

TIE HACKERS

on the Front Range, 1886–1887

*Building the St. Paul, Minneapolis & Manitoba
and the Montana Central Railroads*

❧ BY JOHN A. VOLLERTSEN ❧

The year 1887 was a pivotal year in Montana's transportation history. That year, James J. Hill's railroad, the St. Paul, Minneapolis & Manitoba—commonly called the Manitoba—pushed from the northeast corner of the territory to Great Falls in only six months. Ten thousand men and 6,600 horses built the rail bed one shovelful and one Fresno scoop at a time. The railroad's crews beat a world's record by laying more than seven miles of track in one day.¹

To achieve this feat, Hill employed contractors to do everything, from providing livestock feed to constructing the grade—roughly forty contractors worked on the grade alone.² Tie-cutting operations along the Rocky Mountain Front were at the center of this web of labor. The gargantuan effort to cut, hew, and float nearly half a million railroad ties down the Sun, Teton, and Dearborn Rivers produced numerous newspaper reports of the accidents, deaths, and catastrophic weather encountered by “tie hackers” along the Front Range.³ In the history of railroads, however, Montana's tie-cutting operations have more often than not been relegated to a footnote.⁴



Minnesota Historical Society, St. Paul, HE6.41 Gp9 2096

During the winter of 1886–1887, tie cutters extracted 460,000 railroad ties from Montana's rugged Rocky Mountain Front for the construction of the St. Paul, Minneapolis & Manitoba and Montana Central railroads. From tie cutting to track laying, building the Manitoba line required monumental effort and the labor of over a thousand men and six thousand horses.

Undertaking a contract to cut and float ties on the scale necessary for the Manitoba line required financing—big financing. The Helena-based partnership of John Henry Jurgens and Bennett Price—which ranked among Lewis and Clarke County’s top tenth percentile of taxpayers—saw an opportunity to diversify its operations.⁵ Jurgens had opened his first general merchandise stores in Unionville, Silver City, and Helena.⁶ The partners also established stores in Marysville, Belmont, Rimini, and Montana City, as well as sawmills in Marysville, Canyon Creek, and Wolf Creek Canyon north of Helena.⁷ They operated a stagecoach line between Helena, Rimini, and Marysville.⁸ In 1886, the partners contracted to manufacture railroad ties for the Helena & Red Mountain Railway that ran from the tiny yet booming mining town of Rimini; sixty men were cutting ties in February 1886.⁹ The “mammoth soda water factory” in Helena manufactured ginger ale, cider, soda water,

root beer, and bar syrups—and proclaimed itself to be the best and largest in the West.¹⁰ The huge Helena store and the Jurgens family mansion were both located in the same block of Clore Street, today’s Park Avenue.¹¹

Jurgens & Price’s contract to cut ties for the Manitoba Railroad was at one time hailed as the largest in Montana history: 260,000 ties out of the Sun River headwaters, 50,000 out of the Dearborn, and 150,000 out of the Teton—collectively, 387 river miles to float the ties.¹² John Jurgens took seventy-five men up the Sun River in August 1886, where they began preparations for the operations by constructing approximately seven cabins about one mile up Tiecamp Creek, today’s Headquarters Creek.¹³ Reports noted seventy-five men working in the area on August 25, 1886; seventy men on December 23; and two hundred men on June 30, 1887.¹⁴ As their numbers grew, the men likely constructed small dwellings nearby.¹⁵



MHS Photograph Archives, Helena 957-432

The expense of extracting railroad ties from the Sun River region was financed by prominent Helenans John Henry Jurgens and Bennett Price. The business partners, who had become wealthy by establishing general merchandise stores and stagecoach lines, hoped to realize profits on the tie-supplying endeavor. Above, former territorial legislator Jurgens (third from left, front) poses on the steps of the Lewis and Clarke County courthouse in 1896 during his tenure as sheriff.



G. C. Swallow, photographer. MHS Photograph Archives, Helena, 951-192

Early explorers of Montana's east Front Range found the Sun River region a seemingly impenetrable canyon of limestone cliffs rendered impassable by a hundred-foot waterfall. Yet several miles beyond the rock walls lay a narrow valley filled with lodgepole pines. The Free Timber Act of 1878 allowed railroad contractors Jurgens & Price to obtain a quarter million ties from the forested mineral lands in the upper Sun River drainage, more than half the ties needed for the Manitoba line.

The country from which Jurgens & Price extracted ties today lies within the Bob Marshall Wilderness Area and remains some of Montana's most rugged and inaccessible terrain. Of the early explorers who looked for passageways through the seemingly impenetrable mountains, the 1854 Doty expedition is credited as venturing farthest up the Sun River. The effort was disappointingly terminated by a one-hundred-foot waterfall not more than about twenty feet wide and flanked by huge walls of limestone. Stymied, the expedition did not explore farther upriver but rather "ascended one of the high peaks nearby" and determined that "[a]t this high elevation there was still no timber suitable for building purposes."¹⁶

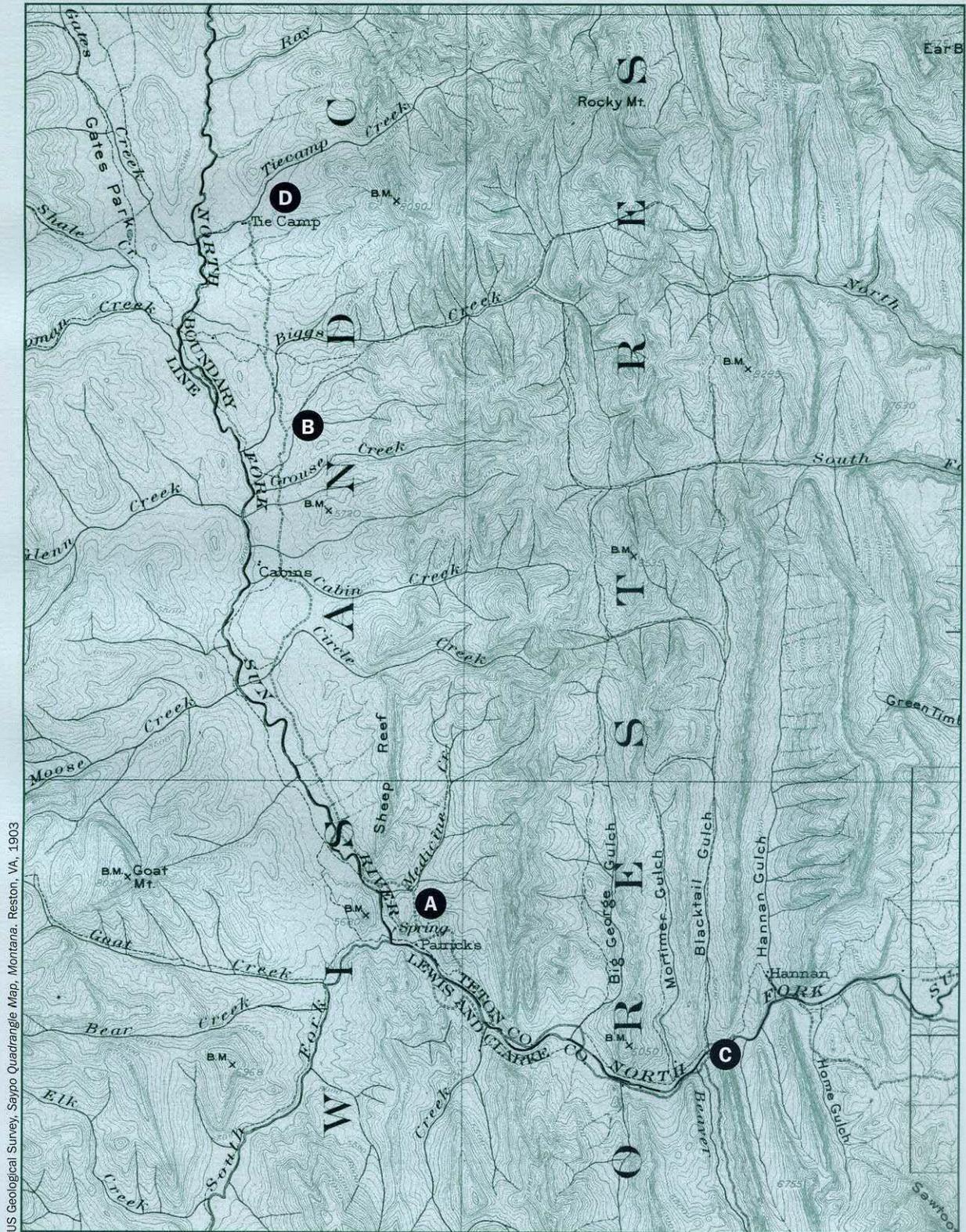
Evidence suggests that the first Euro-American to pierce the Sun River backcountry was John Allen, who

arrived in Montana Territory in 1862. Although barely literate, he managed a brief biography in which he stated, "On head of Sun River Springs 1863, never saw white man in 3 months. Returned Alder Gulch about Dec. 27."¹⁷

Allen's entry refers to the warm water springs that later became known as Medicine Springs at the confluence of the Sun River's north and south forks and approximately fifteen miles west of Doty's waterfall.¹⁸ Between the two lies a fifteen-mile stretch of the Sun River that cavorts through a series of 90-degree side canyons. Beyond the springs, the river bends toward the north, opening into a basin about fifteen miles in length and one to two miles wide.

Jurgens & Price set up its mountain operation near the head of the valley.¹⁹

This 1903 map of the Sun River headwaters shows the fifteen-mile course of the river from the junction of the north and south forks near Medicine Springs (A) through a series of limestone ridges and out onto the plains. The tie-cutting operations extended from this map's northern edge (Lone Park) several miles south to Biggs Creek Flats (B). Supplies were freighted along a narrow wagon road that meandered along Willow and Beaver Creeks (C), through the Sun River Canyon, and then up the North Fork to the tie camp (D). Today, Tiecamp Creek is called Headquarters Creek, and the area east of Medicine Springs is flooded by the Gibson Reservoir, completed in 1929.



US Geological Survey, Saypo Quadrangle Map, Montana, Reston, VA, 1903

It was also announced that the partners planned to “establish a regular supply store at the camp for the convenience of the men.”²⁰

A significant aspect of Jurgens & Price’s Sun River operation was the transportation of supplies.²¹ Freight wagons were huge, heavy-duty wagons—often two or three affixed in tandem—pulled by horses or oxen numbering in the teens. Two wagon roads provided access to the Sun River camp, but the longer road offered the most practical route for transporting goods from Augusta. The other route, although seven miles shorter, included two additional river crossings.²² A noted Montana reporter of the early 1900s, Fisk G. Ellis, recalling a tie float down the Dearborn River in 1887, noted that the Jurgens & Price camps “were [located] back in the mountains, where all supplies had to be taken in with pack horses.”²³

Given the importance of horses, mules, and oxen to the operation, access to fodder was critical. One newspaper account mentions a bridge built by Jurgens & Price being washed out in an 1887 flood. While the location was not specified, it likely spanned the river near the mouth of Tiecamp Creek, connecting with Gates Park, a fertile, grassy area suitable for livestock grazing. In 1908, forest ranger Clyde Fickes

recalled that “back in the 90s . . . at a place now called Cates [Gates] Park; . . . it was possible to put up native hay most any place. During the railroad logging on the North Fork, the mowers were used to put up hay to feed the workhorses used on the logging job.”²⁴

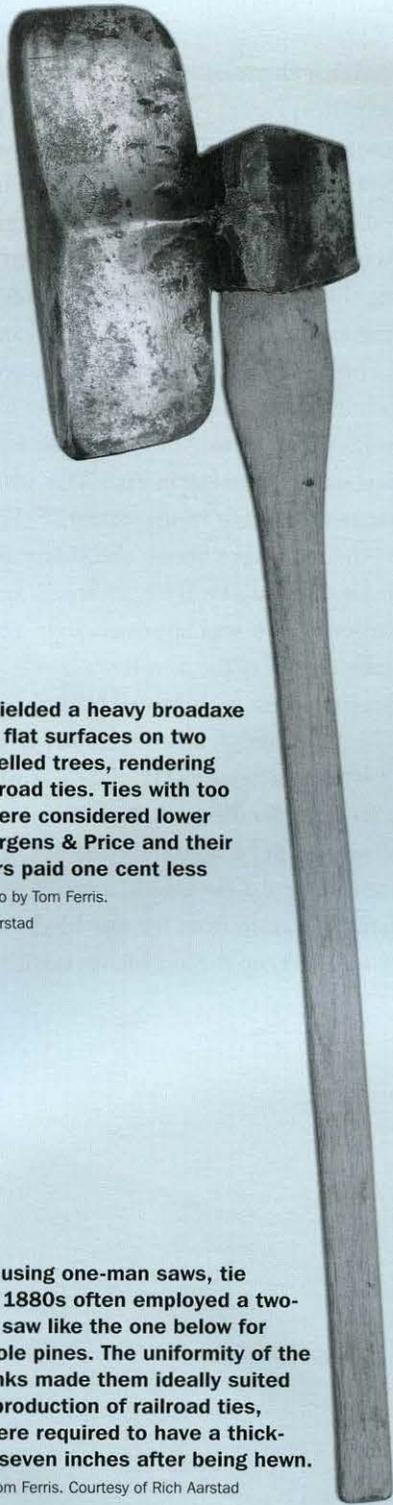
Across the West, tie cutting primarily occurred during the winter months when the tree sap was not flowing and trees were easier to cut, debark, and hew with a broad axe. Additionally, as one account noted, “The railway would only purchase ties between these dates [September to April] because wood cut after the sap started running in early May would rot twice as fast as timber cut in the winter.”²⁵ For Jurgens & Price, this may have been a secondary consideration given the railroad’s swift advancement and the fact the construction site was approximately 120 river miles from the mouth of the Sun River.

An interview with Matt Heikkola, who worked near McCall, Idaho, as a tie hacker in 1914, offers a rare firsthand account of the labor. A variety of tools were required for the work, including a broadaxe with an offset handle, a double-bitted axe, a tie scantling for measuring the tie length, a crosscut saw, coal oil for removing resin from the saw blade, and a file and whetstone to keep the axe blades razor sharp.²⁶

Special Collections, Mansfield Library, University of Montana, Missoula 85-0188



An old cabin is all that remained in 1898 of a camp or homestead in the foothills edging the Sun River Valley. In August 1886, Jurgens & Price hired seventy-five tie cutters to work the area, operating out of a base camp located one mile above where Tiecamp Creek empties into the Sun River. The camp consisted of a handful of cabins and a supply store. Horses and livestock likely grazed in the meadows of Gates Park.



Tie hackers wielded a heavy broadaxe (right) to hew flat surfaces on two sides of the felled trees, rendering them into railroad ties. Ties with too much taper were considered lower grade, and Jurgens & Price and their subcontractors paid one cent less for them. Photo by Tom Ferris.

Courtesy of Rich Aarstad

In addition to using one-man saws, tie cutters in the 1880s often employed a two-man crosscut saw like the one below for felling lodgepole pines. The uniformity of the lodgepole trunks made them ideally suited for the production of railroad ties, which were required to have a thickness of seven inches after being hewn.

Photo by Tom Ferris. Courtesy of Rich Aarstad





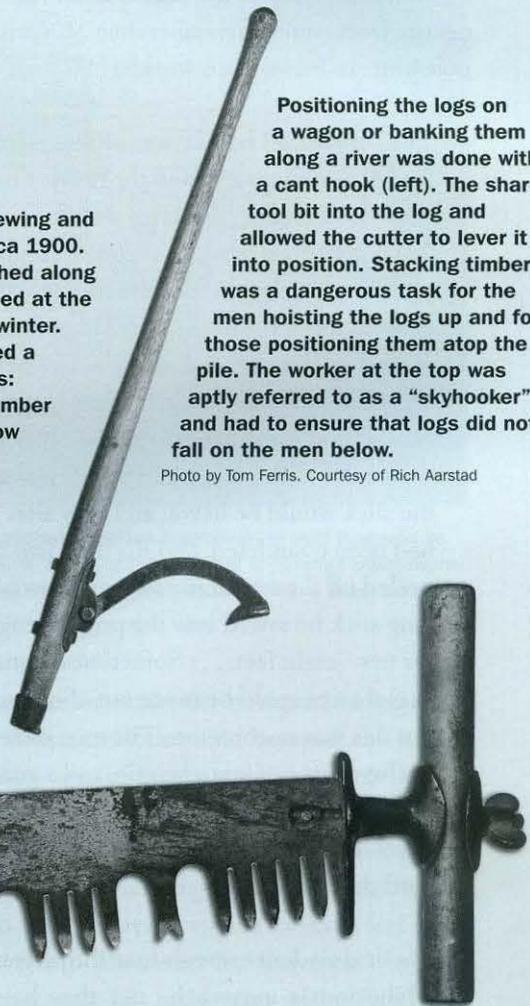
Above, tie crews of the Montana Central Railroad position ties using picaroons. The Central line extended the St. Paul, Minneapolis & Manitoba line to Helena and Butte after its completion to Great Falls in fall 1887.

Left, tree fellers pause from hewing and stacking logs for transport, circa 1900. After camps had been established along the Front, tie cutting commenced at the start of the harsh 1886–1887 winter. Cutting in colder months offered a number of practical advantages: tree sap was not flowing, cut timber could be hauled across the snow by horse-drawn sleds (such as the one shown on right side of photograph), and ties could be banked along the river until spring runoff presented a means of efficient downstream transport.

Minnesota State Historical Society,
St. Paul 212373

Positioning the logs on a wagon or banking them along a river was done with a cant hook (left). The sharp tool bit into the log and allowed the cutter to lever it into position. Stacking timber was a dangerous task for the men hoisting the logs up and for those positioning them atop the pile. The worker at the top was aptly referred to as a “skyhooker” and had to ensure that logs did not fall on the men below.

Photo by Tom Ferris. Courtesy of Rich Aarstad



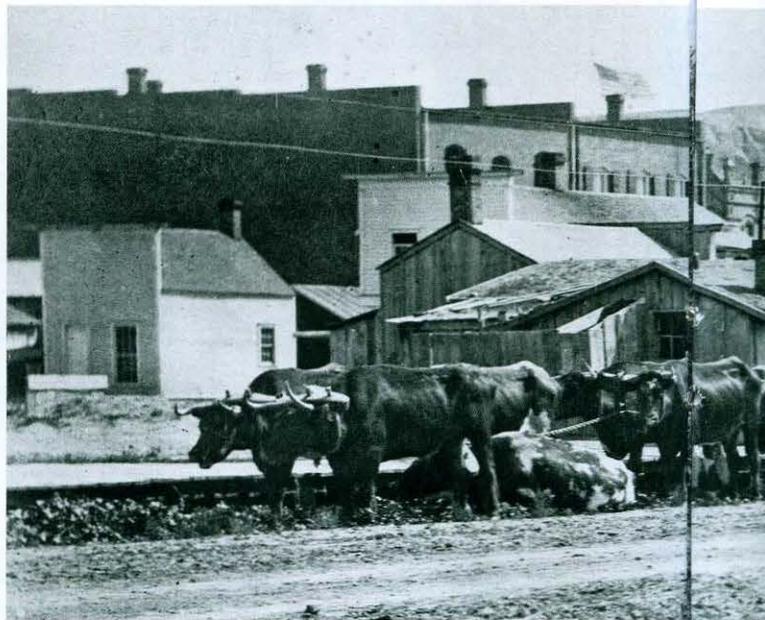
Transporting the ties and constructing the Manitoba line demanded an enormous amount of animal labor. Teams of powerful oxen pulled wagons and sleds piled high with ties from cutting sites to the river, where they were floated more than one hundred miles out onto the plains. Once pulled from the water at the boom, the ties were reloaded onto wagons and freighted by oxen teams to the construction site. Right, an oxen team hauls lumber—possibly railroad ties—from the mountains into Fort Benton.

Ties were made of red fir or tamarack (larch), hewn on two faces only, the other two sides being left round. They were seven inches thick between the hewed faces, but could be of any width between the round sides, up to sixteen inches. Ties with too much taper—too small at the small end—were considered second class, and a lower price was paid for them. First-class ties were paid for at the rate of twelve cents each.²⁷

Heikkola worked the Idaho larch forests where mature trees were much taller than Montana's lodgepole pine. In Idaho, men worked in teams:

The [broadaxe] handle was offset toward the left as it ran back from the head. The man stood on top of the tree with his right foot ahead of his left and struck overhand on his left side. It made no difference whether he went up or down the tree. He ordinarily started up the tree, and when he reached the top end of the usable log, he simply turned around and came back down the other side. Two sides of the maximum usable length of the stick would be hewn, and only after this had been completed, and the bark had been peeled off the remaining two sides, would the long stick be sawed into the proper lengths for ties—eight feet. . . . Sometimes as many as eight ties could be made out of one stick, but this was uncommon. The men were paid twelve cents per first-class tie, and a good team, working hard, could make forty ties in a day. Thus a man earned about \$2.40 for a hard day's work.²⁸

Physical evidence reveals how the Jurgens & Price men laboriously moved the ties they hacked from



the rugged slopes to the edge of the river near the tie camp, where they would wait until spring runoff. Two miles north of the tie camp in the area of Ray Creek, there were “the remains of a cabin and an old toboggan . . . constructed with big bolts . . . made for heavy use. Two tree trunks shaped like runners were on the sled.” Such sleds or modified skids drawn by horses were used in logging operations throughout the West.²⁹

Paul Hazel, who worked and lived in the area for much of his life, recalled that tie cutters used “wagons pulled by oxen [to] carr[y] the lumber to the Sun River where it was dumped in and floated down to Great Falls.” According to Hazel, “hundreds of thousands of railroad ties” were moved in this fashion, leaving the area “almost stripped of trees.”³⁰

Jurgens & Price were lead contractors on the three rivers, but evidence suggests that they subcontracted components of their vast operations, possibly entering into partnership arrangements as they had in some of their other business dealings. For instance, a *Fort Benton River Press* article noted that Oscar A. Robertson received a contract for ties in the Dearborn drainage, and another news report referenced a partnership of Hall & Frazier cutting ties in the Teton drainage.³¹

A *Great Falls Tribune* advertisement—“Wanted 25 tie makers. Apply at camp in Teton canyon. Price 10 or 11 cents.”—demonstrates the different prices paid for the two grades of ties, as was common in opera-



Horse-drawn wagons, similar to this one pictured in Fort Benton, transported supplies from Helena and Augusta to the tie camps. The arrival of winter made already uncertain road conditions and hazardous river crossings even more challenging—and sometimes impossible—for the heavily laden freighters. Strings of pack animals were used instead.

tions throughout the West. Although such specificity in materials implies exactness in railroad construction, photographs of rail lines completed in the 1880s show something different. Most ties do not appear to be sawed cleanly on the ends but instead bear the rough chopping marks produced by an axe. Ties set next to each other vary in length, sometimes by as much as a foot or more, as testimony to the urgency of the work as railroads competed for primacy.³²

Although snow aided the transport of logs and ties since sleds and skids could be used, the winter of 1886–1887—one of the harshest ever recorded on the northern plains—presented the tie cutters with extreme conditions. At times, temperatures in the vicinity of the Sun River ranged from 35 to 40 degrees below zero with snowpack of five to seven feet deep along the Front. Homesteader Carolina Wiegand Bremer, who spent her early years in the Sun River

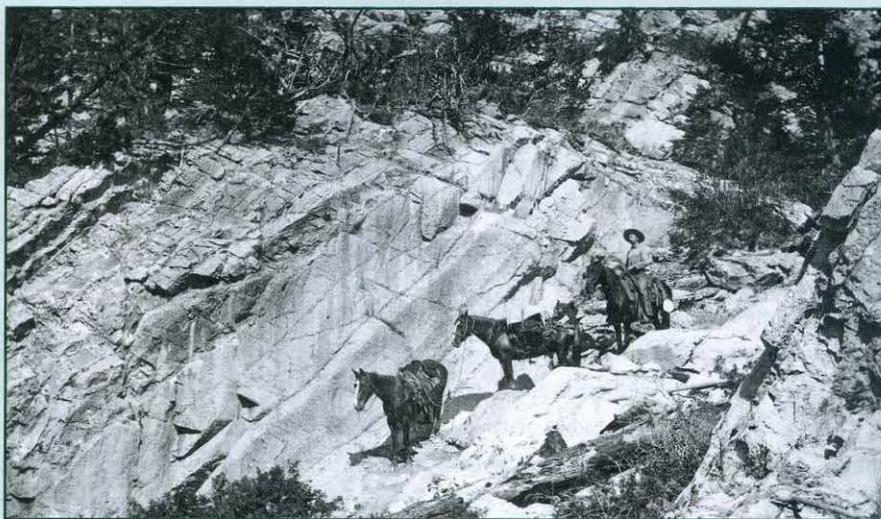
WOOD CHOPPERS ON THE EAST FRONT RANGE

The “wood choppers” of the Front Range floated cord wood, saw logs, posts, and poles downriver from approximately 1876 to 1909. Wood choppers contracted to provide fuel wood to the military at Fort Shaw on the Sun River, but the biggest users of cord wood were the burgeoning communities of Fort Benton and Great Falls. Choteau, Augusta, and Sun River, as well as surrounding ranches, benefited from posts and poles for fence building. The lumber from saw logs floated down the river was processed at the mouth of the Sun River at the short-lived community of Johnstown.³³

In 1887, while the Jurgens & Price tie-cutting operation was occurring in the upper reaches of the Sun River, there was an associated cord wood-cutting operation in the same area. The newspaper reported, “J. J. Ellis and the Bruce Bros. are in the mountains at the head of Sun River, banking wood.” Ellis had a crew of men cutting cord wood (fuel wood) for delivery to Fort Shaw and Sun River. The practice of salvaging cord wood from unusable portions of trees cut for ties was not unusual for the time, and it was possible that a symbiotic business agreement existed between the two partnerships. Ellis’s men started their wood drive immediately following Jurgens & Price’s ties, clearing Sun Canyon on August 13, 1887. Ellis’s wood arrived at Sun River on September 28.³⁴

Freezing water in November challenged men and animals to deliver wood to the town of Sun River. This rare newspaper account from the November 2, 1887, *Sun River Rising Sun* preserves the experience:

Ellis & Bruce are now delivering some 300 cords of wood to the inhabitants of Sun River. This wood was driven down Sun river from the mountains, a distance of nearly a hundred miles. A boom was put in just below the bridge and the wood “corraled,” as the cowboys say. Wagons are hauled out into the water where it is deep enough to assist materially in loading by raising the wood to nearly a level with the rack on the wagon. Two men stand in the water nearly waist deep and place the wood in the rack. An extra team is then hooked on and the four horses then draw the load—about three-fourths of a cord—out of the river across the bar and up on to the street. The leaders are then unhooked and taken back to pull the team out which has been loading during that time. Several teams are thus kept busy, and the piles of wood around town are fast becoming too numerous to mention at \$7 per cord.³⁵



MHS Photograph Archives, Helena 951.190

The narrowness of The Steps—a passage along the North Fork of the Sun River—made travel challenging and necessitated the use of sure-footed pack horses.

area, recalled that “no snow fell until sometime in February. It then started to snow and did so for six weeks without stopping.” Area newspapers reported snow in the mountains being very deep in early February 1887.³⁶

In spite of conditions, “the work went on constantly” at headwaters of the Teton, and “there was no day so cold that most of the men did not work.” Three-foot-high stumps found at Lone Park, an area approximately four miles north of the camp, indicate that trees in the area were harvested in winter, while six-foot-high stumps found at Ray Creek two miles away, suggest that the area was logged late in the season after a considerable accumulation of snow.³⁷

Heavy snows certainly affected the logistics of the operation. One account of winter 1887 noted that with “snow three feet deep at the springs . . . all supplies have to be packed in on horse and burros back, 18 animals being in constant used for that purpose.” Philip A. Manix, a well-known, “loyal, generous, and true” merchant in Augusta, wrote to the editor of the *Fort Benton River Press* in February 1887:

It would be well for the people of Benton to be prepared for big water. The snow in this valley is from two to three feet deep and some of the tie men who came in from Jurgens & Price’s camp yesterday report from five to seven feet in the mountains. A train of Mexican burros have died from the effects of the deep snow.³⁸

How productive were workers in these winter conditions? While claims vary, a conservative estimate of twenty ties per day per individual, with one tree producing three ties, means that the tie hackers would have only needed to cut down 66,667 trees to obtain their target of 260,000 ties.³⁹ This work could have been easily accomplished in four and a half months with seventy men.⁴⁰ The Jurgens & Price men worked an area roughly five square miles abutting the east side of the North Fork of the Sun River, with Tiecamp Creek at the heart and bounded on the north by Lone Park.⁴¹ Best estimates suggest that the swath of lodgepoles one mile wide by five miles long would have produced 1.3 million trees.⁴² Curiously, the lumber likely could have been found on only 167 acres, or an area equivalent to one-quarter

mile by one-quarter mile square, raising the question of why the tie hackers spread their efforts over a much larger area. The effects of the tie cutting was still evident in 1915 when an area forester noted that the “several thousand ties . . . driven down Sun River to Great Falls” had been “cut in scattered patches.”⁴³

Virgin timber stands of various ages and sizes allowed tie hackers a considerable degree of selectivity. Cutting trees of ideal diameter—eleven inches at breast height—produced maximum ties per tree with minimal hewing. Workers also carefully considered the distance from the river and the steepness of the terrain so as to ensure the safest and most efficient means of extraction.⁴⁴

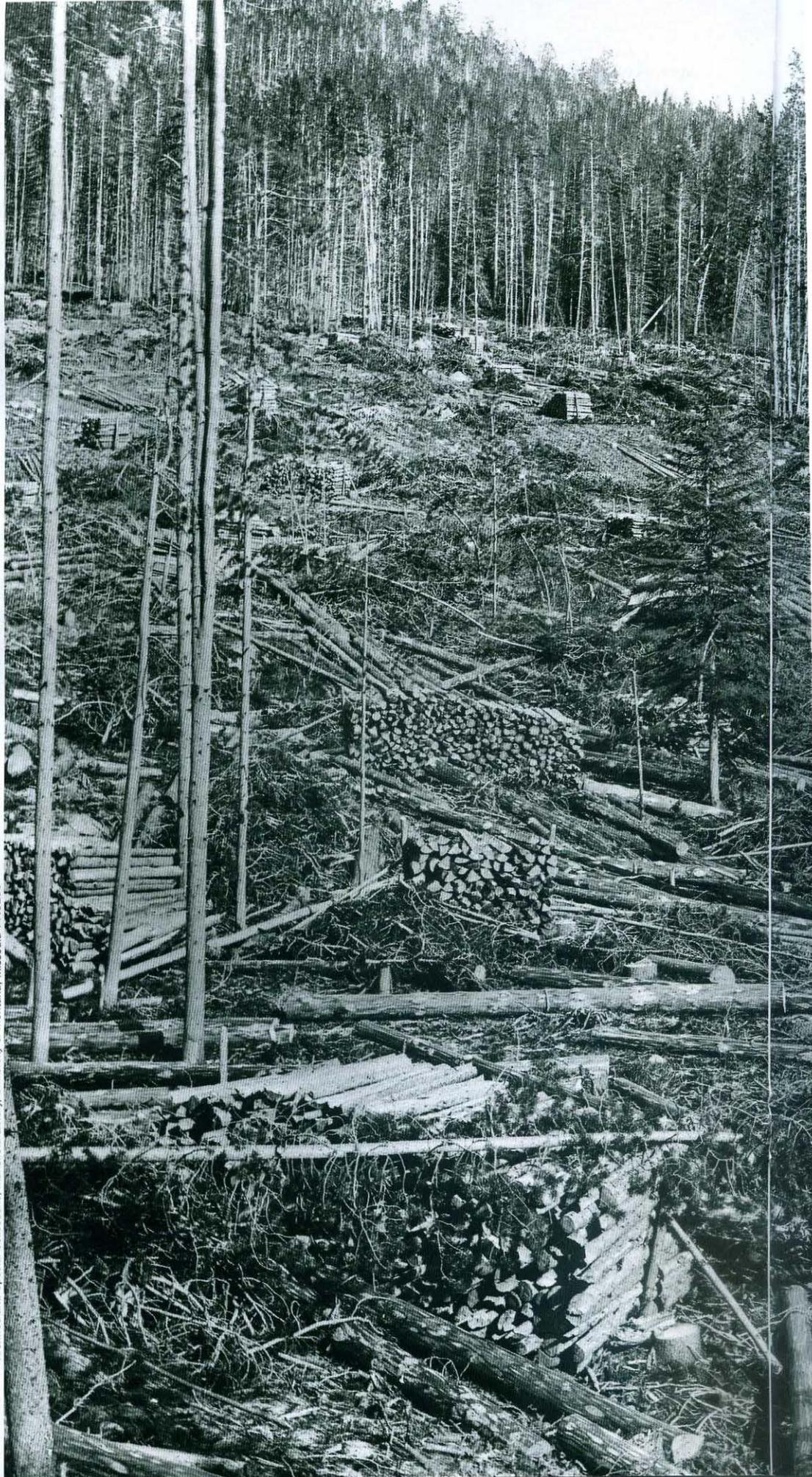
Of the hundreds of men working in the Sun, Teton, and Dearborn Rivers, only one name surfaces in newspaper accounts as being that of an actual tie hacker—and that is only because he broke his leg on his way to vote. In the November 1886 general election, Jurgens & Price brought forty-five tie hackers to Augusta—a distance of fifty miles by wagon road. One of the men jumped out of the wagon, and the wheel ran over his leg, breaking it. The man’s name was McCourt, and he was taken to Dr. A. C. Fleming in Augusta.⁴⁵

Given their eligibility to vote, these tie hackers were likely local men, but the job drew men from all over. A newspaper article on the Teton River operations noted that “the Choteau postmaster has a list of ninety names of men employed in the Jurgens & Price tie camp at the head of the Teton, who received mail at that office. Fifty more tie cutters are expected at the camp within a few days.” Choteau, thirty miles from the camp, offered convenient mail service to men who traveled a considerable distance to work at the camp. On at least two occasions, parties of men were sent from Great Falls to the Teton tie camp, and, in another year, others were recruited out of the employment agency in Great Falls.⁴⁶

After months of cutting and hewing, hundreds of thousands of ties stood stacked and ready for their downriver journey in the late spring of 1887. Documentation of the Dearborn River tie drive is scant, but there is an account from an individual who noted that “the stream was full of ties for a long way both above and below the bridge” in April or May 1887. That winter’s record snowfall generated calamitous runoff along the Teton and Sun Rivers. In June, the

The volume of ties required by the Manitoba line left the Sun River area "nearly stripped of trees," according to one area resident. Right, a post-and-pole operation at French Gulch near Anaconda during the same era shows the obliteration of lodgepole stands by logging crews.

Archives and Special Collections, Mansfield Library, University of Montana, Missoula 77.0159





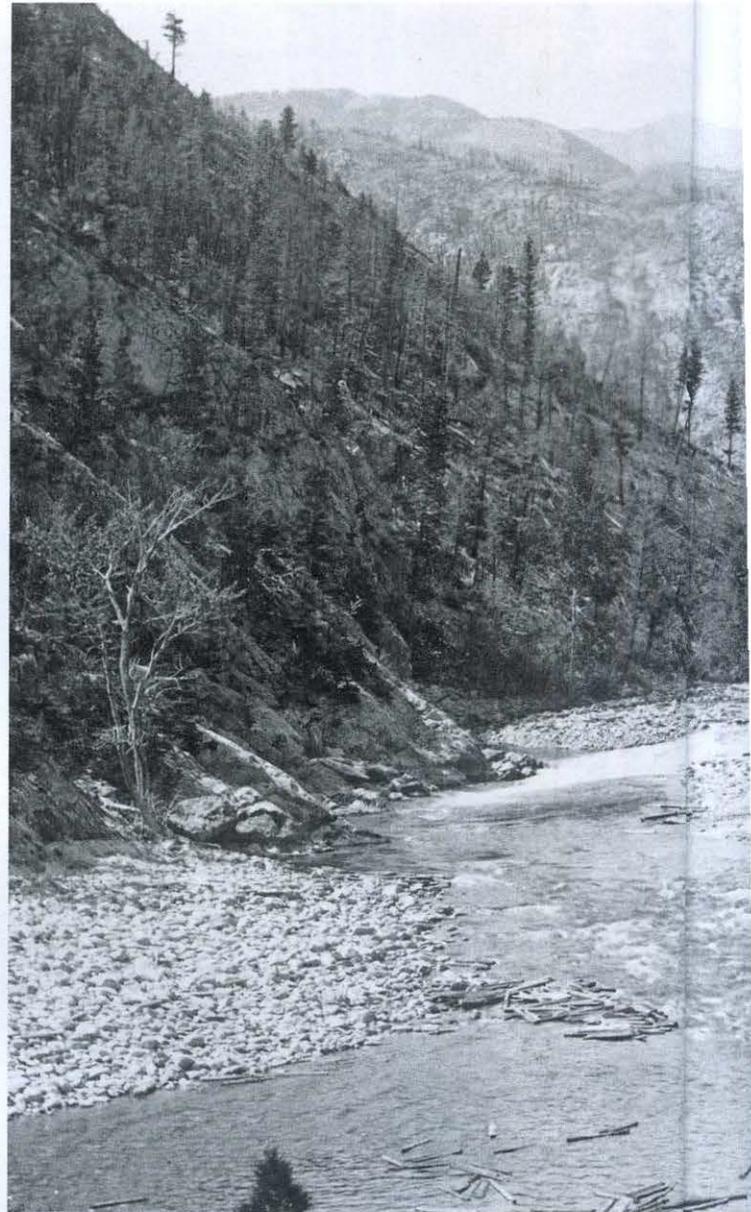


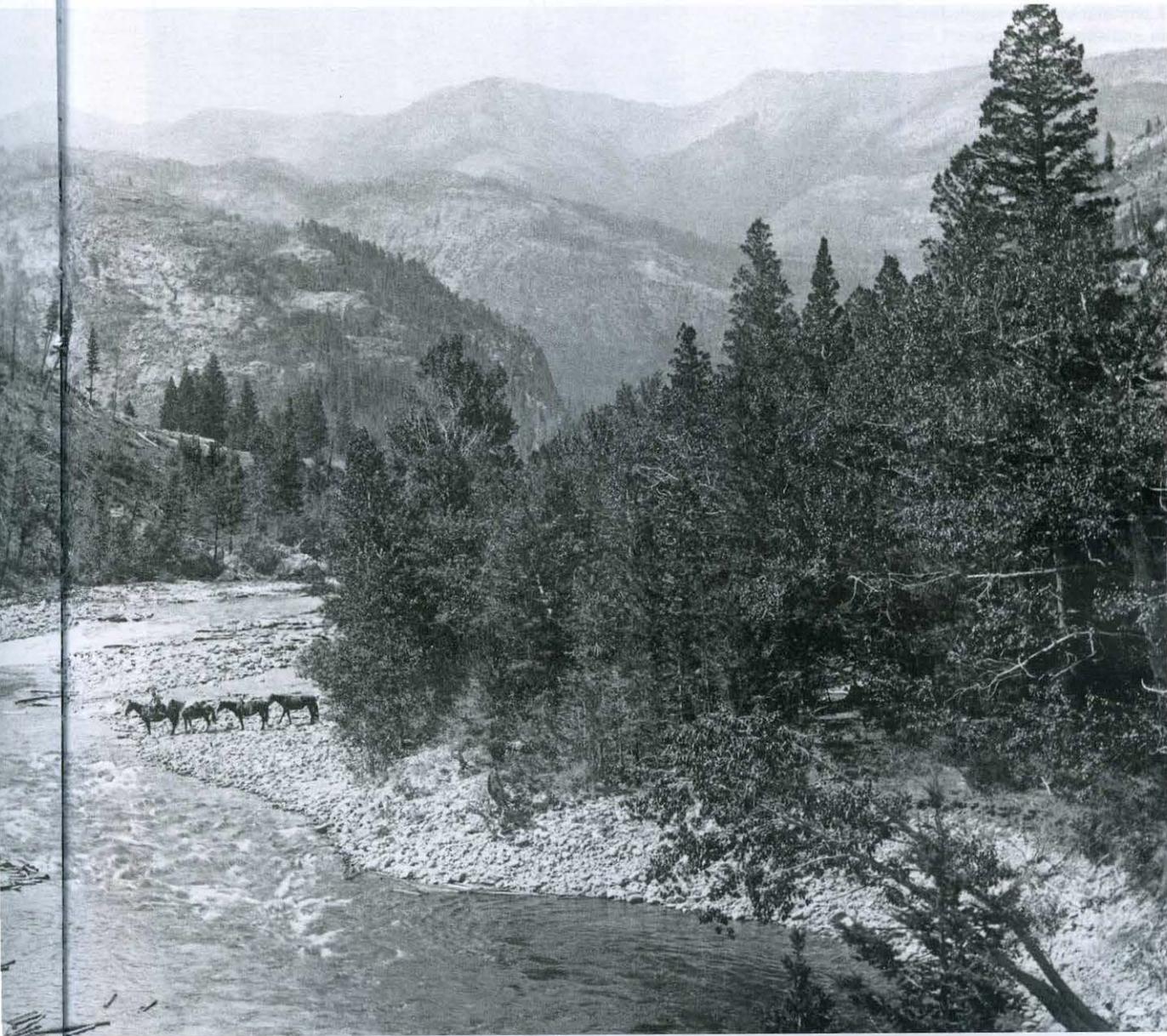
Although hundreds of men worked on the tie-cutting crews, few of their names are known. Many, apparently, were residents of Lewis and Clarke County, while others came from Teton County. Merchant Philip Manix (left) and Dr. A. C. Fleming (right) of Augusta likely knew some of the men personally, but only one tie hacker, a man named McCourt, can be identified with certainty because he was treated by Dr. Fleming after breaking his leg on the way to vote in Augusta in 1886.

lower Sun River flooded one to two miles wide and delayed the drive.⁴⁷

The Teton River operation, led by Hall & Frazier, reportedly started the tie drive on June 6, 1887. However, a rainstorm “swelled the stream to an unusual height, spreading out over the whole valley and scattering their ties far and wide over the bottom lands, where they lodged.” The situation forced the hire of men and horses to drag the ties back to the main channel. “We understand they have engaged all the teams they can procure, and are gathering them up and putting them back in the Teton below the shoals. This entails great expense, but shows that Hall and Frazier are men of pluck,” the paper noted.⁴⁸ On July 20, the *Fort Benton River Press* reported, “Hall & Frazier’s ties have all passed Choteau. Over 200,000 ties kept the crossing of the Teton blockaded for several days, so that it was almost impossible to ford the river.”⁴⁹ The report on July 27 was positive: “There have been twenty-three men employed on the drive. . . . The drive has made an average of fifteen miles a day since leaving Choteau.” The ties reached the catch boom near the mouth of the Teton on August 3, where they were banked at the rate of 10,000 to 12,000 per day.⁵⁰

Jurgens & Price delayed the Sun River tie drive until conditions were more suitable. Mr. Jurgens, it





MHS Photograph Archives, Helena 951-200

Above, men monitor the flow of ties down the Sun River, watching for areas where jams might form. Hoping to avoid the expensive mishaps of the Teton River drive, Jurgens delayed the Sun River drive a full month. While the operation started smoothly, the narrow canyon and multiple rocky outcrops combined with the record runoff resulted in at least one immense logjam.

The record snowfall during the 1886-1887 winter led to weeks of flooding as spring runoff overflowed the banks of the Dearborn, Teton, and Sun Rivers. The high water disrupted the Teton River tie drive, necessitating an expensive salvage operation as men and horses rescued thousands of ties stranded out from the main channel. Left, a two-mile-wide flood engulfed the little town of Sun River in June.

This 1887 photo shows the rough-hewn ends and varying lengths of the ties used for the St. Paul, Minneapolis & Manitoba and the Montana Central line extension. The furious pace of the project as well as the difficult conditions under which the ties were cut and transported contributed to such imperfections in the final product.

was reported, expected the tie drive to commence on July 7, a full month later than the Teton River drive. The first thirteen miles through the upper Sun River basin apparently went smoothly. A report on August 7 said ties were spread out along nine river miles. An article three days later announced at least one “immense jam” in the fifteen miles of tight canyon—which could have been at any of a half dozen narrow gaps, particularly the contorted one-hundred-foot Sun River Falls.⁵¹

Workers braved dangerous situations using pike poles to dislodge jammed ties in the cold mountain runoff. Within a few days, the ties cleared the Sun Canyon, and on August 16 the head of the tie drive arrived at Fort Shaw as the remainder gently meandered through the Sun River Valley. On Wednesday, August 24, the *Sun River Rising Sun* at the town of Sun River, five miles downstream from Fort Shaw, reported, “The river has been full of railroad ties since early Friday morning [August 19].” After two months and 121 river miles, the ties had reached the end of their river journey.⁵²



MHS Photograph Archives, Helena PAC 2008-84.8

To retrieve the logs, booms had been constructed at the mouths of the Teton and Sun Rivers. The Teton catch boom was located where the railroad was projected to cross the river, near the future site of Loma. The ties would supply the Manitoba line from that location to Great Falls. The Sun River boom was near the confluence of the Sun and Missouri Rivers, where, it was reported on September 7,

MHS Photograph Archives, Helena 949-141



In contrast, these railroad ties for the Union Pacific are of uniform length and have neatly sawn ends.

to bank 8,000 to 10,000 ties is a good twenty-four hours' work. This rate cannot be kept up, however, as the facilities for getting the ties out of the way are not sufficient, hence a considerable time is lost. Some ten or fifteen days will be consumed yet in getting all out of the water.

1887, the banking of the ties was taking place at the rate of ten thousand per day at the place where the railroad crosses the river at Johnstown. Joe Kauffman, with his traction engine and "double-back action tie snatcher," supplied the ties to the Montana Central Railroad, an extension from Great Falls to Helena.⁵³

There were problems, however, taking the ties from the river. Joe Kauffman reported:

The October 12, 1887, *Great Falls Tribune* reported that Jurgens "will have all the Sun River ties banked in a day or two and that this work closes his big tie contract—undoubtedly the largest ever undertaken by one firm in Montana."⁵⁴

Whether Jurgens & Price actually delivered the contracted 460,000 ties cannot be known. Coverage in the *Fort Benton River Press* alluded to considerable

U.S. Forest Service photograph. Miriam and Ira D. Wallach Photography Collection, New York Public Library Digital Collections



Tie hackers such as these men on the Gallatin River risked their lives to dislodge tie jams with pike poles.



Above, Louis W. Hill drives the final spike into the St. Paul, Minneapolis & Manitoba Railroad at Fort Benton. The intensive tie cutting and transporting efforts made the rapid construction of the Manitoba line across Montana possible, yet the heavy cost of the operation proved a bitter financial failure for Jurgens & Price, whose partnership had dissolved by 1890. James and Louis Hill continued to expand their railroad investments, and in 1907 the Manitoba line was bought out by their Great Northern Railway.

flexibility in the arrangement, noting that “Messrs Jurgens & Price have an unlimited contract to get out all the ties they can.” Assuming 460,000 was the actual total, this would equate to “about 2,800 ties to the mile, that number will put ties on 165 miles of track.” Thus, the firm’s tie drives culminated in the late summer of 1887 on time to meet the rapid pace of railroad construction.⁵⁵

The tie-cutting business did not make John Jurgens and Bennett Price wealthier, and in November 1890, the Jurgens & Price partnership appears to have officially dissolved.⁵⁶ In his memoirs, Bennett Price reflected, “We paid our men but had too much stuff scattered along the way in goods saw mills etc (\$80000 worth) to come out as we could not realize on it. That surely put a crimp in us.” Price’s 1917 obituary summarized the firm’s tie contract failure: “He met with one business disaster in his life, in the loss of thousands of feet of railroad ties contracted to the Montana Central railway, then building from Butte to

Great Falls, the ties being carried away in one of the worst floods in the history of the state.”⁵⁷

Tie contractors and their efforts have been overshadowed by the larger saga of the Manitoba and Montana Central rail lines, both of which were absorbed by the powerful Great Northern Railway Company, first by lease in 1890 and then by outright purchase in 1907.⁵⁸ It is uncanny that the ties cut from the headwaters of the Sun River 130 years ago came from deep inside today’s Bob Marshall Wilderness, yet hardly any of the story remains on the landscape.⁵⁹

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