

EDITED BY JOHN ELY BRIGGS

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# **Over the Rapids**

Almost as by magic the canoes of Indians and traders, which for years had quietly glided up and down the Father of Waters, gave way to the steamboats and barges of modern commerce. While Iowa was still a Territory and before the advent of railroads, steamboat traffic on the Mississippi had become the principal means of transportation for the produce of the great valley. As the country developed, steamboating grew into a major industry with a rapidity seldom if ever paralleled in the history of transportation. There was glamour and pride of achievement in life on the Mississippi in those virulent days.

On the Upper Mississippi there were two rapids which, when the river was in its lower stages, seriously menaced navigation. In river parlance they were known as the "Upper" or "Rock" Rapids above Rock Island and the "Lower" or "Des

Moines" Rapids, located a short distance above the mouth of the Des Moines River between Keokuk and Montrose. Of the two the Des Moines Rapids constituted the more formidable obstacle. According to Robert E. Lee, who made a detailed survey of both rapids in the autumn of 1837 for the Department of War, the Des Moines Rapids extended a little over eleven miles and had a fall of over twenty-four feet. There the Mississippi flowed, he reported, "with great velocity over an irregular bed of blue limestone, reaching from shore to shore, at all times covered with water, and through which many crooked channels have been worn by the action of the current. Its longitudinal slope not being uniform, but raised at several places above its general elevation, divides the whole distance into as many pools or sections. The passage over these reefs becomes, during low stages of the river, very difficult, in consequence of the shoalness of the water, its great fall and velocity, and the narrow and winding channels through them; as the river rises, its surface becomes nearer and nearer parallel to a plane tangent to the highest of these points, its extreme fall is diminished, and the only impediment consists in the rapidity of the current."

When the river was at its lower stages these rapids baffled the earliest explorers and fur traders, and no doubt proved a barrier to the redmen as well. Father François Xavier, writing in 1721 from hearsay, states that a "league above the mouth of the

Moingona, there are two *rapids* or strong currents of a considerable length in the Mississippi, where passengers are obliged to unload and carry their pirogues". From this statement it would seem that even then, less than fifty years after the discovery of the upper river by Joliet and Marquette, there had come into existence a well-established custom of lightering boats over the rapids.

With the development of the fur trade a village of Sac and Fox Indians, with a considerable number of half-breeds among them, took up their abode at the head of the rapids about the year 1770. The chief occupation of these Indians was the service of guiding itinerant traders up and down the river and especially over the rapids. Luggage and merchandise were unloaded and the rugged braves, sometimes assisted by a mule but more often by their squaws, carried the cargo along the shore to the other end of the rapids. In return for these services they were paid in blankets, baubles, firearms, and whisky.

In 1803 the United States came into possession of the country bordering the Mississippi on the west. Two years later, during the summer of 1805, Lieutenant Zebulon M. Pike came up the river from St. Louis in a large keel boat propelled by sails and oars. On the morning of August 20th he arrived at the foot of the Des Moines Rapids. After having passed the first shoal with great difficulty he was met by a party of Sac lightermen consisting of four chiefs

and fifteen men in three canoes. With them was William Ewing, an Indian agent stationed at the head of the rapids, and Louis Tesson who six years before had obtained a Spanish land grant, set up a trading establishment, and planted an apple orchard near the Indian village. They "took out 13 of my heaviest barrels," wrote Lieutenant Pike, "and put two of their men in the barge to pilot us up."

Pike described the rapids as being eleven miles long, "with successive ridges and shoals extending from shore to shore. The first has the greatest fall and is the most difficult to ascend. The channel, a bad one, is on the east side in passing the two first bars; then passes under the edge of the third; crosses to the west, and ascends on that side, all the way to the Sac village."

In time keel boats, which were widely used by the immigrants who came to the Iowa country, were supplanted by steamboats. The Western Engineer was the first steamer to reach the Des Moines Rapids. Niles' Weekly Register for July 24, 1819, described her arrival at St. Louis and went on to say that the bow of this stern-wheel craft "exhibits the form of a huge serpent, black and scaly, rising out of the water from under the boat, his head as high as the deck, darted forward, his mouth open, vomiting smoke, and apparently carrying the boat on his back. From under the boat, at its stern, issues a stream of foaming water, dashing violently along. All the machinery is hid. Three small brass field

pieces, mounted on wheel carriages, stand on the deck. The boat is ascending the rapid stream at the rate of 3 miles an hour. Neither wind or human hands are seen to help her; and, to the eye of ignorance, the illusion is complete, that a monster of the deep carries her on his back, smoking with fatigue, and lashing the waves with violent exertion." The vessel carried an expedition sent by the national government to explore the Mississippi and Missouri rivers, and during the following summer of 1820 it proceeded up the Mississippi to the Des Moines Rapids but made no attempt to go farther.

Three years later the steamboat Virginia performed the epoch-making feat of ascending over the rapids, the first steam-propelled craft to accomplish the passage. This boat was about one hundred and eighteen feet long, twenty-two feet wide, and had a carrying capacity of about one hundred and sixty tons. She left St. Louis on May 2, 1823, bound for Fort Snelling with supplies. On the evening of May 6th. according to J. C. Beltrami, a noted Italian traveller who was on board, the vessel set out from Fort Edward but soon returned on account of being too heavily laden to "make a very difficult and dangerous passage at a place called the Middle of the Rapids of the Moine, nine miles above the Fort. By great good luck we escaped from a rock which might have dashed our steam-boat to pieces; it was only slightly damaged." The following day was spent in preparation for another attempt at negoti-

ating the rapids, probably by lightering some of the cargo over, and on the eighth the boat made the ascent "though not without difficulty".

Very soon, encouraged no doubt by the outcome of this first venture, other steamers attempted to run the rapids, and it is recorded that not all were as successful in their efforts as was the *Virginia*. The *Mandan*, after being on the river "forty days en route from New Orleans", arrived at the foot of the rapids, "which she attempted to ascend, but could get no higher than Filly Rock, on account of heavy draught and the want of a correct knowledge of the channel by the pilot." Later, however, her efforts were crowned with greater success and on at least one trip it is known that she reached Fort Snelling.

Within the next six or seven years steamboats became common on the river above the rapids and several began to operate on regular schedules. The business of river transportation gradually assumed the character of an organized industry. It appears that the Virginia, Neiville, Rufus Putnam, Mandan, Indiana, Lawrence, Express, Eclipse, Josephine, and Fulton were the first ten steamboats to go over the Des Moines Rapids and reach the head of navigation at the Falls of St. Anthony. Other steamers, including the Pike, Red Rover, Chieftain, Enterprise, Mechanic, Java, Shamrock, Mexico, Warrior, Dubuque, Winnebago, Wisconsin, Olive Branch, and the William Wallace, plied the Mississippi along the eastern border of the Iowa country. These pioneer

steamboats were commanded by such men as Joseph Throckmorton, Thomas F. Flaherty, John Shellcross, Henry Crossle, George W. Atchison, M. Littleton, James May, and J. Clark — names that are famous in the early annals of steamboating on the Mississippi. River transportation developed apace and became a very prominent factor in the marvelously rapid settlement of the Black Hawk Purchase.

Hand in hand with the growth of the steamboat traffic developed the business of lightering. By 1830 the Indians were being crowded out by white men, and five years later lightering had assumed the proportions of a stable, well-organized industry. Towns which became the seat of this industry naturally sprang up at the head and the foot of the rapids. In 1832 Jenifer T. Sprigg made a survey of the Half-breed Tract and laid out a square mile at the head of the rapids on the Tesson land grant and another in 1833 at the foot of the rapids for town sites. The commercial importance of these places, where Montrose and Keokuk are now located, was noted in a letter from John W. Johnson to the Secretary of War in 1833, and the comment was added that during periods of "low water the steamboats cannot pass that rapid, and are compelled to unload at those two places, which makes those situations more valuable than any other part of the reservation".

With respect to steamboating over the rapids the

depth of the water was classified in four stages, each presenting essentially different conditions. First there was the "high stage" during the spring and early summer months when all boats went over the rapids fully loaded. At this stage, of course, lightering was not necessary. At the "normal stage" the smaller steamboats did not need to resort to lightering, but the vessels of deeper draught were compelled to unload at least a part of their cargo on to lighter-barges which they then pushed over the rapids. The lightermen were employed simply as stevedores and were called "ratters". The river was said to be at "low stage" or "floating stage" when all steamers were compelled to unload and transfer their freight on lighters to vessels waiting at the other end of the rapids. Just before "low stage" was reached the steamboat companies were accustomed to arrange their boats above and below the rapids with respect to size and the amount of draught, those of deepest draught below and the lighter boats above in order to take advantage of the shallower water of the Upper Mississippi. The fourth, or "very low stage", was too low even for the lighters to operate and at this stage freight had to be transported around the rapids on land. In the earlier years the freight was carried along the river bank on the backs of men and burros, while the passengers walked, but after roads were built four and six horse wagons were employed for freight and the passengers rode in handsome stagecoaches. Still

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later the construction of a railroad again altered the method of portaging.

The lightering business was a seasonal occupation which seldom lasted more than three months when the river was at low stage, usually during the months of July, August, and September but sometimes beginning in June and lasting until November. A majority of the men engaged in lightering disdained to take up any regular occupation during the remainder or greater portion of the year, preferring to loaf until they could again find employment at their favorite occupation or "profession" as they considered it. Perhaps a few would condescend to work several weeks in the winter putting up ice or to do odd jobs at the brewery to obtain free beer. In the spring they would go out into the hard maple forests which skirted the river all the way between Montrose and Keokuk, and help the half-breeds make maple sugar.

In running the rapids the lighters were loaded with great care under the personal supervision of the pilot or a trustworthy assistant. First a row of sacks, barrels, or boxes was laid the entire length of the boat down the center. Then wings were built on each side. Every precaution was taken to see that the cargo was properly balanced. Frequent measurements were made with a hook-gauge to see that the water line was not too near the top of the boat at any point. The loading also depended upon the stage of the river above low water mark and upon

the character of the cargo. If the material being handled was light and bulky the space in the hold of the lighter was sometimes filled to capacity, in which case a bail-way had to be left at intervals to enable the crew to bail out any water that might seep through the bottom of the boat.

The lighters were manned by experienced crews, generally consisting of three men — two oarsmen, one on each side, and a third, called the "gouger", who manipulated the sweep-oar at the stern as on lumber and log rafts. In addition, a special rapids pilot was in charge.

Piloting a Mississippi River steamer in the old days was nothing less than a fine art, and the rapids pilots were masters of their craft. They possessed marvelous skill, amazing knowledge, and resourcefulness equal to almost any emergency. They knew the exact location of every shoal, ripple, swirl, ledge, rock, and snag in the entire eleven miles of channel. They were absolutely familiar with every feature of the rapids in high water and low, in the dark as well as in the light. Indeed, that was part of their business and their success depended upon the accuracy of their knowledge and their skill in manipulating the vessels.

Intense rivalry existed among the pilots, and many a reputation was made by some act of heroism or marred by some circumstance over which the pilot had absolutely no control. Occasionally bitter jealousies sprang up and malicious trickery was re-

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sorted to in order to play even with the other fellow. Pilots have been known to roll a small boulder off the stern of the boat at some strategic location in the channel where a hated rival on the next boat coming down would be likely to get "hung up" on it, to his great surprise and consternation.

Running the Des Moines Rapids was always dangerous and scarcely a day passed without some narrow escape on the rocks, while almost every year witnessed a major accident frequently involving the loss of life and boats. As early as 1828 the Mexico struck Steamboat Rock but managed to navigate as far as Nashville before she keeled over. The wreck lay there partially submerged for forty years. The Mechanic and West Newton met a similar fate on Mechanic's Rock, while the Cornelia, the Northwest, the J. W. Van Sant. and the Alex Mitchell were also wrecked in the rapids. Many a proud packet has been "hung up" on the rocks and floated off by sinking a lighter-barge on each side, fastening them securely to the vessel, plugging the holes in the sunken barges, and then pumping out the water. Thus the steamboat was lifted sufficiently to free it from the reef. Only the most foolhardy captain ventured to subject his craft to the perils of the rapids during the "floating stage" and then only under the most urgent circumstances. On such occasions the steamer was lightened as much as possible and a "sound and buoy" route was laid out in advance. This was done by a rapids pilot who pre-

ceded in a yawl, sounding every foot of the way and setting buoys at short intervals.

There were many famous rapids pilots, but among them the names of "Sip" Owens, John Barber, Joshua Gore, Valentine Speaks, Robert Farris, and his son, Charles H. Farris, were prominent as men of conspicuous ability. The latter held the record for taking a steamer over the rapids in sixty-one minutes.

The downward freight consisted principally of sacked wheat, oats, potatoes, onions, a little corn, and considerable "Galena cotton", as the lead ore from the mines of Dubuque was called. The upbound freight was of an entirely different character, consisting chiefly of farm implements, stoves, machinery, salt, coffee, sugar, and occasionally some gold coin to pay Indian annuities at the government agencies. Immigrants' belongings — a motley lot of odds and ends such as household furniture, bedding, and livestock — made up no small part of the northward traffic.

It was not unusual to see such boats as the *Muscatine*, with Captain Jim West in charge, steaming down the river with her decks loaded to the guards and pushing from one to five barges loaded with grain. The formation of these flotillas was as follows: if there was only one barge, it was pushed directly ahead of the boat; if two, they were lashed side by side as a pair ahead of the steamer; if three, they were arranged with one ahead and a pair be-

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#### THE HEAD OF THE RAPIDS

THIS MAP IS REPRODUCED FROM A SECTION OF A MANUSCRIPT CHART MADE IN 1833 BY J. T. SPRIGG IN CONNECTION WITH HIS SURVEY OF THE HALF-BREED TRACT. AN ORIGINAL DRAFT OF THE CHART IS IN THE CALEB DAVIS COLLEC-TION OF HISTORICAL MATERIALS IN THE KEOKUK PUBLIC LIBRARY

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hind, all in front of the bow; four were placed two pairs tandem in front; in case of five there were three in front and one lashed to each side of the steamer. Large steamboats have been known to handle as many as fifteen loaded barges. As may readily be seen, this amount of traffic created a tremendous business for the lightermen. When the river development was at its peak in the early seventies, the average annual cost of handling the freight over the rapids amounted to about \$500,000.

In the fall when traffic was heaviest and the river was low it was no uncommon sight to see from fifteen to twenty palatial steamboats lined up at the wharves, both at Keokuk and Montrose, awaiting their turn to be lightered over the rapids. All these boats, with their lights, their crowds, and their music, presented a brilliant spectacle. The hustle and excitement of transferring the passengers, of loading and unloading the freight, and of "wooding up" the boats always furnished a thrill for even the most sophisticated.

During the busy season of the year competition in securing prompt services of lighters became very keen and the bidding spirited to a degree of recklessness. On ordinary occasions, when business was normal and lighter-boats and "ratters" plentiful, the loaders received from ten to fifteen cents an hour for transferring the freight from the steamers to the lighters and the oarsmen from one to two dollars a trip. When business was brisk and hands

scarce the loaders sometimes received as much as sixty or seventy-five cents an hour, the oarsmen from four to five dollars a trip, and the rapids pilots from ten to twenty-five dollars, according to their reputation and skill. The oarsmen frequently made two down trips and sometimes three in a single day, depending upon the demand for their services and their ability to get back to the head of the rapids quickly.

The trip down over the rapids was always exciting and often perilous. The oarsmen's duties, rather strenuous while they lasted, ended the instant the lighter touched the levee at Keokuk. If prospects for another trip were good, the men would leap for the shore and race to catch the bus that ran regularly between Keokuk and Montrose and which would haul them back to Montrose for a dollar, but when they were short of money or the chances of a second trip were poor they usually walked back. After the railroad was completed the oarsmen patronizingly helped the firemen "wood up" and carried water for the privilege of deadheading back on the engine.

At Keokuk the lighters were turned over to "ratters" who transferred the cargo back to the steamboat or to other steamboats and reloaded the lighters with up-bound cargoes. These lighters were then towed back up the rapids, at first by man power, then by oxen, later by four, six, and eight horse teams, and at last by steam towboats. Some-

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times the lightermen propelled the boat up the rapids by poling, bushwhacking, cordelling, or warping.

Isaac R. Campbell may be regarded as the pioneer in establishing the lightering industry. For several years he operated keel-boat lighters of fifty or sixty tons burden. In 1837, Daniel and Adam Hine succeeded Mr. Campbell in the lightering traffic, and introduced the regular lighter-boats which were specialized flatboats. With the increase in business a steam towboat, the *Dan Hine*, was put into operation and as time passed other small light-draught steamboats were added. These men continued in the lightering business until the St. Louis and Keokuk Northern Packet Company gained control.

The lightering season ended abruptly each year with the close of navigation on November 15th, when all marine insurance stopped. Consequently, as the end of the season approached, there was likely to be an increasing demand for lightermen, and the resulting high wages attracted many floating laborers who drifted in to take advantage of the situation. To meet this condition the "ratters" organized a kind of labor union, probably the first to be developed west of the Mississippi. Though it protected the local members against competition from outsiders, there was no effort to regulate wages or hours. Among themselves it was every man for himself. They staved on the job during the busy season as long as they could stand, often working as many as eighteen or twenty hours a day for weeks at a time

under the stimulus of high wages and good whisky. But woe betide any outsider who attempted to break into the ring for there was many a ruffian "ratter" who would stoop to any end in the maintenance of the closed shop on the rapids.

Originally, brawny Americans and numerous Irishmen of the rough and ready type constituted a large proportion of the lightermen and "ratters" as well as the roustabouts on the steamboats. They were a hard-drinking, loud-swearing, devil-may-care race. After the Civil War, however, the Irish were supplanted by ex-slaves who in a few years practically monopolized steamboat labor. On warm summer evenings these negroes used to come ashore with their banjos at Montrose and Keokuk, while their boats were waiting to be lightered, and play and sing the old plantation melodies until after midnight. They were fresh from the southland, freed from the tribulations and sorrows of slavery, but the old life was still vivid in their consciousness and they sang with hearts full of former memories and new inspiration.

Most of the lighter-barges were built up the Ohio River in the region of the "prime oak" timber, floated down the Ohio, and towed up the Mississippi to the rapids. On one occasion at least, during the winter of 1859-1860, John Bunker took a crew of men up the Des Moines River to a sawmill near St. Francisville, Missouri, where there was plenty of good native oak and built two fine lighter-boats which

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were christened the *Hawkeye* and the *Sucker*. These were floated down to Keokuk in the spring after the ice went out.

Staunch though the lighter-boats were, they were subjected to such terrific strain, hard usage, and continual scraping on jagged rocks that they were frequently in need of repairs. For this purpose two shipyards were maintained at Montrose — the upper one owned by John Bunker and the lower by George Anderson. For many years they did a thriving business.

When a boat began to leak dangerously, it had to be dry-docked for repairs. This was accomplished by bringing the boat alongside the shore, placing the ends of four long skid timbers under it, and hoisting the other end of the skids up on wooden horses. Cables were then attached to the boat and by the use of a "crab", which was a large capstan operated by a horse, the boat was hauled up the skids. The lower ends of the skids were then jacked up so that the repairmen could work with ease under the boat.

A crew of eight or ten expert boat carpenters made quick work of their job and the calkers took their turn. Each crack would be tightly filled with oakum. The sound of the calkers' mallets ringing merrily all day long with musical rhythm could be heard several miles up and down the river. After the calkers had finished their work, the cracks were daubed with hot pitch applied with a piece of sheepskin fastened to the end of a round wooden handle.

So efficient were the workmen that very seldom over a day and a half or two days were required for the entire process of repair. The boats, "as good as new", were then lowered back into the water.

In the course of time, as the development of the country increased the commerce on the upper river, there sprang up a demand for speedier and cheaper means of transportation over or around the Des Moines Rapids. Railroads were rapidly pushing westward, and a company was organized to build a line between Keokuk and Montrose. This road was begun in 1855 and commenced carrying freight around the rapids the following year. The coming of the railroad caused great consternation among the lightermen, for they realized that the whistle of the locomotive had sounded the death knell to their occupation. It was, indeed, the beginning of the end. Much to the relief of the public the railroad lowered the lighterage charge to fifty cents a ton, between a third and a fifth of what it had been. The Hine brothers, nevertheless, stoically continued to operate their towboats until the government canal was opened in 1877. That put an end to the occupation of lightering steamboats over the Des Moines Rapids, and a once flourishing industry now lives only in the memory of a few of the older inhabitants.

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