WATERWAY **OPENS NEW RIVER ERA**

Quickening Lakes-to-Gul **Traffic Realizes Dream** of Discoverers

By Joseph U. Dugan

WO and a half centuries hav passed since the great French explorers, Marquette, La Salle, and lo'iet, penetrated the wilderness of the Illinois and Mississippi valleys and gave to the world a vision of a vast and rici domain which some day would be teem ing with life and commerce. It was the dream of these brave adventurers that the natural advantages of a waterway linking the great lakes and the Gulf of Mexico would eventually be realized. That dream has come true. The Lakes-to-Gulf waterway is an accomplished fact. The shipping commerce of twenty-two of the richest states in the country may be floated up and down the great marine highway which is the heritage of the middle west.

The planning of a vast corps of engineers and the expenditure of a total of \$102,500,000 by the state of Illinois, the Chicago sanitary district, and the federal government were necessary to the accom plishment of this gigantic project. The first link was the construction by the sanitary district of the ship canal from Chicago to Lockport at a cost of \$75,000,000. The state of Illinois expended \$20,000,000 in furthering the project, and finally the federal government took over the work of completing the waterway at a cost of \$7.500.000

The formal dedication of the completed waterway, a ceremony in which Secretary of War Dern, Speaker Rainey of the house of representatives, Gov. Horner of Illinois, Mayors Kelly and Walmsley of Chicago and New Orleans, and business and civic leaders of the middle west participated, heralded to the world that the heart of the continent, in terms of traffic, has been put on salt water through the



the work of construction was com pleted in record time

Discussing the significance of the waterway recently, William Allen, business and civic leader of St. Louis, spoke as follows concerning one advantage of the new waterway to this section of the country

"The land-locked interior states have been handicapped by expensive rail hauls to the seaboard. The use of the waterway will reduce the freight bill of the shippers of these states and enable them to compete on equal terms with industries located near the seacoast, which long have enjoyed the advantage of low cost transportation by water.

Another St. Louisan, James E. Smith, chair-

..... LA SALLE -1679-1682. BOONE'S TRAIL-1775. GEORGE ROGERS CLARK-1778-1779 LEWISANDCLARK-1804-1906 SALT LAKE AND OREGON TRAILS SANTAFE TRAIL. O CENTERS OF POPULATION

It has been predicted by Lieut. Col. Daniel 1. Sultan, one of the army engineers in charge of completing the waterway link. that in future the tonnage of freight moved from lakes to guif will reach 5,000,000 tons a year. Since the opening of the waterway last spring, it is true, the tonnage actually moved has been far below that figure; so far below, in fact, as greatly to disappoint many of those who aided and supported the long struggle to bring to completion that maximum use of the waterway cannot be expected until the problem of getting interfering bridges removed has been ended. At present, as a striking example, the Inland Waterways corporation, known as the federal barge line, must break up its tows of two, four, and six barges abreast at Ottawa because of a bridge at Morris, Ill., which permits a clearance of only one barge. This



The J. M. White, considered the finest of the old time river passenger and freight. packet boats.

medium of 3,300 miles of water routes between the great lakes and the Gulf of Mexico through the great Mississippi valley. The waterway opens up a new trade route to Central and South America, and for the millions who live in the middle west it gives a new lease of life to the usefulness of the great natural water highways of this domain.

The immensity of the engineering prob-1em which United States army engineers solved in completing the project is best illustrated in the vicinity of Joliet, where are located the largest of the construction works, the Brandon road pool and ship locks. The huge pool extends from the end of the Chicago Sanitary canal at Lockport lock to the Brandon road lock, four miles below in the Desplaines river.

The Brandon road lock has a 31 foot lift, while the dam includes retaining walls 2.000 fect long, six sluice gates, twenty-one Taintor gates, ice chutes, and head gate structures for the possible future construction of a power house 500 feet in length. Concrete retaining walls extend along both sides of the river upstream from the

dam. The cast wall varies in height from 40 to 15 feet and is two and one-third miles long. The west wall has a height of 23



The latest model barge "towboat" with its pilot house on a movable crane. The vessel is Diesel engine powered and has a propeller.



This picture of the same "towboat" shows the pilot house raised to permit the pilot an unobstructed view of the river ahead.

feet and a length of 1.8 miles. The walls are hollow at the base to act as inter- pilots of today are the masters of any of the romanticized steamboat men of the cepting sewers for Joliet.

The surface level of Brandon pool is above the level of the business center of Joliet. This necessitates a precaution against flood waters. Six gates at Brandon road pevent floods by making it possible to drain the entire pool within three hours. Another gigantic task in completing the Brandon road operations was the drilling and blasting away of the old Economy Light and Power dam No. 1 and the removal of the Ruby street bridge.

In the sixty-mile stretch of the waterway between Joliet and Utica there are four big pools with dams and locks. Considering the vast size of the undertaking,

Louis chamber of commerce, said recently: Our shoe people here are shipping goods to Honolulu by water for what it costs to ship them by rail to Denver."

River commerce in the romantic days of the packet steamboats reached a peak of glory and importance in the waning years of the nineteenth century and then died, a victim of the intense development of the railroads and in some degree of internal mismanage

ment of the steamboat transporta tion industry, a mismanagement born of the failure of the independent boat operators to eliminate extravagant and wasteful methods in the dawning age of strict economy and razor-edge competition. The lack of a connecting link between the great rivers and the centers of industry on the great lakes was another glaring disad vantage which the steamboats could not overcome

It is unlikely that steamboating. s it was when such magnificent floating palaces" as the J. M White, pictured on this page, plied the Mississippi, ever will be revived.

Instead, if the promise of the nagnificent new Lakes to Gulf

waterway is to be fulfilled, a new form of river commerce, which already has begun, will grow in importance until the rivers once more will be teeming with the moving evidence of a once vast tide of trade reborn. Attuned to the modern need for economy and maximum efficiency, river traffic today is composed of huge steel and wooden barges, lashed together and pushed up and down stream by motor powered boats. Although these power vessels push instead of pull their cargoes, they are called "towboats." Experts of river navigation are required to pilot the "towboats," and for that reason the river

bygone era.

Long strings of heavily loaded barges, pushing slowly through the treacherous, winding rivers, lack, of course, the majesty, beauty, and romance of the ornate double-smokestack passenger packets of former days; but if the promise of reborn river commerce is fulfilled, only sentimentalists will continue to bemoan the passing of the old busy packet days on the rivers. And the sight of long barges, heavily laden with steel, hardware, dry goods, beer barrels, and general merchandise, bound from the great industrial cities of the lake region to New Orleans and thence to the South American continent, is not entirely without a romantic aspect.



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Another type of modern barge "towboat" which is in regular service today on the new waterway. It is one of the federal barge line fleet of power boats.

prevents the big tows from coming up to Joliet and Lockport. In conference with a federal representative, however, officials of Morris recently agreed to removal of this obstruction by the first of next March.

The Inland Waterways corporation is the only regular barge service to date using the waterway. Barges of the line have made two trips a week regularly since the navigation season opened.

Following the pioneering voyage of the Sea King, a motor yacht which was the first craft to carry passengers and package freight over the waterway last February, a voyage sponsored by the Chicago Tribune, the first large commercial trip was made by a flotilla of barges of the federal line from New Orleans to Chicago.

Up from New Orleans this inaugural flotilla was pushed through the waters of the mighty Mississippi, past scores of large and small river ports to the confluence of the Mississippi and Illinois rivers, up the Illinois to Utica, the entrance of the new Illinois waterway, and then up the sixty-mile course to Joliet and the connection with the sanitary ship canal leading to Chicago and Lake Michigan. At the connecting points the waterway is served by a splendid system of locks and dams.

Since that inaugural voyage the new era of inland water transportation has begun and a new chapter in the history of national transportation has opened. The era of the old-time steamboats, now dead, was called by Garnett Eskew, river historian, "The Pageant of the Packets." The dawning era may some day be known as "the golden bridge of barges." And in the meantime shippers of the middle west have not had to wait for redevelopment of river commerce to receive benefits from the waterway. Railroad rates on wheat, coffee, sisal, and other products from the south already have been lowered because of the threatened waterway competition.

