CLEARING FOR ACTION ON THE UPPER MISSISSIPPI

"WHY IS THE GOVERNMENT building two dams between Minneapolis and St. Paul when one would serve as well and be less expensive both to maintain and to operate?" This question was often asked forty years ago after the "Five Foot Project in Aid of Navigation" was authorized by Congress on August 18, 1894.¹

The writer was told by a former mayor of Minneapolis that the engineers originally recommended a single dam, but that the Congressman from the fifth Minnesota district insisted upon two, one of which should be wholly within his district. A single dam, at the lower site, would have been half in Minneapolis and half in St. Paul. The fifth district Congressman had no particular enthusiasm for river navigation, but he seems to have had a good eye for the pork barrel. After the upper dam, which was located only a stone's throw above the line between Hennepin and Ramsey counties, was entirely completed, with its lock and lock-keeper's house, at a total cost to the government of $736,851.71, the engineers had their way. The lower dam was built to full height, and the upper dam, which had never been put to commercial use, was blown up with dynamite in 1912 as an obstruction to navigation!

In early days the river was the most convenient approach to the city. Whenever there was a sufficient stage of water, steamers came up to the foot of the rapids below the Falls of St. Anthony. Many early settlers came by boat. After the coming of the railroads the channel was neglected and soon became clogged with sawdust and edgings from the sawmills at the falls. After the passing of the sawmills

¹ This project was modified by an act of March 2, 1907, which provided for a six-foot channel.
the question of reviving navigation was often discussed, but there was considerable difference of opinion as to its utility. Many of the prominent businessmen took the ground that, since railroads were necessary to handle north and south traffic in winter and east and west traffic at all times, there was no need of water transportation. Some said that steamboats and barges were things of the past, like the oxcart and the wooden plow, and that it would be a step backward to revive navigation. On the other hand, it was pointed out that water rates were generally much lower than rail rates, that certain classes of freight were well adapted to water carriers, that cities on navigable water enjoyed lower rail rates than inland cities, and that Minneapolis was the only city of its size in the country that did not have the advantage of water connections with the ports of the world.

The milling interests were generally opposed to relatively lower rates on grain than on manufactured products leaving Minneapolis, and were little interested in north and south traffic. There were a few ardent advocates of river navigation, but neither the business interests nor the people generally were greatly concerned about it. Such incidents as that mentioned at the beginning of this article tended to make the whole thing look like a plaything of politics, and many good citizens regarded it as such. Minneapolis had for a long time enjoyed preferential rail rates based on potential navigation; but the time came when the river was no longer considered even a potential competitor of the railroads and Minneapolis was coming to be regarded as an inland city not entitled to preference.

Such was the state of affairs in 1912 when the Minneapolis Civic and Commerce Association decided to make a thorough study of the question. It undertook to settle, if possible, once for all, whether the city would benefit by the use of the river; and to determine what, if any, encouragement should be given to efforts to improve the channel, pro-
vide a water terminal, and put boats on the river. Accordingly, a committee of fifteen was appointed from the membership by the president, the late Douglas A. Fiske, with the writer as chairman. It was decided first that the chairman should make a tour of the Ohio and Missouri rivers, and of the Mississippi as far south as New Orleans. He was to observe what use was being made of the great river and its branches by cities that already had the advantages of a usable channel and terminal facilities, and to ascertain what benefits, if any, were resulting from such use.

At Pittsburgh it was learned that the canalization of the Monongahela River had been a very great advantage to shippers along its banks. This river is much smaller than the upper Mississippi and has a lower stage of water in midsummer. Although the channel is paralleled by railroads on both banks, most of the coal and other heavy commodities go by water because of cheaper rates. Barges and towboats of large size were constantly moving up and down the channel, and the aggregate tonnage ran into hundreds of thousands of tons per annum. This is an exceptional case because there are important coal mines on the banks of the river, but it seemed to answer in the affirmative the question: Can

*The original committee appointed in 1912 was made up of the following persons: James C. Andrews, Alex E. Clerihew, Wilbur F. Decker, William de la Barre, L. S. Donaldson, Charles D. Gould, Walter Gregory, H. R. Lyon, G. H. Partridge, Samuel R. Van Sant, E. C. Warner, C. C. Webber, and Theodore Wold. Messrs. Archer, de la Barre, Gould, Gregory, Partridge, and Warner dropped out in the following year, and Charles F. Splady, R. W. Chadbourne, C. F. Gotshall, George C. Merrill, H. M. Pilcher, F. C. Shenehon, J. L. Record, and L. H. Brittin took their places. Many of these men were too busy to give much time to the work, but they were practically unanimous in their approval of the final report. Mr. Webber was outstanding in his devotion to the cause, and he was largely responsible, with W. W. Morse, S. S. Thorpe, J. L. Record, and other businessmen and city officials of Minneapolis and St. Paul, for putting boats on the river. Aldermen John Peterson and Josiah Chase were among those who took an early interest in the project and were tireless in working for river transportation and channel improvement.
water compete with rail transportation when conditions are favorable?

It was learned that the cities visited had all built and were maintaining their own terminals. They often encountered difficult problems, especially on the Ohio, because of the great range between high and low water, Cincinnati having a range of over seventy feet. At Memphis the municipal terminal is on a lower level relative to city streets than at Minneapolis. Much of the transferring at New Orleans is made directly from barge to ocean-going craft without the aid of municipal terminals. Barges were in successful operation on the Ohio and on the lower Mississippi. The line between Kansas City and St. Louis was found to be operating with difficulty because the channel had a depth at that time of less than six feet in many places.

It was found that the problem of maintaining a nine-foot channel on the lower river was a difficult one because caving banks and great quantities of silt at times of high water often built up bars in a single night where there had been ample depth the day before. By the use of mattresses and riprap work on the bends this condition was, however, being gradually overcome by the government engineers. It is confined largely to the lower river and scarcely exists at all on the upper river because there is less sediment there and a more uniform flow.

Wherever successful navigation was maintained, as on the Monongahela, the Ohio, and the lower Mississippi, not only was there a large saving in water rates, but much lower rail rates were in force than elsewhere. Potential navigation often had a favorable effect on rail rates, but actual navigation was far more effective.

After the completion of the Panama Canal, Minneapolis lost much west coast business because of cheap ocean rates. Cities hundreds of miles west of the Atlantic seaboard were able to ship their products to Atlantic ports by rail, and
thence to the Pacific coast by water, for less than Minneapolis could ship by the all-rail route. Since the Panama Canal, a government project, had injured the trade of Minneapolis, it seemed no more than fair that the government should improve the channel of the Mississippi as a partial compensation. With rates on the upper river comparable with those on the Ohio and the lower Mississippi, Minneapolis could still compete with eastern cities for south and west coast business.

A city at the head of navigation on any waterway is in an advantageous position because of its relation to trade with the hinterland. Whatever benefits were to be derived from such a position on the upper Mississippi plainly belonged to Minneapolis and should be utilized to the fullest extent. Because of lack of floods and sediment the upper river should be less costly to improve and to maintain than the Ohio, the Missouri, or the lower Mississippi.

These were some of the considerations which convinced the committee that river navigation would be an advantage to Minneapolis, and that every possible effort should be made to have the channel improved, dams and locks built, and harbor facilities provided.

The committee was so impressed with the advantage of municipally owned terminals that it proceeded at once to have a bill introduced into the state legislature authorizing a bond issue of five hundred thousand dollars for a municipal terminal at Minneapolis. This sum was cut to three hundred thousand dollars by the legislature before it passed the bill at the session of 1913. At this point it was discovered that no public body had power to proceed with the construction and operation of river terminals at Minneapolis. The committee decided that the city council should be given this power and the bill was so drawn. Neither the city council nor the city engineer had asked for any authority or money for the purpose until the committee brought up the
matter. Thereafter a harbor committee was appointed by the city council and it co-operated very effectively with the Civic and Commerce Association committee in taking steps toward the establishment of a municipal terminal. Before the city authorities decided to make any improvements at the foot of Washington Avenue, the earlier committee employed a civil engineer to take levels and make a preliminary survey of the possibilities of a rail connection at this point. One of the two possible approaches then pointed out was finally adopted when the connection was made several years later.

The old steamboat landing, owned by the city, was much reduced in area by the establishment of harbor lines by the government engineers. At the urgent request of the chairman of our committee these harbor lines were re-established to give the city an unbroken front of more than a thousand feet and an increased area of something more than sixteen thousand square feet of space available for buildings and equipment. The harbor wall was finally built along this re-established line.

The condition of the channel for a distance of about six miles above the Omaha Bridge in St. Paul was extremely bad. Edgings and sunken logs were so interwoven as to make dredging very difficult. Apparently the government had no plans for immediate improvement, but it was persuaded by members of the committee, who did much prodding and frequently visited engineering headquarters, to produce a usable channel before the high dam was completed.

The city council, very wisely, was in no haste to take final action in the matter of a municipal terminal, for opposition to the project had by no means ceased, but condemnation

---

3 This bridge was for many years the actual head of navigation on the Mississippi. The movement started by the Civic and Commerce Association led, very definitely, to the revival of navigation between St. Paul and Minneapolis, and to the restoration of Minneapolis as the head of navigation on the river.
proceedings were started in 1914. The old public landing was made the nucleus of the terminal and contiguous lots were acquired in almost exact conformity to the recommendations of the committee, dated January 15, 1914. On February 13, 1914, the city engineer presented plans for a harbor wall 1,333.9 feet long on the re-established harbor line, and on February 20 he was directed to proceed with the work. The committee was instrumental in persuading the government engineers to revise the channel project to include a turning basin opposite the proposed terminal, and to hasten dredging operations.

In view of the general acceptance of the advantages to Minneapolis of river navigation at the present time, it is difficult to believe that the project was so little favored twenty-five years ago. Soon after I began to haunt the city hall as an advocate of municipal terminals, one of the elderly conservative aldermen called me aside and quietly advised me to drop the matter and not to risk my reputation in the community by being connected with such an impractical and visionary scheme as the revival of navigation. One of the largest contributors to the Civic and Commerce Association, a prominent miller and highly respected citizen, canceled his subscription because the association had in his opinion been so unwise as to interest itself in such an impractical proposition. It should be said, however, that many who at first looked upon it with disfavor, and some who advised against it, later became active supporters of the plan for the establishment of a barge line.

When the committee had done what it could to obtain appropriations for river improvement, encourage the building of a municipal terminal, and create sentiment in favor of river navigation, it made its final report and left the matter in the hands of businessmen who had come to see its advantages. The matter was taken up by a very capable group of men who overcame tremendous obstacles and finally suc-
ceeded not only in putting boats on the river, but in securing the adoption of a nine-foot channel project and an efficient government-operated barge line.

In June, 1937, more than twenty thousand tons of river freight were landed at the Minneapolis terminal and upward of two million gallons of gasoline arrived in April, 1938. River navigation is now coming into such favor that a plan for extending the service above the falls, by the construction of two more locks, is receiving serious consideration. But this article deals only with beginnings. An account of these later developments would make another—and a very interesting—story.

Wilbur F. Decker

Christmas Lake
Excelsior, Minnesota