The little projections or feet at the conical end of the glass tube should be accurately ground so as to compel a uniform current to flow from all points of the base of the tube. The capacity of the jar in question may be stated as 150,000 eggs of the *Coregonus albus*.

At the present writing, I have a jar containing 40,000 eggs of the whitefish, which are hatching very rapidly. These are the oldest eggs on hand, and their speedy development was brought about by an accident. The main conducting pipe sprung a leak, which interrupted the water supply of the jar for a few moments only; but as soon as the water was turned on again from another pipe, these eggs immediately began hatching by the thousands. This shows that when the eggs are nearly developed, their constant movement in the jar must not be checked if it is thought advisable to detain the appearance of the fry for the longest possible period. These eggs, however, were nearly mature, and the fry therefrom are lively and vigorous.

Yours, very truly,

Prof. S. F. BAIRD,

FRANK N. CLARK.

U. S. Commissioner of Fish and Fisheries, Washington, D. C.

COAL ASHES AS A MEANS OF BAISING MACKEREL IN PURSE SEINES, By S. J. MARTIN.

Sometimes, when there is a large school of mackerel in the seine, they are heavy on the bottom of the seine, so that it cannot be easily handled. In such a case heave a bucket of coal ashes in the seine, and that will bring the mackerel to the surface. Captain Coas, of schooner John S. McQuinn, told me he had three hundred barrels of mackerel in his seine and they lay so heavy on the twine that he could not move the seine with twelve men hauling on the twine. He threw a bucket of coal ashes in it, the mackerel came to the surface, and they could then easily haul the seine. All the vessels that have tried it say it works well. The cook saves the coal ashes.*

METHOD OF USING WILLARD'S PATENT POCKET FOR MACKEREL. By S. J. MARTIN.

Capt. S. J. Martin, Gloucester, Mass., writes in his journal, under date of June 30, 1881:

"I will explain how Willard's Patent Pocket is used for mackerel. In the first place, there are two out-riggers 9 feet long and 4 inches through;

Bull. U. S. F. C., 81-5

^{*}NOTE.—Ashes have been used, so Mr. Merchant tells me, for several years, but is thrown outside of the seine instead of into it, as Captain Martin thought. The object is to frighten the fish by making the water white, when they rise to the surface. The same result is obtained by the menhaden fishermen by giving a few quick turns of the propeller. The fishermen call it "whirling them up."—J. W. Collins.