27 H.—12.

was no end of ova, with the bloom as fresh upon them as when they were first deposited in their mossy beds, while the moss, but for a little dash of white fungus, looked as fresh and as natural as when it was first gathered. The other boxes were opened with the same result. The next process was to put them into water. This was done by lifting the moss very gently from the box and separating it on the surface of the water, so that the ova dropped imperceptibly into the pans. They were afterwards removed by means of glass syphons, and placed in bottles containing water of the same temperature as that in the pans. Some of the bottles were sent to Mr. Frank Buckland, and Mr. Youl took the remainder, and the last that I heard of them was that the ova taken by Mr. Youl were hatched out in May 9, exactly 116 days after they were first deposited in the box. Here is sufficient proof, then, that the experiment by the "Oberon" ought to prove successful. Mr. Youl, after much time and labour, seems to have hit upon the right method of packing. It is an essential condition of success in this matter that the moss in which the ova are packed should retain its life-giving powers, because if the moss decays it is all up with the ova. Some of the former shipments, I believe, failed in part from this cause; and so soon as Mr. Youl became convinced of this fact, he set about procuring the moss for himself, being most careful in instructing his gardener on the point, and the result is the success I have just chronicled. Indeed, Mr. Youl has now shown that there is practically no limit to the export of ova, and that our colonial rivers may teem with salmon if only the ova can be obtained and those interested like to go to the expense of its exportation. Among those present were Dr. Featherston and Dr. Buller, and all were agreed that they never witnessed a more interesting experiment.

No. 78.

The AGENT-GENERAL to the Hon. the Colonial Secretary.

7, Westminster Chambers, Victoria Street, Westminster, S.W.,

Sir,— 29th May, 1873.

Referring to my letter of 16th May (No. 317), in which I described an interesting experiment with salmon ova, conducted by Mr. Youl, I have now the honor to forward copy of a further copy of a communication from that gentleman on the same subject.

I have, &c.,

I. E. FEATHERSTON,

The Hon. the Colonial Secretary, Wellinton, N.Z.

Agent-General.

Enclosure in No. 78.

Mr. Youl to the Agent-General.

My DEAR SIR,—

On my return yesterday from a short visit in the country, I found your letter of the 25th, with the gratifying news of the safe arrival of the "Oberon" in 93 days, for which I am obliged. The hatching from the four boxes you saw opened at the Wenham Lake Ice Company's has been most suggestful. My Buckland's Dr. Ord's Mr. Johnson's and my own all placed

has been most successful. Mr. Buckland's, Dr. Ord's, Mr. Johnson's, and my own, all placed in water under very different circumstances, have been equally fortunate. I should think at the very least 350 young salmon have been hatched by us; and as 220 boxes were shipped in the "Oberon," this would give, if equally successful in New Zealand, 77,000 fish. Pray be so kind

as to let me know the result as soon as you learn.

Yours very truly, JAMES A. YOUL.

By Authority: George Didsbury, Government Printer, Wellington .- 1873.

Price 1s. 6d.