

THE PROPOSED USE OF STEAMERS IN THE MACKEREL FISHERY.**By CHAS. W. SMILEY.**

During the second week of July quite an excitement was created at Gloucester, Mass., by the announcement that Capt. Daniel T. Church, of steamer *Jemima Boomer*, Tiverton, R. I., had ordered of Messrs. H. & G. Lord a mackerel seine, and that menhaden being so scarce he proposed to turn his steamer to good account by catching mackerel. The *Cape Ann Advertiser*, of July 14th, contained an article entitled, "Threatened innovation of the mackerel fishery," in which it said, "The doings of this steamer will be watched with a great deal of anxiety by the captains of the one hundred steamers formerly engaged in the menhaden fisheries, as well as by the large number who depend upon mackerel fishing for employment and for the investment of capital. It is not difficult to anticipate the result, if this class of steamers engage in this branch of the fisheries. There is no reason to doubt their ability to catch almost or quite as many mackerel as they have formerly caught menhaden. Several of them are large, capable of carrying 2,800 barrels of fish in bulk. They carry a double gang of men and apparatus to correspond. During moderate weather, when mackerel generally school the best, and sailing vessels find it difficult to move, these steamers can play around the fleet of schooners, and catch almost every fish that shows itself."

Having thus described the vast superiority of steamers over sailing vessels in this business, and proceeding upon the supposition that the mackerel when caught would be used for oil and guano as had the menhaden, it continues, "Can we afford to take the risk of having such a valuable fishery destroyed and have this vast industry, giving employment to thousands and delicious fish-food to millions, diverted from its proper channel? Is it economy; is it justice to manufacture into oil and guano millions of barrels of the best food-fishes we have?" It then calls for legislation "to prevent the catch of mackerel for the purpose of manufacturing oil and guano."

A correspondent of the *Boston Advertiser*, writing from Gloucester, July 10, briefly stated the same facts, and added: "The employment of these steamers has undoubtedly broken up and driven off the menhaden, and the same effect will be produced upon the mackerel. The general feeling is that some stringent laws should at once be enacted for the protection of the mackerel fishery."

The same day Capt. J. W. Collins wrote to Prof. S. F. Baird stating that he had been requested by certain persons largely interested in the fisheries to bring the matter to his attention, and stating the fear that the proposed innovation will soon practically deprive us of one of the most valuable food-fishes of the American coast.

To all the reports concerning the use to be made of the mackerel so

caught, Mr. Church replied in the Boston Herald that no steamer was being fitted to take mackerel for that purpose, and he showed the unreasonableness of such an expectation by stating that he is offered for the mackerel for food purposes \$3 per barrel as they come from the water, while the market value of a barrel of mackerel after being rendered into oil and guano is \$1 per barrel.

The Cape Ann Bulletin took a hopeful view in its issue, July 12. It admitted that schooner fishing for mackerel was endangered, but declared that Gloucester fishermen would not be long in fitting out steamers of their own if that method of fishing gave indications of success. As to steamers destroying the menhaden fishing, it said, "This is an open question. The fish have always been more or less variable in their visits to the coast, and it is by no means improbable that the investigations of the United States Fish Commission will discover the haunts of the menhaden and assign reasons for their change of locality. To wholly destroy any variety of fish by the hand of man is declared by competent authority to be practically impossible, since what is taken from them is but a drop in the bucket compared with what are destroyed by other means." This accords with Mr. Church's defense, in which he says, "It is a fact well known to all who have taken the pains to study the history of fish that live and multiply in the sea, that they have periods of being plenty and scarce, and that man, in his puny efforts of capture, is as nothing in comparison with the destruction by blue-fish, sharks, bonitas, and other fish of prey. Prof. Baird estimates that the blue-fish in four months destroy on the coast of New England 150,000,000 barrels of fish. When we add to the above the destruction by sharks, whales, etc., and add to that the whole coast from Maine to Mexico, and take twelve months' destruction instead of four, we see that man's influence is about the same as a fly's would be in trying to stop the steamer Bristol's engine by lighting on the end of the walking-beam when it was running wide open, with all the steam the law allowed."

Concerning the use of steamers, Mr. Clark, writing from Gloucester, says: "Gloucester mackerel men do insist that the ordinary use of the purse-seine does not appreciably decrease the stock of fish. Capt. Sol. Jacobs, the famous mackerel-catcher, says that one steamer can catch as many fish as ten sailing vessels; that steamers cannot make a business of carrying fresh fish to market, for lack of ice-houses and means of keeping fish fresh enough for food. If bailed into the hold the fish would be fit for nothing but guano on reaching port. Steamers have not the facilities for carrying barrels and salt, nor deck room to use in splitting, salting, and packing fish. Being entirely unfit for preserving mackerel, all that remains is to carry them to oil and guano factories. The time required to dress mackerel is at present a safeguard against an over-catch; but were all hands to pitch in and see how many fish could be scooped up, regardless of their preservation, it is probable that the business would soon become a thing of the past.

On mackerel vessels the mackerel pocket is useful in saving the fish alongside until they can be dressed and stowed down, besides its use in saving the seine from damage by dog-fish. The pocket would be of little use to steamers, for the reason that there is no difficulty in quickly bailing the catch from the seine into the hold." He, too, calls for legislation.

To all these considerations Professor Baird made the following philosophic reply :

"If the menhaden men catch an abundance of mackerel, can they afford to convert them into oil and guano? Will not these fish, however small, bring better prices for canning? There is a demand, apparently, for ten times as many mackerel as are produced. What can the mackerel men do in the matter? These fisheries are prosecuted more than three miles from shore. Hence neither State nor Federal authority can do anything to prevent any foreigner from coming on the same grounds and fishing in any way he may deem best. When the fish are landed, the State can interfere; and, if it is considered that a wasteful application of the fish is being made, State laws can be enacted. They can say, for instance, that a menhaden man shall not have a mackerel in his possession, just as the same authorities declare that no man shall be found with a trout in his possession during the closed season. The dilemma is that if Massachusetts passes prohibitory laws the fish will be transferred to States not so restricted, and it will be found difficult to produce concurrent action in all the States. The fishermen cannot object to legitimate competition. If the fish are caught and sold for food, so much the better for the country. I do not believe that steam-seining for mackerel will be kept up very long, in view of the comparatively small returns. The menhaden men, while fishing for mackerel, will, of course, utilize the new mackerel pocket and all the other devices."

The status at the present time thus appears to be about as follows:

I. It is proposed to catch mackerel by the use of steamers and the various novel appliances whereby all concede that very much larger numbers may be taken.

II. The rumor that men formerly engaged in making oil and guano from menhaden will convert the mackerel to the same purpose is met with prompt denial, and with the fact that the fish will bring three times as much for food as for oil.

III. As a safeguard, laws are invoked to prohibit manufacture of mackerel into oil; to which it is replied that the Federal Government has no jurisdiction, and that the States could hardly be induced to all unite upon a common prohibition, and especially while any foreigner can catch the fish on the high seas and do as he pleases with them.

IV. It was greatly feared and confidently predicted in 1878 that introduction of purse-seines would ruin the mackerel fisheries, but to day the

Gloucester fishermen insist that although in general use no diminution is appreciable and the catch has greatly increased since 1878.

V. It is now feared that steam fishing will exhaust the mackerel fisheries, as some allege it already has the menhaden fisheries. To this it is answered that menhaden fishing was always variable, that the present absence may be but temporary, and that if permanent it was caused, not by steamers over-fishing, but very likely by great oceanic causes, such as variation in temperature, destruction of their food, &c. It is also declared that all man can do is as nothing compared with the destructive agencies of predacious fish and natural enemies.

VI. The innovation, if it proves a success, is but another illustration of the advance of man in conquering the earth and bringing all its resources within his control, and if he sees the mackerel fisheries in danger of exhaustion he will find a way to propagate them and replenish the seas.

THE COTTBUS CARP TRADE.

[From *Deutsche Fischerei-Zeitung*, vol. v, No. 30; Stettin, July 25, 1882.*]

The Report of the Cottbus Chamber of Commerce contains some information relative to the carp trade, and gives the contracts between the large Berlin fish-dealers and the presidents of the Lusatia fishery associations, which were made last year for the first time, and which probably will also in the future form the basis for all business transactions in the fish trade, making of course due allowance for the variations in price caused by different circumstances. By the terms of these contracts 33 carp of the first quality were allowed to the hundred-weight, and 34 to 43 of the second quality. In order to make these terms less harsh, many bargains were, in 1881, concluded in the following manner: For a hundred-weight of carp (delivered free at the railroad station), containing 43 to 50 fish, 60 marks (\$14.28) were paid; for 3 fish more or less to the hundred-weight, 1 mark (23.8 cents); therefore for a hundred-weight of 40 carp, 61 marks (\$14.51); for one of 37 carp, 62 marks (\$14.75); and, on the other hand, for a hundred-weight of 53 carp, 59 marks (\$14.04); and for a hundred-weight of 56 carp, 58 marks (\$13.89).

The sums paid are calculated according to the average of carp per hundred-weight of the entire quantity of carp sold. The importance of the Cottbus Carp Exchange for the fish trade may be gathered from the fact that nearly 250,000 kilograms of carp are, as a general rule, bespoken by large fish-dealers, and do not enter the general market. The yield of the carp ponds in the Cottbus district alone amounted to 75,000 kilograms in 1881. As the Report of the Chamber of Commerce remarks, the conditions of sale are just both to the producers and buyers, and will in all probability remain in force for a long time.

* *Vom Cottbuser Karpfenhandel*. Translated from the German by HERMAN JACOBSON.