HARVESTING THE HEMLOCK: THE REMINISCENCES OF A PENNSYLVANIA WOOD-HICK

Edited by Thomas R. Cox

PENNSYLVANIA played a more important role in the history of the lumber industry of the United States than is generally realized. Even within the Keystone State, its importance is often forgotten. In 1870 Pennsylvania led all states in the production of lumber. Williamsport was the largest lumber-producing center in the world, while mills in Lock Haven and other communities added to the total. But lumbering both antedated the flush years around 1870 and continued long after them.

The harvesting of Penn's woods began in colonial times. The rafting of timbers and masts down the Delaware and other rivers was well under way by the end of the eighteenth century. Gradually production moved westward. By the 1840s rafting had become an important undertaking on the West Branch of the Susquehanna, and a host of operations had emerged along its tributaries to provide the timbers, spars, and lumber that were its lifeblood. In time, drives of short, free-floating logs were adopted from Maine as a cheaper way of getting wood from forest to market. The building of booms elsewhere on the West Branch provided a cheap way to corral and hold free-floating logs, thereby insuring the ascendancy of the new system and paving the way for the rapid transition of Pennsylvania's lumbering from the preindustrial to the industrial phase. The first and most important of

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¹ A history of Pennsylvania's forest products industries is needed. The best available account continues to be James Elliott Defebaugh, History of the Lumber Industry of America, 2 vols. (Chicago, 1906-1907), 2: 517-655.

these was the Susquehanna Boom at Williamsport, construction of which began in 1849.²

The industrial phase of lumbering in Pennsylvania, like that which preceded it, drew upon the fine stands of white pine (Pinus strobus) that graced much of the state, especially the Allegheny Plateau. As accessible stands of white pine were felled to supply the ever-hungry steam sawmills of the state, production began to fall, but other species of trees were available and as lumbermen turned to them output recovered. The advent of logging railroads and the rising commercial value of eastern hemlock (Tsuga canadensis), both for lumber and for bark for the state's many tanneries, opened new areas of production and rejuvenated old ones. From 1890 to 1910 output remained relatively steady; thereafter it gradually declined. Coupled with the extended era of pine logging that had preceded it, this prolonged harvesting of hemlock gave Pennsylvania a longer period of sustained production than most other pioneer lumbering states. Elsewhere production tended to rise rapidly to a peak and then quickly subside. However, eventually decline came even in Pennsylvania. When it did, lumbermen either moved on to other states, shifted to harvesting hardwoods, or stayed on in Pennsylvania but turned to other endeavors for their livelihood.3

Hiram M. Cranmer, born in Hammersley Fork in northwestern Clinton County, Pennsylvania, in 1891, was intimately involved in the harvesting and utilization of the state's forests during the great era of hemlock operations. Located on Kettle Creek, an important tributary of the West Branch of the Susquehanna, Hammersley Fork was in the midst of events. Not only was Cranmer born there, but he continued to reside there even after he quit work in the woods around 1920. There, and in the surrounding area, he observed events and accumulated stories about woods workers and their activities. Thus when Cranmer turned to recording his reminiscences in 1947, he had not only his own experiences, but also years of observation and information from others to draw upon.

² For details, see Thomas R. Cox, "Transition in the Woods: Log Drivers, Raftsmen, and the Emergence of Modern Lumbering in Pennsylvania," Pennsylvania Magazine of History and Biography 104 (July 1980): 345-64.

³ A wealth of detail on the later years can be found in Walter Casler, Benjamin F. G. Kline, Jr., and Thomas T. Taber III, The Logging Railroad Era of Lumbering in Pennsylvania: A History of the Lumber, Chemical Wood, and Tanning Companies Which Used Railroads in Pennsylvania (Williamsport, Pa., 1970-1978). The chapters in this work have also been published separately under individual titles.

The account Cranmer wrote went beyond pure reminiscence: it blended personal recollections and accumulated folk history. The end result is useful on both accounts. He details the technology of woods work, so often overlooked in forest histories, and reflects the attitudes and actions of workers as only one who has known them at firsthand can. Like many reminiscences written long after the facts, and most accounts that draw heavily upon folk knowledge, the details in Cranmer's story are not always accurate. However, he presents the truth as he understood it and, in the process, yields a consistently interesting, informative account.

During his lifetime, Cranmer wrote historical articles for newspapers and was an amateur folklorist active in the Keystone Folklore Society. Tales and ballads that he collected were included in a number of works. One associate described Cranmer as a "chronicler extraordinary of the old days, old ways and folklore of the Kettle Creek area. As a teller of tales, both true and tall, he was the greatest the Black Forest ever produced." ⁴

Few accounts anywhere reveal the world of the woods worker better than does Cranmer's. That he documents the often forgotten story of lumbering and related activities in Pennsylvania makes it all the more valuable. However, just how he came to produce his reminiscences is not clear. The original typescript account on which this version is based is a part of the holdings of the Forest History Society, which now has its headquarters in Santa Cruz, California. It would appear that the document was composed in answer to a series of questions put to Cranmer by staff members of the society when it was located in St. Paul, Minnesota, and known as the Forest Products History Foundation.⁵ The reminiscences remained in the society's files, forgotten, until uncovered by the present editor in 1979.

Cranmer apparently kept a copy of the manuscript and subsequently submitted it to the *Lock Haven Express*. Much of it appears there, in polished form, as a series of articles on the history of lumber-

A Robert R. Lyman, Sr., Amasing Indeed: Strange Events in the Black Forest, Vol. 2 (Coudersport, Pa., 1973), 12. See also: ibid., 13, 81-82, 94; Lyman, Forbidden Land: Strange Events in the Black Forest, Vol. 1 (Coudersport, Pa., 1971), 9-10; Homer Tope Rosenberger, Mountain Folks: Fragments of Central Pennsylvania Lore (Lock Haven, Pa., 1974), 189-94; Robert H. Byington and Kenneth S. Goldstein, eds., Two Penny Ballads and Four Dollar Whiskey: A Pennsylvania Folklore Miscellany (Hatboro, Pa., 1966), 71-80; Lock Haven Express, Oct. 10, 1967; Fred Jobst to Dolores Buchsen, Oct. 28, 1982, Thomas R. Cox personal correspondence, San Diego, California.

⁵ Ronald J. Fahl to Thomas R. Cox, Aug. 12, 1980; Rodney Loehr to Cox, Mar. 9, 1982 (Cox personal correspondence).

ing in Pennsylvania that was published between January 5 and 16, 1948.6

The version presented here has been shortened somewhat, a few passages have been eliminated to smooth transitions, errors that are obviously typographical have been corrected, and where needed to insure clarity some minor changes of punctuation and paragraphing have been introduced. Otherwise the account follows the original held by the Forest History Society. It is reproduced here with that society's permission.

Hammersley Fork, Pa. July 3, 1947

My full name is Hiram M. Cranmer, I was born at Hammersley Fork, Clinton County, Sunday, February 1st, 8 P.M. 1891.⁷ As a child I lived on a farm. Learned to ride a floating log at the age of seven.

April 9, 1902 I watched a man drown on a log drive. While breaking a "center" jam a man fell in and while the bateau was rescueing him, four men were forced to ride the logs. The man drowned, Frank Lynch, led the men. He lost his nerve in trying to get on another center jam and fell in. He came up a hundred feet below the jam. Enstead of wading to his left, ashore he waded down the stream for a hundred and fifty yards, to his shoulders in water, shouted several times, waded among the logs and went under them. His body was found six miles down the stream below where he drowned May 11, 1902. In his pockets was seven cents, a piece of chewing tobacco and a helgramite. Twenty minutes after he went to

8 Hellgramites are the aquatic larvae of certain winged insects. Much prized for fishing bait, they are usually found crawling under or on submerged rocks in free-flowing streams.

⁶ Cranmer also published a history of Leidy Township, in which Hammersley Fork is located. It was published in twelve parts in the Lock Haven Express between August 6 and 19, 1947. On Leidy Township, see also: John Blair Linn, History of Centre and Clinton Counties, Pennsylvania (Philadelphia, 1883), 635-42.

⁷ At the time the community, also known as Trout Run, had some sixty houses, two general stores, a coach and blacksmith shop, a hotel, a school, and a Methodist church. Today only a few buildings remain. Hammersley Fork is a branch of Kettle Creek that meets the main stream a short distance upstream in northwestern Clinton County after flowing southward out of Potter County. Trout Run also flows from the north into Kettle Creek; it empties into the main stream at the village site. Kettle Creek flows into the West Branch of the Susquehanna at Westport. Lumbering on Hammersley Fork ended in 1910. See: J. Milton Furey, Historical and Biographical Work, or Past and Present of Clinton County. (Williamsport, Pa., 1892), 362-63; Casler, Kline, and Taber, Logging Railroad Era, 527-36.

8 Hellgramites are the aquatic larvae of certain winged insects. Much

work he was under the logs. Tom Smith was the contractor, driving the logs for Brown, Clark and Howe who brought the stumpage in Potter County from the Sile Billings estate and drove the logs down Kettle Creek and the West Branch of the Susquehanna to Williamsport, Pa.9

In 1906 and 1907 I sold papers in the lumber camps, a thirty-one mile route Saturday afternoons and Sunday, to the camps of three lumber companys. The Lackawanna Lumber company, The Goodyear Lumber company and the Emporium Lumber company who cut hardwood.

In January 1908 I helped cut the last logs to be sawed in the Lackawanna Lumber companys mill at Cross Fork, Pa. In the spring of 1909 I worked on the last logdrive down Kettle Creek, for Tom Smith, in Clinton County, Pa. In 1910 and 1911 I worked some on a portable sawmill for Frank Summerson in Clinton county, Pa. In 1912 I worked in Potter County, Pa. for the Emporium Lumber company. First for Guncheon [Guncion] Brothers and when they finished, for Tate Brothers until they finished in December.¹⁰

From January to May I worked in Pocahontas County at the head of the Greenbriar river in West Virginia, first for Craig & Sons cutting spruce logs in [a] six-handed crew. The work was all right but the camp wasn't. Double decked bunks, lobby and sleeping quarters combined, not very good grub. After a few days I left and went to work on the Thornwood Lumber companys mill yard loading lumber on cars for shipment. The town was called Thornwood.¹¹

In June 1913 I drayed chemical wood [to?] load R.R. cars, in McKean county, Pa. Betula was where the chemical plant was located. In July 1913 I peeled hemlock bark for "Cloth[e]spin" Tom Fitzsimmons who jobbed for the Norwich Lumber company... [which had a] sawmill at Norwich, McKean Co., Pa. After barkpeeling was over I worked for George Guncheon, another jobber for the same

⁹ For references to the firm of Brown, Clark, and Howe and to the Billings estate, see: Casler, Kline, and Taber, Logging Railroad Era, 407, 411, 412, 441, 445, 627, 649, 661, 663, 1253. Smith, like most of the other contractors and foremen mentioned by Cranmer, does not appear in the literature.

¹⁰ On these companies, see: ibid., 501-73, 615-54 and passim; George F. Goodyear, "Goodyear Lumbering in Pennsylvania," Niagara Frontier 15 (Autumn 1968): 73-79; William Gove, "William L. Sykes and the Emporium," Northern Logger and Timber Processor 18 (June 1970): 14-17, 34-37; Dale H. Custer, "Obituary for a Boom Town," ibid. 13 (June 1965): 12-13, 30.

¹¹ On logging in West Virginia, see: Roy B. Clarkson, Tumult on the Mountain: Lumbering in West Virginia, 1770-1920 (Parsons, W. Va., 1964).

company. In 1914 I peeled bark first for George Guncheon, latter for Charles Tate....¹²

In 1915 the woods work was shut down on account of the war. In 1916 it opened up and I peeled bark for Edwin Guncheon on Potato creek in McKean county, on the Norwich line.¹³ After bark-peeling was over for that year I drove grabs, rolled logs on the skidway, drayed bark. In 1917 I worked for John Coggins on the Norwich line, peeling bark and cutting logs. In 1920 I peeled bark and drove grabs for Olaf Larson who jobbed for the Center Pennsylvania Lumber Company along the Kinzua creek in McKean county, Pa. This was my last work in the woods. I had to quit because of poison gas that I got in the Argone drive....¹⁴

Few men were killed or crippled. . . . I have been on the wet side of a logjam, the underside, have lain beside a log while a tree ran over me on a steep sidehill, been on a skidway of logs when they squashed out, crouched behind a stump while a log rolled over me, all without being hurt or injured in any way. In seven years about nine hundred million feet of logs were cut and taken out of Hammersley Fork by three lumber companys with the record of one man killed in the woods. His death was caused by a dead tree uprooting, . . . with no warning sound [it] fell on him. . . . The reason few men were killed in the hemlock was the unwritten law of the woods that a car[e]less man who endangered himself and others must be fired. The law of the woods was that a man must not be fired hungry so at the close of the next meal he was handed his pay.

Evenings, Sundays and rainy days there was always a poker game going in the lobby of the camp, generally a five or ten cent edge but ofttimes a quarter edge. Other card games were played for fun, forty-five, sevenup, cinch, casino and king-peed. In warm weather a game of horseshoe pitching after supper was the rule. In the hemlock camps singing was rare. That belonged to the earlier pine woods when

¹² By heating wood in airtight retorts, logs could be made to yield charcoal, methanol, and acetate of lime or acetic acid. Some seventy wood chemical plants are known to have operated in Pennsylvania, all apparently within fifty miles of the New York state border. See: Casler, Kline, and Taber, Logging Railroad Era, 753-83 and passim.

Rairoad Era, 153-83 and passim.

13 Peeling hemlock bark for tannin to treat leather was a major undertaking in Pennsylvania's woods. See: Craig A. Newton and James R. Sperry, A Quiet Boomtown: Jamison City, Pa., 1889-1912 (Bloomsburg, Pa., 1972); Gale Largey, "The Brunswick Tannery," Pennsylvania Heritage 6 (Winter 1980): 10-13; Rosenberger, Mountain Folks, 120-24; Casler, Kline, and Taber, Logging Railroad Era, 1082-91 and passim. On the Norwich Lumber Co., see: ibid., 558-73 and passim.

ibid., 558-73 and passim.

14 Cranmer was a private with Battery B, 321st Field Artillery and saw front line action. Lock Haven Express, Oct. 10, 1967.

every camp boasted a singer. Songs were composed and sung in the camps of exploits or tragidy. For instance, Breaking the Jam on Gerrys Rock, [told of an incident] where six men and their foreman were drowned.15

The work was hard so the men had to be well fed. The food was well prepared and seasoned. Plenty was furnished and if the cook didn't put it on the table he or she was quickly discharged. . . . Every camp had a dining room where the men ate. It was not often that dinner was carried out in [to] the woods. Tin cups, knives forks and spoons, earthen plates and dishes [were used].16

A "wood-hick" (lumberjack) wore calked shoes, overalls with the bottoms cut off so they wouldn't catch in the calks, in the summertime a woolen undershirt, no outside shirt. Wool was a protection against sunburn and catching cold when caught in a shower. In the winter a heavy outside woolen overshirt was worn. In the lobby of a camp a huge box-stove that took wood thirty-six inches long, kept lobby and sleeping quarters upstairs warm.

Before 1916 there were no insurence for woodsmen. [If] a man [were] hurt or sick a paper was passed around and the crew gave something, usually fifty to a hundred dollars was raised to send him to a hospital. Some sawmills hired a doctor, each man paying a dollar a month for doctor services. Most men carried accident insurence of their own.17

Traveling tailors came in the camps and took orders for custom made suits. A woodsman starting for town and a good time generally wore a new tailor made suit and calked shoes. In town he would get

¹⁵ For verses and a discussion of "The Jam on Garry's Rock," see: Stewart H. Holbrook, Holy Old Mackinaw: A Natural History of the American Lumberjack (rev. ed.; New York, 1956), 130-34; Harry Wharton Shoemaker, comp., with John C. French and John H. Chatham, North Pennsylvania Minstrelsy as Sung in the Backwoods Settlements, Hunting Cabins and Logging Camps in the "Black Forest" of Pennsylvania, 1840-1923 (second ed.; Altoona, Pa., 1923), 83-85; Rosenberger, Mountain Folks, 147-50.

16 Cf. Joseph R. Conlin, "'Old Boy, Did You Get Enough Pie?" A Social History of Food in Logging Camps," Journal of Forest History 23 (Oct. 1979): 164-85. In response to this article, Benjamin F. G. Kline, Jr., wrote; "there were some differences here in the East. One was that pork was not a favorite in the Penna. camps and the preference was beef, this even carried on south to W. Va. until the later days when pork was then accepted. Also, in

south to W. Va. until the later days when pork was then accepted. Also, in many of the early Penna. camps, they were run by a man and his wife. And the wife did the cooking. In fact, I have heard many stories when the men would while the cooking in fact, I have heard many stories when the men would not eat cooking prepared by a man, but this also passed as time went along." Kline to Ronald J. Fahl, Jan. 20, 1980, Forest History Society, editor's files, Santa Cruz, California (copy in Cox personal correspondence).—

17 For a contrasting view of danger in the woods, see: Andrew Mason Prouty, "More Deadly Than War: Pacific Coast Logging, 1827-1981" (Ph.D. diss., University of Washington, 1982).

drunk and perhaps sleep in a muddy ditch and come back to camp a week later broke and his new suit ready for everyday wear. He would then order a new suit, earn fifty or sixty dollars then go to town and repeat.¹⁸

The tools used were the double-bitted axe [and the] cross-cut saw which varied in length from five to seven feet according to the size logs to be cut.¹⁹ Bark was removed from trees with a tool called a spud. The tree was first notched in the direction to be felled, with an axe. Then it was sawed down, two men working as a crew. Then the man called the "fitter" choped rings in the bark at four foot intervals, then slit the bark with his axe so the spuder could remove it from the tree.²⁰

The bark was run down hill by gravity in bark chutes. A bark-chute was two ten inch boards sixteen feet long nailed together forming a trough down which the bark slid to the bottom of the hill. The heighth of a hill was gauged by the number of bark-chutes it took to reach from bottom to top. . . . ²¹

On level ground the bark was hauled in bark-drays, which were

18 This negative picture of woods workers is also presented in [Michael A. Leeson, comp.] History of the Counties of McKean, Elk, Cameron and Potter, Pennsylvania (Chicago, 1890), 980-81, where it is stated that "aside from the wages of the rough men, there has been comparatively little of the great profits of the business which has remained in the county. . . . It is not until this section is entirely cleared of its lumber camps that we may begin to expect improvements. . ." This view is developed at length, and applied to lumber districts elsewhere, in Holbrook, Holy Old Mackinaw. However, cf. Graeme Wynn, "'Deplorably Dark and Demoralized Lumberers'?: Rhetoric and Reality in Early Nineteenth Century New Brunswick," Journal of Forest History 24 (Oct. 1980): 168-87.

19 Double-bitted axes were in use in lumbering in Pennsylvania by 1850.

19 Double-bitted axes were in use in lumbering in Pennsylvania by 1850. Earlier, in Maine and elsewhere, single-bitted axes were used. When log drivers came to Pennsylvania from Maine in the 1850s, they at first viewed the local axes with suspicion but then adopted them when their advantages became manifest. Crosscut saws were not used to fell trees until the 1880s; earlier they were used only to buck logs into lengths after the trees had been felled with axes. See: Henry J. Kaufman, American Axes: A Survey of Their Development and Their Makers (Brattleboro, Vt., 1972); Thomas R. Cox, "Logging Tools and Technology," in Richard C. Davis, ed., Encyclopedia of American Forest and Conservation History, 2 vols. (New York, 1983), 347-54.

20 In more recent years, spuds used to remove bark have frequently been and from believe of the larges from automobile springs flattened on one and

20 In more recent years, spuds used to remove bark have frequently been made from halves of the leaves from automobile springs, flattened on one end. Manufactured spuds have handles to make use easier, but are essentially the same. Peelers often pried bark off using two spuds at a time, one in either hand, or a spud in one hand and an axe in the other. Bark peeling as a source of tannin has become rare as chemically derived substitutes have come to dominate the market.

21 According to Casler, Kline, and Taber, Logging Railroad Era, 673, the bark chute was invented about 1900 by woods workers on Hicks Run (located in Cameron and Elk counties). However, a variety of flumes and slides, some remarkably similar to bark chutes, had long been used to move logs and lumber in the woods.

a bark-rack mounted on one sled at the farward end, the back end dragged on the ground. Bark-drays were pulled by horses. In skidding logs the grab-driver used a grab-maul to drive the coupling-grabs into the logs so they could be hauled one behind another in a string called a trail. The grabs on the rigging hitched to the horses were called crotch-grabs.²² Thus a team of horses hauled fifteen or twenty logs in a trail down the mountainside each trip. In addition to a grab-maul the grab-driver used an axe, cant-hook and in rocky country a stone hammer to break rocks in the road so the horses could get by with a trail of logs. Also he carried along a gallon jug of water. Oxen were not used after 1890 because they were too slow in gait. Heavy horses were used instead. By heavy horses is meant that they weighed from fourteen to twenty-one hundred pounds each. . . .²³

Wood-cutters were Bohunks, as men from Austria-Hungary were called, and no self respecting wood-hick would cut wood. The word "hick" originated here in the Black Forest of Pennsylvania back in Civil War days. A. P. Roberts, a native of Maine, was jobbing here, cutting pine logs. Men were scarse because of the war so he brought one hundred men from Novo Scotia to work for him. Two-thirds of them their last name was Hicks, they were called "Roberts-Hicks". Soon a man working in the pine woods was called a "hick". When they began to cut the hemlock all woodsmen were called "hicks" and a town with a sawmill a "hick-town". Nowadays any town smaller than a second class city is called a hick-town.²⁴

Another word used in the woods was "jill-poke". The word jill-poke originated in Maine in 1828 when a log lodged behind a root in the river bank sticking out and up stream at a forty-five degree angle causing a jam. One of the log-drivers called it a "jelly-poke".

²² Grab hooks were heavy metal hooks that were attached to logs to be skidded (and used for other purposes). Many types were used in the woods.

²³ Horses were also more agile and tractable, could be worked on steeper ground, and did not require housing where their hoofs could dry at night (unlike oxen). However, oxen had greater strength and could get by on a simple diet of hay without the supplement of oats that horses needed. For these and other reasons, oxen had been preferred in pioneer logging days; by Cranmer's time they had been replaced almost everywhere.

time they had been replaced almost everywhere.

24 Pennsylvania's Black Forest encompasses nearly a million acres of rugged forest land in southern Potter and parts of Tioga, Lycoming, Clinton, and Cameron counties. Its center is some thirty-five miles northwest of Lock Haven. Cranmer's account of the etymology of "hick" is, in all probability, erroneous. Both the Oxford English Dictionary and Wentworth and Flexner's Dictionary of American Slang suggest much earlier, British origins. However, the use of the term "wood-hick" for a common lumberer seems to be a regionalism used only in West Virginia, north-central and Western Pennsylvania, and neighboring areas. See Harold Wentworth, American Dialect Dictionary (New York, 1944), 291, 716.

It was soon shortened to "Jell-poke". When it got to Pennsylvania in the 1860s it was changed to jill-poke. A tie placed against a lower end of a railroad on a steep grade to keep it from running away was called a jill-poke. So the word jill-poke came to mean safety. To say the "jill-poke slipped" meant danger. In the woods to run or hurry was called "hitting your feet". In hauling logs on a steep side-hill the team was hitched to the head log with a Jay-grab; . . . if the logs began to run the team was swung to one side which automaticly unhooked the team from the logs. Places behind a stump or treetop were cleared where the team could be turned to let the logs run past. Such a place was called a "Jay-hole" which came to mean a place of safety....25

The steam-nigger was a device used on large sawmills to turn logs on the carriage. It was operated by two levers which opened and closed steam valves. Thus at the will of the sawyer it would catch a log on the skids, push it on the carriage then turn it as the sawyer wished; then it was caught by the "dogs" and held in place on the carriage while the carriage passed the saw which cut a slab off the log; then the setter, who rode the carriage, set the log over and a board was cut off the log coming back. The band saw had teeth on both sides and sawed both ways. Then the Nigger turned the log and the other side of the log was squared. Then the nigger turned the log and after the slab was cut the setter set the log over two inches each time both ways, forward and backward. The two inch planks were then run thru' the re-saw which cut them into inch boards.

The sawyer was next to the highest paid man in the mill, the filer was the highest paid. Next to the sawyer the setter received highest pay, then the edgerman who operated the edger which cut the edgings off the boards. On the carriage with the setter worked two men called "dogs" who operated levers that set the dogs which held the log in place while it was being sawed into lumber. The sawyers worked in pairs, one man operating the saw while the other stood by and if the sawyer went for a drink of water the other took over. In the afternoon the sawvers changed places, the one who sawed in the morning acted as relief sawyer in the afternoon.26

²⁵ Cf. Walter F. McCulloch, Woods Words: A Comprehensive Diction-

²⁵ Cf. Walter F. McCulloch, Woods Words: A Comprehensive Dictionary of Loggers Terms (Portland, Ore., 1958), 98. Either Cranmer is mistaken or regional usages of "jill-poke" differed. Neither McCulloch nor L. G. Sorden, Lumberjack Lingo (Spring Green, Wisc., 1969), lists "jay-hole."

26 For further insights into sawmill operations, see: Thomas R. Cox, Mills and Markets: A History of the Pacific Coast Lumber Industry to 1900 (Seattle, 1974), 227-44; Hu. Maxwell, "The Uses of Wood: The Sawing and Transportation of Lumber," American Forestry 24 (June 1918): 333-42; Fred

A double-cut band saw cut from ten to fifteen thousand board-feet per hour. After the boards came thru' the edger they were run thru' the trimmer which squared the ends of the boards regardless of length, from six to twenty feet. As the boards moved slowly crosswise acrossed a table, saws placed two feet apart could be raised with levers to trim the boards as desired. From the trimmer the boards went onto the chains which moved across a platform about a hundred feet long. First a man called the "grader" with a piece of keal²⁷ marked the grade of the board. Men who worked on the chains put the boards as indicated, on small cars each grade by itself. Then it was taken out in the yard and piled each grade in a pile by itself. After the lumber had seasoned it was loaded on R.R. cars as ordered....

Logs were taken to river or railroad by various methods as circumstances warrented. Sometimes they were hauled on sleds but more often a "slide" was used. There were two kinds of slides, timber and ground. The timber slide was constructed by firmly fastening two timbers side by side on cross ties placed ten feet apart from center to center, thus the length of a timber slide could be ascertained by counting the cross ties. In the early days of pine lumbering wooden pins were used to fasten the timbers to ties. In hemlock and hardwood lumbering, huge square cut spikes were used. After the logs were in place the inside of them was hued at a forty-five degree angle forming a rough trough down which the logs were moved. The ground slide was formed by plowing out a trough in the ground. Then water was poured on it and allowed to freeze.

Both timber and ground slides were divided into two classes, running slide and trailing slide. A running slide was one that logs ran down by gravity. To keep the logs from running too fast "goose necked" spikes [were] placed at entervals in the timbers of the slide. The spikes planed a groove an inch and a half wide and an inch deep out of the log. This slowed the logs up in speed. When a log attained enough speed so that the air preasure against the front end of the log equaled the weight of the log it would cause the log to rise up out of the slide and jump out. A trailing slide was not steep enough for the logs to run by gravity, so had to be trailed. A team of horses was hitched one on each side of the last log and an L grab was hooked over the back end of the log and the team pushed the trail of logs ahead of

H. Gilman, "History of the Development of Sawmill and Woodworking Machinery," Mississippi Valley Lumberman 26 (Feb. 1, 1895): 59-69.

27 That is, keel: a marking crayon.

them. . . . Down trailing slides as many as three hundred logs were pushed at one time by one team, scaling about one hundred thousand board-feet. Later when railroads were used the slides were not so long and were mostly running slides. In summer a crude oil was used on timber slide[s] so logs could be trailed. . . .

In the lumber woods were three groups of natural engineers who worked mainly by instinct. First was the slide-builder. He could build a slide down which logs ran at the rate of one hundred miles per hour without jumping out. Second was the splash-dam builder. He built wooden dams twenty or thirty feet high out of logs built in cob-work or log house style with the upper side slopped at a forty-five degree angle. The dam was unfilled, just logs crisscrossed with board sheeting on the upper side. The water held it in place. To keep it from undermining, hemlock or spruce boughs were placed on the bottom on the upper side, covered with gravel, then the gravel covered with earth.... The gate to a standard dam was sixteen feet six inches wide and twelve feet high. Alongside was a smaller gate half as wide. As the water fell six inches when the big gate was open the smaller gate was raised twelve inches. This kept the artificial flood, called a "splash", at a uniform height. Third was the man that could build "cribs" at bends in the stream to keep the banks from washing away during floods. Cribs were hollow frame work[s] of logs about eight or ten feet wide filled with rocks.

Rafting [largely] belonged to an earlier period altho' rafts were [still being] run after log-driving was ended. There were three kinds of rafts: spars, square-timber (which was whole trees with the slabs hewn off), and board rafts. Creek rafts were called "pieces" and were about one hundred feet long; board rafts were six platforms long, a platform of boards was sixteen feet square. Three creek pieces placed end to end made a river raft. Two river rafts lashed side by side was called a fleet and with a crew of five men were floated down the Susquehanna to tidewater. It took six men to run a piece out of a creek to the river, a pilot and two helpers called "crackers" on the front end, a stearsman and two crackers on the rear end.²⁸

Running a raft was a science. . . . A creek piece weighed fifty tons and traveled from fifteen to twenty miles per hour. The old pilots on

²⁸ See James Mitchell, Lumbering and Rafting in Clearfield County, Pennsylvania, on the West Branch of the Susquehanna River (Clearfield, Pa., 1922), 21-26 and passim; R. Dudley Tonkin, My Partner, the River: The White Pine Story on the Susquehanna (Pittsburgh, 1958), 6-7, 9-10, 28-29 and passim; John C. French, et al., Rafting Days in Pennsylvania, ed. by J. Herbert Walker (Altoona, Pa., 1922), 29-40, 53-57, 63-70.

the front end, hat off, bald head shinning like a pink billiard ball, short clay pipe in their mouth, tobacco smoke and orders to the stearsman seeming to roll back over the shoulder, as he called out "pint her fer the leaning hemlock and scrape the pint" as they neared a ninety degree turn. Then "pivot for the turn" which ment to work the oars (sweeps) in opposite directions so the raft would be broadside to the mountain, then a "back-sweep" with the oars and the undertow hitting the mountain would boil back against the raft and hold it ten feet away from shore. Ofttimes a pilot, slidebuilder, dam-builder or crib-builder could neither read or write, yet instinctively he instantly would solve the intricate problems without the use of figures or blueprint.²⁹

The first lumber camps were built "State of Maine" style.30 Along the sides of the camp were double decked beds reaching the length of the camp. The blankets and quilts reached the length of the bunk so when a man went to bed he crawled under the bed-clothes. In the center was an open fire with a hole in the roof to let the smoke escape....

Later when hemlock lumbering began much better camps were built. They were built two stories high, eighteen feet wide and from forty to ninety feet long. Upstairs three rows of beds reached the entire length of the camp, with woven spring beds. Down stairs was the lobby at one end . . . which varied in size, . . . being the width of the camp and from sixteen to twenty-four feet long. The rest of the downstairs was the dining room, with a leanto on the end of smaller camps or on the side of big camps for the kitchen. Large iron kettles were provided where men could heat water on Sundays to wash their clothes. If a man thought he needed a bath in warm weather he hunted up a hole in the creek. In cold weather he had to go either to town or home to get a bath. John E. Duboise [DuBois] Ir. when he lumbered the hemlock out of Hicks Run in Elk County Pa. had three camps of two hundred men each. His camps were sixty feet wide with a lobby both up and down stairs forty by sixty feet, with a bath room and toilets both up and down stairs. Saturday evening after supper those of his men that wished to do so could ride to town on special cars for

Cranmer uses the term as it is in Maine.

²⁹ For accounts of rafting, see: Olive Aucker Glaze, "Rafting on the Susquehanna River," Snyder County Historical Society Bulletin 2 (1943): 3-12; D. F. Magee, "Rafting on the Susquehanna," Lancaster County Historical Society Papers and Addresses 24 (Nov. 1920): 193-202; Thomas R. Cox, ed., "A Pennsylvania Lumber Raftsman's Year: The Diary of William Langdon for 1855," Journal of Forest History 26 (July 1982): 124-39.

30 In Maine the term "camp" is used for the building that houses the loggers, not the entire site, including grounds, as it does in various other areas. Cranmer uses the term as it is in Maine

that purpose. Sunday evening they were hauled back to camp. This was unusual for the lumber company to furnish transportation for their men on week-ends. Of course Duboise owned both logging railroad and trains.³¹

In the lumber woods of Pennsylvania an eleven hour day was the rule. Beginning at six o'clock in the morning, the men [worked until they] were called for dinner at half past eleven. Some jobbers gave their men an hours noon; others would call at the lobby door "all right boys" before half the men were thru' eating. Some jobbers made the men walk both ways on their own time. If men were plentifull it was not uncomon for men to walk a mile from camp and have a tree down when the six o'clock whistle blew. In bark peeling men were called at five o'clock or a quarter hour earlier. Breakfast was fifteen minutes after the men were awakened.

Barkpeeling (hemlock) started in May and ended before the middle of August. If the jobber didn't get his bark all peeled before it tightened, at the new moon in September the bark would loosen and [they would] peel for one week.³²

After bark-peeling was ended for that year the bark was taken out, the trees [were] cut into logs and skidded to railroad or slide. When snow came logs on the mountain tops were skidded and run in slides to the landing. After the hemlock logs were on the landing, then the hardwood and pine were cut and skidded. The job would be finished in April, then a new camp was built and roads were cut ready for bark-peeling when the bark loosened up.

If a man was "swamping" (cutting out roads) he generally worked alone. If "shooting bark" down a chute he worked in a crew of five, one man on the RR car to load as the bark came down the chute, three to put bark in the chute and one to erect the chute ahead as they progressed up the mountain. If the bark was hauled on a dray (sled with rack on it) the man that loaded drays was called a "draydog" and with the teamster made a crew of two to load and unload drays. In skidding logs a team had teamster and "grab-driver"; two or

³¹ John DuBois (1809-1886) was a leading Pennsylvania lumberman. He never married, but chose a nephew, John E. DuBois, to carry on his interests after his death. Unlike the elder DuBois, John E. invested in lumbering in Mississippi, South Carolina, and Oregon. See: Casler, Kline, and Taber, Logging Railroad Era, 1215-25.

³² Normally logs had to be peeled within six weeks of felling or the bark would become too tight to be removed economically. Cranmer seems to suggest that the bark was temporarily reloosened by frosts in the fall. Corroboration from other sources has not been found. In any case, early peeling was advisable because the longer bark remained on a downed log, the more tannin was apt to be leached from it by rains.

three teams worked to the same landing; with two men "rolling landing" [this] made a crew of six to eight working on each landing. Cutting logs two men worked in a crew. In peeling hemlock two men to a crew, one fitter, one spudder.

Some places logs were peeled "by the thousand" meaning that a sub-jobber called a "coon-skinner" took a job of peeling bark and cutting the logs at the same time at a certain price per thousand board feet scaled by Doyle's rule. Doyle's rule for scaling logs was to take half the diameter in inches, subtract two, then square the remainder and multiply by one fourth the length of the log in feet. Thus a log 18 inches in diameter and sixteen feet long scales 196 board feet. But a Scribner rule gives 213 board feet for the same log. At first the Doyle rule was used in even inches only, scaling a log by the numbers in view, which averaged almost as much as the Scribner rule in logs under 28 inches in diameter.33 But when odd inches were used by the companies the jobber was cheated out of twenty-five percent of his work. The Doyle rule was used by the lumber companys that lumbered by railroad. While the Scribner rule was used by the companies that floated their logs to the mills. Thus the pine logs and part of the hemlock logs were scaled Scribner...³⁴

To show how a company would cheat on log scale I will tell of a lawsuit held at Coudersport, Pa. between the Lackawanna Lumber Company, who had a sawmill at Cross Fork, Potter County, Pa., nearly fifty years ago. George Smith signed a contract with the Lackawanna Lumber Company to peel the bark and cut the logs on a tract of land. Bark and logs had to be delivered to the railroad track. The logs were to be scaled by Doyle rule before they were loaded on the cars. The company scaled the first trainload as per contract. The next trainload was scaled on the cars as loaded. The rest was scaled in the mill as they came up the jack-slip. The company had eight log-scalers, Smith had one scaler who scaled all the logs. The company scale was seven million board feet. Smiths scaler tallied ten million

³³ For a summary of log scaling and the various systems used, see: A. E. Wackerman, W. D. Hagenstein, and A. S. Michell, *Harvesting Timber Crops* (2nd ed.; New York, 1966), 393-400. Most logs in Pennsylvania would have been under twenty-eight inches in diameter at the butt. Scaling "by the numbers in view" involved rounding up odd measures to the next number on the scale stick used in measuring the logs.

³⁴ That is, pine logs were normally driven downstream to mills in such towns as Williamsport and Lock Haven, but hemlock logs, which came to be commercially valued after the heyday of those centers had passed, was hauled to mill by railroad; only pine logs that escaped the attention of loggers supplying the river drives survived to be hauled by railroad to the mills erected in the hinterlands to saw hemlock.

feet. In the lawsuit the company's scale was not allowed in court as they did not have one man who scaled all the logs. The Lackawanna Lumber company paid the highest wages to men who worked by the day in company camps, yet cheated their contractors thirty percent on the log scale.³⁵

Crews varied from ten men to two hundred men. Foremen were usually men past forty years of age and not only experienced woodsmen but [ones] having the gift of handling a crew of men. The exception being that sometimes, but not often, the contractors son would act as boss, but not if men were scarse as men did not care to work under a boss who was less than thirty years old.

Mainly the lumber companies treated their employes fair, saw that they received their wages earned. In company camps the beds, food and working conditions were better than it was under contractors. In the hemlock woods the men had a powerfull weapon, "the red-horse let loose in the slashing" (Fire). 16 It happened more than once when a company foreman tried to cheat a man, for the man to reach in his pocket, get a nickel, hold it up and look the foreman in the eye and say, "that will buy a box of matches!" This would bring a satisfactory settlement. In 1893 Goodyear paid his contractors and some of them absconded without paying their men. Goodyear wouldn't pay the men their bark-peeling wages. Fire broke out all over his slashing in Big Moore Run in Potter Co., Pa. In vain Goodyear offered four dollars per day for firefighters. The men jeered him. Helplessly he watched a million dollars go up in smoke. 17

Many of the tannery companies would not pay their contractors until the men were paid. The contractor would give a man an order for money at the company office. The only way a contractor could get any money for himself before the job was finished and his men paid was if, say a man wanted to draw five dollars, the boss would give an order for ten dollars and his employe would secretly rebate five dollars. Such companys did not loose their bark in fires. The contractors got their supplies at the company store. In 1893 the country

³⁵ A preliminary survey of the records in the Potter County Court House has turned up no record of the case. Robert K. Currin to Thomas R. Cox, [January] and Feb. 12, 1983 (Cox personal correspondence).

³⁶ All early logging operations left a great deal of slash in the woods, but hemlock operations left even more than most.

³⁷ On the Goodyears, see: Casler, Kline, and Taber, Logging Railroad Era, 501-80; Charles W. Goodyear, Bogalusa Story (Buffalo, N.Y., 1950); American Lumberman, American Lumbermen: The Personal History and Public and Business Achievements of One Hundred Eminent Lumbermen of the United States (Chicago, 1905), 51-58.

was in a panic. . . . Contractors took advantage to crowd their employes. Walter Moore bought a track of hemlock timber in Cameran county, Pa., built a camp and proceeded to peel the bark. He forced his men to work in the rain. When the bark was peeled his men drew their pay. Next day fire broke out all over his cutting. His investment of twenty thousand dollars went up in smoke in less than one hour.

Back in 1850 occurred the first trouble between the log drivers and the raftsmen. A log boom had been erected at Williamsport, Pa., on the West Branch of the Susquehanna river. Rafts were held up at the boom by the logs. To square accounts with the logdrivers the raftsmen began spiking sawlogs, by boring an inch hole in a log and inserting an iron rod then . . . a wooden plug [to] conceal the rod. When such a log hit the saw the saw was destroyed. Also it got the nerve of the sawyers. A settlement was reached whereby the logging companies paid roundly for rafts held up at the boom or wrecked by floating sawlogs on the way down the river.38

After Black Friday in 1873 the companys cut the wages which resulted in the "Saw-dust war." Colored troops were sent to Williamsport to restore order. This action resulted in having logs spiked and fire in the forest. In 1884 occured the "fire-wood war". People living in the forest had been in the habit of cutting firewood on company lands, dead or down trees that could not be used for lumber. The companys began charging for such wood . . . [which] caused a fire which burned one hundred thousand acres of timber in one day. If they couldn't burn the wood in their stoves they would burn it in the woods. The companys gave up.39

In the fall of 1907 Wall Street had a panic. The Goodyear jobbers, excepting Tom Murdock, conspired to cut wages one half. The men were helpless and had to submit to work for half wages. In 1909 times had opened up so at the close of bark-peeling all the bark, excepting that on Murdocks contract, was burned, fifty thousand cords and the logs damaged twenty percent by fire.

³⁸ Accounts include Cox, "Transition in the Woods"; John B. Rumberger, "The Loggers' Against the 'Rafters'," Lock Haven Express (reprinted from Philadelphia North American), June 17, 1915.

39 On the Williamsport strike, see: Nancy Lee Miller, "Sawdust War: Labor Strife in Lumbermills," Pennsylvania Forests 72 (Mar.-Apr. 1982): 601-2; C. Lee Barry, "Lumbering in Pennsylvania" (typescript on microfilm, Pennsylvania State Archives, Harrisburg, MG-262; location of original unknown, pagination supplied), 167-79. Cranmer also wrote on the "fire-wood war" in Lock Haven Express, Aug. 28, 1947. Other references to it have not been located. been located.

The Lackawanna Lumber company never had a grievance fire, but they had a bad fire. In August 1904 they had fifty million board feet of mill-culls and poorer grades that had accumulated in their lumber yard but insured as No.s 1 & 2. A brush fire was burning acrossed Kettle creek several hundred yards away. After midnight the mill-yard caught fire all over it at the same time. The fire of those burning lumber piles caused a seventy mile an hour gale of wind to spring up. Burning boards were drawn up high in the air and dropped all over the town of Cross Fork, Pa. and in the woods ten miles away. The people saved the town by climbing on the roofs and throwing the burning boards off. The sawmill burned and a locomotive, also fifty thousands of cords of tanbark, several million feet of logs, lumber camps and barns burned and one teamster lost his life, also many railroad cars burned, loaded with tan-bark. 40

In West Virginia little later one company was going to make the men pay board in camps while working, thus on rainey days, men would have to pay board when they were not working. Result, a railroad trestle was burned, over one hundred rifle bullets were fired thru a camp office while the company superintendent was inside lying on the floor to escape being shot; it was six months before the railroad was repaired and a log could be sawed in the mill.

Two good men cutting logs in a hemlock slashing could cut on an average around twenty thousand feet per day. But such men got a quarter extry a day in wages. The amount a crew cut depended on conditions, the kind of timber and the size. The best cutting was logs that run five to seven logs to the thousand board-feet. In cutting larger or smaller logs not so much board-feet would be cut.

The first logging railways were built in the early 1880s. Before Cleveland made a foreign treaty that hemlock lumber could be exported, the tanneries peeled hemlock bark and let the trees rot in the woods. 41 Goodyear brothers, Frank and Charles, were among the first to use a logging railroad, Goodyears had been lumbering in McKean county in a small way useing horses and oxen to haul their logs to mill. Frank Goodyear married a wealthy woman who bought him a locomotive. He built a railroad eight miles from Keating Summit on the Pennsylvania R.R. to where he built a large mill with steam gang

⁴⁰ Cranmer was clearly thinking of the fire of April 30, 1903. On it, see: Lock Haven Evening Express, May 1 and 2, 1903; Casler, Kline, and Taber, Logging Railroad Era, 649; Custer, "Obituary for a Boom Town."

41 No such treaty was negotiated, but the Wilson-Gorman Tariff, passed during Cleveland's second administration, did result in opening the way for limited lumber shipments from the United States to Canada.

saws. The town built near the mill was called Austin. Goodyear bought the logs [that] the tannery at Costello had peeled the bark from. Borrowing a half million dollars. . . he started cutting hemlock in a large way. The one locomotive shoved the logcars up to be loaded by hand then "wildcatted" (dropped by gravity) down to the mill. After the engine had placed the logicars to be loaded it returned to town and hauled the cars loaded with lumber over the hill to Keating Summit. Later he built a mill at Galeton, Pa., and cut the logs the Galeton tannery peeled. Next he got a crude log-loader. The crane could only swing half a circle. The man who operated this loader, George Florie, told Goodyear how a loader could be constructed that could be turned in a complete circle by useing an endless chain wrapped around the base of the loader. Goodyear sent Florie to Buffalo and there in a machine shop Florie built the first Barnhart steam logloader. Goodyear paid George Florie two dollars a day while he invented and built the first successful log-loader and no more. Florie quit Goodyear and was employed by the Lackawanna Lumber company superintending their log-trains. The log-loader was first used in the late 1880s. This made lumbering by railroad a success. 42

Many men that worked in the pine woods became farmers when they quit the woods. Others settled in cities. Most men that worked in the bark woods quit the woods when they got married and moved to town to work in brickyards or factories. . . .

A man wasn't considered a good woodsman unless he had worked in more than one state. In the pine wood days of the 1870s and 1880s men from Pennsylvania used to go to Michigan, Wisconsin and to a less extent Minnesota to work for a year or two just to become a seasoned woodsman. This was started by roaring Jack Bell, a pine cutting contractor, who when he quit jobbing in Pennsylvania moved on [to] Wisconsin, taking a hundred of his men with him. Later in the 1890s and later men from Pennsylvania used to go to West Virginia, Tennessee, North Carolina and other southern states where lumbering was going on, just to work awhile and see the country. After 1900 companys paid the train fare for woodsmen if they would go to Oregon and Washington and stay a year. Two years and they would pay their fare back east again. It was a common thing in a hemlock camp of sixty men to find men that had worked from the Adarondack mountains to Georgia and on the Pacific Coast, in the big timber....⁴³

⁴² Cf. Casler, Kline, and Taber, Logging Railroad Era, 501-5, 519-20; American Lumberman, American Lumbermen, 51-53. 43 The migrations of lumbermen have been inadequately studied. How-

Of logging camp heroes Harry Davis tops the list. He graduated from logger to fireman on a logging engine, from fireman to engineer. From engineer on a logtrain to engineer on the B & S railroad. In 1901 the B & S was building track down the First Fork of the Sinnemahoning creek.⁴⁴ The track was laid to Sinnemahoning town where a wooden trestle was being built to cross the Pennsylvania RR. Davis was engaged in switching some cars at Wharton, twenty miles above Sinnemahoning. Two flatcars loaded with rails being in the way were "given a kick" down the First Fork track. No one dreamed cars would run very far down a grade of only twelve feet to the mile. When they were thru' switching, the flats were not in sight. They started with the engine to hunt the flat cars. Two miles down the unballasted track they stopped and asked a farmer if he had seen two flatcars go past. He replied "yes and they were going fast." The Conductor looked up at the engineer and exclaimed "Sixty men working on the trestle, heaven, hell or catch them cars". The engineer grimly replied "Grab your hat and hang on". The conductor and brakeman jumped on the cowcatcher and then began a race to catch the runaway cars. The Mogul engine seemed to defy all the rules of gravity as they raced down the track around curves and over the uneven road bed.45 The engine with side-rods a shimmering blaze in the sunlight, whistle screaming the runaway signel in hope someone would understand and derail the runaway cars. The crews with determined faces looked straight down the track yet also on their faces was the resigned look of men on the scaffold expecting each breath to be their last. The engineer with left foot braced against the throtle rest to hold him in his seat in the swaying cab, johnson-bar in the "company notch" throtle open wide, exausts comming from the stack in a steady

44 On logging and rafting on this important stream, see: George William

ever, see: Fred W. Kohlmeyer, "Northern Pine Lumbermen: A Study in Origins and Migrations," *Journal of Economic History* 16 (Dec. 1956): 529-38; George B. Engberg, "Who Were the Lumberjacks?" *Michigan History* 32 (Sept. 1948): 238-46.

Huntley, Jr., A Story of the Sinnemahone: A Story of Great Trees and Powerful Men (Boston, 1945); Samuel A. King, "A Log Drive to Williamsport in 1868," Pennsylvania History 29 (Apr. 1962): 151-74.

45 According to Benjamin F. G. Kline, Jr., the term mogul engine probably is used here to refer to a 2-6-0 rod locomotive. The Buffalo and Susquehanna had several; by the time of Cranmer's account, they had been replaced on the main line by larger locomotives and put in switching or worktrain service. However, Cranmer may have simply used the term to indicate a large locomotive, for the account makes clear that it was considerably larger than the normal logging locomotive. Kline to Thomas R. Cox, Jan. 9, 1983 (Cox personal correspondence). McCulloch, Woods Words lists only alternative definitions of the term. Casler, Kline, and Taber, Logging Railroad Era, 1368, describe Davis only as a woodsman.

roar. They overtook the runaways at the end of the trestle. When the conductors foot signeled the coupling was made, the engineer threw the reverse lever "back in the corner" gave her the sand and the drivers spinning in reverse brought the runaway cars to a grinding stop ten feet from the end of iron, just as the Buffalo Flier on the Pennsy track shot past. Eighteen miles in sixteen minutes, all lives were saved BUT the engineer's nerve was shot. Never again could he "keep his hand upon the throtle and his eye upon the rail". Altho he, Harry Davis, had saved the Buffalo & Susquehanna RR a quarter million dollars in damages [that it would have cost] if the runaway cars had crashed into the Pennsy passenger train, he had to go to work as bartender in a hotel in Austin, Pa. 46

Ten years passed away. Came the afternoon of September 30, 1911. A group of people was watching the paperwood dam which supplied the paperwood factory with water. Harry Davis was standing at the end of the dam, the rest were below the dam, 3.30 P.M. with a roar the concrete broke but the steel reinforcing held. Davis ran across the road into the house kept by Cora Brooks, seized the telephone and calling the operator, Miss Dinger, told her the dam was breaking and call the papermill and have the fire-whistle sounded and warn the hotels and places of business and down the valley. Miss Dinger and Miss Deppy the telephone operators, gave the alarm and stayed at the switchboard. For ten minutes while the firewhistle blew the concrete kept breaking with sounds like thunder. The concrete dam was fifty feet high, three hundred feet long and backed water half a mile. The dam was built on shale and the water getting underneath caused the dam to slide and break. For ten minutes the steel rods held before they broke and let the water loose. Half a million cords of paperwood was piled between the dam and the papermill. The paperwood pushing ahead of the water kept the speed of the flood to about twelve miles per hour. A dentist hearing the fire-whistle suddenly stop in the midst of a wail stepped out the door to see where the fire was. Looking up the avenue he saw a house come out into the street and down towards him. Everywhere women were clutching children and running for the hill. Saturday afternoon caught many women taking a bath, and, stopping to dress, [they] were too late to reach safety. Those that reached a place above the flood, looking back saw the jam of paperwood thirty feet high moving down smashing houses like eggshells and half dressed women being caught under the wreckage.

⁴⁶ Corroborating sources for the story of this runaway have not been located.

When the jam reached the "brick row" (bank, Jew store and Goodyear hotel), it held for several minutes until the water worked thru' to the front then it broke at the avenue and the railroad track and passed on down the valley. Harry Davis saved the lives of more than two thousand people BUT because he telephoned from the "Redlight house" his name could not be printed in the papers! The telephone girls were given medals for their bravery, but not Harry Davis.⁴⁷ These two stories were told in every lumber camp in the U.S.

To be rated a hero in the lumber camps one had to save many lives, or else show exceptional bravery and clearheadedness. Like Frank Mainy [Maney?] a tong-hooker, who stuck on a runaway stemwinding locomotive and train of log and bark cars when the rest of the crew jumped. He set the brakes on bark cars back to the engine then climbed on the engine and stayed until he got the train stopped at the foot of the hill. The runaway made nine miles in eleven minutes from the top of the hill to the town of Medix Run. On past the town, under the Pennsy tracks and out on the B & S tracks. The logcars jumped the track and into the Bennets Branch of the Sinnemahoning creek but the bark cars and engine stayed on the track. The reason he stayed on the train was that a woman and baby was riding in the engine to town. Stories of lumber heroes would fill a library. . . .

I always avoided union jobs. . . . Any time I asked for my pay, with one exception, [I got it]. When I worked on the mill-yard for the Thornwood Lumber Co. in Thornwood, W. Va. I was paid once a month. . . . At Thornwood there was a company store but [a worker] was not compelled to trade there. Prices were the same as private stores but the quality of goods in the company store was better. . . .

[Normally men were] Paid by checks which were readily cashed anywhere. At Thornwood, W. Va., one could draw a time check which was discounted 2% to be cashed. At Cross Fork, Pa. the Lackawanna Lumber Co. paid in brass [tokens?] which was cashed on payday. BUT a saloon keeper could present a thousand dollars worth

⁴⁷ Other accounts of the disaster tend to bear out Cranmer's story, although he reports the names of the telephone girls incorrectly. They were Lena Binekey (or Binckey) and Kathleen Lynn (or Lyon or Lyons). Davis's account is quoted in the Lock Haven Express of Oct. 2 and, in abbreviated form, on Oct. 4; thereafter Davis drops from sight. Only on Oct. 2 is it mentioned that the warning call came from the Cliff House, which may have been the brothel Cranmer mentions; however, Marie Kathern Nuschke, The Dam That Could Not Break (Coudersport, Pa., 1960), 7, states that the call came from "the home of Mrs. Cora Brooks" where Davis was living at the time. See also: Currin to Cox, Feb. 12, 1983 (Cox personal correspondence). Casler, Kline, and Taber, Logging Railroad Era, 536-37, tells of the dam breaking, but does not mention Davis.

of brass at the office and instantly get his money regardless of how far away payday was. While the company could and did, hold off the workman until payday to redeem their brass, they dared not buck the "Whiskey Ring".... I carefully avoided all strike territory and closed towns that were completely ruled with only company store, company hotel, and company controled red-light district....

As a newsboy I saw the log-drivers strike on Tom Smiths drive on Kettle Creek Clinton County. The cause was the boss Warren Wykoff, [who] pulled George Kline, a teamster, off his horse and slapped him for being drunk. The men walked out of the creek, struck their cant-hooks in the ground and demanded a new boss and a raise of one dollar per day. They got their demands as soon as the book-keeper could get Smith there, which was less than thirty minutes, in time to work the afternoon splash.

H. M. Cranmer [signature]

Afterword .

After leaving the woods because of ill health, Cranmer worked at a variety of jobs, including carpentry and planting trees for the Pennsylvania Department of Forestry. In 1936 the flooding that resulted from the building of the Alvin R. Bush Dam by the Corps of Engineers forced him to move his small, two-story frame house a short distance away, but throughout he continued to be a part of the Hammersley Fork community and from 1948 to 1956 served as its postmaster, succeeding his sister in that position. He died on October 10, 1967, in a fire that destroyed his home. Never married, he lives on only in the folklore and local history that he helped to preserve.