Donnern, is preparing for the next spawning and hatching season in said establishment a permanent depot for embryonated eggs of the most valuable kinds of fish from North America, South America, and from European lakes and rivers, with the view of facilitating the obtaining of embryonated eggs by the piscicultural establishments of all countries, but especially Austria-Hungary, and of thereby giving a general impetus to pisciculture.

There are no difficulties whatever in the way of this undertaking, because Mr. von Busse has 14 vessels of his own continually out at sea, and maintains direct commercial intercourse with America. Mr. von Busse is moreover, during the current year, sending specimens of all the different species of fish found in the North Sea, carefully packed in ice, to Professor Mather in New York, where plaster casts of these fish are taken for the museum of that city. There is, therefore, no doubt that the prominent American pisciculturists, who have so far showed themselves exceedingly generous, will also in the future continue to extend to us their sympathy and generosity.

Austro-Hungarian pisciculturists who should wish to procure some of the above-mentioned embryonated fish-eggs direct from the depot at Donnern are herewith requested to send all orders to the undersigned. JOSEPH SWETITSCH,

> Director of the Piscicultural Establishment at Donnern, near Bremerhaven, P. O. Loxstedt.

TREATMENT OF FISH EGGS AT SEA.

By von BEHR.

BERLIN, October 20, 1879.

The honorable board of directors of the North German Lloyd has for years taken charge of the exchange of fish eggs between American pisciculturists and the German Fishery Association, and has done this with the greatest generosity and entirely gratuitously.

Such small exchanges may possibly also be made during the coming winter without any one accompanying the boxes during the voyage. By the kind co-operation of Captain Neynaber, of the steamer Mosel, we give below all those little hints which should be observed if the precious fish eggs are to reach the other shore of the ocean alive and in good condition.

It is desirable that the honorable board of directors should hand a copy of this circular to every one of their captains, for our American friends sometimes send us a small box with eggs quite unexpectedly, so that we have no time to notify the captain who has charge of them and ask him to take the necessary precautions.

According to Captain Neynaber's opinion, the following are the chief points:

As soon as the boxes have been put on board the steamer they should, without being exposed to the warmth for any length of time, be placed in the *ice-house* on a *layer of matting* so as to avoid *concussions*.

In the ice-house a place should be selected where the thermometer indicates a few degrees above zero,* as a lower temperature, if it should enter the boxes, would of course destroy the life of the eggs.

. After arriving in port the sailors should be instructed to avoid all *concussions* of the boxes; their stay in a warm atmosphere should be shortened as much as possible; and when the boxes leave the steamer a few pieces of ice should be placed on them.

v. BEHR,

President German Fishery Association.

INTRODUCTION OF CALIFORNIA SALMON INTO ONTARIO, WITH REMARKS ON THE DISAPPEARANCE OF MAINE SALMON FROM THAT PROVINCE.

By SAMUEL WILMOT.

NEWCASTLE, ONTARIO, November 10, 1881.

Prof. S. F. BAIRD,

Washington, D. C. :

I have to apologize for the great neglect in not giving you previous notice of the safe arrival of the half million California salmon eggs obtained through your kind instrumentality. They all arrived in the best possible condition and are now hatched, as lively little fish. By far the greater portion of this consignment was sent to the Saint John's River hatchery in New Brunswick. Previous experience having taught me the importance of having a special messenger to look after fish eggs *in transitu*, I sent my son to meet the Californians at Chicago. He dropped off at this station a portion of the eggs for our hatchery here, and proceeded on with the balance (about 350,000) to the Saint John River, meeting with (comparatively speaking) no losses whatever.

This venture will give a very fair trial of what California salmon will actually do in our Atlantic rivers, as I propose turning the whole of the product of this hatchery directly into the Saint John near the hatchinghouse, which is situated about 200 miles up the Saint John's River from the Bay of Fundy. I trust, for the especial gratification of yourself and myself, these young "Californians" may not turn truants upon us altogether, but that some of them may return to us for further education "in the way in which they should go."

About this time last year I wrote you concerning a strange freak of nature with the salmon in this stream, namely that there were *no males* to be found in the creek to impregnate the eggs of the females with, and that all of the salmon entering it (though much less in numbers than