

On my arrival here, I found laid down in the hatchery, 195,000 salmon ova, the balance of a lot brought by Mr. A. B. Wilmot (of the Bedford Basin establishment) on 18th November. On inspecting them, I was at once impressed with the conviction that they were of very indifferent character, and subsequent observation has sustained me in that opinion. On the 24th the same officer arrived with 120,000 ova, which was very much superior to the others, being brighter in color and much even in size and shape. These have also justified my first impression of them. I have kept a separate record of both lots of ova, the percentage of loss, both *en route* here and subsequently, being much higher on the first than on the second parcel. The present result is shown on the tabulated statement hereto appended, to which I respectfully direct your attention.

The embryo is now apparent in most of those last received, from which I anticipate a very successful hatch, and also a considerable number of the first lot, of which I am not, however, so sanguine. With regard to the apparatus used in this hatchery, I may refer to the trays, which I think far superior to the zinc and wire ones to which I have been accustomed. The absence of the wood frame saves considerable space, and the smooth and polished surface of the metal lessens friction and its consequent detrimental effects on the delicate organization of the egg in its early stages.

To sum up, the excellent location of the building, and its interior arrangements with the never failing-water supply, are such as, under competent management, should ensure next year most gratifying results.

Though the operations in this establishment have not this season been on an extended scale, I have by studying to "be faithful over a few things," sought to secure a continuance of the trust reposed in me.

I have the honor to be, Sir,

Your obedient servant,

W. H. BARBER,

Officer in Charge.

NEWCASTLE HATCHERY.

NEWCASTLE ONT., 12th March, 1880.

Hon. J. C. POPE,
Minister of Marine and Fisheries,
Ottawa.

SIR,—As this winter has been of rather an unusual kind on account of its mildness and almost constant rains, thereby caused the eggs laid down in the establishment to be constantly covered with sediment, I thought it my duty as Caretaker, to give you the following account of the water and its unusual temperature. There has been so many freshets here this season that the water has been more or less muddy all the time, causing a great amount of sediment to be carried down and laid upon the eggs in the houses, even when washed in the morning they would be covered again in a few hours. On several occasions when not having been washed for two or three days there was a half inch or more dirt upon them. There has often been a period of from four to five days, when it was impossible to see the eggs or be able to tell whether there were fish in the glass aquariums or not, on account of the dirty black color of the water running through the pipes. The water has been so dirty for the past three weeks that it has been necessary to wash the eggs nearly every day. This we have to do, as the eggs require to be kept clean at this stage of hatching. The eggs are now shewing signs of hatching out, and are much further advanced at this date than in former years; this, I suppose, is due to the unusual