APPENDIX No. 24.

SPECIAL REPORT ON THE MIRAMICHI AND GASPE FISH BREEDING ESTABLISHMENTS, FOR THE YEAR ENDING 31st DECEMBER, 1874.

MIRAMIOHI, December 31st, 1874.

To Honorable A. J. SMITH,

Minister of Marine and Fisheries.

SIB,—I have the honor to submit the following report of my operations at the Miramichi and Gaspé fish breeding establishments during the past season.

I beg to state that, although not personally in charge at Miramichi during the spawning season, the efforts of my employes resulted in a success quite beyond my most sanguine expectations. The total number of salmon captured was 315, from which about 1,500,000 eggs were obtained. Mr. Parker, who conducted the operation of collecting the spawn, reports the fish as unusually large, some yielding as many as 15,000 eggs.

To prevent a renewal of the loss sustained last winter in the poisoning of eggs by the zinc covering of hatching grills, I ordered fine gravel to be lain on this covering to the depth of half an inch and the ova to be evenly distributed over the surface. This will, I hope, prevent the eggs coming in contact with the zinc and save them from its injurious effects. This arrangement appears to have so far acted beneficially, as Mr. Parker states he never saw eggs doing better, and the loss up to the present time is unusually small. The establishment being now fully completed and in first class condition, I apprehend no difficulty for the future, and with the introduction of new hatching frames, I hope being enabled to make it as successful as any on this continent.

I have not met at Gaspé with the same success as at Miramichi. Although every mode that I could devise was used to procure a full supply of parent fish, I caught only 10 salmon in the Dartmouth River, 35 in the Malbay and 46 in the York River, making in all 91 fish. Of this number I found that not more than 30 were females, and from these I obtained only 20,000 eggs. These were placed on the hatching frames in the same manner as at Miramichi. A considerable number were injured in transporting them from the several ponds to the hatching house, those coming from the most remote ponds receiving the greatest injury. One lot of 60,000 eggs which were fecundated at Malbaie and left in Mr. Vibert's charge to be taken around the coast to Gaspé, I found, on my return from Miramichi, very much injured, over fifty per cent. showing signs of death a week after being placed on the hatching frames. The remainder of the eggs in the house are doing as well as can be expected under the circumstances, and I hope a good proportion of them will be brought to life. The building is fully completed and in first-class order, and all that is required to ensure success in future is a better arrangement for catching and retaining a full supply of the parent fish.

I have the honor to be, Sir,

Your most obedient servant,

A. B. WILMOT. Fishery Officer in charge.