A PERENNIAL SHORTAGE of labor plagued the lumber industry of the Lake States of Michigan, Minnesota, and Wisconsin throughout most of its history. Despite the presence there of thousands of men from northeastern America and northwestern Europe, constant effort was required to attract workers in sufficient numbers to the pineries and to sawmill towns. When pioneers began to progress beyond the log cabin stage and some became aware that they could make a living by shipping timber to settled areas, the mid-nineteenth century lumbermen found themselves with what appeared to be unlimited forests but few men to swing axes and pull saws.

The number of available workers increased after the late 1840s, as German, Scandinavian, and Irish immigrants arrived in growing numbers, but the continued expansion of lumbering provided more jobs than there were applicants, and the labor shortage often was acute. Numerous appeals for workers in newspapers of the lumbering towns and frequent mention of the labor problem in trade journals and letters indicate that the shortage presented a problem throughout the nineteenth century, and even extended into the first quarter of the twentieth on the northern Minnesota frontier of the industry. The Virginia and Rainy Lake Lumber Company, one of the largest producers, was able to hire only half as many men as it

MR. ENGBERG, who is associate professor of history in the University of Cincinnati, has based the present article on a chapter in his history of labor in the Lake States lumber industry, 1830–1920, which the Forest History Foundation of St. Paul plans to publish.
was willing to employ between 1916 and 1924, and it operated with five to nine hundred fewer workers than it needed.\footnote{See, for example, files of the Stillwater Gazette, Eau Claire [Wisconsin] Free Press, Mississippi Valley Lumberman (Minneapolis), and Lumberman’s Gazette (Bay City, Michigan). Comments for the years 1916 to 1924 are in the Frank H. Gillmor Papers, owned by the Minnesota Historical Society.}

The shortage of laborers was caused by a variety of factors, some constant, others temporary but equally critical. The frontier nature of the industry, especially its logging phase, was among the constant problems. Although much of the Lake States area passed from frontier to settled status during the last half of the nineteenth century, northern areas in each of the three states remained sparsely populated even in the mid-twentieth century. The amount of work to be done in frontier communities ordinarily far exceeded the available manpower. Loggers and lumbermen had to compete with mining companies, railroads, highway builders, and constructors of other public works, and also meet the lure of cheap land which enabled a man to be his own employer.

The changes in the volume of general employment which accompanied the ups and downs of the business cycle affected lumbering. Employers found the problem of obtaining workers especially serious in times of full production, when other industries likewise hung out the “men wanted” signs. From the viewpoint of the worker, the periods of unemployment during depressions constituted a serious problem.

Following such panics as those of 1857, 1873, and 1893, employees were distressed by low wages and lack of work, while employers enjoyed temporary relief from the nearly constant labor shortage. But since hard times often forced men to leave a community or to seek other types of work, it sometimes became difficult to fill out logging and milling crews after periods of protracted unemployment.

Any considerable increase in the demand for lumber usually resulted in calls for more laborers than were available in the lumbering communities. Peak periods of prosperity and heightened wartime demand affected lumbering as they did many other industries and created labor shortages that varied from local to continental in scope. A crisis peculiar to the lumber industry came when extensive fires made it necessary to log off burned areas before insects and rot caused further damage to the wood.\footnote{Mississippi Valley Lumberman, October 28, 1894, p. 5; September 7, 1894, p. 7; September 20, 1901, p. 15.} Burned timber sometimes was logged and sawed in addition to the normal...
mal cut of a season, thus increasing the strain on the labor supply.

Wage scales constantly affected the supply of labor, but the impact varied with the wage differential between lumbering and other industries. Some lumbermen believed that an employer who paid and fed his employees well could get men who would stay with him and work hard, and that poorly paid, casual members of logging crews were most easily lured away by reports of higher pay. Many of the late summer and early autumn shortages in the mills and camps were caused by the higher wages paid in the harvest fields. The big mill of the La Crosse Lumber Company, which cut 180,000 board feet of lumber in one day in July, 1875, was closed two weeks later because the harvest fields had siphoned off its workers. The Mississippi Valley Lumberman for September 2, 1892, pointed out that reports of “$4 per day with table board, barn and blanket” in the Dakota harvest fields sounds like “an out-

ing with free fare, free feed and a large bonus” to the lumber shover earning $1.50 a day. Shortages often lasted longer than the actual harvest season. Some men who returned from Dakota farms in the fall refused to begin working in lumber camps until after their cash ran out. One autumn an unsympathetic Minnesota editor remarked that “These drones will come to their milk—condensed milk—along about the time their feet protrude through their last winter’s shoepacks and come in constant contact with the ‘beautiful snow’.” By Christmas, the early fall shortages usually had disappeared.

Working conditions in the lumber industry dismayed some men who might otherwise have been attracted to it. The isolation of the logging camps meant a monotonous life for several months each winter in a snowbound world circumscribed by bunkhouse, cook shanty, stable, and tree felling areas. The rigorous outdoor life of the loggers and rivermen discouraged the less hardy and less adventurous, as well as men with family ties strong enough to keep them in more settled occupations. On the other hand, it is conceivable that, for some, a few months in the woods provided

LUMBERJACKS passed the winters in the bleak isolation of camps like this
a welcome vacation that resembled a part-time divorce and made the remainder of the year endurable.

The Civil War reduced the number of men in the Lake States as early as the fall of 1861 and created some serious problems after Minnesota, Michigan, and Wisconsin drafted or threatened to draft men in 1862 and 1863. The federal draft, which started in the latter year, also pinched. The short Spanish-American War likewise took men from the mills in the summer of 1898. The twentieth century shortage was due in part to the wartime demand for men, as well as to the increased use of forest products.

THE HERE-TODAY, gone-tomorrow nature of many lumber workers, especially those employed in the woods, greatly increased the problems of recruiting and maintaining crews. As transportation improved and opportunities for employment broadened during the last quarter of the nineteenth century, the amount of shifting from job to job increased. Employers complained during the early 1880s, but the problems created by transient workers did not attract considerable attention until the end of the century. Then labor turnover was complicated by expanding operations and a shortage in the lumber boom of 1899-1900. One employer complained that only ten per cent of his crew stayed with him all winter; another company had twenty-one hundred men on its books, although it used only four hundred at any one time. In 1916 and 1917 the Virginia and Rainy Lake company in effect changed crews every month, paying off more than seventy men daily from a force that averaged less than two thousand. During 1916 and 1917 the company settled with 23,209 men, although the average daily employment was only 1,750. The Wisconsin Land and Lumber Company, which did much of its work in the Upper Peninsula of Michigan, recognized the mobility problem in its time books by devoting the first page to transients who had payroll accounts running for less than a month. Twenty-three of these “flying geese” received wages averaging $4.89 for their periods of employment.

While the degree of instability among workers of a particular company often appeared substantial, it did not always have as serious an effect on the community as it did on individual firms. Most of the men who left jobs at their own or their employer’s insistence were able to find work with other firms in the vicinity. In the Saginaw Valley of Michigan in 1875, for example, between seven and eight thousand men were used in the woods during the winter. In summer, when work in the forest declined, the men found employment in the sawmills, in other woodworking plants, and in the associated salt works. In Wisconsin in 1909, the number of workers engaged in lumbering for each month averaged at least five-sixths of the largest monthly total. The highest employment occurred in winter, when logging operations were at their peak; when the midsummer slump in the woods reduced the number of lumberjacks by two-thirds, full-scale mill operation took up the slack. Logging and sawmilling complemented each other almost perfectly, since reduced operations in one were balanced by maximum employment in the other.

Many of the casual workers without fixed residences or firm family connections were temperamentally incapable of settling down; they moved from camp to camp, hoping to find higher pay, a warmer bunkhouse, a more congenial crew, a less exacting boss, better tools, or more tasty pie.

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Pioneer and Democrat (St. Paul), December 6, 1861; Joseph Schafer, Winnebago-Horicon Basin, 273 (Madison, 1937); Mississippi Valley Lumberman, July 29, 1898, p. 9.


Some may even have hoped to find bunks with fewer vermin, although many a wandering worker could have sat down in any snowdrift and picked off his own menagerie of bedbugs and grayback lice. According to the Wisconsin industrial commission, lumber workers were at least one step above hoboes, for “Lumberjacks usually have some baggage, while 'boes commonly have none. Lumberjacks get higher pay for their work and are a more independent lot of men.” Nevertheless, a semi-hobo wing was present in many large crews, which sometimes included men who moved frequently lest their records as army deserters or fugitives from civilian justice catch up with them.

Lumbermen often classified workers who frequently changed jobs as hoboes and tramps, assuming that the individual laborer, rather than management or the character of the industry, was responsible for the inconvenience and expense that went with a rapidly changing labor force. While the lure of greener pastures undoubtedly accounted for many changes, the unstable nature of the industry contributed heavily to the nomadic character of the working force. The frequent sale of timber and mills, usually accompanied by changes in management, automatically resulted in some turnover of workers. The mining of the timber crop on a cut-out-and-get-out policy did not help to make lumber workers feel that they should be loyal to boss or firm.

Methods of hiring and paying sometimes tempted transients to leave camp shortly after their arrival. One Wisconsin employer complained that men came to his camp on a Saturday afternoon, only to quit Tuesday morning after having received nine meals and a plug of tobacco for a single day’s work. The frequency with which men changed camps increased as it became customary to pay them when they left, rather than at the end of the logging season. The company and employment agency practice of paying railroad fares from city to camp added to the difficulty, for it often attracted men who were better riders than workers. Instability also varied with the type of work. Foremen, straw bosses, clerks, and sealers ranked among the most stable of logging camp employees. At the other end of the scale were swampers, skidmen, and cookees—less skilled workers who were likely to drift from job to job. Between these two extremes came the sawyers, fellers, and teamsters who formed the backbone of a logging crew. Generally speaking, good pay and high stability went together.

The fact that a large percentage of lumber workers were unmarried contributed to their excessive mobility. In Michigan in 1885, forty-four per cent of the men who composed sawmill crews were single and seventy-one per cent of those who boomed, drove, and rafted logs were similarly unencumbered. The census takers of 1900

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7 Industrial Commission of Wisconsin, Labor Camps in Wisconsin, 14 (n.p., n.d.).
9 C. M. Oehler to Lucile M. Kane, September 15, 1947, in Forest History Foundation Archives, St. Paul.
found that the percentage of single workers was higher in the western than the eastern section of the Lake States, totaling forty-six per cent in Michigan, fifty in Wisconsin, and fifty-six in Minnesota. Among itinerant workers, the percentage of the unmarried mounted even higher; in 1931 seventy-seven per cent of Duluth's casual laborers had not been married and two-thirds of them usually worked in the woods in winter. Many lumberjacks had not reached the normal age for marriage or were not financially prepared to assume its obligations; furthermore, logging camp life often appealed most to those least inclined to settle down to the restraints and responsibilities of married life. The large number of recent immigrants among lumber workers also contributed to the high percentage of bachelors, for the new arrivals were often young men who had not yet established themselves in the United States to the extent of acquiring wives. Many had sweethearts in the old country who hoped to join them unless absence should make the heart grow fonder for someone else. A further obstacle to marriage came from the fact that relatively few women lived in the frontier areas where most of the lumbering was conducted. In 1890, for example, the northeastern section of Minnesota, excluding Duluth, had 180 males for every 100 females; among the foreign-born the ratio was 235 to 100.\footnote{Michigan Bureau of Labor and Industrial Statistics, Third Annual Report, 219-267, 396 (1886); United States Census, 1900, Occupations, 306-314, 414-418; Alvin H. Hansen, Marion R. Trabue, and Harold S. Diehl, The Duluth Casual Labor Group, 13-15 (Minneapolis, 1932); R. W. Murchie and M. E. Jarchow, Population Trends in Minnesota, 65 (St. Paul, 1936).}

Unmarried workers whose home ties were weak or nonexistent often had little incentive to save money; as a result they frequently quit their jobs with small stakes and left camp on little provocation. Since no one depended on them financially, society did not impose on them the restraints which it held over married workers. Their nomadic existence meant that they frequently lacked the right to vote, and thus felt little responsibility for the community in which they lived. One student of the problem believed that the repression and thwarting of the sex instinct and of family relationships made it easy for the lumberjacks to accept freak economic and political theories, and these ideas in turn made the men unacceptable in many communities.\footnote{Kirkland, in Journal of Forestry, 18:318-329.} Such observations, however, applied to as small a part of the total number of

\[\text{A camp boss, Abe Johnson of Marine, in his office at Bone Lake Camp}\]
lumber workers as did certain allegations about criminal tendencies; neither can be considered representative of a large group of workers who formed an integral part of frontier society and possessed the characteristics of that society, even though occasionally in an exaggerated degree.

The migratory character of many lumber workers was due in part to their employment in an industry which wanted a large pool of relatively unskilled and low salaried labor available for intermittent employment, and grudgingly paid for the privilege in worker and community instability. David T. Mason, prominent timber consultant and manager, wrote in 1920 that “The lumber industry has done its share to develop a condition whereby about 3,000,000 men in the United States have become casual laborers, sometimes called hobo laborers, or ‘blanket stiffs’.” This writer felt that the employer was largely responsible for such conditions, since he feared that by improving camps he would spoil the lumberjacks, and he ignored the evidence that good camps with adequate sanitary facilities, equipment for bathing and for drying clothing, well-lighted reading rooms, and simple amusements paid off for the employer. In some camps the average man could endure the conditions under which he lived and worked only if he had the prospect of an early debauch. The result was migrating, restless, inefficient workers for an industry that needed stable labor and could get it only by reducing the seasonal nature of the work, encouraging family life, and improving housing. Mason added that such improvement also was “the right and fair thing to do.” Although his comments were directed especially toward the Pacific Northwest in the twentieth century, they were in some degree applicable to the Lake States lumber industry of an earlier generation.12


WHEN THE FIRST lumber was cut in an area, it was often necessary to import crews from more settled regions. Some of the early work in the Lake States was done by soldiers who logged around Forts Snelling and Winnebago, although they had been recruited primarily for other purposes. Franklin Steele and other early operators went as far south as St. Louis in their search for workers when they started logging in the St. Croix Falls area in the late 1830s. Many experienced workers came from New England, New York, and Pennsylvania in the middle decades of the nineteenth century.

Employers and potential employees were brought together in various ways. Surviving records of lumber operators include many letters from employers who were searching for workers and a few from men who were seeking employment. Some records anticipate the movement of workers from the East to the Northwest, while others deal with shifts from one Lake State or county to another. Many of the Yankee operators who moved from the East to the Lake States secured workers by writing to partners, relatives, or other friends in New England, asking them to find or sometimes actually to hire men to go west. The decreasing volume of such correspondence in the last third of the nineteenth century indicates a declining dependence on recruiting in the East; the population of the Lake States had increased to such an extent that labor usually could be found locally.

In addition to letters, newspaper notices attracted men to the Lake States. A Maine paper of 1838 carried an advertisement for “SAW MILL WORKMEN ... to go West,” including a head sawyer, a man who understood circular saws, a teamster, and wood choppers. An advertisement for fifty men to raft and saw lumber on the St. Croix River ran in an early St. Paul paper shortly after Minnesota became a territory in 1849. Between 1856 and 1879 the Boston Post carried articles by Christopher C. An-
Andrews, a Minnesotan whose interest in his state’s forest resources is often reflected in his writings. The Chippewa Union and Times of Chippewa Falls, Wisconsin, for June 19, 1869, gave twelve reasons why immigrants should settle in its area. The first announced that “Every new comer can get the highest wages in the States, in our mills or on our farms in the summer, and in our pineries in winter.” Accounts of labor shortages and wage rates appearing in local papers were often copied by other newsheets across the nation.

If job seekers did not apply at a sawmill or logging camp in sufficient numbers, the employer frequently made the rounds of saloons and other skid row hangouts of lumbering towns in search of prospects. The small town employer might go to neighboring lumber centers or to cities where workers congregated. Lumbermen from Stillwater, for instance, visited St. Paul, Winona, La Crosse, and other neighboring places when they could not enlist enough men at home. Such personal hiring practices resulted naturally from the fact that most lumber businesses were owned and operated by individuals and partnerships rather than by corporations.

Hiring was often simplified by shifting workers from logging camps to river drives or sawmills as they were needed. This arrangement benefited employers, workers, and lumbering communities, for it engendered a stability of employment that all too often was lacking in the industry. When companies were organized to handle timber from stump to finished lumber, a planned and regular transfer of labor could be carried out with ease. Camp and mill operations, even within the same firm, however, usually varied in size, and many firms did only logging or sawmilling; consequently, the seasonal flow of labor usually involved a change of employer.

In order to reduce the effect of the loss of men at harvest time, a prominent lumberman advised one of his associates to hire old-timers who lived in the community and put them to work in a mill which would be closed late in the summer, when the men could replace those who left other mills. The tremendous turnover in the crews of the Virginia and Rainy Lake...
company in 1916 caused one of its managers to conclude that it made little difference whether the men were forced to produce what he considered a reasonable output or were allowed to work at their own speed. Driving the crews led to desertion by those who were dissatisfied, and relaxing left the men to plod along as they pleased; in either case the production was only about two-thirds of what might be considered normal."

Raiding the working forces of competing firms was not uncommon. Although such a practice was frowned upon, especially by those who lost employees, its occurrence was not surprising in a business as competitive as the Lake States lumber industry. Eugene Shaw of the Daniel Shaw Lumber Company at Eau Claire, Wisconsin, complained to a railroad in 1906 that "nefarious methods are being employed by alleged loggers and lumbermen . . . to 'gobble up' laborers . . . For instance, your trains . . . are visited each trip up by Agents of the various logging and lumbering concerns . . . who industriously try to hire men . . . who have engaged with other Companies." The writer also objected to the activities of a rival who was luring workers by offering them an extra twenty-five cents a day. When the latter concern first located in Eau Claire, its manager obtained Shaw's wage scale, claiming that he was "desirous of paying the same wages for similar work." Such pirating seemed a gross abuse of a fellow employer's confidence, but workers no doubt felt that the employer got what he deserved for conspiring to hold down wages.

Little evidence has been found of the extensive importation of immigrants under contract. Knapp, Stout and Company, which engaged in large operations in west-
ern Wisconsin, imported laborers from Europe in the mid-nineteenth century, prepaying their expenses and letting them work for their passage. Some workers were brought from Canada to meet the labor shortage during the Civil War. Occasionally French Canadians were brought in for special work for which their experience fitted them, such as getting out large timbers. Some foreign workmen, however, were unsatisfactory. One employer complained about the Austrians and Montenegrins he had hired in Duluth; they could not speak English, did not know how to log, and seemed intent on eating enough meat to make up for all they had missed in the old country. Contract immigration was forbidden by Congressional acts passed in 1885 and later as concern increased over the growing migration from southern and central Europe.16

AS THE LUMBER INDUSTRY grew, it became increasingly clear that recruiting was best done through separate agencies organized for that purpose. An employment office was started by a disabled veteran in St. Paul in 1867. When the postwar boom gave way to the hard times of the 1870s, however, employers turned away extra men. As operations developed on a large scale in the next decade, lumbermen’s associations were organized to deal with a variety of managerial problems, including the study of the labor market, recruitment, and the black-listing of job jumpers. The larger companies, which usually were in constant need of replacements, maintained their own labor offices. Private employment agencies as separate businesses appeared in many cities in the 1880s, but they were not generally used by the lumber industry until the following decade. In 1897 the West Duluth Saw Mill Experts’ Association invited filers, sawyers, engineers, and millwrights to join its ranks, and it simultaneously offered to recommend skilled workmen to employers. Although this may have been a workers’ organization, it probably was an employment agency parading under another title. By the turn of the century, in some areas employment agencies were recruiting more workers than were being placed by direct application of man to employer.17 Shortly before World War I the Wisconsin industrial commission found that hiring for logging camps in that state was done mainly through employment offices in St. Paul, Minneapolis, and Duluth, although some workers came from Chicago and Milwaukee.

Employment agencies in the larger cities secured men not only for the lumber industry, but for work on railroads, in mines, and in other industries which employed large numbers of relatively unskilled workers. Those who were looking for jobs applied to the agencies and were dispatched to firms which needed them. The worker usually paid a fee of one dollar. There was no charge to the employer, although he often advanced fees for penniless workers and deducted the sum from the first wage payment. Agencies appear to have been used more frequently by logging camps than by sawmills because the former were more scattered and more difficult to reach than the latter.

Although the employment agencies often rendered important services both to laborers and employers, at times they did little more than fleece the lumberjacks. Some agencies advertised widely for men and attracted to an area far more laborers than were required. A few extracted fees

17 Minneapolis Tribune, June 16, 1867, July 13, 1868; Globe (St. Paul), January 30, 1881; C. M. Oehler, Time in the Timber, 41 (St. Paul, 1948); Mississippi Valley Lumberman, October 12, 1894, p. 21; November 23, 1894, p. 23.

162 MINNESOTA HISTORY
LUMBERJACKS did their own laundry, using water heated over campfires

from applicants and sent them to logging camps which did not need them. Employers occasionally failed to estimate their needs carefully or they sent orders to several agencies and then refused to hire all the men who responded. In some cases there was collusion between employment agencies and logging camp foremen to increase the rate of turnover and the resulting number of fees they could split. Agents who had this objective in view sent men to camps where they were employed only until they had accumulated enough credit to cover agency fees and transportation charges. Then they were fired to make way for members of a new gang who would have a similarly short tenure. 

Public agencies helped establish contact between employers and prospective employees. State boards of immigration contributed to this cause as early as the 1850s when they began to promote migration from Europe. The Wisconsin board of immigration gave the lumbermen more direct assistance in 1890, when it listed lumber companies that were hiring men and published wage scales. The board also lured men from Iowa, Illinois, Indiana, and other states. The first free public employment office in the Lake States was established by the city of Superior, Wisconsin, in 1899. Two years later it became part of a state system which included offices at La Crosse, Milwaukee, and Oshkosh. Duluth opened a municipal office in 1901 after “the usual well-grounded complaint that the laborers were ‘fleeced by the unscrupulous employment agents’ in collusion with foremen in the lumbering camps and on the railways.” A state office was set up at Minneapolis in 1905. Michigan opened offices at Detroit and Grand Rapids the same year. The

March 1959
Duluth, La Crosse, and Minneapolis offices did an especially heavy business in placing lumber workers.¹⁹

Employers tried in many ways to keep workers on the job after they were hired. As early as 1882, an employers' association moved to black-list any man who twice deserted. Such a plan implied the availability of surplus men, the best of whom might be selected. During periods of full employment, such a scheme did little good. In 1894 and again in 1900 lumbermen tried to reduce midseason desertion by requiring prospective employees to sign contracts binding themselves to work throughout the entire season, but this only created discontent among the men.

Job jumping by workers whose transportation had been paid by an employer or an agency was particularly irritating. One manager on whom this trick was tried filed charges against three men for obtaining money under false pretenses, and they received jail sentences of ten days. Employers found that job jumping could be reduced by hiring only men who had packs which could be kept in the camp office until the owners had worked long enough to pay their fares. Employment agencies accomplished the same thing by checking baggage and sending the checks to the employer. The Minnesota legislature attacked the problem in 1901 by passing a law which made an employee's refusal to work out the value of his transportation or similar benefits a misdemeanor punishable by a fine of not exceeding twenty-five dollars and imprisonment of ten to sixty days. The law specified that there must be intent to defraud, but it went on to say that an employee's failure to perform labor or render service should be prima-facie evidence of intent to defraud.²⁰

In an effort to curb job jumping by providing attractive working conditions, many camp foremen hunted for capable cooks, bought good food, kept the wanigans well stocked, and tried in other ways to keep camp morale at a high level. The Guerney Lumber Company in northern Wisconsin found that showing motion pictures during the evenings and on Sunday afternoons reduced labor turnover and kept the men from carousing at Hurley and other nearby towns. Incidental improvements se-


cured in short periods of labor union success often proved worth keeping after unions disintegrated. High cash wages usually did more than anything else to increase job stability. Mill operators who feared the lure of the harvest fields would prove irresistible to their workers often raised wages five to twenty-five cents per day late in the summer. Such advances, which sometimes amounted to twenty-five per cent of a worker’s salary, became customary as early as 1877, but even so the men often quit.

Withholding part or all of a man’s wages until the end of the season proved a very effective deterrent to excessive mobility. In sawmills it became customary to pay men who worked through the entire season a bonus of a certain amount per hour, perhaps ten to fifteen per cent. Men who stayed in logging camps more than a month or throughout the winter usually received a bonus of an added few dollars per month. While employers looked on this delayed payment as a bonus, the workers generally thought of it as an unjust withholding. Payment by time checks due in the spring or later also served to keep some lumberjacks on the job; either they lacked the money necessary to move or they thought it unwise to leave the service of an employer who owed them money.21

**OBTAINING** skilled workmen and training those who were unskilled were problems closely related to that of recruiting. The great majority of jobs in the lumber camps could be done by men who had grown up on the frontier or in homes where they had learned to handle an ax and a saw at an early age. One pioneer employer spoke of operating his mill “With 10 raw, green, thickheaded Irishmen to take lumber that is passing back from the saws.” Since the ratios of skilled to unskilled workers varied from firm to firm, and definitions of what constituted a skilled employee differed greatly, it is impossible to make a dependable estimate of the proportion of the labor force which was above the common level. Lumber manufacturers who testified before a tariff inquiry of 1893 and 1894 estimated their skilled labor at anywhere from five to ninety per cent of the total. The average estimate of twenty-seven per cent corresponded closely with a summary by the Minnesota bureau of

labor in 1902, which indicated that twenty-nine per cent of the state's lumber workers were skilled.  

During all phases of the industry's history, employers complained that competent workmen were scarce. Many employers agreed with a writer who exclaimed in 1874: "Better pay largely for skilled labor and dextrous manipulators than have inexperienced toil rendered gratis in any phase of the work." On many jobs, the dependability of the worker was as important as his skill, and the tirades of some employers about incompetence might better have been directed at irresponsibility.

Many requests for qualified workers, including cruisers, scalers, millwrights, mill managers, and engineers, as well as the more frequently employed teamsters and sawmill operatives, went out from the Lake States to Eastern associates in the lumber industry. But the fact that a man came from the East did not mean that he necessarily knew all about the business. Wisconsin sawmill operators laughed at early arrivals from Pennsylvania who bagged their sawdust and hauled it to a marsh for dumping, not realizing that such care was not customary on the frontier. On some occasions instruction went from West to East, rather than vice versa. Eugene Shaw, for example, told his uncle in Maine how to make bark marks, and sent him samples of those used in Wisconsin.

In most operations, little attention was paid to training workers. Ordinarily, a man appeared, was asked by a foreman what he could do, and was put to work with little or no instruction. He drew on previous experience and common sense while learning by watching his fellows, profiting from their comments, caustic or otherwise, or from his own mistakes. Occasionally boys served as apprentices, especially in sawmills and in woodworking plants. Most of the lumber workers, however, became identified with the industry in their youth, drew on their ingenuity, and gradually developed special skills until they were experts at their craft. Much of the logging and driving throughout the era of Lake States lumbering was done by small firms with relatively little power equipment, and it therefore depended on the physical strength and common skills of frontier settlers. Because it used extensive mechanical equipment, milling required highly trained sawyers as well as many unskilled lumber handlers, especially during the decades of maximum production.

During the century beginning with the 1830s, when lumbering was a major industry in the Lake States, the shortage of workers was due to many factors which were typical of frontier communities. Low wages, unpleasant working conditions, and military as well as marital problems often combined to discourage men from seeking work in logging camps and sawmill towns. Employers tried in many ways to overcome these adverse factors as they advertised for men, improved working conditions, and adjusted wages to attract employees, and then struggled to hold those who turned in a good day's work. A reasonably successful solution of the constantly recurring labor problem was necessary for an industry which was not only a major factor in the development of the Lake States, but an important source of lumber for the fast growing Northeastern quarter of the nation.

Henry H. Crapo to William W. Crapo, April 12, 1858, Crapo Papers, Michigan Historical Collections; Replies to Tariff Inquiries, published as 53 Congress, 2 session, Senate Reports, nos. 438, 439 (serial 3187); Minnesota Bureau of Labor, Eighth Biennial Report, 262 (St. Paul, 1902).

B. Wait, "In the Lumber Woods," in Lumberman's Gazette, January, 1874, p. 11.

George W. Hotchkiss, History of the Lumber and Forest Industry of the Northwest, 294 (Chicago, 1898); Eugene Shaw to M. G. Shaw, April 8, 1895, Shaw Papers, owned by the Eau Claire Public Library.

THE PICTURES which illustrate this article have been selected from the extensive collection of logging views owned by the Minnesota Historical Society. Those on pages 153, 161, 163, and 164 are from a group presented by Helen C. Barton. The kitchen pictured on page 160 was in a Bovey and DeLaittre lumber camp near Aitkin.