BUFFALO BAYOU AND THE HOUSTON SHIP CHANNEL 1820~1926

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The Story of Buffalo Bayou and the Houston Ship Channel

By

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Houston, Texas

Compliments of



Main Street. 1858



NE day in December, 1913, the Hon Ben Campbell, then Mayor of Houston, now a member of the Port Commission, called me on the telephone and stated, in substance, that the twenty-five-foot Ship Channel was

nearing completion and that it was necessary to create a "Houston Harbor Board" to advise the City authorities how to proceed to establish our Port.

Thus began what developed into eleven years of service on the two Port Boards. I was reappointed on the old City Harbor Board by Mayors Hutcheson, Amerman, and Holcombe respectively, and in 1920, when the Navigation District Board took over the administration of the Port's affairs I was appointed by the Hon. Chester H. Bryan, then County Judge, as one of the two County members of the Port Commission.

In June, 1925, I resigned after having served more than eleven years in a work that soon became of surpassing interest and which, in due course, developed into far greater economic importance to this community than I had the remotest idea of at the inception of my service.

In the past few months it has seemed to me desirable that an authentic story should be written of the Houston Ship Channel which has become an Industrial Waterway of National importance.

Introduction

Of the early history of Buffalo Bayou no citizen is better informed, in my opinion, than the Honorable Ingham Stephen Roberts, a distinguished attorney and a native Houstonian. Mr. Roberts has for years been accumulating a vast amount of interesting data relating to the early history of Houston and its waterway, all of which he generously placed at my disposal and much of the historical matter in the story which follows came from his valuable collection.

During the first few years of my official connection with Port affairs there were innumerable discouragements and disappointments. There were some among us who had neither confidence, vision nor faith, and as illustrative of the native doubter, I recall that a prominent railroad traffic representative several years back at an Interstate Commerce Commission hearing testified that the

"Houston Ship Channel was a huge economic mistake" and, as illustrating the Galveston sentiment, I recall that in a conference with a prominent and beloved citizen of our sister city he was quite emphatic in referring to our waterway as the "damndest fake out of doors."

Early in 1915 the Chamber of Commerce appointed a Committee consisting of Messrs. R. H. Spencer, A. S. Cleveland, and Burke Baker to go to New York and endeavor to interest the Morgan Steamship Line in establishing a modest service between New York and Houston. In this they were unsuccessful but they did succeed in interesting the Southern Steamship Company in establishing what soon became a Philadelphia and Houston service in which is now employed eight modern cargo vessels-and which fleet is to be further increased.

After we entered the World War it appeared for a while that the service would be discontinued by the Company's vessels being withdrawn for trans-Atlantic service by direction of our Government. The officials of the Company, assisted by J. S. Cullinan and Thos. H. Ball, pleaded our cause so earnestly and effectively that the order was withdrawn and the service permitted to continue. It was indeed an important and critical period for our new Port.

The history of the past one hundred years is, to a considerable extent, a story of the development and progress of transportation. The steam engine, the electric motor, the internal combustion engine, the telegraph, the telephone and the radio are, of course, each and all instrumentalities of transportation of people, property and sound, and our industrial growth is largely the result of the progress and development in transportation.

After reading the historical part of the story which follows, the reader, it seems to me, will understand better and reason for the remarkable spirit of courage, confidence and co-operation which has characterized this community in all matters relating to the Ship Channelas I see it, it was literally because of the "faith of the fathers" handed down to the succeeding generation, and, in the story, it is unmistakably shown that the "faith of the fathers" was founded on fact and not on fancy.

In my several years of Port service I was officially associated with citizens whose character, courage and unselfish devotion to the public interest have been an inspiration and a blessing to me, for which I am profoundly grateful and I hold them one and all in affectionate esteem and regard.

The railroads are all important to Houston and I want to record here that the constructive and sympathetic interest of Horace Booth, J. S. Pyeatt, W. R. Scott, John A. Hulen, F. G. Pettibone, C. N. Whitehead and W. G. Choate, as representatives of the various carriers, were of inestimable value to the Port Commission in laying the foundation for, and in the organization of, the existing neutral switching service along the water front, and which I regard as being of tremendous local industrial importance and which I hope may never be disturbed.

In examining the historical data which has been made available, I found peculiar interest in observing the various characters, and the parts they played, as they respectively appeared upon the stage:

General Sidney Sherman, a hero of San Jacinto, who unmistakably visioned the future, and who at his own expense ordered, in 1846, a survey of the waterway.

B. A. Shepherd, the founder of the First National Bank, who was, at an early day, President of a company which operated several steamboats.

Commodore Morgan, whose activities are related in the story.

Col. John T. Brady, who saw in the future ocean vessels around or about Harrisburg, who planned a Belt Switching Railroad, and built the old Magnolia Park line and Clinton Railroad long before there was any economic reason for doing so.

J. R. Morris, who owned the leading hardware store. on the site of the present Levy Brothers Dry Goods Company, whose home was on Main street between the present Bender Hotel and Second National Bank Building, and whose name so frequently appears two generations since.

Major E. W. Cave, who for many years was Treasurer of the old "Central" Railroad, and for more than a generation actively interested himself financially and otherwise in waterway activities and did much to interest Commodore Morgan.

H. R. Allen, a brother of A. C. and John K. Allen, the founders of Houston, whose name so frequently appears up to the early seventies.

C. L. Longcope appears first in 1866, and thereafter for ten years his name occurs frequently and prominently. W. J. Hutchins, W. M. Rice, T. M. Bagby and Alex. Sessums, whose names appear collectively so often

between 1850 and 1875.

Wm. D. Cleveland Sr., T. W. House, Capt. Sinclair Taliaferro, R. M. Johnston and Chas. H. Milby, all of whom were especially active a generation since in advocating the improvement of the waterway.

Chas. S. Riche, an eminent and distinguished United States Engineer, in charge for many years of the improvement of the waterway, and who told me in 1914 that our community "should not fail to go its full length in providing adequate Terminal facilities."

At a somewhat later period appears H. Baldwin Rice, several times Mayor of Houston, who clearly read the future and gave most liberally of his time and means.

Thos. H. Ball appears first in the latter nineties, a Member of Congress, and his long and distinguished service to the waterway, in public and private life, has been, and is yet, of great value. His faith was always an inspiration to me.

R. S. Sterling, who has served continuously and conspicuously since 1910 on the Navigation District Board. He has given freely of his time and constructive ability for more than sixteen years.

Jesse H. Jones, who served as Chairman of the first Harbor Board, and whose courage, foresight, and administrative ability was of important value.

I. S. Cullinan, who visioned the future and on numerous occasions, in his characteristic way, in important places rendered services of real and lasting value.

C. G. Pillot, J. T. Scott, and E. A. Peden have each rendered distinguished and important service.

John H. Kirby, who for many years has given liberally of his time and means.

For many years the project of the Intra-Coastal Canal - now nearing realization - has also had the generous and unswerving support of the business interests of Houston, and J. S. Cullinan, C. S. E. Holland, and G. J. Palmer have given liberally of their time and means to the promotion of that waterway.

Many other names could be quite appropriately recorded but I have only mentioned those whose services have especially impressed me because of the frequency, duration and importance of the parts they played.

The newspapers, too, have played a particularly useful part because, it is to be remembered, that within the past sixteen years the taxpayers of Houston and Harris County have voted public funds to the amount of nearly eleven millions of dollars for the improvement of the waterway and rail and water terminal facilities, and it was through the newspapers only that public opinion could have been crystallized and harmonized to such an extraordinary extent. This, indeed, is, perhaps, unprecedented in American communities when it is remembered that the population of Harris County in 1910 was only 115,693, of whom 30,950 were negroes.

The support given to the waterway in its initial stage by the Cotton Exporters has indeed been of inestimable value and in the construction of privately owned deep water cotton Terminals, Anderson, Clayton & Company was the pioneer closely followed by the Alex. Sprunt & Son interests.

The oil Refineries soon recognized the importance of the waterway and they, too, have contributed in a most important and impressive way to make the Ship Channel of National importance.

R. M. FARRAR.

November 15th, 1926.



Navigating Buffalo Bayou in Early Days

The Story of Buffalo Bayou and the Houston Ship Channel



UFFALO BAYOU heads on the prairie about thirty miles west of Houston, in the extreme northeastern corner of Fort Bend County, and its course is slightly south of east a distance of some fifty miles to the San Jacinto River

and thence into Galveston Bay. Its entire course lies within the limits of Stephen F. Austin's first grant from Mexico. Buffalo Bayou is an arm of the Gulf of Mexico -it is recorded that at the foot of Main Street, in Houston, there is a daily rise and fall of the ocean tide of less than two inches, which increases eastwardly towards its mouth.

At Houston, White Oak Bayou flows into Buffalo Bayou, and the latter is further augmented by numerous other "Bayous", among which may be mentioned Brays', Sims', Vince's, and Green's as being the most important.

In its primitive state it was an unusual stream. Its banks were high, its waters deep, and it was overhung with the branches of large forest trees. All reports comment upon its unusual and sombre beauty. The following description, somewhat prophetic, written in 1837, of

Buffalo Bayou from its mouth to Harrisburg may be of interest:

"Its banks are high and lined with the Cypress knee which shoots up along the edge of the water. In passing over this singular body of water, which is confined, with few exceptions, to precipitous banks on either side, covered with massive timber. whose rich dense foliage throws a melancholy, sombre shade over its dark and sluggish waters. Throughout its whole extent it bears a strong resemblance to a canal."

Capt. Chas. Crotty, now Assistant Port Director, who was for many years in the service of the United States Engineering Department, states: "In dredging in 1904 past the San Jacinto Battle Ground, the dredge brought up two buffalo heads, several cannon balls, muskets, sabres, etc. The buffalo heads were cleaned and shipped to San Antonio for the Alamo." In our Spanish Deed Records there is one from John D. Taylor, dated April 8th, 1828, conveying his league of land to Stephen F. Austin, in which Taylor describes himself as living at "Punto Pino" (Piney Point) on "del Arroyo Cibolo, en Ingles Buffalo Bayou." Apparently the name Buffalo is derived from the Bison

Buffalo Bayou and Houston Ship Channel, 1820-1926

The earliest definite mention of Buffalo Bayou in the history of Texas appears to be on the occasion of "in the year 1820 Col. Knight and Walter C. White burned off a cane brake and raised a crop of corn at a point on Buffalo Bayou in what is now Harris County, Texas."

Below the junction of Buffalo Bayou and the S an J a c in t o River, on the East bank, is the town of Lynchburg, while opposite it, on the west bank, was the town of San Jacinto which was destroyed in the storm of 1875. Lynchburg was established by Nathaniel Lynch in 1822.

In 1837 at the mouth of Green's Bayou was plotted a townsite, "Pokersville", but the name probably killed it. At the mouth of Vince's Bayou there was plotted another town, "Buffalo," but it, too, failed to survive.

Harrisburg, some seven miles east of Houston, was founded in 1826 by Jno. R. Harris, and from

that time on, ocean going vessels regularly plied the waters of Buffalo Bayou. The little town was destroyed by the Mexican Army shortly before daylight on April 16th, 1836, and was soon rebuilt. In 1858 its population was greater than Houston's.

The Mexican forces on April 20th, 1836, also burned a

vessel and warehouses at the old town of New Washington on San Jacinto Bay—a short distance north of the present residence of Hon. H. B. Rice, a short distance east of the present town of LaPorte—on the evening of April 20th they established camp at a point less than a

mile from Buffalo Bayou.

Sam Houston's army crossed Buffalo Bayou on April 18th-19th, immediately east of Harrisburg, at the present site of the Texas Chemical Company plant. The Texas Army established its camp on the morning of April 20th, 1836, on the south bank of the stream in a beautiful grove of live oaks. The battle was fought nearby on the afternoon of April 21st, 1836. The San Jacinto State Park commemorates this important event.

A Doctor Phelps, his wife, two children, and his mother-in-law, Mrs. Wilkin, are said to have lived in 1822 in what is now Houston. Houston was estab-

lished in 1837 by A. C. and John K. Allen and thereafter light draft craft and barges regularly navigated the stream as far as Houston, and regular steamboat service was established in 1837 to and from the town of Galveston and other points on Galveston Bay. The first Steamboat to arrive at Houston was the "Laura" — January 22nd, 1837, which came from Columbia, on the Brazos River.

Originally what is now known as "Morgan's Point" was Clopper's Point. Col. James Morgan, a prominent early Texan acquired this some time prior to the Battle of San Jacinto, and it was better

known, after his residence near there, as "Morgan's Point." A "Mr. Ryder, an Engineer, is said to have lived alone on the extreme end of Morgan's Point in 1822."

In the year 1846 Engineer Geo. Stealey made an examination and survey of the waterway from Bolivar Roads to Harrisburg and his report to General Sidney Sherman closes with the recommendation that the head of navigation for steam oceangoing vessels be located at Harrisburg. This original report is in the possession of the descendants of Gen. Sherman, among whom is a grandson, the Hon. Clarence Kendall, now Assistant U. S. District Attorney.

District Attorney. On October 9th, 1866, the Houston Direct Navigation Company was incorporated and was invested with authority to improve the navigation of Buffalo Bayou, and by the terms of its charter was obligated to "within six months have on the waters of Buffalo Bayou,



City Hall and Opera House. 1876

Galveston Bay and Harbor a sufficient number of steamers and barges to meet the demands of Commerce," and that it should "be subject in transportation of freight to the laws applicable to common carriers." The company, from January 1st, 1869, to September 30th, 1881, trans-



Main Street. 1876

April 4th, 1867, a committee was appointed to draw up a memorial asking that Houston be made a port of delivery, which was granted July 14th, 1870. The City Council also appointed, on April 18th, 1867, a committee of six citizens to recommend a plan for the "building of a ship channel." The names of the citizens were: Jos. R. Morris, Wm. A. Van Alstyne, T. E. Cowen,

ported through Buffalo Bayou 1,985,806 bales of cotton. Its incorporators in 1866 were C. L. Longcope, P. J. Willis, J. H. Sterrett, William M. Rice, T. M. Bagby, J. R. Morris, S. L. Hohenthal, E. H. Schmidt, H. L. Allen, A. Sessums and L. J. Latham. Its old wharf on the north side of the Bayou, and immediately east of San Jacinto Street, was probably erected in the early '70's. Capt. William Christian, still living, served as a Director in the early seventies.

The City backed the enterprise it is said, with a contribution of \$200,000.00, and had the Channel surveyed by Hugh Rice. On April 4th, 1867, a committee was

Peter W. Gray, Jas. T. D. Wilson, and E. W. Cave. The traffic of the Houston Direct Navigation Company had grown to such an extent that "three-fourths of the freights and products of the interior were borne upon the waters of Buffalo Bayou," and freight was carried direct to and

from the Gulf of Mexico on barges, avoiding the charges and losses incident to handling at Galveston, and it was estimated that the saving amounted to "a million dollars per annum."

On January 23rd, 1869, the "Buffalo Bayou Ship Channel Company" was organized, the purpose of its charter being "to construct, own and maintain a Ship Channel from any point at or within the corporate limits of the City of Houston through Buffalo Bayou, deepening, straightening and widening the same, and through the waters, connecting the Bayou with the Gulf at Bolivar Channel." This was authorized at the Constitu-



Foot of Main Street. 1876

tional Convention in 1869, and the company was formally incorporated by the Legislature on July 28th, 1870. This company undertook to "straighten out the Bayou to Morgan's Point." The Directors were: A. S. Richardson, W. J. Hutchins, T. H. Mundine, Jno. Shearn, T. W. House, S. Harper, Eugene Pillot, J. W. McDonald,

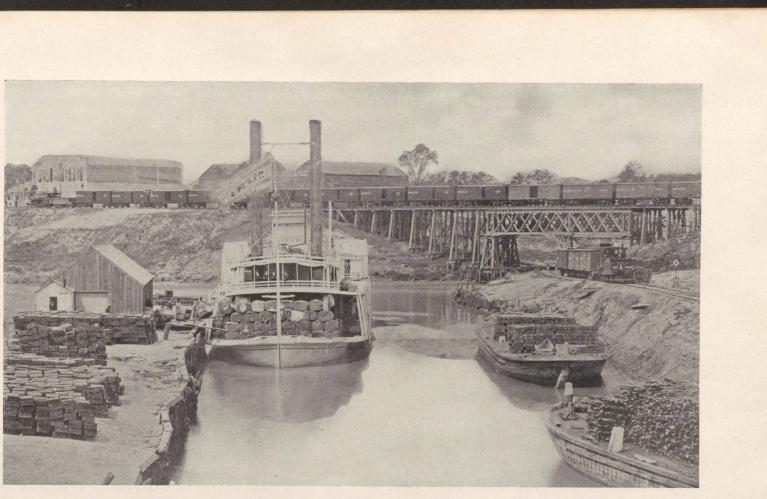
Peter Gable, R. O. Love, W. M. Rice, A. Groesbeck, J R. Morris, H. R. Allen, E. W. Cave, H. E. Perkins, J C. Tracy, and T. H. Scanlan.

The first steamboat service between Houston and Galveston was established in 1837, and on another page appears a fac simile of the ad-

vertisement of Houston's first steamboat line, as the same appeared in the "Telegraph," published at Columbia, Texas. From then on steamboat service was maintained. The old "Diana" was one of the most elaborate boats of those days. According to the local papers, in April, 1839, there were five steamboats plying between Houston and Galveston. In May, 1840, the owners agreed upon a scale of freight and passenger rates between Houston and Galveston: "Cabin passage \$5.00; Deck \$2.50; Freight 50c per barrel. Passenger rates include supper, lodging, and breakfast."

In 1866 the following steamboats appear to have been in daily service: "T. M. Bagby," "Silver Cloud," "St. Clair," "Shreveport," "Rob Roy," and "Arizona." Many other steamboats operated between Galveston and Houston at other periods, and some were quite palatial.

The usual time between Galveston and Houston was,



Steamboat "Lizzie"-Capt. Sterrett. Foot of Main Street, 1876

Buffalo Bayou and Houston Ship Channel, 1820-1926

Steamboat "Diana." Foot of Main Street. 1876

by rail three hours, and by steamboat seven hours.

"A landing place" at the foot of Main Street was provided in 1837, and a wharf along the water front from Main Street to Fannin Street was constructed in 1840. In the early forties the largest warehouse facility was

on the North side of Commerce Avenue, between Fannin and San Iacinto Streets.

A City Ordinance, dated June 8th, 1841, established "The Port of Houston." The Congress of Texas, January 29th, 1842, gave Houston the "right to remove obstructions from the Bayou and otherwise improve navigation."

August 15th, 1849, the people assembled at the wharf to greet the Steamboat "Ogden," Capt. Haviland, which was the first steam packet to make a voyage direct from New Orleans to Houston.

The State of Texas on February 7th, 1853, appropriated \$4,000.00 for the improvement of

Buffalo Bayou. On April 7th, 1857, D. Bradbury was given a contract for improving navigation over Clopper's Point (Morgan's Point) for the sum of \$22,725.00.

A joint resolution of the Texas Legislature, May 24th, 1870, requested the Federal Government to improve the Channels at Galveston and other coast ports.

One of the foremost agencies in promoting commerce then and now, the "Board of Trade and Cotton Exchange," was organized in 1874, and its first officers and directors were: C. S. Longcope, President; W. J. Hutchins, Vice-President; B. A. Shepherd, Vice-President; Geo. W.

Kidd, Secretary; B. A. Botts, T. W. House, Ed Milby, Wm. D. Cleveland, A. J. Burke, H. S. Fox, H. D. Tavlor, S. K. McIlhenny, Fred A. Rice, and Wm. Brady.

The cotton exported from Houston prior to the war between the States was in

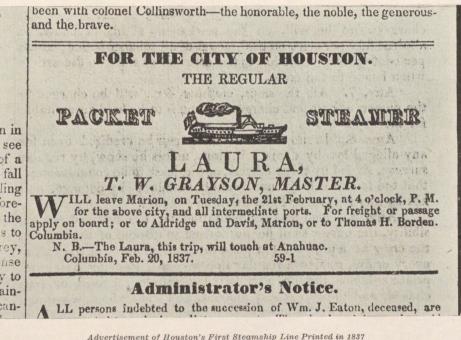
1854		39,923	Bales	
1855		44,050	"	
1856		47,008	"	
1857		46,220	"	
1858		 63,453	"	
1859		96,726	"	
1860		115,010	"	
1861		70,854	"	

The Houston Chamber of Commerce was organized April 4th, 1840, at Carlos's "City Ex-

change," and its first President was E. S. Perkins.

From a newspaper published in April, 1857, at Columbia, Texas:

"The history of San Felipe, Velasco, San Luis and Columbia (all on the Brazos River) shows that situation is no guarantee of future greatness. They were all well situated-their owners lacked enterprise. Compare Columbia to Houston! The one situated at the head of tide water on the largest river in the state, the center of the richest planting section of the world-Houston on a shallow Bayou, naturally incapable of navigation to any extent, surrounded by post oak, pine barrens and boggy prairies—one has all the advantages of situation, the other of an energetic people."



The foregoing is not without application to us herepast, present and future.

The following quotation from "Texas Siftings", a publication of the early eighties, reads as if written yesterday:

> The Houstonians are deserving of much credit for the enterprise they have exhibited, not only in building up their own city, but in developing the resources of the vast territory through which they have built railroads. Houston, situated at the head of navigation on Buffalo Bayou, and being the point of connection for numerous railroads, offers advantages to manufacturers that are not excelled in any other spot in the South; and, no doubt, ere long these advantages will be recognized by capitalists, and Houston will be noisy with the rattle of the loom and the sound of the trip-hammer. Already Houston's capital and enterprise have built a cotton-factory and several ironfoundries; but these are only the acorns from which the wide-spreading oak of industries may yet grow.

> "The Texas Transportation Company." constructed in the latter sixties, now a part of the Southern Pacific, and the "Houston Belt & Magnolia Park Railway Company," constructed in the early eighties, now a part of

the Missouri Pacific, owed their existence to the vision. foresight, tenacity, and faith of a small group of business men, headed by John T. Brady, who, at widely different dates, was the first president of each road.

On September 25, 1866 the Legislature incorporated

Early in 1867 Brady went to New York and Boston to

raise the money with which to finish the railway and to

improve the ship channel, armed with resolutions of the

Board of Directors of the Texas Transportation Com-

pany, authorizing him to sell \$150,000.00 worth of stock

the TEXAS TRANSPORTA-TION COMPANY. The Commissioners appointed to organize the corporation were: T. W. House, Alexander Sessums, L. T. Tinsley, W. P. Hamblen, I. S. Sellers, C. H. Jordan, N. P. Turner, H. N. Duble and associates. John T. Brady and W. P. Hamblen were respectively its first President and Secretary. In January, 1867, Brady entered into a contract with T. M. Hooper and P. M. Carey for the construction of the railroad from Houston to Clinton. A few years later the property was acquired, for debt, by Chas. Morgan, of New York, and with what results will be seen



Foot of Fannin Street. 1876

and another authorizing him to borrow any amount not to exceed \$150,000.00 for the above purposes.

A letter dated September 2, 1867 from W. P. Hamblen, addressed to Brady, for use in presenting the merits of the loan is interesting and reads as follows:

> Houston, Sept. 2nd. 1867. Dear Brady: Your letter of the 23rd ultimo recd. today and I was glad to hear from vou. I have written vou several letters and have sent you package of Rice's report as printed by the City, copy of map and 50 special reports of the Texas Transportation Company. One I enclose herein.

Griffin (W. H. Griffin, City Engineer) has made a calculation of the cost of the channel 13 feet to Constitution Bend from Rice's (Hugh Rice, a Civil Engineer) figures of depth and distance and after purchase of two dredge boats and sufficient flat boats at a cost of \$125,000 the whole work can be done effectually for \$108,800 to Constitution Bend. His figures are as follows: Cost of Dredge Boats & Flats \$125.000 Cost of 27 months @ \$4,000.00

per month 108.000 Cost of wear and tear 31,250 \$264,250

Less sale, or value of dredge boats after work 93.750 is completed . \$170,500

He estimates that Red Fish & Cloppers Bars can be excavated to 8 feet water at a working expense of \$8,000.00.

I say at all times the road (railroad to Clinton) will be finished by Christmas. I intend this week in having a talk with T. W. House (1st) and try to form, or rather organize, the nucleus of a ship channel company under the Transportation

Charter, You I hope will approve if I can effect anything. The subscribing by the New Houston City Company (which owned extensive Bayou frontage), or rather by the stockholders of \$100,000.00 or the stock of that company for a like amount of stock in the Transportation Company I believe something of this kind can be affected. After I sound round and find anything

can be done. I will send for Wm B. (Brady). There is nobody here except House (T. W.) and Morris (I. R.) worth a *damn* and the latter is too narrow minded to do anything. I tell you this city is sorely in need of men. There is no doubt but that she is dwindling into a one horse concern.

Write to me as you progress. I hope you will excuse any remisness on my part as I only write when I have something to say of a business character. You know everyone has left. N. P. (Turner) and E. P. (Hamblen) are both absent. My family have gone and I am certainly on the town. My best regards to Mrs. Brady. I hope you have been pleased since your departure.



Yellow fever not bad but spreading gradually. You talk of reconstruction. We will not see it in five years. The Radicals of the State will split certain

on the negro question. Hamilton (Governor A. I.) will return to the State and will carry a majority of negroes with convention. I have been told by Simon pure Rads (Radicals) that if this is the case they will defeat admission in Congress. It will be the case. Negroes love office and Jack (Gov. Hamilton) knows it and he will play on that string. Yours truly,

Buffalo Bayou and Houston Ship Channel, 1820-1926

It was evidently up hill work convincing the capitalists of the merits of the enterprise, for on October 12, 1867 Wm. Brady wrote to John T. Brady as follows:

Dear Brother: Washington, D. C. Oct 12th, 1867. Should you find it necessary to use our firm paper in effecting



Houston Direct Navigation Wharves. 1876

the purchase of iron and rolling stock for the Texas Transportation Company. I recommend that you do so as it is of great importance, both to our firm and individual interest, that this road should be completed at the earliest day possible. You are, therefore, authorized to execute in behalf of our firm promissory notes to the amt, required or endorse the bonds of the company to the amt. sufficient to effect the purchase as above stated. the notes to be made payable at such time as in your judgment we can conveniently meet them.

Hoping that you may soon meet with success in making the negotiations for our company, I remain, Very affectionately,

Your brother.

WM. BRADY.

W. P. HAMBLEN.

To John T. Brady, New York.

Among Brady's papers is a long written argument presenting the advantages of making Clinton the shipping point and to deliver freight from there to the city by rail, some of which is quite prophetic.

Col. Brady met with some success in raising money and in an effort to interest home people in the project.

we find the following ad in the Houston Telegraph of October 15, 1867:

OFFICE TEXAS TRANSPORTATION CO.,

Houston, Texas. Oct. 15, 1867. The Transportation Company solicit subscriptions for Five Hundred shares of their Capital Stock. (\$50,000), for the purpose

of opening a Channel on Red Fish and Clopper's Bars. First installment of ten per cent to be paid on 15th November next. Full particulars given at the office of the Company, Pillot Building, upstairs. Installments to be paid to A. I. Burke. at his office, N. E. Corner Franklin and Main Streets.

W. P. HAMBLEN, Sec. Transportation Co.

The "Clinton Railroad" was completed in 1868 but the steamships did not come. The disappointments and discouragements of the ensuing years may be better imagined than described.

The main obstacles were Clopper's Bar, Red Fish Reef. poverty, a small community, and



Barnes House, Present Rice Hotel Site. 1876

There enters upon the stage in 1875, a dominant and important character, to the activities of whom a separate chapter may be appropriately devoted, and which is written by one peculiarly qualified.

Reconstruction. The early advocates and promoters of the waterway apparently visioned guite accurately the future, but always greatly underestimated the cost in dollars.

"During the last hundred and fifty years, the rate of progress in man's command over nature has been

> ten times as fast as in the period between Caesar and Napoleon, a hundred times as fast as in the slow prehistoric ages. Tens of thousands of years divided man's first use of fire from his first application of it to iron. The art of writing preceded the printing press by tens of centuries. In those days, each great invention was granted a lease of many ages in which to foster its own characteristic civilization before it was submerged by the next. In our day, in each generation a new economic life half obliterates a predecessor little older than itself."

Commodore Charles Morgan Father of the Houston Ship Channel



MMODORE CHARLES MORGAN, founder of the Morgan Steamship Line, was a Texas pioneer and the State's best friend in its early industrial development through his untiring efforts to give Texas her first regular line of Steamships. As early as 1835, while Texas was

still a part of Mexico, he sent one of his ships, the "Columbia" to Galveston. He also owned a controlling interest in the "New York" and the "Neptune", which operated between New Orleans and Galveston in 1841-1845.

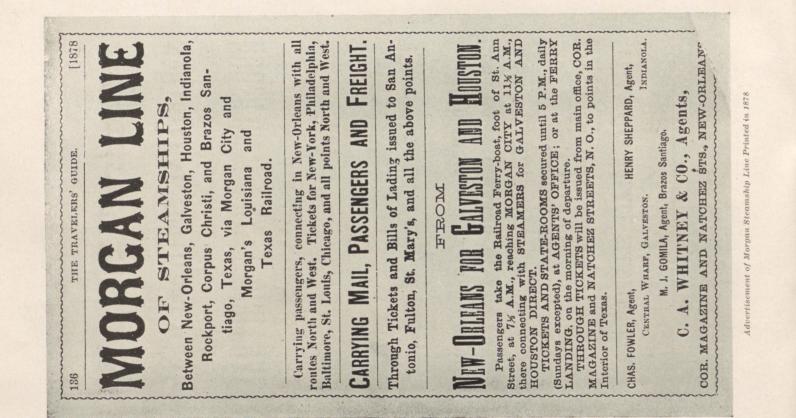
In 1847 Morgan and his partner, Harris, obtained control of the carrying trade between Texas and New Orleans by the purchase of the Steamships "Palmetto", Capt. Smith, and the "Galveston", Capt. Crain. In 1848 these steamers were sent to Matagorda Bay and a little

Hon. Ingham Stephen Roberts

Fellow Texas Historical Society

later to Brazos St. Jaco. In 1849 Captain Jerry Smith took from Matagorda Bay the first cargo of cattle ever shipped from Texas.

In 1857 Commodore Vanderbilt opened a new steamship route from Morgan City, Louisiana via Berwick Bay, which was soon acquired by Morgan, and in 1867 Morgan dredged a channel at Red Fish Reef in Galveston Bay and across other bars to enable his ships to navigate Buffalo Bayou as far as Clinton. In the winter of 1874-1875 the Canal across Morgan's Point was begun-(the cost of Morgan's canal was \$92,316.85, for which amount Morgan's Estate was reimbursed May 4th, 1892 by the United States Government) — and during the storm of September, 1875, the water broke through the unfinished canal so that small boats thereafter came through, and on September 22nd, 1876, the canal having been com-



pleted, the first ocean steamship, the "Clinton", to navigate Buffalo Bayou, now the Houston Ship Channel, docked at Clinton. The following account of this important event is taken from the Houston "Daily Telegraph" (Sept. 23rd, 1876):

Sixty carloads of Freight! An ocean steamer comes through the Ship Channel loaded down with freight!

Galveston's cuttle fish - It's Wharf Company flanked and checkmated!

The Steamship "Clinton", Captain Talbot, from Morgan City, Louisiana, with sixty carloads of New York freight for Houston and various points on the Central. International and San Antonio Railroads, arrived at Clinton yesterday morning. The freight was discharged yesterday, and loaded in cars for the points of destination.

This vessel brought the Texas freight of the New York steamer "Algiers"-although business via the Ship Channel has not been announced as regularly opened the facilities at command at Clinton have enabled this large amount of freight to be handled rapidly. In a few days we learn that both freight and passenger business will be commenced.

The "Clinton" brought the trucks for the passenger cars now enroute to Houston via Little Rock. Sixteen carloads of cotton from points on the Central road went down to Clinton yesterday morning. The Houston Depot is not yet completed, but we learn that New York freight will be delivered there this morning. This is a practical result beyond quibble and doubt of the success of the Ship Channel, and proves its reality to the understanding of all. The merchants who receive this freight get it free of the extortions of Galveston bete noir, its hideous Wharf Monopoly. Mr. John H. Reagan's especial pet.

The New Orleans "Times" (Sept. 21st, 1876) had the following to say concerning the Texas Transportation Company's Railroad and the Ship Channel:

The Morgan Line shipped yesterday by the New Orleans. St. Louis & Chicago Railroad two passenger and one baggage car

Buffalo Bayou and Houston Ship Channel, 1820-1926

for their new Railroad running from Houston to Clinton, Texas, eight and one-half miles in length. At Clinton all future freight and passengers will be transferred for all interior points in Texas instead of Galveston as formerly.

Her Wharf Monopoly has thus killed the goose that laid the golden egg. Moral: Other close fisted monopolies should take warning and avoid her errors.

Chas. Morgan was born in Connecticut April 21st, 1795, and died in New York City May 8th, 1878, and it is appropriate to note that the Morgan Steamship Lines in the year 1926, at the old site known as "Clinton", on the Houston Ship Channel, completed their modern fire



Morgan Steamship Line Terminals, 1926

Buffalo Bayou and Houston Ship Channel, 1820-1926

proof wharves and docks — at a cost of more than \$1,000,000,00, exclusive of the value of the land, thus commemorating forty-eight years after the death of its founder his prophetic vision.

On another page is a fac simile copy of an interesting

advertisement of the Morgan Line published in Texas papers in 1878.

The Steamship "Algiers" above mentioned, by an interesting coincidence, was one of the fleet of vessels which in the year 1915 was placed in service between Philadelphia and Houston by the Southern Steamship Company, which inaugurated the first regular steamship service through the Houston Ship Channel, in which service it now has a fleet of eight modern cargo carriers.

Up to September 19th, 1890, every vessel passing through Morgan's "Cut" paid toll, and a heavy chain was stretched across

the canal, to insure that the toll was paid.

INGHAM STEPHEN ROBERTS.

THE steamship service established by Commodore I Morgan appeared to be "and the dream came true", but for a few years only.

The transportation system he had dominated, after his death soon passed into other hands which, in the nineties.

acquired the "Galveston, LaPorte and Houston Railroad", and the National Government dredged a deeper channel across the Galveston Bar, thus bringing deeper water to the port of Galveston where the Morgan Steamship terminals were established, and the old Clinton terminal, so far as ocean going vessels were conconcerned, was abandoned.

With these occurrences the struggle for a deeper channel was renewed, and with what success will be seen. There were, however, to be many years of discouragements and disappointments, with powerful opposition in some quarters along with an apathetic stupidity in others,

where there should have been friendly co-operation.

Happily the opposition now no longer exists, and the apathy and stupidity has changed, in recent years, into zealous, friendly co-operation.

The first survey of the waterway by United States Engineers was made in 1871. On June 10th, 1872, Congress "authorized the improvement of Red Fish Bar in Galveston Bay, Texas", and a channel from fourteen to eighteen feet deep across that reef was completed in 1872.

The project for a channel twenty-five feet deep from the foot of Main Street in Houston to Bolivar Roads in

Galveston Bay was approved by Congress March 3rd, 1899, and amended February 20th, 1900. Under this project a channel was dredged from Bolivar Roads to Harrisburg eighteen and onehalf feet deep, with cuts through Irish, Clinton and Harrisburg Bends.

On March 3rd, 1905, Congress further modified the project by locating the terminus of the head at "Long Reach", the present Turning Basin, which was dredged to eighteen and one-half feet depth in 1906-7.

Appropriations were thereafter made by Congress in dribblets for the twenty-five foot project. Our public spirited citizens were

aroused to the consequence of an indefinite delay, and realized that some extraordinary reason should be pretwo Pipe Line Dredges for maintenance work. sented if the project was completed in a reasonable time. It is appropriate to note here that the proposition above mentioned was the commencement of a National policy, Through a delegation of citizens sent to Washington, Harris County proposed that if the National Governand since then no new important project has been anywhere adopted without assurances of local co-operation ment would let a continuing contract for the twenty-five



Houston and Texas Central Railroad Yards. 1896

foot channel from Bolivar Roads to the Turning Basin, the taxpayers of Harris County would pay one-half of the construction cost, and would also provide adequate publicly owned water terminal facilities.

This novel proposition was promptly accepted by the



Capitol Hotel, Texas Avenue and Main Street, 1893

contributed \$200,000.00 towards the construction cost of

Rivers and Harbors Committee of the House and the Commerce Committee of the Senate, and in fulfillment thereof the Legislature of Texas enacted necessary Navigation District laws.

On June 25th, 1910 Congress made an appropriation to complete a twenty-five foot channel. at an estimated cost of \$2,500,000,00, "local interests to pay one-half thereof". the contract for which was let June 10th. 1912. This contract was completed September 7th, 1914, at a cost of \$2,412,595.66, precisely one-half of which (\$1,206,297,83) was paid by the Harris County Ship Channel Navigation District, which, in addition, also



Prairie Avenue and San Jacinto Street. 1896

and provision, approved by United States Engineers insuring against private monopolization of harbors and waterways constructed under the direction of the National Government.

The Harris County Navigation District was created by the voters of Harris County, Texas, on January 10th, 1910, and the first Commissioners were:

Chas. Dillingham. R. S. Sterling. C. G. Pillot.

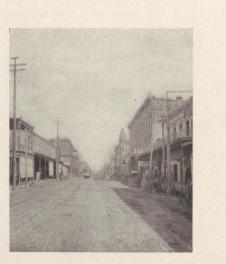
The voters on June 1st, 1911, authorized the first Bond issue of \$1,250,000.00 for the purpose of meeting one-half of the above construction cost.

On March 2nd, 1919, Congress authorized the construction of the thirty-foot Channel, the work on which commenced in May, 1920, and was completed in September, 1925

The total cost of the Ship Channel, construction and maintenance, to June 30th, 1926, was \$12,029,250.00, of which Harris County contributed \$2,771,297.83. The City of Houston and Harris County have jointly contributed also, \$7,700,000.00 for the construction of publicly owned water and rail Terminal facilities which provide at publicly owned docks, berthing facilities for sixteen vessels at one time.

The voters of Harris County have just approved another Bond issue authorizing the expenditure of \$1.500.000.00 to construct additional dock and other terminal facilities. extension of the grain elevator facilities, and further extensions of the Public Belt Railroad.

Privately owned docks and industries represent at this date. an additional investment of \$125,000,000. which includes privately owned docks,



Congress Avenue Looking Toward Main Street, 1893

with a berthing space for an additional thirty-two vessels. December 19th, 1913, and the following citizens were so that at present forty-eight vessels may be docked at members: R. M. Farrar one time. Iesse H. Iones C. G. Pillot

During the year ending June 30th, 1926, 1240 ocean vessels navigated the Houston Ship Channel and the

value of their cargoes was \$457.823.882.00. exclusive of local traffic. During the same vear the Port Terminal Railroad Association, which operates the Public Belt Railroad, which serves a portion of the water front, handled 84,967 loaded cars. which does not include the rail movement to and from that portion of the water front which is served jointly and exclusively by the Southern Pacific and Missouri Pacific Lines.

The pictures of the water front activities appearing on other pages will, perhaps, give the reader a more comprehensive idea of the volume of business being transacted along the water-

way than the figures quoted, and, in this connection, it is to be remembered that prior to the termination of the World War, November 11th, 1918, there was comparatively little business being transacted along the waterway. The first Harbor Board was appointed by the Mayor in December, 1913, and its first meeting was held on



Buffalo Bayou and Houston Ship Channel, 1820-1926

I. T. Scott

Thos. H. Ball

I. F. Coleman. Consulting Engineer.



Southern Steamship Line Terminals. Public Wharves 4 and 5

Wharf No. 1 was completed in August, 1915, and the first cargo from Philadelphia arrived August 16th, 1915.

In May, 1922, the City Harbor Board was absorbed by the Navigation District Board (the Port Commission), and the membership of the latter at that time was:

E. A. Peden R. S. Sterling

R. J. Cummins D. S. Cage

R. M. Farrar

Thos. H. Ball. Counsel

I. F. Coleman, Consulting Engineer

B. C. Allin, Port Director

Chas. Crotty, Assistant Port Director The distance, by the thread of

the waterway, from the Turning Basin to Bolivar Roads -the Channel into the Gulf of Mexico-is fifty miles, and the distance from the Turning Basin to San Jacinto River is sixteen miles, all of which is a land locked harbor safe and secure from storms and floods.

The Port authorities, with the approval of the United

Buffalo Bayou and Houston Ship Channel, 1820-1926

States Engineers, have established from the Turning Basin to Green's Bayou, a distance of nine miles. Harbor lines at a Channel width of four hundred feet, within which no improvement may be constructed. Eastwardly from Green's Bayou the Harbor lines are established at five

hundred feet. Therefore, as the frontage is improved on both sides the Channel is increased to the widths mentioned.

An important transportation facility, publicly owned, and to which reference has already been made, is the Public Belt Railroad which serves the water front, and cost \$860,000.00. It is operated by the Port Terminal Railroad Association, composed of a representative of each trunk line carrier entering Houston, and a member of the Port Commission who is the Chairman of the Terminal Railroad Association.

Through the Public Belt Railroad every trunk line carrier now or hereafter entering Houston is

assured of reaching water front industries and facilities on equal terms and conditions with every other carrier. This arrangement is quite unusual and of far reaching importance to industries now located and which may hereafter locate on or adjacent to the water front.

Another important facility is the publicly owned Export

Grain Elevator with a capacity of one million bushels. This facility was completed recently and represents the latest in engineering skill. It was designed by the John S. Metcalf Company of Chicago. This is the first season of operation and from July 1st, 1926 to November 15th,

For the protection of the water front the modern fire boat "Port Houston" was recently placed in service and it. too, is the latest in water fire fighting machines. It is of the Desel Engine -Electric Drive type, and was designed by Messrs. Cox and Stevens, New York. It cost \$308.134.22.

The Channel at night is lighted

1926, the grain exported amounts to 2.106.328 bushels.

from Bolivar Roads to Lynchburg, a distance of thirty-four miles, thus insuring night navigation between those points. It will not be long until it is lighted between Lynchburg and the Turning Basin — a distance of

sixteen miles—and the entire fifty miles may then be safely navigated by night as well as by day-and an important saving will thereby accrue to vessels.

The Port authorities are also urging upon the United States authorities the importance of widening the Channel through the old Morgan's Canal, the necessary land for

which improvement has already been unselfishly donated by the abutting property owners.

Another aid to navigation which is being urged by our Port authorities is the "flattening" out of three or four rather sharp curves in the Channel between the Turning

Basin and Lynchburg, and it would be indeed desirable to acquire now all of the land necessary for that important improvement. Some of this necessary land has already been donated by public spirited abutting land owners.

Another aid to navigation which ought not to be indefinitely delayed is the dredging of another Turning Basin, which would result in a material saving to an increasing number of vessels which must otherwise proceed upstream solely in order to turn around. In straightening the old Channel four islands have been created, surrounded on one side by the new Channel

and on the opposite side by the old Channel-these points are peculiarly adaptable to development as additional Turning Basins as and when needed.

The Magnolia Compress and Warehouse Companyoriginally Weld & Neville - was erected at a cost of \$1,000,000,00 at Harrisburg in 1901-2, and is a large and



Port Houston Fire Boat

important facility - it was originally designed to ship cotton by barges rather than ocean going vessels. Its water front wharf can be reconstructed for deep water craft at a modest additional cost.

The Manchester Terminal Warehouse Company is



City Hall. 1926

The City of Houston is now constructing an Industrial High-

way, one hundred and twenty feet wide, along the South side of the waterway from the Turning Basin to the center of/the City; and Bonds have also been voted with the proceeds of which to construct along the North side another Industrial Highway, also one hundred and twenty feet wide.

rapidly nearing completion, and will prove an important privately owned facility.

Another important facility which means much to future industrial development along the Ship Channel, and not generally recognized as vet, is the Intra-Coastal Canal which will connect the waters of Galveston Bav with the Mississippi River and the waterways tributary thereto. The far flung significance of this facility, indeed, challenges the attention of the most conservative one if he but permits his mind to dwell upon the industrial possibilities thereof.

Rice Hotel. Texas Avenue and Main Street. 1926

These two Industrial Highways will be of general economic importance, as well as of great convenience to existing and future Industries. The cost of these two Highways will be more than \$3,500,000,00, including the 69th St. Bridge, now nearing completion, by which they will be connected as one Belt Highway.

From the foot of Main Street. in the center of the City, to the Turning Basin, by the thread of the Waterway, is six and onehalf miles-air line is four miles -and this is known as the Upper Channel, suitable for barges and other light draft craft.

On the Upper Channel are a number of large and important cotton compresses and warehouses, which barge their cotton down to ocean steamers at and below the Turning Basin.

Congress has recently authorized the improvement of the Upper Channel, and the use thereof by light draft craft will

very materially increase as a result of the improvement. A large amount of tonnage already passes over it-during the year ending December 31st, 1925, a total of 282,536 tons was moved over the Upper Channel. The value of that tonnage was \$10,414,832.00.

Thus has been told the story of Buffalo Bayou and the

Houston Ship Channel in words and figures which, with the accompanying old and new pictures, is a story of surpassing interest to those who are interested in industrial development and growth. It is impossible to tell the story so that an accurate and adequate portrayal may be

> made on paper. I hope that I have done so with some degree of accuracy and comprehensiveness.

> What has already been achieved is largely due to the assistance of the National Government, coupled with the courage, confidence, and co-operation of the Community. The Waterway and the publicly owned rail and water terminal facilities are dedicated to the service of commerce, without which there would be no United States of America.

Transportation authorities have told us that no man can foretell the future industrial development along this land locked

and safe and secure waterway, and it is not inappropriate to close this story with the prophecy that the industrial development thereof will be only limited by the growth of Texas, by the character, extent and usefulness of the service rendered to commerce, by the extent of the cooperation and support of the people of Harris County,

and by the ability and character of the administration of the Port's affairs.

The dividends to date have been large-they will be larger in the future only if we, as a community, properly understand the importance of making our waterway of adequate and useful service.

It is apparent, after reading the story, that from 1837 to 1926, a period of eighty-nine years, the hope and struggle of this community have constantly been for the improvement of its waterway. It has worked incessantly to that end. It has neither faltered nor waivered at any time or place in the long journey.

It seems to me that this community faith, which has so unfalteringly sustained the hope and vision of the fathers, may have produced an unprecedentedly forward looking and energetic citizenship. I have often been told, by those who ought to know, that there are in Hous-



ton more interesting and outstanding characters, more men of courage and determination, and more and better community co-operation than in any other community

The author is indebted to Hon Ingham S. Roberts and T. F. Ravell for the pictures of early Houston inin the South. This may be so-I do not know-but it would be included in this work. The End. teresting to trace in a historical story that phase of our

Buffalo Bayou and Houston Ship Channel, 1820-1926

history, and I venture the observation that the faith in the Ship Channel for all the years may, in fact, have developed in the citizenship of today the existing worth while sense of responsibility to the community-"public spiritedness" — which has for three generations been

Main Street, 1926

characteristic of the community and which, it is to be hoped, will continue.

We have doubtless had what. at times, appeared to be our full share of citizens who have believed that the community exists for the citizen, rather than the reverse.

However, these thoughts are rather for another story at another time by another writer.

The author will appreciate additional data and information relating to the early history of Buffalo Bayou, and he hopes that the circulation of this story may bring to him enough such data and information to warrant.

at a subsequent date, a revision of the story.



Plant of Manchester Terminal Corporation. Storage Capacity 250,000 Cotton Bales. Cost Five Million Dollars.

Privately Owned Terminal and Industrial Facilities on Ship Channel

American Maid Flour Mills. American Petroleum Co. Armour Fertilizer Works. Carnegie Steel Company. Channel Fuel Co. Clarion Oil Co. Clinton Compress Co. Clinton Ship Yards. Crown Oil & Refining Co. Deepwater Oil Refineries. B. H. Elliott Ship Building Co. Galena Signal Oil Co. Gulf Pipe Line Co. Gulf Refining Co. W. D. Haden Shell Plant.

American Chemical Company. Bayou City Compress. Central Lumber Co. Crystal Ice Factory. Direct Navigation Company. G. C. Griffin Sand & Shell Co. Henry Henke Ice & Refrigerating Co. Horton & Horton.

W. D. Haden Ship Yard. Harrisburg Lumber Co: Harrisburg Machine & Foundry Co. Horton & Horton Ship Yard. Horton & Horton Shell Plant. Houston Compress Company. Houston Lighting & Power Co. Houston Oil Terminal Company. Houston Poultry Feed & Fertilizer Company. Houston Terminal Refining Co. Humble Oil & Refining Company. Keen & Woolf Refining Co. La Porte Oil & Refining Co. Magnolia Compress & Warehouse Co. Magnolia Petroleum Co.

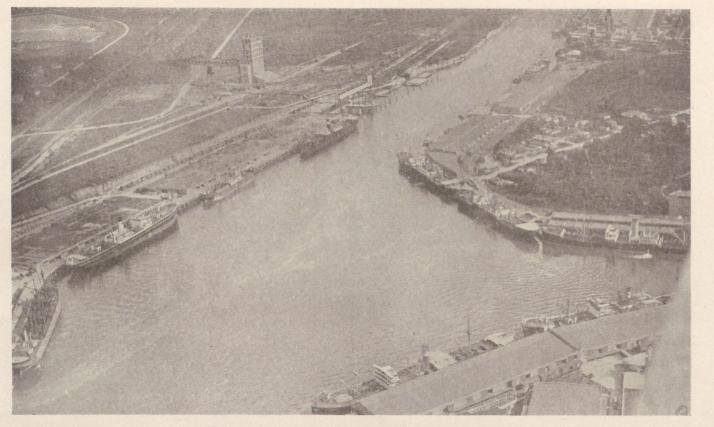
Houston Gas & Fuel Co. Houston Lighting & Power Co. Houston Packing Co. Houston Terminal & Cold Storage Warehouse Co. Houston & Texas Central Warehouse. Irvins Ice Plant. W. L. Jones. Merchants & Planters Oil Mill.

Below Turning Basin

Above Turning Basin

Manchester Terminal & Compress Co. Morgan Steamship Line Terminal. Pay-Tex Oil & Refining Co. Peden Iron & Steel Co. Rio Bravo Oil Co. Ship Channel Compress Company. Sinclair Refining Co. Southern Steamship Line Terminal. Sun Oil Co. Tex-Chemical Company. Tex-Cuban Molasses Co. Texas Portland Cement Co. The Texas Company. Turning Basin Compress Co.

Prichard Rice Mill. Ship Channel Boat Line. Shippers Compress Co. Standard Cotton Compress. The Texas Company. Trinity Portland Cement Co. Wolf Cotton Warehouse Co.

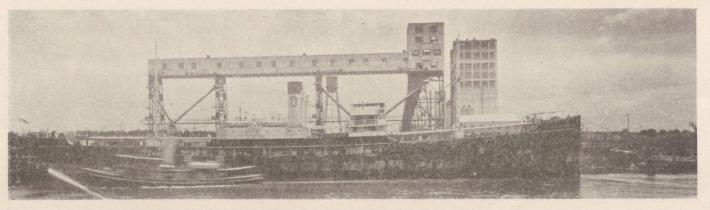


Airview of the Turning Basin Showing Eleven Vessels Loading and Discharging Cargoes

Port Commission (Harris County Navigation and Canal Commission)

> R. S. STERLING, Chairman D. S. CAGE, Vice Chairman. R. J. CUMMINS. BEN CAMPBELL. W. T. CARTER, JR.

MAJOR J. L. SCHLEY, Corps of Engineers, District Engineer, Galveston.



The Port of Houston Nov. 15, 1926

Operating Personnel

B. C. ALLIN, Director of the Port. H. H. Rose, Chief Clerk. H. H. Rose, Chief Clerk. H. J. Scott, Supt. Wharves. THOS. H. BALL, Counsel. H. L. WASHBURN, Auditor. GEO. S. COLBY, Supt. Grain Elevator Dept.

U. S. Government Officials in Charge of Construction and Maintenance of the Houston Ship Channel

MR. C. NELSON,

U. S. Junior Engineer, in charge of Field Office, Houston.

Port Houston's Publicly Owned Export Grain Elevator

Houston Chamber of Commerce

Nov. 15, 1926

Advisory Committee

-

R. M. FARRAR, President. J. W. NEAL, Vice-President. L. S. Adams, Treasurer. C. Milby Dow, Secretary of the Board. S. R. Berton, Jr. E. L. CRAIN. JOHN A. EMBRY. F. M. LAW. N. E. MEADOR. W. A. MITCHELL. JOHN A. MOBLEY. W. R. SCOTT. H. M. WILKINS. JOHN R. YOUNG.

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J. S. Cullinan, *Chairman*. Ben Campbell. W. L. Clayton. John A. Hulen. Roy Miller. T. Rieber. A. D. Simpson.

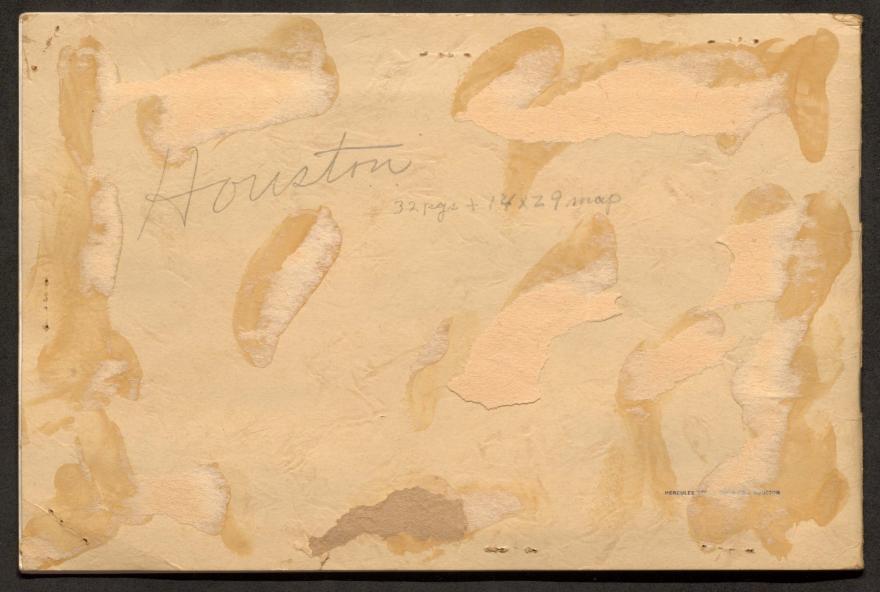
Operating Personnel

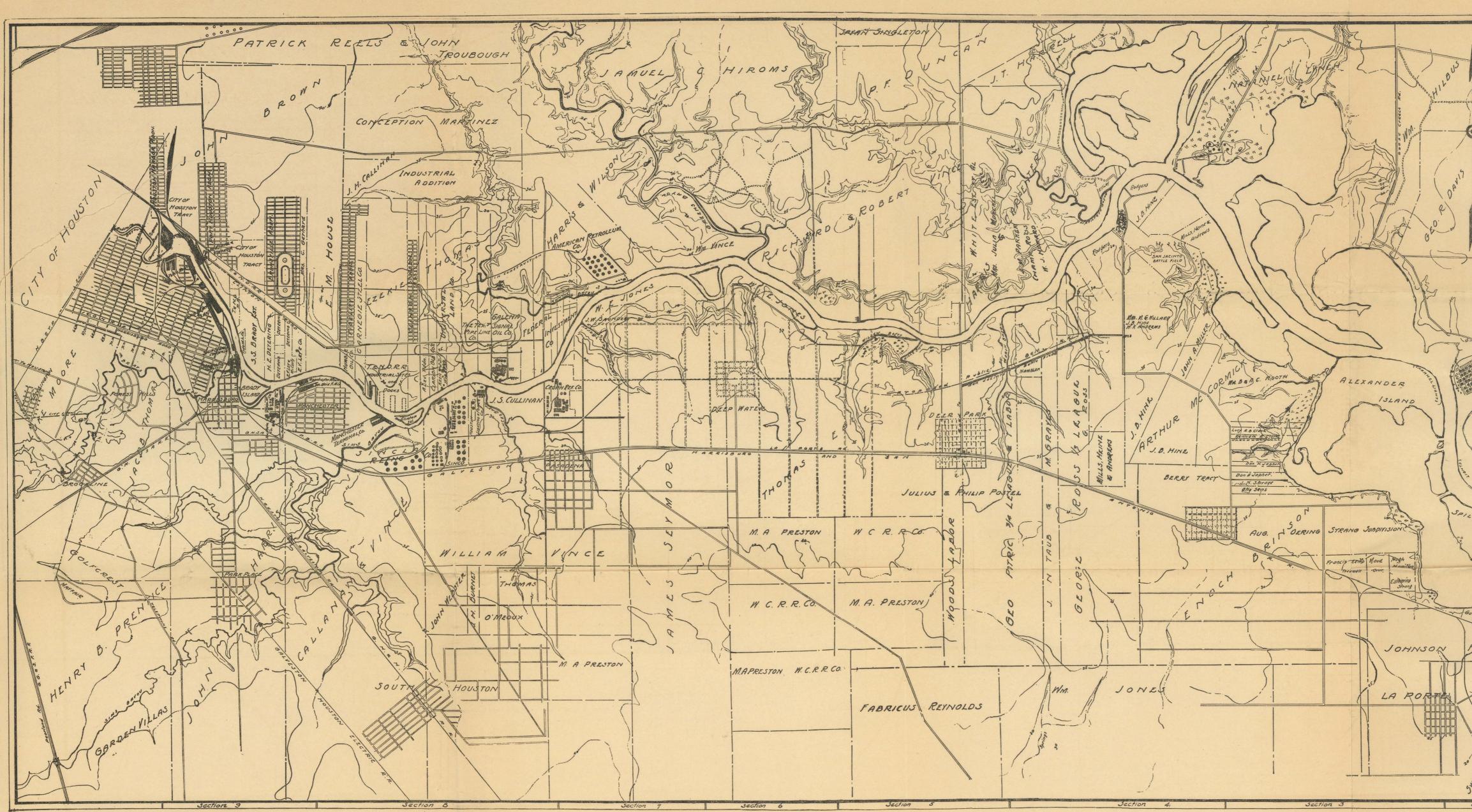
R. J. SEAMAN, Acting General Manager. G. C. ROUSSEL, Asst. to Vice-Pres. & Gen. Mgr. T. L. EVANS, Mgr., Domestic and Foreign Trade Dept. C. E. HOLLOMAN, Mgr., Transportation Dept. W. L. STALLINGS, Mgr. Agricultural Dept. BURT RULE, Mgr., Publicity Dept.



Ships of Many Nations Docked at Houston Compress Company Wharves







#1 - im

MAP THE HOUSTON SHIP CHANNEL Showing all Industries, Railways, Public and Private Docks, and Approximate all Original Surveys in the Vicinity of the Channel. This is a reduction of THE AUTHORIZED CHANNEL MAP" approved by the Port Commission Nor. 1925. Prepared for and distributed by the HOUSTON CHAMBER of Commerce, Houstory, Tex. 2000 1000 0 2000 4000 6000 Babilart Scale :-Kilometa 1 1/2 9 Compiled by Louis Ginsburg U.S. Engineers Retired ynchburg and Cedar Bayou Rd. 1-26-26 * Change DOSE CREEK MAN ISLAN! HUNTER BAY TON Norze- Sections of this Map on a large Scale showing more datails can be furnished in single or completeset upon request at the abore address Copyright Aplied for, Feb 1926. 55 Section 2.

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