H 4

No. X.

A PAPER
ON THE IMPORTANCE OF ENCOURAGING
THE
IRISH FISHERIES
AS AN
INDUSTRIAL RESOURCE,

READ AT AN EVENING SECTIONAL MEETING, 23RD JANUARY, 1847,

By J. C. DEANE, Esq., M. R. I. A.

IN occupying the attention of a Society for the promotion of national industry, I might at any time calculate on your indulgence towards such suggestions as I might be enabled to offer for the development of an important branch of our industrial resources; but at a period like the present, when a want of food presses upon all classes of the community, I may perhaps claim a more earnest and favourable consideration in submitting to your notice some facts regarding those great stores of food which Providence has placed around our shores, actually within our reach, unused and unavailable,—I mean the fisheries. They have been from time immemorial a source of supply, sometimes to ourselves, at other times to neighbouring nations, but never to the extent to which they might have been cultivated.

In our earlier records concerning the state of the Irish fisheries, I find that a Statute was framed in the reign of Elizabeth, prohibiting foreign vessels from fishing in our seas without a license; and in the reign of Mary, the King of Spain was allowed by her Majesty to fish on the coasts of Ireland, for which he paid £3000 per annum into the Irish exchequer. In Charles the First's reign the Dutch paid £30,000 for liberty to fish during the summer of 1635 in the British seas; and, no doubt, drew large supplies from the rich treasures of our Irish seas. Indeed it is likely that they fished with more success on the coasts of our island than on those of England and Scotland, for during the prevalence of the wars of that period, there was less liability of their being interrupted in their pursuit. It is

well agreed, however, by all those who have written upon the subject, that from the British and Irish seas the Hollanders drew their wealth and greatness; "not," says a learned writer, "that they are to be quarrelled with, but rather commended for their industry, and we justly reproached for our sloth and negligence in not partaking of such a blessing which Providence has thrown at our doors." In 1650 Sweden also sent one hundred vessels to fish on our banks, having been permitted as a favour so to do, so little did we then know of the value of our fisheries. The deplorable condition of the British fisheries in the reign of James the First called forth the able advocacy of no less a personage than Sir Walter Raleigh, who addressed His Majesty on the subject, and in dwelling on the inestimable riches of the British seas, says: "That our sea and land commodities enrich and strengthen other countries against our own; and in the great sea business of fishing the Hollanders employ near 20,000 ships on the coast of England, Ireland, and Scotland, and are enabled, and do build one thousand ships and vessels yearly, having not one timber-tree growing in their country, nor home-bred commodities to load 100 ships, and yet they have 20,000 ships and vessels, and all employed. That by twenty busses are set on work 8000 persons by sea and land, and an increase of 10,000 mariners. That the mighty huge fishing that ever could be heard of in the world is on the coasts of England, Scotland, and Ireland; but the great fishery or practice thereof is in the Low Countries, and other petty states, wherewith they serve themselves and all Christendom." Of the fact, that the riches of the nation could be materially increased by a successful prosecution of the fisheries, Sir Walter appeared to be fully sensible, and urged the necessity of advancing and cherishing the interests of the fishermen in the following cogent reasons: "First," said he, "they are useful for taking God's blessing out of the sea; secondly, for setting the people on work; thirdly, for making plenty and cheapness in the realm; fourthly, for increasing ships to make the land powerful; fifthly, for a certain nursery for breeding and increasing mariners; sixthly, for making employment for all sorts of people, as blind, lame, and others, by sea and land, from ten or twelve years and upwards; seventhly, for enriching your Majesty's coffers by merchandize returned from other countries for fish and herrings; eighthly, for the increase and enabling of merchants, which now droop, and daily decay." Sir William Temple, in a letter addressed to Lord Essex, in 1673, says that the fisheries of Ireland "might prove a mine under water, as rich as any under ground;" and he went so

far as to propose that no one "should be eligible to sit in the House of Commons, or be entitled to the commission of the peace, unless he had taken a practical part in the management of that branch of our industry." Of the policy of this suggestion I leave you to judge. It is, however, certain, from the opinions at least of those who thought upon the subject in those times, that the value of the fisheries was unappreciated, and deplorably neglected by our country, to the immeasurable wealth of others, and to our own shame.

While the minds of men of speculative genius were thus directed to the subject, our Legislature, as might naturally be expected, was not inattentive to the encouragement and extension of the Irish fisheries, as objects of importance in a national and commercial point of view; and before I proceed to consider their existing state, I shall very briefly glance at the progress which they have made through the medium of legislative assistance.

In the reign of George II. (the earliest Statute which I think it necessary to refer to) an Act was passed for the encouragement of the coast fisheries; and about this time Mr. Doyle, an hydrographer, discovered a most valuable and productive fishing-bank off Waterford, where he fished with the greatest success. He named the bank after his boat, "the Nymph," and being then about to publish a chart of the harbour of Waterford, he made sketches of the various headlands, with their bearings from the bank, which he engraved for the chart. Mr. Doyle made certain proposals to supply the English markets with fresh fish, but they were not then put into execution.

In the third year of the reign of George III. the system of bounties was first adopted by the Irish Parliament, and twenty shillings per ton was granted on all deep-sea fish; but a subsequent Statute (the 25 Geo. III.) limited this bounty to "fish for curing, and the consequence of this change was great distress among the fishermen; and on the 19th March, 1789, a petition was received from the Skerries fishermen (the principal body), complaining of having been ruined by fishing for the bounty on the North-west coast under the new law, and praying for aid to pay their debts, and carry on the fishing for the Dublin market.* The 41 George III. granted the large sum of £30,000 for bounties for supplying fresh fish to the English markets, which induced another attempt to be made to fish "the Nymph Bank," Mr. Frazer being selected to carry out the experiment, the Irish Government coming forward

* Commentaries on Ireland. Second edition.

most liberally in its aid. It appears, however, that the project was sacrificed to party purposes. In the year 1803 the Marine Society offered their assistance to the Nymph Bank Company, which offer was rejected; and the Society, determining to fish on their own account, sought an Act of Incorporation, but not having succeeded in obtaining it, their intention was frustrated. Mr. Frazer is reported to have continued to fish upon the Bank with some fair success, but in the year 1804 the Company was dissolved. Various enactments, from the year 1776, extending over a period of ten years, were passed for the encouragement of the Irish fisheries. In the year 1786 the bounty was raised to 4s. per barrel, and premiums were offered for the four greatest quantities of herrings taken between the 1st of January and December the 31st of that year; and after this several Statutes continuing the old bounties were passed, until the year 1819, when the Irish Fishery Board was formed.

In that year a bounty of £2 10s. per ton was granted to the owner or person chartering or hiring any vessel of fifteen tons or upwards, for fishing and curing fish, but not to be paid for any greater number of tons than sixty. There was also a bounty on whale-oil and whalebone. In 1820 the tonnage bounty was increased to three shillings per ton; and in 1824, by the 5 Geo. IV. c. 64, that on production was reduced to four shillings per barrel for herrings, to be annually reduced one shilling per barrel, and to cease finally in 1829; and the tonnage bounty, by an annual abatement of five shillings per ton, was also directed to be discontinued at the same time. The system continued, however, to operate till April, 1830.

Grants for repairing and constructing piers and harbours, and for repairing poor fishermen's boats, were distributed from the year 1819 to 1830, £5000 per annum being placed at the disposal of the Commissioners for that purpose. Loans to fishermen, part of an accumulated fund, was set apart by the Board to assist in repairing the boats and furnishing gear; but great difficulty was experienced in administering the system to advantage: frauds to a very great extent were practised, and the loans were discontinued. The residue of the grants vested in the Fishery Board was, after the dissolution of that body, first entrusted to the Board of Inland Navigation, and shortly afterwards to the Board of Works. In the year 1835 a Commission was directed to inquire into the state of the Irish fisheries; and in 1836 they furnished a most valuable Report, which contains an immense mass of information, being the evidence and experience of all those who were then engaged in the fisheries, or likely to know much about them. In the year 1842 an

Act was passed, 5 & 6 Viet. c. 106, which provided for the registry of fishing vessels, under which, (with a more recent Statute (the Piers and Harbours' Acts), which I shall have occasion to refer to before I conclude), our coast fisheries are at present managed.

I believe this shortly brings before you the legislation which was provided for the encouragement and promotion of our fisheries. The most important of those enactments was that which encouraged the building of vessels for the fishing trade, by giving bounties on production and tonnage. During its continuance there can be no doubt that a stimulus was given to the energies of the fishermen; but, upon the other hand, it gave rise to a perpetration of frauds and evasions which were by no means calculated to forward the true interests of the trade, or improve the moral condition of those engaged in its pursuit. It is unnecessary for me to discuss the various opinions which have been expressed in favour of or against the revival of the system; they may be shortly summed up by stating, that those who approve of it contend that during its continuance our fisheries progressively improved, and that by the abrupt withdrawal of that encouragement, they have declined and become depressed in their condition; while those who disapprove of the system say, that capital was not supplied through the medium of the bounties, but that they operated merely as premiums on the result of the very small portion of capital then embarked in the trade, but did not tend to increase the capital so employed. To the existing state of the fisheries, and the value of encouraging them as an industrial resource, I now have to direct your attention. At the present period of dearth and scarcity, when we are compelled by necessity to seek for every available mode of subsistence for our famishing poor, it is justly a matter of surprise that they have not been more looked to as a source for providing food of a cheap and nutritious character. It has been remarked that, during the past year, the supply of fish on all our coasts was much more abundant than it has been for many years, and the weather has not proved unfavourable for their capture.

"In the year 1782" (writes Mr. Knox), "when the Western Highlands of Scotland suffered so much from famine, the annual arrival of the herrings had never been known to fail completely till that remarkable year, when those little visitors seemed to conspire with the seasons in order to rouse the notice of the Government towards those distant shores. While the elements kept back or destroyed the regular produce of the earth, the herrings abandoned their well-known ground, di-

reected their course towards the Irish Channel, or stopped there after their annual progress round the Land's-end; and whence the Highlanders, not being provided with proper vessels, were unable to follow them. But this was not all: whilst the people were deprived of grain, roots, milk, vegetables, and herrings (their usual food in good seasons), an almost uninterrupted succession of storms, such as had not happened within the memory of man, prevented them from attempting the white fishery; neither, had the weather been moderate, could they go out without the means of subsistence: thus a double famine arose."

Comparing, then, the state of Ireland at the present moment (suffering heavily as she is under the dispensation of Providence), with that of the Western Highlands in 1782, it will be admitted that we have not been as severely dealt with. Countless shoals of herrings abounded on our coasts and in our harbours, creeks, and inlets, during the summer of the last year; and they have been sometimes absolutely used as manure for the ground for want of salt to preserve them. We have had no hurricanes to prevent our fishermen from following the fish, and yet we hear the cry of starvation in our maritime counties—ay! and much louder (as, for instance, in the western part of the county of Cork) than in any other part of the country. Surely there must be something wrong in all this! Cannot the evil be arrested, and the progress of famine in some measure stayed, by providing means for our people to make use of the food with which God has enriched our seas; and while we seek to meet adversity, and to turn to proper account this great article of subsistence, should we not endeavour to cultivate and permanently extend the fisheries as one of the best resources of our national industry?

The quantity of fish which we use for our home consumption is very great, and I may say almost all the cured fish which we consume is imported from Scotland, to whom we have long been steady and well-paying customers. Of this some idea may be formed, when I tell you that the supply of herrings yearly furnished by Scotland to us is very nearly equal to that which she exports to the rest of the world besides. From April, 1844, to 1845, she sent us cured herrings to the extent of 120,293 barrels, many of the contents of which were probably taken from our own seas, cured by her, and sold to us. Scotland, not blessed with the same advantages which we possess in soil or climate, derives a large revenue from the industrious prosecution of her fisheries; while Ireland, with land, and good land too, in waste, capable of raising grain in abundance, and

having fisheries just as productive, if not more so, neglect them, and suffer them to be used for the enriching of others.

Are the fisheries properly pertaining to Scotland more abundant than our's? Yes, because their industry is greater. Are their harbours, more than our's, safe and accessible asylums for the refuge of their fishing craft? Yes, because, naturally inferior, they have been made industrially superior to our's by the construction of piers and harbours of refuge. Is there a deficiency in labour to work the fisheries advantageously? The Census, I apprehend, will answer, No. Or, again, is the success of the Scotch fisheries, as compared with our own, to be attributed to any Government aid extended to them? I would say not; for, with the exception of the mere superintendence of the Fishery Board, and a small distribution in the way of grants to fishermen for repairing their boats, the fisheries have to depend on the industry of those engaged in the pursuit. What, then, is the true cause of the depressed state of our Irish fisheries?

To the consideration of this question I shall now apply myself, and I hope to be enabled to shew that Irishmen possess means within themselves to place their fisheries upon a firm and comprehensive basis, and to make them, like those of Scotland, a source of abundant wealth.

Our fisheries (at least for my present purpose) may be conveniently divided thus :

- Our In-shore Fishery ;
- The Deep-Sea Fishery ;
- The Salmon Fishery ; and
- The Oyster and Lobster Fisheries.

To the two former (as being the main sources from which we may expect to derive wealth by the prosecution of them) I would more immediately call your attention this evening.

The In-shore Fishery is that from which we receive the general supply of fresh fish for home consumption, and is chiefly carried on in smaeks, wheeries, and hookers, from five to twenty tons burden, and in smaller boats and yawls. In the more remote fishing districts, with some exceptions, the character of the fisherman partakes of that of neither sailor nor fisherman ; in most instances, properly speaking, he is an agricultural labourer, following fishing more as a temporary resource than as a trade. It may be, that the general proprietorship of land, even among the more humble of our population, has strengthened the inhabitants of our maritime districts in this particular, and may have exercised an influence on the regular and profitable prosecution of this branch of our industry. The absence of a steady daily market for the supply has tended

materially to originate this mischief; for the fisherman, uncheered by the hope of being enabled to dispose of the produce of his labour, becomes indolent and apathetic in the pursuit of fishing, and naturally seeks in other occupations a more certain return for his industry. Besides, if he does succeed in taking a large quantity of fish, he has neither the means nor the facility to transport it to the more inland towns, where he would be certain of disposing of it; and even those who purchase fish (the kedgers, as they are called on the western coast) are not enabled to bring it from remote districts soon enough to market, or in a sufficiently fresh condition to ensure a remunerative price. Again, the fisherman, generally speaking, is totally ignorant of the art of curing; and when the supply is greater than the demand, he has no capital to purchase salt to preserve it; and mayhap if he had, it is not to be procured in his locality. This, combined with a want of the knowledge of curing, and the absence of a steady demand, drives him, as I said before, to other sources of employment; and steadiness of demand, amongst a population who are not wealthy, cannot be expected for an article of comparative luxury, such as fresh fish, more particularly amongst the portion of the inland population, subject as hitherto to existing difficulties of supply. But these observations, so far as regards the sale of fresh fish, only apply where there are no markets, and where the facility of carrying it to market does not exist. Wherever these two great desiderata are supplied, proportionate success must attend the fisheries, and stimulate the energies and enterprise of those engaged in them.

The fishing establishment at Dunmore is an interesting proof of the truth of this. In the year 1840 Mr. Strangman of Waterford, with one or two other individuals, associated in the purchase of two fishing vessels, of about thirty-five tons burden, and brought over some experienced men from the southern coast of England to carry on the trawl-fishing on that coast. Dunmore possesses a most excellent and commodious harbour, from whence Waterford is but distant twelve miles, and from thence first-class steamers start weekly for the principal English ports. A short experience proved to Mr. Strangman how valuable the fisheries were on the coasts adjacent to Dunmore, and he was enabled to shew a return of twenty per cent. upon the capital expended. This soon induced others to follow his example; and upon my visiting Dunmore in the early part of last year, I found twelve vessels of from thirty-five to forty tons permanently engaged in the deep-sea trawling.

A regular supply soon generated an increased demand;

and fish-dealers for the English market soon established themselves in Waterford. They purchase the fish readily from the boats, pack it in ice, and, having facility of transit by the steamers, send it to London, Liverpool, and Bristol. The men occupied in these vessels receive a share in the produce caught (being the only true means of encouraging steady industry), and thus, meeting with a certain demand upon their arrival from fishing, they are naturally led on to increased exertion and enterprise. Mr. Strangman told me that the English dealers pay for turbot 10*d.* to 1*s.* per lb., and for sole 4*d.* to 5*d.* To steady markets and great facility of transit thereto may be attributed these high prices: and it is truly painful to contrast the pleasing effects produced by these means with those observable in the more remote districts, where such advantages do not exist. In Crookhaven, on the south-western coast of Cork, I have often purchased a large-sized turbot for 1*s.*, and soles for 2*d.* and 3*d.* each, which, it is obvious, would never have been disposed off at such a price if the fishermen could have reckoned with any degree of certainty on a more remunerative market.

With these few remarks on the state of our In-shore Fisheries, I now pass to consider the state of the Deep-Sea Fisheries, which may indeed be said to be altogether neglected and untried; not that there is any lack of a due appreciation of their importance and productiveness, but that the want of capital among those who are aware of their value prevents them from being prosecuted and made a source of abundant wealth. The deep-sea banks (at least so many of them as have been discovered) lie generally at a distance of some thirty or forty miles from the shore, and abound with quantities of cod, ling, and haddock, the right to fish which banks is in ourselves; but in the ill-found, crazy, and undecked boats of our fishermen, it would be useless, as well as hazardous, to attempt this fishing, and the cost of a vessel suitable for carrying it on is a sum absolutely unattainable to them. With fishing gear complete it would amount to at least £650; and thus, from the absence of capital engaged, the deep-sea fisheries afford us little, if any, of their valuable produce; but we must not forget that, with vessels equally costly, the Dutch ("without one timber-tree growing in their country") for centuries have been in the habit of adding such a large amount to the wealth of their state.

Upon the one hand, then, we have our In-shore Fisheries carried on to a very limited extent, and the supply therefrom uncertain, principally in consequence of the want of markets and means of conveyance to them; added to which there is a

lamentable ignorance of the curing art, and an utter absence of the means of carrying it on: and on the other hand we find our extensive deep-sea banks are left untried and uncultivated, in consequence of the want of capital to supply vessels of an adequate size for the prosecution of that fishery. How are these evils to be remedied—by what or by whose instrumentality? Some urge the necessity of Government interference, and even go so far as to call for a revival of the bounty system; others look to the establishment of joint-stock companies, who would supply boats, as the best means to effect improvement in the fisheries; while to the combination and association of capital by a few individuals attached by local interest to the fishing station (which may be legally called a local partnership), do others look for any certain success.

And first, with respect to Government interference, a step, and a most wise and salutary one, has been already taken by the Commissioners of Fisheries, that is, the Board of Works, who, finding the great evils which arose on the western coast from a want of a steady daily demand, have established three stations for the purchase and curing of fish. The places (where I may say by this time their operations are already commenced) are Roundstone, Belmullet, and Killybegs. Salt has been stored, competent curers have been employed, the necessary means and appliances for curing erected, and the Government, through its officers, intend for a limited period to become the purchasers of fish, but only in the event of there being no other purchasers in the market, and then at a fixed and fair price; thus, with the smallest possible amount of interference, to create a market for the fisherman, and, by example, stimulate his industry and arouse his energies. A small supply of lines and hooks will be deposited at each station; every facility will be afforded to our native fishermen to learn curing; and the fish, when cured, packed, and barrelled, will be sold; and, by showing that a remunerative price can be obtained, men of enterprise, combining in a spirit of mutual confidence, may be induced to follow the example thus set by the Government. As far as I am enabled to offer an opinion on the subject, I look to this move as one of the surest steps to the ultimate development of the fisheries as a trade.

In the establishment of joint-stock companies for fishing, and for providing boats for fishermen for deep-sea purposes, some look with confidence for an effective result; but I am bound to say, at the same time, that success has not attended the many attempts which have already been made for that purpose. I am fully aware that now-a-days company-making is unpopular, and, perhaps, the reason may be that parliamentary

exemption from liability has rendered shareholders less careful of the general concern than in ordinary partnerships; for I am persuaded that mutual confidence is the great source, not only of private mercantile aggrandizement, but of national prosperity:

“ *Bona fides reipublicæ stabilitas.*”

The clubbing together of fishermen themselves for the purchase of vessels for the carrying on of the fisheries, as is generally adopted on the coasts of England and Scotland, is pronounced by many to be the best organization for fishing purposes; for those who subscribe their capital are at once proprietors and fishermen, and are practically engaged in the endeavour to make it a remunerative investment, by working their own vessels; and thus the great expense which the management of a company would necessarily entail is by this plan saved. There can be no doubt that if capital could be extensively combined among our fishermen, it would reasonably produce the best results; but until it be forthcoming in this way, we should not condemn efforts to obtain it through the medium of joint-stock capital. These undertakings have latterly undergone such a depression in public esteem, that it is not at all improbable that private enterprise may resume its old legitimate form of mutual responsibility and co-operation, and that we may yet experience on our shores all the benefit of extensive private association. Attempts are now making to organize companies, some for supplying fishing-boats and fishing, and others for merely curing and purchasing fish. The latter appears to me to be the safer plan, for capital may be thus managed with more scrutiny than when afloat (I mean in the purchase of vessels or in the occupation of fishing); but since capitalists in both countries have become habituated to the employment of their capital under Acts of Parliament in joint-stocks, we must naturally look to those operations of commerce in the first instance for development of such resources as we at present possess.

Having thus brought before your view some facts connected with the earlier value of our Irish fisheries, and the legislation under which they have been protected and encouraged, the state of our In-shore and Deep-Sea Fisheries, and the leading causes of their depressed condition—and having endeavoured to place before the Society, in a very general way, the most practical plans which have been suggested for their improvement, let us for a moment reflect on the great and inestimable value which would arise if we were enabled to place them in

anything like a working condition as a trade. "Mines" (says Raynal) "can be exhausted, and the fisheries never are. Gold is not reproduced, but the fish are so incessantly; and he (to use Dr. Franklin's words) that puts seed into the ground reaps fifty-fold, but he that puts a line into the sea and pulls out a fish pulls out a piece of silver." These mines, then, are around our coast, for which we are not called to pay for the privilege of working. We have abundant labour, and were capital forthcoming to forward our fisheries, our coast population—men, women, and children—would soon find occupation and employment of a profitable and permanent kind: the men in building boats and in fishing—the women and children in the manufacture of nets, and in the several stages of the curing process. Scotland does all this; she sends her produce to the European and Indian markets as well as to us. Her exports last year in herrings alone, to places in and out of Europe, were 176,080 barrels, producing a large and important return, and employing a great number of fishermen and their families, coopers and ropemakers, ships and seamen, to convey the salt for curing. Spain, too, I find, has recently sent to Scotland for her herrings; and, spite of duties amounting almost to a prohibition, they have found their way to the heart of France. Is it not, then, justly a matter of wonder and astonishment that Ireland, with her coast supplied as abundantly, if not more so, than any nation in the world, with equal facilities with Scotland for shelter, conveyance, and opportunities for export, should not only suffer so great a source of wealth to be uncultivated, but should weaken the right hand of her maritime strength, by allowing the fishermen to be unemployed and incapable of serving with efficiency in our navy when occasion should require their services.

Before any thing, in my humble judgment, can be done for the permanent improvement of the fisheries, and for the establishing of an export trade, we must supply our fishing communities with materials for carrying it on. And, first of all, we must have piers and harbours of refuge along our coasts. Already there has been legislation upon this subject; and a Statute, which I before cursorily alluded to, was passed last session, and a sum of £50,000 was granted for the promotion and extension of our fisheries, by giving grants of public money for the construction of piers and harbours. As I am informed, the provisions of this Act are in course of extension to no less than thirty-six places in Ireland; and I am given to understand, that the applications to the Board of Works for erecting piers, &c., were much more numerous than could be

supplied by a grant of twice the amount given by the Statute, evidencing in no small degree that there is a desire to encourage and protect the interests of the fisheries, at all events in this particular. If they (the fisheries) be carried out in connexion with the piers and harbours, as has been indicated, these, at least, cannot be called unproductive works.

The next step should be to erect curing-houses, and stores for salt. For, however a luxurious market like that of London or Dublin may consume the supplies of fresh fish hitherto obtained, it is to the great national consumption of cured provisions we must look for such a market as shall create what may be truly called national prosperity. This desirable object of establishing curing-houses may be well effected by the same machinery as that provided by the Piers and Harbours' Act, namely, by the co-operation of parties locally interested with the Government. These great and essential materials, namely, piers and curing-houses, being extensively supplied, we may then look confidently for the gradual embarking of capital for the building boats, &c., supplied as it must be either through local resources, or through the medium of joint-stock capital.

Loans, in kind, of lines, hooks, and other necessary gear, may be established with beneficial results. How often is the poor fisherman unable to procure the implements of his trade, unless at a high price, from the country dealer, and then of an inferior character. The resident gentry in the neighbourhood of the fishing station may aid in the management of the loans, which would have the good effect of making them acquainted with the characters of the fishermen, and enable them to discriminate between the industrious and the indolent.

Light carriages or carts may be established, through private or other enterprise, for the conveyance of fresh fish from the distant and more remote districts to the inland towns, which would no doubt be a most remunerative speculation. And here I would say, that the various relief committees and associations throughout the country may do well to adopt this suggestion. The guardians of the poor, too, may profit by it; and work-houses, from their superior arrangement, while they might obtain what might otherwise be considered objects of luxury (that is, fresh fish), might repay the supply by manufacturing nets and other engines for the production of their sustenance. Fish is brought by carriage conveyance from the coast of France to the interior; and the vessels engaged in the fishery at Boulogne, Dieppe, &c., land their produce, to be transported with rapidity and dispatch to Paris and the intermediate towns. The establishment of railways in that country

will soon render this mode of conveyance unnecessary, but until railways extend in Ireland, and afford increased accommodation of transit, should we not make use of those modes which have been found to answer so well in France?

Our deep-sea fishing banks, too, should be surveyed by government, as well with the view of ascertaining their exact position, as of recording their productiveness.*

During the past year some gentlemen with whom I connected myself sought to organize a company for supplying fishing-boats, and for fishing generally. We presented a memorial to the late government for a vessel to survey the great Nymph Bank, and a revenue cruiser was at once placed at our disposal; but not having received public support, we were, with much regret, unavoidably prevented from taking advantage of this liberal offer.

The expense of providing gear would have been very considerable (more than those who organized the project felt themselves called upon to incur), and it was even questioned by practical men whether the survey could have been effectively carried on by one vessel, and more particularly as the time was limited for her occupation in our service. I believe, also, that the value of any survey made by private individuals would not be recognized by the public as authentic, and that to be really useful it should be conducted by Government, through the medium of its own officers, aided by experienced fishermen, as well as by men of science. A report formed on a survey of this kind would be most valuable, particularly to those anxious to embark in the fishery of the deep seas, and a knowledge of the position and of the resources of the banks would, I have no doubt, tend to increase the number of vessels of that size sufficient and capable for promoting those fisheries.

If we were in the condition of those enterprising Dutchmen, who, without the aid of joint-stock companies, and Joint-Stock Company Acts, relying on the mutual honesty of merchants, fished the Dogger Bank by private capital, we might have no difficulty in seeing our way to the realization of all the wealth which Providence has manifestly placed in the hands of men who can mutually confide in one another. As it is, habituated as we have been, for two generations, to the protection of parliamentary associations, it is hardly to be expected that private enterprise and individual responsibility could come

* Mr. Strangman, of Waterford, told me that he, as well as others, would have embarked capital in providing vessels for carrying on the deep-sea fisheries of the Nymph Bank, but that they were deterred from so doing, in consequence of the expense which a preliminary survey of its position and productions would entail.

forward in aid of long, habitual neglect; but a great public Society, incorporated for the promotion of national industry, may at least hold out a hand of encouragement alike to those who have been accustomed to exempted liability, as to those who rely on the great mereantile industry which had created the commercial prosperity of Holland, of England, of America; and may shew to all men of enterprise the means whereby they may increase their wealth, and promote common prosperity. And not only could this Society, by taking up the fisheries as an industrial resource (a marine husbandry justly within their charter), stimulate the enterprise of capitalists of all denominations, but, in a degree only secondary to the scientific operations on the dry surface of the soil, extend the kingdom of science into the depths of the sea, hitherto deemed inaccessible, and, by completing the survey of the bottom of the ocean, enrich the knowledge of marine zoology, geology, and botany. If such surveys, scientifically ascertained, and reduced, as they easily might be, to modes of expression which humble men could understand, were made accessible to the members of our fishing community, there can be no doubt that capital would be applied in a much more remunerative manner than at present, when the fishermen can only depend on empirical observations for the place, season, or quality of bait, &c., necessary to carry on their operations. These, however, are remote considerations, depending on the application of cultivated minds to scientific inquiry through long periods of observation; but, in the mean time, practical experience and mature consideration of what is already known upon the subject may enable me humbly to suggest to your Society some means within your immediate ability to adopt, by which these incalculable resources may be made more immediately productive.

I would suggest, therefore, that in your museum, where you have arranged the models of those instruments most efficient for the production of the fruits of the dry soil, you also should give a place to those other implements not less needful, by which food and wealth may be drawn from the soil covered by the sea. Amongst such models, one which I conceive in the present state of our fisheries' interests may be among the most immediately useful, is that *carr* which I have already spoken of for the transit of fresh fish from the coast to the market, a model of which, to be constructed from the best examples of such conveyances, I shall have the honour to submit to the Society, and to pray of them to place in their industrial collection, as a nucleus, however inadequate, for a future marine industrial museum.