

20,000,000 whitefish eggs from the fish-hatching establishment of Frank N. Clark, Northville, Mich., by the mail-steamer Australia. The eggs will be packed in mountain ice, and carefully watched during the voyage. On their arrival at Auckland they will be transferred to a colonial steamer, preparations having been made for their reception and distribution throughout the colony. Mr. Clark kindly forwarded to Mr. Creighton models of his patent hatching-boxes, and these are already in the colony, so that no hitch will occur in this regard. Mr. Clark telegraphed from Omaha on the 15th that the eggs had been shipped in good condition, and would arrive in San Francisco on the 19th. Mr. Clark came with the shipment from Northville to Omaha, to insure against any damage or accident en route. The friends of acclimatization in this State will be gratified, no doubt, at the success of the experiment. Of the Australian group of colonies New Zealand is more closely identified with this country than any other.—(*Frank Leslie's Illustrated Newspaper.*)

CARP IN THE HUDSON RIVER.

By E. E. SHEARS.

.COXSACKIE, GREENE COUNTY, NEW YORK,

January 26, 1881.

Prof. S. F. BAIRD,

U. S. Fish Commissioner, Washington, D. C.:

DEAR SIR: Will you please send me your last report. If you have anything special on the carp, please send that also. Are there any carp in the Hudson River? I find in "Transactions of the American Institute," dated 1850, page 397:

"Mr. MEIGS. We are pleased to see among us Captain Robinson, of Newburgh, who brought the carp from England several years ago, thus conferring a great benefit upon his country by adding a fish before that unknown in our waters.

"Captain ROBINSON. I brought the carp from France about seven years ago, put them in the Hudson River, and obtained protection for them from our legislature, which passed a law imposing a fine of \$50 for destroying one of them. I put in gold-fish at the same time. Now some of these carp will weigh two pounds, and some of the gold-fish, which are a species of the carp, are quite large, some of them being pure silvery white. Both kinds are multiplying rapidly."

I notice that the gold-fish are quite plenty in the river in this vicinity; also a fish about the size and shape, which is called a silver-fish, but they do not correspond to Captain R.'s description of the silver-fish. These are nearly or quite as dark as a rock-bass. I have seen none that would weigh over one pound and a half. When caught in fykes by the fishermen they are usually pronounced unfit to eat and thrown back in the river.

However, last fall I saw them peddled through the streets, and the fishermen told me they could catch scarcely any other kind, and they sold as well as perch or bass. I have not had an opportunity to taste any of them, therefore am no judge of their flavor.

Respectfully,

E. E. SHEARS.

SUGGESTIONS TO FISH CULTURISTS.

By GARRICK M. HARDING.

WILKES-BARRE, PA., *January 16, 1880.*

Prof. SPENCER F. BAIRD,

U. S. Commissioner of Fisheries:

MY DEAR SIR: In reply to your esteemed favor of recent date, permit me to say that for ten years past and upwards public attention has been largely directed throughout the Northern States of the Union to the subject of fish-culture. Formerly the interest felt in this matter was mostly confined to sportsmen, but the rapid increase of population, the growing necessities for food, added to the fact that our forests were fast passing away, our mountain streams and wooded lakes denuded of their shade and converted into other than purely nature's uses, have, altogether, awakened a general interest in the subject. While the actual number of those personally engaged in fish-culture is limited, yet the whole mass of our people may be said to be looking now with encouraging favor upon the enterprise.

Individuals associate together in a sort of *quasi* corporation and purchase ponds and inland lakes, rent creeks and even small rivers, stock them with fish of various kinds, always observing, however, adaptabilities both as respects the waters and the fish. Thus sport and supply go hand in hand. Nor are the owners or controllers of such waters alone benefited. These ponds and inland lakes are the sources which make up the rivers that flow, often in large volume and for great distances, through the country to the sea. They too become stocked, teem with choice fish. The public at large thus have brought within their reach, without cost, the sport and supply which, in the beginning, seemed designed only for the few.

In order to have the most satisfactory results from this system of buying or controlling ponds and inland lakes, experience has shown that the outlets should be secured by a galvanized-wire screen of a mesh not greater than three-quarters of an inch in size. If brook trout, black bass, or pickerel be the fish with which any such water is stocked, the small fry, appearing generally the first year but surely after the second, will find their way through the meshes of the screen in numbers sufficiently great to stock abundantly in three or four years every commingling and suitable water below. Brook trout, however, should never be