SOUND OYSTER GROWING.

CONNECTICUT'S ENTERPRISE IN NEWLY ACQUIRED TERRITORY.

The Shell Fishery Commission's Surveys and Maps—Parcelling Out 250,000 Acres of Deep Water Beds—Interests Involved—Steam Dredging—Enemies of the Oyster.

While the demand for oysters both at home and abroad is increasing from year to year, the fields of production are not increasing at all proportionately. Indeed, the only noteworthy increase is upon the Connecticut shore. Six or seven years ago the oyster cultivators of New Haven, Fair Haven, and Norwalk were in the habit of going over in April and May of each year to buy two-year-old oysters from the beds "off Fire Island way," for their planting. Now the process is reversed. In the past season one New Haven firm alone, J. & G. H. Smith, sold 20,000 bushels of two-year-old oysters for planting in other waters. There are every season in the months mentioned hundreds of sloops in the Connecticut waters after loads of these small oysters, which command 55 or 60 cents per bushel, for the stocking of the beds of Boston, Providence, Long Island, and other points along the coast. It is claimed by the New Haven producers that not only are they able, by the use of the modern systems and appliances which they have adopted, to raise and ship oysters for one-half less than any other producers, but that their oysters are better than any others, and that there are no waters anywhere along the American coast so perfectly adapted to the cultivation of the oyster as the Sound. This last great claim has only within a few years past come to be properly appreciated, and its recognition has been the main cause spurring the State of Connecticut to affirm the right of control over her own shell fisheries, of which she has always, until recently, been deprived by the State of New York.

That control over the waters of the Sound and all therein, which it was claimed was vested in the State of New York by certain ancient patents from the Duke of York and the British Crown, was rather a moral than actual, for the State of Connecticut disposed of its grounds for oyster cultivation in its own way, and managed its coast affairs to suit itself, with little regard for New York's theoretical ownership. But for the better security of tenures derived from the State of Connecticut, it was deemed advisable to have the boundary settled definitely and permanently. Furthermore, New York's assumed control was in certain cases a shield for illdoers. Thus, for instance, a prize fight took place a few years ago on Charles Island, a little patch of land in the Sound, which can be driven to in a wagon from the Connecticut shore at low water, and the participants, who were arrested by Connecticut officers and soldiers, escaped punishment by claiming that their offence, if any existed, had been perpetrated within the jurisdiction of the State of New York.

The first step toward a proper fixing of the boundary line of Connecticut through the Sound was a suit begun in the United States Supreme Court by the State of Connecticut against the State of New York in 1878. Soon afterward each State appointed a boundary commission. Allen C. Beach, Secretary of State, A. Schoonmaker, Jr., Attorney-General, and Horatio Seymour, Jr., State Engineer, represented New York; and the Hon. Ralph Ingersoll, the Hon. Lafayette S. Foster, and the Hon. William T. Minor represented Connecticut. These gentlemen agreed upon a line running substantially through the centre of the Sound from a point opposite Byrams Point to near Fisher's Island, where it was agreed that the waters that island under the jurisdiction of New York, and thence easterly to the Massachusetts line. It was provided that no fishing rights or State grants extant before the agreement should be affected by it. The agreement was ratified by both States, and submitted to Congress. In April last the State of Connecticut set on foot measures for the proper utilization and control of her new property by the passage of a law conferring on her Board of Fish Commissioners powers as a Shell Fishery Commission.

MAPPING OUT THE WORK.

This Fish Commission has been in existence fifteen years, and was the pioneer in New England in the work of restocking the rivers with salmon, shad, black bass, trout, and smelt. Great success has attended its labors, and as it has always been composed of gentlemen of ability and high character, it has achieved great practical good for the State, with a careful economy such as is seldom shown by State Commissions. The present Commissioners are Dr. W. M. Hudson of Hartford; Robert G. Pike, Judge of the City Court of Middletown; and G. N. Woodruff, farmer and fish cultivator, of Sherman. To these gentlemen was confided, by the act of April, 1881, the establishment of a system for the regulation for all time of the property of the State under the waters of the Sound and the oyster beds that may be formed thereon. They accepted the highly responsible duty with a good deal of hesitancy, but have discharged it so successfully as to win the cordial approval and endorsement of all who are acquainted with the results of their labors. Their first duty was to procure a survey and map of all the grounds suitable for the cultivation of shell fish in the Connecticut waters of the Sound. To this end they employed Mr. J. F. Bogart, a civil engineer of New Haven. Mr. Bogart made arrangements with the late Capt. C. P. Patterson, Superintendent of the United States Coast and Geodetic Survey, for tracings from the original charts of the Connecticut shore, which are on a scale of 3½ inches to the mile. These tracings make a continuous map which, if put together, would be sixty-four feet in length, and have a projection showing each minute of latitude and longitude, all triangulation points located by the United States Coast Survey, and the hydrography of the bottom of the Sound. The Commission also provided with complete descriptions and sketches of the triangulation points, and their surveys will be connected with the Coast Survey triangulation points, so far as such points may be found. This gives the Commission a full control of the astronomical work of the Coast Survey, which will enable the engineer of the Commission to compute correctly the latitude and longitude of any required point. In completing the maps, all points will be plotted by their geographical position, thereby securing perfectness of results and the greatest possible perfection of map work. With this help from the Coast Survey, not only has a great expense been avoided, but surveys and location of grounds are now so far advanced upon the Commissioners' maps that they are ready to dispose of tracts at many points along the shore. The income from the sale of lots will more than pay all expenses.

The Commissioners have had to run a line along the shore, following somewhat nearly the indentations of the coast, inside which the control of the grounds remains, as it has heretofore been, under the jurisdiction of the several towns on the coast. The fixing of this line has been, to a great degree, left to their discretion, and they have seen fit to deal liberally with the towns. Outside it, as far as the boundary line fixed by the Inter-State Commission, the grounds belong to the State, and can be only acquired through letter of by and purchase from the Shell Fishery Commission. It is roughly estimated by the Commissioners that there are within these lines, between the town tracts on one side and the boundary line on the other, about 250,000 acres of good bottom available for oyster cultivation. Perhaps it will not be more than 200,000 acres. But, even at that lower figure, what an enormous prospect of possibilities opens when the yield of oysters from the comparatively diminutive area now cultivated is taken into consideration. From the data gathered by Mr. Ernest Ingersoll for the last census, it appears that in 1879 there were employed in oyster cultivation east of New Haven 845 acres, at New Haven and Milford 2,600 acres, and at Bridgeport and westward in Connecticut waters 3,485—in all only 6,931 acres. In that year, and it was a poor one for the oyster trade, there were taken from these beds 500,000 bushels of Virginia transplanted oysters from Virginia seed and 270,000 bushels of natives. Since then the acreage in use has been increased, and the yield last year was much greater. But it will answer to imagine even 200,000 acres producing oysters at even the rate of 1879.

DEEP WATER BEDS.

One great discovery of late years, that of the practicability of dredging with profit of the oyster, has made possible the utilization of much of this ground at depths which used to be deemed far too great. While the "Virginias" have to be planted in shallow water, the "natives" can be cultivated successfully six, eight, and ten fathoms deep. Indeed, the Commissioners have now before them an application from one man for an allotment of 1,000 acres, five and a half miles off shore, opposite the town of Madison, where the depth at mean low water is fourteen fathoms. This far, out of the 140 applications received by the Commissioners, asking for the allotment of about 32,000 acres of ground for oyster culture, not one has been located where the water was less than four fathoms. This indicates not only a purpose to grow more largely hereafter the native, instead of the "Virginias," but that the men now contemplating the extension of their present business or new enterprises in this field are large operators who propose to employ steam power and cultivate upon a grand scale. It is well understood that some of them, fearing to put even a thousand acres into cultivation, and fearing that the Commission might refuse to grant so large tracts to individuals, have made their applications in several different names, with the purpose of consolidating the grants so obtained. It is the policy of the State to put these grounds, as far as possible, in the hands of a great number of small proprietors, rather than dispose of them to a few large growers, but the franchises granted are perpetual, and there appears to be no way to effectively carry out this policy. Some of the small growers are indeed apprehensive that the natural tendency of the business, through the employment of steam power for its prosecution, will be to gravitate into the hands of the great proprietors.

When Mr. H. C. Rowe of Fair Haven introduced the steam dredge, the William H. Lockwood, ancient oystermen commiserated his folly and prophesied his discomfiture. But a single season demonstrated so successfully the advantage of the new system that a number of steam dredges were contracted for by other growers, and now there are in operation two at Fair Haven, one at New Haven, two at South Norwalk, one at Rowayton, one at Greenwich, one at Milford, and several others are building for the coming oyster season. Mr. Rowe's boat is capable of dredging up 500 bushels of oysters a day. When she is at work her dredges keep ten men busy on deck sorting the oysters from the trash. It has been considered that one man had about all that he could do, dredging by hand, to attend to two, or at the outside three, acres of oyster beds, but here are men now in the business who, with a dozen or so hands and a steam dredge, cultivate four or five thousand acres. H. C. Rowe & Co. planted last year 75,000 bushels of oysters, and this year 100,000, intend building another dredging steamer, has fifty acres of barring ground ready to take up 75,000 bushels of two-year-old oysters next April and May besides their regular trade through the fall and winter. They are probably the largest growers in Connecticut, cultivating, it is understood, nearly, if not quite, 3,000 acres of ground; but there is at least one other dealer, Mr. H. J. Lewis, who planted 50,000 bushels this year and a number put down from 3,000 to 10,000 bushels of seed oysters each. It certainly does appear as if the little people had some reason for looking with a degree of apprehension toward the future. The small dealers, have, however, one advantage at least, which may be regarded as a compensation. There are along the coast natural oyster beds, of which the largest is probably that off Stratford, covering about 2,000 acres at three fathoms of water. Although worked a few months in the year by a fleet of 75 or 100 sail, it seems practically inexhaustible.

Under the old system of obtaining oyster grounds from the towns, each voter being the theoretical possessor of two acres of the public domain under water, the plots granted were of all sizes and shapes, run in such irregular lines that a map of them looked like a Chinese puzzle more than anything else, and it must have been almost impossible for dredgers to avoid at times trespassing upon the property of their neighbors and thus begetting disputes, reprisals, and law suits. As the Commissioners do not propose to meddle with town locations inside that coast and headland line, their regular and perfect work will not directly affect the old-time confusion in town designations, but it will at least set a good example. The Commissioners' plots are all laid out, or will be, on true east and west and north and south lines, so that all the plots are rectangular. The intention is, as far as possible, to make the lots 1,500 by 3,000 feet each—containing 103 2-10 acres—the long way of each lot being in the direction of the tide. In some places they have had to allow for cutting up, but nothing less than fifteen acres do they deem worthy of their consideration.

HOW GROUND IS OBTAINED.

The mode of obtaining ground under the new law will be as follows: The person desiring ground must make application in the prescribed form of a blank, legally approved by the Shell Fishery Commissioner of the State, setting forth the quantity of ground he wishes, describing exactly where it is, and showing that it is not and has not been within ten years a natural oyster, clam, or mussel bed. A notice, which includes a exact copy of that application, is sent to the Town Clerk of the town opposite where the ground is said to lie, and must be posted in a conspicuous place in his office for twenty days, in which time objections to the grant, if there are any, must be lodged. If no objections appear, the Commissioners are authorized to give the applicant a deed of the ground, upon his paying the State $1 per acre therefor and the expense of surveying and inspecting the plot, which is usually at a charge of ten cents per acre. If any objections are filed with the Town Clerk they must be returned with the application to the Commissioners, who will institute an investigation and decide the matter as seems to them just and lawful.

Grounds have been objected, either that the grounds applied for are natural beds, or that some person claims ownership by virtue of many years' possession and enjoyment, or under a deed from the town. Fifteen years' possession is held to confer rights of ownership, in the interest of peace. The law designed to give to private individuals of natural shell-fish beds, the law is especially severe, prescribing that the Commissioner who knowingly does such a thing shall be subject to a fine of not less than $100 nor more than $500, and that the person illegally obtaining such natural beds knowingly shall lose his designation and forfeit all he has paid for it. Provision is made for the return of a purchaser's money in case his designated ground proves to be unfit for the cultivation of shell fish, and to prevent speculation in grounds, the assessment of ground and holding it indefinitely for a rise in value instead of for honest work, there is a clause compelling the cultivation of ground within five years from its allotment. A clause in the bill prescribes that no person can hold more than 5 acres from any other citizen of the State, unless he has been a resident of the State for one year prior to his entering upon such possession. This clause the Commission will probably ask the Legislature to strike out. Not only is the narrow prescription an offensive feature, but it may be the means of preventing which it would work great injury to persons desirous of retiring from business and to heirs, besides shutting out much desirable capital.

The maps and surveys of the Commission are now well advanced, and before long the English and American oystermen will be busy at the work of locating flat corners in the water by the sextant, which will necessitate the determination of marked points along the shore. It is his intention to determine the exact position of many of the summer resorts, church steeples, and other conspicuous and commanding points along the shore, as good objects to sight from the water. It may also be found necessary to erect permanent signals of considerable size along some parts of the coast, but this will be avoided as far as possible, on account of the unsightliness. The law provides for the plain marking out of designated grounds by the grantees by permanent "stakes, buoys, ranges, or monuments," so that hereafter, or rather, after operations are fully commenced under this law and Commission, there need be no more confusions of property lines on ground which under the