

Minnesota Works Progress Administration: Writers Project Research Notes.

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Wallace

MINNEAPOLIS. MINN.

SUBJECT: Upper Mississippi Barge Lines and nine foot channel.

By P J Wallace

Notes on the Improvement of
the Mississippi for
navigation purposes.

The care and improvement of the Missippipi has been always a subject that concerned the national government. From the earliest days the War Department and its corps of engineers have made surveys designed to prevent floods and to stimulate navigation.

As early as 1789 the Federal Government began to expend money to effectuate the purposes above referred to. Between 1789 and 1886

1927 the government had expended the sum of \$57,000,000 and by 1927 it had spent on improvements \$160,000,000. Besides this amount, states and municipalities have spent large sums for steamboat landings and docks.

There is the difficult problem of flood control. The deepening and daming of the river channel for navigation purposes is another one and the utilization of potential power is the third. Plans for controlling the flow of water in the river affects both navigation and flood control while works designed to regularize the channel

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Barge Lines and 9ft Channel

depth by locks and dams raises the problem of the use of power thus developed.

The first expenditure of public money was used for the removal of snags and other obstacles to navigation. There was some dredging and removal of rock by excavation. Then in the *** forties wing dams began to appear. Wing dams were intended to diarect the chief flow of the river into a relatively narrow channel. They increase **xcouring* and discourage the formation of sand bars in the river. By 1927 there were three hundred of these wing dams in the thirty miles of river between St Paul and Prescott, four hundred in the forty miles between Wabasha and Winona and many more down the river to its mouth. Wing dams are constructed usually of willow matresses and broken rock.

The above methods of improvement of the river lasted until the eighties when the first attempts to regulate and increase the flow of water and improve the channel. They were little more than attempts to assist nature to preserve a navigable river by removing obstructions to traffic. Beginning in I880, however, and again in I889 and I907 projects were approved by congress for reservoirs and storage dams in the Upper Valley. Six such storage reservoirs were developed at a cost of a million and a half dollars. In I926 it was estimated that they could increase the stage of water at St Paul a foot and a half during low water periods. The following year the Mississippi River Commission made public its conclusions that the use of reservoirs for flood control would be more costly than the use of levees and diversion channels.

Much of the improvements were made so far were piecemeal projects built in the worst spots, the rest of the river, except for the removal of obstacles, being left in its natural state. A Mississippi River Convention, meeting at St Paul in 1877, memorailized congress for a permanent channel from St Paul to St Louis, this channel to be five feet deep an eight foot channel from St Louis to Cairo, and ten feet from there to New Orleans. In 1878 a general plan was adopted for the improvement of the Upper Mississippi, the project to provide a channel four and a half feet deep to St Louis.

Work continued on this project for a generation with contraction of the waterway by a closure of chutes, dredging, revetment work, construction of wing dams and reservoirs.

About 1907 this project was said to be complete. It was then recognized that if the channel was to offer any effective competition to railroads it should have a depth of more than four or five feet. Jim Hill said in this year that a fifteen foot channel was desirable and an eighteen foot one would be twice as good. Few people listened to this and some sensed that because of his connection with the railroads, the old Empire Builder made the request too extravagant, purposely. Because of the revival of interest in river transportation a new project was adopted providing for a six foot channel from Minneapolis to St Louis by the same methods of construction that had been used to secure a four and one half foot channel. By 1920 twelve million dollars had been spent on this project and by 1925. it was estimated to be xixxy forty six percent complete.

It was recognized by this time that the six foot channel would aid only types of river boats that were very nearly obsolete such as log rafts and packets. Barge lines required ,as the Ohio channel

experiences proved, channels eight or nine feet in depth and of sufficient width

depth to facilitate maneuvering of the fleets and the towboats.

This precluded use of wing dams and other affairs that narrowed the channel. The best opinion was that a wide and deep channel should be created by means of locks and dams. However much opposition developed to this from outside sources but by I930, backed by the most skilful and persistent demands of the waterway interests, the Minnesota representatives in congress succeeded in having written into the Rivers and Harbors Billwhich was signed by President Hoover in I930, a proviso for the nine foot channel in the Upper Mississippi.

In the I93I session of congress a report of the engineers was handed to in. This report provided for the construction of twenty seven locks and dams above St Louis. Four of these dams were already substantially completed. The total cost of this project was estimated at \$124,000,000, and the annual maintenance at \$1,750,000.

But so far the project has only been authorized and the money appropriated for that purpose was considered inadequate. The bill introduced by Congressman Mansfield of Texas and Senator Shipstead, authorizing thexisterexament a bond issue of half a billion to complete the project failed of passage in the closing years of President Hoover's Adminstration.

When the Roosevelt Adminstration embarked on its gigantic program to relieve the depression and reduce unemployment in I933, the completion of the nine foot channel project was one of the first to receive consideration. Under the Public Works Adminstration program money was earmarked for this purpose and a way opened for the prosecution of the plans submitted by the Army engineers. Within a few months contracts had been let for the dams and locks and work is proceeding rapidly. It is expected that the project will be

completed early in 1938.

Before election last year and again on his visit to Minnesota this year, President Roosevelt, speaking at St Paul, promised to come here in 1938 and take a trip down the Mississippi river. The value of the national advertising the river and its transportation favilities and scenic advantages will gain from such a tour cannot be overestimated.

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Life on the Mississippi, S.L Clemens (Mark Twain)

LOCKS AND DAMS

Twenty six locks and dams have been authorized by Congress to be built between Alton ,Ill, and Minneapolis. Locks have been completed at 24 sites and are under construction at three sites. The few unfinished locks and dams will be completed in I938, after which the water in the channel will have a minimum depth of nine feet the entire distance between Minneapolis and St Louis. The charge of the construction of these locks and dams is vested in the United States Army Engineers.

The purpose of the locks and dams is first to retard the flow of water during flood periods so that the disasters which occur in the lower Mississippi Valley periodically would be prevented, or at least minnimized. The second purpose is to back up the the flow of the river so that slack water pools would be created and a minimium depth of nine foot of water would be held in the channel.

The project is not for the purpose of producing electrical energy. Only two of the dams develop power and both are of the non-movable type. One of these is known as the Twin City Dam ,which is 5.4 miles below the Minneapolis Municipal Terminal under Washington Avenue bridge. This dam was originally intended to produce power to be used in the Twin cities for lightxxxxx light and power purposes. This dam was built by the government and for a long time the residents of St Paul and Minneapolis had dreams of having their own electric light and power plants and be in a position to use electricity for lighting ,cooking ,heating ,power and other purposes at a price comparable to that charged by the public owned plants of Kansas City and Seattle.

A "joker" in the bill passed by 6 ongress authorizing the construction and the leasing of the dam provided that the city that the lease the power from the dam must have receiving equipment such as poles and wires and transformers. As this would run into millions of dollars a special bond issue would have to be put up to a vote of the people. This would give the power trust an opportunity to oppose the project and perhaps, defeat it.

Henry Ford appeared several years ago and promised to build a factory if he could lease the plant power site and dam from the government. The present Mayor of Minneapolis, Geo E Leach, was mayor at the time and vigorously opposed the leasing of the plant to Ford. Other advocates of public ownership also contended the building of the dam was due to the agitation for Municipally owned light and power plants in the two cities. But Ford's propaganda, that he would build a factory that would give regular employment to approximately I4.000 persons, had its effect and he secured a lease for fifty years to the great power site. The Ford plant was built and now uses most of the power. The surplus power is sold to the Northern States Power Company, a utility company which did not interpose any objection to the Ford proposition.

The lock on this dam was opened for navigation in 1917.

The other dam used for power purposes is located at Keokuk, Iowa.

At these two dams the lock "lift" is approximately 38 feet. A lock "lift" is the difference in the water level above the dam and below it.

The flow of water through a non-movable dam cannot be regulated and at flood tide flows freely over the top of the dam. Such a dam consists of a solid concrete structure ackross the stream or river.

On the other hand a movable dam consists of a base with concrete piers between which gates can be raised and lowered to regulate the flow of water.

The two types of gates used in the movable dams on the Mississippi are the "Taintor" and the "Roller" gate.

All the dams on the Upper Mississippi, with the exception of the power dams, are of the movable type. and have a lift ranging from 5ft 6 inches to 20 feet.

How boats pass in the night or day. Connected with each dam is a lock which consists of two concrete walls paralleling the course of the stream. The distance between these two walls is usually IIO feet. There are two gates - the upper gate and the lower gate, each distant from the other about 600 feet. Both gates are closed while a vessel is being raised or lowered and water is poured into the lock or taken out as the case might be. Only one gate can be open at a time. When the upper gate is open the water rises to a levil level with the pool above the dam. The same happens with respect to the pool below the dam when the lower gate is opened.

The completed locks and dams on the Upper Mississippi, at thes writing, are those at or near St Paul; Hastings; Alma, Wis; Fountain City, Wis; Winona, Minn; Trempaleau, Wis; La Crosse, Wis; Genoa, Wis; Guttenberg, Wis; Iowa; Dubuque, Iowa; Rock Island, Ill; Muscatine, Iowa; Burlington Iowa; , Keokuck, Iowa; and Canton, Mo.

The construction stage on projects June of this year were as follows:

Red Wing, Minn, lock completed, dam 26 per cent constructed; Lynxville, Wisconsin; lock completed, dam 62 percent; Bellevue, Iowa; lock completed, dam 56 percent;

Clinton, Iowa, lock completed dam 4I percent; La Claire, Iowa, lock completed, dam 35 per cent.

Besides the Twin City lock some of the others are the Hastings lock which is located 37 miles from Minneapolis, which was opened to navigation I930; the Red Wing lock is located 56. I miles from Minneapolis; the lock at Alma, Wis, is completed. It is IOO miles below the Minneapolis Terminal. The Fountain City Wis, is II4 miles from Minneapolis; the Winona is II4 miles from the Minneapolis Terminal.

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Topic: Upper Mississippi Barge Line and Channel By P.J. Wallace. For week ending Nov 25th 37

NOTES ON TERMINALS
ON UPPER MISSISSIPPI
BARGE LINES AND CHANNEL. .

Quays, Piers, Docks and Harbors are the names of landing facilities to which ocean steam rs and other floating craft is attached. Along the Mississippi the above conveniences are called "Terminals" and sometimes "Municipal Docks". While the word "Terminal" means end or extremity it is frequently used to designate the station at the end of a railway system. Because of the number of terminals in St Paul and Minneapolis it is no wonder that mid-continent people when they come to give a name to the ports at which barges load and unload on the Mississippi refer to the them as "Terminals".

Minneapolis and St Paul have fairly good port facilities when a comparison is made with others towns on the Mississippi. When the upper harbor on the Mississippi is completed Minneapolis well have many docks in the trade area where the milling and other great industries are located. Because it is at the end of channel development Minneapolis has only one terminal of commendable size viz., The Municipal Terminal, owned by the city.

W.H.RUtland, in an article in the Marine News of July of the present year complains that ,with but two notable exceptions, the towns along the river where the Inland Waterway Corporation operates its towns and barge lines, the municipalities have been lax in installing adequate port facilities. He states that the "Wharf boat idea still prevails in a number of communities, although its usefulness ceased to exist coincident with the time the government made the first appropriation to carry the nine feet channel depth project through to completion". He also points out that every Rhine, Elbe and Danube port is equipped with a full complement of port facilities, including waterfront warehouses and all the necessary implements for transhipping cargoes by mechanical means. As a consequence these rivers have the lowest freight rates in the world.

The Minneapolis Minneapolis has a municipally owned terminal that the city has Terminal.

every reason to be proud of. It is a terminal in the real sense of the word because it is at the head of navigation on the nine foot channel, at the present time. The city has shown that it is river conscious because up to the present time the has expended \$835,356.24 on this port.

This river and rail terminal is located on the Mississippi under the Washington Avenue bridge xxx at 22nd Avenue South and Washington. It occupies a total of I7 acres of ground ,extending from below St Mary's Hospital to the Northern Pacific *** railway bridge. It has a river frontage of 3,000 feet. The buildings were built and are owned by the city but are leased to the Inland Waterway Corporation, a government owned agency which operates the Federal Barge Line. The main dockhouse is 400' X 60'. There are 20 platforms 643' long. There is also a Radio station. There is a locomotive crane.

There is also a wharf barge. There is ample railroad trackage with a spotting capacity of 86 cars. There are special facilities for handling coal.

The platform has a covering 25' X500'. The warehouse is 50' X 225.

This terminal is capable of handling three times the freight at present sent and received by the barges. It was designed principally for handling package and miscellaneous freight. This terminal was opended with the arrival of the first tow August 25,1927.

St InuI928raigrain Transfer terminal was built by the Archer Daniels - Midland Company with a capacity of IO,000 bushels per hour.

St Paul Terminals St Paul is well equipped with terminal facilities.

It has a magnificent passenger boat landing designated "Lambert Lahding" in honor of the late Col Lambert ,wo did so much to promote the building of the nine foot channel. This terminal is constructed of reinforced concrete. It extends 700 feet from Robert Street to tSibleytStreet along the east bank of the river. It will be completed this year at a cost of \$125,000. Capt Roy Streckfus of the steamer "Capitol" states that this is the finest and most practical boat landing on the entire Mississippi river system.

Beginning at the foot of Sibley St a new water level roadway extends for two miles along the rebuilt east bank of the river to the Municipal Barge Terminal. This roadway has a direct water level connection between the business district and the Barge Terminal. When completed it will cost the city \$365,000. This roadway will be named "Warner Road" in honer of Richmond P. Warner, who died Jan 5,1936.

The Municipal Barge Terminal, the construction of which bagan in 1928, is equipped with all the modern appliances for the handling of package and bulk freight except grain. When completed this will cost St Paul \$750,000.

The city has also a riverside grain terminal which represents an investment of \$190.000.

All of the above are under the control of the Port Authority of St Paul, a municipal commission , created under the terms of the Minnesota Harbor Act.

The properties were deeded by the City of St Paul to the Port Authority in 1934.

The Chicago ,Milwaukee, and St Paul Railway has connections withthe above terminals.

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MINNEAPOLIS.MINN.

Topic:Barge Lines and Deep Channel
By P J Wallace. December 9th 1937.

Notes on the rise
and fall of river
traffic on the Mississippi

Despite the fact that the present improvements on the river channel did not become effective until a very recent date, keelboats, rafts and steamboats did a thriving business until the construction of transcontenantal railroads diverted the trade east and west instead of north and south.

First the fur traders and explorers used the cance; then came the pirogue, which was little more than an enlarged cance , hewn out of a log. The bateau followed the pirogue. It was a little wider through the middle than the pirogue and had tapered ends. Under the name "Mackanac Boat" this latter type of boat was used on the upper river in the fur trade. From these primitive craft evolved the keelbaat which came into use well before 1800. It might be forty to eighty feet long and tem feet wide. It was built upon a keel with side planks and ribs. The crew usually numbered ten men and the load upstream was about three thousand pounds per man. It had sharp ends and had a flat bottom like the modern barge. In its heyday it was referred to as the clipper ship of inland navigation. It was propelled by poles , handled by men who walked from the prow to the stern as they shoved the poles against the bottom of the river and pushed the boat forward. Some times horse power was used and in a few instances sails attached to maste pulled the boat along.

In time, enlarged keelboats, Ioo feet long and carrying as much as one hundred tons of freight, were used. These were known as barges and had a captain, a steersman and a crew of about fifty, who propelled the boat by rowing, poling, towing or by the use of the sail as circumstances permitted.

In ISI4 Zachary Taylor brought a fleet of keelboats up the river with troops and supplies to Fort Crawford. Later Duncan Graham was commissioned by Lord Selkerk to load three keelboats with wheat, oats, and peas.from Prairie du Chien to his settlement on the Red River of the North. This tripo cost Load Selkirk six thousand dollars but it saved his colony from famine. During the twenties and thirties this class of vessel made frequent trips up the river to Fortt Snelling. George Davenport had a "line" of these boats on the upper river taking furs and lead and grain down the river and bringing back gingham, sugar , powder and rum. The keel boats were profitable and charged high freight rates, six or seven dollars from New Orleans to St Bouis, per huadred pounds and cargoes not hard to find.

Shipment by the keelboat was slowedcostly and hazardous. But until the coming of the steamboat it was the best conveyance yet evolved for the transportation of goods and the settlement of the west.

We are not here conserned with anything but the evolution of floating common carriers and the development of transportation on the river, but it might not be amiss to say that ramance was not lacking in the lives of he hard working , hard drinking , and frequently reckless and lawless men who operated the keelboats. They had often times to fight Indians and pirates and the early keelboatmen often proved more than a match for the agressors.

Comparatively few pilots and gamblers , dressed in black and wearing silk hats, and diamonds in their neckties , and pictures of fair lades embroider the period of the keelboats but there were lots of heroes and deep dyed villians. The deeds of the villians outlived those of the heroes, ashore and afloat. There were floating business establishments doing business with river boats and exaftxxkengxthex inhabitants along the shore. Timothy Fink, writing of a boat he was on during this period says: "There was kept a town *** the tavern, the retail and dram shops, together with the inhabitants,

and no small number of very merry customers, floated on the same bottom"

THE COMING OF In the decline of the keelboat marm era the inhabitants
THE STEAMBOAT

along the shore line becoming tamer and more civilized, abhorred the keelboat crews and welcomed the coming of the steamboat. One of the pioneers said: "We believe that steam has done more in producing a moral revolution in the West than perhaps all of the schoolmasters and most of the preachers combined".

When Robert Fulton astounded the people of the east when he navigated the Hudson with his steamship Clermont, he did not know how much his steam driven craft would have to do with the development of inland waterway traffic and the Mississippi Valley. Robert Livingston, who helped to negotiate the Louisana Purchase, became interested in inland waterways and Fulton's chief financial backer. The two soon had a viston of driving the keelboats out of business with their new contrivance. But they wanted a monopoly of steam transportation on the inland rivers. In furtherance of their desire they made application to the state legislatures of the west for this privilege.

Only one Louisana, granted the monopoly, which meant that Envingston and Fulton had the sole right of steamship navigation to the mouth of the Mississippi.

NICHOLAS ROOSEVELT When President Roosevelt delivers his opening address, from ENTERS THE SCENE aboard the government towboat anchored beside the

Minneapolis Municipal Terminal, to a crowd gathered to bid him Godspeed on his trip down the Mississippi in 1938, he will be able to dramatize he fact that an ancester of his inaugurated the first steamship service on the Father of Waters. For it was Nicholas Roosevelt, an eighteenth century ancestor of two Presidents of the United States, who built the first steamboat to operate on the western rivers. After surveying the river to New Orleans in 1809, Nicholas Roosevelt secured the backing of Livingston and Fulton in his enterprise. In 1811 he had built his steemship, appropriately

named the New Orkeans, at Pitsburg and started for the mouth of the river the same year. As Roosevelt's steam propelled ship moved down the river she was received with acclamation by the people along the way. But to some she brought fear. About the time she was due in New Orleans a terrific earthquake occurred, distroying islands and changing the course of the river in places. To the superstitous there seemed a strange relationship between a ship that puffed along under its own power without the brawn of man , and an earth that seemed no longer fixed.

This first steamship on the Mississippi was a crude affair ,but, nevertheless, the "Navigater," an early Mississippi River Publication, stated she made \$20,000 during her first years operation after paying interest on her \$40,000 cost. She sank in ISI4. But Fulton and Livington continued to build and operate boats until a man named Henry. MShreve, after whom Shreveport is named, entered into competition with them. Shreve built a steamship called "The Enterprise" and took a cargo to New Orleans in defiance of the Fulton-Livingston monopoly. His ship was seized and a case was instituted in the courts to determine the legality of the monopoly. At this time the British were threatening New Orleans and Andrew Jackson commandered Shreve's baat and put her master in charge. She was equipped with a field piece and shelled the British column. After this encounter with the British was settled , Shreve continued to operate his boat. He was offered a partnership with Fulton and Livingston but declined. He eventually won his case and established the principle of freedom of competition thus opening navigation on the Mississippi to anyone who cared to engage in it.

But this was not Shreve's only achievement. The Fulton -Livingston boats were modeled on the hulls of ocean going steamships. Their draft was too for the Ohio and Mississippi, demanding more water than there was in the channel.

Shrive conceived the notion of building a boat to fit the river instead of trying to findxing fit the river to the ships. Shreve modeled his hull on that

take form they saw a hull that sat on the water instead of sinking into it.

With so shallow a hull they saw no place where the machinery could, installed.

But Shreve put his engines and boilers on deck! More than that he built another deck on top of the first one -thus the double decker, the first of a type to become universal on the Mississippi. All this may not seem connected with the upper Mississippi ,yet it was Shreve's boat that created the steamboat as contrasted with the steamship, and made steamboat traffic practicable as far north as St Paul.

THE VIRGINIA

ARRIVES AT The first steamboat to make its appearance on the Mississippi FORT SNELLING

above the Ohio was named the Zebulon M.Pike which arrived in

St Louis, August 1817. The first boat to make the trip above St Louis was the Western Engineer. About 1820 it made a trip as far north as the rapids and then returned to St Louis.

It remained for the Virginia to open navigation on the upper Mississippi. In I823, the Virginia, a steamboat of over a hundred tons and I20 feet long with a 22 feet beam, exploded the prev general belief that steamboats could not operate above the rapids. The Virginia arrived at Fort Snelling, May IO, I823, with a load of stores for the soldiers at the Forttand a few passengers. She made the trip in twenty days and demonstrated for all time the feasibility of transportation of goods and passengers on the upper Mississippi.

But the population above St Louis was so scant that until I840 the only boats coming up to the head of navigation at the Falls of St Anthony were either chartered by the government to bring goods to the soldiers or the American Fur Company vessels engaged in the latter trade. But only a short time after I840 there were upwards of 40 steamboats making trips to St Paul every season.

HOW RIVER TRAFFIC Twenty years after the Virginia reached Fort Snelling DEVELOPED VALLEY.

saw steamboating well established. The next twenty years saw it reach its height and contribute nearly everything to the settlement and development of the Valley. In I840 the population of Minnesota was little more than 700. In I850 it had risen to 6,077 and in I860, keeping pace with expanding river traffic , the population had grown to I72,023. In I859, St Paul became a town of I2 to I5 thousand people. St Anthony and Minnespolis were growing rapidly and towns like Red Wing , Prescott, Hastings Maiden Rock, Lake City, Stockholm, Pepin and Read's Landing were growing rapidly daily increasing in population.

In I856 the numerous boats on the river were unable to handle the increasing traffic. Two boats left St Paul a day at their time but the business done by the meager population was too heavy for them to handle. In I857 Winona reported the arrival of I700 steamships in that years, some of them coming from such distant cities as Pitsburg, Cincinati, St Louis, Fulton City, Galena, Dubuque and St Paul.

In addition to the lead, the Indian and Military supplies of earlier years, the downstream traffic consisted chiefly of agricultural products - oats, wheat, flour ,barley, potatoes, cranberries and the upstream loads were chiefly made up of machinery for the farmers, drygoods and groceries. Before the opening of navigation in I860, at points between LaCrosse and St Paul 200,000 bushels of grain were awaiting shipment down the river and that by the opening of navigation it was thought I50,000 bushels more would be accumulated.

From the fifties on ,when settlers were pouring into Minnesota ,passenger traffic was even more profitable to the steamboats than freight.

UPPER MISSISSIPPI The greatest profits in the steamboating business on the STEAMBOAT PROFITS

Upper Mississippi were made in the fifties and sisties.

All the boats of the Minnesota Packet Company made substantial profits. The investment in one of their boats was between \$20,000 and \$40,000 and the average life of the craft was about five years. Merrick estimates that if a moderate sized boat made four trips between Galena and St Paul per month her profits should amount to \$22,500 or more. The navigation season being five months long ,her net earnings for the season should amount to \$56,300.

The net gains of the St Paul Packet Company(Davidson Line)in I865 were 249,000 dollars - an amount greater than the total capital of the company. In I865 the Muscatine made \$77,000 in the St Paul and St Louis trade and her sister ship, Davenport, made \$70,000 net. The Burlington, a sidewheeler of about 300 tons, which made ninteen trips between St Louis and St Paul, cleared \$70,000 for the season -nearly tweether original cost.

THE DECLINE OF If the course of the Mississippi were east and west, instead RIVER TRAFFIC

of north and south, perhaps a decline in its trade would never set in. The dense populations in the east found that they could get their supplies cheaper over the great lakes and quicker by the railroads. The east west flow of traffic ,after the civil war, was greatly stimulated by the development of trend a great grain export business to Europe. So long as the tend in trade, from the developing grain raising pratries and the mining districts of the West, was towards the Atlantic Coast and Europe, the east west route had a great advantage over the Mississippi. From Galena it was a few miles further to New Orleans than it was to New York, and the east west route to Liverpool was fourteen hundred miles shorter than the trip via New Orleans. The economic inactivity of the south after the civil war also helped to destroy traffic on the river. Manufactured goods the West meeded were to be found

in the east not in New Orleans, hence it was difficult to secure return loads and reduce transportation costs. Besides this the Mississippi is closed to transportation for several months every year. This gave a great advantage to the railroads which operated all months of the year. In addition navigation was considerably slowed down by low water.

Merrick, when he returned to the Mississippi in I876, said he found half a dozen railroad lines running out of the twin cities. But this fact alone did not contribute to the decline of the traffic on the river. In I879 Winona noted that 3,000 boats and I,300 barges passed that point in I879. But the high water mark was not reached until I892 when the passage of 5,468 boats were recorded. After I900 the big decline set in and in I918 there were less than 300 boats and still less barges.

The chief hope of the Upper Mississippi for a long time remained in the lumber and the grain trade The grain trade assumed important proportions in the sixties and seventies. But a prejudice prevailed ,amongst many shippers, to the shipment of grain by the southern route, because it was believed that the dampness and the heat of New Orleans damaged the grain. In 1880 one third of the grain shipped from St Louis went south by river but by 1900 only six per cent of the grain shipped out of St Louis went by river. The railroads were bidding this business away from the barges. As the railroad lines expanded westward into the grain producing areas the river suffered further.

The shipment of lumber declined after I890. The opening of the Panama Canal made shipments of lumber from the Pacific Coast and much cheaper to the populous districts in the east than from Minnesota.

But the greatest cause of the decline of traffic on the river were the railroads. Part of this harm was inevitable but much of it was deliberate. The twenty years from the sixties to the early eighties was the period during which the railroad net in the northwest was constructed and during that time

transportation on the river steadily declined. Not only did the railroads build lines across the river but they built then northand south paralleling the river. The railroad companies than started a rate cutting campaign and bought many terminal sites along the river and thereby hampered competition from boats and barges. Government reports showed that long stretches of waterfront that could be used for terminals were held by railroads. Navigation above St Anthony Falls was gradually eliminated by the building of the railroads in the district.

(More on how the railroad reduced rates to run out the Steamboats next week and how they raised rates after competition was eliminated. This will lead to the causes for the agitation to establish barge lines after rates to the landlocked middle west were boosted by the decision in the Indiana Rate case. Next week.)

The second

Very good!

Topic:Upper Mississippi Barge Lines & Channel By P J Wallace. Week of Dec 16th 1937.

Competition for business between

Railroads andRiver

The first railroad to enter thedTwin Cities did not connect this trade territory with the east or south. It was built first from St Paul to St Anthony, and thence westward across the farming districts to the Dakotas. Most of the material used in the construction of this first railroad, and later its equipment, came to St Paul on steambats and barges via the Mississippi river. The first railroads serving the Mississippi west of Chicago were built to Galena, Dubuque, Rock Ishand and other river points . Later they came as far as La Crosse and Winona, The transfer of goods to and from the boats was made at these points. Even Duluth was connected with the Twin Cities before Chicago and the eastern points were. This gave an eastern outlet via the great lakes to eastern markets before there was any rail connection between here and St Louis and Chicago.

AND sought to develop traffic from and via that city they had to meet the double barreled competition, i.e., the river from Dubuque St Louis and the south and the lake and rail routes from the east via Lake Superior. The railroads were forced to make rates to meet this water competition condition. This adjustment of freight rates between the Twin Cities and St Louis and Chicago had the effect of building up the industry and commerce of the entire northwest, including manufacturing and jobbing. As soon as interference with these adjustments took place there were upheavals which produced a long list of industrial dasualties and an undue burden on our basis industry - agrigulture.

THE FAMOUS
INDIANA RATE CASE. The strangle hold which the railroads managements
secured on vehicles of traffic operating on the Great Lakes (see I C C
reports 33ICC699) the failure of the old packet boats on the Upper
Mississippi to meet modern conditions, the rate policies of the railroads
soon made water competition ineffective. With this major factor
suppressed freight rates were steadily increased until the Interstate
Commerce Commission, in the Indiana Rate Case, decided Feb 14, 1922, that

"Water competition on the Mississippi River north of St Louis is no longer recognized as a controlling force but is little more than potential".

This put the entire midwest territory on a dry land rate basis.

Following this drawing decision freight rates throughout the

Upper Mississippi Valley increased from 33-I/3 per cent to IOO percent and more. North bound class rates from Chicago to the Twin Cities which were on a scale of 9I-1/2 cents first class were advanced to 98 cents for the same class. Class rates from St Louis to the Twin Cities which were on a scale of 96 first class were advanced to \$I.25 first class. The rates for all other classes were maised in relation to the first class rate.

Upper Mississippi industries ,particularly jobbing ,were then dealt a further severe blow by the Interstate Commerce Commission, which resulted in a rate adjustment whereby it bacame cheaper to ship directly from Chicago to points west, than to ship to upper river cities in carload lots, and thence in less than carload lots to the same western points. This seriously hurt business interests and the employment of raolroad labor in this territory. From being rate breaking points the Twen Cities were reduced to the status of way stations.

Let us see the effect of this decision of the I C C in the Indiana Rate case had on rates between the Twin Cities and St Louis and Chicago. In that celebrated case the I C C fixed the time for the new rates as July 1922.

For many years prior to June 1918 the first class rates from Chicago to the Twin Cities werex was 60 cents. After the Indiana Rate Case decision it was boosted to $91\frac{1}{2}$ cents on July 1,1922. The present rate is \$1.26.per cwt. This is an increase of 66 cents per cwt weight or 110% over the June ,1918 rate. The increases in other rate classafications over the 1918 rate are as follows:

Rates in cents per hundred pounds between Twin Cities and Chicago										
Prior to June 1918.	Class I 60	-			5 20	A 26	B 20	C 17	D 14	E I3
Present rates	126	107	88	69	47	57	41	38	28	22
increase over 1918 rates-cen Percent	ts 66	57 II4%	48 I20	44 %1769	27 % I35	32 %I 28%	2I 105%	2I I23%	I4 I00#	9 70%

The above rates were precribed in I.C.C Docket No.17000, Part 2

(I64 ICC I). Rates published effective Dec 3,193I. These rates were
not changed under the decision in the Western Trunk Line Class rates,

(204ICC 595), under which revised rates were published effective August 20,1935.

R	ates in between	cents Twin C	per hur ities a	and St L	unds ouis					
Prior to June 1918	Class I 63	2 52½	3 42	4 26	5 2I	A 26	B	C I8	D 15	E 13½
Present rates	145	123	102	80	54	65	47	44	33	25
Increase over 1918 rates-cen Percent	ts 72 II2%	70½ 139%	60 I43%	54 208%	33 160%	39 I50%	26 124%	26 144%	18	II= 85%

The above rates were precribed in Western Trunk Line Class Rates,

(204 ICC 595)published effective August I935. Very slight difference from I931
rates (I64 ICC I)

LAKE AND RAIL RATES INCREASE The effect of the Indiana Rate Case decision was even felt in the lake and rail rates. The rate on butuminous coak(a commodity essential to an industrial community) from Duluth Superior to the Twin Cities for many years priof to December I,1910, was 90 cents per ton. By successive increases the rate had been raised to \$1.85 per ton in 1932. The rates from the Appalachian fields to Duluth and Superior have been raised in similar proportions. Rates an iron and steel articles for many years were made with relation to water competition. The lake and rail rates ranged from Io cents to $I3\frac{1}{2}$ cents and all rail rates during the seasons of navigation, ranged from IO to I4 cents. These rates have steadily increased. December I,193I, they were $27\frac{1}{2}$ cents per hundred pounds from the Chicago to the Twin Cities. On that date they were increased by the mamagers of railroads from what they were, to 4I cents and 46 cents respectively, and on Jan 4,1932, to 43 cents from Chicago to the Twin Cities and 48 cents from St Louis.

Another serious blow to the Twin Cities was delivered by the Interstate Commerce Commission in its decision in the Fargo Rate Case (Fargo Commercial Club V A.&W.Ry.,98 I.C.C.6I) decided June 2nd I925. In this case Fargo and other North Dakota communities complained asked for a lowering of rates from Twin City points to North Dakota towns. It was pointed out that the rates to Moorhead were less than the rates to Fargo ,just across the Red River. The railroads were named the defendants but did not defend. But the Minnesota Railroad and Warehous Commission came to the defence of the rate structure, contending that it had a right to fix intrastate rates. The I C Commission upheld its own right to rule in intrastate as well as interstate matters. The result was that the rates were again increased and Minnesota communities had to pay.

Partly because of its landlocked position in the interior and partly because the Interstate Commerce Commission cancelled the priviledge Minneapolis possessed of forwarding flour at a through rate to Buffalo and storing it there for distribution in the east, this city has lost its position as the leading flour milling center in the nation. Because of the cancellation of this pr right of the Minneapolis mills to store flour in their own warehouses in Buffalo, the mibling interests were forced to erect new mills there, duplicating existing capacities at Minneapolis. In 1931 it was disclosed that the total freight charge on wheat forwarded from Duluth to Buffalo, milled into flour at the latter point, then shipped to New York maxé amounted to 27.83 cents per cwt, while flour milled in Minneapolis and shipped to New York costs 42.50 cents per bushel. This gives Buffalo an advantage of 14.67 cents over Minneapolis in the eastern market.

At one time the production of flour in Minneapolis was I/6 of the entire output of the country. In I9I6 more than I8,000,000 knsksks barrels of flour was produced in Minneapolis. Thereafter production began to decline until I934 when it only amounted to & 7,082,000 barrels. In I905 the flour and grist mill products were reckoned as 5I percent of all the factory products made in the city. While the flour output of Minneapolis declined Buffalo increased its flour production from 2,347,500 barrels in I906 to 7,722,900 barrels in I916 and I0,060,000 in I928.

An extract from the front page of the Buffalo Express of March 22,1925 is revealing. The headlines say:

"BUFFALO JUMDS TOFORE AS THE "BIGGEST FLOUR MILLING CENTER OF U.S."

"Minneapolis has been displaced from long established first position:Local output is rapidly and surely increasing"

In the course of the story under the above headlines we find the

following paragraph:

"It was pointed out by those in charge of the industrial bureau of the Chamber of Commerce that whenever Buffalo gains in a new mill or an addition to an established mill, the addition to the local production is taken away from the plants in Minneapolis. The Russell -Miller Company of Minneapolis, while keeping their own mill in Minneapolis, erected a mill in Buffalo last year, transferring their work to this city. Their own mill , was, therefore kept idle. The Pilsbury Flour Mill Company also moved their productive work to Buffalo in I924 by building a mill there".

The story then winds up with the following gem of truth:

"The most important reason for the shift of productivity to
Buffalo and the acendency of this city as the greatest milling center
of the country is the realization that it is cheaper and more
convenient to transport quantities of wheat from the northwest to
Buffalo than it is to ship flour from the mills of Minneapolis to
New York and other ports for export."

It should be borne in mind that prior to I9I8 the Minneapolis Chicago railroads published through rates from Minneapolis to all points east of Buffalo and Pittsburgh which were almost as low as the water rate from Duluth to Buffalo, plus the rail rate east of Buffalo. The slightly lower rate from Duluth made it possible for Buffalo and Duluth to expand and prosper along with Minneapolis. But the government order cancelling the favorable rail rates from Minneapolis had the effect of almost doubling the cost of transportation from this city. Because of the war this change did not make itself felt until I9I9. Then the real force of the change challenged the grain and milling interests of Minneapolis. They appealed to the railroads requesting the re-establishment of rates from this city to the

east that would preserve the Minneapolis market. A formal request was presented to the Minneapolis Chricago lines dated Sept I4, I920, and to the eastern lines Sept 25. I920. As a result of joint conferences with the different railroads an understanding was reached that the proposal be submitted to the Interstate Commerce Commission.

The adverse disision caused the shippers and business interests of Minneapolis to look into the possibility of transportation relief through the development of the Upper Mississippi. The study and analysis led them to the conclusion that a six foot channel would not be adequate for the needs of the Valley. They urged a program calling for a nine foot channel but this suggestion did not take root until 1924 when the Real Estate Board became alarmed over the unfavorable trend of business activity.

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Topic:Barge Lines and Channel.

By P J Wallace.week ending Dec 23rd, 1937.

REASONS WHY BUSINESS

CARRIED ON AGITATION FOR

DEVELOPMENT OF RIVER AS WATERWAY

The greatest single factor which determines the industrial prosperity or commercial life of any community is the cost of transportation. When that cost is out of line with other areas that are on a competitive basis, or is raised to a high level, commerce stagnates and the affected area suffers. These condistions prompted men in private, commercial and public life in Minneapolis, St Paul and other cities and communities in the Upper Mississippi Valley, to start a gr at campaign for the restoration of one great agency under which our industrial and agricultural live grew and prospered. The condistions which lead to this campaign for the development of the Mississippi as an artery of transportation are summarized in a leaflet issued in 1933 by the Upper Mississippi Valley Assossion , under an introduction by its president, Mr C.C. Webber. In this publication the following words are printed:

"We of the middlewest are in a pocket. Our manufacturers are so handicapped by adverse transportation conditions that they fond it difficult to compete with those manufacturers and distributers located at Chicago or east thereof. As a result the commercial life of the Upper river cities, affording important home markets for agriculture, is seriously threatened."

The undeniable facts are all too evident. Take the Twin Cities for illustration - those enterprises upon which these cities were builded have passed away or are, to a greater or less extent, moving to more favored locations. It is only necessary to call attention to what has happened or is happening to our lumber industry, flour milling, the manufacture to linseed oil, jobbing, and the like, to realize that no time must be lost in correcting present conditions unfavorable to the development of commerce and industry in the Twin Cities and other commercial centers in the upper Mississippi Valley if we are to regain our former position and serve the Northwest".

It might be here added, to what has been said in another part of thesennotes, that the rate adjustments which deprived Minneapolis of its position as a competitor with Buffalo and other eastern cities in the milling of flour, also injured the agricultural interests in its trade area. Minneapolis was the greatest premium market for wheat in the world. Because of the milling requirements here the millers paid premiums above the world market for the protien content of flour. This was a decided advantage to the wheat producer of the northwest, especially during the dry years when the production per acre is low, but, by a strange trick of nature, the protein content of the wheat is very high.

Besides this the territory contigous to Minnespolis has a special interest in the preservation of Minneapolis as an important milling and grain center. Because of diversification in farming in recent years animal feed and fertalizer is essential to the farm industry. The fertilizer content of wheat is substantial. In every IOOO MANNAN bushels of wheat, or 60,000 pounds, the by-product feeds supply 435 pounds of nitrogen, 480 pounds of phosphoric acid and 227 pounds of potash.

Mr Read ,president of the Minnesota Farm Bureau, who appeared **** at a hearing before the I C Commission, the purpose of which was to restore the pre war through rates to the east, stated that the agricultural interests represented by his organization - "have looked with much concern upon the diminution of the milling and grain industry in Minneapolis not only because it tends to reduce the competition in buying grain but because it tends to restrict the feed products that are by-products of the mills which are needed by the farmers. These by-products are used in diversified farming as feed and these feeds are essential to the welfare of the farmer".

It requires no eleborate argument to show how the whole vicious circle works to the detriment of the agricultural producers. First - the through rate published by the Minneapolis -Chicago railroads to the east, to compete with rail-water transportation is abolished (Gen Order U.S.R.R Adm effective Feb28, I920) Washburn Crosby, Pilsbury and Russell-Miller interests build Mills at Buffalo to supply eastern markets.

Production of Flour in Minneapolis Mills fell to fifty per cent of capacity in I924-5. Buffalo becomes leading producer of flour mill products.

Northwestern grain formsrsized one time routed to or through Minneapolis, now routed by rail to Duluth and by water to Buffalo. Feed products become scarder in Minnesota farmers trade area therefore higher in price. Cost of production of animal products in Minnesota rises and farmers margin of profit decreases unless he raises the price of his products to the consumer.

DEEP WATER RIM OF COUNTRY GAINS POPULATION GAINS POPULATION WHILE MISSISSIPPI VALLEY STATES LOSES

Under the last rearrangement of congressional districts, Mississippi Valley states lost I6 seats in congress. Each membership in the House

Representatives was based upon 279,712 inhabitants. This loss of I6 representatives indicates the failure of these interior states to keep pace with the normal growth of the country as a **chake**x whole by over four million and a half in population. During the same period, omitting inland districts of two states, the Great Lakes and seaboard states, made a net bein of 2I seats in Congress.

The seaboard and Great Lakes rim of the country is an area 50 miles inward from the coast line. There low cost water transportation is available. Although this area covers only I4½ per cent of the total land acerage of the country, it contains 45.I per cent of the population.

As contrasted with the loss of population by the states of the Mississippi Valley this deep water rim gained 5,874,000 between I920 and I930 above the average increase of the country as a whole, or 67.7 per cent.

STEPS TAKEN TO REMOVE ABOVE CONDITIONS AND DEVELOP MISSISSIPPI WATERWAY.

Because of the above and Other unfavorable conditions confronting business and industry here a group of Minneapolis shippers looked around for some remedy. They came to the conclusion that the Mississippi should be developed so that its floating craft six could compete with the railroads and the rail -lake routes east. The shippers wanted ,not an artery of transportation of the packet boat or keelboat days, but maximum modernized and developed to a commercially usable depth, upon which powerful motor towboats, pushing 2,000 ton steel barges, can carry freight at a much lower rate per ton that is now charged by the railroads.

These shippers urged a program calling for a nine foot canalization of the Mississippi from Minneapolis to the sea but this suggestion did not take effect until other business associations

became alarmed)

at the exodus of business from this territory. In the fall of 1924 REAL ESTATE BOARD THE Industrial Committee of the Minneapolis ENTERS THE PICTURE. Real Estate Board made a careful study of the business situation and came to the same conclusion as the Shippers as to the remedy to be wsed to correct the industrial trend. On January 6ath 1925 this board called a meeting at the Nicollet hotel of its own members, manufacturers, the city engineer and traffic men. This group agreed that if Minneapolis were to resume her rightful place amongst the progressive cities to the country actual navigation must be restorted on the river. On Jan I5, the Board invited Mayor Leach, City Engineer (now State Highway Engineer) Elsberg, Alderman J. H. Chase, Ald G. Lindsten, Lee Kuempel, Traffic Association, and J L Record of the Minneapolis Steel and Machinery Company. After this meeting a committee of 50 members , drawn from 200 shippers and manufacturers were appointed to push the program

Soon thereafter Mayor Leach called a meeting in the reception room at the city hall and appointed a committee to carry on propaganda for development of the river.

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Topic:Barge Lines and 9 ft Channel
By P J Wallace, week ending Dec 30.1937.

Steps taken to promote

development of Waterway

Upon the solicitation of the Minneapolis Real Estate
Board, J S Brodie, of the River Transit Company, brought his barges into
Minneapolis May 24th, 1925. This action re-established navigation on the
upper river and demonstrated Minneapolis was actually the head of
navigation.

In May of I925, Halleck W. Seamen, a member of the Inland
Waterway Corporation, came to Minneapolis and delivered addresses to
two groups of shippers and businessmen , forcefully advocating river
development. Shortly after this occurence a subcommittee was appointed
from a special committee on waterway development, and S. S. Thorpe of
Thorpe Brothers, was made chairman. This/sent Reuben Andreas
and W W Morse to Moline , Ill, and other upper river cities, to confer
with the representatives of the Federal Barge Line. When Mr. Morse and
Mr. Andreas returned, they submitted a report to the general committee.
The report recommended:

"In view of the extreme importance of this question to Minneapolis and to the northwest, that immediate steps be taken to bring about the operation of barge line service to Minneapolis".

August I4, I925, Cornish Bailey, representative of the national rivers and Harbors Congress, and Lachlan Macleay, secretary of the Mississippi Valley Association, and cooperated with the local committees in arousing interest in both St Paul and Minneapolis and throughout the northwest in river navigation. They spoke before nearly every lunguage luncheon club in the Twin Cities in favor to navigation as a cure for the transportation disabilities of this area.

On the 22nd of the above month General Ashburn, president of the Inland Waterways Association, came to Minneapolis at the invitation of the committee of business men, and addressed a meeting of people, interested in river transportation, at a luncheon at the Minneapolis Club. This established a basis of negotiations between the government and the businessmens committee in regard to extending the barge line here.

August 24 a meeting was held was held at the Nicollet Hotel at which Mr. Thorpe presided, and representatives of shippers and local businessmen's organizations as well as representatives from various cities and towns along the Upper Mississippi River attended. At this meeting the chairman was authorized, by resolution, to appoint nine representative men from the cities representative representative dat the meeting to carry on educational work for the re-establishment of the barge line service along the lines recommended by General T.Q.Ashnurn.

On November 24.1925. fifty four delegates, including Governor Christianson, Mayor Leach of Minneapolis and Mayor Newison Newis

They formally requested this corporation to extend the barge service from St Louis to Minneapolis. As the majority of the committee were from Upper River cities they offered to find \$500,000 to purchase equipment. The committee's recommendations were approved by the Board of Advisors and they transmitted the recommendation to the officials at Washington for approval.

The matter of building the deep channel had now reached the stage where pressure had to be brought on the proper authorities at Washington. When it was know, that the National Rivers and Harbors Congress would convene in Washington Dec 9 and IOth, approximately 25 representatives journeyed for the capitol to be present. Josiah Chase, then aldermen , was made chairman of a committee to see President Coolidge, Secretary of Commerde Hoover, Vice President Dawes, Secretary of War Dewight Davis, General M L Taylor, members of congress and other officers of the US Government. The other members of this committee were W W Morse and A C Wiprud of Minneapolis and Colonel Lambert of St Paul. They acted as special committee for the newly organized Barge Line Company and succeeded in securing a promise from General Ashburn and Secretary of War Davis that the government would operate the barges between St Louis and Minneapolis.

Ninkman The year of I925 was a notable one in barge line history because the initial spade work for the re-establishment of transportation on the river was tone. So much was done that, at a joint meeting of the organizations interested was held at the Nicollet Hotel Jan I9, I926. General Ashburn attended and gave an assurance that the government would give its support to the enterprise in the following words: "Within a period of five years we shall build up for you

a combined water-rail transportation system that will put you on an economic parity with the remainder of the United States and bring undreamed of prosperity if you will join us in undivided support and work with us one for all and all for one".

The traffic manager of the Federal Barge Line made several trips to Minneapolis and St Paul. He favored a larger fleet than was at present proposed and together with the representatives of the Barge Line Corporation secured a further promise from the authorities at Washington to furnish the barges needed.

General Ashburn made a trip up the river with the Wynoka and four barges and reached Brescott with difficulty. Above that point the channel was found to be too shallow for the Wynoka. The General Allen was substituted and was able to bring the barges to Minneapolis without and further accident or delay and arrived May 2nd.

During the last xix months of I926 Congress appropriated additional capital for the Inland Waterway Corporation on which \$I,I22,000 was allotted for additional equipment for the upper river. This equipment consisted of a towboat and 45 barges. In addition to this 3 towboats and many barges were already under construction. Congress authorized the expendiditure of \$\frac{1}{2} \frac{1}{2} \frac{1}{2}

Febuary 28th I928 Senator Shipstead in the Senate and Congressman Newton in the House led a successful fight for an appropriation for the development of the upper river barge lines.

In a report to Congress, dated February, I3 I930, Maj Gen Brown, Chief of the Army Engineers states "reliable and economical navigation is not practicable on a depth of less than six feet but would be assured by a depth oof 9 feet". January 22, I930, the Board of Engineers for rivers and harbors made a report in which they recommended that the present unsatisfactory conditions could be improved by intensive work on the than 6 foot project. All the works done than were adaptable to am ultimate 9 foot channel. The report of the above Engineers stated that -the improvement of the stream was necessary so as to provide adequate facilities for modern river fleets -

"Operated primarily in the interests of producers and consumers of the northwest, may well result in a movement of \$\frac{1}{2}\$ four million five hundred thousand tons of grain, with an estimated saving of \$4,000,000 in transportation costs; 4,000,000 tons of West Virginia coal, with possible savings of 50 cents to \$I per ton; 500,000 tons of iron ore; and considerable quantities of gasoline and other commodidities".

The Board of Engineers in making their report, favoring a nine foot channel, fixed the northern terminus at the Northern Pacific Bridge in Minneapolis, about one mile south of the Falls of St Anthony and close to the University of Minnesota campus. This report was the basis for the appropriations that have been made by Congress to build the locks and dams necessary to make a nine foot channel and maintain equipment theron. (Document NO 290, House of Representatives 71st Congress Letter from Secretary of War, transmitting report from the Chief of Engineers on a partial survey of the Mississippi River, between mouth of Missouri river and Minneapolis.)

At the time the groups of shippers and business man which promoted the development of a practical waterway for the Mill City protested against making the north terminus south of the Falls of St Anthony. They favored then as they favor now that the river must be made ready for the operation of barge lines above the Falls and through the milling and industrial district of Minneapolis where large tonage could be handled at the warehouse doors.

The City Council and the business interests of the city are now insisting upon the building of two locks above St Anthony and carrying the canalization of the river to the north city limits and perhaps to the Coon Creek dam. The contention in the Board of Engineer's Report was that the potential transper tonnage may come to the waterway through furture and present industry along the Mouth of the St Croix River, the Minnesota River and the Mississippi below Minneapolis. The City Council Committee of Minnespolis and business interests contest this and say that the development of the Upper Harbor is essential if the Mill City is the reap the benefit of all the millions spent on the river below the Washington avenue bridge. A built for the development of the upper harbor has already passed Congress but no appropriation has been made to put it into effect. There will be fight to get this appropriation during the forthcoming 1938 session of Congress.

NEXT WEEK. Factual information about the development of the Upper harbor, how it can be developed and other matter concerning it.

Sources of information Much of the material in the fore part of this week's article have been gleaned from an article by Harry Benton, former secretary of the Minneapolis Real Estate Board and now of the Nat Real Estate Board, in an article in the Minneapolis Journal.

1-3-34 1-3-049 MINNEAPOLIS. MINN.

Topic:Barge Lines and 6ft Channel.

By P J Wallace, week ending Jan 6th 1938.

Notes on the proposed development of the Upper Minneapolis Barge Line Harbor.

In the closing days of the I937 session of Gongress the development of the Mississippi above the Washington Avenue bridge and the building of a harbor above St Anthony Falls was authorized. With only one objector (Rep Robert F. Rich - Rep., Pa) the House of Representatives passed the omnibus rivers and harbors bill, with the Shipstead -Johnson amendment, authorizing the extension of the nine foot channel to the upper harbor, tacked on to it , on August I6, 1937. It must be added that the forgoing action of Congress is contingent on the report of the Army Engineers. The St Paul office of the Army Engineers has been working on a report on the harbor above the falls for over a year. It is expected that the report will be available to the rivers and harbors committees of both houses of Congress this current session. A favorable report from the Army Engineers would mean an appropriation for completion of the channel to north Minneapolis but that would not be necessary according to a statement made by Congressman Dewey Johnson in Washington August I2th 1937 (Mpls Journal Aug I3, '17) Mr. Johnson stated that if the report of the engineers is favorable, there is a chance for the start of construction work earlier than expected, since \$27,000,000 was voted by the last congress for the completion of the nine foot channel.

Where the nine foot channel now ends under the Washington Avenue bridge there is no industry. But if the channel is carried only two miles further north it will tap approximately \$5,000,000 tons within a block of the Mississippi river on either side. The board of army engineers approved plans for channel improvement several years ago. One plan provides for a single lock through the falls the other for two locks. The engineers now expect to make their raport January IOth.

It is understood that the Board of Army Engineers have decided that the plan to develop the upper harbor is "economically feas ble and advantageous" (Mpls Journal Nov I6 '37) and that the present plans call for a lock that would take care of 6,000,000 tons annually. Details yet to be determined include proportional division between the city and the federal government of the cost of constructing water mains and sewers.

EITY PLANNING On August 17th 1937 the city engineer of Minneapolis COMMISSION REPORT.

of findings that have be n made with the aid of WPA Project No 3417.

The report shews the difference between water and rail rates averages 99 cents per ton. On the basis of the 1936 tonnage handled by 438 industries in 14 north Minneapolis \$4,277,598 could be saved to these firms through water transportation. The planning engineer stated that there are more than 3,000 industrial firms whose freight shipments are affected by the same factors as are given in the case of the companies referred to above.

This calculation resulted from a survey of the 233 of the 438 business and industrial concerns within a few blocks of the river from the Franklin avenue to the north city limits. These firms the report shows handle approximately I,870,000 tons of materials and other goods a year ,75 per cent of which could be shipped on the Mississippi.

Barge Lines

"233 of the 438 major concerns within the upper harbor area were contacted and surveyed as to their business activities during I933 and I935. The expression of their attitude was invited as to whether the proposed upper harbor improvement would be a real benefit to industrial Minneapolis and help arrest the downward movement in those activities caused largely by unfavorable freight rates.

Concerns	Attitude	percent
i 94	Favorable	83.3
16	Unfavorable	6.7
23 233	Non-Commital	10.

The attitude of many of the latter two classifications was prompted by reason of their business activities with industries which might be unfavorable to this proposed improvement.

are carried out Minneapolis will have the finest harbor on the Mississippi. This harbor would be located above the falls in what is known as the St Anthony pool. This pool is approximately twelve miles long and extends from the third avenue bridge to the Coon Creek Dam. Without any improvement the depth of the harbor varies from six to nonteen feet.

Barge Lines and Upper Harbor

Including Islands the harbor has twenty miles of shore line. The lowness of its hanks make loading and unloading of boats cheap and easy.

There will be no expensive excavation work with steam shovels to make the banks suitable for piers. There is no swift current nor high water to contend with because the highest flood is not more than four feet and this height is seldom maintained for move then a few hours at a time. It can be easily seen that loading and unloading docks can be constructed simply and inexpensively.

Bridges and railroads cross the harbor. Coal and ore docks, flour mills ,grain elevators ,factory buildings,and warehouses can have the river at its their front doors and the railroads in their backyeards. The WPA Project No,3417 survey shows that out of 233 concerns visited along the upper harbor shoreline 39 firms ,with a shipping tonnage of 415,646½, in 1935, were located one block from the river;70 firms with a shipping tonnage of 562,807, in 1935, were two blocks from the river;44 firms with a 1935 tonnage of 427,99 tons, were within three blocks from the river;61 concerns with a shipping tonnage of 201,084½, in 1935. were located within four blocks of the river and 19 concerns with an annual tonnage of 248,416 tons in 1935, were located from five to twelve blocks from the river. To clarify the above and prevent misconception; it may be here said that the tonnage listed is for direct distribution in the case of 52 retail concerns.

The St Anthony pool is seventy five feet higher than the surface of the river at the Washington avenue bridge. As far back as 1925,

F.M. Henry, a civil engineers who had much to do with the prometion of the nine foot channel, suggested a canal about four thousand feet long,

Barge Line and channel

built of reinforced concrete, extended along and against the west bank of the river from the Northern Pacific bridge to the proposed harbor above. It would be ninty feet in with between its walks it would be provided with two locks.

This preliminary suggestions of an early day proponent of the upper harbor may be considerably modified by the Army engineers in their forthcoming report to the Secretary of War.

Now that the construction of the upper harbor has been ratified by congress and its completion in I940 only awaits a farorable plan of construction from the army engineers and a further appropriation of funds by Congress, it is interesting to recall that there was much opposition to its development, by railroads and other interests.

August 27-28, 1935, was the date on which a hearing was was held in the Mayor's reception room in the city hall at Minneapolis.

The hearing was presided over by Major Dwight F. Johns, district engineer of the United States army, following resolutions passed in congress which brought up the question of extending traffic above the present terminal by building locks at the falls. Alderman John Peterson stated that at one time the city council considered the extension of the harbor itself, and winners planned to underwrite its cost, but because of the heavy burden of relief of the unemployed feared it could not finance the undertaking.

But on the closing day of the hearing interests or consedition opposed to the harbor mobilised their forces and gave battle. These interests contended that the terminal facilities at the Washington avenue bridge were adequate for all purposes and claimed that the extension of river development above the falls would bring no material increase in traffic to the river.

Barge Lines and Channer

The representatives of the Great Northern, Northern Pacific, and Soo Line declared that claims that the development of the upper harbor would reduce freight rates were exaggerated. Arthur N. Hyde, director of manufacturing for General Mills and Washburn Crosby Co, told Major Johns that construction of the nine foot channel above the falls would cause his company a loss in water power. He contended that its waterpower rights was one of the main reasons his company remained in Minneapolis. He tried to persuade the district engineer that only I45,000 barrels of flour per **RNEMX** annumn out of a total of 3,000,000 barrels cauld be shipped by barge. Another witness, Albert E.Remele, representing frain and coal shippers ,said that very little additional grain shipments would be attracted to Minneapolis by the new harbor because the southern demand for grains was small and the bulk of the present shipments go east over the Great Lakes route.

On the 19th day of May 1936 the City Council of Minneapolis deposited with the Board of Engineers for Rivers and Harbors, Munitions Building, Washington, D.C, an argument on appeal from reports of the United States Engineer at St Paul and the United States Division Engineer at St Louis "on the proposal to develop the upper Mississippi river nine foot channel to the north city limits of Minneapolis".

The appeal was from the findings of Major Johns, referred to above, and Col.J.N.Hodges of St Louis.

Inferentially the findings of the engineers may be found in the following viewpoints expressed in the appeal brief of the City of Minneapolis. The brief states:

Barge Lines and Channel

I. "They(City of Mpls and other groups) do not agree with the Engineers on the proposal to defer the completion of the nine foot channel to the north city limits until such time as industrial development takes place along the river below Minneapolis".

2"They cannot accept or agree to any porposition that proposes to defer the project beyond the time when the rest of the nine foot channel is completed and ready for commerce."

- 3."They do not agree witht the Engineers and some of the opposing shippers that the development of the upper Harbor will not draw a large volume of coal, grain and the products of grain to the water route".
- 4." "They do not agree with the Engineers there is no opportunity for expansion in Minneapolis along the present nine foot channel to take care of large grain elevator operations, flour mill operations, coal dock operations, ore dock operations or any of a considerable number of activities that are a part of any industrial development.
- 5. They admit there is opportuntity to increase the capacity of the present barge terminal freight house for the handling of small quantity shipments of package freight. They insist, however, that such expansion can be of no value to industrial development.
- 6." They are in accord with the Engineers on the proposition that the Upper Harbor in Minneapolis provides an unusual opportunity for industrial development. The large amount of vacant property adjecent to the river and its suitability for any industrial activity requiring considerable land and satisfactory railroad track facilities is awaiting the improvement of the Upper Harbor".

Barge Lines and Channel

7."They are in accord with the Engineers on the proposition that Federal money should not be expended for the proposed development.

unless it holds strong promise to produce tonnage of I,000,000 or more tons annually for water transportation".

In all the reports the Engineers were agreed on the feasibility of the project. They agreed that the Upper Harbor is adaptable for the development of an ideal place for barge and towboat accomodation. They acknowledge that the Upper Harbor is surrounded by large tracts of vacant property suitable for the development of industrial activities. They concede that there is now adjacent to the Harbor industrial and business activity of considerable magnitude; and that the present terminus at the Washington Avenue bridge does not provide an opportunity for sufficient industrial development.

This topic Incomplete

1/6/38

MINNEAPOLIS. MINN.

Topic:Upper Harber -Barge Line & Chamnel. By P J Wallace, week ending Jan 13,1938.

Continuation of notes

on Upper Harbor Development

from week ending Jan 6,1938

"We respectfully submit that the evidence and facts herein presented are all impelling in support of the proposition that the nine foot channel project should and must be extended to the North City limits of Minneapolis".

The above was the closing paragraph in a 72 paged brief submitted to the Board of Engineers at Washington D.C., as an appeal from the reports of the army engineers located in Minneapolis, who did not speak very favorably of the development of a harbor above St Anthony Falls. The whole tenor of the brief was that the building of the nine foot channel, with its expense of almost \$150,000,000,000,000 would would be misspent as far as Minneapolis was concerned. The money for the building of the 26 locks and dams was appropriated by Congress because of the agitation carried on principally by the business men of Minneapolis. These business men now feel that, while the development will do much good to St Paul, Winona and other points between here and St Louis, Minneapolis will be robbed of the advantages of the great improved waterway they did so much to promote, if the upper Harbor is not financed by the government.

One of the largest kinds of potential tonnage anticipated when the channel is completed is grain. This commodity must be processed between the producer and consumer. In Minneapolis the facitities for processing grain are very extensive in the Upper Harbor area while at points below Minneapolis they are very limited.

TRADE RULES The Minneapolis Chamber of Commerce and other grain ON GRAIN

exchanges have certain fixed rules and practices which must be adhered to in the distribution of grain. This is particularly true of what is known as "Futures". Grain in St Paul elevators cannot be applied or delivered on a hedging contract entered to in Minneapolis or any other market for future delivery. Thus an elevator below Minneapolis on the river is without hedging protection against fluctuation in the market value that may take place between the time the grain is purchased upon its arrival in Minneapolis and the time it is reforwarded from the elevator here for delivery into the hands of the purchaser. Grain elevators at terminals are not successful unless accumulated grain stock stored within them can be delivered in satisfaction of futures contracts that mature at a subsequent date. In previous reports of the army engineers it was assumed that the northwest would enjoy the benefit of low waterway transportation by routing their grain boxcars through the port of St Paul. It can readily be seen that it would be cheaper for the government to build two locks in the Falls of St Anthony and do the other necessary improvement of the channel in the industrial district of Minneapolis than it would be to move the mills and elevators togather with the grain marketing machinery at present located in the Mill City to St Paul.

ENGINEERS RECOMMEND Last week the Chief of the Army Engineers ,in his NEW EXPENDITURES :

\$13,703,000 for completion of the channel and other work omaximum mixsippi such as maintenance. At the end of the last fiscal year the report stated that the nine foot channel was 67 percent complete. It further said that all but nine dams and three locks were IOO percent complete. This will mean that a depth of nine feet will be in the channel all the way from Nrw Oreeans to Minneapolis in May I938 despite the fact that some work hassymments still to be done on the Hastings, Red Wing, Winona, Trempealeau and La Crosse and Genoa locks and dams.

NO ESTIMATES FOR "While the river and harbors act of I937" says the UPPER HARBOR.

report, "authorizing the extension of the channel above St Anthony Falls, contains no specific requirements as to local co-operation, substantial bridge revisions are involved which are in general the responsibility of local interests. ****"A definite modification of the existing project" to provide for extension above St Anthony Falls "awaits final approval of a plan by the board of engineers". The board of engineers are now awaiting the report of the district engineers at St Paul. Preliminary estimates have set the cost of improving the upper harbor at from five to eight million dollars. This is exclusive of certain work to be done by the city such as the changing of a sewer , raising of bridges etc.

To quote again from the appeal of the City Council of Minneapplis to the board of engineers- "The City Council of the City of Minneapolis by unamimous action has pledged immediate correction of city bridges and other city facilities to meet the requirements of this Upper 6ity Harbor development".

Association, was quoted in the Minneapolis Journal of May 3Ist 1937, stated the the army engineers idea that bridges had to be raised above the Falls was no longer necessary. He stated that a low, diesel-powered towboat had been developed, so that bridges as they now stand , give sufficient clearance. Whether passenger steamers like the "Capitol" or the "Hiawathia" could clear under the bridges above the Falls, Mr. Feltus did not indicate in his interview.

SOURCES OF INFORMATION OF FOREGOING PAGES

Our Waterways, 2nd edition, Mississippi Valley Assn, St Louis.

71st Congress, 2nd session, House of Representatives, Document No. 290.

Argument on Appeal from report of U S Dist Engineers at St Paul to Board of Engineers of Washington.D.C. by City Council of Minneapolis.

From Canoe to Steel Barge, Hartsough M.L. University of Minn Press.

Newspaper Clippings on Upper Harbor at Pub Library, Minneapolis.

Minnesota Planning Board Report at Minneapolis Pub Library.

1/13/38

MINNEAPOLIS. MINN.

Topic: Upper Harbor, Barge Lines & Channel

By P J Wallace. Jon 20

Navigation above

St Anthony Falls

Even today the claim of Minneapolis to be the head of navigation is disputed despite the fact that the city council built a three cuarter of a million terminal near the State University

Away back in I849 when the territory of Minnesota was formed and attracted the attention of the entire country as possessing a healthful climate where consumption might be cured, St Paul laid claim to the title: "The head of Navigation". True it was that the freighted ships of trade found their journey's end at the capital city yet there was a little burg called St Anthony that vigorously disputed the title. But there were few captains of steamers who were willing to risk their vessels above St Paul and below the falls except in the best of weather.

Away back in the fifties St Anthony, even though it could not maintain its reputation as "Head of Navigation" because state ships from New Orleans did not wake pierce the air of what is now the industrial hub of Minneapolis with the sound of their steam whistles, steamboats ploughed the river above the falls and many boats were built at St Anthony Falls.

Round

From I850 to I880 there was more or less regular traffic above the falls. The Covernor Ramsay kept in service between St Anthony and St Cloud until I855 when there was much agitation for a new boat.

A company called the "St Anthony & Sauk Rapids Steampacket Co, built a new steamboat called the "H.M.Rice" at the Falls. She cost \$20,000 and made her first trip July 4th I855. The St Anthony Express of Oct 27th I855 calls attention to the fact that St Anthony was the only place in the territory in which boats were built. In addition to building the Governor Ramsay H.M.Rice, St Anthony financed the "Falls City" a boat designed the run from below the Falls to the Phead of navigation"

In I886 the "North Star "was launched with Captain A.R. Young as

EXEMPTION Skipper. A news item states that the fare on this boat was

\$I to Anoka; \$2 to Monticello; \$3 to Sauk Rapids. The average number of

passengers per trip on this boat was 75 and she made an average of

\$800 per trip which included money received for carrying freight as

well as passengers. In I857 another boat "The Enterprise" was launched.

The Minnesota Democrat of this period stated that two boats were running

regularly between St Anthony and Sauk Rapids and went on "Minneapolis

is no longer an insignificant place. Let it be known that Minneapolis

is the commercial and manufacturing city of the northwest".

Despite the panic of I857 times were good on the river above St

Anthony Falls. The Enterprise had eighty tons of freight on board on
one trip upstream while the H M Rice carried IOO passengers on a trip in
I858. Some places were isolated until navigation opened up on the
river in spring. In the issue of the St Cloud Visitor of March 4th
I854 the editor complains that he had to suspend publication for
three weeks because he could not get print paper. He further stated that
he would issue the paper forthnightly until navigation opened and

he could get regular shipments of paper and supplies from downstream, when he would resume weekly publication.

In I858 the North Star was sold to Anson North up. It was soon learned that Mr. North up had his eye on business above the Sauk Rapids. Let the issue of the Sauk Rapids Frontiersman of May 6.1858 , tell the story.,

"The North Star succeeded in getting over the rapids at this plade on Monday morning last and immediately left for Pokegema Falls, some two hundred and fifty miles above this. This must prove of considerable importance to the Upper Mississippi country as it will prove that another unknown stretch of Mississippi can be navigated by steamboats and another large section of the country opened to quick settlement".

The St Cloud Visitor, commenting on the trip of the North Star to Pokegema Falls, said- "St Cloud is now 300 miles below the head of navigation on the Mississippi".

This North Star was afterwards dismantled and her machinery was freighted overland to the Red river where another boat was built and called the "Anson Northgup", which was put in operation in I858-9.

The master of the North Star was regarded as a celebraty by the people of Minnesota of that day. Commenting on Northgup and his steamboat enterprise the St Cloud Democrat of the time said:

"If anybody can get a steamboat over to the Red river Captain
Northrup appears to be the man. He is a cross between a western
steamboat man and a polar bear. He looks sufficiently stern and
determined to chase a considerable number of hostile Indians
by looking at them: and has that sideway nod of the head which expresses

the determination of that animal which often kills ats enemy after it has, itself, received any number of death wounds".

In I86I we find the first publicity for river improvement above and below the Falls. The St Anthony Express advocated "memorializing congress for \$50,000 to be used above the Falls and \$40,000 to be used between St Paul and the Falls".

The above agitation had the effect of causing the legislature over IO years later to pass a resolution asking congress to improve the Mississippi from the Falls of St Anthony to its source After reciting that the river was navigable from St Anthony to Pokegema Falls, a distance of some five hundred miles by river, and that a great benefit to the state would accrue by giving the new settlers a means of transportation and saving the government money in the shipment of supplies to Fort Ripley and other points. The resolution approved February 24,1874, wound up as follows:

"Resolved. That the senators and representatives of this state in congress be requested to use their influence to secure at the present session of Gongress such legislation as will provide for the improvement of the Mississippi river from the Falls of St Anthony to its source, at as early a day as may be practicable; and to secure the appropriation of such money as may be necessary for the commencement of the improvement herein specified".

An Act of Congress approved June 23,1874,appropriated \$25,000 for this purpose. This amount was spent in minor work before a general plan was approved.

Perrie

In 1862, Captain Davidson, who operated a line of boats below the Falls, decided to get some of the trade above St Anthony. He put a new boat called the "Cutter" on the river which was the seventh steam vessel above the Falls. Davidson introduced an arrangement by which was transferred by team from a point below the Falls to a place in Stanthony -from steamboat to steamboat. This kind of a dry canal or Paramlee transfer line around the Falls charged two cents per hundred pounds for freight two and a half cents per sack for wheat and four cents per barrel for flour. This boat pulled two barges in which were loaded large quantities of wheat. At this time large quantities of Hudson Bay furs were shipped through the United States"in bound" This "Cutter" carried large quantities of this fur. at one time having as much as three hundred and sixty pounds of Buffalo hides aboard. On the return journey the Hudson Bay Company often times shipped large quantities of package goods by these boats to be transhipped at a point north was overland to the Red River of the Noath and up into Canada.

In the sixties the United States Government inspected steam

vessels below but not above the Falls. But the records of the

U.S. Inspectors Office at Dubuque, Ia, show that the Cutter was inspected while she was still above the Falls.

In I863 the river was unusually low. Captain Davidson was in need of light draft vessels below the Falls. The result was that the Cutter was taken out of the water above the falls and hauled like a house along Main Street ,St Anthony ,and again put back in the river below the Falls.

Jan Jan

At this time traffic began to decline above the Falls. The railread was in operation between St Paul and St Anthony. Another extension was being built up towards St Cloud. The Cutter landed at St Paul late in the fall "a lot of iron and a passenger car for the St Paul and Paul and Pacific Railspad".

In 1864 the decline of steamboating above the Falls of St Anthony had already set in. The railroad was competing for trade and competing in every way possible to eleminate the steamboats. The St Cloud Democrat stated early in the year that the other boats on the viver would follow the Cutter below the Falls and then rhe editor indulged in this prophesy: The building of the railroad to St Cloud kills steambeating above the Falls.

The prediction was true. Before the summer was over the other boats were moved south of the Falls. Towards the end of the year the State Atlas published the following obituary.

"Steamboating on the riverxisxplaysdxssix Upper Mississippi is played out. The three steamerws that used to run there have all taken an overland journey towards the rising of the sun, in search of more water to lave their sides. Hereafter saw logs and Pickerel will alone navigate the river from the Falls to St Cloud with the chances just now that these in their turn will have to give way to minnows!"

For a time the people above the Falls regarded the railroad something alike a child regards a new toy. But they saw that things were not as good as they should be in the transportation line.

We find that in January I865 a meeting was held to do something towards

the restoration of navigation above the Falls.

Acommittee consisting of Z H Morse, St Cloud, Alex Moore Sauk Center, W.W.Webster, Clearwater, and J.B.Blanchard, Monticello, was appointed to see what could be done to bring back the boats. In Febuary it was announced that the Upper Mississippi Transportation was formed. In the spring of I868 the agitation was resumed but no boat appeared during the year. The papers were full of encouragement of boatbuilding during these and following years but no boat appeared. Early in the seventies one editor said that the main trouble was that the river was not improved and advocated the expenditure of public money in the development of the channel so that the boats could operate even in low water seasons.

Late in November 1873 a meeting of the Minneapolis City Council was held at which W D Washburn presided. D Morrison, S C Gale.Mr .Hobart Dr.Keith, Col Farquhar, H.T. Welles and others agreed to subscribe \$1,000 towards a survey of the river.

On December 20,1873, Mr Skinner, an assistant United States Engineer made a report on an examination of the river he had made of the river. This between St Anthony Falls and St Cloud. Because the examination was taken after the close of navigation soundings had to be taken through holes in the ice. The main points of obstruction then were Coon Rapids a point a few miles from Anoka, Cedar Island Rapids, Thousand Islands and Rocky Point. This United States engineer reported that the river could be put in pretty good shape at that time for \$43,034.

The engineer reported that during the season one boat was plying between the Falls and St Cloud and another was in cource of construction.

In I874 a steamer called the Minneapolis did a good trade between Minneapolis and Sauk Rapids. She carred a lot of wheat from the country around Monticello to a mill at Minomin, owned by a Mr. Hall.

This mill seemed to be an industrial unit of much importance in those days. It was located eight miles above Minneapolis.

During I874 the United States had a force of fifteen engineers employed in making a survey of the river between St Anthony and Sauk Rapids. These engineers blew up some blulders at Battle Rapids and then announced that there was between three and four feet of water in the channel at low tide.

In I875 the Minneapolis was wrecked when an ice gorge located three miles above the Mill City broke and smashed the steamer Minneapolis against the pier of the upper bridge.

By an Act of March 3,1875,\$100,000 was appropriated and most of it was spent on the Falls of St Anthony. A more complete survey was made and the engineers estimated that for \$75,000 a three foot channel and for \$144,677 a five foot channel could be constructed between the Falls and St Cloud.

SOURCES OF INFORMATION

From Canoe to Steel Barge, Hartsough M.L. University Press, 1934.

From Articles by Captain Bill in the Saterday Evening Post of Burlington, Iowa, Feb 7, '25; Feb 14, 1925; Feb 21, '25; Mar 7, '25; Mar 14, '25; Mar 28, 25, April 4th '25; April II, 1925

There are any number of paragraphs in this work which contain incomplete sentences. Other sentences are so ambiguous that the meaning cannot be deciphered without reading and re-reading a number of times. Please rewrite the paragraphs that have been marked, and read it all to see if improvement cannot be made, in parts that have not been checked.

The continuity of this is good. With the necessary rewriting it should make a genuinely interesting account.

Note: the name of a ship is always set up in italics by the printer. Consequently it would save time if you underlined the name as you type.

ldv

MINNEAPOLIS.MINN. -62Topic:Barge Lines & Channel
P.J.Wallace, Jan 27 th.

NOTES ON FORMATION OF FEDERAL BARGE LINES

The world war had an important bearing on transportation
in the Mississippi Valley. It was during those years that the
Interstate Commerce Commission made this great area, which is as large
as Great Britain, France, Germany and Italy, a landlocked inland empire, through
sections up a new rote structure.

By use of rates. In 1917 the war had arained a great quantity of
railroad equipment out of the Valley. It was all tied up along the
section surrounding the North Atlantic ports in an intensive
movement of war material. The result was congestion in the eastern region
of the country, which caused a breakdown of the whole system of
national transportation. Industry in the Mississippi Valley was not
taken over for war purposes to any great extent. It was stagnant
for lack of transportation to do a business along the river.

At this time people in New Orleans and St Louis decided that it was time something should be done to put the Mississippi River to work. They formed a company and determined to raise finances to build a brage barge line. Steel was hard to get at the time because of its use in the production of war materials. They called on the Council of National Defense but were informed by that body that the government had to get all the steel it required and the

Barge Lines & Channel

building of boats and barges had to wait. They then called on President Wilson and placed their problem before him . He was sympathetic.

The railroads were then just taken over by the government and the Federal Railroad Control Bill was before congress. The president intervened on behalf of the lower Mississippi men with Congress. The plight of the Mississippi Valley was recognized and a provision was inserted in the above bill authorizing the President to use such portion of the \$500,000,000 provided by the law, as he deemed proper, to buy and build barges, towboats and other equipment for navigation of the river. (Sec 6 Federal Control Act, 40 Statute .L., 45I) This act gave power to the Railroad Administration to build barges and towboats and begin river service which, under the stress of war and the investment of money in Liberty Boands, these private citizens found it difficult to do.

A committee on Until Inland DeWaterways was formed under the Council of National Defense, headed by General William M. Black, Chief of the U.S. Engineers. This committee was reformed under the Railroad Adminstration with the addition of Mr. Sanders, of New Orleans, and Mr. W. Dickey of Kansas City, representing the Mississippi Valley. After making an investigation this committee recommended to the Director General of Railroads the establishment of barge service on the Mississippi, the Warrior and the New York Barge Canal. In 1918, Mr Sanders was instructed to prepare plans for fleets of steel barges and towboats. It was not until 1920 that the first fleet of forty steel barges and six towboats were the put into service. When the war was over private interests in New York State, advocated the sale of the Canal line. This would mean the end of service on the Mississippi river if representatives from this section

were not successful in having inserted in the Transportation Act of I920, provisions which continued this barge line service under the control of the Secretary of War.

By this action the givernment had now firmly committed itself to encouraging the operation of a barge line on the Mississippi. The next move of Congress was to pass an Act in June 1924, creating the Inland Waterways Corporation-

"For the purpose of carrying on the operations of the government owned inland, canal, and coastwise waterways system to a point where the system can be transferred to private operation to the best advantage of the Government"?

By an amendment to this Act ,May ,I928,Congress declared it to be the service policy of the Government to continue the transportations of the Inland Waterway Corporation until

"I. There shall have been completed in the rivers where the Corporation operates, navigable channels, authorized by Congress, adequate for reasonably dependable and regular service theron; (20 terminal facilities shall have been provided on such rivers reasonably adequate for joint rail and water service; (3) there shall have been published and filed under the provisions of the Interstate Commerce Commission Act, as amended, such joint tariffs with rail carriers as shall make generally available the privileges of joint rail and water transportation upon therms reasonably fair to both rail and water carriers; and (4) private firms, companies, or corporations engage, or are ready and willing to engage, in common carrier service on such rivers. (Sec 3(c) Inland Waterways Act as amended)

There is a continual agitation going on for the return of the equipment of the Federal Barge Lines to private interests. Some of this is evidently backed by competing corporations such as railroads.

For instance, the "Traffic World" launches an attack on the annual report of General Ashburn, president of the Federal Barge Line, to the Secretary of War. The General states in his report that three million of the fifteen million dollars originally appropriated by Congress for the use of the Corporation, is not needed at the present time and can be returned to the Treasury. The editor demands that five million, the entire cash assets of the Corporation, be returned also, on the ground that there would be used by the Corporation to encroach on private business. As these funds, derived from operations, do not equal the total reserve for deprecipitation, the insincerity and animus of the writer of the article may be seen.

Mr Garratt S.Wilkin, a special wfxt representative of the Inland
Waterways Coprporation , speaking before the Metropelitan Traffic
Association of New York, May I3, I937, states that the Federal Lines
"Has returned to shippers over 26 million dollars - more than its
entire capitalization - in savings on freight shipped over its lines".

The Corporation has existed and operated for I9 years on an appropriation I2
of Amillion dollars out of an original grant by Congress of
I5 million dollars. It has kept free of debt and accumulated a cash fund
of five million dollars, on million of which represents net income.

The Federal Barge Line initiated its service on the upper Mississippi in 1927. It has provided a water rate of approximately 80 per cent of the all rail rate between ports. Because up to the present smaller barges were used on the upper river than down stream greater savings have not been put into effect. When the channel is the full 9 ft up to the Minneapolis Terminal this year it should be possible to put greater savings into effect.

The Federal Barge Lines tow fleets of six large barges usually carrying cargoes of from 6,000 to 122000xtonx I2,000 tons. Fleets on the Rhine, the greatest barge river in Europe, have capacities of about I,200 tons each barge, or when three to six barges are towed they have seldom a cargo of more than 6,000 tons.

SOURCES OF MATERIAL

\$ 71 St Congress. House of Representatives. Document No 290.

Report of Engineers for Rivers and Harbors.

Upper Mississippi River Bulletin. March 1937.

Leaflet giving statement of A.C. Wiprud before Committee of House of Representatives investigating competition of U.S. Govt with private enterprise, hearing a Chicago, Nov 16, 1932.

August 1937

MINNEAPOLIS.MINN.

Topic:Barge Lines & Channel
By P.J Wallace.Feb 3rd.

Random Notes on

Channel Development

Winona will gain from the development of the nine foot Channel, long before Minneapolis, because the Mill City will not be able to Eash in" in full until the Harbor above St Anthony Falls is ready.

As a matter of fact Winona has gained substantially already. The city's I930 census listed Winona's population at 20,802 persons. In I936 the officials of that coty listed its population at 28,000(Mpls Journal Mar 7th I936) The boom in population is due to the fact that for the past three years much development work on the nine foot channel has been done in the vicinity of Winona. Five of the dams in the channel project were constructed within a 25 mile radius of the city. Each of the dams cost approximately \$5,000,000 to build.

The influx of workers , who were ingaged in the construction of the dams, brought the city great prosperity, even in comparison with pre_depression boom times. Even Small river communities near Winona awoke from a quietude that descended on them with the decline of the river transportation following the advent of the railroads.

Two coal terminals are being planned along the river by Winona people.

The city comments on the fact that it has excellent locations along the river for industrial development.

In Red Wing, another good town on the river, a terminal to cost in the neighborhood of \$15,000 has been planned.

The dam builders are creating a huge chain of man made lakes in the upper Mississippi basin, each one as large or larger than Lake Pepin, where the Mississippi widens naturally at the mouth of the Chippewa river, to create a lake 25 miles long and three miles wide.

Shipstead's part in nine foot channel fight

When Senator Shipstead opposed Frank B.Kellog for a seat in the Senate

in I922 he made his principal fight on the Each-Cummins law ,which was

then a subject of much controversy. Through that fight he learned much

about discrimatory freight rates. When the Minneapolis interests awoke to

the importance of river transportation in I925, and pushed the battle

for the nine foot channel they found a well informed man in the

person of Senator Shipstead to push their claims in Washington.

After being convinced that the development of the river would aid the

worker ,producer and consumer in Minnesota, Shipstead launched what turned

out to be a long, hard and unyielding battle for the nine foot channel.

He carried the fight through three administrations, through ten sessions

of congress, and scores of committee meetings in both the House of Representatives

and the Senate.

In 1927 he succeeded in persuading President Coolidge to agree to an appropriation of \$2,000,000 for a Federal Barge Line, In 1930 he was able to optain adoption by congress of the nine foot channel.

Barge Line & channel

The same year \$7,000,000 was authorized by congress for work on the channel. When the relief bill was up for consideration in congress in I932, Senator Shipstead moved the limitation be lifted on the authorization and went to see President Roosevelt, obtaining \$10,000,000 from the fund with which to begin work. Later \$13,000,000 was obtained from the same fund to carry on the work on the nine foot channel.

In the fight for the upper Harbor , Sanator Shipstead arranged for many hearings in Washington and Minneapolis, where army engineers , city engineers, experts of the Upper Mississippi Waterway Association and farmers have given testimony. He, together with members of the House of Representatives such as Dewey Johnson, succeeded in getting through an amendment to the Rivers and Harbors bill in congress, last December , authorizing the building of the nine foot channel above the Falls of St Anthony. It might be added that Walter Newton, when he was in congress, lent every aid to Senator Shipstead in his fight for the nine foot channel. Congressman Johnson is ably following in the footsteps of Newton , and so that his work would be carried on better, engaged the services as secretary of a man who did the publicity work for the Upper Mississippi Valley Association for years.

TOWBOATS ARE REALLY PUSHBOATS

Contrary to the impression generally held , because of the name of the boats, the barges are tied together and pushed rather than pulled , by the Tows. Equipped with powerful Diesel Motors, the towboats can easily plow behind twelve heavily loaded barges, carrying as much as I2,000 tons of cargo.



The modern towboats frequently carry a crew of 20. They are equipped with radio communication. No passengers are carried. In contrast to the modern towboats the old fashioned packets often carried freight cargoes of perhaps 500 tons and from 40 to IOO passengers.

From speech by W. W. Morse at National Rivers and Harbors Congress at Washington D.C.

According to Mr.Morse, who is now a member of the Inland Waterways
Corporation, when General Ashburn came to Minneapolis in 1925, he
informed the assembled business men that the socalled Goltra fleet,
consisting of four towboats and nineteen barges, was tied up in accontract
so that it could not be made available for use on the upper river.

As an outgrowth of this the Upper River Committee decided that they
must themselves furnish the money to build a suitable fleet of barges
if service was to be reestablished on the river. Accordingly there was
organised the Upper Mississippi Barge Line Co with an authorized capital of
one million dollars. Minneapolis, St Paul and other cities along the
river subscribed \$200,000 in stock. A note issue was arranged with for
boand houses and trust companies in Minneapolis in the sum of \$500,000
secured by a mortgage upon the fleet to be built.

Then with the \$700,000 available the Minneapolis Committee

proceeded to Washington and offered General Ashburn and the Secretary of

Apapeal

War to build a fleet and turn same over to the Inland Waterways Corporation

for a period of five years , for the purpose of instituting barge line

service on the upper river. After the matter was passed upon from a legal

angle by the Judge Advocate of the Army, it was presented for discussion

to the Cabinet. After it was indorsed there and the approval of the

Bresident was secured, a lease was executed on the 20th of January, between

the Upper Mississippi Barge Line Company and the Inland Waterways Corporation

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This lease provided that the Upper Mississippi Barge Line Company would, at its own expense, construct a fleet at a cost of not less than six hundred dakkars thousand dollars, and lease this fleet for a period of five years to the Waterways Corporation, at a rental of \$30,000 per year.

The Secretary of War then commissioned General Ashburn to conduct an exploratory trip up the river from St Louis to Minneapolis, so that he might observe the channel with a view to designing a fleet suitable for this particular waterway.

On April 22,1926, a fleet consisting of the steamer "Wynoka" and four barges left the city of St. Louis for Minneapolis, in ballast. The fleet arrived in Minneapolis May Ist and met with a marvelous reception.

The banks of the Mississippi from St. Paul to Minneapolis were lined with people, on foot and in automobiles, to view the fleet come up the river.

Thousands poured down on the barges when they were made fast at Minneapolis, The people were glad and much interested. Mavigation had been re-established on the old river I once again:

Topic:Barge Lines and Channel.

By P.J.Wallace

Week ending Feb 18.1938

NOTES ON POPULATION AND RESOURCES OF UPPER MISSISSIPPI BASIN AND AREA

The Upper Mississippi Basin is that section of the Mississippi north of the junctions of the Missouri and Ohio rivers. The dominant drainage factor in this region is the main stream of the Mississippi, which runs from its source in Lake Itasca to the junction of the Ohio -a distance of I400 miles.

The drainage area of the Upper Mississippi is about I85,000 miles, or I5 percent of the entire Mississippi drainage area.

The related Great Lakes and Hudson Bay drainage areas are about 95,000 square miles. The area under consideration includes practically all of the states of Illinois, Wisconsin and Minnesota, the eastern onethird of North Dakota, the upper penensula of Michigan, corners of Missouri and Indiana and some of South Dakota.

In mining, manufacturing and commerce and agriculture, it is one of the most important areas in the United States. It comprises 9.6 percent of the area and I2.8 percent of the population(nearly I6,000,000) of the continental United States.

The proportion of land devoted to crops varies from 60 percent in Iowa to 37 percent in Minnesota.

The farm buildings, implements and machinery represent in value nearly one fourth that of the total of the United States.

It is the principal region where wheat, barley, oats, hay, swine, cattle and dairy products are produced.

Of its farms I7 percent have water pumped to dwellings, I8.5 percent are lighted by electricity; 44 percent have radios, 65 percent telephones and 95°2 percent automobiles.

This region accounts for I5 percent of the mining of the country and as much as 80 percent of the tonnage of iron ore comes from this area.

The value of its diversified manufactured products in I929 was \$II,000,000,000 or I6 percent of the total of the United States.

Sources of above material

Report of the Mississippi Valley Committee of the P W A, which was submitted to Harold L.Ikkes and printed at the Government Printing Office in 1937.

The "Collier's Weekly" article

On Febuary 29, I936, Collier's Weekly had an interesting article entitled "The return of brank" Father Mississippi" by Harris Dickson. The article is headed by an illustration showing a federal line towboat and its barges on the Mississippi at New Orleans. Engraved in the illustration are the following words which give an inkling into what the article contains -

"It was the railroads that put the Father of Waters out of business; it was the war that put him back in again. Now argosies once more ply his stream as in the romantic days following the Louisana Purchase. This waterwayx-borne commerce sails with the blessings and aid of the government -but not of the railroads."

The writer asserts that about I820 the commerce on the Mississippi was so great that New Orleans took second place in American ports passing. Baltimore, Philadelphia and Boston. This scared eastern merchants with the result that they built the Erie Canal in I825, hoping to divert a portion of the traffic -again by water.

building began. Locomotives snorted on both banks of the river. There was competition with the steamboats. In those days there was no Interstate Commerce Commission to regulated rates and precribe rules. There was a dogfight between the railroads and the steamboats. There was cutting on all sides and the railroads sometimes gave secret rebates to shippers, This resulted in the first crude attempt at government regulation in I887. But this was too late to do the steamboat fleets any good and by the end of the century the boats had

vanished and the railroads enjoyed an unchallenged managed When in 1918, the Federal Barge Lines began to operate with governemnt subs support, the railroad spokesman and newspapers began to raise the objection that government was competing with private business. The author quotes from an article in the Traffic World, a "Journal of Transportation" in its issue of May 12,1934, in which the author of the article printed in the Traffic World quotes figures and concludes that the barge line is a mixture of "piracy, propaganda, humbug and extravagance carried on by the government". Mr.Dickson then quotes a statement made by a Federal Barge Line Official as follows- "After seventeen years operation on partially improved streams the Federal Barge Lines have proven beyond doubt the feasibility and economy of such transportation. This year will be the best in its history. The Upper Mississippi Division. formerly operated at a loss , will be in the black'. * * * * Right now the both the Upper Mississippi and Missouri are jammed with freight, and it has been necessary to add additional tows on the latter".

The writer seen gives the original reason for the organization of the Inland Waterway Corporation in 1917, when the United States was embroiled in the World War. Because of the great mumbers of men and the tons of material transported over the railroad systems congestion in eastern yeards caused a tiex a breakdown in shipments.

In the crisis, W.G.McAdoo, Secretary of the Treasury, was authorized to assume control of the railreads as a war measure. Under his powers as Railroad Adminstrator he took over all the craft which he deemed useful to his purpose that yet remained on the rivers.

This nondescript fleet the government tried to whip into a barge line, which had scarcely begun its service when the war ended. In I920 the railroads were turned back to private control but the barge line continued to function under control of the War Department.

In that year the Transportation Act was passed ,which, amongst other things ,declared the policy of the government "to promote encourage and develop water transportation service and facilities facilities in connection with the commerce of the United States, and to foster and preserve in full vigor both rail and water transportation".

The government was now pledged to back water transportation but during the next four years the operation of the barge line proved unsatisfactory. In 1924 Congress decided to create the Waterways Corporation and assigned General T.O.Ashburn to take charge as a full time duty. Five million dollars was set aside to finance the project together with equipment valued at \$10,000,000. This old equipment, acquired in wartime at war prices, had soon to be junked. The Waterways Corporation, of course, had to assume the loss. After four years of experimental operation the Congress decided to extend the operations of the corporation and appropriated another ten million dollars. This made fifteen million dollars of which only twelve million dollars have been withdrawn from the Treasury by the corporation, leaving a balance of three million dollars unused.

The government subsidized the railroads also by giving them large land grants , but the railroad executives say that is different the remarkable from water those used to develop the waterways.

The author of the article then gave as his opinion that one of the chief factors which induced Congress to improve the Mississippi and *** subsidize the development of the barge line, was the Panama Canal. **Uncle Sam had dug that ditch for his commerce in peace

and protection in war, perhaps without forseeing that it would have a distructive effect upon the Middle West. *****New freight rates by sea from coast to coast were so cheap that sections without water transportation labored under crushing disadvantages. Industries and population moved from the interior to more favored localities on our Atlantic and Pacific seaboards, the Great Lakes and the Gulf; such a serious migration that the Middle West lost sixteen seats in Congress after the census of 1920".

The author of the Collier article failed to state that the rulings of the Interstate Commerce Commission in the Indiana Rate Case, the Fargo Rate case and other cases gave an opportunity to the railroads to jerk up their prices so that this area bacame landlocked and the Flour milling sceptre, once so proudly held by Minneapolis, went to Buffalo, and manufacturing plants moved out of the state by the score.

He states that a consideration that probably influenced

Congress in developing the Mississippi traffic was the utility of the
waterways in time of war. Then he asks a question on what would
happen if a severe flood such as tied up traffic waxxx at every point
south of St Louis so that not a train could cross the river in 1917,
happened in 1917 when railroad traffic was snarled in the east.

Men and munitions could not move in such an emergency, or at least, could
not move with sufficient rapidity to be used to the best advantage
in time of war.

in time of war. These remote this good.

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Private John Allen, when running for Congress, was asked where he stood on the prohibition question. "Stand all right" replied John. "I drink we with both sides".

Drinking with both sides and imbibing their views with his liquor Mr .Dickson gives the slants of the pro-river and anti river partisans.

The points made by the railroad officials and their friends were:

"Water haulage is cheaper than rail. The cost of carrying freight
by water is enormously greater than rail transportation if you add
the "overhead" and the "hidden cost".

"Our roads now have ample equipment and facilities to carry every pound of freight that may be offered . An overproduction exists in transportation as in every other industry, and there's no necessity for barges"

"The government should not set up a competition against us and take away any part of our revenues"

"It is unfair for our roads to compete against a subsidized concern".

The Federal Barge Lines have not paid back one single dollar to the government. Their financial statements are misleading because they fail to consider prodigious sums expended for their benefit on channel improvements. *** Uncle Sam supplies a right of way at no cost to barge lines, whereas we must not only keep up our tracks but also pay heavy taxes on them."

"The Federal Barge Lines will never be returned to private ownership, because government bureaus have always found a pretext to perpetuate themselves".

In the following paragraphs he gives the views of the partizans of the Barge Lines:

"For twenty five years prior to the World War, railroads had a stranglehold on American transportation and are now fighting to keep their monopoly".

"It does not lie in the mouth of rail magnates to denounce a subsidy. They built their roads on subsidies and land grants that became a national scandals. Miles and miles of public domain were donated to them, some of which they afterwards sold as city lots at so much per front foot. Counties gave rights of way, towns paid bonuses for the location of repaid shops, and invested in railroad stocks that were rendered workhless through Wall Street juggling. Bankruptcy and receiverships destroyed the value of those stocks, and municipalities got no return except - what the barge lines also give- convenient transportation."

"Many a railroad president receives ten times as much as

Major General Ashburn, who draws only his modest pay as an American

officer - from the government."

"The Interstate Commerce Commission, is ,as required by law,
"railroad minded" and favors the roads against the river."

"Railroads annihilated river traffic by carrying freight at a loss, which added millions and millions to their already hopeless deficits"

"If railroads succeed in driving out barge lines they will hoist their rates and lay heavier burdens upon American commerce."

"As to the profit or loss of our operations, we insist that from

1924 to 1934 inclusive we returned to the people in direct savings

on freight \$22,246,200, besides uncounted economics on freight shipped by rail, where roads were forced to lower their charges"

"The Federal Bagge Lines now assert that they have three and one half million dollars cash on hand, no debts, and equipment valued at \$24,500,000.

The author then goes on to describe the towboat "Cairo" which cost half a million dollars. He tells about massive barges with a cargo capacity of three thousand tons each. Ten of these barges were pushed by a towboat. The investment in the cargo was over two million dollars and the freight charges accruing from the single trip amounted to more than \$80,000.

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SOURCES OF MATERIAL

Collier's Weekly, Feb 29th 1936. Article by Harris Dickson.
"The return of Father Mississippi".

This maderial is deficilt to handle entertainingly, and I find your treatment of it interesting.

FEDERAL BARGE LINES AND DEVELOPMENT OF
CHANNEL OF THE MISSISSIPPI

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TOPIC: BARGE LINES & CHANNEL

BB. P.J. Wallace Feb 25

Public Service Commission of Indiana Et Al. V.
Atchison, Topeka & Santa Fe Railway Co.

Because the above case attracted a lot of attention when it was decided Febuary I4, I922, and had a bearing on the action of the Minneapolis & St Paul business men in promoting the development of the Mississippi for traffic purposes, it should have an important place in these notes.

The syllabus of the case, which was decided by the Interstate Commerce Commission, states:

"Class and commodity rates from points in Indiana to St, Paul and Minneapolis, Minn, which are higher than from points in Illinois and points on the west bank of the Mississippi River in Iowa and Missouri found unreasonable and unduly prejudicial to the extent herein indicated"

The principal allegation was that the class rates from all points in Indiana(except points grouped with Chicago, Ill.) to St Paul and Minneapolis, are unjustly discriminatory, as compared with much lower class rates, gover ned by western classification, applying from all points in St Louis, and in Illinois, to the same destinations.

Several organizations representing shippers in St Louis and

Illinois intervened in opposition to the relief sought by the Indiana Public Service Commission.

Prior to November 1914, the first class rate from Indianapolis
to St Paul was I8 cents higher than the corresponding rate from St Louis.
Under the increases from that time the difference bacame 55 cents.
Commissioner Meyer, who delivered the decision, made the following statement:

"They(the Fublic Service Commission of Indiana)urge that the rates from Chicago to St Paul are depressed, having been influenced originally by competition of rail lines to the Mississippi River and boat lines beyond, as well as competition on the great lakes and active competition of rail lines; that the low level of the Chicago -St Paul rates is also indicated by the fact that these rates also apply to points much nearer to St Paul, including East Dubuque, Ill."

Because most of the lines foming to the Twin Cities from Chicago and St Louis follow the Mississippi practically the entire distance, The rates from the St Louis and Chicago group had their origin in water competition on the Mississippi River. In the past most of the business transacted between the St Louis and Twin City territory was jobbing. In this jobbing business St Louis had to meet the competition of Chicago and endeavored for many years to make such rates from St Louis territory as would enable the latter city to compete on an even basis with Chicago.

The maintenance of a close relationship to Chicago points, regardless of much longer hauls, resulted in comparatively low rates to other from Illinois points to Minneapolis and St Paul. This aroused a feeling of jedlousy between the Indiana points and their competitors in the cityical cities in Illinois and caused the Public Service Commission of Indiana to take their case to the Interstate Commerce Commission

for relief. Evidence was offered to show that Indiana points shipped to the Twin City trade area such articles as pianos, washing machines, paper boxes, soap , electrical outfits, window glass, fruit jars, agricultural implements, automobiles, iron pumps and several other articles.

In the Indiana Freight Bureau case, (I6.I.C.C./277) the Interstate Commerce Commission found in I909 that relatively higher class and commodity rates from Indianapolis than from St Louis to St Paul were justified. The conclusion in this case was based on actual and potential competition on the Mississippi River.

In the Indiana rate case decided in Febuary 1922 the Commission reversed itself ,and referring to its own decision in 1909 said:

"Since then circumstances have changed. Water competition on the Mississippi River north of St Louis is no longer recognized as a controlling force but is little more than potential. Moreover the difference of rates in favor of Illinois points has been greatly increased over that in effect at that time. Incidentally , the Chacago, Burlington and Quincy and other carriers concede that their rates from St Louis are too low, being less than for equal distance in central territory, increased.

This decision distroyed the favorable rate structure the Twin Cities enjoyed for nearly fifty years. The carriers were authorized to revise their rates in conformity with this ruling.

The result was that the agitation for revival of river traffic got under way. The government has expended millions towards making the river suitable for navigation. Private and public barge lines bring heavy cargoes of coal oil up the river at rates which are materially lower than charged by the railroads. Statistics show

that traffic on the Mississippi river system increased from 25,566,000 tons in I920 to 73,902,000 in I936. The inference is that cheaper freight rates and satisfactory service caused the increase.

SENATE BILL 1632 and HOUSE R 3263

The above bill ,still before Congress, undertakes to contract and common (?)
water carriers upon our lakes, bays, rivers , canals and coastwise,
under the domination and control of the Interstate Commerce
Commission. It would authorize the Commission to fix rules
and regulations under which water carriers would have to operate.

Under the terms of the bill the water carrier would have to convince the I.C.C that public convenience and necessity required its services before being given a certificate to operate.

It requires that all contracts must be filed with and approved by the Commission and it empowers the Commission to raise any rate agreed upon between the shipper and the water carriers. The terms of the bill would regulate rates on 50 horsepower vessels with the same force and authority as vessels with IO,000 tons capacity.

Congress created the I.C.C to regulate, conserve and control railways. It has the railway viewpoint. Its members are railway minded. If given this vast power, provided in the proposed bill, from past experience it would be expected to to establish rules, regulations and rates which would deprive the public of the economics of water transportation and drive out of business many boat lines.

On May 6th I935, Federal Coordinator Eastman found that the operative cost of rail carriers was 8-3/IO mills per net ton mile while that

while that of water carriers was only I¹/₄ mills per net ton mile. The I.C.C which has jaint already control over joint rail and water rates, has shown its attitude towards low water rates by fixing joint rates at from 80 to 90 percent of competing rail lines. It is believed by proponents of the barge lines that if the I C.C was given this power to regulate and control water carriers, that the existing rail rates ,now depressed to meet water competition ,would be raised to a dry land basis.

In I824 Congress laid down the policy of improving the Inland waterways as free public highways. The Mississippi Valley Association ,in a booklet published Oct I935, referring to this bill says:

"We believe it would be contrary to public interest if forms of transportation which cannot successfully compete with water transportation should succeed in persuading Congress to reverse a national policy which has been maintained for over a century. Placing water carriers under the absolute domination and control of an unsympathetic governmental agency with the power to impose restrictions , limitations and handicaps upon water carriers would jeopardize the usefullness of water highways and deprive the producing and consuming public of the economics of water service".

Senator Shipstead and other progressives have oposed the bill and so far it has not been enacted into law.

THE PETTENGILL BILL

This bill is another measure that has the opposition of interests trying to develop our waterpower traffic. If would nullify the Fourth Section ,known as the "Long and short haul Clause" of the Interstate Commerce Act. The proponents of barge lines claim that this bill would enable rail carriers to destroy competitors by making confiscatory

rates between water points. It would result in wasterful competition between communities and industrial centers in interior sections

These things happened before the present 4th section was enacted and there is not much reason they would not happen again if the law was repealed.

Another bill has been introduced by Congressman Driver which limits the discretionary power of the Interstate Commerce Commission in the adminstration of the present law. This would strengthen rather than weaken, as proposed in the Pettengill Bill, the good provisions in the present law. The Mississippi Valley Association urges that the Pettengill Bill be defeated and that the Driver bill be passed.

Most of the progressive members of congress take the same view.

MINNEAPOLIS. MINN.

TOPIC: BARGE LINE & CHANNEL -Harbor.

By P.J. Wallace, week ending March 17th.

Notes on Recent Happenings

in Congress concerning

Upper Harbor

Quickly following the release of the report of the Army engineers, on the proposed construction of imprivements above St Anthony Falls, by the Secretary of War last week, Congressman Henry Teigan appeared before the Rivers and Harbors Committee of the House of Representatives and asked for an appropriation of \$7,799,000 for the completion of the improvements of the upper harbor. It the same hearing the Great Northern Railway was represented by its counsel, Alex James, who vigorously opposed the project. Mr. Janes contended that up until 1936 the Army engineers, in their annual reports on the canalization of the Mississippi, referred to this upper harbor improvement "as wholly unnessary expense". He stated that the last report recommending the construction of works that would improve the upper harbor called for the expenditure of \$1,016,000, by the Great Northern and the Northern Pacific Railways, in changing bridges to conform with plans inxine contained in the Engineer's report. The City of Minneapolis would also spend \$700,000 for the same purpose. The appearance of Mr Janes , within a few days after the Secretary of War transmitted his report to Gongress , shows the attitude of non-cooperation with the businessman and shippers, assumed by the railroads.

In other parts of this series it is pointed out that an amendment to the Rivers and Harbors Bill was passed last wenter authorising the construction of a kar locks in the St Anthony Falls Dam so that barges could be towed into the upper Minneapolis Harbor. When the bill became an act and was signed by the President it did not carry any appropriation. As is usual in such cases the Army Engineers conducted a survey of the project to determine what should be done to carry out the intentions of Congress. The report of this survey was conveyed to Congress at the end of last week by the Secretary of War.

The report of the engineers calls for construction of two locks through St Anthony Falls and the dredging of the harbor as far north as the Soo Line bridge. Col P.B.Fleming ,district army engineer located in St Paul ,says that work on the plans is now under way with money at present available but that actual construction must await appropriateon of money by Congress. He estimated that the construction work would cost approximately \$9,000,000,most of which will be borne by the United States Congress and some by local authorities. The City Council has for years advocated the construction of the channel to the harbor in North Minneapolis and has intimated its willingness to do its share of the work, such as raising bridges , changing a sewer etc.

If governmenent funds were now available plans for the starting of work on the scheme would be ready by May I5th. The engineers estimate that it would take two years yet to complete the work so that navigation would be brought over the falls and down into the industrial center of Minneapolis.

The construction work would be in the nature of dredging and widening the river so that the tows and barges could maneuver properly. The channel would be dredged from the Northern Pacific bridge ,which is the extreme northern point of the present nine foot channel, to the lower lock at the foot of the channel.

At the falls dam two single docks will be built. Each will be 400 feet long. The lower lock will provide a lift of 25 feet, and the upper 50 feet.

A I,000 feet turning basin will be provided.

Onere are eleven bridges now spanning the river where this improvement is to be effected which will have to be revemped. **ExThis will be done for the purpose of providing a I50 feet **Extine** horizontal and 26 feet vertical clearance. This work must be done by the owners of the bridges - the city and the railroads.

The engineers estimate the cost to the federal government at \$1,241,000 for dredging and \$6,538,000 for constructional work. The cost to the city and the railroads for modifications in water and gas mains and the bridges will amount to \$1,774,000. According to the report the annual federal maintenence would approximate \$67,000.

Brig.Gen.M.C. Tyler, senior member of the corps of engineers , who made the report to the Secretary of War said, amongst other things:

"Local interests must give assurance satisfactory to the Secretary of War that they will bear the cost of necessary bridge modifications and adjustment to utility structures estimated at \$1,774,000 and furnish free of cost to the United States all lands needed for the improvement and suitable spoil disposal areas for new work and for subsequent maintenance as required."

The government has the power to compel the railroads and others to make changes required for the channel.

Dr.Paul C.Hartig, chairman of the Upper Harbor Commission predicted that the completion of the channel into the upper harbor will bring \$25,000,000 worth of new building to the city. The surveys of the commission show he stated that there are 300 firms waiting for the completion of the harbor so that they can have access to the inland waterways system for the further transportation of goods and raw materials. He further stated that -"One New York firm is considering a \$35,000,000 industrial project in Minneapolis, dependent on water transportation".

The City Council, at its meeting last Friday, directed four Aldermen and the City Engineer to go to Washington and appear before the proper congressional committees to urge the immediate appropriation of the sum necessary to complete the upper harbor project. The deputation left Wednesday morning of this week.

Pa.

TOPIC: BARGE LINES AND CHANNEL.

BY-P J Wallace, week ending Mar 24th.

Even though a "recession" occurs during the depression the Federal Barge lines, a government owned enterprise, has justified its existence.

The records for I937 show that the Barge Lines hauled 2,619,427 tons of freight for the year - the largest tonnage in their history. The comptroller of the Inland Waterway Corporation, operator of the lines, stated that the increase for the third consecutive year was due to the improvement on and the better business along the upper Mississippi and Missouri rivers. In I935 the tonnage carried amounted to 2,128,872 tons The gain in I937 over I936 was traceable to increases of 20,877 tons of coal,10,897 tons of sulphur, and & 7,518 tons of corn in northbound cargoes on the lower Mississippi and increases of 15,000 tons of grain and 63,000 tons of general merchandise hauled in a southerly direction. An increase of 43,975 tons of freight over 1936 was handled in northbound transportation on the upper river.

Barge Lines 105

The tonnage hauled by districts by the lines during I937 was - upper Mississippi,2oI,182; lower Mississippi,I,594,757; Illinois,419,459; Missouri,59,387; Warrior,344,642.

In all the barge lines have hauled 25,560,381 tons of freight since 1924.

It should be remembered that the above figures refer only to freight hauled by the Federal Barge Lines. There are many privately owned lines on the lower river. There exists the control of the Mississippi system - the Ohio - is not referred to above. The Ohio River carried as much freight last year as the Rhine and nearly as much as the Panama Canal for last year.

The official records of the War Department with showed that ,during I936, move than twice as much traffic was moved on the inland waterways in the Mississippi Valley than on the Panama Canal. The river tonnage freight is entirely domestic while I0,600,000 tons of the traffic on the Panama Canal in I936 belonged to the United States. The rest of the 30,680,000 tons passing through the Ganal was foreign.

Mr.Feltus, traffic expert for the upper Mississippi Waterway Association at a meeting of the Maritime Exchange in New York February of this year, stressed that fact that the upper river is now served by only the Federal Barge Line on the upper river has mostly old style stern wheel towboats . But the line has refre refrigerator barges which can carry butter at from \$3.50 to \$5.00 per ton, as compared with \$16.00 per ton on the railroads. New barges, he said , can carry fill products up the river at half the cost of pipe line transportation and will be able to save about \$2.50 per ton on coal when the river channel is completed to the upper harbor in 1939.

Barge Lines and deep channel

When Messrs Burbank, Blakeley & Merriam owned the stage lines emerging from St Paul, this firm worked over 700 horses in the year 1865. To attend the horses and vehicles used in the stage and express business two hundred men were employed by this company at the time. Several other men were employed on the varginaxxxxix prairies of Minnesota at the time in producing hay, oats and corn to feed the horses. Today there are as many taxicabs in the Twin Cities as there were horses employed by the stage company. But instead of oats and hay the taxicabs are fueled by another product of the earth -oil. But the oil has to be brought to Minnesota over long distances and the oil companies are now finding it economical to build their own barges and towboats to bring the oil over the waters of the Mississippi to Minnesota. This has attracted to Minnesota several of the leading oil companies. The Shell and Socony -Vacuum Oil companies have established extensive terminals at St Paul for distribution of petroleum products in the Northwest.

The Shell Petroleum Corporation Marine terminal affords storage facilites for over 350,000 gakkans barrels of gasoline and fuel oil. This oil terminal while not completed to its fullest capacity is already regarded as the largest marine patroleum base in the United States.

Beginning last July 80 barge loads of oil products, averaging more than 600 tons per barge, were moved up the Mississippi for storage and distribution from the St Paul terminals.

The White Eagle Division, Socony - Vacuum Company has purchased and is operating its own modern oil bases and towboats. This equipment was estpecially built for its service between Kansas City and St Paul. The two above named companies have already acquired 71 acres of ground for their terminal and storage use at St Paul.

Despite the fact that the Mississippi runs through the center of St Paul and that the capital city has ample river frontage, it has been handicapped for years because of mansatisfactory barge service. Most of the frontage is privately owned. Individuals and railroads own the land on both sides of the river. Yet the city built a modern barge terminal three miles down the river but on an impractical site. The road connecting the warehouse district with the terminal runs over a series of high hills east of the city over which heavy trucks have difficulty in climbing. Many shippers used rail transportation instead of the barges because of the difficulties presented by the bad road condition and the high cost of hauling between warehouse and dock.

The WPA has improved this condition somewhat by 1& veling and grading the road. Much of the material for the purpose of building this modern road has been salvaged from dredging operations on the river by the army engineers. Razagaxa Dockage facilities at the foot of Sibley St have been developed as part of a PWA project. A twenty five hundred foot taxainal Dock has been constructed in addition to terminal improvement to the east.

The Municipal Terminal had its first portions built when barge line service was inaugurated on the upper Mississippi in 1928. It is equipped with all motern appliances for handling all package and bulk freight except grain. But there is a grain terminal close by. It is connected with Sibley St, two miles away ,by the "Warner Road" which extends along the river bank.

Akkwakkhe The terminal is under the control of the Port Authority of St Paul. This Port Authority is a municipal created under the anthonixxx Minnesota Harbor Law, Chapter 6I , Laws of 1929, and amended by Chapter 132, Laws of 1934.

Minneapolis.Minn.

Topic:Barge Lines and Channel

By. P.J.Wallace, week ending May 19th

Late Congressional Action
on upper harbor bill

The United States News of May I6, I938, had the following announcement,
"H.R. I0,291, War Department. Non Military annual appropriations; sent to
conference May 9". This means that two million of the \$4,623,450 earnarhed
for the deepening of the river and the completion of the locks and dams
is to be used for starting work on bringing the nine foot channel
from its present terminus at the Washington Avenue bridge 4.9 miles
farther into the industrial district. It is estimated that it will
cost \$3,000,000 althogether to complete the works in the upper harbor
before towboats can maneuver in that vicinity.

The government has spent \$145,000,000 on the deepening of the channel from the mouth of the Missouri to Minneapolis but Congress hands out money in a niggardly fashion to complete the work into the industrial district in Minneapolis. This is due to a large extent to the tactics of the railroads in hindering and delaying legislation that would lead to the completion of the channel project at the Minneapolis end. During the hearing on the above entitled bill several representative Minneapolis men before the house committee urging that an appripriation to build the upper harbor. Two railroad attorneys also

Representative Johnson of the Fifth Minnesota District(Minneapolis) pointed out that the opinions of two railroad lawyers seemed to have more wikkk weight with the committee that the large number of Minneapolis citizens, including a deputation from the City Council, that journeyed to Washington to present the case for the upper harbor to Congress.

Mr. Johnson pointed out that Congress had passed a bill last year authorising the construction of the harbor project; that itemad in pursuance of this authorization the Army Engineers had already spent \$102,000 in drawing plans and making geological and engineering surveys designed to extend the channel 4.8 miles farther into the northern past of the City of Minneapolis. He said the city has fought for eight years to get this harbor appropriation connected with the channel. The republican adminstration had spent \$5.000.000 on the upper Mississippi channel and the New Deal had spent \$135,000,000 after President Rosevelt has made a personal survey of

the undertaking. The City of Minneapolis had a larger pane population than all the cities along the route combined, if St Louis were taken ent, yet it would benefit least if this harbor was not built. The city had shown its good faith by expending \$1,000,000 on a terminal but this terminal was for package freight only. Goods had to be transhipped four times in many cases before they could connect with the river through this terminal. Because the banks of the river were about I25 feet high where the terminal was located it was difficult to make railroad or trucking commections with the barge lines.

In opposition to Mr.Johnson's amandment ,Mr.Collins of Mississippi contended that if Mr Johnson's amandment was adopted the government would have to spend \$8,000,000 to build the channel above St.Conthony Falls. At least two locks and dams would have to be built. There are eight bridges across the river that would have to be altered.at a cost of \$1,774,000. Mr Collins quoted a report from the Board of Engineers,made six years ago, which recommended non-approval. He also quoted the following resolution in an effort to show that the local people were unwilling to bear the cost themselves and wanted to shoulder it on Gongress. The resolution which Mr Collins quikkedx quoted reads as follows in the Congressional Record:

"Whereas it has been represented to the joint Committee representing the Minneapolis Traffic Association, The Taxpayers Association, and the Minneapolis Civic and Commerce Association by written evidence of the City Planning Engineer and by additional oral assurances from others that the building of two locks and the

opening of a nine foot channel to the north city limits of Minneapolis by the United States Government will not require the change of any city or railroad bridge and will not involve the city of Minneapolis with any expanse or additional tax burden other than the lowering of one water main below the Falls of St.Anthony at a cost of \$20,000."

Congressman Johnson in replying to Mr. Collins pointed out that the Mississippi Congressman had quoted from Enginers reports made many years ago and quoted from the last report of the Board of Army Engineers approving the upper harbor project and giving plans for the immediate construction of the channel above the Falls. He quoted a letter from General Schley to the Secretary of War, dated Feb 26, 1938, in which that officer of the Army Engineers approved the plans made for the development to the north city limits of Minneapolis. He also said that the City of Minneapolis on November I5 last year sent down a deputation of I5 city officials. This delegation met with the Army Engineers and showed them a resolution passed by the City Council pledging IOO per cent payment for all bridge changes and cooperation with the government in bulding the channel abive the Falls. Mr Johnson said that the Army Engineers are now studying a plan of using the same type of Diesel Tugboats on the upper Mississippi that are now used in Chicago. If the same kind of tugs are found practicable on the upper Mississippi then only one bridge will have to be changed.

Part of Mr Johnson's amendment was accepted which meant the deletion of certain lines in the Committee's bill that would bar an appropriation at this time. This was accepted on the ground that the function of this committee was to appropriate and not to legislate.

The other part of Mr .Johnson's amendment -carrying an appropriationwas defeated. The Senate bill ,however, earries an appropriation for
the upper harbor and as the matter is in conference between both
houses the prospect at present is that the Senate contention will prevail.

(The material furnitae in the foregoing pages is founded on
article in the United States News, May 16,1938, and pages 7457,7458 and
7459 Congressianal Record of the present year.)

RAILROAD SUBSIDIES BY THE GOVERNMENT

In a handbill prepared and issued by the Upper Mississippi and St.Croix River Improvement Commission there is reproduced an advertisement of the Northern Pacific Railroad, published in the June 1871 issue of the Manufacturer and Builder, a magazine published by Western and Co, 37 Park Row, New York.

In view of the fact that for years the railroads have opposed government development of the Mississippi and that an attorney for the Northern Pacific Railgoad recently appeared in Washington kex before a Congressional Committee for the purpose of delaying the building of the nine foot channel into the industrial district of Minneapolis, it might be well to quote a few paragraphs of the advertisement showing how these one railroad has benefited from land grants - a type of subsidy pravalent in the sixties and seventies.

After telling of the rich territory through which the Northern Pacific runs to the coast; the great tonnages in grain, lumber and ore that the road would carry from the fertile hills and valleys of the west and the great prospects of future prosperity that lies before the stockholders of a road that traverses x "A fertile belt of country I,800 miles long and at least 700 in with width", the advertisement goes on to say -

"The land grant of the Northern Pacific consists of 12,800 acres to each mile of track through Minnesota, and 25,600 acres per mile through Dakota, Montana, Idaho, Washington, and Oregom - the branch to Puget Sound having the same grant as the main line. The average for the whole length of the road and branch is over 23,000 acres per mile, and the total exceeds fifty million acres. Of the quality of these lands it is enough to say that they lie in the richest portion of that

Contrast the above with what the railroad magnates now say about the government spending money for the development of the nation's waterways. In an address , *** entitled "The drift toward Confiscation", Fred W . Sargent, president of the Chicago and Northwestern, stated to a meeting of bankers at Cleveland-

"When, for instance, the government of the United States, through the use of the taxpayers want money, provides facilities to afford free storage of commodities moving in water transportation and thereby interferes with the business of legitimate capital invested in storage houses along the shores of the Mississippi River, it is confiscating property as surely as if it arbitrarily, and through the exercise of police power, padlocked the doors of private warehouses or placed police officers within such buildings to prohibit it from using the private facitlites".

"We may assume for the purpose of this discussion that the public welfare requires the development of inland waterways at public expense but when the government furnishes the taxpayer's money to furnish the

capital and to afford rates that will materially interfere with the investments of thousands upon thousands of our people in other forms of transportation, it is as clearly violating the constitution of the United States as if by direct legislation it so reduced the rates of the railroads that they could not under honest economic and effective management secure a fair return for honest investments.

Daniel Willard , president of the B & O Ry also questioned the propriety of government aid to Inland Waterways

P J Hurley, Secretary of War in President Hoover's cabinet effectively replied to all this by stating:

"There is plenty of precedent for givernmental financing of inland waterways developments. Tremendous subsidies were granted to the railroads in their infance by the government. As a matter of fact our railroads would never have survived without such assistance. More than any other form of transportion they leaned on the kind shoulder of a friendly federal government and a farsighted people".

Secretary Hurley stated that the land grants to the railroads of the United States reached I55,504,000 acres of public lands or an area almost twenty times the size of the state of Massachusetts.

(From Advertisement published in "Manufacturer and Builder" published by the Western Co ,37, Park Row, New York. Original is in possession of Upper Mississippi and St Croix Improvement Commission Civic and Commerce Bldg, Minneapolis)

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