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RAFTING DAYS ON THE MISSISSIPPI

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In this brief sketch of rafting on the Mississippi River it will be possible to relate only a few high lights of this interesting activity. The surroundings of these early lumbermen were the primeval forests with their birds and mammals. Indians in their canoes could be seen gliding over the waters of rivers and lakes. Indian villages with smoke curling skyward from their camp fires were common sights. Into this wilderness of more than a hundred years ago the age of industry was just beginning to penetrate.

The Mississippi River was indispensable as a carrier of logs to sawmills located in towns along the banks of the river as far south as St. Louis, and of sawmill products to these lower river towns. In the late thirties and forties of the past century the rafting of logs and lumber was in an experimental stage, but not for long. The ingeniousness of the Yankee combined with that of many good immigrants brought about developments in rafting methods that were little short of miraculous.

In the early years logs were formed into a raft by the "lock-down" method. This system was eventually abandoned for the more efficient "boom brail" method. The "lock-down" system was cumbersome and wasteful. In making up this type of raft it was necessary to drill two or three holes in each log to hold the logs in place and bind the raft. This wasted about ten per cent of the timber. By the seventies the "boom brail" type of log raft was rapidly coming into use. This raft was easier to make up and was much sturdier; it eliminated the waste of the older process. The "boom brail" raft had a rectangular framework of heavy booms on the outside of the logs. Each such brail averaged about thirty-two feet in width and five hundred feet in length. The logs were placed in this framework so that they overlapped. The whole brail was made rigid by diagonal cables or chains. At times a second layer of logs was placed over the first. Brails of logs were lashed together to form a large raft which might contain some one million board feet of logs. A raft of this size would cover about three acres. Needless to say, great skill was required to handle such a mass of logs as it floated down the stream.

Not until the eighties were log rafts regularly towed, i.e. pushed, to their destination by sternwheel towboats. It was then possible to "drop a raft" from Beef Slough, just south of Lake Pepin, to Rock Island in three and a half days, and to St. Louis in five days. Occasionally a log raft would be broken or wrecked and many of the logs would be scattered along the banks or drifted away and were lost.

For many years sawmill districts of western Wisconsin and eastern Minnesota lacked wagon roads and railways. Most of these mills were located on tributaries of the Mississippi. These sawmill operators were obliged to construct their lumber into rafts which could be floated down the rivers. The tributary streams had many rapids and falls and were, in general, not navigable for steamers. Although it is not certain when the first lumber raft was taken down the river, there is evidence which indicates such activity as early as summer of 1831, when a raft of lumber was reported to have been floated from the region of Menomonie, Wisconsin, to Prairie du Chien. By 1838 lumber was delivered in St. Louis by this method. It was not long until every town on the river from Prairie du Chien south became something of a lumber market. Since much lumber was carried into the interior regions by wagons, towns which were situated on railroad lines served as the important distributing points. Such towns in Iowa soon handled more than one-half of all the sawmill products as lumber, shingles, lath, and posts. Thus the mills of the Lake States were essential factors in building towns and cities and in expanding the farming area throughout the prairie states.

Floating lumber down a river which had a steady flow was difficult enough, but to send it down rivers with swift rapids and dangerous falls was extremely hazardous. This called for construction of strong rafts and most expert handling. As the lumber came from the saws in the mill it was made up into cribs on a "cradle" in an adjacent shed. In constructing the cribs of lumber a heavy framework of timber or "grub planks" was laid down, and upon this framework, about sixteen feet in width and thirty-two feet in length, lumber was piled to a height of twelve to twenty courses or tiers. This was held in place by "grubs" or short poles placed in holes in the "grub planks." Binding planks were placed across the top of the crib when completed, and made fast to the "grubs." At least one heavy thirty-two feet long sweep oar was later fastened to the heavy planks on each end of the crib to aid in steering.

After this work had been completed, the cradle was tipped and the crib slid into the water. Individual cribs were then fastened end to end, forming a "string" of as many as twenty-four units. When these strings had been floated to the Mississippi they were fastened to other strings, making up rafts which might be from eight to eighteen strings wide. The size of the raft was increased with the passing years. Before 1860 a large raft contained up to five hundred thousand board feet of lumber, but in the late seventies some rafts contained nearly three million board feet and covered from three to four acres of surface. In addition to lumber, many rafts carried deckloads of planks, lath, shingles, and other wood products. One of the largest rafts ever taken down the Mississippi River was towed by the "Saturn II" in 1901. It was sixteen strings wide,

each string containing forty-four cribs of twenty courses each. This raft was 270 feet wide and 1,450 feet long. It contained nine million feet of lumber, truly a massive amount of product in one cargo. It would have required approximately nine hundred freight cars of that period to have transported this by rail.

As already mentioned, most of the sawmills were located on rivers and streams which were tributary to the Mississippi. The longest water course to be run before reaching the Mississippi was the Wisconsin River. The mills on this river were located above the Dells. The river had an almost endless series of falls and rapids, with current varying from ten to twenty miles an hour. To make possible the running of rafts over dams and rapids, sluice-ways of heavy timbers were constructed. These sluice-ways were laid at angles varying from fifteen to thirty degrees. The water which poured over these slides carried the rafts downward with the "speed of an arrow." It was dangerous employment, and many lives were lost and rafts destroyed. As the raft approached the slide of a dam or falls it was made fast in the eddy above and taken over in sections, usually one crib at a time. As the cribs reached the lower water level they were again assembled into a string. When the crib shot over the dam the men who guided it grabbed the "sucker line" which was strung lengthwise along the center of the crib. The angle of some sluices was so steep that the speed carried crib and men completely below the surface of the water. The Kilbourn dam on the Wisconsin River was the most dangerous part of the journey on this stream. It was estimated that about five per cent of the lumber passing over this dam was lost.

The success of guiding rafts to the Mississippi markets depended chiefly upon the pilots who possessed the necessary skill, courage, and knowledge of the river channel, and could weather storms which might arise. These men were essential to the lumber trade of the Mississippi region and drove hard bargains with the mill operators. They had to be dependable for they were entrusted with the products of the mills, and in some cases, with the actual sale of cargo as well as paying off the crews at the end of the run.

Before the sixties, rafts were carried downstream by the current. This required considerable manipulation of the sweeps or oars as well as poling. During the Civil War years steamboats displaced this slow and cumbersome method. The early towboats were clumsy sidewheelers, which in the seventies rapidly gave way to the stern-wheelers. Guiding a heavy raft 1,400 feet long required the services of an expert. A "bowboat," a small steamer made fast at the bow of the raft, aided the pilot on the towboat to follow the channel. Upon signals from the pilot in the large towboat, the bowboat moved the forward end of the raft to port or starboard as required. The "Pittsburgh", a towbarge 258 feet in length, was considered the best stern-wheeler on the upper Mississippi. During

the late eighties and early nineties, when the shipping of lumber down the river was at its height, fully one hundred stern-wheelers were engaged in this business.

The rafting crews, known variously as "roosters", or "river rats", were perhaps the hardest set of men in the entire lumber industry. Many a lumberjack did not consider them proper company and refused to associate with them. Although they were rough and tough, they were not known as a criminal lot. Their greatest diversion was drinking. They "liquored up" when they reached their destination with the rafts, and "liquored up" again when they arrived at the mills awaiting another trip down the river. While on the down river journey these men lived in makeshift huts or small tents on the rafts. Usually a separate hut was provided in which meals were prepared. Raft pilots strongly objected to structures which were large enough to catch the wind. Even a slight wind could make it difficult to follow the channel and to avoid islands, sand bars, shallows, blind sloughs, bridge piers, and snags.

O. H. Ingram, a sawmill operator of Eau Claire, relates in the summer of 1860 some of his experiences as lumber salesman, while traveling with a raft of lumber from his mill to the river markets. As they approached a town, Ingram would take a skiff and go on ahead to inquire about prices and demand. If prospects were poor, they would float down the river to the next town and make further inquiries. Wherever the market was good the pilot would stop, and buyers would select the kind of lumber and other products needed to care for their demands. As a rule the whole crib or even string was sold at a time. When the river was unusually muddy, the lumber had to be washed, which was a broom-and-water operation. As Ingram sold the lumber he would send groceries and other goods to their company store in Eau Claire, or cash if he received enough, to the mill operator. In his letters to his partners he gave instructions as to the kind of lumber to saw.

The last raft of lumber to be taken down the Mississippi River left Hudson, Wisconsin, for Fort Madison, Iowa, in August, 1915. The cargo of some four million five hundred thousand feet of lumber was towed by the "Ottumwa Belle" with the "Pathfinder" as the towboat. As this raft moved slowly down-stream past the high bluffs and flats, and the sound of its whistle died away in the distance rafting on the Mississippi became another closed chapter in the history of the great river.