mountain camp was important as a center for the oxen logging operations of the Bridal Veil Lumbering Company from the late 1880's to about 1900. Photo courtesy of Oregon Historical Society.

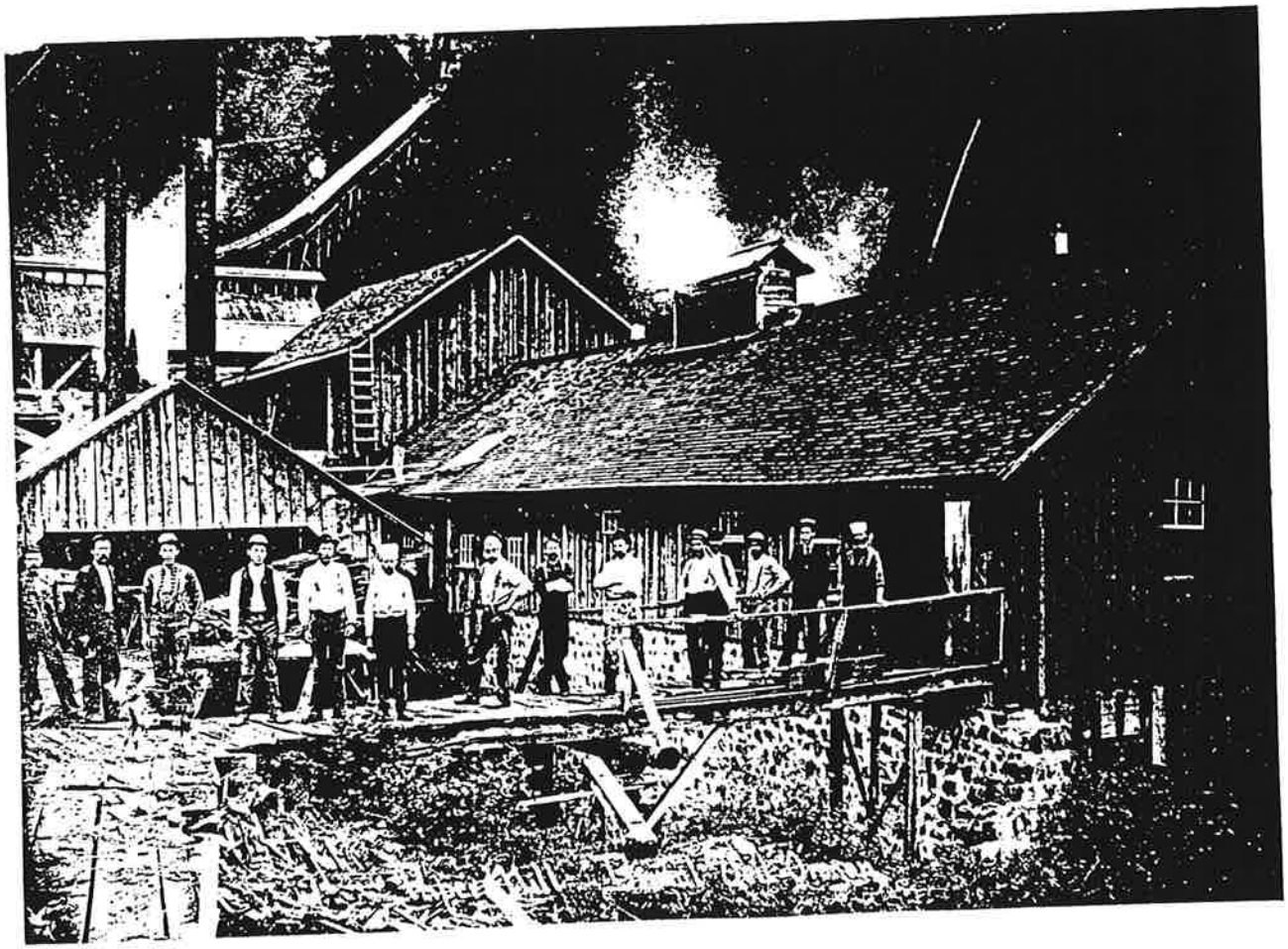
FIGURE 8

The Bridal Veil Lumbering Company's logging railroad camp of Apex about 1890-1895. Note the construction of the frame houses set on wood posts; an example of early company housing. The women were the camp cooks. Photo courtesy of Oregon Historical Society.





PLANING MILL.



PAPER MILL CREW - ABOUT 1891

Mike Souple, Walter Flemming, Frank Howard, Henry C. Horton, Ed Horton, Horace H. Phillips, Fred Ladsick, Fred Mount, and others.

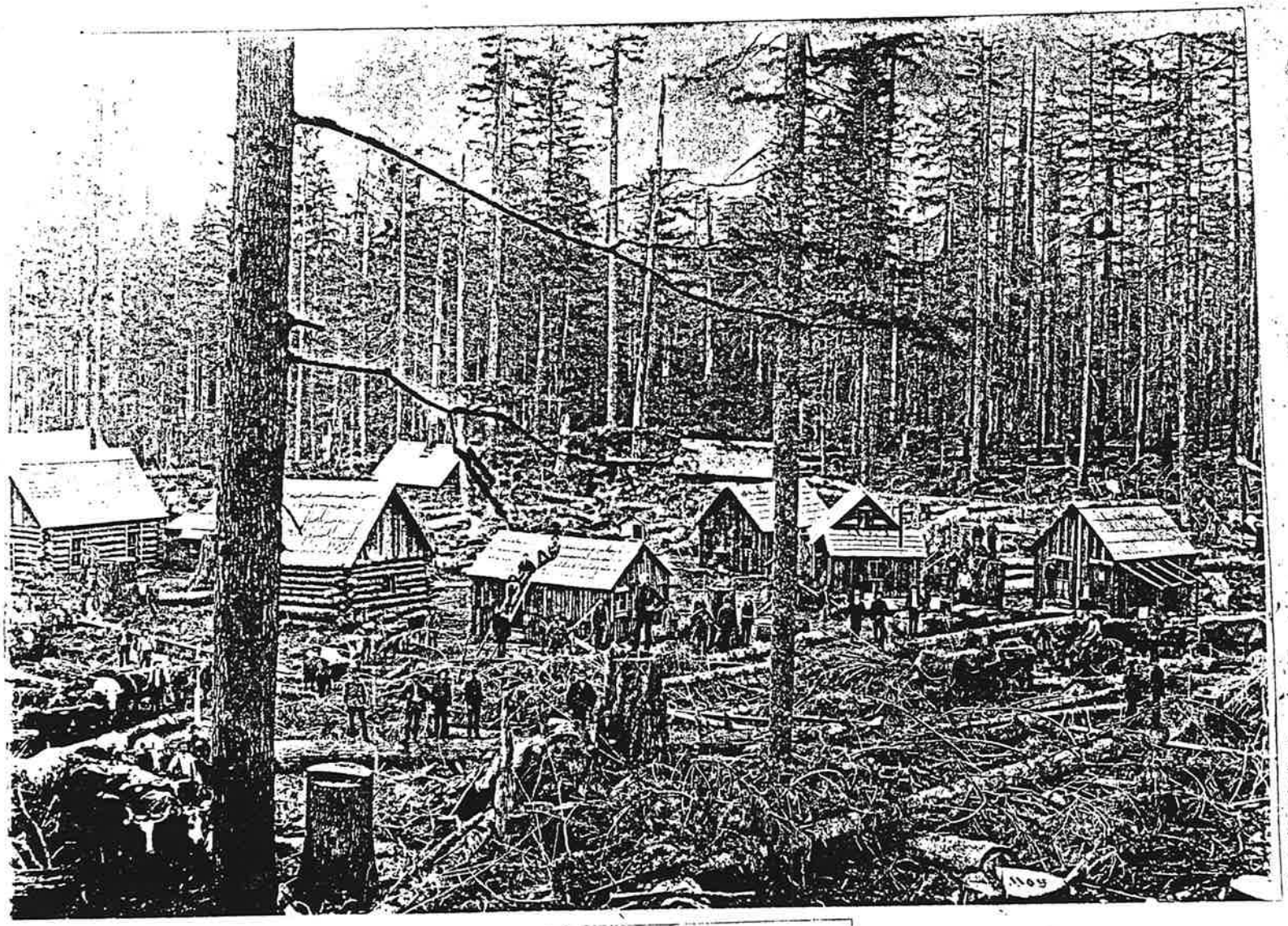
BRIDAL VEIL LUMBER YARD AND PLANING MILL CREW & A FEW CHILDREN
ABOUT 1898

Tom Small
Will Shepherd
Dan Lehman
J. M. Leiter
Jake Gilliam
& small child
John Embody
Mr. Carlson
Mr. Proctor
Ernest Stone
Frank Knapp

Ed Gilliam
Mr. Gilliam
Harry Nelson
Fred Collard
Mr. Erickson
Mr. Gustafson
Ralph E. Early
John Carson
Henry C. Horton
Joe Leiter
Alva O. Horton

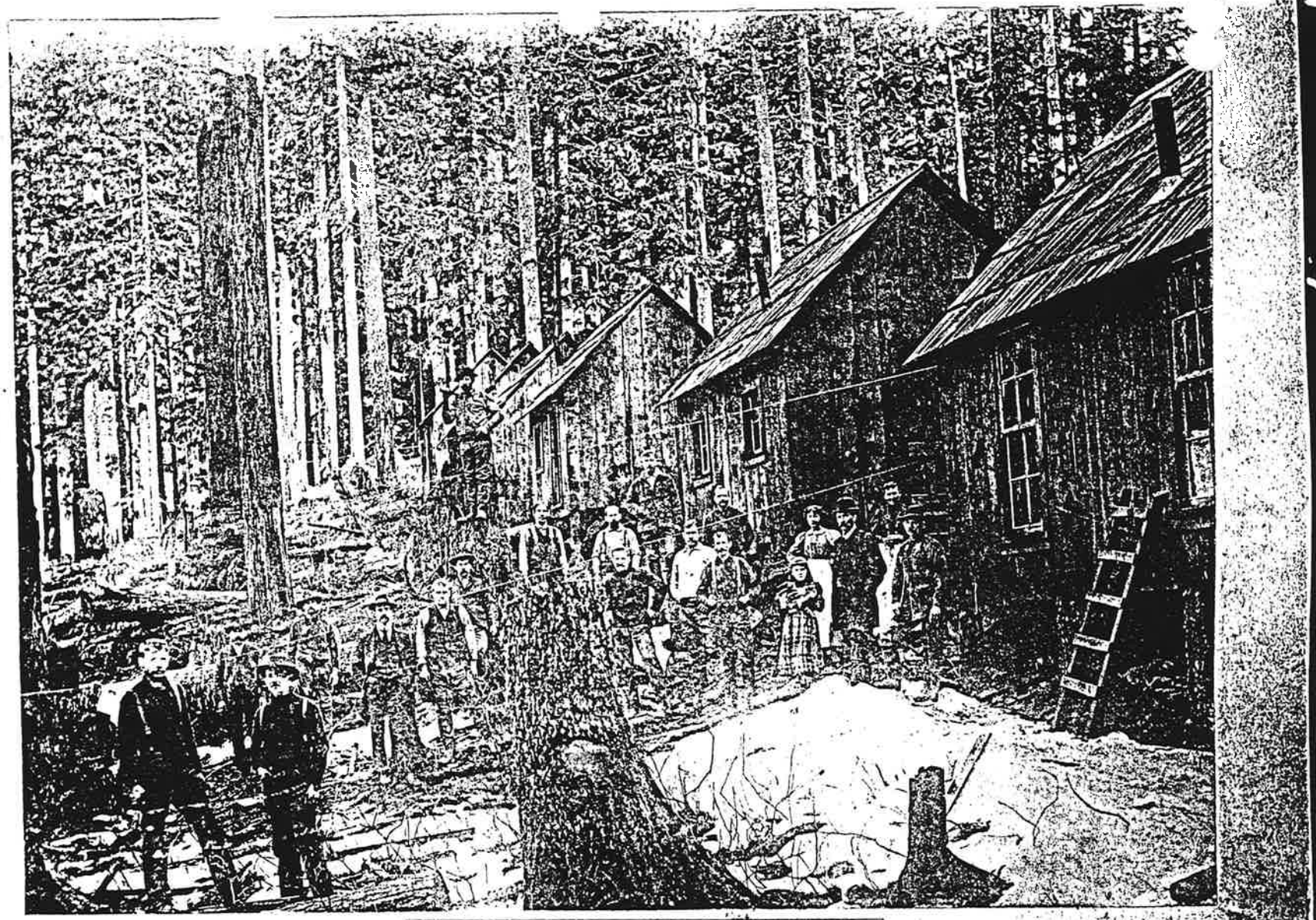
Walter R. Horton
Mr. Witham
Nels Karr
Mr. Collard
and others.

Children:
Charlie Nelson
Willie Ostrand
Harry Swain



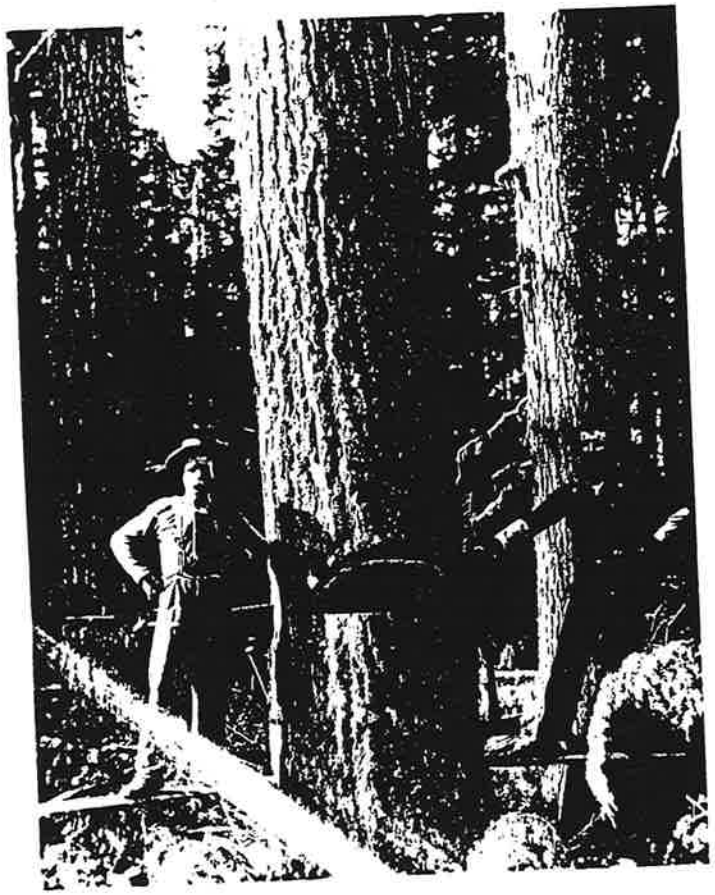
16. LOGGING CAMP.

BRIDAL VEIL LOGGING CAMP
OHS #44631



11. APEX LOGGING CAMP AND CREW.

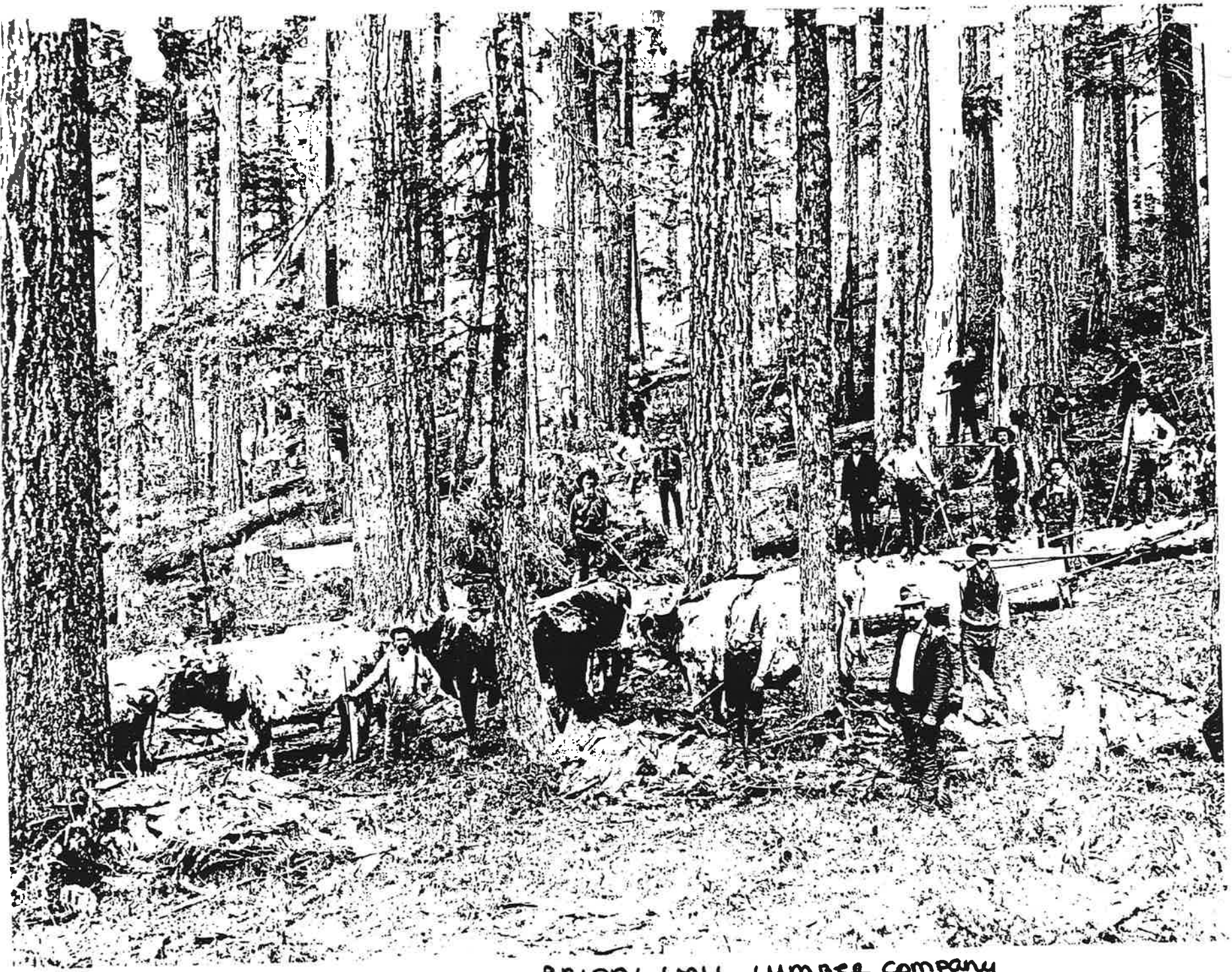
44630 OREGON HISTORICAL SOCIETY



TIMBER FELLER
BRIDAL VEIL LUMBER CO.
OHS PHOTO # 45789

FALLING LARCH
BRIDAL VEIL LUMBER CO.
OHS PHOTO 45805

BRIDAL VEIL LUMBER COMPANY
YARDING LOGS & DONKEY
OHS PHOTO FILE # 46239



BRIDAL VEIL LUMBER COMPANY

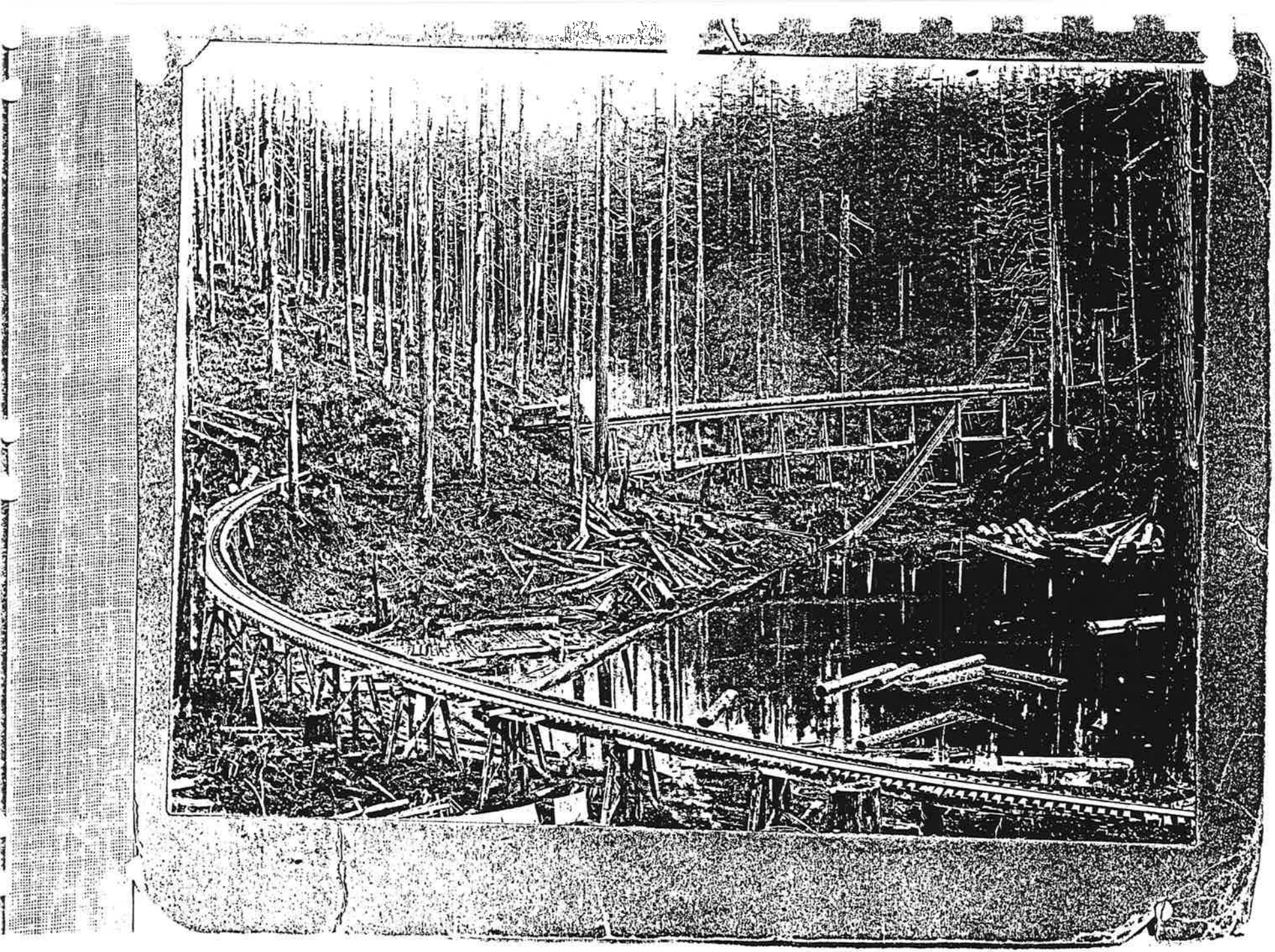
7. DONAHOE & KELLY OX TEAMS.

OHS Photo File #58919

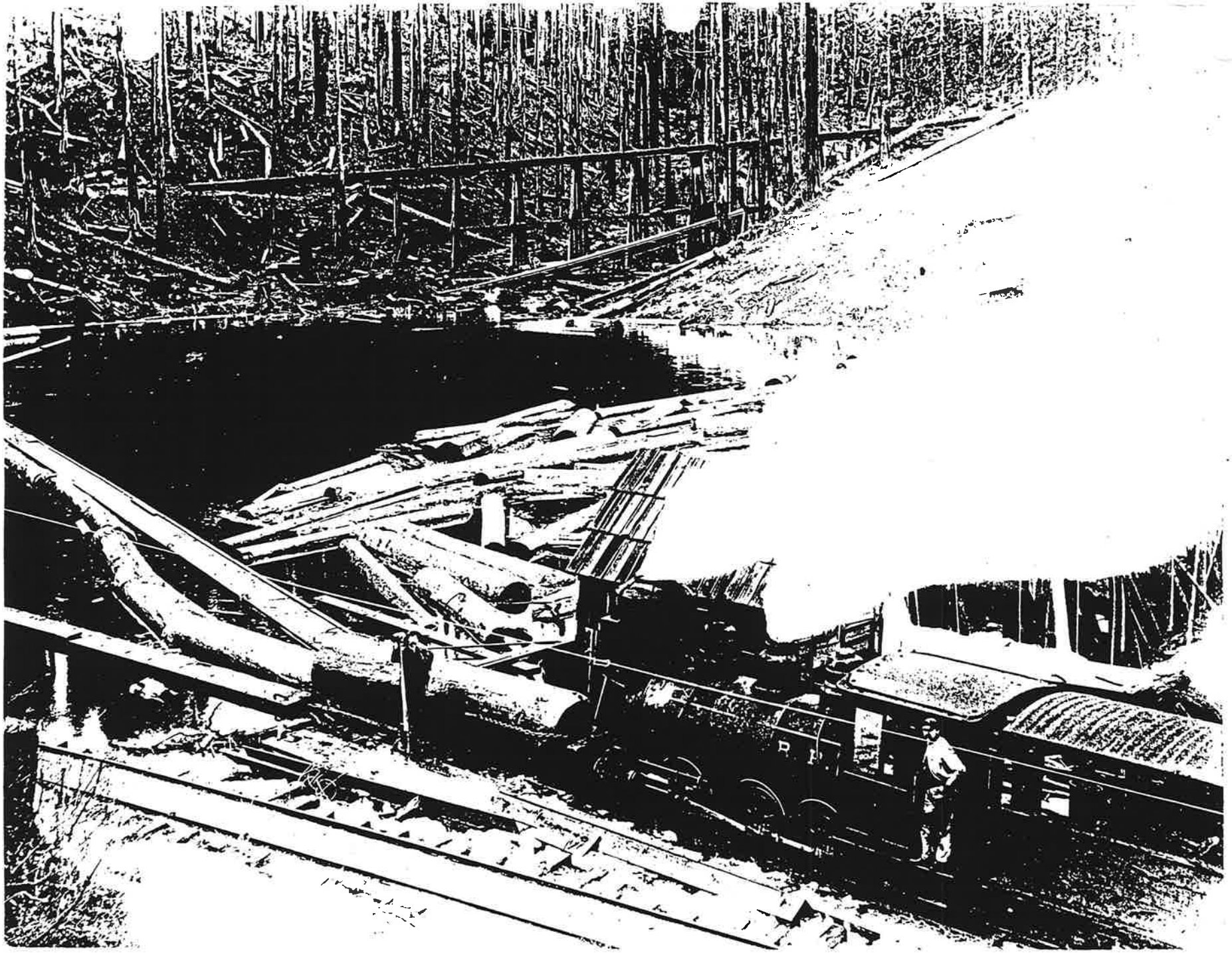
LOGGING CREW
OHS PHOTO FILE
#45799

BRIDAL VEIL LUMBER CO
OHS PHOTO # 4702

FLUME WITH MILLED BOARDS
OHS PHOTO # 8337



OHS PHOTO # 66269



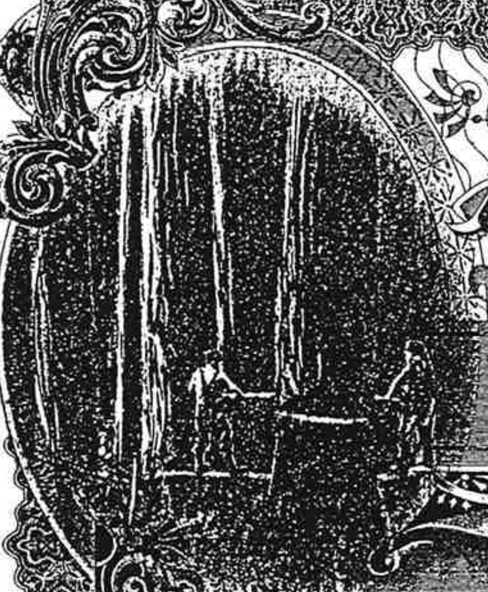
TAKING LOAD FROM POND
OHS PHOTO # 46238

INCORPORATED UNDER THE LAWS OF

OREGON

No. 11

Shares 7500



Douglas Fir Lumber Company

CAPITAL STOCK $100,000

This Certifies that Bridal Veil Lumbering Company is the owner of Seven thousand five hundred Shares of the Capital Stock of

Douglas Fir Lumber Company

transferable only on the books of the Corporation by the holder hereof in person or by Attorney upon surrender of this Certificate properly endorsed.

In Witness Whereof, *the said Corporation has caused this Certificate to be signed by its duly authorized officers and to be sealed with the Seal of the Corporation this 10th day of Nov A.D. 1917*

[signature] V. PRESIDENT

[signature] SECRETARY

Glass & Prudhomme Co., Printers, Portland

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