390 BULLETIN OF THE UNITED SPATES FISH COMMISSION.

do not know anything more about it, except that it is highly prized by the Würzburg people. In spite of all the inquiries I have made, I have not been able to reach any certain result as to the gold-carp. I cannot get any from France, owing to the scarcity of spawn. I do not know whether there is anything mysterious about this fish, but, at any rate, I cannot learn any data concerning it. From Lohmann-Witten I have received what pretended to be "carpes d'or," but I do not know what fish these are which have been honored with this name; I believe they are common scale carp. I shall shortly reopen my correspondence with France, and perhaps I shall succeed. There are also blue carp of the leather, mirror, and scale varieties.

ECKARDT.

PLAN OF THE INTERNATIONAL FISHERIES EXHIBITION TO BE HELD AT EDINBURGH, SCOTLAND, AND A LIST OF PRIZES TO BE AWARDED.

BY J. A. LEONARD.

DEPARTMENT OF STATE, Washington, March 7, 1882.

SIR: I have the honor to transmit herewith, for your information and consideration, a copy of a despatch from the consul of the United States at Leith, Scotland, in reference to the International Fisheries Exhibition, which is to be held at Edinburgh, Scotland, beginning on the 12th of April, 1882.

I am, sir, your obedient servant,

FREDK. T. FRELINGHUYSEN.

SPENCER F. BAIRD, Esq.,

Commissioner of Fish and Fisheries.

[Enclosure. Mr. Leonard to Mr. Davis, No. 21, dated January 26, 1882.]

PLAN OF THE INTERNATIONAL FISHERIES EXHIBITION TO BE HELD AT EDINBURGH, SCOTLAND, AND A LIST OF PRIZES TO BE AWARDED.

No. 21.]

CONSULATE OF THE UNITED STATES, Leith, Scotland, January 26, 1882.

SIR: I have the honor to submit herewith to your Department a report which I have compiled regarding the arrangements made for the International Fisheries Exhibition to be held in Edinburgh, Scotland, during April, 1882, such report including a statement of the objects of the exhibition, and lists of the prizes offered for exhibits and essays, and I trust that it will be found acceptable.

Dispatch No. 191, of date 15th July, 1881, from this Consulate to the Department of State, contained a notification that the exhibition above referred to would be held in Edinburgh, in the month of April, 1882; and enclosed therein were two circulars which had been received regarding it.

I have the honor to be, sir, your most obedient servant,

J. A. LEONARD,

United States Consul.

Hon. J. C. BANCROFT DAVIS,

Assistant Secretary of State, Washington, D. C.

[Enclosure in No. 21.]

INTERNATIONAL FISHERIES EXHIBITION TO BE HELD AT EDINBURGH, SCOTLAND, APRIL 12, 1882.

Arrangements are now in progress for an International Fisheries Exhibition to be held at Edinburgh, Scotland, commencing on the 12th of April, 1882, and continuing open not less than two weeks.

The exhibition is promoted by the lord provost, magistrates, and town council of Edinburgh; the Highland and Agricultural Society of Scotland; the Merchant Company of Edinburgh, and the Scotch Fisheries Improvement Association. It will be presided over by H. R. H. Prince Alfred Ernest Albert, Duke of Edinburgh, K. G., K. T., K. P., and is under the patronage of more than a hundred of the nobility, officers, and distinguished citizens of Scotland, including the commissioners of Scotch Salmon Fisheries, Her Majesty's inspectors of Fisheries for England and Wales, the inspectors of Irish Fisheries, and the Fishmongers' Company of London. Archibald Young, esq., of Edinburgh, commissioner of Scotch Salmon Fisheries, is co-operating under the instructions of the secretary of state for the home department.

The exhibition is to include all kinds of articles connected with or illustrative of the fisheries of the world, and will be open to exhibitors from all countries.

The objects of exhibition and subjects for essays are exceedingly comprehensive, and are included in the following general classification:

I. Fish, aquatic birds, paintings, &c.

II. Boats and implements used in fisheries, &c.

III. Pisciculture, including models of apparatus, &c.

IV. Fish passes, including models.

V. Preserved fish, oils, specimens of salt for curing, &c.

VI. Tinned fish.

VII. Fish products, such as manures, isinglass, glues, models fish curing yards, &c.

VIII. Social condition of fishermen, models and drawings of harbors, houses, life-boats, food, clothing, systems of signalizing, light houses, fish markets, compasses, barometers, telescopes, &c.

IX. History of fishing, ancient implements, literature on the subject. X. Pollution of rivers, systems and appliances for prevention, &c. XI. Corals, aquatic fauna and flora, shell-fish, &c.

XII. Loan collections of any articles bearing on the above classes. The following prizes are offered :

SPECIAL PRIZES FOR EXHIBIT.

1. Specimens of tinned fish of all kinds, £25.

2. Specimens of dried, salted, and smoked fish of all kinds, £50.

3. Models or plans of fishermen's dwellings, £10.

4. Models and drawings of fish passes and ladders, £20.

5. Model of the safest and handiest sailing fishing boat—hull, spars, sails, and rigging, $\pounds 20$.

6. Models and plans of piscicultural establishments, £10.

7. Models and plans of fish curing yards, £5.

8. Models and plans of apparatus for transporting live fish long distances in safety, $\pounds 10$.

9. Models and drawings of a handier and safer rig for the boats now in use on the east coast of Scotland than the lug sail, which requires to be dipped at every tack in beating to windward, $\pounds 20$.

10. Specimens or models and plans of trawl nets, £10.

11. Specimens or models and plans of bag, stake, and fly nets, £10.

12. Collections of inland fishing tackle, £20.

13. Fish-hatching apparatus, full size, with appliances and implements, $\pounds 25$.

14. Models or drawings illustrating the best system of rendering streams, polluted by sewage and manufacturing refuse, innocuous to fish life, $\pounds 25$.

15. Model of a fishing trawler, sail or steam, $\pounds 20$.

16. Eel trap for river not to interfere with other fisheries, £5.

17. Apparatus for catching crabs and lobsters. £5.

18. System of signalling at night for fishing fleets and vessels, £25.

19. Model of machine, worked by hand or steam power, for taking in trawl, cable, or herring nets, $\pounds 15$.

20. Improved salmon net, cotton or hemp, for use with cable, £5.

21. Improved herring net, £5.

22. Models of whale boats, and of all kinds of apparatus and tackle used in the seal and whale fisheries, $\pounds 20$.

SPECIAL PRIZES FOR ESSAYS.

1. On harbor accommodation for fishing boats on the east or north coasts of Scotland, pointing out the localities where harbors are most required, and distinguishing between natural coves or bays which may be converted into good harbors by artificial assistance, and places where the harbors must be entirely artificial, £25.

2. On the various methods of fish culture practiced in different countries of the world, £15.

3. On the various methods of oyster culture, £15.

4. On oyster culture in Scotland, including Orkney and Shetland, specifying the localities and the species and varieties of oysters most suitable, and discussing the effects of the laws at present in force, $\pounds 20$.

5. On the legislation at present applicable to the salmon fisheries in Scotland, and the best means of improving it, $\pounds 10$.

6. On the best means of increasing the supply of mussels for bait, indicating the most suitable localities for mussel beds, $\pounds 20$.

7. On the natural history of the herring, with special reference to its migrations, $\pounds 10$.

8. On the various means of curing and preserving fish at home and abroad, ± 15 .

9. For the best description of the means used for curing and preserving the various kinds of fish caught on the coasts of Scotland, the Hebrides, and the Orkney and Shetland Islands, $\pounds 15$.

10. On the pollution of rivers, indicating especially the kinds of pollution injurious to fish life, £20.

11. On the salmon disease, £10.

12. On the migration of the Salmonidæ as affected by meteorological and other influences, $\pounds 10$.

13. Should there be a mesh fixed by law for herring nets, and, if so, of what size; or should fishermen be at liberty to use any size of mesh they please? $\pounds 5$.

14. On the best method of preserving fish alive for markets, £15.

15. On the artificial propagation of sea-fishes suitable for food, £10.

16. On the breeding and rearing of fresh-water fish, £10.

17. On the species of foreign fish most suitable for introduction into British rivers and waters, $\pounds 15$.

18. On the utilization of fish-offal, £10.

19. On the fish supply of great cities, with special reference to the best methods of packing and distribution, and other means calculated to facilitate the delivery of the fish in good condition for market, £20.

20. On the herring brand, £10.

21. On the food of fishes, both in fresh and salt water, accompanied by illustrations and preparations, $\pounds 15$.

22. On the natural history and habits of fresh-water trout, with special reference to the institution of an annual close time in Scotland, and the expediency of adopting a rod license, $\pounds 10$.

23. On the migration and spawning of sea-fish suitable for food, £10. 24. On angling associations, with code of rules for their management,

£10.

25. On the relations existing between the annual migrations of seabirds and the migrations of fishes, $\pounds 10$.

26. On the best modes of preserving ice, £10.

In addition to the above prizes, medals and diplomas granted by gov-

ernment for the encouragement of the exhibition will be awarded to deserving essayists and exhibitors.

It is announced that no application for space for exhibits can be received after the 1st of March, 1882, and that exhibits will be received from the 27th of March till the 4th of April.

It is also announced that all essays intended for competition must be lodged with the secretary on or before Monday, the 3d of April, 1882.

The place of exhibition, Waverly Market, is an iron and glass building, admirably adapted for the purpose, and furnishing a space of 6,810 square feet for exhibitors.

There is every reason to believe, from the applications already made for space in the exhibition, and from the interest shown by letters of inquiry, that, in addition to the exhibits of Scotland and other portions of Great Britain, there will be a large number of exhibits from Sweden, Norway, Russia, France, Germany, and other nations of Europe, and a number of entries have already been made from the United States.

The occasion will be a very favorable one for bringing the fishery products of our country, and its progress in fish-culture, to the attention of the people of Europe.

Full information, with copies of the regulations under which the exhibition is to take place, and entry forms, can be had from the secretary, Mr. Henry Cook, W.S., 3 George IV Bridge, Edinburgh.

J. A. LEONARD, United States Consul.

FISHERY NOTES FROM GLOUCESTER, MASSACHUSETTS, CONCERN-ING COD, HADDOCK, HERRING, HALIBUT, AND MACKEREE.

Ry S. J. MARTIN.

Of the twenty-four boats that had nets, only five are left. They are doing very well. The fish they get are large and bring a high price. A fortnight ago the fish were all in one place, and that was small. The boats had their nets set across one another; the place was not over a quarter of a mile wide where they caught all the fish; now there are large fish all over the bay; they are doing better with nets than with trawls. The schooner Emma A. Osier came home last night to repair nets; had a crew of ten men; shared \$46 to a man; can't pick that off every bush. The schooner Magellan Cloud landed 5,000 pounds of cod to-day, two nights' fishing. The schooner Morril Boys, landed 5,500 pounds, two nights' fishing; sold to-day for 3 cents a pound; good One of the boats is getting some new nets; the men think work. there will be good fishing all this month. The codfish on George's are larger this spring than they have been the last ten years; the fish are fatter this year than they have been for some time. There is a very large school of haddock on George's; the haddock are full of spawn.