93.-FISH CULTURE IN BELGIUM-PROPOSED GOVERNMENT ACTION.*

By E. WILLEQUET.

[From a letter to Prof. S. F. Baird.]

For several months Mr. Lefebvre, United States consul at Ghent, has been the obliging intermediary through whom you have expressed your desire to give to Belgium solid proofs of the kind feelings entertained by the United States and by yourself for our country, by offering to send us a new fish, unknown to European rivers, and which, it is supposed, would be particularly well suited to the comparatively less pure rivers which flow into the basin of the Scheldt, viz, the catfish.

I feel that I must thank you directly for the interest which you take in us; and as the reading of the Annual Reports of the Commission of Fisheries has taught me to appreciate the broad views which you put into practice, I will confess that I still look for other benefits which my country is to reap from your generous proselytism.

I must state right here that I do not possess a single qualification which justifies the liberty which I take in addressing you. My excuse is solely the desire to profit for Belgium from the large amount of work which you have accomplished. I am a member of the Belgian Chamber of Representatives, and my position will perhaps enable me to spread some of your ideas, and cause Belgium to derive some profit from your rich experience. The Government is well disposed. A new law on river-fisheries has been passed, and has just been published with a series of regulations. The Government has also appointed a commission to inquire which would be the best steps for restocking our rivers. I look for good results from the measures which our Government has already taken, and from those which are in course of preparation relative to the river-fisheries. But as regards the sea-fisheries, everything remains to be done.

We possess one fishing port, Ostende, which supplies a great part of the continent of Europe with fish, and which doubtless in the near future will develop into one of the most important fishing ports on the west coast of Europe, owing to the railroads from the interior which center here. We also have one important river, which, in its maritime part, shows only very insignificant products of the fisheries. I imagine that if you were placed in similar circumstances, you would have known how to derive considerable profit from our geographical location, and I therefore venture to ask, if your habitual generosity would permit you to give us some practical advice.

If your kindness would induce you to render us some such service, I

^{*} Translated from the French by HERMANN JACOBSON.

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am convinced that I could easily induce the Belgian Government to appoint a commission which would follow the line of action indicated by you.

I ask, for instance, if, after the experiments in multiplying codfish which you have made in the port of Gloucester, you would deem it possible to stock the entire North Sea—already rich in fish—to such a degree as to bring the codfish nearer to our coast? At present, our fishermen only catch codfish on the Dagger Bank, a large bank extending from Scarborough to Jutland, and this only in winter. In acting in conjunction with England, could we not succeed in stocking the southern portion of the North Sea with as many fish as fill its central and northern portions? At present, it takes the fishermen two or three days to reach port again on their return from the Dagger Bank.

Am I laboring under a complete illusion in looking for such a result, and is it possible to reach it? Would it be possible to stock the Scheldt with the *Alosa sapidissima*, and the river herring which you call *alewife*?

But I am only giving you here some few samples of what I have in view. I well know that your ideas on this subject are much more clearly defined than mine. Would it be trespassing too much upon your kindness to believe that you will guide us with your advice?

Mr. A. Lefebvre has assured us that next spring you will send us some catfish. We shall thankfully receive these fish, but we are so ignorant in everything pertaining to them that it would be extremely useful if you would send us some instructions beforehand. In what localities should these fish be placed? In a pond, or in running water? Must some regard be had to the temperature? It would doubtless be useful to place the fish under strict surveillance, so that we can render you a full account of the entire transaction.

CHAMBER OF REPRESENTATIVES,

Ghent, Belgium, February 19, 1883.

REPLY BY PROFESSOR BAIRD.

I will take pleasure in carrying out the original intention of supplying American food fishes to the waters of the Netherlands. The species that I have considered most suitable is the selfsame catfish, of which your letter makes mention, belonging to the genus *Pimalodus*.

In reply to your query as to the possibility of stocking the shores of Belgium, I am unable to speak without more knowledge of the coast itself. There is no very good reason why a great extension of these may not be accomplished by artificial means. Perhaps it will be better to wait the final results in the United States before entering upon a similar enterprise abroad. I see no reason why the *Alosa sapidissima*, or American shad, and the alewife, may not thrive in your waters. The only difficulty is in carrying them across the ocean. Upon this subject we shall probably make experiments this year, and the results will enable us to advise you.

The catfish which we propose to send are thoroughly hardy fish, and

require no care. It is only necessary to place them in the water, the muddier and more sluggish the better. They will live in ponds or in running streams; and are equally at home in warm water and cold.

WASHINGTON, D. C., March 13, 1883.

NOTE.—For other items upon this subject compare Bulletin 1882, p. 153, and Bulletin 1883, p. 218.—C. W. S.

94.—PURCHASE OF PROFESSOR POEY'S ICHTHYOLOGIA CUBANA BY THE SPANISH GOVERNMENT.

By Prof. S. F. BAIRD.

Prof. Felipe Poey, of Havana, under date of the 24th of February, 1883, announces that the Spanish Government has purchased his Ichthyologia Cubana for \$4,000. It will be exhibited in the exposition in Amsterdam. He hopes to have it printed in Madrid. The work is in ten volumes, each 450 by 324 millimeters. These volumes contain 1,040 plates of fishes of every period of growth. The drawings were made by himself from life. Many of the plates occupy three and even six double pages. About half fill only one single page each.

The plates represent 758 species of Cuban fishes (1,300 individuals), 90 scales, 94 vertical sections, 87 entire skeletons, 51 half skeletons, 43 details of skeletons, 85 complete visceras, 32 details of visceras, 8 entozoa, and 120 miscellanea.

WASHINGTON, D. C., March 1, 1883.

95.—REAPPEARANCE OF YOUNG COD HATCHED BY THE UNITED STATES FISH COMMISSION.

By W. A. WILCOX.

[From a letter to Prof. S. F. Baird.]

The harbor and mouth of the river at and near Portsmouth, N. H., is full of young codfish from four to ten inches long. The fishermen mostly use trawls with quite small hooks and find them in large numbers on the hooks. They take them off with care and return them to the sea. Fishermen say that they have never seen anything like it in the number of very small cod. They give all the credit to the United States Fish Commission, calling them "Professor Baird's fish." Mr. Valentine Doane, jr., of Portsmouth, N. H., can give further information.

BOSTON FISH BUREAU,

Boston, Mass., August 17, 1882.