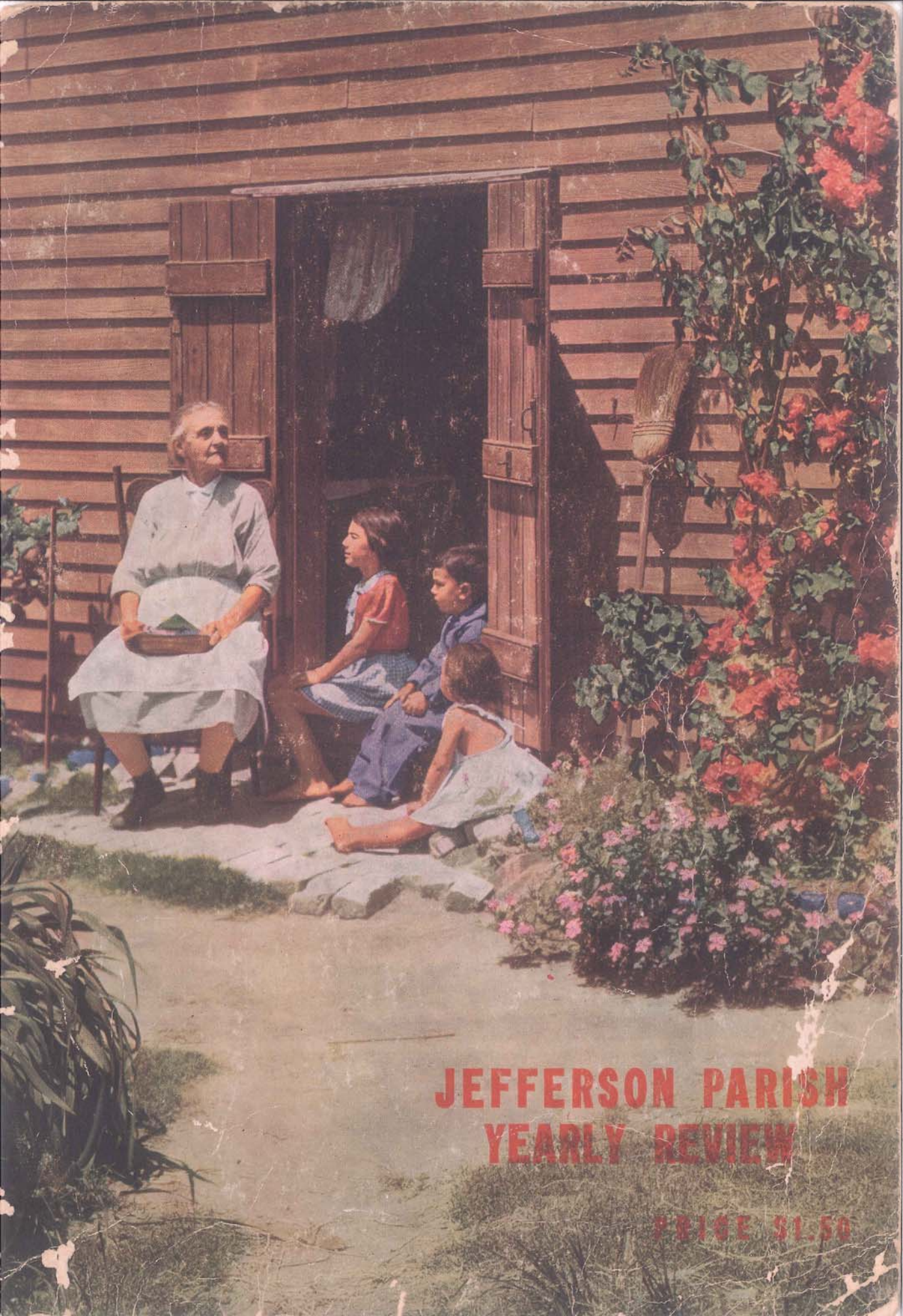


JEFFERSON PARISH YEARLY REVIEW

PRICE $1.50

JEFFERSON PARISH

the most highly industrialized section of the South!

There are—in Jefferson Parish — sixty-one industrial concerns of which five are the largest of their kind in the nation.

Seven trunk line railroads, three national highways, the Intracoastal Canal, the Mississippi River and one of the country's largest airports serve this area—and, it is the proposed location for the post-war deep ship channel from the Port of New Orleans to the Gulf of Mexico.

It is the industrial section of the Gateway and Air Hub of the Americas, strategically located between the raw materials of the South and Southwest and the Southern and inland markets of the United States.

JEFFERSON PARISH POLICE JURY

1944
JEFFERSON PARISH
YEARLY REVIEW

To our thousands of readers within the parish and far beyond, whose continued interest, during ten years of publication, have inspired us to greater efforts, this Anniversary Issue is affectionately dedicated.

"We're both ten years old"

Printed in U. S. A.

"Hello again — and welcome back to Jefferson Parish!"

FOREWORD

You are about to begin reading the Tenth Anniversary Edition of the only parish publication in the United States.

Since 1935 we have been telling the story of Jefferson. Our back issues—carefully filed by libraries and colleges throughout the country and constantly requested by writers and business executives—are a decade's prose and picture history of this section of our State.

It has been the policy, in each Yearly Review, to concentrate on the authentic and attractive presentation of Jefferson Parish, but, in so doing, it has been our good fortune to create a widespread interest in all of Louisiana.

Authors and editors, intrigued by our tales, seek us out for more data on the legend and lore of our famous Barataria bayouland, the early nineteenth century haunt of America's only pirate, and, as a result, they also become interested in other parts of romantic Louisiana. Business men from all sections check us on our amazing statements about the possibilities and resources of our own highly industrialized parish, and usually grow enthusiastic over the marketing promise of our whole Gulf area. Sportsmen and artists and scientists are attracted, by our articles, to the infinite variety of Louisiana's marine and wild life. Movie companies consult us on locale. Travelers learn about Grand Isle, our primitive paradise on the Gulf of Mexico, and are lured to explore lovely Louisiana, an experience they never regret.

Part of Louisiana we are, but of all of it we are proud. If, in reading about Jefferson, you are persuaded that, where one parish can be so rich and romantic and progressive, the other sixty-three must also be interesting and worth investigating—then our job has been well done.

As you finish this Tenth Anniversary Edition, remember that the editors and writers and people of Jefferson Parish will welcome your comments, your questions and—best of all—your visits for personal confirmation.

Jefferson Parish Yearly Review

JEFFERSON
THE PROLIFIC PARISH

BY WEAVER R. TOLEDANO
President, Jefferson Parish Police Jury

JEFFERSON Parish was named in honor of Thomas Jefferson, third president of the United States, in spite of the fact that originally he didn't want it. It was laid in his lap, along with the rest of the Louisiana Purchase in 1803, a hot political potato which required all his statesmanship to handle.

In those early days, some of the best minds of our country, including Jefferson himself, believed that we should never expand west of the Mississippi. James Madison went on record as stating that emigration west of the river would be detrimental, that it would slacken concentration and promote disunion sentiments—actually, that it was a necessity for the West bank to be under a separate and foreign government.

Jefferson merely wanted to buy Florida and the island of New Orleans to keep out of war with France. Napoleon happened to want to sell more than that because he preferred war with England—and needed cold cash. It was Napoleon's idea that everything west of the Mississippi, involving a gigantic slice of real estate which now represents more than 14 of our 48 states, should be included in the deal—a factor which obviously upped the purchase price.

Fortunately for us, we had Robert Livingston and James Monroe as our representatives in France—both men with vision. Jefferson had given them authority to buy only New Orleans and that portion east of it, which was then known as Florida, and he had put a maximum of $10,000,000 on what they could spend.

Livingston and Monroe, however, came back with practically the rest of the continent—had secured it all for the bargain price of $15,000,000, which helped the situation some—but Thomas Jefferson had to wage a bitter fight to justify their seemingly extravagant transaction to a young nation, to whom at that time 15 million was a lot of money.

Yes, Thomas Jefferson has gone down in history as one of the greatest Americans, mainly because he was lucky enough to have two men who knew when to exceed their orders.

Jefferson Parish, as it now exists, was only 426 square miles of that fabulous transaction, and yet, we have every reason to believe that—mile for mile—it has turned out to be the most prolific and productive piece of the whole Louisiana Purchase and, therefore, rightfully deserves the name of the man whom history credits. And—here are our arguments.

. . . WHERE 60% OF THE MANUFACTURED AND SHIPPED GOODS OF THE PORT OF NEW ORLEANS ORIGINATES.

. . . WHERE ARE LOCATED FOUR OF THE LARGEST PLANTS OF THEIR KIND IN THE WORLD.

. . . WHERE IS CENTERED A DAIRY INDUSTRY WHICH EXCEEDS ANY OTHER PARISH IN LOUISIANA.

. . . WHERE ARE FOUND THE SUCCULENT SHRIMP AND OYSTERS OF BARATARIA BAY AND THE FAMOUS SOFT SHELL CRABS OF LAKE SALVADOR.

. . . WHERE BLACK GOLD FLOWS AND SLEEK FUR ABOUNDS AND PRACTICALLY EVERY VEGETABLE KNOWN TO THE TEMPERATE AND SEMI-TROPIC ZONES CAN BE RAISED.

. . . WHERE THE SPORTSMAN CAN RUN THE GAMUT FROM TROUT TO TARPON OR DUCK TO DEER.

. . . WHERE THE ARTERIES OF EVERY KNOWN MODERN METHOD OF TRANSPORTATION CROSS OR CONVERGE.

. . . AND WHERE, AWAITING THE POST-WAR TRAVELER, LIES THE TOURIST-UNTOUCHED AND LOVELY LAND OF LAFITTE AND THE GOLDEN SANDS OF GRAND ISLE, AMERICA'S RIVAL TO THE BEACH AT WAIKIKI.

Jefferson Parish reaches up from the Gulf of Mexico for sixty miles, like a strong right arm, supporting the Port of New Orleans in its cupped palm, the fingers disappearing in Lake Pontchartrain and the thumb cut off by Orleans Parish. This is an apt comparison because the strong arm and helping hand of Jefferson Parish are giving tremendous assistance to New Orleans on her steady forward march toward the great world prominence that is her post-war opportunity and destiny.

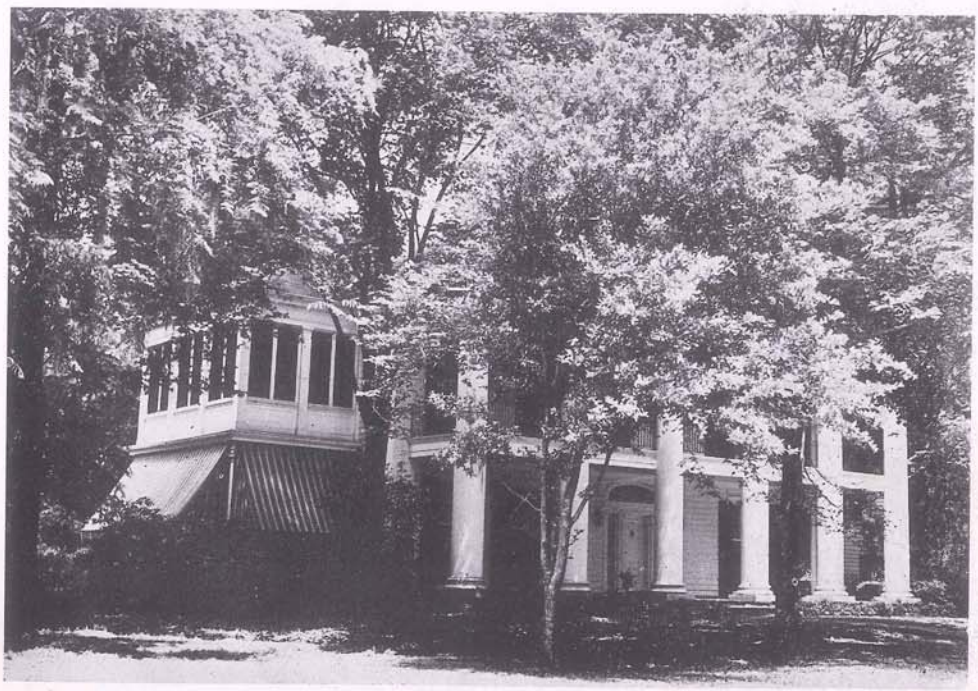
New Orleans' inevitable expansion will be in the direction of her port activities. That means westward—into Jefferson Parish, where exist long miles of river frontage and where there are acres of ten-year tax free industrial sites for factories and warehouses.

Already sixty-one industrial concerns—ranging from the four world's largest in their class to the moss ginner who employs several people—have proven the practicability of Jefferson Parish as a manufacturing center. Here are concentrated a population large enough to supply intelligent workers. Here are seven trunk line railroads, two railroad yards and a railroad shop. Here are concrete highways, the $14,000,000 rail and vehicle Huey Long Bridge, the Moissant Airport, which when completed, will be one of the largest in the country, the famous toll free Intracoastal Canal and the old Mississippi itself. Here also, as discussed in another portion of this issue, is the future natural short route to tidewater.

Here, in the roomy parish of Jefferson, right where the raw materials from the South and West, from the Latin Americas and other foreign lands enter the Port of New Orleans, is the ideal spot for economically processing them for market or for storing them for reshipment.

In Jefferson Parish are the fuels to run the machinery of manufacturing: its own abundant oil fields now comprising over 135 wells—natural gas—ample electric power for great industrial expansion—even coal economically transported by water from Kentucky and Alabama. Here also is another important factor—the climate for all year manufacturing and for economical living.

This stately residence is indicative of the fine homes and beautiful surroundings to be found in Metairie. This residential section is considered one of the finest in the South and we are justly proud to claim it as part of Jefferson Parish.



JEFFERSON PARISH POLICE JURY — MEMBERS AND OFFICERS

Seated, left to right: John H. Haas, Ward 1, Gretna (McDonoghville); Clem Perrin, Ward 6, Lafitte; Wm. Hepting, Secretary; W. R. Toledano, President, Ward 9, Kenner; Mrs. J. P. Smith, Parish Treasurer and Assistant Secretary; John J. Holtgreve, Ward 8, Metairie; B. P. Dauenhauer, Ward 3, Gretna; and Robert Ottermann, Ward 7, Southport.
Standing, left to right: Wm. E. Strehle, Ward 2, Gretna; Alvin E. Hotard, Parish Engineer; G. Ashton Cox, Parish Printer; Edward M. Thomassie, President Pro-Tem., Ward 4, Marrero; D. H. Roussel, West Bank Road Superintendent; Frank J. Deemer, Auditor and Bookkeeper; Russell Le Doux, East Bank Road Superintendent; Ernest Riviere, Ward 8, Metairie; Roger Coulon, Ward 4, Harvey; Joseph Weimer, Inspector of Liquor Permits and Business Licenses; Sidney Pertuit, Ward 4, Westwego; Wilfred Berthelot, Ward 5, Waggaman; Jessie J. Breaux, Ward 3, Gretna; and Roy Duplechin, Ward 4, Marrero.

Jefferson Parish officials are working closely with the State Highway Department to secure overpasses such as this one located just west of the Huey P. Long Bridge, in other sections of the parish, where they are needed.

The population of Jefferson Parish doubled between 1920 and 1930. It has again almost doubled. Industry came and saw and passed on the word to others. Today this parish is the most highly industrialized section in Louisiana —and it has just begun to grow.

I have used the word "prolific" several times. That was no artistic license or writer's exaggeration. I mean just that. This parish has EVERYTHING. In case you should get the idea, from my remarks about the industrialization of Jefferson, that we are merely a community of smoke stacks and time clocks, I will give you a running resume of the whole parish—then we'll come back to a few concluding points.

At the top of Jefferson Parish is one of the finest residential districts of New Orleans—the town of Metairie—where it is always 5 to 10 degrees cooler in the summer than in the city. Fine homes flourish here.

At the other end is one of the still undiscovered primitive places of America—an Eden of sun and shade, surf and sand, trees, flowers and peace, where time has been asleep a hundred years and where the honk of wild geese is heard often—the automobile horn seldom.

Between these two extremes is the strange and romantic region of bayous, bays and swamps. This is the locale of Louisiana's most colorful story—the land of Lafitte and his pirate-patriots.

Here the visiting sportsman may enjoy a week's hunting or fishing. (Note: Come to Jefferson Parish between May and October and you'll always get your tarpon.) Here also the native earns a good year's living trapping and fishing. Pleasure for one. Profit for the other. All in this forty miles of water wilderness between the industrial and residential section and an island of enchantment.

Strange, paradoxical parish! There are spots in it where families back in the bayous must use the tricky pirogue to get to town. Their doorstep is the water's edge, their home a houseboat which they transfer from fishing grounds to trapping grounds.

Yet through this same parish run the fast highways from St. Augustine, Florida, to San Diego, California; from New Orleans to Winnipeg; and from New Orleans to Madison, Wisconsin.

Mickey Adam and Ann Metoyer, daughters of Grand Isle residents, happily arise with the sun to lend a hand with the early morning seining. The sun and air and climate build strong, healthy young bodies on Grand Isle.

At the airport in Jefferson Parish you are only a few hours from any spot in the U. S. A. At Grand Isle, the same parish, you are over a century in the past.

Industry! Beauty! Romance! Fishing! Hunting! Trapping! Ah, yes—we forgot farming and dairying. New Orleans leans heavily on the milk and cream from Jefferson. Truck farm products find their way to the New Orleans' stores and historic French Market. The early cucumbers from Grand Isle are famous firsts on the northern markets. And Jefferson Parish poultry is another food item gaining in prominence every day. The alluvial soil of Jefferson is rich with top soil loot brought down by Old Man River for centuries. The temperature will only average about 5 days a year as low as 32° and about the same number of days a year as high as 95°.

This is a prolific parish—but not a self-satisfied parish. Right now, in time of war, we are working for victory and preparing for peace.

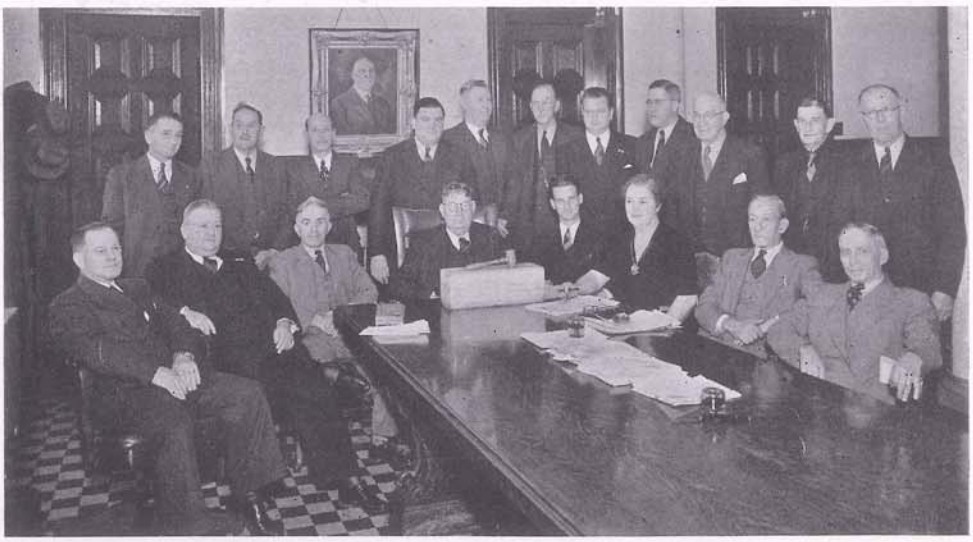
We are fighting for a bridge from Gretna to New Orleans, a still closer link with the East Bank. We have proposed to the U. S. Army Engineers the shortest, practical deep sea channel to the Gulf—our Arrow To The Americas that will bring the biggest ships of Uncle Sam's navy right up to the harbor of Greater New Orleans. We plan a road to Grand Isle paralleling the ship canal, that will put the safest and finest surf bathing in America only an hour by car from Canal street. An additional project is a reinforced embankment and highway along our lake front. And we are working for additional overpasses in our congested areas so that the traffic of tomorrow can move at tomorrow's pace.

The post-war program of Jefferson Parish is one designed to keep our industries expanding and our people prosperous, and to help New Orleans move nearer to her goal as Port No. 1 in the United States.

OUTGOING JEFFERSON PARISH POLICE JURY — MEMBERS AND OFFICERS

Seated, left to right: Clem Perrin, Ward 6, Lafitte (12 years); Wm. E. Strehle, Ward 2, Gretna (28 years); Hirsch Meyer, Ward 4, Marrero (12 years); W. R. Toledano, President, Ward 9, Kenner (24 years, 19 as president); Eugene Haydel, Former Office Clerk, now in the air service of the United States; Mrs. J. P. Smith, Parish Treasurer and Assistant Secretary (4 years); Wm. Hepting, Secretary (27 years); and Albert J. Cantrelle, President Pro-Tem., Ward 4, Marrero (20 years).

Standing, left to right: John H. Haas, Ward 1, Gretna (McDonoghville) (4 years); D. H. Roussel, West Bank Road Superintendent (25 years); Leon Gendron, Ward 3, Harvey (8 years); John J. Holtgreve, Ward 8, Metairie (8 years); Ernest Riviere, Ward 8, Metairie (8 years); Edward M. Gordon, Ward 4, Westwego (12 years); W. Richard White, Ward 3, Gretna (5 years); C. V. Bourgeois, Liquor License Inspector and Collector for the Sixth Ward (12 years); Ed. E. Feitel, Ward 4, Harvey (12 years); Robert Ottermann, Ward 7, Southport (20 years); and Joseph Petit, Ward 5, Waggaman (20 years).



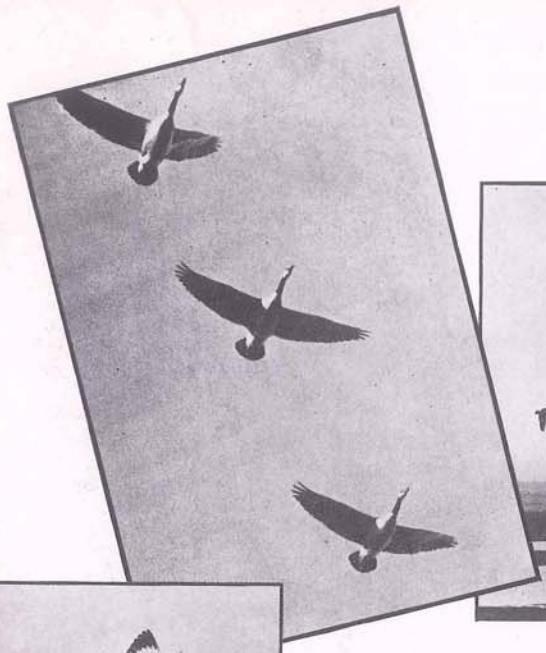
RIVER TERMINALS CORPORATION

Regular Barge Service
between
New Orleans, Monroe and Camden, Ark.

Regular Barge Service
between
New Orleans and points on Intracoastal Canal - - - West

HOUSTON, TEXAS

HARVEY, LA.



Upper right: Northbound geese display precision flying for which they are famed.

Upper left: A trio of Canada Geese in perfect unison of movement.

Center: The beautiful Willet, a shore bird, exhibits its powerful two-foot wing spread. Once nearly extinct this game bird is now protected.

Below: A Towering Black Duck, suddenly startled, takes off with the easy grace and power of a bomber.

WILDLIFE

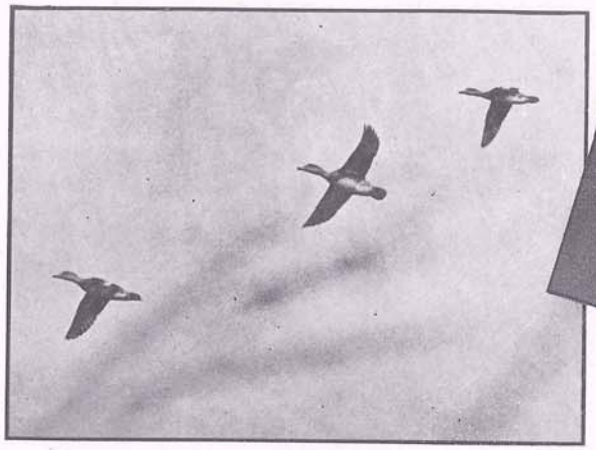
THE wildlife of Louisiana represents, in recreation, in interest and in economic value, an immense asset.

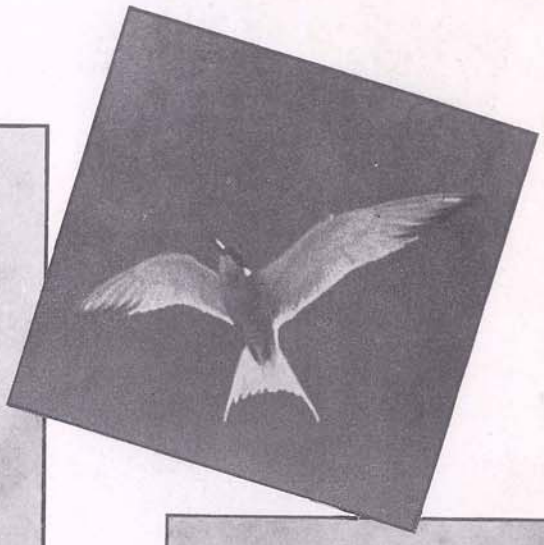
Grand Isle, that famous land where Jefferson Parish meets the warm waters of the Gulf of Mexico, is one of the very finest starting points for a survey of the wildlife of the State, since it is a veritable cross-roads—south and north, east and west—for some of the most interesting members of our rich birdlife.

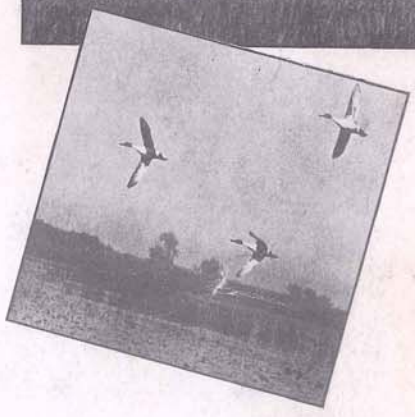
Motoring along the beach in the early light of morning, we come suddenly upon ten Blue Geese who have made this strategic stretch of sand their landing field. They look tired, and well they should, for in one unbroken flight these birds have come all the way from the arctic eastern entrance of Hudson Bay to find in southern Louisiana their winter home.

The Blue Goose is one of our most extraordinary migrants. Described in 1758 as originating from Hudson Bay, its nesting grounds were never actually found until 1929. Soper, a Canadian naturalist, terminating a six-year search, discovered its breeding places in Baffin Island and other limited areas of the lands that form the Eastern Canadian Arctic. Why these birds should choose to leave the luxuriant coastal areas of Louisiana, where, in only several concentrated spots, such as Main Pass and Marsh Island, more than 95 per cent of all existing Blue Geese sojourn, and seek for their summer home and nursery grounds the bleak and windswept arctic tundra is a question to which no man has answer. But, this they do.

Here, too, at Grand Isle, innumerable Warblers, Tanagers, Orioles, Finches and many other birds







BY JAMES NELSON GOWANLOCH

Chief Biologist, The Department
of Conservation, State of Louisiana

stream in migration, arriving in the spring tired and hungry from their flight over the Gulf or in autumn leaving for winter homes farther south. Here the Ruby-throated Hummingbird, tiniest of all our avifauna, sets out unhesitatingly to fly five hundred miles across the Gulf non-stop. It is interesting to note, as another evidence of our benign Southern Louisiana climate, that this jewel-like bird sometimes stays the entire winter in New Orleans.

Wildlife, however, is made up of more than birds. It includes the mammals, those animals that occur in such abundance and variety, many of them so unheeded by man that few bother even to learn their names. Included too are the reptiles, such as the once very valuable Diamondback Terrapin and that creature we could so easily dispense with, the ugly Water Moccasin. Here, too, are the amphibia, including that admirable beast, the Bullfrog, whose Cajun name, *Ouaouaron*, Lafacadio Hearn once described as the most delightful and perfect of all examples of a name imitative of a call.

It is the purpose of this article to indicate what must of necessity be merely a few highlights of Louisiana wildlife.

Louisiana has but slight variations in altitude when compared, for example, with California, from which fact one might think that our wildlife should be poor. On the contrary, Louisiana is exceeded in the richness of its birdlife by only two other of the forty-eight states, namely, California and Texas.

All birds are arranged technically into related groups of species known as "families." Sixty-five families of birds have been recorded for the entire North American continent, some of which are represented by only casual or accidental occurrence.

Upper left: Green Winged Teal, small but swift, can coast to a landing with the wind, or against it.

Upper right: The Common Tern, whose symmetry of form is beautifully revealed in this photograph, is a familiar bird throughout most of the North American continent.

Center: The American Widgeon-Baldpate is one of the fastest flyers of the duck family.

Below: Pintails, whose two long tail feathers (not fully developed on these drakes) caused Audubon to call them the "Sprigtails."

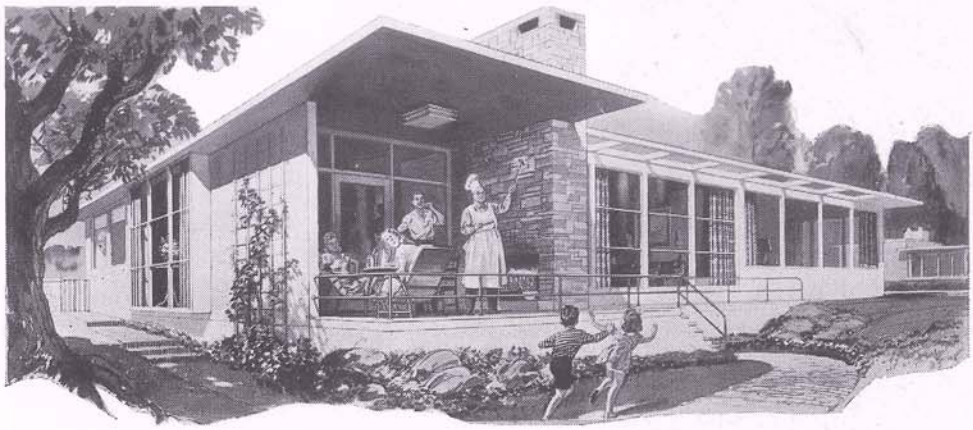
Yet of these sixty-five families, members of no less than fifty have been found in Louisiana. Thus Louisiana has, as part of its rich birdlife, representatives of no less than seventy-seven per cent of all the bird families ever known to occur on our whole continent. Strategic geographical position more than compensates for the lack of that diversity of habitat found in mountainous states. To Grand Isle come such a southern species as the Groove-billed Ani, such a northern species as the Duck Hawk, such a western species as the Scissor-tailed Flycatcher, and such an eastern species as the Reddish Egret. Here indeed is a meeting place, biologically, of the four points of the wildlife compass. The recent discovery of the airlines that New Orleans is a strategic four-way cross-roads for planes merely corroborates what the birds have always known.

Louisiana may be divided, for purposes of wildlife consideration, into six physiographic regions, since the kinds of wildlife present are dependent upon the home that they can find. These regions are the blufflands, uplands, alluvial lands, pine flats, prairies and coastal marshes. Alluvial lands are, of these, naturally the most characteristic of the State, composing as they do about one-half of our total area; while the coastal marshes, ranging from ten to sixty miles inland, form one of the most interesting environments of all. Such is the patchwork pattern of environments, ranging in height from the blufflands of the Felicianas (East and West Feliciana Parishes) to the beaches upon which the sea surf breaks. Each provides habitation for typical groups of animals. Probably most unusual of all are the coastal marshes whose luxuriant vegetation conceals a richness of life that is not yet properly comprehended, even by the biologist.

Most abundant of the game mammals of Louisiana are the Cottontail and the larger Swamp Rabbit, the first of which occurs chiefly in old fields and woodland borders, while the latter is generally distributed over the lowlands, including the marshes along the Gulf Coast.

Deer range in considerable numbers over most of the State and in some sections are common. It is interesting to note how well adapted these animals have become to a life along the coastal lowlands where they find abundant shelter in the willow-grown ridges. The writer has been deeply impressed, when paddling silently in a pirogue along a bayou,

Not long ago Louisiana Conservation men made an expedition into the swamps to save young deer endangered by high water. Photographer Edouard Morgan was fortunate in recording on film the story of the benevolent deer hunt, rivaling the tale of "Bambi." Here, in sequence, is the discovery of a group of young deer surrounding a doe, undisturbed and merely curious at the human intrusion. However, sensing that here is their natural enemy, man, the group breaks up and a doe and what is evidently a real life "Bambi" are caught as they silently steal off. Curiosity gets the better of the baby deer and he stops to investigate. Below, two bucks, hearing the disturbance, rush to the rescue of their young. (See Page 14)



Miracle Homes of Tomorrow ....from Marrero

Twenty-two years ago newspapers from Maine to California headlined the making of "the largest board in the world" at Marerro, Louisiana.

Since then, Marrero men and Louisiana sugar cane have helped to make the Celotex plant at Marrero—now grown to ten times its original size—the world's largest producer of insulation board products. In achieving this, Marrero and Jefferson Parish have made a major contribution to the comfort and healthfulness of homes all over the world.

Today, some 2500 Jefferson Parish residents are working at Celotex, turning out building materials needed by Uncle Sam's fighting forces and war industries. Another 1130 local Celotex men and women are serving with the Army, Navy, Marines and Coast Guard.

Tomorrow — when peace comes — the Marrero plant will have an equally important part in building a new America and helping to rebuild the rest of the world. Marrero men and Louisiana sugar cane will be called upon to produce a great volume of Celotex products, including many new ones.

These Celotex products will help to create new types of homes—Miracle Homes of the future — that will be finer and less costly than any built in the past — homes that will probably be erected at the rate of 2,000,000 a year after the war.

In these future days, as in the 22 years that have passed, Celotex will continue to do its full share for the well - being of the people of Jefferson Parish.

CELOTEX
REG. U.S. PAT. OFF.
BUILDING PRODUCTS

THE CELOTEX CORPORATION

by the almost magical ability with which deer at the water's edge will suddenly and silently vanish into the tangled cover. Fox squirrels of several species provide excellent quarry for the skillful marksman. Bears still occur in some parts of the state, chiefly in the heavily timbered bottomlands along such rivers as the Tensas and the Atchafalaya.

Predatory, yet valuable because of its skin, the mink still ranges throughout the entire state, a total of as many as a hundred thousand pelts being taken in four parishes in a single year.

The Otter, odd and inquisitive in its habits, ranges throughout most of the parishes but is properly most abundant around the mouths of the rivers. As many as seventeen not infrequently may be observed swimming along in a leisurely manner or playing gracefully in the water. Full of curiosity, they will arrest their movements at a sharp whistle and will then cruise in the offing to watch for what will happen next.

The Gray Fox occurs throughout the State and is a considerable enemy of such ground-nesting birds as quail. The Red Fox is not a native Louisianian. Imported by fox hunters it has become established in many regions, but appears to be less damaging to wildlife than is its gray relative.

One strange member of our fauna is the Armadillo, wierdest of all North American mammals. This creature apparently moved eastward years ago from Texas into our State and has now spread over virtually all of Louisiana with records in areas east of the Mississippi. Armadillos, active at night, burrow rapidly and roam widely. Quail hunters, apprehensive that this nocturnal wanderer might be a serious quail enemy, can be assured that such is not the case. Careful studies reveal that Armadillos feed chiefly on insects, including that serious southern quail pest, the fire-ant. Their presence in Louisiana, it is to be concluded, is beneficial.

Probably few Louisianians realize that the Beaver, the Wolf and the Panther (Mountain Lion or Cougar) are still members of our fauna. The Beaver occurs along the Amite and Comite Rivers and some of them have recently been transferred to the Tangipahoa. They became so numerous in one part of East Baton Rouge Parish that their fondness for corn caused considerable alarm among the farmers whose lands bordered the stream. One agent of the Department of Conservation,

And here we see the actual rescue. Young "Bambi" is not only lost—but fast getting out over his head in water and it appears that he is relieved, rather than frightened, to see the Game Warden approach. "Bambi" and what may well be his brother, "Sambi" don't seem a bit perturbed as the Game Warden picks them up and carries them to safety. Those deer which the Conservation men could return to their families were released. One, which was completely lost, was taken to a nearby farm and fed by bottle. In the last photograph "Bambi," surrounded by admirers, is on his way to a new home at the zoo—and from all appearances it would seem he is lapping up the attention!

The Southern Cotton Oil Company

* * *

Manufacturers of

WESSON OIL

SNOWDRIFT SHORTENING

* * *

GRETNA, LOUISIANA

on one occasion, caught eighteen beavers in one community with live traps and transferred them, unharmed, to other areas where they were more welcome.

Wolves can be heard in some of the wilder bottomlands in the northeastern part of the State and elsewhere. Some of this same habitat is shared by the Panther, one or two specimens of which are taken almost every year. It is a strange contrast, therefore, the existence of these traditionally wild creatures in the State of Louisiana where, in addition to the pattern of modern towns and cities, the confines of the State still include abrupt transitions to primitive areas of bottomland and swamp.

Perhaps nowhere in the world do there exist more picturesque names for wildlife than in Louisiana. This doubtless is in large part due to the peculiar backgrounds of the early inhabitants of the State, who, from the earliest French adventurers and hunters faced the hardships of an unusual wilderness from which they sturdily won their sustenance. Someone once said that an Indian's idea of a road was a means of getting from one place to another and arriving there alive. This would well have applied to primitive Louisiana, were it not for the fact that the rich network of waterways provided for the bateau and pirogue of traveler and hunter a highway paved with water, by which he could pass through the wilderness—a wilderness, seemingly interminable, seemingly unconquerable.

Louisiana wildlife names have arisen from the intermingling of no less than seven languages, French, Indian, German, English, African, Spanish and Italian. The Opossum became *Rat de Bois* ("rat of the woods"); that eminent animal the skunk became *Bête Paunte* ("stinking beast") or, even more vividly, *Arrosoir* ("sprinkler" or "watering can"); while to the bat was given the odd appellation *Souris-chaude* ("hot mouse"), apparently a reversal and corruption of the name used in France, *Chauve-souris* ("baldheaded mouse").

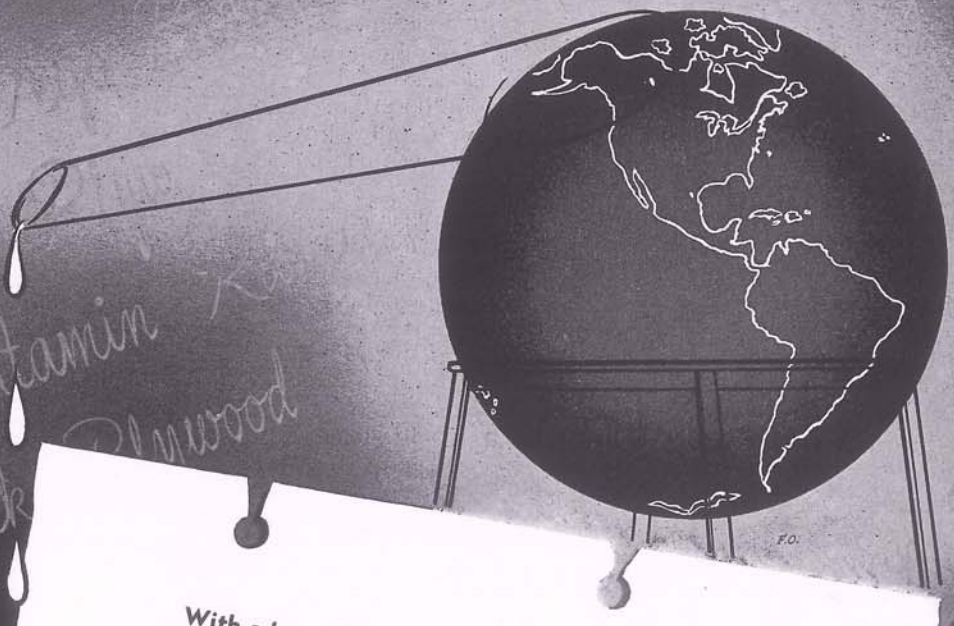
A characteristic winter scene is the sight of graceful Tree Swallows playing over the marshes or criss-crossing in search of food low over the surface of the Mississippi River. Characteristic, also, and surprising to visitors from the North is the summer spectacle of the Orchard Oriole, a bird elsewhere so completely associated with trees. Here, however, it builds its nest among the marsh plants of even, low coastal islands.

The Bob-White is undoubtedly the species that provides more hunting than any other single bird. Its spirited and lovely call can be heard in Louisiana in appropriate areas all the way from the Arkansas border to Weeks Island on the Gulf. Over-hunting, erosion, the rise and spread of useless vegetation such as broom sedge, have been among the factors that blotted out in many parts of the State what was once fine quail hunting. The Division of Wildlife and Fisheries of the Department of Conservation has, under the direction of Major James Brown, Director, conducted extensive activities to restore this bird to its former wide abundance. Quail raised in the State-operated hatcheries have been distributed through the cooperation of local sportsmen's clubs to areas all over Louisiana, where they have been released on public lands at such time of year that they have ample opportunity to join with the wild coveys and set up their own households. Especially important has been the program, likewise conducted by Major Brown, of providing farmers with seed of good quail plants such as lespezda, together with fertilizer, so that soil erosion can be checked and excellent food and cover for quail grown.

One voice, solemn and sonorous, heard from Louisiana woodlands is that of the Barred Owl, a year round resident. This is one of the birds most frequently found killed on the highways, which is quite unfortunate since its food habits are, on the whole, highly beneficial.

Coastal Louisiana, as well as many inland areas, provide ideal habitats for Herons. The writer, on one occasion, while passing down one of the coastal waterways, observed in less than twenty minutes no less than eight different species of the Heron family. Striking in their beauty, Herons range in coloration all the way from the pure white of the Snowy and American Egrets to the

new words to conjure . .



With a brave new world to conquer when the smoke of battle clears—there are brave new words to conjure . . . to dream . . . to develop for the ultimate benefit of all mankind—the free and the oppressed, the victorious and the spoilers. Thousands of new ideas, new products, new conveniences . . . will make our tomorrow livable beyond our fondest expectations . . . will make life, in this world of tomorrow, sensational and thrilling.

Tomorrow—IPIK PLYWOOD will find its way into your home in beautifully finished exterior and interior wall panels and flush-type doors . . . into your boat with its battle-tested Marine Plywood, water-proof, weather-proof, heat-proof

So add to your vocabulary important new words . . . IPIK TEGO-BONDED PLYWOOD!

IPIK GUM ★ POPLAR ★ MAHOGANY PLYWOOD

IPIK PLYWOOD COMPANY

1833 Canal Building, New Orleans ★ FACTORY, *Kenner, La.*

Free On Request: "Yesterday, Today and Tomorrow in Plywood"

complex pattern of the Louisiana Heron and the Least Bittern. Strangest in coloration of all is the Little Blue Heron, a common species which, completely white when young, assumes a piebald blue and white pattern before attaining the uniformly blue body and wings of the adult. Social birds, Herons nest in crowded colonies from which they scatter far and wide during the day in search of food. Their evening home-coming, when after circling over the rookery they suddenly plunge downward to their nests, is a beautiful and memorable sight. Herons are welcome birds to the eyes of all who grow rice or any other agricultural crop because, although these species eat frogs and fish (the latter unimportant kind), the major part of their diet is composed of grasshoppers and other insect pests.

Terns and Gulls are among the most familiar of our sea birds. Not only do they occur along the coasts but they may, like the graceful Least Tern, penetrate far inland. Scarcely anything can match the spectacular character of the tern cities located on the coastal islands. Cabot, Caspian and Royal Terns by the thousands congregate in compact nesting colonies particularly along the low shell islands of the Chandeleurs. These birds certainly lack wisdom in planning their cities, since with available abundant territory that seems to our human judgment much more desirable, they, nevertheless, year after year cheerfully choose beaches so low that the rise of tide due to a single minor storm will sweep, into destroyed windrows, thousands of their eggs in a single day. Undaunted they cheerfully again set up their complicated house-keeping.

Louisiana has an abundant Rail population. "Thin as a Rail" is a well chosen phrase, for these birds are laterally compressed, enabling them to run easily through the reeds and other vegetation of the marshes in which they live. The peculiar cry of the Clapper Rail, resembling the sound of the watchman's rattle of long ago, is familiar to all as, too, are the oddly contrastingly colored black young. The Clapper Rail keeps chiefly to the salt or brackish water marshes while the King Rail prefers fresh water. Both are known in Louisiana as "marsh hens" and are highly prized as game birds. One remarkable thing about the Rails is the fact that whenever pursued in the marsh they take with reluctance to the air and fly only short distances, yet their normal migration may carry them, in certain species, a thousand miles. Thus, our Sora Rail, breeding in Manitoba, winters on the Gulf Coast, while the little Yellow Rail, found, in summer, as far north as Southern MacKenzie and Central Quebec, Canada, likewise journeys to the Gulf states for its winter home.

One of North America's rarest birds, the Whooping Crane. This pair, in flight, was photographed in Louisiana.

The Poule d'Eau (American Coot) is an abundant bird familiar to every hunter. It is, however, not an unmitigated blessing since it competes with the much

Here photographer Albert Dixon Simmons has captured the beauty and grace of birds in flight at sunset.

more desirable ducks for their food and will often in concentrated numbers completely clean out the useful vegetation of good duck territory. The removal of the bag limit on coots (which must be a Federal matter) would, the writer believes, be desirable.

The Raccoon, that quizzical creature, almost a jester among our wildlife, ranges in every parish of the State. Where it can reach the island-nesting Pelicans, the 'coon is capable of causing heavy depradations among these birds. The writer has often encountered clear evidence of such work.

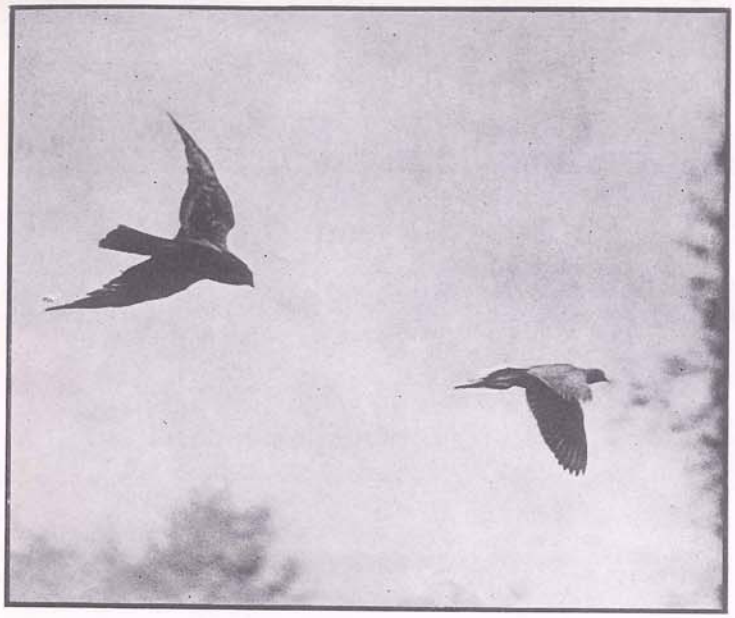
Our Pelican, official symbol on our state seal and also official state bird, deserves a special mention. Properly known as the Eastern Brown Pelican, this grave fowl has every right, by tradition and by performance, to hold the high office that it honors. The Brown Pelican occurs throughout central and southern United States, being represented on the Pacific Coast by a western sub-species. Brown Pelicans are no enemies of our fisheries since most exhaustive scientific investigations have established that the fish they eat include almost none of either game or commercial value.

The Pelican has a historic position in written natural history that dates back ten centuries. There were compiled, over one thousand years ago, in manuscript form, certain quite remarkable documents known then as "Beastaries." These were discourses on natural history written by medieval monks, consisting, in fact, of only a slight chemical trace of any natural history at all but an overwhelming dose of Middle Ages moral precept teaching. The Pelican became the symbol of unselfish devotion, because the action of the mother bird in regurgitating swallowed fish to feed its offspring was misunderstood, and it was believed that the parent actually tore open her own breast and fed, with unfailing sacrifice, her young with her own blood. Even Shakespeare refers to this legend when, in "King Lear" he speaks of "pelican daughters." It is such a sacrificial act that the Pelican is depicted as performing in the representation of herself and her young on our state seal.

Brown Pelicans nest in exceedingly interesting colonies in Louisiana, particularly on islands off the coast. The contrast between the constant raucous racket of the young and the completely silent anxiety of the disturbed parents in their ponderous flight is indeed memorable. Young Pelicans are first dead black in the color of their skins but soon acquire a white coat of down. Adult Pelicans so often bring sharply to the observer's mind the impression of what those long extinct reptiles, the pterodactyls, must have looked like when the earth was much younger and allegedly much less civilized than it now is.

Dr. Harry Church Oberholser, one of the most eminent North American ornithologists, has well said:

"The coast of Louisiana, situated as it is in the central portion of the northern coast of the Gulf of Mexico, lies directly in the migration route across the Gulf of Mexico that is used by so many birds traveling from the Gulf States to Central and South America. On the Gulf shore, in southern Jefferson Parish, is situated Grand Isle, a sandy coastal island that, however, supports a considerable growth of live-oak trees. By reason of its position and apparent attractiveness to birds, it seems to be a port of call for large numbers of northward migrating small birds in the spring and their first stopping place on the edge of the mainland of the United States. Few places seem to be so advantageous for the study of the migratory movements of birds in the spring



Here is an unusual photograph of winged warfare. A Mourning Dove speeds to safety as a Cooper's Hawk zooms close behind.

as does Grand Isle, and the large numbers of migrating birds that are to be found at this locality during the northward migration when weather conditions are right, are almost unbelievable."

One scientific method of studying bird migration is by banding individual birds. A serially numbered band is placed on the bird by an expert competent to identify the species. Recovery of the band then tells how far and how long the individual has travelled. Turning now to some Louisiana records we find many of interest. A few are cited here:

A Cedar Waxwing banded at Shirley, Massachusetts, July 11, 1933, was found at Houma, Louisiana, February 25, 1934. A Ruddy Turnstone, banded at Zion, Illinois, September 4, 1929, was found at Bayou Scofield, Louisiana, October 10, 1929. A Robin, banded at Kingston, Ontario, July 22, 1934, was found at Lake Pontchartrain, Louisiana, December 21, 1934. A Killdeer, banded at Regina, Saskatchewan, Canada, June 27, 1933, was found at Arnaudville, Louisiana, January 5, 1936.

Interesting records of three waterfowl, each banded at Avery Island, follow: A Blue Goose, banded November 12, 1933, was found at Moosonee, Ontario, Canada, May, 1936. A Pintail, banded March 4, 1933, was found at Steep Rock, Manitoba, Canada, July, 1936. A Pintail, banded December 22, 1933, was found at Pitt Point, Alaska, July 29, 1934.

The way Canvasback wander is indicated by two individuals, each banded at Abbeville, Louisiana. The first, January 29, 1933, was found at Huaniquero de Morales, Michoacan, Mexico, January 2, 1934. The second, banded February 4, 1929, was found at San Diego County, California, November 13, 1929.

Particularly of interest are the records of Woodcock since, more than in any other State of the Union, Woodcock appear to congregate for their winter home in Louisiana. Out of eight birds banded near Lottie in Point Coupee Parish, January 14, 1937, one was killed October 2 of the same year near Martinsburg, New York, another October 29, 1938, near Sloansville, New York, while of seven Woodcock banded on the night of January 7, 1937, near Sherburne in Pointe Coupee Parish, one was killed on November 14 of the following year at Chipman's Corner, Nova Scotia, Canada.

Particularly interesting, also, is a record of a Pintail duck shot just below Dulac, Terrebonne Parish, November 28, 1933. The band was so worn that the lettering could not be read until the metal was specially treated by the F.B.I. It was then found that this Pintail, hatched at the Waubay National Wildlife Refuge, Waubay, South Dakota, and banded there August 18, 1929, had carried the band for almost five years.

Still more remarkable is the story of a Dosgris (officially the lesser Scaup), which was shot by the writer's friend, Robert "Bobbet" Gaspard, Christmas, 1941, in a salt marsh between Lake Borgne and Lake Catherine. Mr. Gaspard brought the band to the writer who found that so worn was the metal that nothing whatever could be deciphered even under a microscope. The aluminum circlet was then submitted to the F.B.I. who, by application of special methods, revealed the bird band's message. The writer was then astonished to learn that this duck had actually been banded by another of his friends, Mr. R. B.

Gordon, near Abbeville, Louisiana, December 23, 1933. It is challenging to contemplate the vicissitude and hazards encountered by this bird in traversing sixteen times the entire length of our country, an aggregate journey of approximately 32,000 miles.

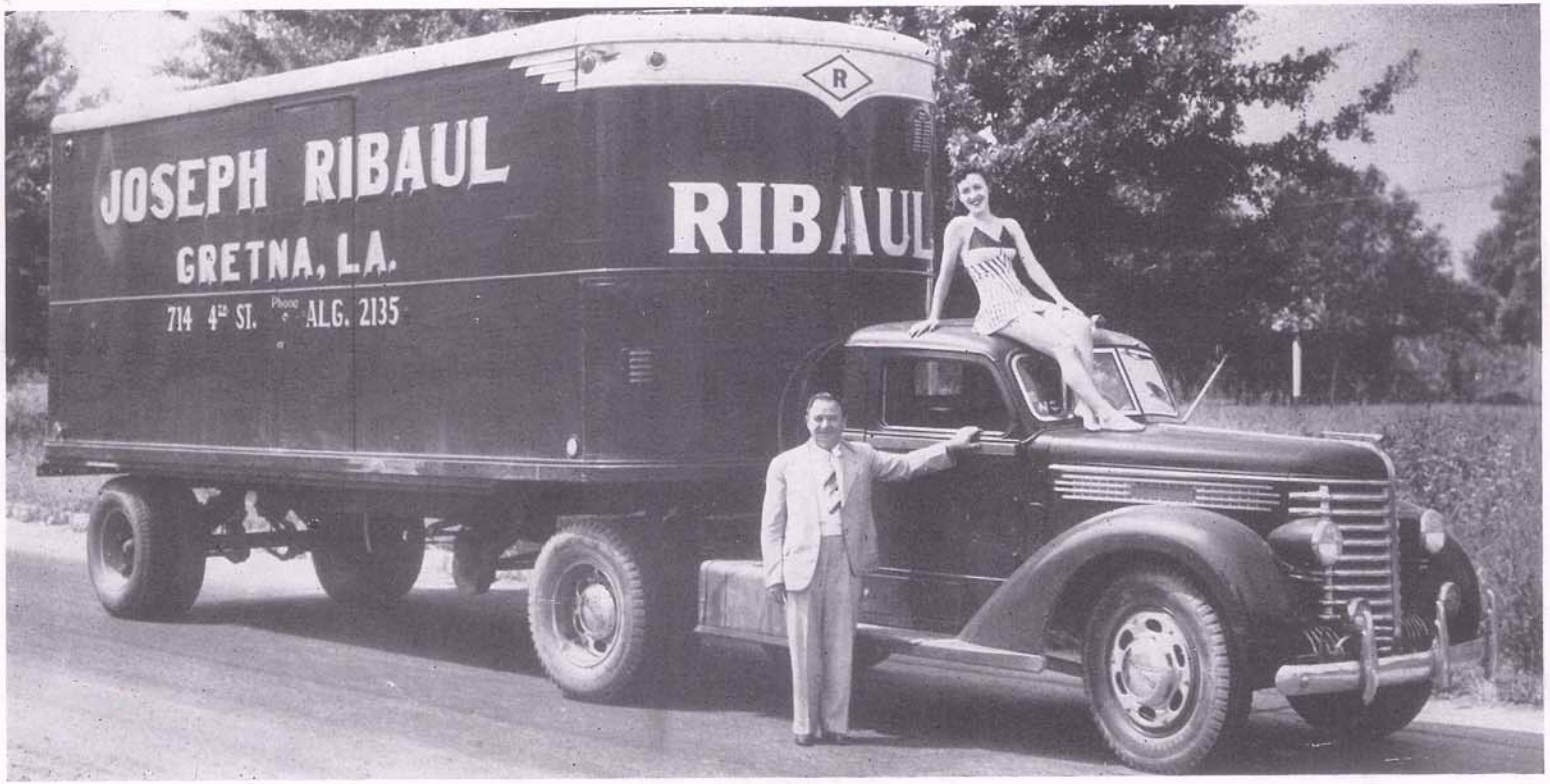
Remarkable among our northern migrants is the Great Blue Heron, a common Louisiana species. The Great Blue Heron and its sub-species occur as breeding birds from Northern Canada to the Gulf. Great Blue Herons make long flights. One banded June 21, 1936, at De Pue, Illinois, was shot on Monkey River, British Honduras, on November 30 of the same year. Of two banded at Waseca, Southeastern Minnesota, one flew nineteen hundred miles to Oaxaca, Southern Mexico, the other twenty-six hundred miles to Gatun Lake, Panama. Both of their flight lines, if they were direct, probably traversed Louisiana.

Sixty years ago Louisiana received from Japan by way of Venezuela and New Orleans a Japanese gift that has done and is doing inestimable damage to our wildlife. This is the water hyacinth known generally throughout the State as the "water lily." When, in 1884, an International Cotton Exposition was held in New Orleans the Japanese representatives in their building on the Exposition grounds gave away these plants, which they had imported from Venezuela, as souvenirs. The plants originally came from Japan. Eagerly sought because of their beauty, these plants were taken far and wide by exposition visitors. As early as 1890 an agitation was started to take some measures to control the water hyacinth and in 1897 Congress made its first appropriation of $5,000 for the study of this plant in the waters of Louisiana and Florida. 1899, 1902 and 1912 are the dates of the first three Congressional acts providing funds for water hyacinth removal in Florida, Mississippi, Louisiana and Texas, the four states into which they had, even then, spread.

Another plant, an American native, the alligator weed (alligator grass), often joins up with the water hyacinth and contributes badly to the damage done. Water hyacinth cannot live on land while alligator grass, although it can spread out over the water, must remain attached to the shore.

The water hyacinth is one of the worst biological pests in the State of Louisiana. The writer, with the invaluable assistance of Mr. W. E. Wunderlich, of the United States Engineers, War Department, worked out for the Department of Conservation a water hyacinth control unit capable of being transported to any point to which an automobile could travel. Consisting essentially of a twenty-foot long, three-foot wide conveyor mounted on two automobile wheels and handled as a trailer attached to a truck, the machine is mounted on three sheet-iron pontoons. The Department of Conservation had two of these units constructed and they have been in successful operation for over two years under the direct supervision of Major James Brown, Director of the Wildlife and Fisheries Division, but due to the wartime manpower situation it is not possible at present to continue this work. Using a simple cutting pattern it is possible to have the water hyacinth move steadily onto the conveyor. They are thrown out onto the bank where rapidly these plants die, quickly losing their 95 per cent water content. Each unit is capable of clearing 1200 square yards of hyacinth infested water an hour. Although the motor necessary to operate the conveyor is actually less than four horsepower, the machine has the surprising capacity of throwing out and disposing of the water hyacinth at the rate of one ton a minute.

Water hyacinths jam up navigation. Repeatedly, owners of homes and camps along bayous, where the only means of access is by boat, have been compelled to abandon their valuable equities because they could no longer traverse the hyacinth infested waters. Water hyacinths completely destroy the fishing value of the ponds, bayous and lakes which they cover. Light



JOSEPH RIBAUL TRANSFER

Most Reliable Drayman on the West Bank of the River — Day and Night Service

Local and Long Distance Hauling of All Kinds — We Have Contract Carrier Permit All Over State of Louisiana

Pictured With Modern Van Is Mr. Ribaul and Daughter, Virginia

penetration is blocked. Under-water plants, necessary either as food or shelter for various forms of life upon which the fish feed, or necessary shelter for the fish themselves, are destroyed and the fish (game or commercial) must starve or migrate. Investment of many tens of thousands of dollars of State money in State fish and game preserves is being endangered, and will be completely destroyed unless the water hyacinth is controlled. The water hyacinth, also, to a very serious degree affects the usefulness of what would otherwise be ideal duck ponds. When water hyacinth rafts form they may be driven back and forth by the wind and thus destroy, by scouring out, underwater stands of valuable duck-food plants. When, also, water hyacinths completely cover the surfaces of such ponds they render them utterly useless as haven or port-of-call for migratory waterfowl. Chemical methods of control have, for various reasons, proven unsatisfactory. One of the big post-war jobs to be done in the State of Louisiana is a program to bring this dangerous Japanese plant pest under control, and recapture, for our recreation and our other valuable economic use, the vast water expanses that have been so disastrously invaded.

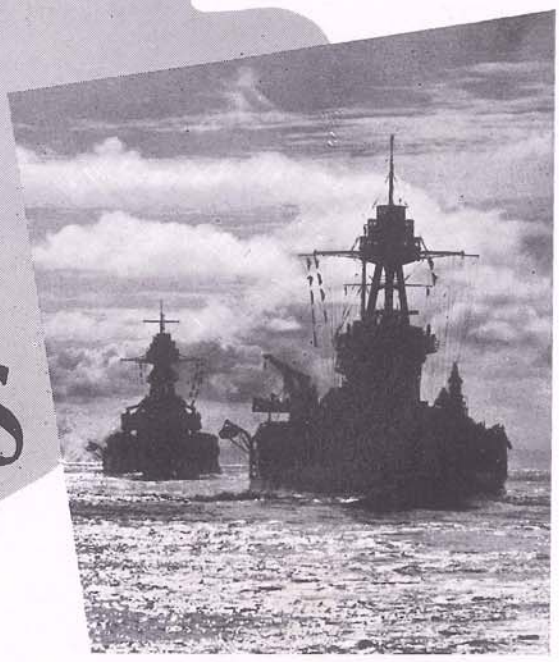
The economic importance of Louisiana wildlife is tremendous. Where such excellent duck and goose hunting, tarpon fishing and other forms of angling are available in the picturesque setting and natural charm of our state, it is natural that visitors from far away should come to Louisiana to combine many pleasures in one journey. The economic value of the activities of Louisiana sportsmen within the state is also very great. Every time the hunter or fisherman pursues his sport he adds to the income of a wide range of fellow citizens. When, under normal conditions he enjoys such recreation, he contributes most substantially by his use of and payment for transportation services, food, overnight accommodations and the personal services of a guide, expert in hunting and fishing. Any important hunting and fishing community in Louisiana can provide such guides and they are of traditional excellence. Fish and other game must be regarded as a crop, a crop to be carefully guarded, as far as its safe perpetuation is concerned, but a crop that very definitely should be harvested since, unharvested, it is simply wasted.

No state of all our forty-eight excels Louisiana in its fine tradition of hunting and fishing enjoyment. Once a wilderness, which Columbus has been credited with sighting along its lowest southern border on his mysterious fourth voyage in 1502, Louisiana is a land rich in wildlife and rich in historic background. It was the meeting place of primitive hunter, trader, adventurer, priest and soldier of fortune, a mingling of daring men who lived dangerously in the presence of wild nature, gaining from bayou, lake and forest their fare and their welfare.

They have left to us a precious heritage that, damaged sometimes by inevitable changes of developing civilization, damaged sometimes by prodigal waste through our own carelessness, we still have in rich measure. Such is the wildlife of Louisiana—unique in many ways in the wildlife pattern of our entire continent.

James Nelson Gowanloch, *author of this article, has been Chief Biologist for the Louisiana State Department of conservation for 13 years. His lifetime has been devoted to the study of the flora and fauna of our country. Marine research has taken him from Nova Scotia to the Dry Tortugas Islands off Florida and to the Pacific Coast. For 13 years he was a professor in American and Canadian universities. To those interested in supplementing the reading of this article with further information, we recommend "The Bird Life of Louisiana" in the writing of which Mr. Gowanloch collaborated with Dr. Harry C. Oberholser.*

ARROW to the AMERICAS



BY M. F. PARSONS

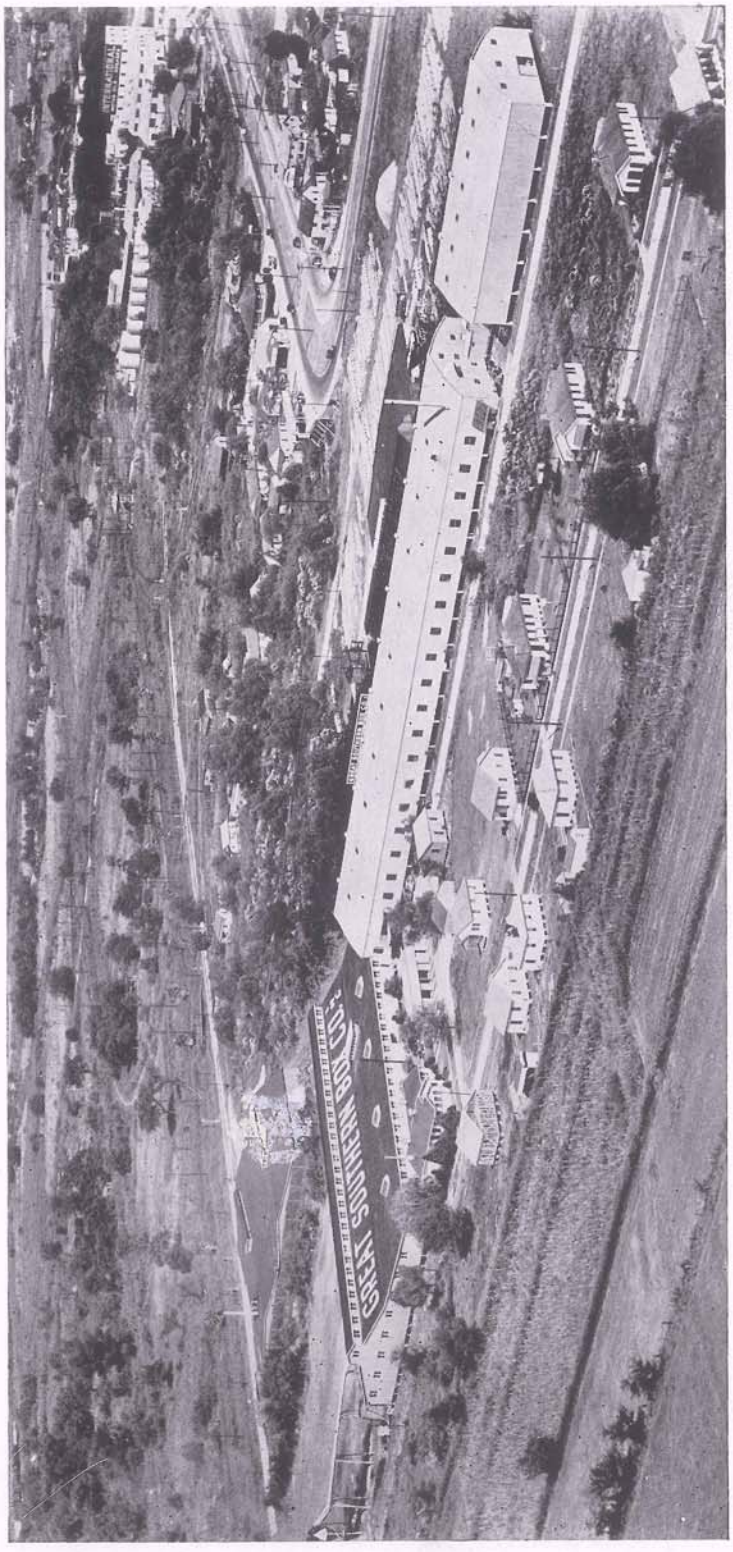
ON AUGUST 5, 1943, the Ship Channel Committee of the Police Jury of Jefferson Parish and the Dock Board of New Orleans presented to the U. S. Army Engineers—in public hearing—two different routes for a proposed deep ship channel to the Gulf of Mexico.

On that memorable date, both these groups—representing Greater New Orleans—realized that, although they differed in the details, they were fighting for a common cause; and, that their united efforts were putting in motion the project that would be Postwar Problem No. 1, not only for New Orleans and Louisiana—but for the whole Mississippi Valley.

New Orleans has ahead of it the greatest postwar opportunity of any city in the world. It is the natural port of exit for the great Mid-Continent area of the United States, which accounts for 42.1 per cent of the retail sales of the country, supplies 63.5 per cent of the farm income, contains 49.3 per cent of the population and produced—before the war—40 per cent of the manufactured products. During the war, it has fared particularly well in the location of new industries. This means that the Mississippi Valley will have a postwar percentage of industrialization undreamed of before Pearl Harbor—and that these factories will aggressively seek new peace time markets.

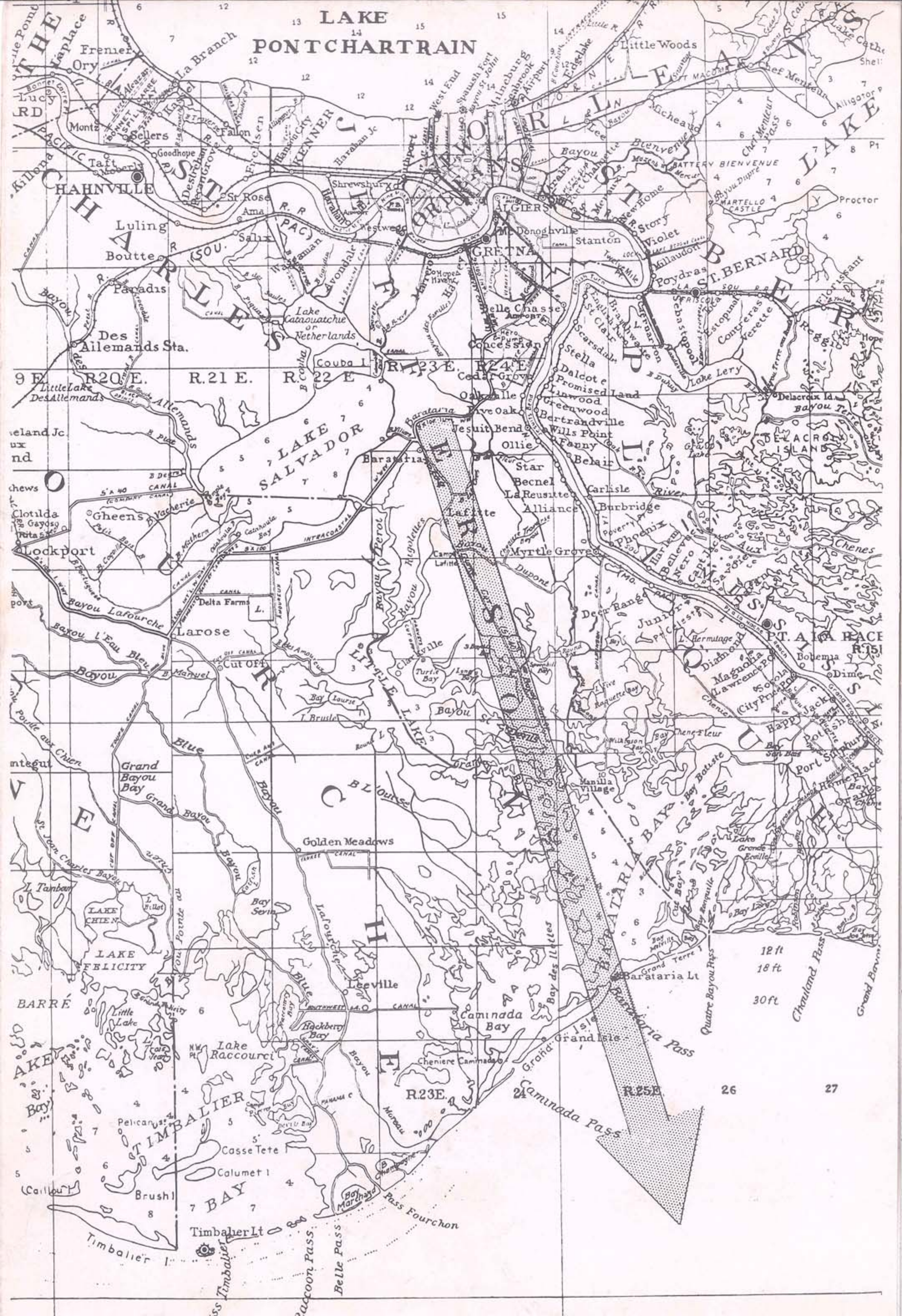
Through their natural port of exit, New Orleans, they will find them in the Latin Americas, the great trade frontier of the future. From the rich Mid-Continent of the United States—via truck over fine four-lane highways, via rail over eight trunk line railroads, via boat over our inland waterways and via air by means of the new airlines which have made New Orleans their terminus—will come finished products of our factories to be shipped to the machine-hungry Latin Americas.

Only one thing is needed to clinch this great chance of a great city. Everyone familiar with the economics of the Port of New Orleans is aware that the Mississippi River passage to the Gulf has been inadequate for years. The war has simply brought to a crisis a situation that has long been tolerated. We can wait no longer. Post war ships will be larger. Postwar commerce will be heavier. Postwar competition will be tougher. A ship canal MUST be built—and that canal must be the deepest and best approach on the whole Gulf Coast.

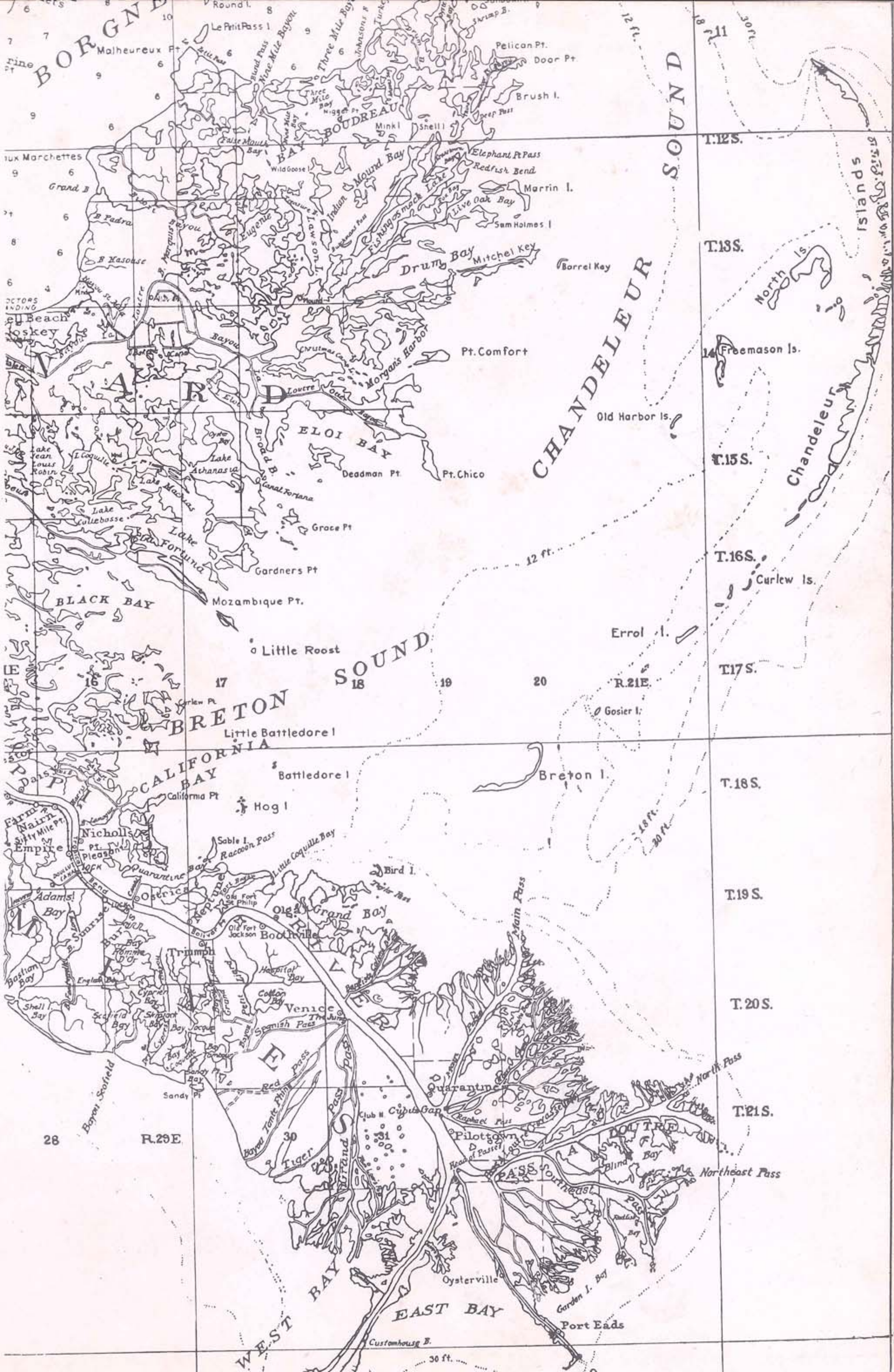


GREAT SOUTHERN BOX COMPANY, INC.

Southport - - - - - - - - Louisiana



LAKE PONTCHARTRAIN
ST. CHARLES
JEFFERSON
ORLEANS
ST. BERNARD
PLAQUEMINES
LAFOURCHE
TERREBONNE
NEW ORLEANS
CHAHNVILLE
Laplace
Frenier
Ory
Lucy
Montz
Sellers
Taft
Goodhope
Killona
Luling
Boutte
Paradis
Des Allemands Sta.
Little Lake Des Allemands
Kenner
Harahan
Shrewsbury
Westwego
Waggaman
Avondale
Marrero
Harvey
Gretna
Algiers
McDonoghville
Stanton
St. Rose
Ama
Salix
Destrehan
Lake Cataouatche or Netherlands
Couba I.
R.20E.
R.21 E.
R.22 E.
R.23E.
R.24E.
LAKE SALVADOR
Cedar Grove
Oakville
Jesuit Bend
Ollie
Star
Becnel
La Reusitte
Alliance
Barataria
Lafitte
Myrtle Grove
Belle Chasse
Concession
Stella
Scarsdale
Dalcote
Promised Land
Linwood
Greenwood
Bertrandville
Wills Point
Fanny
Belair
Carlisle
Burbridge
Phoenix
Harlem
Belleview
Nero
Savoie
Junior
Deer Range
Dupont
Poydras
ST. BERNARD
Friscola
Sebastopool
Contreras
Verette
Reggio
Florissant
Lake Lery
Delacroix Id.
DELACROIX ISLAND
Violet
Story
Millaudon
Twelve Mile
New Home
Meraux
Chalmette
Bienvenue
Micheaud
Chef Menteur
Little Woods
Edgelake
Lee
BATTERY BIENVENUE
MARTELLO CASTLE
Proctor
PT. A LA HACHE
Bohemia
Dime
L. Hermitage
Diamond
Magnolia
Lawrence
Sofola
City Price
Happy Jack
Potash
Port Sulphur
Homeplace
Lake Grande Ecaille
Bay Batiste
BARATARIA BAY
Manilla Village
Barataria Lt
Barataria Pass
Grand Terre I.
Quatre Bayou Pass
Chaland Pass
Grand Isle
Caminada Bay
Caminada Pass
Cheniere Caminada
Lockport
Gheens
Clotilda
Gayoso
Rita
Bayou Lafourche
Delta Farms
Larose
Cut Off
Bayou L'Eau Bleu
Golden Meadows
Leeville
Bayou Perot
Little Lake
Clarksville
Turtle Bay
Bay Lourse
L. Brusle
Grand Bayou Bay
Bayou Pointe au Chien
St. Jean Charles Bayou
L. Tambour
LAKE CHIEN
LAKE FELICITY
BARRÉ
Little Lake
Lake Raccourci
TIMBALIER BAY
Pelican I.
Casse Tete I.
Calumet I.
Brush I.
Timbalier Lt
Timbalier I.
Raccoon Pass
Belle Pass
Pass Fourchon
Bay Marchand
Bay des Ilettes
R.23E.
R.25E.
24
26
27
12 ft
18 ft
30 ft


BORGNE
Malheureux Pt
Le Petit Pass I
Round I.
Three Mile Bay
Nine Mile Bayou
Pelican Pt.
Door Pt.
Brush I.
BAY BOUDREAU
Mink I
Shell I
Elephant Pt Pass
Redfish Bend
Marrin I.
Live Oak Bay
Sam Holmes I
Mound Bay
Drum Bay
Mitchel Key
Barrel Key
Wild Goose I
Grand B
B Padra
B Nasouse
Lake Eugenie
Fishing Smack Lake
Indian Mound Bay
Morgan's Harbor
Pt. Comfort
Beach
Oskey
Bayou
Loutre
ELOI BAY
Deadman Pt
Pt. Chico
Lake Jean Louis Robin
L Coquille
Lake Athanasia
Lake Machias
Lake Cutlebosse
Lake Fortuna
Canal Fortuna
Broad B.
Grace Pt
Gardners Pt
BLACK BAY
Mozambique Pt.
o Little Roost
SOUND
BRETON SOUND
16
17
18
19
20
R.21E.
Curlew Pt
Little Battledore I
CALIFORNIA BAY
California Pt
Battledore I
Hog I
Breton I.
Gosier I.
Errol I.
Curlew Is.
CHANDELEUR SOUND
Old Harbor Is.
Freemason Is.
North Is
Chandeleur
Chandeleur Islands
12 ft.
18 ft.
30 ft.
11
14
T.12S.
T.13S.
T.15 S.
T.16S.
T.17 S.
T.18 S.
T.19 S.
T.20 S.
T.21 S.
Farm
Nairn
Sixty Mile Pt.
Nicholls
Empire
Pleasant Pt.
Quarantine Bay
Sable I.
Raccoon Pass
Little Coquille Bay
Bird I.
Main Pass
Ostrica
Neptune
Old Fort St Philip
Old Fort Jackson
Grand Bay
Boothville
Adams Bay
Sunrise
Buras
Bay Homme
Triumph
Bastian Bay
Shell Bay
Scofield Bay
Venice
Spanish Pass
Hospital Bay
Cotton Bay
The Jump
Red Pass
Sandy Pt
Bayou Scofield
Bayou Tante Phine
Tiger Pass
Grand Pass
30
31
Club H.
Cubits Gap
Quarantine
Raphael Pass
Pilottown
Head of Passes
PASS A LOUTRE
North Pass
Northeast Pass
Southeast Pass
Blind Bay
Redfish Bay
Garden I. Bay
Oysterville
Port Eads
EAST BAY
WEST BAY
Customhouse B.
30 ft.
28
R.29E.

Jefferson Parish recommended to the U. S. Engineers that this future ship channel should be located on the West Side of the Mississippi, where Jefferson Parish quietly awaits its destiny as the "Brooklyn" of New Orleans.

Here, digested for quick understanding and future reference, are the arguments presented by Jefferson Parish. To help you we have included a map of the channel recommended. And, as you observe how it takes the shortest distance between two points straight as an arrow down through the Parish to Gulf deep water, you will understand why it has been named "THE ARROW TO THE AMERICAS."

A ship canal such as proposed—a canal that will build around it one of the greatest seaports in history—must be built where industry can grow. It must have available room on its banks to welcome new enterprises. It must have space beyond those banks to expand as its industrial life grows, and, it must be located where the resources required by industry are most convenient.

A glance at the New Orleans' growth chart over the years shows that to the East have centered the retail, the cultural, the wholesale and the residential activities. But to the West Bank have gravitated the industries, the storage facilities, the majority of all the trunk line railroads bringing raw materials to New Orleans, the railroad yards and the machinery of commerce. Right now the plants handling nearly 60 per cent of the normal industrial volume of New Orleans are located in Jefferson Parish.

Here are electric power, natural gas, oil and water—all unlimited and available to industry. Here, also, are miles of ten-year tax free parish land, still uncrowded and ideal for future factories.

Through this area, abounding in natural advantages, Jefferson Parish engineers have indicated a route that will be SHORTER.

The "ARROW TO THE AMERICAS" would anchor at Crown Point on the Intracoastal Canal on the northern end and terminate at Barataria Bay, the actual canal distance being approximately 42 miles. This is the closest point to Gulf deep water from New Orleans in any direction.

Ships would come through Barataria Pass between Grand Terre and Grand Isle, a natural channel that has maintained an 80 foot depth for generations.

By this route it is estimated that a ship can reach Crown Point from Tidewater in three hours as compared to the 12 hours now consumed fighting upstream on the Mississippi. From Crown Point—where rail, barge, air and truck distributing systems would pick up cargoes—the distance is only 9 miles to Gretna and 12 miles to the Huey Long Bridge. It has been recommended by certain factions, that this canal be cut through to Westwego on the Mississippi, an additional channel distance of only 8 miles.

Experts claim that "THE ARROW TO THE AMERICAS" would save shippers, over the present river route, one dollar per cargo ton.

"THE ARROW TO THE AMERICAS" could be constructed for $10,000,000. This low estimate is based on these factors. First, the utilization of present bayous and cut offs over part of the route would minimize dredging. Second, none of the terrain for the entire distance presents dredging difficulties. Third, no bridges will be required. And fourth, the Gulf end represents no silt elimination or control.

Its economical construction estimate also takes into consideration the inexpensive right of way purchases that would be possible. Practically all of the Jefferson Parish land through which this canal would be routed is undeveloped and therefore cheap. Most of it is property of the State, under Conservation Department protection. None of it passes within the limits of any town.

It will be a safe and reliable route for shippers. There will be no currents or curves to present navigation hazards. The absence of silt formation guarantees a uniform depth at all times. The canal, being salt water, will offer deep water conditions to fruit cargo shippers—a very important profit point. Fruit ripens faster in fresh water. This route will also eliminate bar and river pilot charges and automatically lower insurance rates.

From an industrial standpoint, the earth secured from the excavation of the canal can be utilized to a safe height and several hundred feet in width as building sites and switching facilities—plus a four-lane highway to Grand Isle on the West Bank.

Its completion would open up the agricultural, seafood, cattle raising and industrial possibilities of Grand Isle and the surrounding islands. Its construction would also make available to industry the rich oil, gas and sulphur resources immediately adjacent to the canal.

"THE ARROW TO THE AMERICAS" would pass right through the famous Lafitte Oil Field. In Plaquemines Parish, which joins Jefferson on the East, are the rich Grand Ecaille sulphur mines.

Oil and sulphur are two things which industry cannot do without. Every modern means of locomotion that flies, rolls or floats requires oil and every article manufactured, somewhere in its production or handling, comes in contact with sulphur in one of its many forms or applications.

To these two vital commodities "THE ARROW TO THE AMERICAS" would offer a cheap, handy ride to market.

"THE ARROW TO THE AMERICAS" would bring additional wealth to local, state and Federal governments. At present, the greater part of the land through which the canal would be projected is low value marsh land, undeveloped and practically uninhabited. When the canal goes through, thousands of these low value acres will become industrial sites, roadways or ship slips and docks. Land values will raise.

It will put us closer to the Central and South Americas and closer to the Pacific Ocean if the Tehuantepec Canal across Mexico is eventually constructed.

There is, also, a final consideration that strengthens still more the Jefferson Parish deep ship channel route. There will be, at the Gulf end, excellent land and water facilities for a large naval base. With this canal, all vessels of our Navy could be serviced here—in close conjunction with sea and land planes at a similarly constructed air base in the same area.

At the time this report went to press no word had been received as to which route the U. S. Army Engineers have approved. Back in 1929, when the need of a deep ship channel was already under consideration, the Engineers reported that the route now proposed by Jefferson Parish was the most feasible route from a construction and economic standpoint. We hope they reach the same conclusion again.

But—let us not lose sight of the main issue, which is A DEEP SHIP CHANNEL. Whichever route is approved, our fight has just begun. The decision of the U. S. Engineers will be merely the first step in the project.

We think it is a foregone conclusion that both Jefferson Parish and New Orleans, when the U. S. Engineers hand down their decision, will forget their differences of opinion and will unite in support of the selected route.

Then will come the struggle to get it through Congress—to get the money to build it—to get the rest of the states to see its value to the whole nation as we do.

M. F. PARSONS

Mr. Parsons, author of the preceding article, is Vice-President of Celotex Corporation, in charge of the Marrero plant and all operations throughout Louisiana in connection with the purchase and gathering of bagasse. When Celotex was but an idea in 1920, Mr. Parsons joined the original organization. For 24 years he has been associated with every activity of his company, the largest of its kind in the world, and has a quarter century's economic knowledge of the parish in which it is located.

By HARNETT T. KANE

MAKING a talk on the subject of Louisiana's bayous some time ago in Mississippi, I was asked a question by a good-humored listener: Why, in writing about the bayou country and its people, hadn't I mentioned any of "those big storms" since the Cheniere Caminada hurricane of 1893? Weren't they always hitting here, and killing people?

My answer was that, in the fifty years since the much-publicized blow of '93, the area about New Orleans had been visited only once by a heavy hurricane, in 1915. At that time, in the places adjoining the city, only a handful of persons died, and in New Orleans itself—only two. And those two lives were lost because the individuals failed to heed warnings to stay indoors out of the path of flying debris!

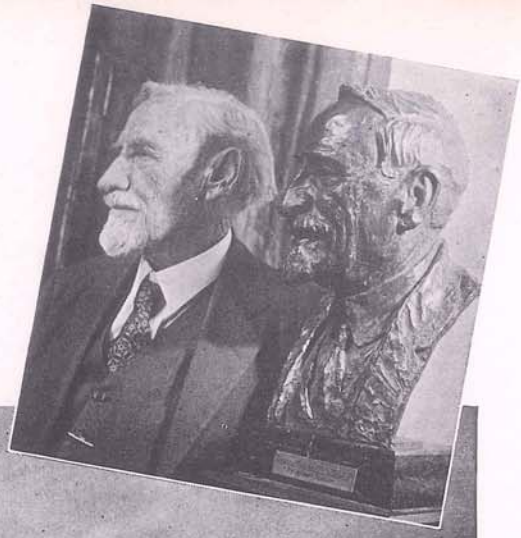
Thereby hangs a story. This pair of tropical outbursts, over a period of a half century, should not give New Orleans and its surroundings a classification as a "hurricane belt" any more than the Chicago fire should set that city apart as one peculiarly subject to flames. As a matter of fact, over a period of years, more persons die of cyclones or twisters in the interior of the United States than meet death in the Gulf coast hurricanes striking at all points from Florida to Texas.

In former years, in this rich Deep Delta area built up by the winding Mississippi, people might have had reason for fear when September or October winds moved upon them. There was no way of knowing, until the last moment, if or when or how the elements would strike. Today, say those whose job it is to cope with the winds, there is no reason why a single life should be lost. Louisiana has learned to handle its storms. It recognizes the signs far in advance; it takes precautions and it protects itself.

For much of this, one particular Louisianian is responsible. Today, in a dusty art shop at 633 St. Peter Street, a sprightly, goateed man with sharp eyes and a no less sharp sense of humor, chuckles with his customers and talks about the weather. He is Dr. Isaac Monroe Cline, for many years the principal meteorologist in charge of the United States Weather Bureau office at New Orleans. Now in zestful retirement, he is one of the great figures in the history of American weather forecasting.

"Old Doc" Cline wrestled with the hurricanes, treated them as his personal enemies and sought out their weak points over a period of many years. He came to know as much about the subject as any man, and he put his information to work.

He had a reason for his interest, a bitter one. In 1900 he was living in Texas, in charge of the Galveston station and the Texas section of the United States Weather Bureau. His main concern then inclined toward medicine. He belonged to the state and national medical associations, and he lectured on medical climatology at Texas State University's medical school. Then, one night changed his life. September 8 came, and with it the Galveston storm.



Isaac Monroe Cline, M.D., Sc.D.—the Weather Wizard—beside a bust of himself. While below is the Gulf of Mexico, whose many moods he studied and carefully charted for years until he was able to see beyond her smiling shores and surface and accurately foretell her mounting angers long before she herself was able to express them in sudden and sullen storms.

Among those who were killed was his young wife, drowned before his eyes. He managed to save his three children; and "Doc" Cline decided the next day to give up medicine and put himself into a fight against the forces of the winds.

There was no reason, he told himself, why the toll of the tropical hurricanes could not be greatly curtailed. Men called them "unpredictable." "Doc" Cline felt that nothing was unpredictable. He dug into records, he made inspections, he set up measuring instruments, he interviewed witnesses, and slowly he accumulated thick volumes of data. Sometimes he was discouraged, but every year added new facts, building what was almost certainly the greatest collection of information on the subject. Gradually he was developing his thesis.

The route of a tropical hurricane, he found, is certain and can be determined in advance if watchers ashore will study the rise and fall of the tides. The hurricane, like other phenomena of nature, sends its signs ahead; it is man's task to recognize them. "Doc" Cline sought to develop ways of charting the course and predicting the destination of the blow. Eventually he had ready what he called his integration method: an analysis of many wind directions over a wide area, brought together eventually into a definite picture of the storm itself.

Often, he found, the weather was clear and bright along the coast when the hurricane was moving toward it. Some who were on the scene might be unworried; but if they examined the waves they would know that something was wrong. By keeping a close watch upon wave movements everywhere in the storm area, "Doc" Cline could tell just what that something was, and what to do about it.

The "Betty Jean," equipped with a quick-freezing unit, and a storing and freezing capacity of 60 tons will head, pack and quick-freeze the shrimp right on the fishing grounds.

SHRIMP BOUGHT AND SOLD

Any shrimper on the lakes or in the Gulf interested in selling their catch on the fishing grounds—contact us! The "Betty Jean" will act as mother ship for several other company owned trawlers as well as some privately owned.

Companies interested in buying our fresh frozen shrimp are invited to phone, wire or write.

LEWIS SEA FOODS

450 SALA AVE. PHONE WA. 6405
P. O. BOX 128 WESTWEGO, LA.

G. C. LEWIS, MANAGER

Crabs ★ *Shrimp* ★ *Turtles* ★ *Frogs*

The storm of 1915 was his first great test. Dr. Cline put his data together, gave a clear set of warnings in advance, told the people what to expect, and when. News of the blow was circulated carefully in advance; vessels were sent out to pick up persons in the path of the winds. In New Orleans on September 29, the day the hurricane arrived, he urged people to stay indoors, out of the way of flying slate and other articles. The human losses were amazingly small—just two. "Doc" Cline had licked the enemy.

Today his methods are almost universally accepted. They have proved repeatedly that the term "unpredictable" need no longer be applied to hurricanes. He has refined his methods, and changes have been made in communication and coverage of the South Louisiana sections. If any storm comparable to that of 1915 arrives, the losses should be still less than the last time.

Weather men can now tell the source of a hurricane at least three or four days in advance, from the time it enters the Gulf or has its birth there, and check it hour by hour in its movement toward the coast. Even before that, thanks to stations in the West Indies and facilities for receiving reports from ships at sea, they know when trouble is brewing.

About the Delta area, in all directions from New Orleans, telephone service is now available—toward the river mouth, to the lake edges, to Grand Isle and other outlying spots. Radio has made rapid advance in recent years. Most homes have a receiving set or possess quick access to one. Luggers and other vessels own them as regular equipment.

When the "storm period" approaches, the people of Jefferson, of St. Bernard, of Lafourche and Plaquemines Parishes keep their ears close to the radio, and watch their skies and waters. They know the meaning of a peculiar color to the sky at dusk, the significance of the odd flights of certain birds. They un-

---

The U. S. Coast Guard Station at Grand Isle, stoutly constructed to withstand the most violent wind, and built high to afford shelter in case of flood waters. From the top of this station flies the flag that warns the island fishermen of impending storm or dangerous weather. It is strategically located near the center of the island.

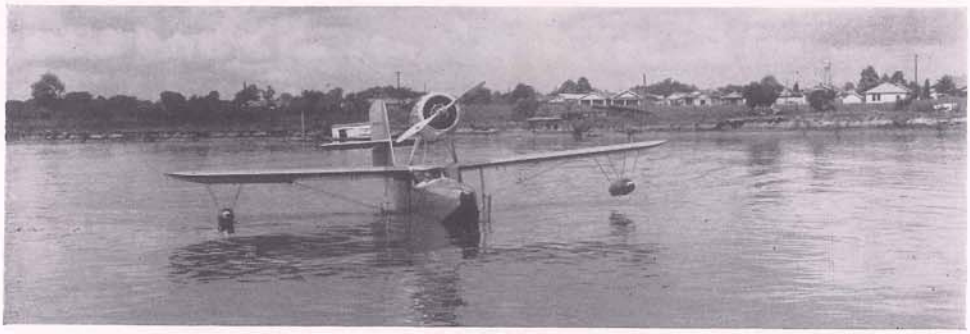
Floral Beauty

The magnificence of New Orleans' Floral Trail, the beauty of her parks and gardens and the charm of the city's "Old World" atmosphere have made this city the mecca for visitors from all parts of the United States. Her annual Sugar Bowl, Mardi Gras, Spring Fiesta, and other celebrations draw additional thousands of visitors.

This will always be true and in the post-war years New Orleans will be host to ever-growing thousands. Today, however, New Orleans has developed anew in going about the grim business of winning the war. Vast war industries have sprung up, employing thousands of people. Much of this will be retained after the war, insuring for the city an ever-growing importance in the industrial and commercial life of the Western Hemisphere.

And so, to the lovers of beauty; to the seekers of relaxation and pleasure and to others who are attracted by business or commercial interests — a Hearty Welcome is Extended.

City of New Orleans



Sturdy amphibious planes that can land in a bayou or at the door of a lonely trapper's cabin, whose inmates may not be able to move out on account of sickness or injury, are additional present day precautions against the dangers of flood and storm.

derstand the "signs"—but they understand also that men with headphones and little instruments for recording winds and tides comprehend more than any layman.

Few of these people are unfamiliar with the modern storm warning flags. A child hears early about them, and is impressed with their importance. He knows the Coast Guardsmen, and he knows that they are ready to help spread warnings and to evacuate residents when evacuation is thought necessary.

These people, too, have learned about home construction. Their buildings are now more heavily built than in earlier years, more firmly anchored against the winds. Back levees have been raised in many places, to keep out the waters from the marshes along the Gulf. If and when the hurricane comes, the people are equipped to meet it as never before.

But when the message goes out that the authorities advise departure for those in a certain strip, everything is coordinated to assure a quick removal. At radio stations, repeated warnings are dispatched. Boats of every kind—tugs, barges, luggers, yachts are available. Motor cars will transmit the word to some sections beyond the usual line of communication; pirogues or canoes will carry it beyond that. Even amphibious planes are on hand, and have been used frequently in individual instances, when fishermen were lost or marooned on the lake edges.

The children of this area read in their school books, or listen to the old people as they talk of the Cheniere Caminada disaster of '93. They know that there is today no reason for a repetition of the tragedy; that they will never be caught in this fashion by the winds coming without advance indication.

Meanwhile the workers in the weather offices and government headquarters, despite wars and embargoes, discover more and more each year about the behavior of the winds in the Gulf and the Caribbean. And "Doc" Cline's chin-whiskers bristle as he works among the vases and oil paintings in his shop, and remembers his pioneer days.

HARNETT T. KANE

Author of the preceding article on hurricanes, is a former reporter and feature writer for the New Orleans Item. In recent years Mr. Kane has become nationally known for his two best sellers, "Louisiana Hayride" and "Bayous of Louisiana." A frequent contributor to Collier's, Reader's Digest, Saturday Review of Literature and other publications, Mr. Kane is, at the moment, putting the finishing touches on his forthcoming book "Deep Delta Country."

O'SHAUGHNESSY SERVICE, INC.

Distributors

TEXACO PETROLEUM PRODUCTS

Airline Highway at 17th Street Canal, New Orleans

40 Bowling Alleys—Air Conditioned

Soft Drinks—Complete Auto Service

Additional Service Stations Located at Jefferson Highway and Brooklyn Avenue—Jefferson Highway and Lake Avenue

A. O'SHAUGHNESSY
President

G. B. BERTSCH
Vice-President

M. TURFITT
Secretary-Treasurer

TAMING THE MISSISSIPPI

The Mississippi at New Orleans in May reached 19.37 feet, the highest in 15 years. The papers briefly printed the news, the people of the batture were officially instructed to move to higher ground, and the authorities sandbagged various points as merely precautionary measures—but the people of New Orleans paid absolutely no attention to what was formerly panic material. . . . The populace read with desultory interest the newspaper speculation that the Bonnet Carre spillway should be opened, but no anxiety was aroused. Carelessly they took for granted one of the greatest engineering victories in history—the taming of the lower Mississippi.

This absence of fear of flood is a tribute to the successful finish of a fight, the story of which is dramatically told in this article.

By THOMAS EWING DABNEY

TO OPEN an outlet port for its extreme western settlements in Kentucky and Tennessee, the young and struggling United States in 1803 made the largest real estate purchase in history. Incidentally, it acquired the biggest flood-control problem the world had ever known.

The $15,000,000 which Thomas Jefferson gave for the Louisiana Territory was less than five per cent of what this country would spend in less than a century and a quarter in vain earthworks against the Mississippi river's overflow, before it adopted a real control plan costing about that much more.

Through 16,000 miles of navigable, and tens of thousands of miles of non-navigable streams, the drainage of the million and a quarter square miles of territory between the Appalachian and the Rocky Mountains included in the Louisiana Purchase reaches its heaviest concentration in the thousand-odd miles of the Mississippi between Cairo and New Orleans.

That river-groove is large enough for the water run-off most of the year, but for the overload when spring melts the snows and brings its heavy rains, Nature provided some 30,000 square miles of flood-plane. It was man's job to

hold the river in its regular channel so he could drive his plow through this rich alluvium deposited in previous centuries.

The first challenge to the Mississippi appeared in 1727—a three-foot levee 5,400 feet long at New Orleans. French engineers of the day believed they had tamed the river, and the Superior Council of that colonial period made official proclamation to that effect.

But by 1812, when the present Louisiana was admitted to the Union, there were, between Baton Rouge and New Orleans, 340 miles of levee considerably higher than three feet, and they had cost $6,000,000. By 1858, the mileage had grown to 2,000, the levee line reached as far north as Cape Girardeay, Mo., and the earthworks averaged eight to ten feet in height. By 1926, they had grown to 18 feet.

When the 18th century opened, it was physically impossible for more than a million cubic feet of water a second to pass down the lower Mississippi without overflowing. But confinement has more than doubled that—and doubled the destructive force of the river.

Between 1735 and 1827, there were 15 major floods; in the century that followed, there were 23.

The flood of 1811 put five feet of water in the Oak street stores of St. Louis. That of 1816 poured so much water into New Orleans that boats did a large business on Chartres, Royal, Dumaine, Bienville, Burgundy, St. Louis and Rampart streets. Eight other floods drove into New Orleans, not because the city's ramparts had been breached, but because breaks elsewhere had exposed the city to flank invasion.

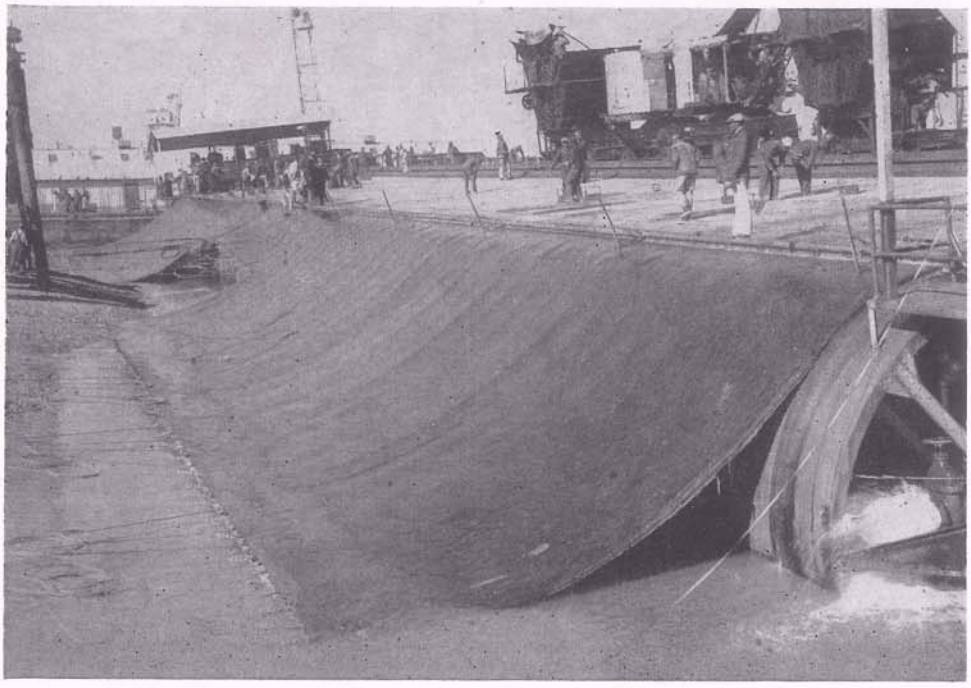
As early as 1735 it was seen that flood-control was a public problem. The French ordinance of that year, requiring property owners to build embankments in front of their river lands or forfeit their holdings, recognized that principle. The United States, by the Act of 1850, which provided for state funds to build levees (funds raised by the sale of federally owned swamp and overlow lands by the states) underscored that principle, to which this government gave further emphasis when, within the next two years, it appropriated $100,000 for a survey looking to a broad control policy. Devastating floods in 1858 and 1859 put new pressure behind this movement, but the War Between the States intervened; and by 1874, the protective system was more inadequate than it had been in 1858, thanks to the military operations of four bloody years when both Union and Confederate armies cut the levees; and thanks, too, to the neglect, impoverishment and prejudice of Reconstruction years.

Hope returned to the stricken land when Congress created the Mississippi River Commission in 1879. This was a step towards federal responsibility, but not a long one, for current reasoning was not unanimous that flood-control was constitutional, and the commission put in its protective devices under the guise of aids to navigation. This committed it to a policy of levees only, though Charles Ellet, Jr., a distinguished engineer employed by the corps of Engineers, U. S. A., in 1852, and A. A. Humphreys and H. S. Abbot, army engineers, in 1861, had pointed out that levees alone would not meet the challenge. Levee-building continued, with the states supplying most of the funds.

The larger and stronger levees raised in this modern period reduced the number of crevasses from 284 in 1882 to three in 1922. Government engineers believed that as soon as certain sections were brought up to proper grade and cross-section, the system would be impregnable. But the larger confinement raised the flood-crests. The river awaited the day when it could hurl new forces into the attack.

In the spring of 1922, more than 13½ inches of rain over the Mississippi Valley sent 265,146 million cubic yards of water down the huge drainage flume. This was a new record. The flood reached crests of 20.3 feet at Pittsburgh, 34 at St. Louis, 53.5 at Cairo, 43.3 at Memphis and 22.3 at New Orleans. It overflowed 13,200 square miles of land and destroyed $17,087,790 of property.

Levees broke at three places, all in Louisiana. At Ferriday, the crevasse was 3,700 feet wide. The other two breaks were below New Orleans, one at Myrtle Grove plantation, 22 miles from the city but on the opposite side of the



Corps of Engineers, U. S. Army, laying an asphalt mattress on the bottom of the Mississippi to prevent it from eating away the levee. Notice the gap in the mat for fitting the landward section around the Westwego Ferry landing pile structure. Men on top are stapling reinforcing wire preparatory to pouring the hot asphalt. About 200 men to a crew. Mats sometimes laid as deep as 90 feet.

river, the other at Poydras plantation, on the New Orleans side and only 14 miles from the city.

No crevasse in recent history had struck so close to the South's largest city. It was a stop-look-listen sign which told the nation that the Lower Valley was still fighting a life-and-death battle with the river. But more important was the immediate relief which the break gave to the overburdened river. Though a rise had been forecast, the crest dropped after this break. This showed the value of outlets, which Ellet had advocated nearly three-quarters of a century before.

While the flood was at its height, a group of Louisiana citizens organized, under the leadership of James M. Thomson, then publisher of the New Orleans Item, the Safe River Committee of One Hundred. That committee demanded that the flood-control policy be enlarged to include relief outlets, through which excess flood waters could be discharged; the building of reservoirs on source streams to hold back the water; and reforestation to retard the run-off.

The Poydras levee was rebuilt, but Louisiana in 1926 removed, at its own expense, a stretch of levee 60 miles below the city, on the east bank of the river, so that the water could spill across the marshes to the sea. It cost the state $1,000,000 but it was a good investment because it kept alive the outlet agitation.

The Safe River Committee won the support of many national organizations in the demand that the federal government assume full responsibility for flood control. No longer able to match government dollars in levee building, as required in the flood-control Act of 1917, the exhausted states, subject to overflow, could not hope to participate in the enormous program which 1922 showed was necessary.

The people who lived behind the mile-wide flume which supported the river above the land in the high-water periods had spent, on levees up to the

War Between the States, $43,750,000; from Reconstruction to 1879, when the Mississippi River Commission was created, they had spent $5,000,000; from then to 1926, they spent $170,000,000 and the federal government added $129,000,000 to that—total, $347,750,000. Louisiana's bill alone had in 60 years totaled $63,000,000.

Came 1927, with an early snow-melt and unusually heavy rains. Flood-crests reached new levels—36.1 feet at St. Louis, 46 at Memphis, 58.7 at Vicksburg, 47.8 at Baton Rouge, 20.8 at New Orleans. The levee walls were not strong enough to withstand the mighty thrust. The river broke through and broke through and broke through—the broadest and tallest earthworks melted under that charge.

Panic rushed ahead of the boiling crest, and even New Orleans, lying behind the heaviest defenses in the Mississippi Valley, became the abode of terror. Greenville, Mississippi, almost wiped out; 75 squares in Little Rock, Arkansas, under water; the flood sweeping to New Iberia, Louisiana, 200 miles from the river, a town never before reached by flood water! "For God's Sake Send Us Boats," shouted Governor Dennis Murphree of Mississippi in eight-column headlines.

New Orleans became hysterical. "Cut the levee at Poydras!" From a hundred miles away the city rushed in trainloads of dirt with which to fill 640,000 sacks for strengthening its fortifications. "Cut the levee!" Hospitals laid in immense stocks of provisions and evacuated the lower floors. In hundreds of back yards, skiffs testified to the panic. "Cut the levee!" The river was a foot higher than the street which was the top of the levee at the Canal street ferry landing. "Cut the levee!" City engineers joined in the cry.

The War Department gave permission. On April 26, Louisiana's governor, O. H. Simpson, signed a "Public Emergency" Proclamation, giving permission to dynamite the levee near the site of the 1922 break, at noon, Friday, April 29.

Guaranteed reimbursement for their property, the people of St. Bernard Parish, who had stood guard-mount on their levees day and night since the beginning of the panic, put aside their arms and consented to be evacuated to New Orleans—a pathetic parade: families and their household goods loaded upon creaking farm wagons and rattling automobiles, boys herding livestock and driving chickens, men and women and children trudging through the hot dust, for summer was then warming up to its work.

This is a companion picture to the one on page 48, showing another stage of laying an asphalt mattress. This is an upstream view revealing the revetment in place prior to upper bank paving on the Mississippi River.

JEFFERSON DEMOCRAT

Official Journal of the

PARISH

OF

JEFFERSON

SINCE 1896

Gretna, Louisiana

Unskilled dynamiters, after long trying, opened a 1,000-foot breach, and the river poured its yellow water upon the green marshes, driving the muskrats to the grass-covered rafts which the Department of Conservation had prepared to prevent the destruction of so large a part of the fur industry. The river above New Orleans began to drop, and the city awoke from its panic, as from a bad dream.

That levee-cutting cost the city $8,000,000, but it was money well spent, for it gave sensational proof to the outlet-theory.

Elsewhere on the river, the people could not buy security so cheaply. Through 225 breaks in the levee, the river poured across 28,573 square miles of land, almost as much as it had taken in the days when there were no levees; it destroyed half a billion dollars of wealth, drowned a million and a half head of cattle, reduced more than 600,000 persons to destitution, and killed 250. It was the greatest peace-time disaster in the history of the nation. By August the relief bill was almost $17,000,000. Rehabilitation of the land and the stricken families cost millions more.

Congress met while the disaster was still fresh in their memory. By the Act of May 15, 1928, the United States recognized federal responsibility for flood-control. This country adopted an engineering plan which was the largest peace-time constructive measure in our history; revised that plan upward in 1936, increasing the appropriation from $290,000,000 to $332,000,000.

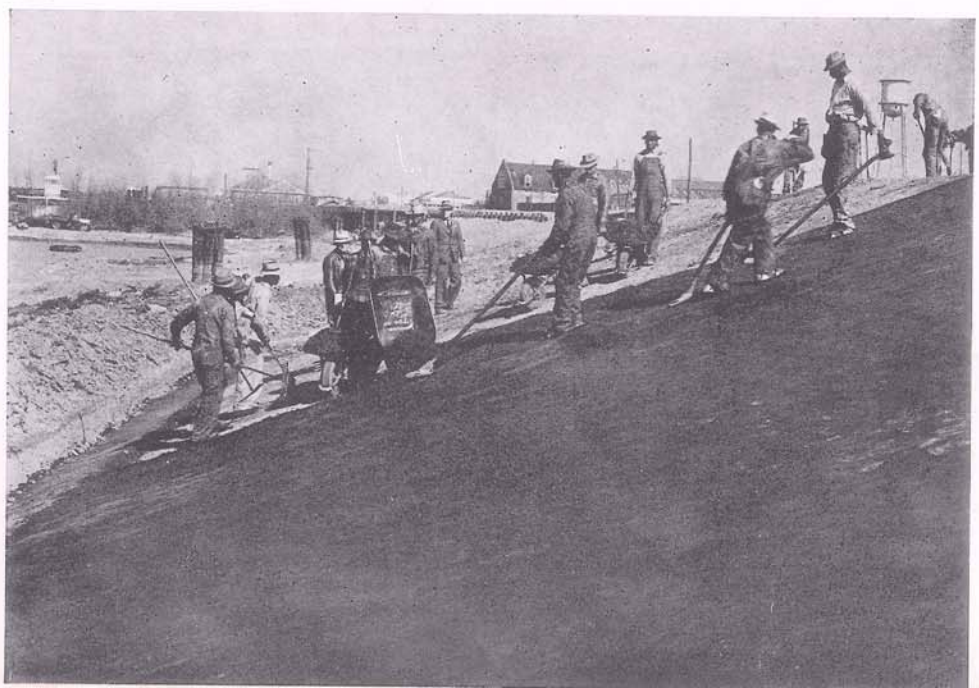
The plan included stronger levees, artificial outlets, the increasing of the capacity of the Atchafalaya river, reservoirs in source streams, and cut-offs.

Twenty-three miles above New Orleans, the Bonnet Carre spillway was built in 1935. This is a controlled outlet, to be used in flood emergencies, for diverting 250,000 cubic feet of water a second—nearly twice the flow of Niagara Falls—into the Gulf of Mexico via Lake Pontchartrain, eight miles away. It cost $13,226,492.

The cut-off program was the most audacious attack on the river since Eads' jetties. A cut-off is a new and shorter channel through a peninsula formed by the stream's meanders. In flood, the Mississippi had often found this relief, and engineers had tried to prevent it, believing that cut-offs introduce abnormal slopes both upstream and downstream. Brigadier-General Harley Bascom Ferguson, U. S. A., president of the Mississippi River Commission, after an exhaustive study of the hydraulic forces involved, drove 11 cut-offs through the tangle of bends between Arkansas City and Natchez. The river itself added the 12th. Ferguson opened the first cut-off January 8, 1933. It is 12 miles below Vicksburg. Five years in the making, the cut-offs cost $25,-

---

Another stage in levee reinforcing and a companion picture to those on page 48 and 50. This shows the facing of a revetment with asphalt in the ordinary manner above the water line. The U. S. Engineers no longer give the mischievous Mississippi much to chew on when it's on a rampage.



000,000. They shorten the river by 100 miles, and speed the progress of flood water to the Gulf of Mexico.

The cut-off theory was put to a severe test in 1936, before the job was completed. That was the year when the simultaneous rise of the Monongahela and Allegheny rivers, which form the Ohio, poured muddy, foaming water into the Golden Triangle of Pittsburg, turning theaters into swimming pools with 20-foot diving depths; climbed to 52.8 feet on the Cairo gauge; passed flood stage as far down as Helena. But from that point, the menace was lost in the rapid run-offs, so that at New Orleans, the gauge reading was only 14.4 feet, which was 2.6 feet below flood stage. Next year, there was a still more severe test.

Between January 1 and 25, 1937, rains dumped 60,000,000 tons of water into the Ohio drainage valley. Swollen by the downpour on an area 100 miles wide by 550 long, the Ohio put 18 square miles of Cincinnati under water, flooded three-fourths of Louisville and would have overwhelmed Cairo had not the army engineers opened the Bird's Point-New Madrid Floodway, which took the strain from the city's 60 foot seawall almost in the moment of collapse. By 10 to 20 feet, the Ohio topped the flood stages which had been the rosary of suffering. At Cairo, the flood reached the height of 59.6 feet on February 3, and poured the greatest volume of water ever recorded into the Mississippi, 2,024,000 cubic feet a second, 410,000 more than in 1927. Down the Mississippi rolled as great a flood as that of 1927. At Memphis the peak flow was 2,020,000 cubic feet a second, as compared with 1,750,000 in 1927; but at New Orleans, the crest was 1,200,000, as compared with 1,360,000.

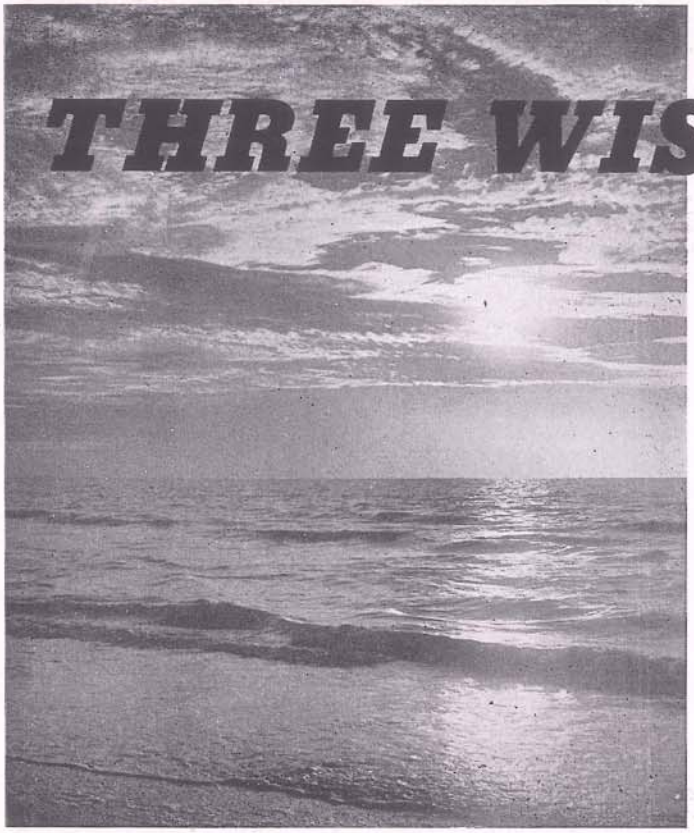
This flood, though it destroyed half a billion dollars worth of property, drove nearly a million persons from their homes and killed 400, did not roll over as much land as that of 1927, for not a levee on the main river below Cairo broke. Its progress to the sea speeded by the cut-offs—eight days to travel the distance which, under 1927 conditions, could not have been passed under 20—the water did not pile up in the long and deep and broad channel of the lower river. Like a well-ordered parade, it moved between the strengthened levees, 490,000 cubic feet of each second's flow entering the Atchafalaya, 210,000 the Bonnet Carre spillway, the rest down the main channel. Each 60,000 second feet that passed through Bonnet Carre lowered the river height at New Orleans one foot; the maximum gauge reading there was 19.3 feet.

The Mississippi Valley, which Thomas Jefferson bought, opened a new destiny to the United States, and launched the most rapid and the most complete occupation of a wilderness in history. The conquering of the Mississippi's flood menace is one of the most dramatic triumphs in engineering.

It guarantees the safety, not only of New Orleans, but also of the farms, plantations, industries, villages and cities up and down the restless river. It opened a new economic era for a section in which capital was not willing to make impressive investment because of the danger of flood. It made good the promise of Thomas Jefferson's great Purchase; it showed what can be done for other sections lying under a similar threat.

THOMAS EWING DABNEY

The author of this article has long been one of the Review's most popular contributors. On the subject which he treats this year, he is probably the most thoroughly informed writer in America. Mr. Dabney, a former feature writer for the New Orleans States, has been publishing his own newspaper for the last two years, out in Socorro, New Mexico. Almost simultaneously with this article comes his new book off the press—"100 Great Years"—an interesting history of the Times-Picayune.



THREE WISE MEN

At the southernmost tip of Jefferson Parish lies Grand Isle, whose primitive beauty and romantic history make it one of the few remaining unspoiled spots in America. Grand Isle is a "sleeping beauty" which has several times seemed on the point of rising from her slumbers to assume her rightful role as a princess.

This is the story of three men who fell in love with this "sleeping beauty" and devoted their lives to bringing about her awakening.

Their belief in Grand Isle has not been in vain for it will not be long, once this war is ended, before the "Prince of Progress" will awaken the "sleeping beauty."

By
SUE THOMPSON

A STAR OF DESTINY hangs low in the heavens above Grand Isle. A star that promises the fulfillment of a vision.

Three men have clearly seen that vision and devoted their lives to making the dream become a fact. All three have died without seeing its complete fulfillment. But the work, the time and effort and love they devoted to making it a reality has not been in vain.

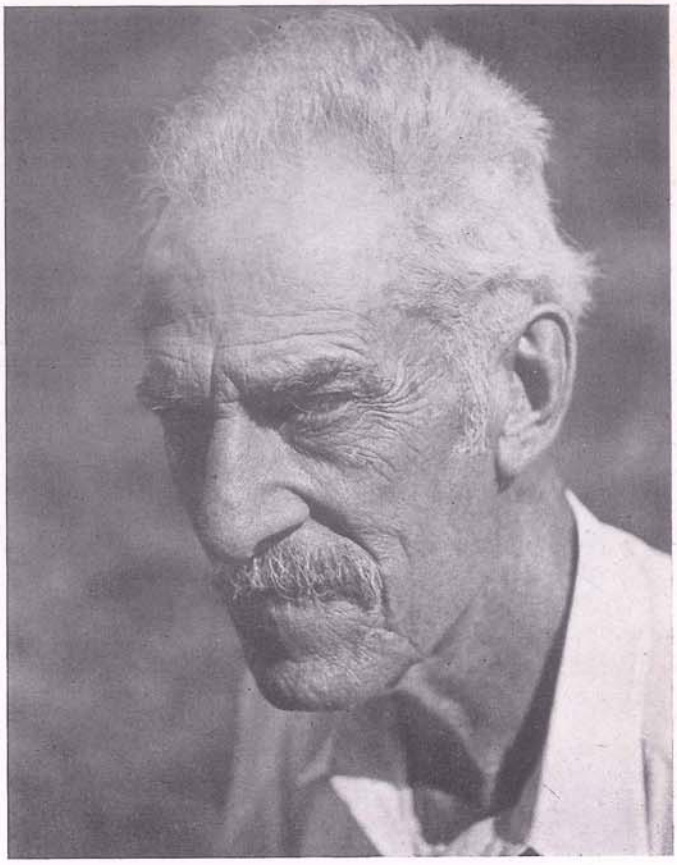
For Grand Isle is merely sleeping now—a sleeping beauty—awaiting the enchanted kiss of the Prince of Progress who shall wake her from slumber to vibrant, pulsating life.

As yet, comparatively few people know Grand Isle as anything but a name—a dot located on the Gulf of Mexico—a spot where, they have been told, the sun beats down relentlessly. But to those who know and love this island for what it is, and was, and can be—it's a peaceful haven for weary bodies and jangled nerves. An island of beauty and contrast. Unmercifully hot on the beach—but cool, quiet and calm beneath the heavy growth of trees and oleanders which canopy the homes of the islanders so completely that almost no habitation can be seen from the stark white road which parallels the eight-mile-long beach.

A place where sun and surf and tropical breezes combine to lull the most turbulent breast. A place where the blue white stars hang so low in their velvet black drapery of night that the first time you see them in this setting you automatically reach up to pluck one down.

It is an island of beauty—an island that will some day be the playground of the South—that will, like Cinderella, emerge from her tattered raiment, in beautiful silk and satin, as the radiant beauty she was intended to be.

This "sleeping princess," Grand Isle, has, since its first discovery, had as colorful a history as any romanticist could wish. No doubt Columbus, on his mysterious return voyage to America, must have seen, and perhaps stopped, at this jewel-like island. Unquestionably it must have been one of the many secret rendezvous of Henry Morgan, the notorious pirate who terrorized the Caribbean and Gulf waters long before Lafitte.



Colonel Stephens, who, to prove that a road could be built through the "trembling prairies" to Grand Isle, walked from New Orleans to the island in 1907.

But the first actual record we have of Grand Isle is in the latter part of the 18th century, as the home and sanctuary of peaceful fishermen.

It was around the turn of this century that the tranquil existence of Grand Isle was shattered by the blood-curdling cries and raucous laughter of pirates. During this era the island became a swaggering, swashbuckling adventuress, not from her own choice, but through circumstances which forced her, as the rendezvous for the colorful Jean Lafitte and his band of smuggler-pirates, to wear a cutlass at her belt and to bear the name of "outlaw" without a quiver. She had suddenly been transformed from a quiet and shy maiden, into a brazen, pirate-lass, her natural beauty overcast with a quality of the sinister. Upon her golden sands respectable men feared to tread. Her beach was strewn with loot and the wreckage of unfortunate ships who ran afoul of the Gulf pirates. Her bower of trees became, instead of protection and shade for quiet homes, a clever camouflage for a smuggler's lair.

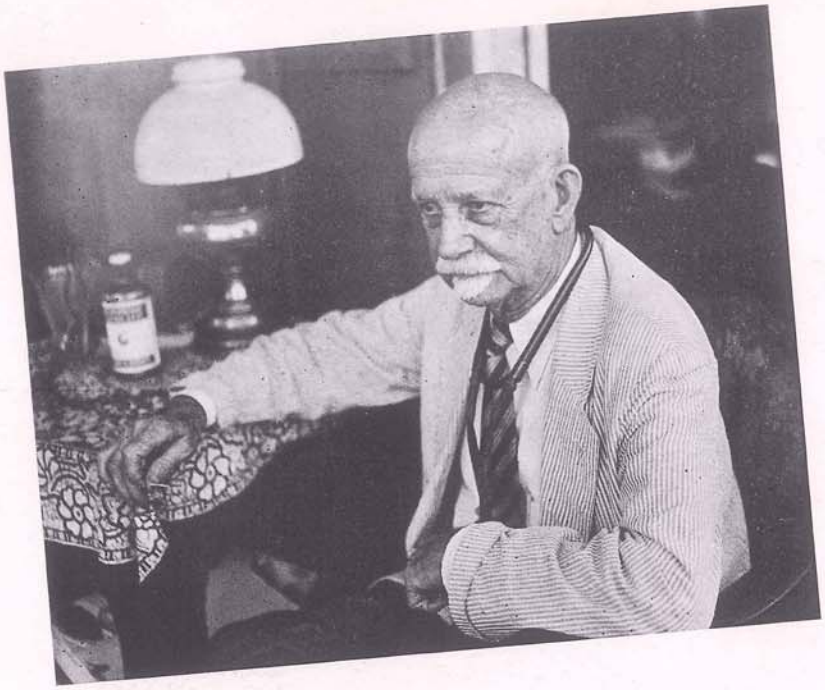
Her peaceful fishermen turned to the reckless daring of sudden death upon the sea. She was an island of beauty, yes. But she was also an island of danger—of death, and, until the United States government took a determined hand in matters, she belonged to a pirate band. In 1814 she was liberated from her enforced piracy by the quick destruction of her sister island, Grand Terre, the arsenal and stronghold of the pirates.

The scattering of the Gulf pirates permitted her once again to return to a quiet-sit-by-the-sea life. Her fishermen-turned-pirates returned to fishing. Her beach was strewn with nothing more sinister than driftwood. Her quiet, shaded lanes presented nothing more dangerous than a startled lizard. On the clear blue waters of the bay and gulf sailed nothing more awesome than migratory birds.

For several decades she slept peacefully.

Then suddenly, without warning, the storm of 1893 struck Grand Terre and Cheniere Caminada. Devastation and destruction lay all around her. And, despite the fact that Grand Isle herself suffered comparatively little from the storm—despite the fact that her sheltering oaks protected and saved her from being leveled by the hurricane which destroyed Grand Terre and Cheniere Caminada—the damage had been done. This was the era before the wireless and the telephone. By word of mouth news seeped northward, distorted as news always becomes by word of mouth . . . and for many years the people of Louisiana, in fact all over the nation, assumed that Grand Isle had sufffered a like fate.

Some damage had been done, of course, as would be natural with a storm of the proportions of that of 1893—but not to the extent that word got around. The truck farms of the islanders had been destroyed—but not the island. Nor



Dr. Theodore Engelbach, who went to Grand Isle to die and instead lived to devote a lifetime of service to the islanders and to become one of its most outstanding benefactors and enthusiasts.

Dr. Engelbach early recognized the therapeutic value of the island's climate and hoped to see Grand Isle become a health resort where tired minds and weary bodies could be mended.

the islanders. Of the entire population on Grand Isle who were in the storm of 1893 not one white person was killed. Seven negro workers were killed, but only because they did not heed the warning, or take shelter quickly enough behind the protecting oaks.

Lafcadio Hearn's poignant and tragic story "Chita," based upon the storm which split Last Island, somehow mistakenly became identified with Grand Isle and for many years she suffered the stigma of the tragedy that befell Last Island. Only in comparatively recent years has this mistaken identity been cleared up in the minds of people who assumed that Grand Isle was the scene of "Chita."

So, from 1893 the sleeping beauty found herself experiencing a bad dream. She must have, during this time, been very bewildered to hear herself described as a "dangerous woman."

Her inhabitants shook the salt water from their eyes and surveyed the scene. Yes, the land was still there. The trees were still there. True, they would have to repair here and there, replant their gardens, mend or replace their boats—but there was no reason why a return to normalcy should not be made immediately. But somehow, the fear or the discouragement that descended upon the survivors of Cheniere Caminada must have crept into the hearts of her people. They were lethargic about getting back to the business of living.

It was at this psychological moment that three wise men appeared upon the Grand Isle horizon. Three men who saw the destiny of this gem lying in the blue waters of the Gulf . . . who saw the possibilities of the island . . . saw the radiant beauty of the princess and recognized her nobility even though she was dressed in worn calico.

One was a native of the island . . . one was a doctor . . . and one was an engineer.

Since what these three men did and tried to do cannot be told simultaneously, even though they were contemporaries, we shall tell their stories, as simply as possible, in the order in which their destinies merged with that of Grand Isle.

John Ludwig was the native.

Of hardy German stock, John was born and raised on the island and he had a great love for it and its people. If one could make a distinction, he was, you might say, one of the leaders of Grand Isle by virtue of the fact that his general store was the central meeting place of the island. Following the storm

of 1893 John Ludwig knew that the people of Grand Isle must be brought out of their lethargic attitute. In his store he talked to them, alternately cajoling and badgering them about replanting their gardens and repairing their boats.

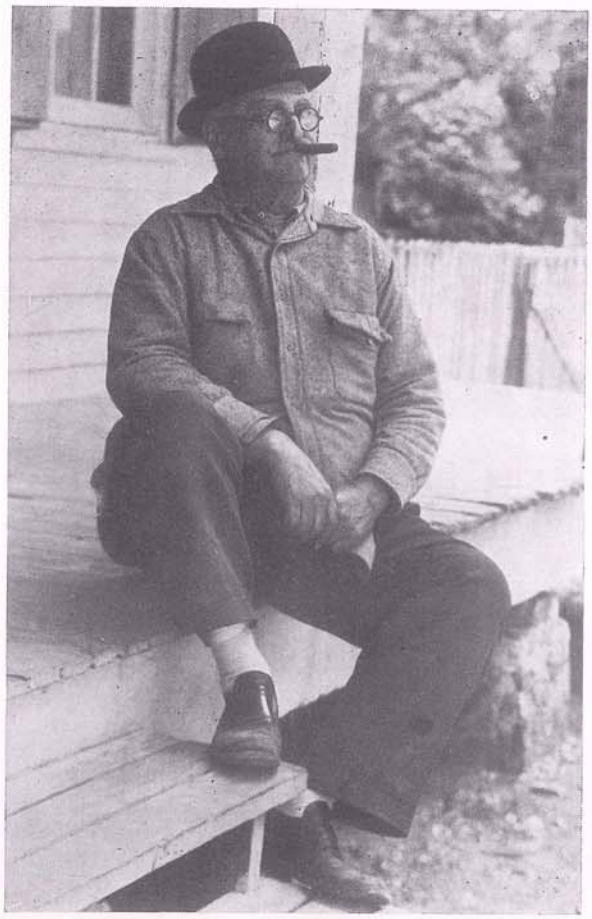
He himself led the way in the agricultural reconstruction of Grand Isle. Because of the sandy loam texture of the earth certain products such as melons, cucumbers, cauliflower and other products indigenous to sandy soil could be grown profusely on this island. But the same soil which gave abundant growth to these products could not be cultivated too deeply lest the salt water beneath it destroy the crops. So Ludwig worked out a unique method of cultivation . . . oversized hills with deep furrows between. He pointed out that the tremendous supply of shrimp which abounded in the gulf and bay could be used, in dust form, as rich fertilizer for these crops.

The islanders snapped out of their lethargy. They built new levees on the bayside of the island and repaired those that had been damaged. They put in flood gates to control the salt water. They dug drainage ditches. And they planted crops.

How well they followed Ludwig's example is indicated by the fact that when the Pan American Pacific International Exposition was held in 1915 a cauliflower, so large it completely filled the top of a regular sized flour barrel, and grown by Miss T. Mercedes Adam of Grand Isle, won the Gold Medal. Miss Adam's cucumbers were given a Diploma of Honorable Mention. Other vegetables exhibited by her drew blue ribbons in the same exposition.

From around 1900 on, the sleeping beauty added to her repertoire the role of a farmer's daughter. Produce cultivated by her inhabitants was shipped northward as far as New York. In 1931 for example, John Ludwig was shipping to northern markets between 35,000 and 50,000 bushels of big, crisp cucumbers.

And John Ludwig soon found himself wearing the crown of "King." To the islanders he became "King John." His leadership in the agricultural reconstruction of Grand Isle, his benevolence, his foresight and sagacious wisdom made him a beloved figure.



So it was only natural that Grand Isle found herself the center of nation-wide attention. Writers and artists flocked to see for themselves this tiny kingdom ruled over by "M'sieu John." They were intrigued by the primitive beauty of the island, the islanders themselves, most of whom were direct descendants of pirate forbears. They were fascinated by the colorful "King John" in his well-worn baggy clothes, a black derby stuck rakishly atop his head, and an ever present black cigar protruding from his jovial face.

His throne was his store. Here,

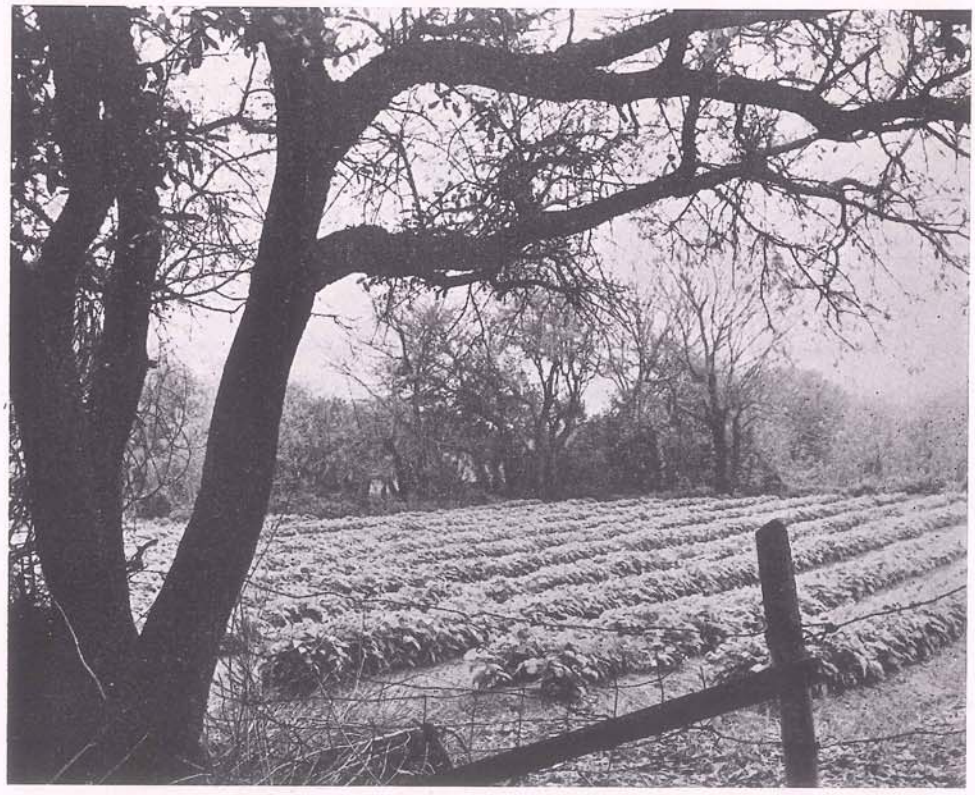
John Ludwig, who, through his benevolence and wisdom, became "King John" to the islanders. It was his unique method of agricultural cultivation that rejuvenated truck farming on Grand Isle and caused Russell Lord, novelist, to include the colorful "King John" in his book "Men of Earth."

Ludwig's terrapin farm was the largest in the world and an important factor in the welfare of the island. Artists, writers and the nation's gourmets called him "M'sieu John" or "King John." He was never any more formal than he appears in this photograph despite the fact that he was a friend of the famous and a man of considerable means.

rocking back and forth, he was to be found constantly surrounded by his "court" who perched on overturned boxes and barrels and either listened avidly to "King John's" wise advice or were in deep discussion of some current problem or trouble. They came to Ludwig with their problems and he helped them. Sometimes with advice—sometimes financially. But always he helped them.

And yet this was not all "King John" did to earn his crown. In addition to the agricultural enterprise of the island he started, in 1900, a terrapin farm which became, in a few short years, the largest terrapin farm in the world. In New York and other fashionable spots the name "King John" was synonymous with the diamond-backed delicacies so eagerly awaited by discriminating gourmets.

Even though Ludwig was vitally interested in other projects of Grand Isle and did not lessen his activities in their behalf, his terrapin farm was closest to his heart. And it furnished an excellent livelihood for the islanders who engaged in trapping the terrapins for Ludwig.



Here is pictorial proof of the profitable truck farming possible on Grand Isle. Crops are planted in fairly high hills with deep furrows between for proper drainage. The huge, crisp cucumbers grown on Grand Isle are early "firsts" on the northern markets.

Yes, John Ludwig did much to put the name of Grand Isle on the map. He knew and saw the possibilities of Grand Isle. He lived long enough to see part of the vision come true.

The second man of vision was Dr. Theodore Engelbach.

It was during the latter part of the nineteenth century that Theodore Engelbach came to New Orleans to take charge of the Boericke and Tafel Pharmacy on Canal Street. As a boy in New York he had determined to make medicine his life work and his arrival in New Orleans was part of his well laid plans. He worked in the pharmacy until he had acquired the amount of money needed to attend Tulane. In 1894 he graduated from Tulane Medical School, probably

the only man in history (at that time) to be awarded a diploma in pharmacy and medicine on the same day. However, the strain had been too much. He had attempted the almost impossible and it resulted in a nervous breakdown. A physician recommended that he go to Grand Isle to rest and recuperate. And, while he did not know it at the time, that period of rest on Grand Isle irrevocably moulded the rest of his life.

Dr. Engelbach went from Grand Isle to Europe and finally back to New Orleans. Once more overwork brought on a nervous collapse . . . this time of such severity he was given no hope of recovery. In 1901 he was pronounced all but dead. And it was then that he remembered Grand Isle—remembered his former recovery there and decided if he was going to die, that was where he wished fate to overtake him. So he went to Grand Isle to die and instead lived to the ripe old age of 78. But, once having recovered from his second illness, the irresistible lure of the island had crept into his blood. Able to return to his practice of medicine in New Orleans he chose to remain and cast his lot with that of the island.

He himself could not, or modestly preferred not to, fully explain his reasons for staying. Sometimes, in later years, he would reluctantly admit that possibly the need of the people had partly influenced him to remain. But would quickly add that the warm waters of the gulf, the tropic breezes, held him on the island.

Those who knew Dr. Engelbach were perfectly aware that he could have, had he wished, become a shining light in the medical profession but instead chose to devote his life to the care of the islanders and the natives for miles around who, until his arrival, had no doctor closer than New Orleans.

He was a member of the Louisiana State Medical Society, a member of the American Medical Association, Assistant Surgeon U. S. Public Health Service attached to the Coast Guard station and a life member of Tulane Alumni Association.

To round out his activities he took on the duties of justice of the peace and notary public and, referring to his great family of islanders, he was fond of telling his cronies that "I hatch 'em, I patch 'em, I match 'em and finally I dispatch 'em."

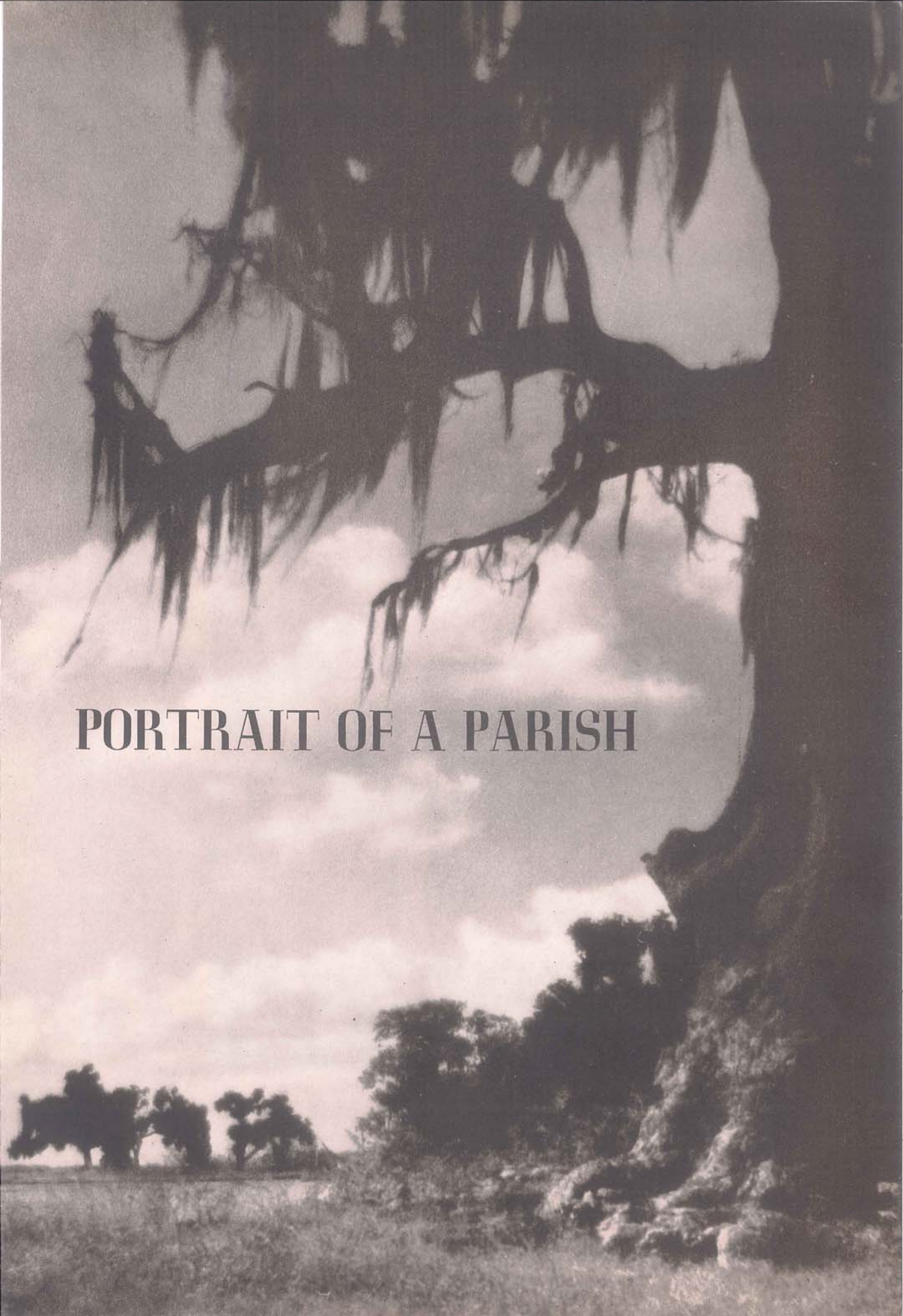
It was not at all unusual for Dr. Engelbach to paddle twenty or thirty miles in a pirogue to bring a baby into the world. Dr. Engelbach was always ready and willing to travel any distance, day or night to minister to the sick. The recountal of the many times when Dr. Engelbach, hardly able to stand on his own two feet, traveled to the bedside of the sick, would fill a good, thick volume.

Once he was suddenly called to a showboat which was tied up at the Ludwig Wharf . . . and there, surrounded by the gaudy trappings of showboat life, he delivered a husky youngster. Another time he brought into the world an infant so tiny it had little chance for life unless an incubator could be secured immediately. It was impossible to get one quickly enough from New Orleans so "Doc", hardly pausing long enough to take a deep breath, set to work building the incubator.

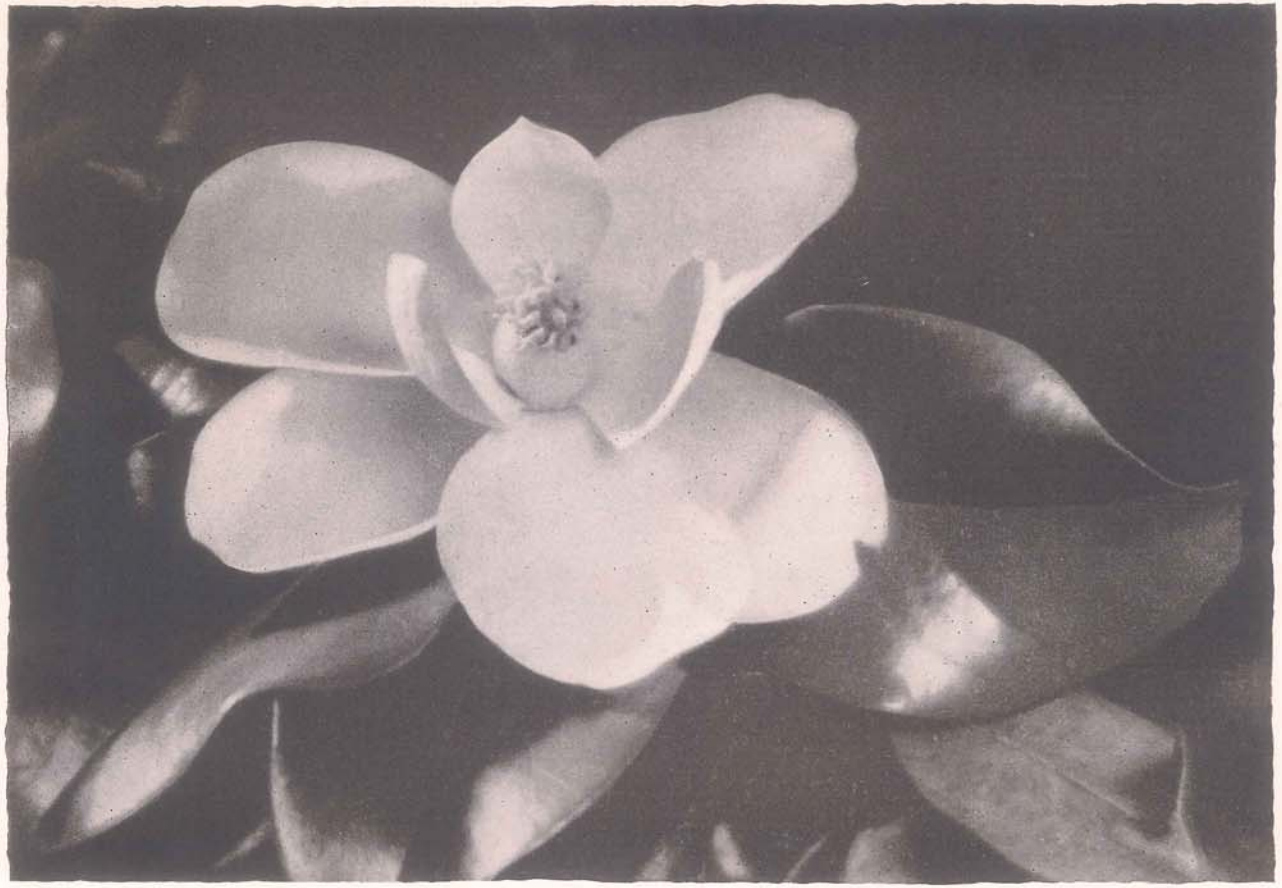
Oddly enough the first serious medical case which Dr. Engelbach treated on the island was that of a young woman who was brought to him with lockjaw resulting from some minor injury. That young woman was Miss T. Mercedes Adam who later became Dr. Engelbach's housekeeper and assistant—and is today one of Grand Isle's leading citizens as Justice of the Peace. Judge Adam is, you might say, a protege of Dr. Engelbach and has been untangling the problems of the islanders for the last ten years.

Long before the medical profession worked itself into a tizzy over therapeutics Dr. Engelbach was preaching the therapeutic value of the island's climate.

(Continued on Page 148)

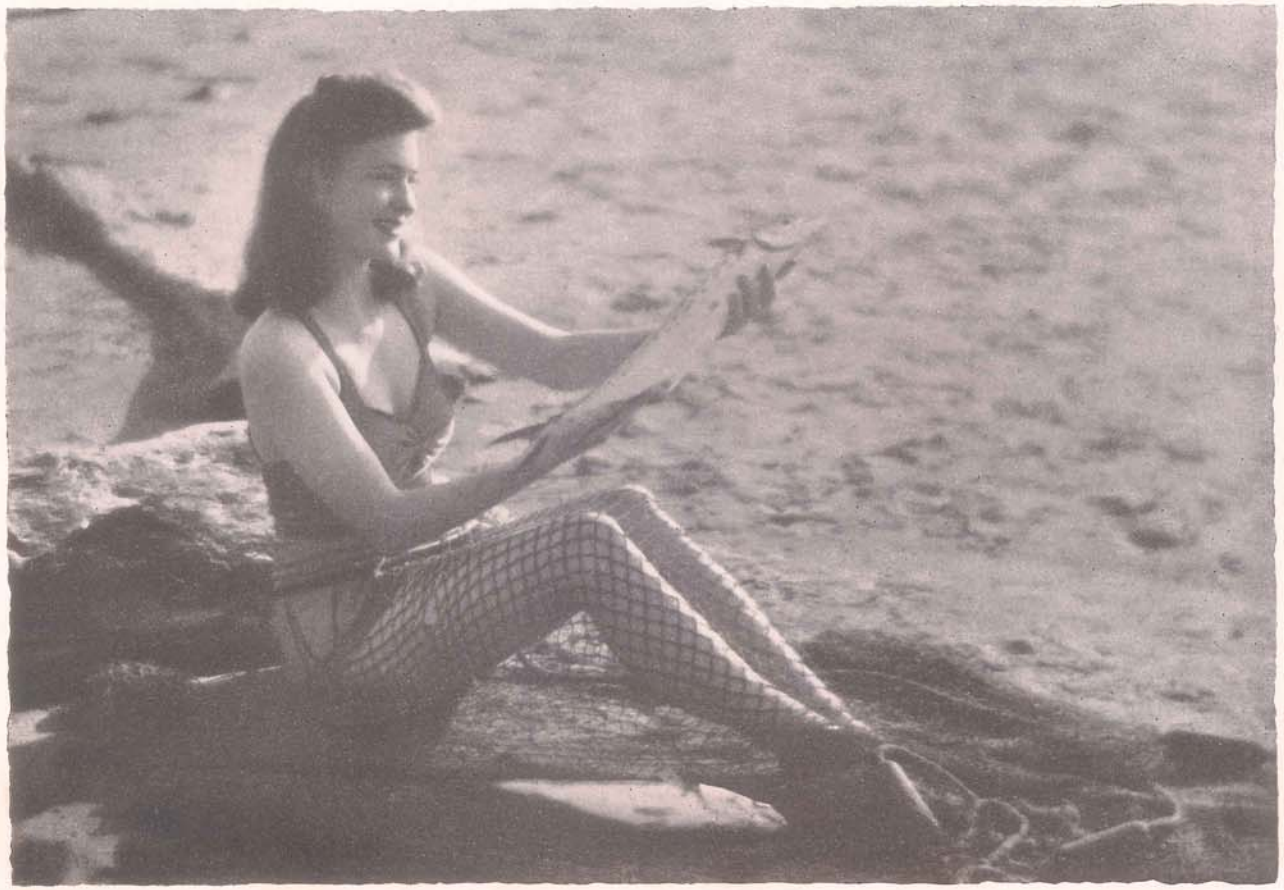


PORTRAIT OF A PARISH



A portrait of versatile Jefferson Parish begins properly with the exotic magnolia . . . the beauty and fragrance of which are so symbolic of the rich romance and mysterious beauty of this part of the country. The magnificence of the stately magnolia tree in bloom, its platter-size, creamy white blossoms nestled against the glistening green of the tree itself, is a sight not soon to be forgotten. Nor will you, once having visited Jefferson Parish, soon forget this lovely land of contrast.

Here, on the golden sands of Grand Isle—the once famous rendezvous of Lafitte the Pirate, and the future playground of the South — Georgia Alford, enmeshed in a fishing net, inspects a gleaming Spanish Mackerel which was a part of the early morning's haul. At Grand Isle, is to be found the finest fishing in America and the finest surf bathing—two postwar pastimes which will some day soon be available to the traveler, sportsman and vacationist.



Jefferson Parish is a land of striking contrasts—in terrain, its people, and its character. Located in Metairie, the swank residential section, is this magnificent building, reminiscent of the past glory of the plantation era and expressive of the modern era which is duplicating and restoring many of the old plantations to their former beauty. Built in 1929, this graceful structure houses Metairie Park Country Day School.

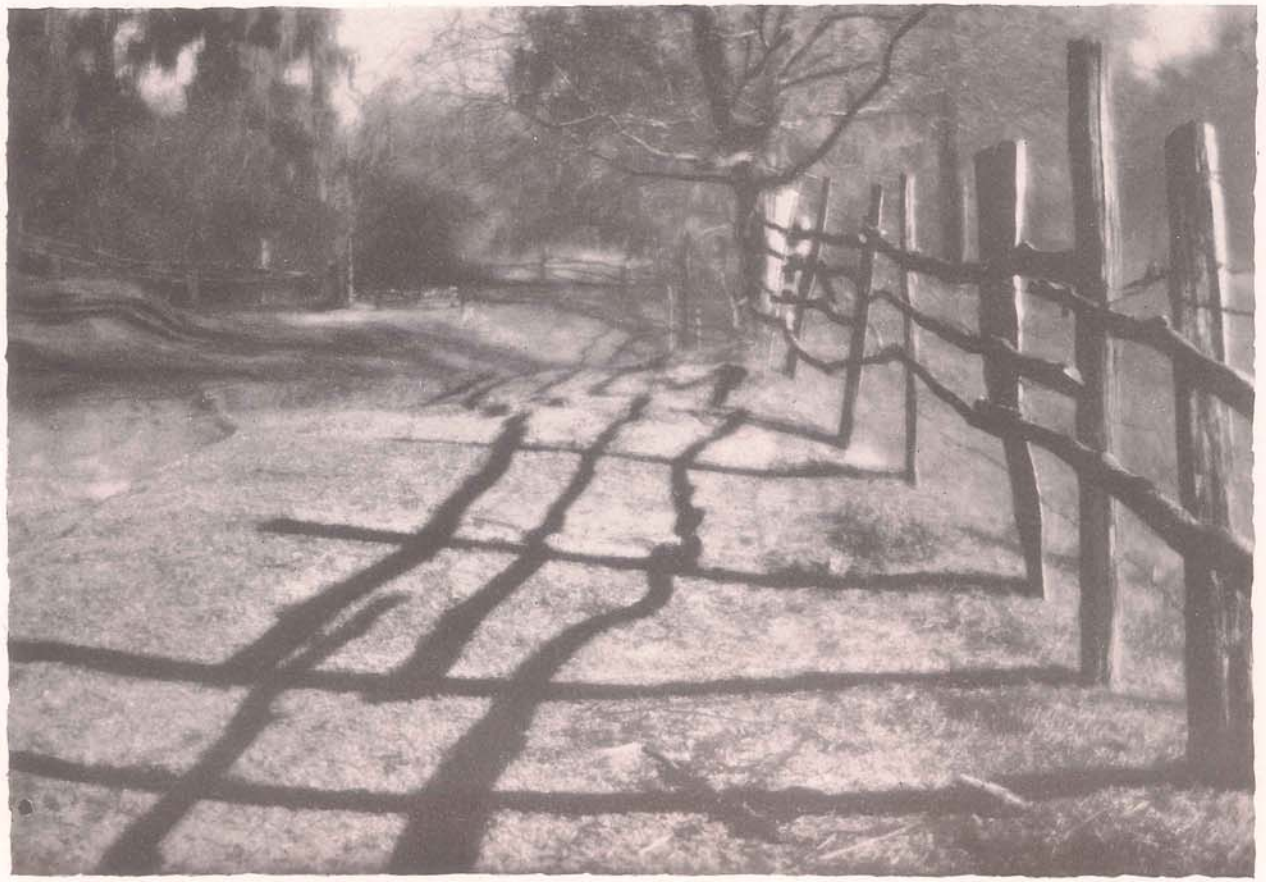
In vivid contrast is this weather-worn cabin, its hand hewn fence leaning precariously against the wind, the omnipresent old oak trailing the familiar grey beards of Spanish Moss against the sky. This particular type of shanty-cabin, with its aura of happy-go-lucky nonchalance, once a familiar and dear sight to poets and song writers, is fast disappearing as the ravages of time and weather wreak their havoc.

Jefferson Parish is a many-faceted land, one of which is the physical makeup of its terrain. Within the 60-mile length of this parish which stretches from the warm, blue waters of the Gulf northward to Lake Pontchartrain, the traveler encounters a variety of landscape . . . marshlands, half land, half water, whose deceptive appearance of solidity have gained them the local name of "trembling prairies;" labyrinthian bayous which interlace and intertwine; gently rolling alluvial land such as this whose fertile soil has been richly endowed by Mother Nature for profuse and abundant productivity.

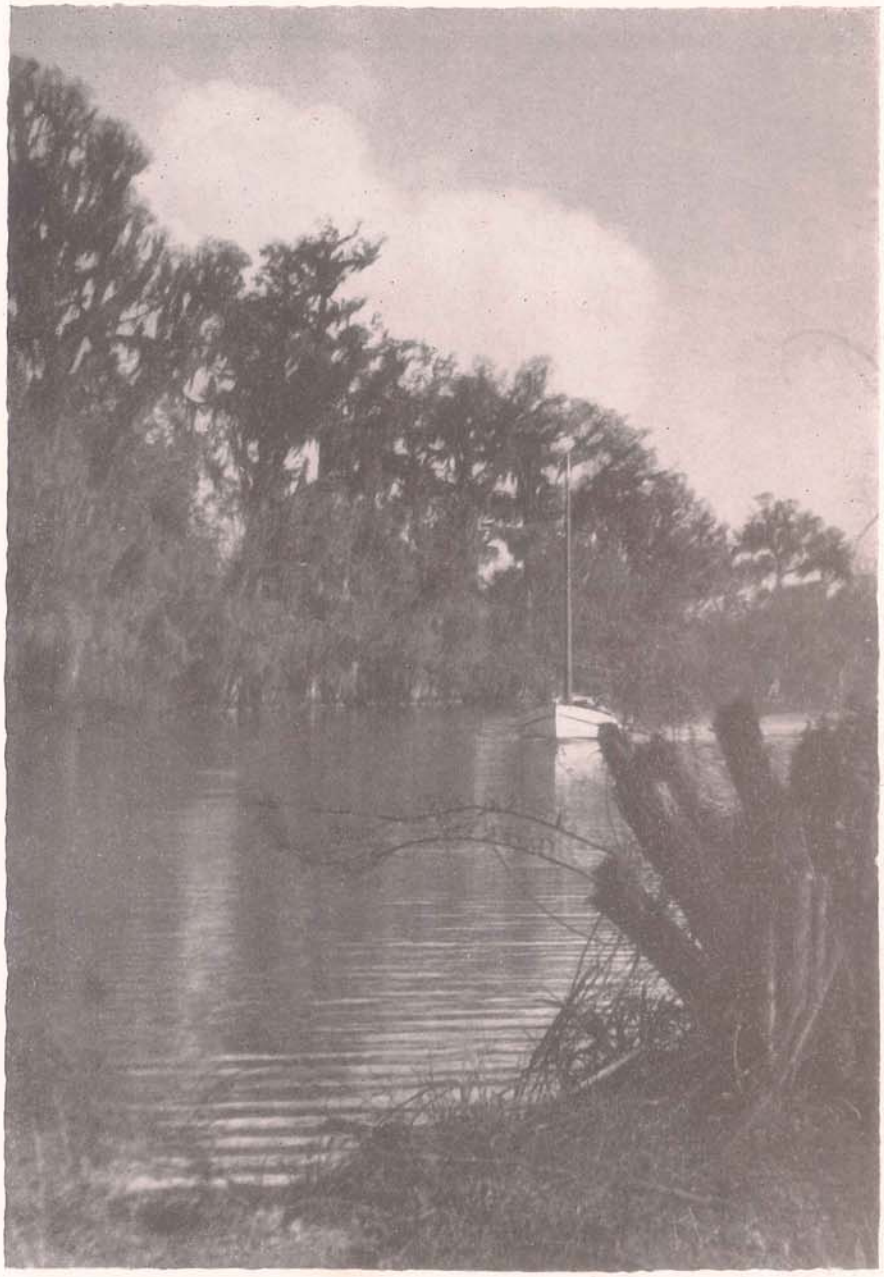
One of the most interesting sections of Jefferson Parish is the Barataria country through which Lafitte and the U. S. customs officers played hide and seek in the early part of the 19th century. Here too, parallelling Bayou Barataria, is one of the most unusual streets in America—the winding footpath which hugs the bayou's bank, the waters of which furnish the only highway these fisher-folk need. On the banks, but a few steps from the water's edge are the homes of these fishermen. Their boats are anchored before the very doors of their homes. The path, a portion of which can be seen here, is their main street, the connecting link between their homes, their stores, churches and cemeteries which line the bayou for many miles.

Mysterious and myriad are the swamplands of Jefferson Parish. Sometimes dark and foreboding; more often cool and green with lush tropical foliage. Tall cypress trees canopy this maze of waterways through which the light reaches the water only by long shafts of sunlight creating a jungle-like contrast of dark and light. One can paddle quietly in a pirogue through these silent swamps and glimpse the lazy alligator, a startled deer—or, flashing among the trees, the bright plumage of rare and unusual birds.

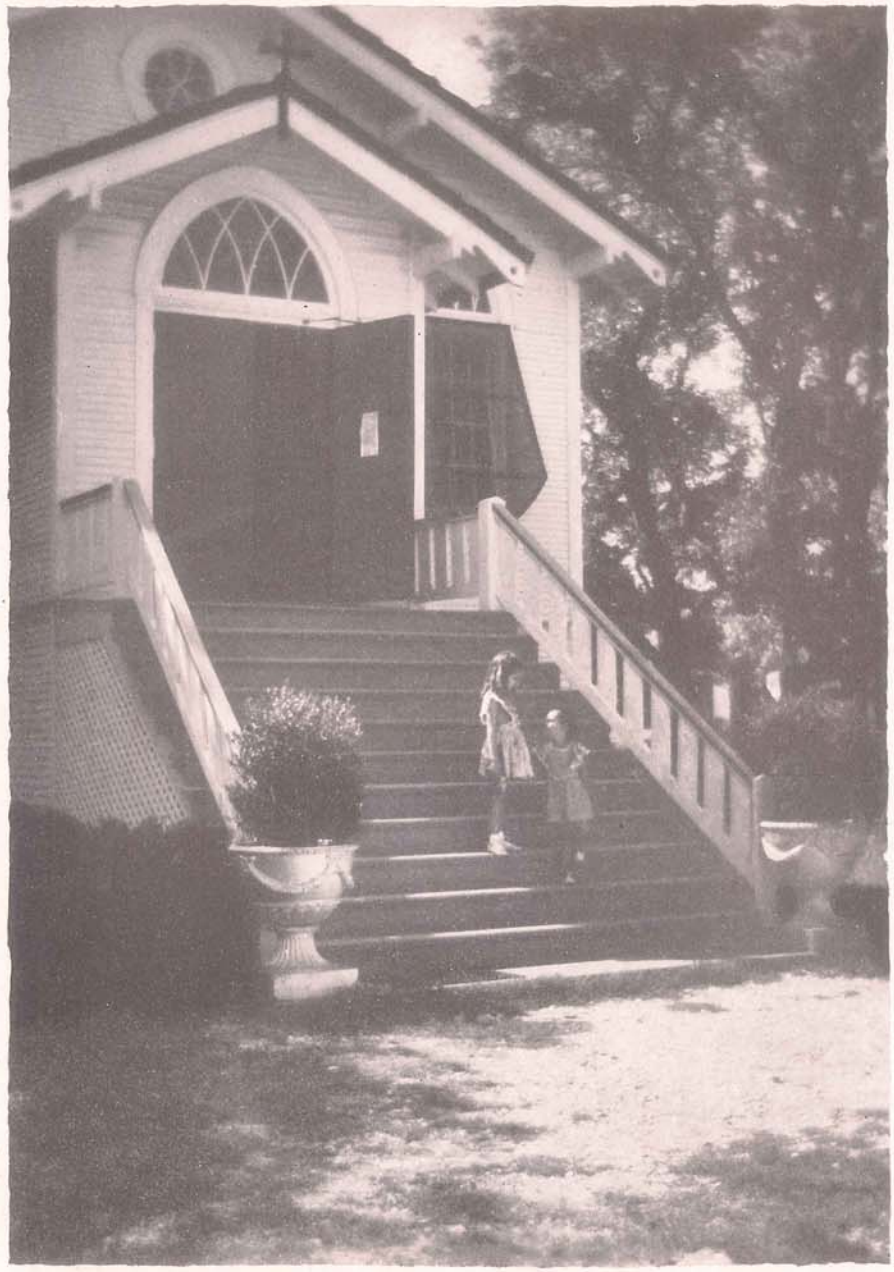
The late afternoon sun weaves an undulating shadow pattern on a bit of rustic and unspoiled farmland. Rich farm and pasture lands are abundant in Jefferson Parish. On land such as this graze our fat, sleek cattle and grow our famous market products which are shipped to all parts of the country. Early settlers soon discovered that the fabulous wealth promised them was not in gold and silver but was the precious treasure of rich and fertile soil, which is today being tilled by the descendants of those first adventuresome colonists.



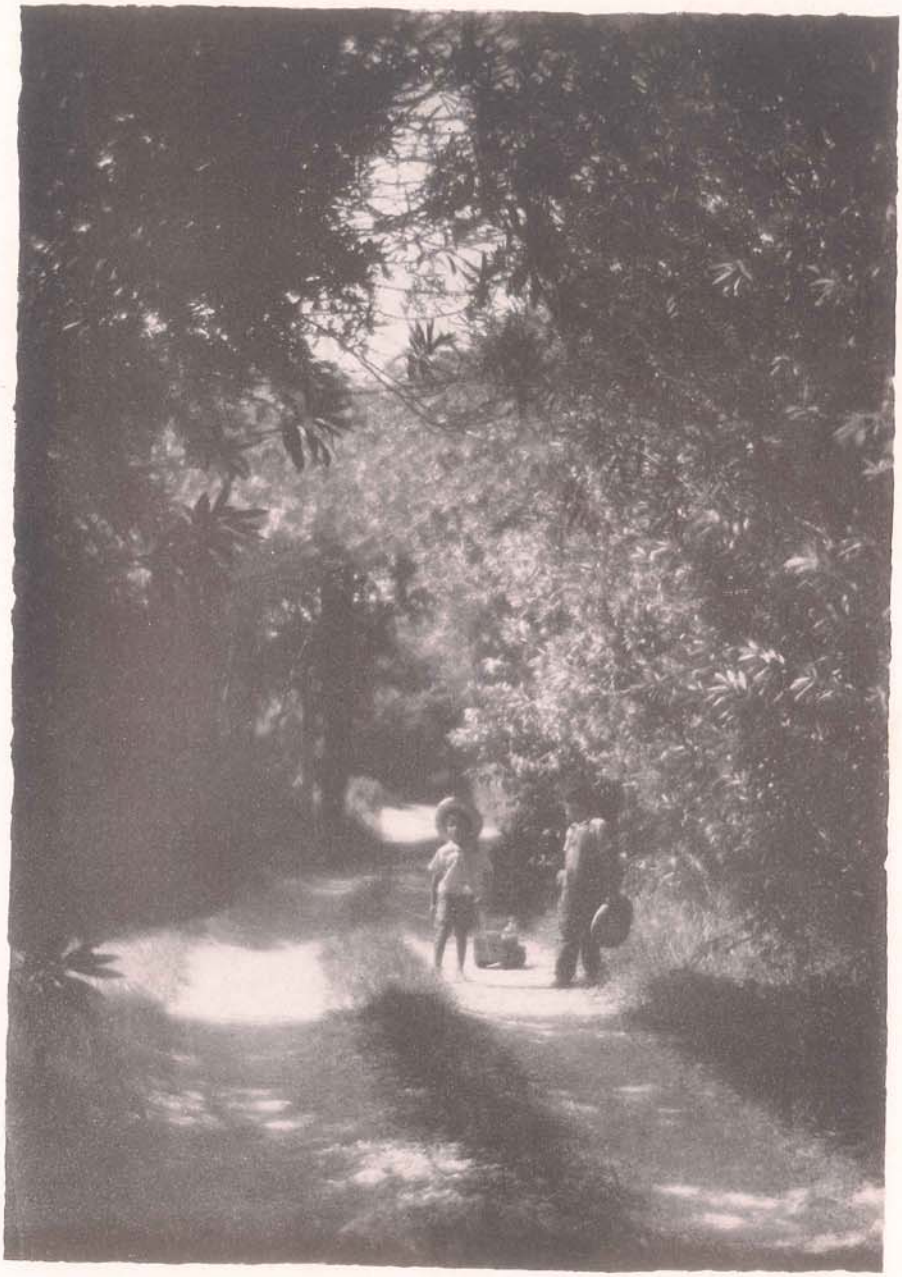
Green grows the corn—and tall—in Jefferson Parish. Let the farmlands of America look to their laurels for more and more is this section being cultivated and transformed into fields of waving corn and other produce to help feed the nation. The semi-tropical sun, the good, rich earth and a salubrious climate combine to make possible prolific three-crops-a-year planting.



Here, one of the many thousands of fishing boats is wending its way via bayou to Gulf waters for a lucrative day of fishing. The waters of Jefferson Parish abound in succulent seafood—practically everything that swims or lives in water is to be found either in the inland bayous and lakes of Jefferson Parish or in the waters of the Gulf off Grand Isle, which is the southernmost tip of this fishermen's paradise.



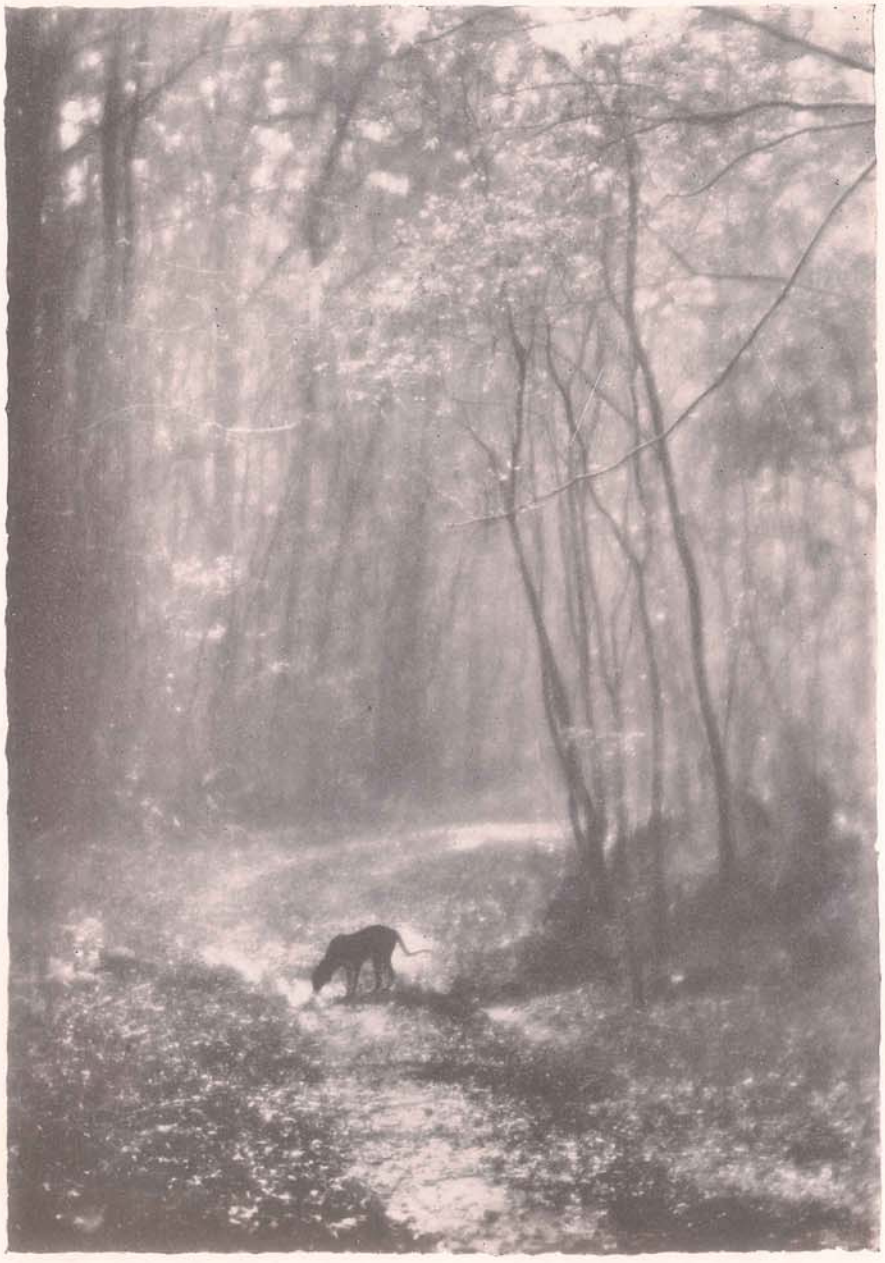
Grand Isle is rich in legend and historical anecdote. No less a part of its charm are its inhabitants, most of whom are direct descendants of Lafitte's band of smugglers. It is, then, a bit startling to find these natives so deeply religious. But, when one remembers they were originally peaceful fishermen turned smugglers by tempestuous circumstances, it is not difficult to realize their quick return to home-loving fishermen. Descending the stairs of "Our Lady of The Isle" church, around which all island life revolves, are two of Grand Isle's children.



Nowhere in America will you find more tranquil, unsullied beauty than here on Grand Isle, the "sleeping beauty" of Jefferson Parish. No strident noise nor blare of traffic disturbs these two tanned and barefoot island boys, who, having been to early morning mass, now make their way down one of the lovely shaded lanes, beneath a bower of fragrant, crimson oleander toward the beach where they will fish and swim and play the rest of the day away on the eight-mile, unbroken stretch of Grand Isle beach.

Not until the war is over and traveling is no longer rationed will the eager visitor be able to stand here on this stretch of beach at Grand Isle and witness this awe-inspiring sight—the dawn that breaks "like thunder" over the island and the opalescent Gulf in golden splendor. And, if you arise early enough, you may be able to duplicate this flight of pelicans in precision formation against the sun.

Anywhere you may be in Jefferson Parish at eventide . . . whether at Grand Isle, on one of the many bayous, a limpid lake or the "Father of Waters" . . . moonrise will fill your heart with peace and calm and beauty—and you will see, in the darkening velvet of the sky, the low hanging moon of silver—the poetry and majesty of nature with which this land is so lavishly endowed.

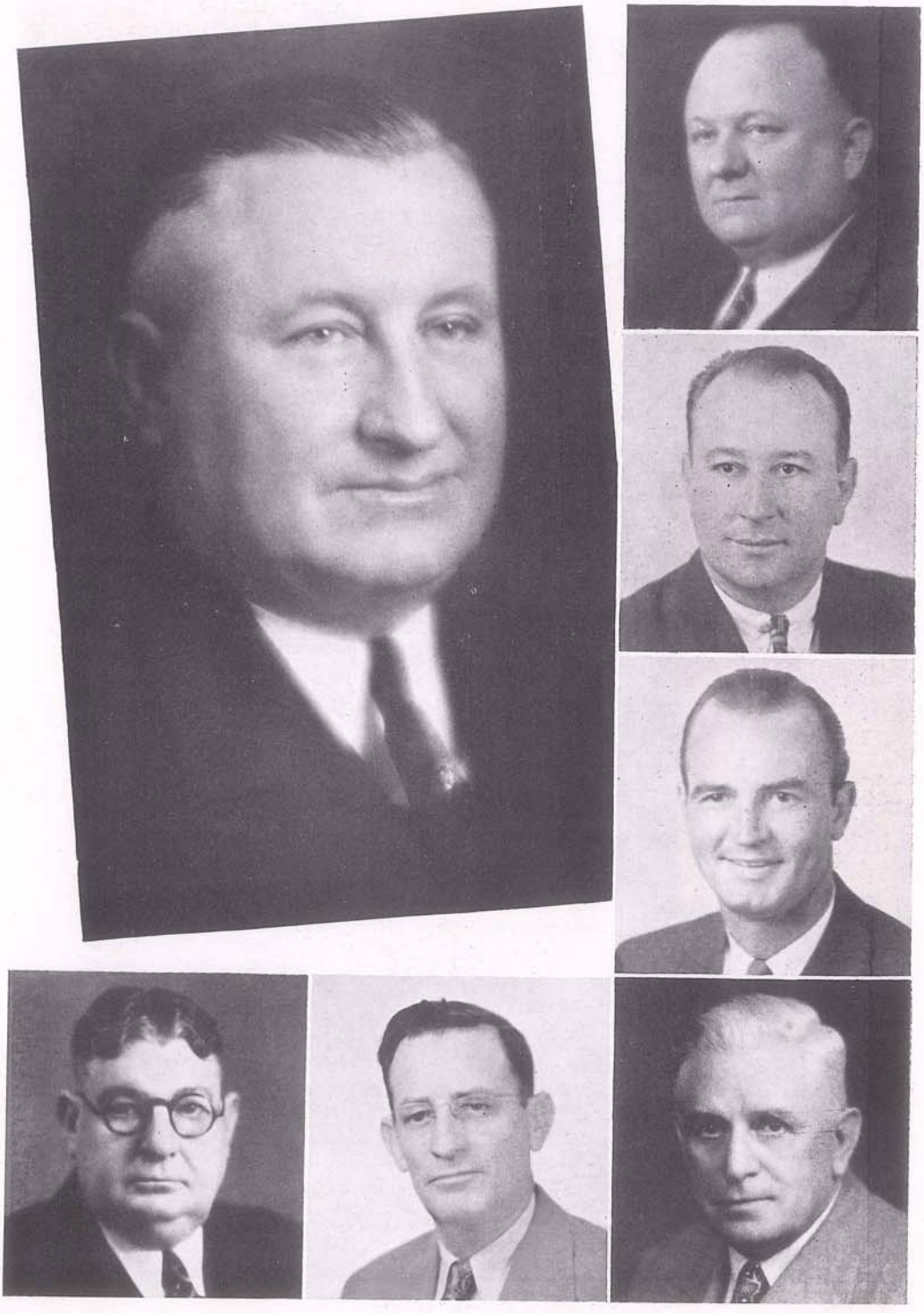


And here—where a hunter's hound experimentally sniffs the trail in the sifting sunlight—our portrait of Jefferson Parish must end. Here, where the trail leads off into the still wild woods whose friendly branches and protecting foliage are the habitat of nearly every known form of wildlife. Here, then, lies the promise of good hunting to the man or woman seeking relaxation . . . and a warm welcome to this land of friendliness and friendlier people!

FEDERAL, STATE AND DISTRICT OFFICIALS

Hon. James H. Davis, Governor of the State of Louisiana

Reading from top to bottom: Hon. Allen J. Ellender, United States Senator from Louisiana; Hon. John H. Overton, United States Senator from Louisiana; Hon. J. Emile Verret, Lieutenant Governor, State of Louisiana; Hon. Paul H. Maloney, Member of Congress, Second Louisiana Congressional District; and Hon. Alvin T. Stumpf, Louisiana State Senator, Tenth Senatorial District.



PARISH OFFICIALS

Hon. Frank J. Clancy, Sheriff

Reading from top to bottom: Hon. George Heebe, Jr., Assessor (term expiring January 1st, 1945); Hon. Vernon J. Wilty, Assessor Elect (term beginning January 1st, 1945); Hon. James E. Beeson, State Representative; Dr. Charles F. Gelbke, Coroner; Hon. Edward M. Thomassie, President Pro-Tem., Police Jury; and Hon. Weaver R. Toledano, President, Police Jury.

COURT OFFICIALS

Upper left: Hon. John E. Fleury, District Attorney, 24th Judicial District. Upper right: Hon. L. Robert Rivarde, Judge, 24th Judicial District. Center: Hon. A. T. Higgins, of Jefferson Parish, Associate Justice of the Louisiana Supreme Court. Lower left: Hon. E. Howard McCaleb, of Jefferson Parish, Judge of the Court of Appeals. Lower center: Hon. Vic A. Pitre, Jefferson Parish Clerk of Court, 24th Judicial District. Lower right: the late Hon. Ernest M. Conzelmann, Assistant District Attorney, 24th Judicial District Court. (At the time this publication went to press no successor had yet been appointed.)

PARADE OF

PROLOGUE

The parade forms!

A lady in Ohio walks in a store and places her down-payment on a sleek and expensive fur coat, the pelts of which came from the marshes of Jefferson Parish. A husky farmer in North Dakota pours on his breakfast wheatcakes a golden cataract that originated in the world's largest cane syrup cannery—also in Jefferson Parish.

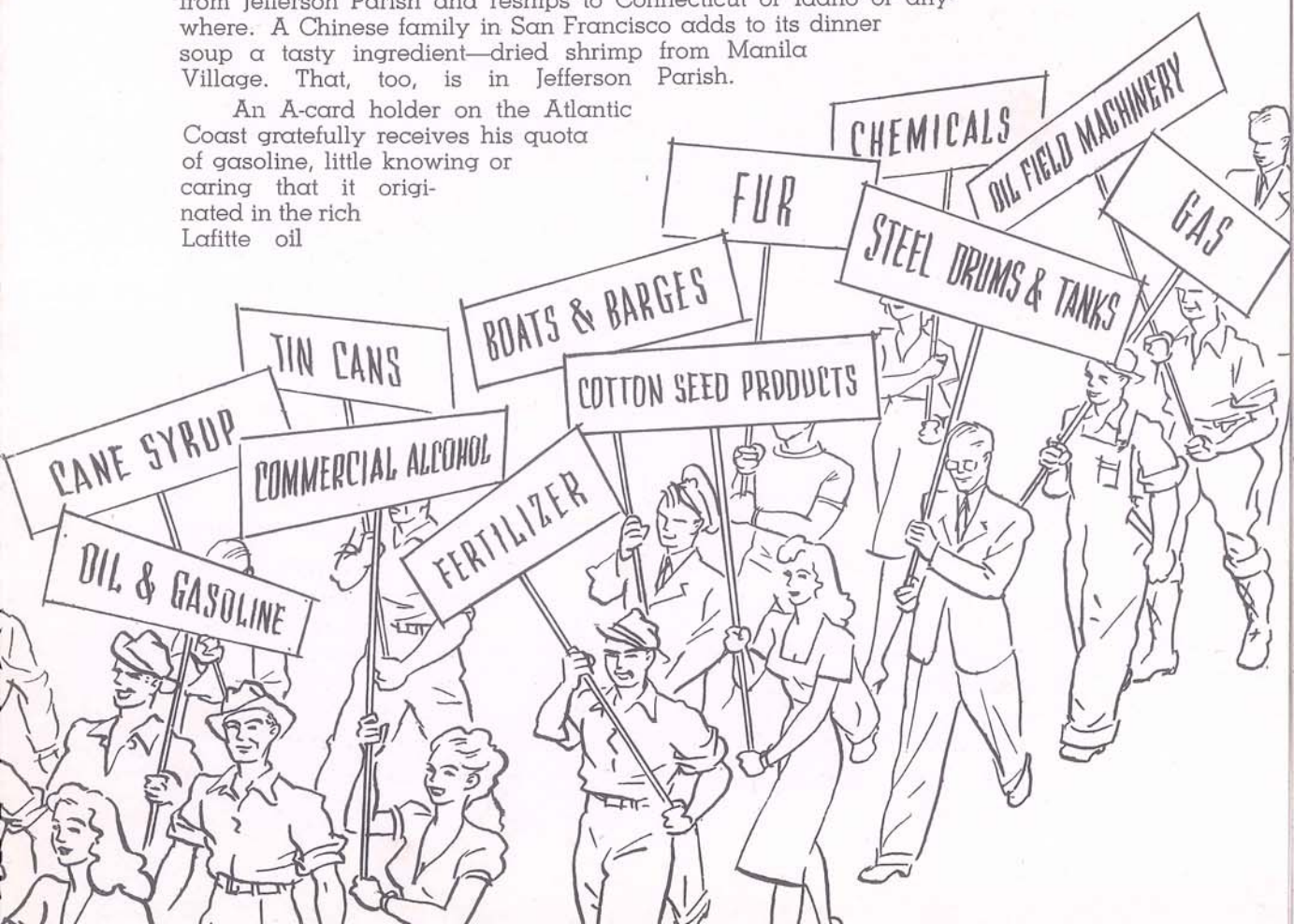
A Jap destroyer in the Pacific feels a sudden pain in its guts—and, in death agonies from the deadly torpedo of a fragile PT, hisses its hatred at the tiny antagonist whose wooden fleetness was milled and formed in Jefferson Parish. In the nation's fight to supply the demand for synthetic rubber, a new butadiene plant in West Virginia goes into production with commercial alcohol furnished by this same parish of profusion.

In Chicago, a beautiful church solves an acoustical problem so effectively that now the solemnly and softly uttered prayers from the pulpit can be heard distinctly in the rearmost seats. The solution of that problem was Acousti-Celotex, made in the only Celotex plant in America, located in versatile Jefferson Parish.

A tourist in New Orleans orders the famous Oysters Rockefeller, and is served the equally famous bivalves from Barataria Bay, at about the same moment a hostess in Detroit is proudly placing in front of her guests a tasty shrimp salad, the crustaceans of which were caught in the waters of Jefferson.

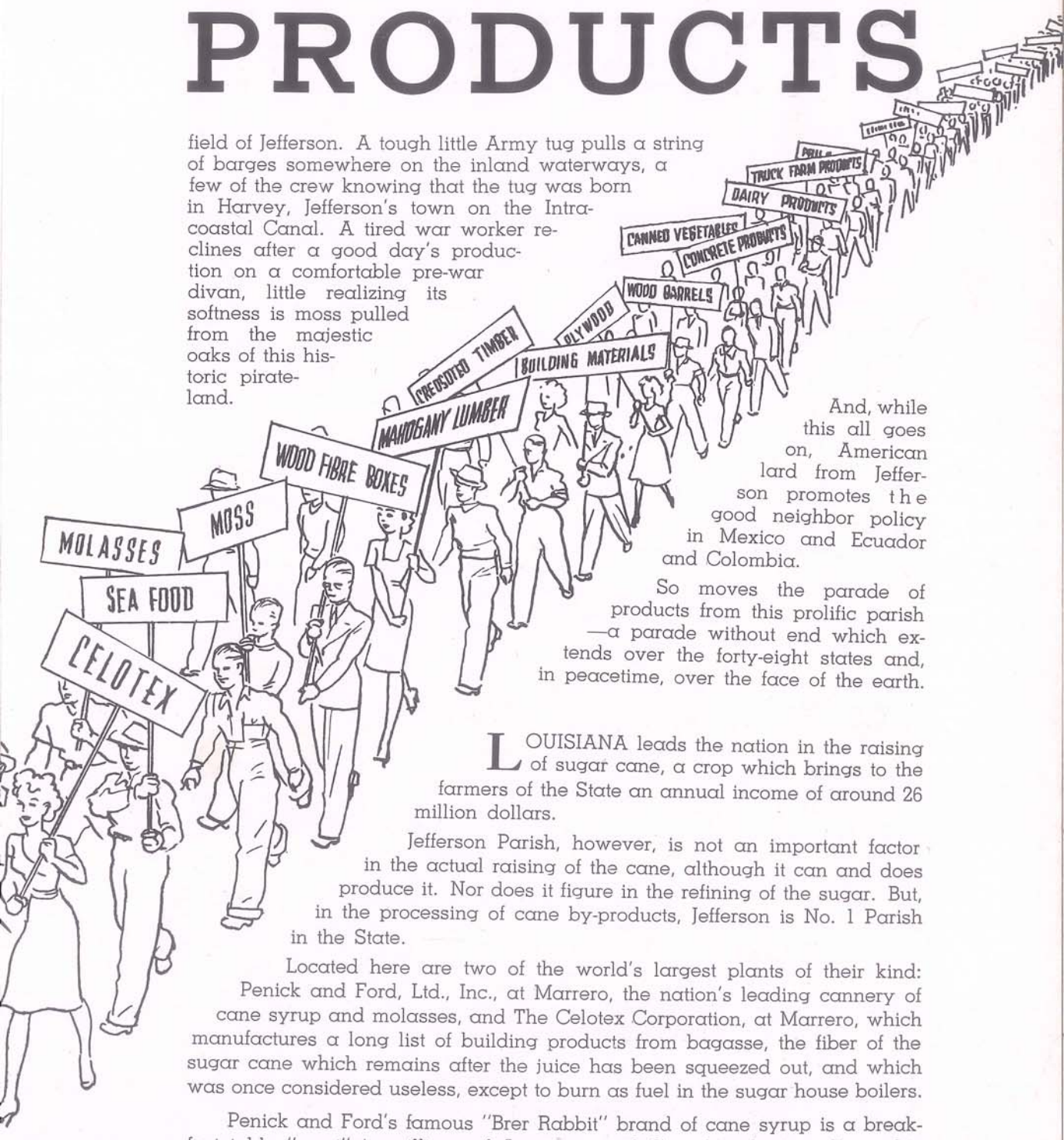
A meat packer in Kansas City receives a shipment of wooden crates from Jefferson Parish and reships to Connecticut or Idaho or anywhere. A Chinese family in San Francisco adds to its dinner soup a tasty ingredient—dried shrimp from Manila Village. That, too, is in Jefferson Parish.

An A-card holder on the Atlantic Coast gratefully receives his quota of gasoline, little knowing or caring that it originated in the rich Lafitte oil



PRODUCTS

field of Jefferson. A tough little Army tug pulls a string of barges somewhere on the inland waterways, a few of the crew knowing that the tug was born in Harvey, Jefferson's town on the Intracoastal Canal. A tired war worker reclines after a good day's production on a comfortable pre-war divan, little realizing its softness is moss pulled from the majestic oaks of this historic pirate-land.



And, while this all goes on, American lard from Jefferson promotes the good neighbor policy in Mexico and Ecuador and Colombia.

So moves the parade of products from this prolific parish —a parade without end which extends over the forty-eight states and, in peacetime, over the face of the earth.

LOUISIANA leads the nation in the raising of sugar cane, a crop which brings to the farmers of the State an annual income of around 26 million dollars.

Jefferson Parish, however, is not an important factor in the actual raising of the cane, although it can and does produce it. Nor does it figure in the refining of the sugar. But, in the processing of cane by-products, Jefferson is No. 1 Parish in the State.

Located here are two of the world's largest plants of their kind: Penick and Ford, Ltd., Inc., at Marrero, the nation's leading cannery of cane syrup and molasses, and The Celotex Corporation, at Marrero, which manufactures a long list of building products from bagasse, the fiber of the sugar cane which remains after the juice has been squeezed out, and which was once considered useless, except to burn as fuel in the sugar house boilers.

Penick and Ford's famous "Brer Rabbit" brand of cane syrup is a breakfast table "must" in millions of American and Canadian homes. From this factory also originates first, second and third grade molasses and blends of corn and cane syrup. Louisiana is the source of most of Penick and Ford's products for table use, but this firm also imports "blackstrap" from Cuba for the manufacture of cattle feed and for distilling purposes. It maintains a three-million gallon capacity cold storage plant for syrups and molasses.

The Celotex Corporation was established in Jefferson Parish in 1922 for the pioneer manufacturing, from bagasse, of what painstaking experiments had revealed would be the best insulating board that could be produced. Jefferson Parish had all the necessary qualifications. It was in the sugar cane area; it had plenty of water; excellent transportation facilities; ample land for future plant expansion and a wide-awake community for the procurement of labor and intelligent cooperation. The originators of what they determined to call "Celotex" started operations, back 22 years ago, with one board making machine.

Today "Celotex" is a household word. Seven board machines now produce 1,500,000 square feet a day—including building board, lath, roof insulation, sheathing, insulation for refrigerators, acoustical board and expansion joint material for concrete roads. The plant now consumes approximately 30 carloads of fibre every day and about 10,000 gallons of Mississippi water per minute.

A moment ago we mentioned "blackstrap." That is the final molasses left after several refining processes have been completed. Formerly, like bagasse, it was considered a waste product and was usually dumped in a ditch.

But today, shiploads of "blackstrap" ranging from 80,000 to 2,000,000 gallons, come into Jefferson Parish from Cuba, Puerto Rico, Jamaica, Honduras and Hawaii for the manufacture of commercial alcohol. Rum was also produced in peace time.

Two plants of the Commercial Solvents Corporation are engaged in this alcohol production—one at Harvey and one at Westwego. In the past year the Harvey plant has increased its production 50% and the Westwego plant 45%. The Gulf Distilling Corporation, also engaged in this same activity at Gretna, has likewise increased its output. Commercial alcohol has become a vital ingredient in our synthetic rubber program.

This is the "M. V. SEGUIN," one of the seagoing tugs recently built by Avondale Marine Ways, Inc., for the U. S. Maritime Commission. These tugs are motor-propelled and are among the largest in the world designed for commercial purposes.

The North American Trading and Import Company at Westwego imports and stores molasses for the Defense Supplies Corporation for shipment wherever it is vitally needed. And, the Publicker Commercial Alcohol Company, working with North American Trading and Import, produces commercial alcohol which goes to butadiene plants in Baton Rouge and West Virginia.

The U. S. Industrial Chemicals plant at Westwego is a molasses terminal for the purpose of storing imported and domestic molasses for the subsequent manufacture of cattle feed, which finds its way West for the winter feeding of cattle when the range is snow covered.

When cane was brought to Louisiana about two hundred years ago it was first grown and sold as a confection, being soft and sweet and easy to chew. Very shortly, however, the ingenious populace discovered that a powerful homebrew, which they called "Tafia," could be distilled from it and the early authorities had many a sugar cane binge to handle. But today, the parade of products that have been derived from this amazing plant is lengthy and imposing. And, for a good view of this parade as it forms for its march into the homes, farms and factories of the world—visit Jefferson!

From cane let's jump to cotton—another great Southern crop—and another great source of Jefferson Parish's manufacturing activity.

The Southern Cotton Oil Company at Gretna is one of the world's largest plants for processing cotton seed oil. From this plant is shipped, North by rail and South by ship, vegetable shortening and cooking oils. This is one of the oldest plants in the parish, having passed the half century mark of continued operation.

Here, also, is the Harvey refining plant of Swift and Company, also a Jefferson Parish old-timer with over 33 years on its production records.

Because Jefferson Parish has admirable rail and water facilities for bringing in the cotton seed and other raw materials, and excellent water connections

---

This is an OFFICIAL U. S. ARMY AIR FORCES photograph of a Transport Glider. After D-Day, when we began to read the newspaper accounts of plane-towed gliders dropping our air borne infantry into Fortress Europe, we began to realize that Jefferson Parish processed mahogany had taken a dramatic part in the invasion, both by air and by water.

for shipping finished products by both rail and water, these plants have economically gravitated to this area.

What's next in the parade? Oh, yes, we see a banner there marked "Seafood." That's a puny word to cover such a big Jefferson Parish subject.

First of all, along with the other "world's largest" we have already mentioned, Jefferson Parish has the largest shrimp and oyster canning plant in existence—the Southern Shell Fish Company at Harvey.

Jefferson Parish is right in the middle of the great shrimp fishing zone of Louisiana. Its trawlers from Lafitte to Grand Isle, cruising in Barataria Bay, Bay des Ilettes and the Gulf of Mexico, dip their nets and lift from the storehouse of Nature rich harvests of the sweet succulent crustaceans—some of them to be canned for far off grocers' shelves, some to be shipped fresh-frozen by truck and railway express to waiting hotels, restaurants and seafood mar-

Into PT boats have gone a great part of the war time production of processed mahogany from Jefferson Parish. This photograph shows Higgins PT's staging combat maneuvers on Lake Pontchartrain under the eagle eyes of veterans of the famous "Squadron X" of Guadalcanal fame now training youngsters in PT "know how."

kets, and some to be dried on huge wooden platforms and shipped dehydrated.

Its Barataria Bay oysters, seasoned delicately with Gulf saltwater and fattened healthily by the fresh water, are famous for their flavor. Admittedly, the finest soft shell crabs in America come from Lake Salvador and Bayou Pero, a unique industry developed by Jefferson Parish ingenuity a few years ago. (See story in 1938 Review.)

From the diversified waters of Jefferson—its twisting bayous and broad fresh water lakes and the Gulf itself—come the finny additions to the seafood parade—speckled trout, spanish mackerel, redfish, sheephead, drum, channel mullet, buffalo, gaspergou, sac-a-lait, and catfish—most of which the fishermen take to the markets of New Orleans.

An excellent example of the seafood business of Jefferson Parish is the activity of the Ed Martin Seafood Company at Westwego.

This firm, in addition to its shrimp canning, has at least 80 fishermen catching crabs exclusively. Four to five hundred baskets, averaging 7 dozen crabs to the basket, are picked every day. The crab meat is packed in cans, and shipped in wooden barrels, one hundred cans to the barrel surrounded with ice, to 44 states in the Union.

This eleven year old firm, employing 120 people, has just started shipping boiled crabs in the shell. The pincered delicacies are wrapped individually in parchment paper and shipped by truck, to points as far as Philadelphia.

In the Lewis Sea Foods plant, another Westwego firm, ten thousand pounds of crabmeat have been picked in a single day. This company will introduce an innovation to the shrimp trawling trade this summer. The "Betty Jean," a 65-foot, 80-ton boat, operated by Lewis Sea Foods, will cruise in Barataria Bay, the Gulf of Mexico or anywhere the shrimp are being caught—equipped with a complete freezing unit. Shrimp will be taken from the trawler's nets, the

Prophetically silhouetted against Jefferson Parish skies, as this article is written, are 135 of these towering symbols of Louisiana's great new oil industry. She has profitably pioneered the drilling of deep wells and a new oil metropolis is about to be born in New Orleans, from which southward into the Gulf of Mexico and northward into Mississippi are already extending spokes of exploration — offering fascinating challenges to the geophysists, the geologists, the paleontologists and the drillers and their roughnecks.

heads will be picked off, the shrimp frozen and packed in 5 lb. cartons—all on board the "Betty Jean." The boat will hold the equivalent of two boxcars. When filled to capacity the "Betty Jean" will return to Westwego and the cargo shipped.

Other seafood shippers are the Cutcher Canning Company, the Robinson Canning Company and the Otto L. Kuehn Company. There are other seafood activities in this parish—the Grand Isle and Cheniere Caminada shrimp and fish receiving platforms; the oyster tonging in Barataria Bay; the dried shrimp platforms of Manila Village and Bayou Broulo and the Westwego Feed Meal Mill, which takes seafood shells and by-products and makes them into nutritious poultry feed. But these will give you a passing view of the seafood part of the parade. We can't tarry too long. Other products are moving up.

With boats so much a part of the panorama of Jefferson Parish it is only natural to expect to see boat building. You will not be disappointed. The Avondale Marine Ways, Inc., is now fulfilling a Maritime Commission contract for 8 large seagoing tugs and working on coastal cargo vessels. The Allen Boat Company is producing 85-foot diesel tugs and steel oil barges. And, the Harvey Canal Shipyard and Machine Shop keeps in repair the boats and barges of the Coast Guard, the public service agencies and the Intracoastal Canal trade.

The subject of boats immediately focuses our attention on another interesting Jefferson Parish product—its mahogany. We are visualizing in our mind's eye those tiny PT's delivering large lethal doses to the surprised squadrons of the Imperial Japanese Navy, and we are proud that many of their sleek and slender hulls originated with two Jefferson Parish firms.

One is the Freiberg Mahogany Company, early this year awarded the Army-Navy "E," which operates a sawmill and veneer plant, dealing exclusively in foreign hardwoods, chiefly mahogany from Central America. Into the PT boats we just mentioned—and into airplanes, gliders, helicopters and landing and crash boats—now go practically its entire production. Furniture, radios and pleasure boats must wait for victory.

The other firm is the Ipix Plywood Corporation, which fabricates mahogany and other hardwoods into aircraft and marine plywood and flush doors. This Jefferson company is also completely dedicated to war work.

A prepainted and stencilled installation of Acousti-Celotex installed in St. Hyacinth's Church of Chicago, Illinois, involving a coverage of 19,000 square feet. From the discarded pulp of the sugar cane, science and Celotex have combined to produce in Jefferson Parish a sound conditioning building material which, in the case of this church, carries even the softest tones of the Mass to every worshipper in every pew.

In Jefferson Parish, at Southport, is the largest creosote treating unit for lumber in the country. This is the American Creosote Works, Inc., which covers 30 acres of ground. A planing mill, including re-saw and framing machinery, permits the fabrication of special timbers before treatment. Two wharves serve the plant. One is a landing unit, which is equipped to discharge creosote from tankers direct into an 8,000,000 gallon storage tank and the other is an export shipping dock. Today, of course, this plant is supplying treated lumber almost exclusively for war work.

Let's stay in the wood classification and study the other products that Jefferson can supply in this category.

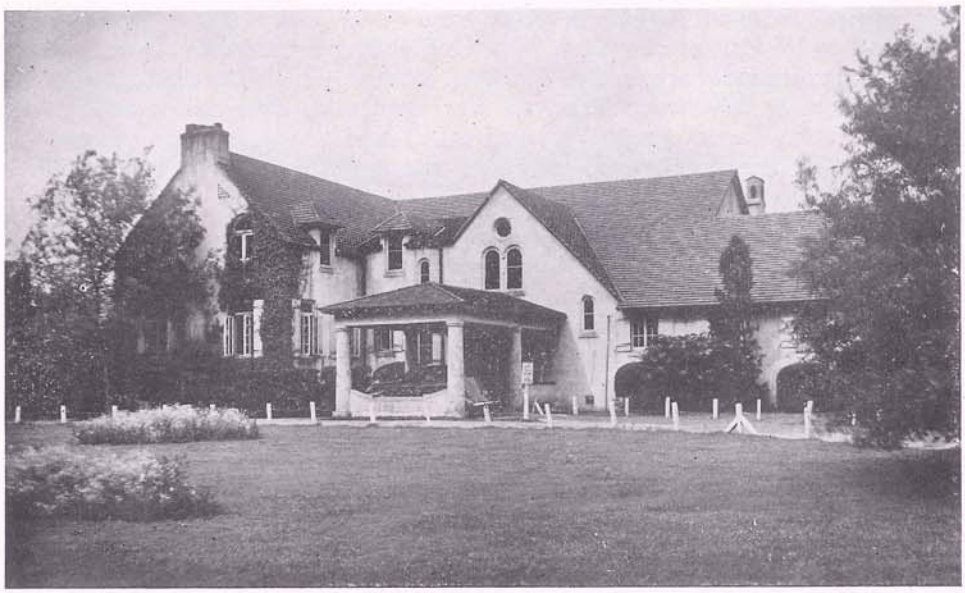
The Great Southern Box Company, Inc., has one of the largest wire-bound box plants in the South. From veneer, procured from Louisiana and Mississippi, finished boxes are distributed to meat packers in the Middle West and to citrus packers in the Rio Grande Valley, as well as many other markets. The Great Southern Box Company also operates a corrugated paper board plant.

There are also the Louisiana Box and Lumber Company, noted for egg crates and the Mancuso Barrel and Box Company, Inc.

In another part of this issue is an interesting article on oil, which has become, in the last ten years, one of the richest products of the Jefferson Parish parade. So complete is that story on the producing end of the parish oil business—and so authentic and convincing are the figures—we won't attempt to cover any more of that phase here. Instead we will point out, in the passing parade, the activities that have followed on the heels of the drillers.

It is only fair to say, in explanation, however, that four companies—the International Lubricant Corporation, the Gulf Refining Company, the Texas Company and the Sinclair Refining Company were here long before oil was discovered in Jefferson. They came originally because of the inland waterway connection with sea and rail.

Chiefly supplied by the Mid-Continent and Texas oil fields, The International Lubricant Corporation manufactures all kinds of greases for industrial



The beautiful clubhouse of the Metairie Golf Club

METAIRIE GOLF CLUB

HAROLD W. MISCHLER, President

A. W. CANCIENNE, Vice Pres. W. H. WYNNE, Sect'y.-Treas.

FRED HAAS, Professional

LEOPOLD SAUX, Manager

Charley Spahr

DISTRIBUTOR

Pan-Am Petroleum Corp.

★

Harvey, Louisiana

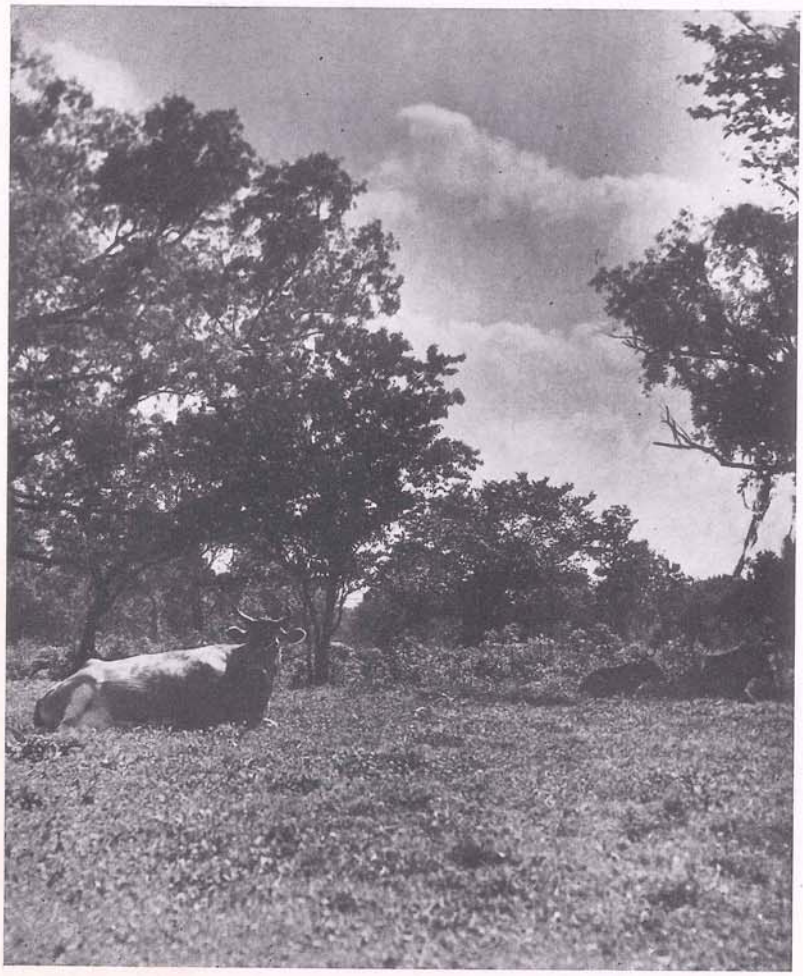
and automotive use. It ships to every state in the Union and before the war exported to 57 foreign countries. The Gulf Refining Company established a distributing terminal here for five Southern states in 1904. The Sinclair Refining Company at its Westwego Terminal has distributed light oils, gasoline and kerosene from Texas since 1925 and the Texas Company has operated a petroleum terminal at Marrero for years and, in addition to oil production, is refining casing head gasoline at Lafitte.

In Harvey is the American Iron and Machine Works, Inc., engaged in making and repairing oil well drilling and producing equipment. As a war activity they are also machining Liberty Ship shafting. Then there is the Hunt Tool Company, engaged in the repairing and serving of oil field equipment.

Incidentally, the Hake Galvanizing Works at Harvey offers the only hot dip galvanizing unit within 400 miles.

Steel drums, of course, are a prime product of the parish. The Rheem Manufacturing Company, the Bennet Manufacturing Company and the J and L Steel Barrel Company are all engaged in this activity. The Evans Cooperage Company reconditions them and the Wm. F. Spahr Foundry and Machine Works makes parts for steel drums and the machinery to manufacture them.

To serve the Gulf Coast syrup, seafood and vegetable canners the Continental Can Company established a huge plant in Jefferson Parish in 1932. The plant space has expanded twice since that time, now occupying, with the addition of a lithographing department, an area three times the original layout. This plant produces 80 to 100 million cans annually under normal conditions, and is equipped to serve the needs of the entire South.



A paradoxical parish is Jefferson. With less than 3 per cent of its total area available for farming purposes, it pastures and feeds great herds of dairy cattle that furnish a steady, dependable supply of rich cream and milk to New Orleans—it grows and transports to the city markets over thirty different kinds of vegetables—and it raises pedigreed porkers and blue blooded poultry for its own and cross-river consumption. Its truck farmers, poultry and hog raisers and dairymen are helping to make the parish one of the largest producers of food per acre in the United States.

There is, in the area around Lafitte, a thriving beef cattle business. The cattlemen here specialize in high grade Herefords, regarded as one of America's finest type of beef cattle.

From raw materials obtained in Louisiana and Mississippi, the Squire Dingee Company packs pickles and mustard for distribution over the U. S. and for export to Cuba.

In 1936 Johns-Manville Products Corporation established a plant at Marrero in this industrial center of the South, and proceeded to manufacture asbestos cement shingles, asphalt shingles and roofing, and roof cements and

Shrimp, the largest single item on the imposing seafood list of Jefferson Parish, is shown here being taken from the trawler and put into baskets preparatory to its trip to market. Soon it will be served boiled, with beer, or will emerge as someone's dinner cocktail.

putties for the Southern market. Today this plant, covering 130,000 square feet of floor space, provides employment for 350 workers.

Fertilizer is an important product of Jefferson Parish for three reasons: the South and Southwest are good markets for the finished product; the South is also a source of the raw materials; and Jefferson Parish is the transportation center between sources and markets.

The Davison Chemical Corporation has produced fertilizers in Jefferson Parish since 1900. These fertilizers, made up of potash and phosphates, are shipped throughout Louisiana, Mississippi, Texas and Arkansas. The Swift and Company Fertilizer Works began operations in 1912, procuring phospate rock from Florida, sulphur from Louisiana, other nitrogenous materials from other parts of the U. S. and foreign countries and potash from California. Swift's fertilizers are also shipped throughout the Southwest.

Did you ever see so many boiled crabs? This is only one batch. Actually, 400 to 500 baskets of these delicious denizens of the deep are processed in a day at the Ed Martin Seafood Company of Westwego.

Armour and Company Fertilizer Works, sharing age honors with Davison, both being established in 1900, produces fertilizer made from animal bones from its own packing houses and products from the Southern states. Its bone black is nationally distributed, sold to sugar refiners and syrup manufacturers. It exports to South America.

In 1927 the Paper Makers Chemical Division of Hercules Powder Company established a plant in Jefferson Parish for the same reason all these many other manufacturers have located here: nearness to raw materials, excellent transportation facilities and a great Southern and Southwestern market, both export and domestic. With resin from Mississippi and bauxite, obtainable all over the South, this firm produces paper manufacturing chemicals and general industrial chemicals. To list a few: acids, alcohols, alums, cleansers, caesin, wax emulsions, sulphonated oils and oil emulsions, soap powders, resins and pitches.

A famous international shipper of insecticides and sanitary supplies, holding world's medals for its products, has been operating in Jefferson since 1876—John Stumpf's Son of Gretna.

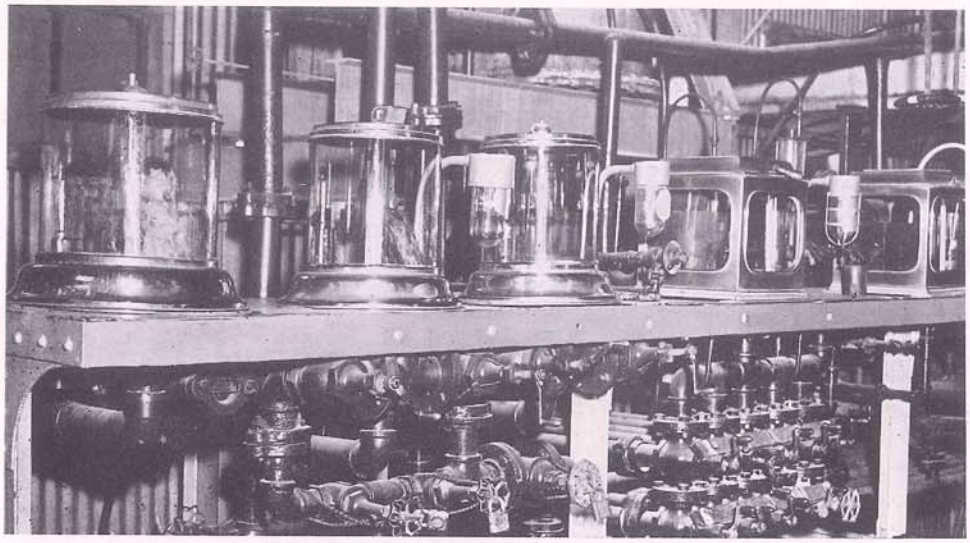
Are you tired reading about the products of Jefferson Parish? Did you realize there were so many and that they were so varied?

We said in the beginning of this article that Louisiana leads the nation in sugar cane. It is also top state in fur production—the 1942-43 catch totaling 4,776,812 pelts, bringing $5,738,168 to about 20,000 trappers in the state. Muskrat, skunk, mink, raccoon, opossum and otter—all abound here.

Although the total catch and total valuation are not broken down by parishes, it is thoroughly recognized that Jefferson is one of the top three—and that its several thousand seafood fishermen follow the trap lines in the winter time, often pocketing several thousand dollars for three months work. From the marshes of Jefferson into the markets of the world go hundreds of thousands of pelts annually.

Where, you might ask, in this parish only 60 miles along, would there be room for anything else? Already we have covered an extensive industrial section, oil fields, fishing and trapping grounds, lakes, bayous, bays and canals.

But, there seems to be room for everything here—even farming and dairying. The rich alluvial soil which the river deposited in previous centuries yields excellent truck vegetables and furnishes pasture for contented cattle. Jefferson has infinite variety in its agricultural products, sending to the markets



The combined storage capacity of the two plants of Commercial Solvents Corporation is 30 million gallons of molasses. These are stills for the initial distillation of commercial alcohol from fermented molasses. The resultant distillation, known as High Wines, is further distilled into finished alcohol, which is then worked into different grades for different purposes.

of New Orleans fresh vegetables, fresh eggs, poultry and dairy products. Especially upon the modern dairy farms and dairy cattle of Jefferson Parish does the metropolitan area of New Orleans lean heavily.

Then there is the Spanish Moss, which nature has lavished upon this parish. Visitors admire its beauty and the people of the bayouland turn its abundance into bales of future upholstered comfort for the homes of America—and nature keeps replenishing it so that neither its beauty nor abundance will diminish.

There is also natural gas which Jefferson has recently discovered in her vast reservoir deep in the silt of the centuries, packed down by Ol' Man River. One well has already been put into production.

Oil in Jefferson was found only a little over ten years ago. Gas is a very recent discovery. Many of the industries are young in years, but all were

This is a picture of an automatic air testing machine for two pound cans for Home Canning at the Harvey plant of Continental Can Company. Two such machines are used, their combined capacity making it possible to test 320 cans a minute.