## MARINE SCIENTIFIC STATION FOR CANADA.

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A complete biological survey of the constal waters of the Dominion is a great task, and could only be accomplished gradually. But such a work would fall within the operations of a marinestation, and would be gradually pushed forward season by season until the physical conditions, the biological characteristics, the fauna and flora of every arc., wherein the fishing industry is prosecuted, are made known and are available for the guidance and information of those actively engaged in fishery pursuits. Other work of a highly practical nature would come within the scope of the proposed institution.

Methods of preserving and transporting tish, improved means of drying, salting, canning, and refrigeration—in short, all the modes suggested by science for conserving the best and most attractive elements of tish food, would be thoroughly tested, and new improvements, or novel and unsuspected methods made known. The growth within recent years of a vast industry which has proved a source of wealth to many districts, viz., the preservation of orchard fruits, is an indication of the success which may attend new methods of "putting up" economic products, and the preserving of fish in attractive marketable form is a line of industry in which very little progress has hitherto been made. The utilization of fish roe, livers, skins, and waste products, at present of comparatively small value, is a promising field there can be no doubt, if economical and ready methods be discovered of turning them to account. It remains to be seen how far existing modes can be improved, or new methods adopted, with a prospect of commercial success.

The preservatica of fish on new plans is a most promising field, and one which could be without difficulty carried on experimentally in a marine station. No one acquainted with the incredibly rapid progress of the preserved fruit industry already referred to, the great strides which it has made in the Dominion, and on somewhat different lines in Great Britain, can deny that such methods, if applied to the preservation of fish, would mark a new era into the fisheries of our country. While the neatly packed products of the orchard and fruit garden find their way to the tables of all classes of the community in Britain, the United States, and other countries, and the canned lobsters and oysters prepared on our coasts are hardly less widely used, the roughly dried and salted tish of the Dominion are far less generally sought and used in our provincial cities and towns, and are unknown to a great part of the population in Britain. In appearance and comestible qualities, salt fish, dry and pickled, have not appeared to recommend themselves to English cooks and housekeepers. Yet the quality of our cod, haddock, mackerel and herring cannot be questioned—indeed it may be doubted whether the fish of any other waters are of equal excellence. Experiments leading to a superior and more attractive method of preparing and packing these fish would yield pecuniary returns more than proportionate to any extra trouble or expense in preparation. Such prepared fish would take possession of markets never yet reached by our fish merchants, and would prove much more lucrative than the coarsely prepared, and, to many, offensive, forms of cured fish, which at present are shipped to the South American. West Indian and other markets. Norway has made great advances in this direction and her attractively prepared fishery products, including many entirely novel foods, have already secured much favour in the British markets. The enterprise of Canadian merchants would not be lacking if experiments proved that new and superior methods of preserving fish could be readily applied in our own fisheries.

Science alone can afford sure ground for advance in the various lines of progress indicated in the foregoing remarks. The fisheries have largely stood aloof from scientific aid, or rather the means of scientific aid have been wanting, and its powerful influence in the way of prospering the fisheries has not been realized. But the benefits of fishery science are no longer matters of doubt, and all that is required is to afford means for pursuing exact scientific research, and for spreading amongst fishermen and others, actively engaged in the fisheries, the beneficial results of such researches and new knowledge.

It is important that a scientific fishery station should be centrally situated upon the coast, that the conditions of marine life should be favourable, so that