HOUSTON
AND
SOUTHERN TEXAS
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A NEWSPAPER REFERENCE WORK

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FOREWORD

DESIGNED AS A BOOK OF REAL UTILITY TO THE NEWSPAPER, THE ARTIST, AND THOSE INTERESTED IN THE AFFAIRS OF HOUSTON AND SOUTH TEXAS, THIS WORK HAS BEEN PREPARED WITH A VIEW TO MEET THE DEMAND OF NEWSPAPER OFFICES FOR PHOTOGRAPHS AND DATA REGARDING MEN AND INSTITUTIONS WHO LEND THEMSELVES TO PUBLIC AND SEMI-PUBLIC ACTIVITIES.

CARE HAS BEEN TAKEN TO VERIFY EVERY STATEMENT MADE IN THE BIOGRAPHICAL DATA HEREIN, THAT IT MAY BE DEPENDED UPON TO BE HISTORICALLY CORRECT. THE ILLUSTRATIONS ARE MADE WITH A VIEW TO THEIR SATISFACTORY REPRODUCTION IN NEWSPAPER WORK; AND THE WORK THUS BECOMES A VALUABLE ADDITION TO NEWSPAPER LIBRARIES.
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HOUSTON AND SOUTH TEXAS

THE CITY OF HOUSTON had no share in the stirring events of the Texas Revolution simply because there was no City of Houston in existence at that time. The City and the Republic came into being about the same time, for as soon as the battle of San Jacinto was fought and won, in April, 1836, the Allen Brothers acted and defiantly located the "city" at this point. The Allens had tried to buy Harrisburg, but the deal had fallen through because the Allens thought that the Harrises demanded too great a price for their town and their holdings of land in its immediate vicinity. They then came five miles by land farther up Buffalo Bayou, purchased the lower half of two leagues of land from Mrs. Parrott, of New York, and located their city at the head of tide water.

Something that added materially to the immediate and ultimate success of the Allens was the fact that when they laid out Houston, Harrisburg was no longer a competitor for supremacy, Santa Anna having removed the latter town by burning it down, thus leaving the Allens, literally, a clean field.

So soon as the "City of Houston" was laid out, the Allens began the advertisement of city lots in the New Orleans, Georgia and other papers published in the United States, as well as in the only paper in the Republic of Texas at that time—"The Telegraph and Register," published at Brazoria. In that prospectus the Allens proved themselves to be masters of the advertising art, and, it may be added, truthful prophets, as well.

They claimed that Houston was bound to be the greatest shipping point of Texas; the greatest manufacturing point; the great railroad center, and, as early as August 30th, or three and one-half months before the First Congress of the Texas Republic met at Columbia, on the Brazos and selected Houston as the Capital of the Republic, the Allens rather more than hinted that such selection would be made. Houston was made the capital on December 15, 1836, and at that moment there was not a single house in the town and on January 1, 1837, he only house in the "city" was a small log cabin which he Allens had built for themselves. All the other citizens lived in tents.

However, within five months from that time, Houston had numerous log cabins and the large capitol building which stood on the site now occupied by the Rice Hotel, a large frame hotel, located on the corner now occupied by the Southern Pacific building, a President's mansion, a log cabin located on the site of the present Scanlan building, the land office, which stood where the Binz building now stands, and a number of less pretentious log cabins devoted to the sale of whiskey. The building problem was an embarrassing one, for Santa Anna had burned down the only sawmill in Texas when he destroyed Harrisburg, so that logs were he only available substitute for sawn lumber.

Governor Frank Lubbock, who arrived in Houston on the steamboat Laura, the first boat to come to Houston, on January 1, 1837, thus describes the situation in Houston at that date: "A few tents were located not far away, one large one being used as a saloon. Several small houses were in course of erection. Logs were being hauled from the forest for the erection of others * * * a number of workmen were preparing to build cabins, business houses and the big hotel on the corner of Franklin and Travis."

On January 19, 1837, the first sale of town lots took place and there were many buyers, for by now the former residents of Harrisburg and people from other parts of the Republic had been impressed by the enthusiasm and ardor of the Allens and had determined to cast their lots with the "future great city." In addition to these were many young men from the United States, young, active, progressive, and ambitious, who entered at once on the task of making Houston the great commercial center it has since become. These men were the
pioneer merchants and railroad builders of Houston who left behind them not only the city of Houston but the development of Texas as monuments of their achievements.

At that time, as now, Galveston was the chief port of Texas, but its location rendered it rather inaccessible because it could be reached by water only. When the steamboat Laura succeeded in reaching Houston, one of the greatest transportation problems was solved, that of reaching the port of Galveston easily and safely. The early merchants of Houston took advantage of this fact and soon built up a large trade with the interior of the Republic, bringing the products of the farms and plantations here by means of ox wagons and sending back such goods and implements as were needed by the farmers. For many years Houston received and shipped all of the commerce of the Republic and the foundations were laid for the fortunes made by the early merchants of this city.

There has always been a spirit of healthy unrest shown by the people of Houston, dating back to the very beginning, which has resulted in a constant reaching out for more and better things. Though the ox wagon system of transportation assured Houston a continuation of her advantages as a receiving and shipping point, her merchants were not content but, knowing that larger things lay behind the development of the Republic, began planning to build railroads to furnish greater facilities for transportation. As a result, the Houston & Texas Central Railroad was built by Houston men, with Houston capital, and while this was not the first railroad built in Texas, the short line from Harrisburg to the Brazos river having that distinction, it was the first road built along intelligent and far seeing lines, and has done more for the development of Texas and the greatness of this city than all other causes combined, for it established the great power of a railroad as an empire builder.

While the people of Houston have always shown such interest in the commercial upbuilding of this city and of Texas, the intellectual affairs of life have not been neglected, and they have done much for the arts, sciences and literature, as is shown by the fact that every great thing that has resulted in the upbuilding of Texas has originated in Houston. The first Lyceum and Library was established in Houston, the Texas State Medical Association was organized in this city. The first State Fair had its origin in Houston. The first great State musical association, the State Sangerfest, originated here, the State Law Association was born in Houston. The Texas Press Association was organized in Houston. In fact, it is difficult to find a single thing that has made for the material and intellectual life and prosperity of Texas that did not have its origin in the minds of the people of his city and was put in effect by them.

It is well to bear these facts in mind, for they show that Houston has not depended on her natural advantages to arrive at her present greatness, but that her people have ever striven to attain higher things by their own exertions.

It is impossible to review the steps, one by one, which this City had to take during early stages of her development. Great obstacles were met and overcome until now the city stands at the head of all competitors among the cities of Texas, with a future before her which is so great and filled with largeness that it staggers the imagination to attempt to grasp its real significance.

No city on this continent has greater natural and artificial advantages than Houston. Her location at the head of tide water on Buffalo Bayou, with rich and fertile lands surrounding her on all sides; her location near the great timber forests of Texas; her situation near the richest fruit and truck growing fields and farms and South Texas, are the chief of her natural advantages, while her seventeen great trunk lines of railroad, reaching to all parts of the continent and converging here like the mouth of a funnel to discharge the products of the great Southwest into her lap; her Ship Channel, bearing on its bosom great steamers from all great ports of the world, that come here to carry away the products of Texas and other States, form her artificial advantages. They are all so closely interwoven, however, that it is hard to say which are natural and which are artificial, since they are all due to the wisdom and forethought of the builders of this city.

Houston is unquestionably the greatest manufacturing point in Texas and stands very
nearly at the top of the manufacturing cities in the South. Her situation is ideal for such institutions as factories and shops, for on all sides of her is an abundance of raw material, while, here at home, is an inexhaustible supply of cheap fuel and pure artesian water, the latter obtainable everywhere by simply sinking artesian wells. These advantages have resulted in the establishment of hundreds of manufacturing concerns in Houston, many of them the largest of their kind in this country, employing thousands of workmen. Some of them so large that their possession would stamp Houston as a chief manufacturing point if she had no others.

It has already been stated that most of the great things in Texas had their origin in Houston and were conceived by Houstonians. It is not known generally that the first man in Texas to conceive the idea of cultivating rice in this State was J. R. Morris, a wide-awake merchant of this city. He became so impressed with the possibilities of rice culture on the prairies East of Houston, between here and the San Jacinto River, that he had a survey made at his personal expense, for a canal to be used for irrigation purposes. His failure to get permission to divert the water from the river into his canal put a stop to his ambitious undertaking, but he afterwards tried rice culture on a small scale, as an experiment.

As early as 1850, rice was grown in Texas, but there were less than 100 acres devoted to the experiment, and no attempt was made to grow it on a commercial basis. The industry moved so slowly that forty years later, in 1890, the total area of the Texas rice fields embraced less than 140 acres, though the method of cultivation had changed and irrigation had taken the place of the old hit and miss plan, which depended entirely on the occurrence of timely rains for the water supply.

In 1895, the acreage had grown to about 2,000 and after that there was a steady growth until 1909, the high-water mark of 283,282 acres had been reached. That year, rice sold at such low prices that many of the fields were abandoned and the acreage reduced materially. However, improved condition in the rice market resulted in another increase until year before last, the only year for which official figures are obtainable, the production of rice in Texas was 1,636,000 bags. Last year the acreage was increased about 25 per cent, so that the growing crop this year is expected to produce about 2,500,000 bags. A bag of rice contains 4 1/2 bushels. Rice now sells for from 6 1/4 cents to 7 3/4 cents per pound according to quality and grade, or at an average price of 7 cents. Thus it is evident that the coming crop of 2,500,000 bags, worth about $19 a bag, will produce $47,500,000, thus putting rice in the third place among the money crops of Texas. Quality is a leading characteristic of Texas rice, the agricultural department having asserted that "Texas grown rice is superior to that grown anywhere else in the world."

The foregoing figures are used for the dual purpose of showing the importance of the rice industry in South Texas and also to show Houston's important relation to the industry. The rice growing area extends from the Louisiana line to Matagorda County, covering Jefferson, Orange, Liberty, Chambers, Harris, Colorado, Wharton and Matagorda Counties, or an area about 180 miles long and 50 to 75 miles wide. These counties contain thousands upon thousands of the finest rice lands in the world, and when it is stated that not more than 20 per cent of the suitable land is under cultivation, the magnitude of the industry in the future may be appreciated.

Houston is situated at the top of a rough triangle which covers the entire rice producing area of Texas and 50 per cent of the rice fields are directly tributary to her. She mills fully one-half of the rice grown in the State, having five great rice mills for that purpose.

Important, as it is, rice forms but about 20 per cent of the agricultural industries of the counties embraced in the Texas rice belt, for fruit and vegetables are produced in large quantities in addition to corn, cotton, oats, peanuts and small grain crops. The climate is most favorable while the annual rainfall of nearly 50 inches insures sufficient moisture for growing crops of all kinds. The soil is very rich, producing 25 to 40 bushels of corn to the acre, an average of 75 bushels of oats, 33 to 37 bushels of peanuts, while fruit grows in abundance all over this territory.
It is strange but true that while oranges grew in such profusion in one of the counties embraced in the rice belt, that the name of that luscious fruit was given to the county, yet it is only in recent years that fruit growing on a commercial basis has been carried on in South Texas. Thirty-five years ago fully 90 per cent of the land in the present rice belt was regarded as unfit for any other purpose than that of grazing and could be purchased for 25 cents to $1 per acre. In the early Eighties, Major Stringfellow found that the worthless (?) lands between Houston and Galveston would produce not only pears but plums, peaches, strawberries and similar fruit in abundance. That discovery changed the aspect radically, and cheap lands disappeared from the market, prices advancing to $20, $40 and even to $100 per acre. Now, not only those lands but those of the whole coast belt produce figs, oranges grapes, peaches, plums, strawberries and other fruits in commercial quantities and form staple crops.

Records of the Weather Bureau show that the average date of the first frost in this section is November 25th, while the date of the last frost is March 5th. That gives to this territory a larger number of growing days than is enjoyed by other parts of the State. The fruit, vegetable and melon growers are enabled to place early grown fruits and vegetables on the market and secure the highest prices for them. The strawberry crop alone is of the greatest value and importance, and, in localities where plenty of moisture is obtainable at the critical period of the plants' growth, the yield is certain and large.

Of late years attention has been given to the cultivation of the Satsuma orange in South Texas, with the happiest and most gratifying results, conditions both climatic and otherwise being peculiarly well adapted to the growth and development of this fruit which is now considered a regular commercial crop of this district. The same is true of improved varieties of peaches and figs, the latter having enjoyed prominence for several years as a money making crop, since it grows in profusion and needs little attention. The Magnolia fig (so named because a man who ordered a magnolia tree from another State received a fig plant instead of a magnolia tree) is now one of the regular crops of all parts of the country lying in South Texas. It is not difficult to cultivate, is propagated from cuttings and produces abundant crops of fruit now eagerly sought after by the lovers of that delicious fruit. The plant is hardly, grows rapidly and produces fruit during the second year.

Also, in recent years the cultivation of watermelons and musk melons has been carried on extensively in the coast district. The salt air from the gulf seemingly giving the melons a flavor not found in melons grown in the interior. The rinds are of a lighter color, are thinner and the flavor of the melons such as once tasted is never forgotten.
HOUSTON has all the advantages of an interior town and of a seaport. It has been truly said that this city needs no boosting, the use of no loud-sounding adjectives, nor exaggeration, but merely the statement of unadorned facts to show its greatness as a receiving, distributing, manufacturing and financial center. In all of these, Houston is great already and when it is realized that scarcely a start has been made in most of them, the future is seen to hold the most dazzling prospects—prospects, too, which may be considered certainties rather than probabilities, it is reasonable to believe that the Houston of the future is destined to be one of the chief commercial, financial, manufacturing and industrial centers on this continent.

The basis for this belief is that Houston now has seventeen lines of railroad connecting her with all parts of this continent, while she has the Ship Channel giving her direct connection with all the markets of the world. Thus, she has both rail and water transportation and each is undergoing constant growth and expansion. Even now, when the Ship Channel is not completed, the largest ocean-going steamships come here for cargoes, several having only recently taken away cargoes of more than 20,000 bales of cotton, cleared from Houston for foreign ports.

The use of the term "not completed," as applied to the Ship Channel in the foregoing paragraph, was intentional, for work is now going on for the widening and deepening the already excellent channel, which when completed, will make it the equal of any canal or channel in existence. Even today it compares rather more than favorably with the famed Manchester Canal in England, as the following shows. That canal has a length of 35½ miles, a depth of 28 feet and a bottom width of 120 feet. Its cost was $85,000,000. The Houston Ship Channel has a length of 60 miles, a uniform depth of 25 feet and a bottom width of 120 feet. It has cost less than $5,000,000, so far, while the work now going on will be at an additional cost of about $3,000,000, making the total about $8,000,000. The Manchester Canal has 14 locks, while the Houston Channel has none. The Manchester Canal is a fine example of engineering skill, but no such skill is required in constructing the Houston Channel, for the work is largely mechanical, consisting mainly of dredging away the sand and clay from the sides and bottom of the channel. Being an arm of the sea, with tide water reaching miles above the Turning Basin, the channel might be widened and deepened indefinitely without lowering its surface the fraction of an inch for it has the whole Gulf of Mexico from which to draw its supply of water.

As already remarked, large ocean-going vessels of great cargo capacity come here with ease and safety, and several lines of such boats have been established, but when the work now under way is completed, the channel will have a uniform depth of 30 feet from Houston to the gulf, and a uniform bottom width of 150 feet, which will permit the largest commercial vessels afloat coming here with ease. An idea of Houston’s preparedness, right now, when the channel is only 25 feet deep, may be formed from the statement that 90 per cent of the commerce of the world is carried on in vessels drawing 22 feet and less.

COTTON.

Many of the friends of Houston, unintentionally, do this city a great injustice by saying that Houston is the greatest interior cotton market in the United States. The injustice is done by using the word "interior" before market, for Houston is actually and unquestionably the
largest spot cotton market on this continent and second only to Liverpool, England, among the spot cotton markets of the world. Houston receives, owns and handles over 1,000,000 bales of cotton each season and no other market on this continent can come anywhere near making such a showing. It is silly to speak of Houston’s gross receipts of cotton averaging 3,000,000 bales each year. Gross receipts are meaningless as showing the importance of any cotton market. It is the net receipts that count, and it is here that Houston’s 1,000,000 bales of net receipts score, for those figures represent the number of bales actually owned, controlled and handled by Houston’s cotton merchants, and represent as actual yearly interest of Houston of about $145,000,000 in the Texas cotton crop.

These conditions have prevailed for many years, not on so great a scale, however, but have been gradually growing. Interested people on the outside have charged that Houston has been favored by the railroads and that that has established her preeminence as a market. That, of course, is not true. Houston has been made great as a cotton market through the foresight and wisdom of her merchants and business men, as the following statement shows.

Wherever Cotton Exchanges have been organized, local cotton merchants, who were Factors, and therefore interested in the sale of cotton, have been in the majority. As a consequence, all rules and regulations governing the purchase and sale of cotton, have been made in the interest of the seller. Houston is a shining example of the wisdom of adopting an opposite course, for all of the rules of the Houston Cotton Exchange favor the buyer and all of the methods and customs of the local cotton merchants operate towards the same end. The result is that now, when the factorage business is largely a thing of the past, everything is favorable to Houston. The interior merchant and planter no longer ship cotton to market, for they have a market at their very doors and sell to the agents of buyers, representing foreign and domestic spinners, who, in turn concentrate the cotton at some favorable point for inspection and classification before its final shipment abroad. It is here that the unrivaled facilities of Houston come into play. There are 75 individuals and firms making Houston their headquarters, who buy cotton in all parts of Texas, Oklahoma, and some parts of Arkansas and Louisiana, every bale of which is brought to Houston and stowed here.

Not only do the rules and customs of this market favor the buyer but Houston has made ample provisions for handling the cotton at the lowest possible cost after it arrives here. Seven large compresses and warehouses have been erected, five of the compresses being strictly up-to-date and capable of compressing to high density. These compresses have a total capacity of 600,000 bales, while another high density press is now being constructed at a cost of $1,000,000, which when completed will have a capacity of 100,000 bales, making the total capacity of the city, 700,000 bales.

LUMBER.

It is a remarkable fact that the great financial panic of 1907 which carried so much disaster and ruin with it, was the direct cause of hastening Houston’s greatness as a lumber market. Until then the demand for lumber was so great that the consumers sought it at the mills, so that the sales departments and mills became practically one thing. Then came the panic; the demand ceased and the mills found themselves with large stocks of lumber on hand and no market for it. They sought to create a demand by sending their sales agents over the country, and were successful. But now another difficulty arose. It was necessary to keep in close touch with outside markets and with their sales agents and that could be done only from some central point. The obvious advantages of Houston as a receiving and distributing point led to its being selected as that point and several of the greatest lumber companies established their headquarters in Houston, at once. Others quickly followed and now Houston is the headquarters of practically every wholesale lumber company of Texas and of a large part of Louisiana; so that today Houston contains more great lumber concerns than any section of the United States, except the Pacific-Northwest.
The magnitude and importance of the lumber business of Houston may be appreciated when it is stated that Houston lumber firms handle between two and three billion foot of lumber each year. It is impossible to obtain definite figures showing the amount of the business in dollars and cents, but if that could be done, it would show that Houston, as a lumber center, stands very nearly at the head of the leading lumber markets of the world.

RAILROADS.

Houston as the great railroad center of the Southwest is so well recognized that it requires only the briefest mention of its leading features here. Seventeen great lines converge here and each one makes this city a terminus. There are no through trains passing through Houston. There are Pullman cars and passenger coaches, but no through freight trains, for all that leave here are made up in Houston.

There are nearly 6,000 men employed by the railroads in Houston, about one-half of them being skilled mechanics working in the shops of the Houston & Texas Central and the Southern Pacific railroads. Those shops are equipped with the latest and most efficient machinery. They are wonders of efficiency, and can turn out about everything needed for their engines and cars. They have machines for making the delicate tacks for the silk curtains of the Pullman cars, and machines for making the iron beams and castings that are used in the frames of the cars, some of them weighing hundreds and thousands of pounds. Of course, they make no locomotives, but since they have machines for making each separate part of a locomotive, it would be no difficult task for each shop to turn out one locomotive each day, so perfect and effective are their equipments.

The seventeen railroads have $10,000,000 invested in terminal facilities here, and the switches and side-tracks within the city’s limits, if placed end on end, would duplicate the Houston & Texas Central road from Houston to Denison, on the Red River.

During the year just closed, although train service has been much restricted by the Government, there were 90,000 trains hauled in and out of Houston, while the freight handled by them amounted to very nearly half a billion tons.

Houston has hundreds of manufactures, some of them huge affairs that would be a credit to a city twice its size, for its location as a manufacturing point is unequalled. It has everything, at its very door, that a manufacturer needs except, perhaps some kinds of raw material. There is an abundance of pure artesian water and an inexhaustible supply of cheap fuel, Houston being located in the very center of the oil producing fields. It has both rail and water transportation to and from the outside world. It is already the railroad center of the Southwest, and, unquestionably, it will become the great manufacturing center as well. In many respects Houston is great already as a manufacturing center, but there is a feeling of healthy unrest, because its citizens see what can and should be done in so great a field.

But since these manufactures will be treated in detail elsewhere, it may be well to pass on and see how Houston has prepared in a financial way to care for those already here and for those to come.

FINANCIAL.

Houston has long been recognized as the financial center of Texas and she justly deserves that honor. There are six National Banks and six State Banks, whose combined resources amount to over $161,000,000, while the Houston Federal Farm Loan Bank and the branch of the 11th District Reserve Bank, having a combined capital of $60,000,000, bring the total bank resources of the city to over $220,000,000.

In addition, there are several Trust Companies here having combined capital of several million dollars more. That shows how well Houston is prepared to care for the institutions already here.

But there is another feature of Houston’s bank statement, of equal importance. The individual deposits of her citizens in her banks amount to very nearly $56,000,000. That shows Houston’s ability to care for all worthy industries and enterprises that desire to come here, for her citizens already have both the money and the inclination to do that very thing.
THE HOUSTON SHIP CHANNEL

While Houston will unquestionably need five miles of improved and modern wharves, covering both banks of the ship channel below the Turning Basin, in the very near future, to accommodate the thousands of vessels that will come here when the present improvements in the channel are made, it is perhaps well to go slowly in the work of such wharf building until the channel is completed. Work is now under way for widening and deepening the channel. When this is done the Houston Ship Channel will have a bottom width of 150 feet from the Turning Basin to Morgans Point and a width of 250 feet from that point to the mouth of the jetties on the Gulf of Mexico, while a uniform depth of 30 feet will be established and maintained.

The growth and development of traffic on the channel have been marvelous and, in a measure, have exceeded the anticipated demands made on it. Only six years ago ocean-going steamers feared to enter the channel and hesitated to do so until the Steamer Dorothy, of the Bull Line, demonstrated that it was safe to do so by bringing a cargo of coal up the channel, which was unloaded at Clinton, just below Harrisburg, the construction of the docks at the Turning Basin being then under way but too incomplete to allow the Dorothy to unload the cargo at the latter point.

That first vessel was quickly followed by others and within a year several other steamers from Philadelphia brought cargoes of coal and iron pipe to Houston. Then, in August, 1915, the Southern Steamship Company docked its first steamer at the Turning Basin and inaugurated regular sailings between Houston and New York and Philadelphia. These facts are given to show how rapid the development of the channel commerce has been.

According to the annual report of Captain B. C. Allin, director of the port, the following named steamship lines have entered the port of Houston and are making regular sailings to the destinations named:

- The Gulf Export and Transportation Company, to Mexico and Central America.
- Daniel Ripley & Co., to Havre France, and Bremen Germany.
- Tex-Cuban Molasses Company, to Cuban ports.
- The Texas Chemical Company, to Montevideo, Uruguay and other South American ports.
- Southern Steamship Company, to Philadelphia.
- Sinclair Navigation Company, to Tampico, Mexico and European ports.
- Gulf Pipe Line Company, to Tampico and Tuxpan, Mexico, Port Arthur and Port Neches, Texas.
- Galena Signal Oil Company, to Tampico and Tuxpan, Mexico and European ports.
- The Armour Fertilizer Works, to Tampa, Florida.

In addition to these lines, there are frequent sailings of "tramp" steamers that come to Houston for cargoes intended for many ports of the world.

From January 1, 1920, to November 1, 1920, 204 vessels entered the Port of Houston and on the latter date there were four large steamers loading cotton for foreign ports, at the Turning Basin.

The 204 vessels mentioned in the foregoing paragraph brought in 274,220 tons of cargo, valued at $13,398,253 and took out 209,120 tons of cargo, valued at $24,208,957.
The rapid increase in the export of cotton through the Ship Channel is shown by the fact that during the entire season that ended July 31, 1920, only 69,000 bales were exported, while from August 1, to October 31, only three months of the present season, 153,508 bales have been exported and several vessels were still in port loading cargoes on the latter date.

Now, while this rapid growth of the commerce of the Ship Channel is shown by Captain Allin's report, he gives facts and figures to show that the commerce over the bayou between the Turning Basin and Main Street has also increased much greater than the average citizen of Houston dreams of. This commerce consists mostly of building materials, sand and shell for street paving, oil for industrial plants, rice from the farms below here, groceries and household furniture, oil well supplies and hundreds of such things, coming from or going to the towns and industrial plants located on the Ship Channel or on the bay. Captain Allin estimates that from January 1, to October 31, 1920, the movement amounted to 300,000 short tons, valued at $18,000,000.

One of the greatest benefits derived by Houston from the Ship Channel comes from the numerous industrial plants that the Channel has attracted. These plants now number twenty-six already on the ground while several other large companies are seeking an entrance here. Those already in operation on the Channel are:

- Tex-Cuban Molasses Company, molasses.
- Armour Fertilizer Works, fertilizers.
- Alex Sprunt & Son, cotton.
- Magnolia Compress & Warehouse Co., cotton.
- Deepwater Refinery, oil refining.
- Texas Chemical Co., chemicals and fertilizers.
- Magnolia Petroleum Company, fuel oil.
- Fidelity Chemical Company, fertilizers.
- Texas and N. O. Refining Co., fuel oil.
- Sinclair Oil and Refining Co., oil refining.
- Keen & Wolf Refinery, oil refining.
- The Texas Company, fuel oil.
- Galena Signal Oil Company, oil refining.
- Monroe-Hughes Company, oil refining.
- Crown Oil and Refining Company, oil refining.
- American Petroleum Company, fuel oil.
- Crescent Oil and Refining Co., oil refining.
- Gulf Pipe Line Company, mixing plant.
- Humble Oil and Refining Co., oil refining.
- Sinclair Gulf Oil Company, fuel oil.
- Le Porte Oil and Refining Co., oil refining.
- Walker Oil and Refining Co., oil refining.
- The Houston Mill & Elevator Co., flour milling.

These companies are all great concerns and represent an invested capital, not including that of the ground, of fully $25,000,000. From the foregoing statement, it is evident that the Ship Channel is something of a double blessing to Houston, for it not only furnishes her water transportation to and from the markets of the world; attracts commerce from the world's markets through and to Houston, but leads directly to the establishment of a number of great industrial plants here, that but for the Ship Channel and the many advantages and inducements it offers, would never have dreamed of coming here.

Captain Allin in closing his report says: "The industries that are already here represent but a small part of what can be located on the Ship Channel and adjacent territory, easily accessible to all the facilities of the Channel and are only a small beginning of what the future holds for the port of Houston when all of its possibilities are fully developed."
SIDE from her advantages as a concentrating and distributing point, Houston has at her very door everything that a manufacturer needs, with the exception, perhaps, of some kinds of raw material. There is an abundance of pure artesian water, an inexhaustible supply of cheap fuel (for Houston lies at the center of the great oil-producing fields of South Texas), both rail and water transportation giving her connection with the markets of the world, and, in a word, Houston has about everything necessary to make her a great manufacturing point.

That these advantages have not been overlooked by the manufacturers is evidenced by the location here of 520 manufacturing plants, several of them equal in size and importance to similar plants found anywhere in this country. It is a long step from the little corn-grinding mill whose motive power was an old mule; from the primitive rope-walk, located where Turnverein Hall now stands, which were Houston’s first manufactories, to the 520 factories, foundries and great workshops of today, but Houston has taken that step and had done so in so brief a time that the accomplishment really affords direct proof of her great advantages, for the situation that exists here has had an overwhelming influence in bringing this about.

It would seem that with the many manufacturing plants they have already, the people of Houston would be satisfied and would fear that the situation was overdone for a city no larger than Houston. That would be true, but for the fact that the plants here do not depend on Houston for the market, nor do they depend on the State of Texas, but on the whole of the United States, Mexico, and many of the South American and foreign countries. About the only great industry dependent on local interests are the cotton compresses that find a market here, so to speak, in caring for the more than one million bales of cotton brought here, owned and controlled by the cotton merchants of Houston, each year. But with all the great plants located here there exists a spirit of healthy unrest, caused by an appreciation of the fact that so inviting a field cannot be long neglected when one sees what can and should be done in it.

While Texas is the greatest cotton producing State in the world, and, in consequence, the greatest producer of cotton seed in the world, Houston is the greatest producer of cotton seed products in Texas. The business is large, and in spite of competition, shows a healthy growth, for Houston’s position as a receiving and distributing point give her advantages that cannot be overcome by would-be competitors. The manufacturing of cotton seed products is carried on by seven great establishments whose capital invested goes up to nearly $3,000,000, and whose finished products sell for between $5,000,000 and $7,000,000, annually.

Only a few years ago cotton seed was considered a real nuisance by every planter who owned a cotton gin and was regarded as absolutely valueless. Then some genius discovered that oil could be extracted from the seed and they became valuable. Then it was discovered that the shells of the seed could be ground up and converted into a fine nutritious food for live stock, and they became more valuable. Other uses were discovered for the seed until today cotton seed and its by-products about equal in value the cotton crop itself. The value of the Texas cotton seed is greater than that of the seeds raised elsewhere, for they contain more nutriment and are richer in oil. The analytical chemists of the Department of Agriculture at Washington state that the Texas cotton seed are the best and richest in the world, the cotton seed meal of other states having only 49 per cent of protein and fat combined, while cotton seed meal made from Texas seed has a minimum of 55 per cent. The conse-
quence is that cotton seed meal made from Texas seed commands a premium in all of the markets of the world. The mills of Houston use only Texas seed, of course.

The refined products of cotton seed oil are lubricants, imitation butter, lard and several other articles of a similar character. The various uses to which the products are put increase rapidly so that it is almost certain that ere long they will rival the once despised, but now invaluable by-products of coal tar.

No industry in the city is more thoroughly developed than the machine shops and the foundries. This has resulted because of the great and rapid development in so many industries, that has taken place and the consequent demand for machines and engines of various types. There are ample facilities here for all such work and engines are turned out in large quantities, from the small gasoline engines for motor boats to the huge locomotives for the railroads. As an evidence of Houston’s preparedness for foundry work it may be stated that not long ago a foundry here cast one piece of machinery weighing 75,000 pounds to be sent to Honolulu.

Both the Houston and Texas Central and the Texas and New Orleans Railroads maintain large machine shops here which are among the best and most thoroughly equipped institutions of their kind in this country. Each is equipped with modern machinery capable of turning out everything needed by a railroad, from the little tacks used for the curtains of the passenger cars to the cars themselves and the largest locomotives. No work is to delicate for these machines nor any too great for its other machines. As mentioned elsewhere, these shops have the capacity for turning out one complete locomotive each day if the demand for them should arise. The payrolls of these shops amount to between $5,000,000 and $6,000,000 each year for labor alone.

In addition to these shops, in the way of production to meet the demand of the railroads, the Grant Locomotive Works are prepared to do anything from repairing an old engine to building a brand new one and its business has shown such wonderful growth within the last year or two that the company is now planning to build a new and extensive plant at a cost of hundreds of thousands of dollars.

Houston, as a car wheel manufacturing center, has been known for over a quarter of a century and has now assumed its rightful place among the leading centers of this industry. There are two large plants located here, the Dickson Car Wheel Company and the Houston Car Wheel Company and each does an extensive business with all parts of the United States and with Mexico. The Dickson Company is the larger of the two with an annual output of 125,000 wheels, which are distributed to all parts of the Union. The Houston Company is an able second to the Dickson and between the two the Houston-made car wheels are now used on many of the leading railroads of this country and Mexico to the exclusion of all others—long service and durability having shown them to be superior to all other makes.

The Houston Oriental Textile Mills, one of the few institutions of its kind in the world, and, also, one of the three such mills in the United States, is an institution of which Houston is justly proud. The Houston Mills do an immense business in competition with the Eastern mills, and have extended their market both East and West, until now they cover the territory embraced between the Carolinas to the East and San Francisco to the West. This plant now specializes in the manufacture of "press cloth" which is made from camels' hair, colts' main, mohair and human hair, and is used in the extraction of vegetable oils. The "press cloth" is shipped to all parts of the world. Its raw materials are imported from China, Africa, South America, Japan and Egypt.

The Oriental Textile Mills is a veritable modern village and workshop combined. It has a school for the children of its employees, a church, modern houses for its workmen, many comforts and conveniences for its employees and everything is done for their health and happiness. It is needless to say that the company has the whole-hearted and loyal support of its employees. Its annual payroll amounts to fully $250,000.

Not until about fifteen years ago was the first pronounced step taken towards making Houston a great manufacturing center for furniture and woodwork of all kinds. About that
time, the Myers-Spalti Company established their initial plant here. From a small beginning their business has grown until now, in place of the one small building they occupied then, they have added several large three-story and five-story houses and their plant covers several acres. C. F. Lottman & Sons and the Deutscher Furniture Company are two other manufacturing plants here that have about all the business they can attend to. The combined output of these three firms amounted to nearly three-quarters of a million dollars last year. They manufacture furniture, household necessities, such as safes, etc., and claim that they make anything wooden from a toothpick to the heaviest furniture for home or office use. They have branch offices at all the leading markets and ship their products all over the South and the West.

The factories just named manufacture mattresses, bed-springs and such things in large quantities, but there are several large plants in the city, which are devoted entirely to such work, while one or two of the large furniture and household supply dealers have plants of their own where they manufacture mattresses and bed-springs, thus adding to the large output of these things here.

An article of great manufacturing and agricultural importance that has come into prominence during the past year or two, is the formerly humble peanut. The cotton oil mills of Houston were the pioneers in bringing this about, for they were the first to demonstrate the possibilities and importance of the lowly peanut as a vegetable oil producer. The industry is comparatively new, yet it has already succeeded in establishing a market, on a commercial basis, for the cultivation of this nut. Slight changes only have to be made in the machinery for crushing cotton seed, so the new industry was launched with small expense and trouble, and now promises to take its place by the side of cotton seed, both in importance and value. The stimulating effect of the discovery mentioned in the foregoing paragraph, has resulted in an immense production of peanuts, wherever suitable conditions for their cultivation existed, over Texas and, from being a neglected crop, that of last year sold for more than $40,000,000, a great part of the crop finding its way to the Houston mills.

The Texas Portland Cement plant located on the Ship Channel at Manchester, is one of the greatest and most important of Houston's manufacturing concerns. It is, also, one of the largest and most up-to-date concerns of its kind in this country, has a daily capacity of thousands of barrels of cement, and employs a large working force. It draws is supply of raw material from the extensive shell banks found along the bay front, almost at its door, while its proximity to the Ship Channel and its location on the belt railroad line now building gives it both rail and water transportation for its product not only to the domestic markets but to the markets of the world. It is one of the big cement plants not only in Texas but in the United States as well, and adds immensely to Houston's importance as a manufacturing center.

The Texas Chemical Company's plant is located at Manchester also, near the Cement plant. This is one of the largest plants of its kind in the South. It has been completed only a short time but has already made its influence for good felt. Its products are sulphuric acid, ammonia, commercial fertilizers and bone-carbon for refining sugar. The plant is an immense one and has a daily capacity of 100 tons of sulphuric acid. It draws its raw material for the manufacture of the acid from the great sulphur deposits near the mouth of the Brazos River. Though only recently completed its business has so increased that the company is now duplicating its plant, which, when completed, will make this one of the largest and best-equipped chemical plants in this country. In addition to the manufacture of acid, the plant produces large quantities of commercial fertilizers, bones for their manufacture being imported from South America and taken direct to the plant through the Ship Channel. The company has an active demand for its products, both locally and abroad.

Houston is unquestionably the greatest manufacturing point of what has become a vital need in the development of the oil fields, namely, the manufacturing of oil well supplies. There are ten great companies here, among them several of the most important concerns of their kind in this country, whose annual output amounts to millions of dollars. Their prod
products are sold in all parts of Texas, Oklahoma, Kansas, Arizona, New Mexico, California, in fact, wherever oil well drilling is under way or oil fields are already developed. This industry has attained its high development in a few years, and it has been most thoroughly organized and perfected in Houston. The demand for its products has increased so rapidly that one or two of the large plants have more than doubled their capacity in the last year or two, and at least one, has now under construction one of the largest and most complete plants in this country, an increased capacity rendered necessary by the constant increase in the demand for its products.

Although still in its infancy, the manufacturing of grain bags has already attained to respectable proportions as the following shows: Last year the Houston manufacturers turned out 30,000,000 grain bags having a commercial value of $5,000,000 and found a ready market for all of them in the local market as well as in the wheat belt of the Northwest. More than that, they supply the markets in parts of South America. The industry is a growing one, subject to sharp competition from the great mills in the North and East, yet notwithstanding that, Houston’s superior advantages as a distributing point, with an abundance of raw material near at hand, enable her bag mills to more than hold their own against all comers.

A huge flour mill and grain elevator are now under construction in this city, located on the Ship Channel, which, when completed, will make this city one of the great flour producing points in Texas. The plant will have a daily capacity of 3,500 barrels of flour which it is estimated will meet the demand of Houston and nearby markets only, so that great expansion of its facilities has been provided for.

Unfortunately, the census returns for the manufacturing industries of Houston have not yet been made public, so that an exact statement of Houston’s growth and development during the last ten years cannot be made. In order that an intelligent idea of this growth may be formed by the reader, the following statements are given:

The United States census figures, made public July 22, 1911, gave the following facts about manufactories here in 1910:

| Number of establishments | 249 |
| Capital involved | $16,594,000 |
| Number of employees | 5,338 |
| Value of products | $23,016,000 |

In the absence of Government official figures, the following, compiled by George W. Dixon, publicity director of the Houston Chamber of Commerce, are used. He made a close survey of the situation and issued the following, showing it as it exists today:

| Number of establishments | 520 |
| Capital invested | $50,000,000 |
| Number of employees | 12,000 |
| Value of products | $73,000,000 |

If Mr. Dixon’s figures be correct, and there is every reason to believe that they are, then Houston’s manufacturing concerns have kept pace with the growth of Houston in every way during the last decade, and lead to the belief that the future holds much promise of greatness for this city in every way.
Houston's Crude Petroleum Refineries

If Houston were not the leading cotton market of America; if she were not the second largest lumber market on this continent; the financial center of Texas and had only her railroads and ship channel she would still be immensely great. But her greatness is added to by her possession of so many crude petroleum refineries, which illustrate forcibly the importance of manufacturing plants, for without them, so far as petroleum is concerned, Houston would be simply a way station or a link in the commercial chain leading to some other point of greater importance. However, as it is, Houston is now at the center of a great wheel covering the oil producing fields of the Texas coastal region, the flow radiating inward instead of outward and pouring the liquid wealth into her lap.

Ex-Senator A. J. Hazlett, recently editor of the Oil Trade Journal, of this city, but now publicity man for the Producers and Refiners Corporation, Petroleum and Its Products, with headquarters at Denver, Colorado, than whom no man in this country is a greater authority on all matters relating to oil, states that the annual production of petroleum in Texas is now 100,000,000 barrels and that more than 4,000 miles of pipe lines are in operation, with other lines being constructed for the purpose of transporting the crude petroleum from the producing fields to the refineries in the State. That is not all, for these Texas pipe lines are connected with a network of pipe lines reaching into Oklahoma, Kansas and Louisiana, through which about 40,000,000 barrels of crude petroleum are brought to the Texas refineries each year to be added to the 100,000,000 barrels produced here. Thus, it is evident that there is small danger of the Texas refineries running short of raw material.

Nearly all of these pipe lines are tributary to Houston, either directly or indirectly, while the Humble Oil Refining Company has just completed a line from the Ranger Oil field direct to its refinery on the Ship Channel, and to the Shipping Docks at Texas City, also, a line from the West Columbia field to the channel, making in all a line of 8-inch pipe about 340 miles in length, at a total of about $20,000,000.

The mileage of pipe lines in Texas is distributed among the various oil companies as follows:

<table>
<thead>
<tr>
<th>Company</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Company</td>
<td>925</td>
</tr>
<tr>
<td>Magnolia</td>
<td>910</td>
</tr>
<tr>
<td>Gulf</td>
<td>715</td>
</tr>
<tr>
<td>Prairie</td>
<td>500</td>
</tr>
<tr>
<td>Humble</td>
<td>350</td>
</tr>
<tr>
<td>Sun</td>
<td>175</td>
</tr>
<tr>
<td>Pierce</td>
<td>85</td>
</tr>
<tr>
<td>Sinclair</td>
<td>80</td>
</tr>
<tr>
<td>Empire</td>
<td>75</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,015</strong></td>
</tr>
</tbody>
</table>

The replacement value of these lines is, in round figures, $100,000,000.

That Houston is the financial center of the Oil Industry, in Texas, is shown by the fact that the Texas, Gulf, Humble, Sinclair, Republic, Galena-Signal, Crown, Houston, Higgins, East Coast, Rio Bravo, White, Turnbow, Monarch and many smaller oil companies have their headquarters, or branch offices, here, while all of the leading oil well supply houses maintain district headquarters in this city.
A number of manufacturing concerns, specializing in oil well supplies are also located in Houston, such as the Lucey Manufacturing Corporation, Hughes Tool Company, Reed Roller Bit Company, Layne-Bowler Corporation, J. H. McEvoy Company, Stancliff Screen Company, Perkerburg Tank Company, Cameron-Devant Company and others.

The magnitude of the petroleum and its allied industries may be seen when it is stated that not less than $50,000,000 is now being spent by the various oil interests in territory directly tributary to Houston, while the value of sites, tank-cars, boats, filling stations and equipments will not fall short of $200,000,000, and that producing, transporting, refining and marketing give employment to fully 200,000 persons in the State.

At present Port Arthur is the leading petroleum refining point in Texas, but before long Houston will take that honor from her. This is no empty boast but a plain statement of fact. Port Arthur now has a daily charging capacity of 96,000 barrels, while Houston has only a daily charging capacity of 35,200. However, Port Arthur has reached her limit, while Houston is just beginning to extend and reach out as the following statement shows:

<table>
<thead>
<tr>
<th>Refineries</th>
<th>Operating Now</th>
<th>Being Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crescent Oil Refining</td>
<td>1,300 barrels</td>
<td>300 barrels</td>
</tr>
<tr>
<td>Crown Oil</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Deepwater</td>
<td>1,200</td>
<td>800</td>
</tr>
<tr>
<td>Galena-Signal</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Humble</td>
<td>12,000</td>
<td>48,000</td>
</tr>
<tr>
<td>Hughes-Palmer</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Keen and Wolf</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>La Porte</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Pa-Texas</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Sinclair</td>
<td>5,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Trans-Atlantic</td>
<td>1,500</td>
<td>1,000</td>
</tr>
<tr>
<td>Turnbow</td>
<td>1,200</td>
<td>1,300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35,000</strong></td>
<td><strong>61,900</strong></td>
</tr>
</tbody>
</table>

This will give Houston a daily charging capacity of 100,000 barrels, placing her far in the lead of all competitors. The added capacity is now under rapid construction and it is not simply surmise nor talk.
INCE, as we have seen, Petroleum occupies so important a place in Houston’s industries, it may not be out of place to give a brief, non-technical, description of the process by which the crude petroleum is refined.

When the crude petroleum comes from the wells it is run into temporary storage tanks, the larger ones holding 55,000 barrels or more. A number of these tanks grouped together is known as a “Tank Farm.”

From these storage tanks the oil is pumped, through pipe lines to the refineries, usually nearby but in some instances, hundreds and even thousands of miles away from where it is produced; for the refineries are generally located at some deep water port or other point having superior transportation facilities, so as to secure as large an area of commercial life as possible.

When the crude petroleum reaches the refineries it undergoes many processes, the chief one being what is called basical refining where something more pleasing to the eye and far more valuable is made from some very dirty looking material. But before anything is done, the oil is allowed to “rest” or settle in storage tanks so as to separate all water and earthy matter from it which is accomplished by allowing these to sink to the bottom of the tank. After “resting” the oil is pumped into what are called “stills” or distillation apparatus. These stills usually have a capacity of from 100 barrels to 1,200 barrels. They resemble huge boilers, which in fact they are, except instead of boiling water and producing steam, they boil oil and produce vapors. These vapors escape through the top of the still into a large pipe which leads to the condensor.

Now, as everybody knows, water is composed of two atoms of oxygen and one atom of hydrogen; that at 212 degrees, Farenheit, water boils, changes its form and becomes steam and that when it comes in contact with a lower temperature than 212 degrees it again changes its form and becomes water. With crude petroleum, however, it is different, for it is composed of a number of chemical compounds, each affected by a different degree of heat and each having its own particular boiling point. It is owing to these various boiling points that the different petroleum products are separated from the crude petroleum. The foregoing gives, in brief, the governing principles of crude petroleum distillation by which the constituent parts of the oil are separated the one from the other.

As already stated the vapor is passed through the large pipe at the top of the still and then goes to the condensor, which is a large square box filled with small pipes through which cold water is constantly flowing, which causes the vapor to condense. After being condensed, it flows into another pipe leading into the “manifold,” or receiving house. This manifold may be compared to a railroad freight yard having many tracks and switches, with this difference that pipes take the place of tracks, and the flowing oil that of the trains. When the product reaches the manifold it is called distillate and each distillate is switched to its proper pipe leading to its own receiving tank. That, roughly, describes the process of distillation.

Of course, the various products do not come over from the still all together, but come one at a time, the still man arranging the heat under the still at that point which will drive off the one having the lowest boiling point, which is gasoline, then raising the temperature slightly so as to vaporise the next one and so on until all are driven off, each being gathered in its own particular tank after passing through the manifold.

All crude petroleum contains the following different products, though some of them may be represented merely by a trace: Gasoline, Naptha, Kerosine, Gas-oil, Light Lubricating, Heavy Lubricating, Medium Lubricating, Cylinder Stock, Fuel Oil, Asphalt.
One by one these distillates are driven off from the still, go to the condenser, thence to the manifold where they are switched, each to its own receiving tank where it is allowed to settle, the water and other undesirable ingredients sinking to the bottom of the tank. After that each distillate is pumped to its intermediate tank and is on its way to be further refined.

These distillates may now be compared to a human family, the different grades of crude petroleum representing the parents, for they were all originally found in it, but, judging from their appearance one would never take them to be brothers and sisters, for they bear no resemblance one to the other. The family as a whole was black, but now we find gasoline and naphtha which are white; kerosene which has a distinct "yellow streak," gas-oil which is a dirty yellow, the lubricating oils some of which are pale and some red, the cylinder stocks which are greenish and brownish and finally asphalt which is as black as tar. However, the chemist and refiner know they are all from one family—the ugly crude petroleum family.

From the tanks each of the distillates goes through a process of rectification, the only difference in the process being that some of them receive more of this treatment than the others.

They then go to the agitator, a tall, narrow tank, where they undergo a process of "treating" which is nothing more than a washing and scowering with acids, caustic soda, soda ash and hot or cold water, that depending on the grade of the distillate itself. All of the washing and agitating is done by compressed air. This process removes all impurities, excess carbon, etc., from the distillate and, in some cases the product, after this treatment, is ready for the market after being allowed to settle for a short time.

A good many of the products have to undergo further processes, however. Gasoline, naphtha and kerosene are now practically finished products and are ready for marketing, while gas-oil has only to be freed of its moisture to be ready for shipment. But lubricating oils require further treatment. If they are from a crude petroleum that has an asphalt base they are filtered after bleaching, so as to clear them of all extraneous substances and impurities. But if they come from crude petroleum that has a parrafin base they undergo the same process but are given more attention. They go to the parrafin plant which performs a double duty, for it not only makes the lubricating oil fit for use, but, at the same time extracts from the distillate a valuable by-product called parrafin wax. The process is simple and consists only in refrigeration. The oil will not freeze but the wax will congeal at the low temperature and in that way the oil is freed from it and the by-product parrafin wax is obtained.

In no part of a refinery are more different kinds of machines gathered than there are in a parrafin plant. There are brine-tanks, ammonia tanks, big hydraulic presses through which the oil is squeezed, leaving the wax on large canvas sheets (sweaters) where the last trace of oil is separated from the parrafin wax, pumps, tanks, pipes, etc., etc., in bewildering number. After the parrafin plant process, the wax is melted and filtered to give it its white color, when it is then run into moulds of commercial size after which it is packed in sacks and is ready for shipment.

After the wax has been extracted from the lubricating oil, the latter goes to the filter-house for further refining. This filter house is a pretty hot place and contains many tanks, all funnel-shaped and tightly closed on top. These tanks, called filters, are filled with Fuller's earth which removes the suspended coloring matter from the lubricating oil and, also, extracts the free carbon contained in the oil. The process is a simple one. The oil is let in at the top of the filter, trickles slowly down through the Fuller's earth and comes out at the lower end, a beautiful liquid. Its color varies from the yellow of a lemon to the dark red of a cherry. Some cylinder oils are again filtered and these are more transparent and have a beautiful dark cherry-red color.

Gasoline has the lowest boiling point, is the lightest and, therefore it is the first member of the crude petroleum family to be driven off by the heat under the still; asphalt has the highest boiling point, is the heaviest, and therefore, is the last to be driven off. In some grades of petroleum asphalt is the base and forms 60 to 70 per cent of the oil, while in other grades it is an outcast and constitutes nothing short of a nuisance. But it cannot be denied
that all crude petroleum owes much of its support to its member—asphalt. As a rule crudes with a paraffin base have greater gasoline content, while crudes with an asphalt base contain a high percentage of lubricating oil.

All of the various products of the refinery have to pass rigid examinations by the chemist who subjects them to the severest tests, but having successfully passed that ordeal, they are ready for the market and are then put in barrels, iron drums, 5-gallon cans, tank-cars, tank-steamers and enter the world to produce heat, light, lubrication and many other necessities, comforts and luxuries for mankind.
Jesse Holman Jones

Prominent for his activities as capitalist and builder, JESSE HOLMAN JONES, with office at 708 Goggan Building, Houston, Texas, continues to contribute to the commercial prestige of South Texas through a variety of endeavors. He is the son of William Hasque and Alma Holman Jones, born in Robertson County, Tennessee, on April 5, 1874. He attended the Public Schools of Tennessee, then, with the determination to build a business for himself, Mr. Jones started the ladder of commercial success at the bottom round, and has persistently climbed upward to the eminence he now occupies. In addition to lending his influence and support to all civic betterment movements, Mr. Jones contributed able co-operation to his country's need during the late World War. He was a member of the War Council, and Director General of Military Relief of the American Red Cross in Washington, later serving overseas, with great success and much personal distinction. Jesse Holman Jones is also widely known as a clubman with national affiliations. He is a member of the Bankers Club of New York; Chevy Chase Club, Washington; Sleepy Hollow Country Club, New York, Metropolitan Club, Washington. He also belongs to the Houston Country Club, Houston Club, Lumberman's Club, Elks and the Salesmanship Club. Mr. Jones is married and resides at the Rice Hotel, Houston, Texas.
JACOB F. WOLTERS, Lawyer, was born at New Ulm, Austin County, Texas, September 2, 1871. Attended public schools of Fayette County and Add-Ran Christian University (now Texas Christian University). Admitted to the bar in 1892. Elected County Attorney, Fayette County, same year. Represented Fayette County in Twenty-Fifth Legislature. Served as officer of Cavalry during Spanish war in U. S. Army. District Presidential Elector, 1900. Presidential Elector at Large, 1904. Removed from LaGrange, Texas, to Houston, in 1905. Candidate for the United States Senate, 1912; defeated by a plurality in democratic primary by Morris Shepard, Lieut. Colonel National Guard, 1910. On entry of United States into the world war, rendered conspicuous service by conducting educational campaign through public speeches and newspaper articles on duties of citizens in war, and brought about cordial relations between Americans of German and other racial extractions. Appointed Brigadier General, National Guard, April 1, 1918. Organized First Cavalry Brigade, National Guard. Granted federal recognition August 28, 1918, with all units of this organization designated for federal draft. With officers and selected enlisted specialists, ordered to a training camp. With entire organization, ordered for federal mobilization January 2, 1919. Qualified in grade Brigadier General, National Guard, Cavalry Officers' Training School, Camp Stanley. Armistice intervened; previous orders for mobilization of brigade were cancelled. Served with National Guard troops Longview race riots June, 1919. Commanded storm stricken area, Aransas and San Patricio Counties, September-October, 1919, under martial law. Commanded Galveston military district June 7-October 8, 1920, under martial law. Under reorganization, National Guard now in progress throughout United States, has been assigned to command Cavalry Brigade Army Troops, consisting of units in Texas, New Mexico and Colorado. Actively engaged in the law practice as senior member of the firm of Wolters, Storey, Blanchard & Battaile. Member of Masonic fraternities, K. P., Elks, Houston Country Club, Houston Club, University Club and Turn Verein. Married Miss Sallie E. Drane, of Columbus. Two sons: Theodore Drane and Russel F. Wolters.
President of the Houston Chronicle, was born November 29, 1870, at Pembroke Christian County, Kentucky, and at the age of three years was brought to Huntsville, Texas, where his parents resided.

When only twelve years of age, he was a Printer's Devil, on the old Huntsville Item, then under the management of George Robinson, Sr., where he learned the rudiments of the newspaper business, setting type, washing rollers, and pulling the Washington hand-press.

After graduating from the Sam Houston Normal Institute at Huntsville, and after a short course of study at the University of Texas, Mr. Foster put into effect his determination to learn the newspaper business in a large city.

In 1892, he came to Houston and obtained a position as reporter at $10.00 per week. The twenty-eighth year of his age found him occupying the position of managing editor, probably the youngest managing editor of any paper of importance in the country.

When the oil boom struck Texas with the opening up of Spindle Top, Mr. Foster, aided by his accurate knowledge of markets and marketing, made a few thousand dollars in oil-land speculation, and October 14, 1901, he established the Houston Chronicle, which from a six-page sheet has grown to its present metropolitan size and influence, with the finest newspaper plant and office building in the entire South.

Mr. Foster was elected President of the Southern Newspaper Publishers' Association in July, 1920, and is also a director of the newspaper departmental of the American Association of Advertising Agencies.

Mr. Foster is interested in various industrial, commercial and financial enterprises in the city of his career. He is a member of the Elks, the Houston Club, the Houston Country Club, the Kiwanis and Rotary Clubs.
On June 21, 1887, in Aiken, South Carolina, there was born to Mr. E. J. C. Wood and Mary A. Wood, a son, whom they named WILLIAM ELLIOTT WOOD. When the boy grew to early youth, his education was inaugurated on a sound basis and, passing from elementary to academic, he entered Davidson College, Davidson, North Carolina, for one year. The youthful aspirant for a life of success then entered Georgia Tech., Atlanta, Ga., and graduated therefrom as Electrical Engineer, class of 1907. Mr. Wood immediately entered the Statistical Department of Stone & Webster, in their Boston, Mass., office. In December of the same year he affiliated with the Transportation Department of Jacksonville, Fla., Traction Co. New honors distinguished Mr. Wood in January, 1910, when he became Engineer, Maintenance of Way, Jacksonville Traction Co., in which office he served until April, 1913. At that date the Company again demonstrated their recognition of his superior qualifications by offering him the Superintendent of their Company’s operation, which office he accepted. In April, 1916, Mr. Wood added to his previous proud record by being appointed Superintendent, Transportation Houston Electric Co. In July, 1917, he was appointed Superintendent of El Paso, Texas, Electric Railways from which connection he went to Galveston Electric Co. as Manager of their Corporation. April, 1920, Mr. Wood became Manager Houston Electric Co., and Galveston-Houston Electric Railways Co., in which important office he remains to date. Mr. Wood is recognized throughout Engineering circles for his efficiency and scientific knowledge.

WILLIAM ELLIOTT WOOD married Ruth Louise Johnson on October 8, 1913. Their two children are Miss Mary Louise Wood, born on December 7, 1914, and Miss Ruth Ellen Wood, born March 25, 1920. The family residence is 1112 Sul Ross Avenue, Houston, Texas.

In club and fraternal circles Wm. Elliott Wood is widely known as a popular member of Houston Club, University Club, Houston Country Club, Rotary Club, B. P. O. E., Beta Theta Fraternity and Azola Club.
Of great interest to the public is the career of SAMUEL FAIN CARTER, Jr., son of Mrs. Caroline Banks Carter and S. F. Carter, born in Beaumont, Texas, on May 29, 1890. His scholastic preparation for a successful life commenced in the Public Schools and Longfellow School of Houston, progressing through Southwestern University of Georgetown, Texas, Virginia Military Institute, Lexington, Va., and Roanoke College, Salem, Va., to a distinguished conclusion in 1917. Mr. Carter began business in the humble position of file clerk for the Continental Lumber Co., on January 7, 1913. He later became a city salesman, and when the company disorganized on March 1, 1914, he formed a partnership in the now prominent firm of Tryon and Carter, engaged in wholesale lumber business. Mr. Carter has always been especially distinguished for his vigorous activities in promoting movements for the public good. He aided valiantly in organizing the Y. M. B. L., and served as one of its directors for 2 years. He was First Vice-President from June to December, 1919, and President from December, 1919, to June, 1920. As Vice-President of the Y. M. B. L., he went to Aransas Pass with the Houston Relief Train and assisted in restoration of order in that stricken community for ten days. He had charge of unloading all relief supplies and directed distribution of them to Aransas Pass, Rockport. He personally accompanied the wagon that carried the first load of relief supplies to Rockport after the storm had subsided. During his term as President of the Y. M. B. L., Mr. Carter contributed notably toward bringing the Confederate Veterans’ Reunion to Houston, aided the Albert Johnston Camp Sons of Confederate Veterans of which he was later appointed Commander. During the Reunion further recognition of his valuable efforts was accorded Mr. Carter by his appointment as Commander of the Trans-Mississippi Department of Sons of Confederate Veterans. Perhaps no work Mr. Carter has accomplished has endeared him more to Texans personally than his splendid activity in behalf of commemorating San Jacinto Day. He inaugurated a movement for annually celebrating (Continued on page 81)
WILLIAM CHELSEY TURNBOW

President and General Manager of the Turnbow Oil Corporation, known from New York to Texas in the Oil Industry as one of its most important promoters, and a recognized factor in banking circles, has attained his present eminence through persistent efforts and determination not to be frightened by difficulties, prodigious though they appeared to be at the moment of their appearance. Left an orphan at the age of twelve years, he acquired what education as he could while also fighting the wolf from the door with the valor of a man. In 1902, he entered the oil business at Spindletop, Texas, being practically a pioneer. Later his operations included Baston, Sour Lake, Saratoga, Humble and Goose Creek. His persistence in an unknown field attracted other powerful interests, and resulted in direct progress for the oil business in Texas. Mr. Turnbow's present enterprise, The Turnbow Oil Corporation, was organized in January, 1920, capitalized for 250,000 shares of no par value. It is at present approximately a $5,000,000 Corporation, owning a refinery on the Houston Ship Channel which it is necessary to enlarge. The Turnbow Corporation also has producing properties in Goose Creek and Burk Burnett fields, and is active in other properties of similar prospect and value. Prior to organizing the Turnbow Corporation, Mr. Turnbow had organized and brought to a successful issue the Gulf Coast Oil Corporation, which he later disposed of. In addition to oil, Mr. Turnbow is President of the Gulf State Bank of Houston, Texas, and owns large tracts of land, including ranch properties, which support vast herds of valuable cattle. Mr. Turnbow was married to Miss Julia Ruth Springer, on Sept. 28, 1904. Their one daughter is Miss Julia Ruth, the Second. In private life, Mr. Turnbow is equally as happily successful as in his public career. He is popularly a member of Odd Fellows, the Y. M. C. A., Houston Club, Camp Sterrett Country Club.
Actively promoting development of Texas Waterways. JOHN PERCY MITCHELL, business man and operator of water route mail lines in South Texas, is widely known and recognized for the genuine, constructive value of his industrial efforts. Undismayed by apparently insurmountable difficulties, Mr. Mitchell organized the Pioneer Transport Company, which operated between Houston and Goose Creek field, and still operates a freight and express line between those points. From 1903 until 1909, when mail line operation in South Texas was attended with every character of discouraging feature, he determinedly commenced the operation of a line between Galveston, Anahuac and Wallisville. Moving to Houston, Texas in 1909, Mr. Mitchell inaugurated a freight line service between Houston, Anahuac and Wallisville that was of inestimable value to that section during the one year he maintained same. At the conclusion of that year, Mr. Mitchell returned to Galveston, and again established a mail line via boat from Galveston to Anahuac and Wallisville, continuing same until September 15, 1916. Since that date, Mr. Mitchell has been located in Houston, and engaged in the conduct of boat and barge line, known as MITCHELL TRANSPORTATION COMPANY. His commercial operations have contributed in a very solid manner to general industrial developments throughout the areas affected, especially in facilitating communication in districts not otherwise so easily accessible by regular means of communication.

John Percy Mitchell is the son of John Field and Jennie E. Mitchell. He was born in Baytown, Texas, on September 23, 1882. His education acquired in common schools. Mr. Mitchell married Miss Winnie Davis on June 23, 1909, in Wallisville, Texas. Their two children are John P. Mitchell, Jr., who is nine years old, and Donald Davis Mitchell, just nineteen months. Their family residence is No. 3313 Montrose Boulevard, Houston.
Among South Texas' young business men who are actively engaged in building vastness into the State's commercial endeavors, one of the most virile and successful is J. AUSTIN SMITH, the head of the well known firm of J. Austin Smith & Company, Accountants and Industrial Engineers, whose services reach over the confines of the Lone Star State extending into the entire group of Southern States, and which enjoys recognition everywhere for its dependability and clean methods. This business was established three and one-half years ago, by Mr. Smith, in Galveston, Texas, and its growth to such proportions in so short a space of time is very largely due to the high qualifications and determination of its chief executive. Mr. Smith brought to the business in addition to his personal fitness the experience of several previous years, during which time he was engaged for one year in the Accounting Department of the Gulf Refining Company, and spent five years as Auditor for W. D. Haden.

J. AUSTIN SMITH is a native of Texas, born at Cedar Bayou, on October 20, 1890. He is the son of Mr. and Mrs. E. G. Smith. His education was acquired in the Public Schools of Harris County, Texas. In 1910, Mr. Smith married Miss Maude Parker. They have one son to gladden their home. Mr. Smith is a member of Texas Consistory No. 1 Scottish Rites and member of El Mina Temple Nobles of the Mystic Shrine. He served zealously as a member of various committees on war work in charge of the innumerable drives for inexhaustible causes, and contributed ably to their success. Mr. Smith's local business address is 400 Prince Building, but branch offices are maintained in a number of the larger cities throughout the country. He resides at the Rice Hotel.
From a bell hop in a hotel at twelve to an oil magnate and man of affairs at 36, is the story in brief of the career of Seymour E. J. Cox, Sr., president of the General Oil Company, which brought in the discovery well, the McDowell, near Big Spring, and developed the four mile extension to the Burk Burnett field with the Sparks No. 1 10,000 barrel gusher, the greatest ever developed in that sector.

The career of S. E. J. Cox, Sr., reads like fiction and again demonstrates that in Democratic America every man is the architect of his own fate and that pluck, hard work and grit will win in the long run.

Although handicapped by a lack of education in books, having reached so far as the fifth grade in school, this man of affairs secured an education in the University of Hard Knocks and from ocular demonstration that is more valuable than one from books. He talks with pride about how he had to work when a lad to help the folks at home. He was born in Ogemaw County, Michigan, of John Thomas and Effie A. Cox, poor but hard working parents. At eight years of age he began his business career as a newspaper merchant, and sold newspapers, shined shoes, mowed lawns or did any other kind of honorable work that came to his hand. While helping father and mother, he also found time to play, and played in play time and worked in work hours.

At twelve years of age, he entered the hotel game as a bell hop, and when off duty helped at home by milking the cows and chopping and splitting wood for the stoves. He always looked ahead and when he reached the age of seventeen he applied for a job as salesman. He made good. Between fourteen and seventeen years of age, Seymour Cox was found working in factories, and studying the game of salesmanship in which he succeeded to such an extent that his present success became assured.

He followed the career of salesman from his seventeenth to his thirty-fourth birthday. In looking back over his life, Mr. Cox chuckled with glee as he told how he enjoyed milking cows and splitting wood.

On April 25, 1907, he married Miss Nellie McDonald, and one son, Seymour E. J. Cox, Jr., a bright lad of ten years, has blessed the union. Like all men of affairs, Seymour E. J. Cox, Sr., has a hobby, aeronautics. He, with Mrs. Cox, tour the oil fields of Texas in their Curtis and Haviland airplanes. He is a member of the Aero Club of America, Aero Club of Texas, Texas Auto Club.

(Continued on page 81)
DAN DILLON.

Popularly recognized by a large circle of admiring friends and the public in general as a leader in the Oil Industry in the Lone Star State, DAN DILLON, with increasing success adds daily to his lustre in his chosen exploits. He is now interested in four of Texas' famous producing oil wells, and vigorously operating three additional rigs out of which there is expected splendid developments in due course. Always optimistic, even in the face of the most barren prospects, always determined, and sticking to the game with enthusiasm, DAN DILLON lead the way to oil prospecting in the days when the remainder of the world looked askance at his efforts as useless. The results are more than ample to justify his foresight and perseverance.

DAN DILLON is a native of Houston, Texas, where he was born January 23, 1893. After the usual scholastic attainments, Mr. Dillon turned his attention at once to prospecting and developing oil in Texas. He was one of the first in the field when famous Burk Burnett opened, and continues to maintain increasing activities in every direction in connection with oil and its development.

Mr. Dillon married Dettie Mae Hinsley, of Houston, in 1913. Their only child is a daughter, Miss Blanche Mae Dillon.
PLATTE

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the Henke Co., Mr. Platte was with the firm of Henke & Pilot. William J. Platte was born in Hanover, Germany, on October 17, 1864, son of Mr. and Mrs. (Continued on page 81)

CHESTER HILLYARD BRYAN

Lawyer, Member of the Legislature, and County Judge of Harris County, which latter office he has occupied uninterruptedly since his election in 1916, is the son of Mrs. Bettie and Dr. Louis A. Bryan, born in Houston, Texas, on January 13, 1880. The Judge attended Houston Public Schools and Welch's Academy, then entered Bethel Military Academy, Warrenton, Va., and graduated from Law Department of University of Texas, Class of 1901. He was elected Member of the 29th Legislature, but since 1916 has held office as County Judge of Harris County. Judge Bryan was eminently active in war relief (Continued on page 81)

WM. J. PLATTE

One of Houston's widely known successful business men is WILLIAM J. PLATTE, the popular manager of Henke Artesian Ice & Refrigerating Company, with which concern he has been connected for the past twenty years, contributing ably to the expansion of the business to its present prestige and strength. Prior to his connection with the Henke Co., Mr. Platte was with the firm of Henke & Pilot. William J. Platte was born in Hanover, Germany, on October 17, 1864, son of Mr. and Mrs. (Continued on page 81)

SCOTT J. DAUGHERTY.

With the shrewd vision that sees beyond the NOW and HEREx and the determination to follow with practicable effort the beckonings of that vision, SCOTT J. DAUGHERTY, the first stevedore and forwarding firm to actually engage in that line of business in Houston, is one of the paramount factors in development of the great Ship Channel project which, in completion, is one of the greatest assets of the Southwest and of Houston, Texas. Mr. Daugherty began his business career in (Continued on page 81)

SEARCY BAKER.

One of the interesting characters in public life today is SEARCY BAKER, the popular Superintendent of Police to which office he was appointed in 1917. The foundation for Mr. Baker's career was laid as a tiller of the soil, during the years 1883 to 1899, out of which avocation so much of the world's greatness has arisen. In 1902, Mr. Baker became Superintendent of Texas Penitentiaries, serving in that difficult office until 1907.

SEARCY BAKER is the son of Jack and Della Baker, born in Plantersville, Texas, on November 11, 1861. He graduated from Texas A. M. College as a Mechanical Engineer. Mr. Baker married Miss Lida J. Gibbs, on Nov. 21, 1883. Their children are Mattie Searcy, Maudel and Claude.

Mr. Baker is a Mason and belongs also to Kiwanis Club.
HARRIS COUNTY COURT HOUSE
Y. M. C. A. BUILDING, HOUSTON

ENTRANCE TO RICE INSTITUTE, HOUSTON
SCENES IN HOUSTON'S RESIDENTIAL SECTION
TWO BIG HOUSTON INDUSTRIAL PLANTS
Houston Chamber of Commerce One of South's Famous Commercial Bodies for More Than Half A Century :: :: ::

By GEORGE W. DIXON, Publicity Director.

The Houston Chamber of Commerce was first chartered in 1866, and is one of the oldest commercial organizations in the South. Indeed, it is doubtful if any other organization of similar character in the South has been in continuous service for fifty-five years.

For more than half a century it has been the clearing house for community interests. It has taken a leading part in every movement having as its object the building up of Houston's commercial, industrial, financial, educational and civic life.

A copy of its old constitution and by-laws shows that in 1866 the membership dues were $2 a year, with an initiation fee of $. Individual memberships are now $25 a year, with no initiation fee. The change in membership dues reflects the growth and progress of business.

A considerable part of the Chamber's revenues in the early days were received from fees charged for special services. For instance, business men would come to the Chamber of Commerce to arbitrate their differences where money disputes were involved. This was more in keeping with the spirit of the times than going to court and hiring counsel to prosecute a suit at law. The arbitration committee sat often. For settling a dispute involving the sum of $500, the arbitrators received $10; for $1,000, they received $15; for $1,500 they collected $20; for $2,500, the fee was $25; and all amounts above $2,500, one per cent of the amount in dispute. Not less than $10 nor more than $50 could be accepted as fees in arbitration decisions.

Merchants had to hold membership in the Chamber of Commerce before they could avail themselves of its services as an arbitration body.

The Chamber also functioned as a merchants' exchange, and charged commissions on sales of merchandise. The faded copy of its ancient by-laws shows that a commission of 2½ per cent was charged on sales of cotton, sugar, molasses, steamboats; for purchasing drafts, receiving and forwarding money, and other services. The same commission was allowed on the purchase of commodities for members.

The organization did a freight forwarding business among its other duties: collected insurance; "landed and reshipped merchandise from vessels in distress," etc. It received and forwarded all kinds of merchandise. Under the division of "liquids" authority to charge 50c was provided for forwarding a barrel of whiskey. This was 55 years ago.

Officers who served in 1866 were: John Dickinson, president; A. J. Burke, first vice-president; E. W. Taylor, second vice-president; P. Reynaud, secretary and treasurer. These names figured prominently in the early business life of Houston.

Many years ago the chamber ceased doing a brokerage and freight forwarding business. It has for more than a quarter of a century concentrated on problems of community interest. It was instrumental in securing the recognition of Congress and the subsequent development of the Houston Ship Channel. It has taken a prominent part in the various bond issues for the improvement of the Port, the securing of ocean steamship service and the routing of cargoes through Houston. It has encouraged the building of railroads into Houston, and has lived to see seventeen mail line railways entering this city. It has served Houston merchants and Texas shipping interests in the matter of keeping transportation rates on a reasonable basis. It has secured millions of dollars worth of industrial plants, developed the farming,
live stock and dairying industry of this section and advertised Houston and South Texas to the world as a land of opportunity for home seekers and investors.

The history of the work of the Chamber of Commerce is inseparably connected with the growth and progress of Houston. It has been known as "the power house of the city," and has been active in all affairs of a public nature.

When the matter of establishing a Federal Farm Land bank in Texas came up for decision, the Chamber of Commerce issued a special prospectus on Houston for the information of the Federal Committee having in charge the location of these banks. The result of this work was the establishment here of the Federal Farm Land bank for Texas. Through this bank, some forty million dollars have been loaned to farm-home builders in Texas, since 1917. Through the Chamber of Commerce, Camp Logan was established at Houston during the world war. More than 35,000 soldiers were quartered here and trained for service in France. Many of these men became citizens of Houston after the war.

Ellington Field was established through the work of the Chamber of Commerce. This field was one of the famous training schools for aviators during the war.

No task of public importance is too great or too small for the Chamber of Commerce to take up. It is always on the job for Houston and the best interests of Houston's citizens.

WM. J. PLATTE.

(Continued from page 61)

Julius Platte, who removed to America and educated their son in the private and public schools of Houston. Mr. Platte married Miss Rose M. Turck in 1894. Their one child, a son, died in 1917. Mr. and Mrs. Platte re- move to 4610 Montrose Bvd., Houston. Their home is always hospitably open to their many friends. Mr. Platte is a member of Kiwanis and Turn Verein organizations.

CHESTER HILLYARD BRYAN

(Continued from page 61)

work, contributing his time and talents to all drives for funds, serving as Chairman for Harris County in all five Liberty Loan Campaigns, a Member of the Executive Committee of War Stamps Savings, Salvation Army, Red Cross, Near East Relief, War Camp Community Service, etc. The Judge is popularly a member of Houston Club, prominently a Mason Scottish Rite 32nd Degree, Past Potentate of Arabia Temple, member Knights of Pythias, Dramatic Order Knights of Korassan, Maccabees, Woodmen of the World, Elks, Kiwanis Club, Turn Verein, Saengerbund, and Kappa Sigma. He is unmarried and resides at 1602 McKinney Avenue, Houston, Texas.

S. J. DAUGHERTY.

(Continued from page 61)

Wabash, Indiana, in the lumber industry. He removed to Mobile, Alabama, in 1900, and in addition to lumber began activities in ships and shipping. He came to Houston in 1911 when the Ship Channel project was merely an embryo. Immediately Mr. Daughertry perceived the possibilities, and inaugurated a stevedore and forwarding business which handled the first ships at the new Houston docks, and handled the first ship loaded at the Port of Houston for European ports, Mexico and Cuba. And while at the moment handicapped by lack of ships, he is working with unabated zeal and enterprise for the establishment in permanency of Houston's great undertaking. SCOTT J. DAUGHERTY is the son of David and Mary Daughertry. He was born in Wabash, Indiana, March 1, 1867. He attended Wabash High School and Oberlin College. He married Miss Florence Culberson, and their only child is a daughter, Miss Ruth Daughertry.

S. E. J. COX, Sr.

(Continued from page 57)

and Country Club of Houston, the town he calls his home.

Mr. Cox and his wife each entered an airplane in the international flight flown in France in September, 1920, in completion for the Gordon Bennett Cup. He does not boast of a military career, although he did his bit in the time of need when the world was made safe for Democracy and the Hohenzollerns driven off the throne. He bought bonds, helped in the drives, and offered his services to his country and to her ally in Canada. He lost an eye when a youth and this prevented his being accepted in either army.

Mr. Cox has his choice of political parties, but does not play the game, preferring to play the oil game at which he has been unusually successful. His greatest pride is in the fact that his company has braved the sneers and jeers of others in catching the wild cat in the oil game like Jack Abernathy caught the wolf and bringing the cat to the top and making money for his stockholders.

Page Eighty one
T. S. REED, Jr., Pres.  T. N. WHITEHURST, Vice-Pres.  N. B. WODWIN, Sec.-Treas.

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Agents for Bowie Line, Houston-Mexico Service, 2 Sailings per Month.
Regular Service established Houston to Tampico and Vera Cruz.
DEPENDABLE SERVICE.

We are in position to handle your business for all Latin-American Countries. We will appreciate your inquiries, and will be pleased to handle your business. If there is anything you desire in the Export business, ask us, we can tell you, and will gladly lend you any assistance required.

Ship your freights in our care and we will do the rest; to the satisfaction of all concerned.

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Deepwater Oil Refineries
HOUSTON, TEXAS

“THOROUGHLY REFINED”
Red and Pale Lubricating Oils

Aeroplane photograph representing partial view of Deepwater Oil Refineries—Unit No. 1 on Houston Ship Channel

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A modern hospital of three hundred fifty beds, equipped with complete Pashological and Roemtgeneological Laboratories, using the latest improved methods; four general operating rooms, two specialist operating rooms and two emergency rooms. One floor exclusively for Maternity cases.

Large staff of surgeons and physicians.

At the eighth annual convention of the American College of Surgeons, recently held in Montreal Canada, St. Joseph’s Infirmary was classed among the Standard Hospitals of the United States and Canada.

This classification was based on the fundamental ability of a hospital to care for their patients according to the best approved methods of diagnosis and treatment, the requirements of which safeguard science, service and safety.

An excellent training school for nurses is maintained, where they receive a three years course of practical and theoretical work.

With all the service and spirit of the "Standard Hospital", St. Joseph’s Infirmary is one of Houston’s points of pride.
THE ATMOSPHERE OF A BANK

Something tangible, the presence of which characterizes every banking institution.

For over half a century the First National Bank of Houston has endeavored to reflect a cordial spirit in every relationship. This desire has been constantly in the thought of each Officer and employee in the bank.

A willing, generous service, cheerful in spirit, is a thing this institution constantly strives to give.

It is our purpose to render a service that will demonstrate our sincere interest in the financial welfare of our customers.

The inquiries of individuals, firms, corporations and other banks wishing the services of any of our departments are most welcome.

First National Bank of Houston
A. L. NELMS
THOMAS KEHOE
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COTTON EXPORTERS
HOUSTON COMPRESS COMPANY
HOUSTON, TEXAS

500,000 Square Feet of Storage Space
Constructed Entirely of Concrete. Two
High Density Compresses. Storage Ca-
pacity of 100,000 Bales Compressed
Cotton. Insurance Classifications AAA

Equipped throughout with Automatic Sprinklers
The Price-Booker Manufacturing Company was chartered in San Antonio in the year 1904 and began the manufacture of food products with 200 acres in cucumbers, selling their finished products direct to the retail trade. In the Spring of 1913, they moved to Houston, later establishing a branch at Waco, Texas, and Andalusia, Alabama. They now plant about 4,000 acres in cucumbers, maintaining thirty salting stations adjacent to their three plants.

They employ a force of three hundred women and one hundred and fifty men who work under the most sanitary conditions, with plenty of fresh air, clean, comfortable rest room for the women and all employees are protected by industrial insurance.

The value of their output this year will reach one and a half million dollars, which is handled only by the jobbing trade and will go into New Mexico, Oklahoma, Texas, Alabama, Arkansas, Mississippi, Louisiana, Georgia, Tennessee and Florida.

They pack delicious sweet pickles, either sliced, mixed or plain; crisp sour pickles; dills with the genuine tang; sweet and hot relish; chow chow; salad dressing; pepper sauce, and salad mustard in twenty different sized bottles as well as in casks, barrels, half-barrels and kegs.

They pack canned Sweet Potatoes and Dill Pickles, and operate a large Peanut Butter Factory.

Visitors are cordially invited to watch the process of handling the cucumbers from the time they are received from the salting stations until they are packed into the attractively labeled bottles, until they come to your table.
Harrison Line

REGULAR SERVICE
GALVESTON TO LIVERPOOL

ROYAL MAIL STEAM PACKET CO.
REGULAR SERVICE
GALVESTON TO BREMEN AND ROTTERDAM

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305 HERMANN BLDG.
One of the large ones REBUILT and MODERNIZED in our plant. We are operating day and night rebuilding locomotives for some of the largest Railroads in the United States. If for them, why not for you? Satisfaction is what has made our attainment possible.

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Also all other grades and qualities produced, including "TORO" BRAND SPECIALLY PREPARED AGRICULTURAL SULPHUR for treating the soil and increasing the crops. Inquiries solicited on any grades or quantities.

Circulars, samples and price lists sent on request.

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