

Strong pillars of wood were driven into the mud and sand; arms were added; the whole was interlaced with branches of trees; and boughs were hung over the beds on ropes and chains, whilst others were sunk in the water and kept down by a weight. A few boatloads of oysters being laid down, the "spat" had no distance to travel in search of a home, but found a resting-place at the moment of being exuded, and "grew and grew" till with fullness of time it became a marketable commodity.

But the history of this modern phase of oyster-farming, as practised on the foreshores of France, is so interesting as to demand a rather detailed notice, for it is one of the most noteworthy circumstances connected with the revived art of fish-culture that it has resulted in placing upon the shores of France an almost countless number of fish-farms for the cultivation of the oyster alone. It is no exaggeration to say that about thirty years ago there was scarcely an oyster of native growth in France. The beds had become so exhausted from overdredging as to be unproductive, and totally unable to recover themselves, so far as their power of reproduction was concerned. As an illustration of the overdredging that had prevailed, it may be stated that oyster-farms which previously employed fourteen hundred men and two hundred boats, and yielded an annual revenue of 400,000*fr.*, had become so reduced as to require only a hundred men and twenty boats. Places where there had at one time been as many as fifteen large oyster-banks, and great prosperity among the fisher class, had become almost oysterless, and the people were consequently in despair at the loss of this favourite adjunct to their banquets, and had to resort to other countries for such small supplies as they could obtain. It was under these circumstances that M. Coste instituted that plan of oyster-culture which has been so much noticed of late in the scientific journals, and which appears to have been influenced by the mussel-farms in the Bay of Aiguillon and the oyster-*parcs* of Lake Fusaro—so far, at least, as the principle of cultivation is concerned. At the instigation of the French Government he made a voyage of exploration round the coasts of France and Italy, in order to inquire into the cultivation of the sea-fisheries, and to see how these marine fisheries could be artificially aided, as the fresh-water fisheries had been aided through the rediscovery by Joseph Rémy of the long-forgotten art of pisciculture. Lake Fusaro, one of the places he visited, is devoted to the highly profitable art of oyster-farming, yielding (as has often been published) from this source an annual revenue of £1,200. The mode of oyster-breeding was to erect artificial pyramids of stones in the water, surrounded by stakes of wood in order to intercept the spawn, the oysters being laid down on the stones (see sketch). Fagots of branches were also used to collect the spawn, which, as I have already stated, requires within forty-eight hours of its emission to secure a holding-on place, or be lost for ever. I enclose a rough sketch giving a general view of Lake Fusaro, showing here and there the stakes surrounding the artificial banks, the single and double ranges of stakes on which the fagots are suspended, and at one extremity the labyrinths, in the face of which is a canal, of from $2\frac{1}{2}$ to 3 mètres broad and $1\frac{1}{2}$ mètres deep, joining the lake to the sea. A smaller lake communicates with the canal. The pavilion in the lake is the ordinary residence of the person in charge of the fishery.

The plan of the Fusaro oyster-breeders struck M. Coste as being eminently practical, and suitable for imitation on the coast of France. He had one of the stakes pulled up, and was gratified to find it covered with oysters of all sizes and ages. The Lake Fusaro system of cultivation was therefore, at the instigation of Professor Coste, strongly recommended by the French Government to the French people as being the most suitable to follow, and experiments were at once entered upon with a view to prove whether it would be as practicable to cultivate oysters as easily among the agitated waves of the open sea as in the quiet waters of Fusaro. In order to settle this point it was determined to renew the old oyster-beds in the Bay of St. Brieuc; and, notwithstanding the fact that the water there is exceedingly deep, and the winds very violent, immediate and almost miraculous success was the result. The fascines laid down soon became covered with seed, and branches were exhibited at Paris and other places containing thousands of young oysters. The experiments in oyster-culture tried at St. Brieuc were commenced on part of a space of 3,000 acres that was deemed suitable for the reception of "spat." A quantity of breeding-oysters was laid down either on the old beds, or on newly-constructed longitudinal banks. These were sown thick on a bottom composed chiefly of immense quantities of old shells—the "middens" of Calcaire, in fact—so that there was more than ordinary good chance for the spat finding at once a good holding-on place. And here I may say that, when coming down the coast and strolling about Waikanae and its vicinity, it has often struck me what admirable material there was there for oyster-culture, as almost everywhere on the sea-coast you find hillocks of old shells. I trust they may some day be utilised for the purpose for which they seem so specially intended. To continue, however, the remarks about St. Brieuc: Over some of the new banks fascines made of boughs tightly tied together (our own manuka would be admirable for this purpose) were sunk, and chained, so as to intercept such portions of the spawn as were likely to be carried away by the force of the tide. In less than six months the success of the operations was assured, for at the proper season a great fall of spawn had occurred, and the bottom shells were covered with the spat, while the fascines were so thickly coated with young oysters that an estimate of 20,000 for each fascine was not thought an exaggeration.

OYSTER-PARKS.

Twelve months before the date of the experiments above described at St. Brieuc the artificial culture of oysters had successfully commenced on another part of the coast—namely, the Île de Ré, near La Rochelle, in the Bay of Biscay, which may now be designated as the capital of French oysterdom. It is curious to note the very rapid growth of the industry of oyster-culture on the Île de Ré. It was begun so recently as 1868, and there are now upwards of 4,000 *parcs* and *claires* upon its shores, and the people may be seen as busy in their fish-parks as the market-gardeners of Kent are in their strawberry-beds.

I am now going to show how an ordinary working-man can, and often does, take the initiative in introducing a national industry, and show by a practical example what can be done.

Oyster-farming on the Île was inaugurated by one Beuf, a stonemason. This shrewd fellow, who was a keen observer of nature, and had seen the oyster-spat grow to maturity, began think-