

being very delicate and sensitive to extremes of temperature. In the present state of our knowledge, it would be impossible to carry the eggs that distance; and until we can succeed in transporting the eggs or very young fish to England, we may safely give up any more ambitious attempt. There would be no great difficulty in transporting the eggs of the trout from England to India. They could be packed in ice, which, if renewed from time to time on the journey, would keep them in proper condition. We have several times sent salmon eggs to Australia and New Zealand with excellent results. Whitefish eggs, also, could be sent; but this fish will survive only in deep lakes of cold water, where the temperature does not rise above 50 or 60 degrees Fahr.

We have no purely freshwater mullet in the eastern United States. There are, however, several species in the West Indies, and one in the Sandwich Islands, which are strictly freshwater in their character; although I doubt whether they would be better than those you can obtain nearer home.

WOOD'S HOLL, MASS., *August 13, 1885.*

163.—THE USE OF THE ELECTRIC LIGHT IN FISHING.

By LIEUT.-COMMANDER Z. L. TANNER, U. S. N.

[Reply to Oscar Hatfield, U. S. Consul at Batavia.]

I have received the letter from the American consulate at Batavia, dated July 10, 1885, with reference to the use of electric lights for fishing.* In reply I beg to say that electric lights are in constant use on board the Albatross in our work of investigations. We have used an arc light hung near the water, but the form in use at present, which has been most successful, is an Edison incandescent lamp attached to an insulated cable. Although certain species of fish in rivers, and near the coast, are attracted by a bright light, sea fish, as a rule, are rather repelled by it than otherwise. We do not use the light for the capture of edible fish, but only in collecting minute forms of crustaceans and surface specimens which we could not procure by any other means. My opinion is that the electric light would be of very little service in sea fishing.

WOOD'S HOLL, MASS., *August 25, 1885.*

* The letter was as follows:

"Some time ago a company was started here for the purpose of fishing by electric light. A variety of apparatus, &c., was ordered and received from Europe, a steamer was especially constructed, &c., but the company cannot catch any fish. The result is an apparent failure and the loss of the funds invested.

"It appears, however, that at home your department maintains a steamer called the Albatross, on which an electric fishing apparatus is in good working order, and I have been asked by the company here to ascertain if this is so, and if so, they would be very much indebted for information regarding it. What system or patent is worked? Where can it be purchased? Any hints upon the subject will be thankfully received."