

THE LOUISIANA OYSTER INDUSTRY.

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The great resources of Louisiana, in its large production of sugar cane, cotton, rice, lumber, and fruits, have hitherto kept in comparative obscurity what are generally deemed the minor, and wrongly considered the less remunerative, fields for the employment of capital and intelligent labor. Many of these are so regarded simply because the best locations for their development have been until recently remote from the centers of trade and great waterways and, in many instances, difficult of access by quick transportation. This possibly accounts for the general ignorance of the great opportunities which these industries offer for highly remunerative investment.

Prominent, if not the principal, among these neglected interests are the vast fishery interests of the State which, under energetic labor and scientific cultivation, would in a few years equal, if they did not surpass, in the way of pecuniary profit, the aggregate value of the entire agricultural product of the State. The extent of the oyster territory is so vast, the supply so abundant and cheap, and so little labor and capital are required for development, that, once known, capital and labor will inevitably seek employment in what must eventually become a leading industry, far surpassing that of any other State in the Union in this respect.

On the eastern boundary, starting from the Rigolets, the small gut or strait connecting Lakes Borgne and Pontchartrain, and following the shore line southward and westward around the mouths of the Mississippi River to the Texas line, there is a coast of about 600 miles in length, if measured on straight lines from point to point. Making an allowance for the curvatures of the coast, the shores of salt-water bays, bayous, inlets, lakes, and islands, which fret this part of the State like network, the littoral line will not fall short of 1,500 or 2,000 miles. Taking into consideration the shelving, shallow beach adjacent to it, experts well acquainted with its geographical features estimate that the area suitable to planting and growing oysters is equal to the amount of acreage available in all of the other States of the Union combined. By far the larger part of this extensive coast was dotted by extensive natural oyster-reefs, originally—that is, in a state of nature—only distant from each other a few miles. Those most accessible to speedy transportation to market have been in some cases almost entirely denuded, and others seriously impoverished by the constant fishing in and out of season. In still other instances the fresh water from river crevasses has occasionally, but only temporarily, injured the productive capacity of the beds. These injuries are, however, but occasional and temporary, as we have just said. The fecund, recuperative power of nature, in no way more strikingly illustrated than in the immense reproductive capacity of the oyster, soon replenishes the stock, whenever the depredations of fishermen or the overflow of fresh water cease, and the beds are allowed to rest for a time.

Besides these natural beds, the coast abounds in suitable places in which the mollusk can be transplanted from the seed bed and under proper care developed into an oyster which, for the delicacy of its flavor, can not be excelled the world over. East of the Mississippi River these natural beds are still numerous, and transplanting is carried on to but a limited extent. Not only do these beds supply the wants of the people of the lower coast, but small quantities are shipped to the New Orleans market, and poachers, or "pirates," so called, from Mississippi carry away annually hundreds of schooner loads of the shellfish. A fleet of lumber schooners, said to be capable of carrying from 1,000 to 2,000 barrels and supplied with shallops and dredges, effectually comb the beds of St. Bernard Parish. In addition to those thus gathered large numbers are crushed and broken by the dredges, while others are buried in the mud, which covers and smothers them. These oysters thus removed are not culled on the banks, but are carried and sold in the rough, just as they come from the water, to the canneries on the Mississippi Sound for prices varying from 30 to 60 cents per market barrel.

The flavor of these bivalves here taken, although of excellent quality compared with those of the Atlantic States, is by no means equal to those taken from the choice planting-grounds across the Mississippi, going west from the great river. Bayou Cook, Grand Bayou, Bayou Lachute, Timbalier Bay, Last Island, Barataria Bay, Wine Island Lake, Vermilion Bay, and the Calcasieu grounds furnish the best, those of Bayou Cook having the highest reputation in the markets of Louisiana and the neighboring States and bringing a correspondingly higher price.

The manner of cultivation, if it can be dignified by that name, and the methods of fishing and forwarding to market are of the most primitive character, and the capabilities of production have as yet been hardly demonstrated. The fishermen are mostly uneducated Austrians from the Slavonic provinces, commonly known as "Tackoes." Small colonies of them "squat" on any available shore, generally along some stream, bay, or lake emptying into the Gulf, regardless of the ownership of the land, erect their huts, and with the capital of a pair of oyster-tongs, a skiff or two, and a small stock of rough provisions, usually advanced by the dealers in the city, embark in the trade of oyster fishing. Few of them own luggers or engage in the business of forwarding their oysters to market. From time to time they recruit their helpers from the freshly arrived of their countrymen, who, knowing neither the language nor the country, go to "learn the trade" at nominal wages as a sort of apprenticeship, receiving board and lodging, such as it is, as part compensation for their labor. The master fisherman or "captain," as he is termed, thus equipped and assisted, starts out in the planting season and transports from the natural bed skiff-loads of the shellfish, which he deposits in the brackish bayou or lake which he has selected near his cabin, marks his beds of "plants" with stakes to designate his ownership, and keeps "watch and ward" over his possessions until his crop is ready to ship to market. Others do not plant at all, but only fish the natural oysters from the bed and sell to "luggermen."

The planted oysters transferred from the natural beds, where the sea water is very salt, soon feel the beneficial effect of their changed condition. The fresh-water streams, draining the rich alluvial highlands, bring down in profusion infusoria and other low forms of vegetable and animal life on which the young oysters thrive. They commence immediately to fatten and alter the shape of their shells gradually from the lank and slim form somewhat similar to an irregular isosceles triangle, broad at the

hinge and diminishing in breadth, until they narrow down to what is commonly, but erroneously, called the mouth, forming somewhat of a wedgelike contour, to a more rotund or parabolic shape as they grow larger. The rapidity of growth of the Louisiana product is marvelous. In the North Atlantic States it takes nearly three years, as we understand, for the fish to mature from the seed, so as to be marketable. In the Louisiana waters it takes hardly more than one-third of that length of time.

When sufficiently matured, say to an average length between 4 and 6 inches, the time of fattening and growth depending to a great extent on the size when transplanted and the richness and abundance of the food in the locality, the crop is ready for marketing. During the fattening process, however, the plants are subject to a variety of diseases, although not so numerous or so fatal as those in the colder waters of the North Atlantic, nor are they exempt from other destructive agencies. Schools of drumfish and sheepshead prey upon the beds, crushing the shells easily and devouring at times in a single night hundreds of barrels of oysters. Crabs also devour the young oyster, while a number of crustaceous borers and starfish find their way through the shells and kill the young brood. To guard against these depredations, although ineffectually in most cases, pens formed of stakes driven in the bottom of the stream are erected around the plants.

The planting we have alluded to consists in strewing the natural young oysters in thin layers over a hard bottom, which has previously been selected and located, or at times artificially created by deposits of old shells. In gathering or "tonging" the oysters from the natural beds, 20 barrels per day is considered a good day's work per hand. This, however, is rarely reached, owing to the unreliability and inferiority of the labor. The "Tackoes" are not by disposition an industrious people, and, like all the people dwelling near the shores of the Mediterranean and Adriatic, they are inclined to the *dolce far niente*, and are peculiarly sensitive, from their former habits, to the effects of the cold northers of the Gulf. Moreover, they are timid sailors and dread the sudden storms of our southern waters. They are careless and heedless of waste, and it is a common practice, although contrary to law, to "cull" the natural oysters, and for that matter the plants as well, on shore or while under sail from the beds. The fatal effects of this practice will be readily perceived when we state that it consists of scraping and knocking off the myriads of embryos of young oysters which adhere to the older ones, and which should be dropped back into the water upon the beds, to be thus preserved and matured, but instead are dropped on land or in the water away from the beds and there left to die. This is but one example of the ordinary run of the "Tacko" oyster fishermen. Nor is this confined to the people of this nationality alone. It may be said to be general among nearly all the fishermen.

The report of the United States Fish Commission of 1880 says:

The shipment of oysters from New Orleans has hitherto been very small, and principally of fresh oysters. * * * Work is irregular because of the difficulty of getting oysters in sufficient quantity and when needed, owing mainly to the indisposition of the oystermen to work in bad weather.

There are no statistics at hand by which the total of the gathered crops can even be approximately estimated. Prices vary considerably, according to the weather and the season. Small, natural, unplanted oysters, commonly called "coons," suitable for planting, can ordinarily be purchased at from 25 to 60 cents per barrel, delivered free on board at the beds. Fully matured plants vary in price at the plant beds from \$1

to \$2 per barrel, according to the reputation of the place from which they come. These "barrels," however, are what are technically called "bank measure"; that is, 2 "bank measure" barrels make about 3 barrels when sold in market. When the planter finds that this crop is sufficiently matured and fat, ready for market, say six or eight months after being transplanted, he bargains and sells to the "luggerman" on the ground. A few planters own or have their luggers and ship for their own account. The "luggermen" transport their purchase to market, generally to New Orleans. The trip to the city usually takes from two to three days, a part of the journey consisting in threading narrow, shallow, and tortuous bayous. Adverse head winds sometimes delay the passage so long that the cargoes are unmarketable on reaching their destination. Sometimes, where practicable, "cordelling," or hauling the luggers by horse or man power, is resorted to, and at times steam towage, when accessible, is employed, all of which, of course, is an element of further expense.

Arrived at New Orleans, the luggerman disposes of his load to the dealers, who supply the local trade and ship to neighboring cities. Prices range according to the supply. Favorable winds may serve to bring in on the same day a large fleet of oyster-laden craft to "Lugger Bay," as their landing opposite the French Market is called. The market consequently becomes overstocked and glutted. If to this is added simultaneously a sudden change of weather from cold to warm, a not unusual thing in this climate, the luggerman is forced to sell at a very heavy loss on purchase price or unload his cargo into the river. Besides these adverse contingencies, there are the ordinary accidents of navigation, such as grounding and remaining so for several days in the low tides in the shallow lakes and bayous, and storms of several days' duration, when the timid luggerman, who shortens sail ordinarily on the slightest rise of wind, now anchors or "ties up," and awaits its cessation. Then, too, the cargo is in considerable risk of being killed while in transit. A violent collision with the bank or another vessel, a violent hammering on the deck, and even heavy peals of thunder, have been known to "deaden" the whole cargo, and if the weather be warm and the market not close at hand there ensues a complete loss.

With all these disadvantages, however, which could easily be obviated by prudent and proper precautions, and in spite of the heedless, thriftless, and primitive manner in which the trade is carried on, these Austrians amass, in nearly every instance, considerable profits, make what are to them handsome sums and respectable fortunes, and usually retire to their native land, there to live, with their few wants and the Continental cheapness of living, the balance of their lives in comparative affluence for people of their class. These fortunes are ordinarily realized in a few years, seldom more than ten or twelve. On retiring, the fisherman disposes of his hut and outfit, oyster-beds, tools, boats, etc., with the good will of an established business, to some relative or friend whom he has imported to the country for the purpose, or perhaps to some of his helpers who have saved a little money. In some instances good round sums are realized by these sales. In others, the retiring vendor retains a share in the business and draws a portion of the profits, occasionally paying flying visits to this country to look after his interests.

Most of these men can neither write nor read English or any other language, nor do they speak or understand any tongue save Slavonic, and when dealing with those other than of their own nationality require the services of an interpreter. These small fortunes, which they amass in so short a time, generally consist of sums varying from \$5,000 to \$15,000 or more. Considering the smallness of their operations, the light-

ness of the labor, the exceedingly limited character of their business in every respect, the utter want of scientific or practical knowledge of oyster-culture possessed by them, the acquisition of such sums in so short a time is marvelous. And yet when we consider their manner of life and their immense profits, hereafter shown, it is easily comprehended. They "squat" on any lands, public or private, for which they pay no rent. Hitherto they have paid no rent or taxes of any kind. They pay nothing for their oysters if they tong them themselves. They subsist on fish, which are plentiful and easily caught at all seasons, supplemented with poultry, which they raise, and game of all kinds, which abounds at proper seasons. In some cases they reclaim a portion of the marsh land in the neighborhood of their cabins by filling it in and cultivating vegetables thereon. During the "close" season, when only a small quantity of oysters are illegally or surreptitiously marketed, they engage in other profitable pursuits. Their expenses are almost nil, outside of a small account for store provisions and rough clothing, and their proceeds are almost clear profit.

In addition to the sale and shipment of fresh oysters, large profits have been realized by the canneries, which have been established from time to time; but as the oyster supply in their neighborhood has been diminished by indiscriminate and unseasonable fishing, and as the prices have increased, some of these establishments have removed to more favorable and lower-priced localities where their materials could be purchased almost on their own terms. The canned oysters shipped from Louisiana until recently have always been of the poorest and cheapest quality, subjected to the "bloating" process by continued "floating" in fresh water, and then canned by some imperfect process which imparts to them an unpleasant and "woody" taste. All these practices have combined to give Louisiana oysters an unfavorable reputation in markets outside of the State, though when properly prepared connoisseurs have pronounced them equal, if not superior, to the best of Chesapeake Bay or those of any of the other eastern fisheries.

If we turn from this primitive, loose, and careless method in which the oyster industry of Louisiana is at present carried on, and compare it with the skill, industry, and science with which the industry is conducted in the Eastern States and in Europe, and then consider the vast area that the Louisiana oyster-grounds present, the warm waters of the Gulf, the richness of the food, and the numerous other superior advantages which their situs affords, there dawns before us a field for investment, with such rich returns therefrom, as is scarcely presented anywhere else in the wide world in this or any other employment of men and money.

Let us for a moment illustrate the enormous profit accruing to these primitive planters and luggermen. A bank barrel of coon oysters will, when transplanted for six or eight months, increase to 1½ barrels by reason of growth. The coon oysters can be obtained free from the natural beds at no cost except the price of labor. If purchased, they cost 30 cents per barrel. This 1½ barrels is sold to the luggermen at from \$1 to \$2 per barrel at the plant beds. When the luggerman sells at the city market he obtains from \$3 to \$4 per market barrel, 2 bank barrels making 3 market barrels. Thus the bank barrel of fish which the luggerman has bought at \$2 brings him 1½ barrels (market), or from \$4.50 to \$6 per bank barrel. If the planter himself ships he would obtain \$6.00 for what he has paid 30 cents, or obtained for nothing if he fished for them. The same would be relatively true, only with a smaller amount of profit, where natural oysters are transplanted and so kept a few weeks simply to improve their condition by fattening before shipping.

As the trade is at present carried on the planter gets the benefit of the first difference in growth, and the luggerman the advantage of the difference between the bank and the market measure. Thus a person who both plants and markets his oysters, as we have said, would pay 30 cents a barrel bank measure, and from that barrel he would gather $1\frac{1}{2}$ bank barrels of mature, marketable oysters, which, selling at, say, \$3, he would get \$6.60 for what he originally paid 60 cents. In other words, 1 bank barrel of coon oysters worth 30 cents expands into $1\frac{1}{2}$ bank barrels of plants in six or eight months, which is $2\frac{1}{4}$ market barrels, worth from \$3 to \$4 each. At \$3 per barrel the 30-cent purchase becomes worth \$6; at \$4 per barrel, \$9. Of course, these prices are predicated on the lowest buying and selling rates, and on the basis of large purchases and sales in an ordinarily favorable market. These profits would be immensely increased if the spawn were scientifically protected, and the immature oysters were preserved from disease and numerous enemies by proper precautions now universally in vogue in the older countries and fully described in *The Oyster* by Professor Brooks; *Oemler's Life History, Protection, and Propagation of the American Oyster*; the reports of the United States Fish Commission; the reports of the oyster commissioners of many States, and other American and European literature on the same subject.

That the field for investment is an inviting one, and is gradually becoming recognized as such by investors both within and without the State (and must become still more so as the subject is investigated and studied), is shown by the formation of several incorporated companies now engaged in the development of the industry. Outside of many small individual efforts in that direction, several associations have been formed, prominent among which are the Gulf and Bayou Cook Oyster Company, Limited, which owns the major portion of the lands in Bayou Cook and the valuable planting-grounds thereunto appertaining, and also the Louisiana Fish and Oyster Company, the latter of which is now in active operation, and the former will soon be, having just successfully terminated a long litigation with some of the Tacko "squatter" fishermen.

The legislature of the State has just recently passed prudent acts for the protection of the fisheries, reserving the natural beds not heretofore granted for public use during the "open" season, providing for a somewhat proper police, as well as the leasing and selling of the State lands suitable for planting at moderate rates, and exacting a minimum tax to execute the law. The right of fishing for oysters is reserved to the citizens of the State alone. This law—which is imperfect in not closing for a longer period in each year the natural oyster beds, which have well-nigh become exhausted, so as to allow them to recuperate and to be restored to their pristine fruitfulness—will probably be amended and perfected by future assemblies as the legislative mind becomes more educated on the subject, as it has been in the older States that have undergone the same experience in this respect.

The Louisiana legislature at its last session passed a resolution (No. 136 of session acts of 1896) that—

The United States Fish Commission be requested to investigate the oyster-spawning season and report to this general assembly before its next session the exact season of the oyster spawning in this State, and all other facts respecting the same, and whether or not the present existing laws are not injurious to the oyster industry of this State.

Of course such improvement will be strenuously opposed by the uneducated fishermen and the avaricious luggerman and dealer, who look no farther than the present

profits of the day and care not for the future, although if they did but know it they are more vitally and immediately interested than all others in the prevention of the ruin of the fisheries. In pursuance of this resolution the United States Fish Commission steamer *Fish Hawk* will, we are informed, immediately on the adjournment of this Congress proceed to make the investigation requested, and will report thereon to the next general assembly of the State, which meets in May of this year. Without trespassing on or unduly anticipating the recommendations which will then be made, we venture to suggest consideration of the following points:

(1) The establishment by the State of a fishery commission to protect and regulate more effectively the oyster fisheries as well as the fin fish, both salt and fresh.

(2) The establishment of a station by the United States Fish Commission on the Louisiana Gulf coast convenient to New Orleans as a distributing-point for the Gulf and interior States.

(3) The closure for several years of those natural reefs and beds which are now on the point of exhaustion.

(4) A prolongation of the ordinary close season from April 1 to October 1, as it has been shown that this interval of time is used for spawning, which is not confined to May, June, July, and August, as heretofore thought. During the six months of close season suggested the sale of oysters of any kind should be prohibited, whether from private beds or public reefs. Dealers, common carriers, and others should be punished for transporting or dealing in them during the close season, the same as under our game laws. The present law allows the sale from private beds, although ordinances of the city of New Orleans prohibit the sale of oysters of any description from May 1 to September 1 of every year. The allowance of sales from private beds during the closed season opens the door wide to indiscriminate selling and renders the law inoperative and incapable of execution.

(5) Persons found with unculled oysters in their possession in any other place than on the bank should be severely punished.

(6) Every incentive and inducement should be held out by legislation to encourage the culture of the oyster and the use of natural reefs should be confined, as far as possible, to supplying seed, to be planted and improved by cultivation. To that end liberal sales and leases for terms of years should be granted on the public lands and waters suitable for oyster culture. Riparian proprietors should be given and granted the right to plant and cultivate oysters to a certain distance on their water front and other means should be resorted to, in order to offer inducements and accord liberal treatment to capital to develop this enormously valuable industry, which has as yet hardly been touched.

Perhaps obstructions to improvement are always to be expected from the ignorant. In New Jersey, where such extended closure of seed beds was similarly opposed (as it was in France and other countries), the commissioners tell us "all the opposition offered at the outset of this proposed system of protection has now disappeared, and those who were loudest in their protestations have acknowledged their unfounded prejudice and error. All of the seeding-grounds of Delaware Bay enjoy a rest of 9½ months each year. As a result the beds have increased in area and new beds are continually forming, and the supply is increasing to a wonderful extent." If the legislature of Louisiana will follow the wise example of those older communities and

also prevent the use of natural beds except for seeding purposes, and thus compel and induce the proper cultivation of the oyster, a mine of untold wealth will be opened both for her own exchequer and the people.

The difficulties, dangers, and delays of transportation are being rapidly overcome by railways and canals—some already built and others projected—penetrating many of the best oyster regions; and if capital be properly encouraged and protected in its investment, as it assuredly will be, the day is not far distant when the product will be immeasurably increased, the price for home consumption greatly reduced, and an export trade established which will supply the whole of the Western territory of the United States, from the Mississippi to the Pacific coast, at reduced prices. Not only to the capitalist is the field open, but to the skilled oyster-culturists of Chesapeake and Delaware bays, Long Island Sound, and the Connecticut shores the State offers cheap oyster-lands for sale or rent, and a free supply of seed. To all such, with a minimum of capital but with skilled industry and energy, she opens her arms to welcome them to a home on the verge of her "summer sea," beneath skies which hardly know what winter is, and to cheer them on to fortune and her own industrial development. This is no fair-seeming but false promise, but one tendered in all sincerity and based on facts which the writer has been careful to understate rather than to overestimate.

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