

Some interesting letters will be found in the Frazer River reports regarding the great improvement made in certain rivers in Oregon, by means of supplying them with fry from hatcheries established upon them. See general report under heading "practical results from artificial fish-breeding."

(2.) *Sydney Hatchery, Cape Breton*, reports a distribution of 1,559,000 salmon fry in some eighteen of the most important rivers of Cape Breton. They were put out in the best possible condition, without accident, or loss worthy of mention. During the past autumn 554 parent salmon were captured and confined in pens, at the fishing stations on the Margaree, Sydney, Salmon, Middle and Lower Middle Rivers; 401 were females and gave 2,678,000 eggs, or an average of 6,695 to each female; these parent fish were returned to the river again in a lively condition; a fence was built on the water line at the hatchery, and a new scow for transporting salmon. The building will require painting, and a new floor laid in the hatching room, next year.

(3.) *Bedford Hatchery, Nova Scotia*, From this nursery were put out 4,390,000 young fish as follows: 1,400,000 sea salmon, 190,000 salmon trout and 2,800,000 whitefish; the two last named fishes were produced from eyed eggs transferred from the Ontario hatcheries. These were planted in ten of the lakes of the Province well adapted for their future growth. The Atlantic salmon were distributed in no less than twenty-six of the most prominent rivers, in twelve of the Counties of Nova Scotia. The most satisfactory results attended the hatching and distributing of the salmon and whitefish. The same success was not experienced with the salmon-trout, these when about to emerge from the ova died in very large numbers; their loss is attributed to the unsuitability of the water which supplies this hatchery (for the growth of salmon-trout) as it appears that a portion of these eggs were sent to temporary hatcheries at Lochaber, and Sheet Harbor, where the most perfect success was met with. In this latter view of the matter, the officer in charge urges the importance of obtaining further supplies of trout and whitefish from Ontario, to stock the many lakes which abound in the Province of Nova Scotia.

One hundred and eighty-four parent salmon in all were obtained during last fall to supply this nursery with eggs—104 were females and gave 1,100,000 ova, making an average of about 10,575 eggs each: much disappointment was felt at not getting a larger number of salmon at the Musquodoboit River, where full arrangements were made to secure them. The interference of a fishery warden allowed a number of the salmon to escape—and other rivers had to be resorted to. To ensure greater economy and certainty for securing parent salmon in the future, arrangements of a permanent nature should be made at the Musquodoboit River by the establishment of a Government station, with an extensive reservoir alongside, in which a full supply of fish could be safely kept until spawning time. This plan should be completed early next spring in order to take advantage of the early runs of fish. Necessary improvements were made during the past season in the taking up, re-fitting and otherwise improving the conductor pipe, for supplying the hatchery with a better run of water. The establishment having been renewed throughout will require little expenditure upon it for some time.

A very lucid description of the benefits which have been experienced from the operations at this hatchery in the increase of salmon in many rivers in Nova Scotia, will be found in the Bedford report hereto attached; and will also be referred to under the heading:—"Practical Results from Fish Breeding."

(4.) *Dunk River Hatchery, in Prince Edward Island*. From the breakage of the dam at this hatchery the supply of water was stopped, and the establishment has been closed up since. A large supply of salmon eggs were laid down in this nursery in the autumn of 1887, and were progressing satisfactorily until the dam gave way from the effects of a freshet in the river in March last; as the dam could not be repaired at this time, it was necessary to transfer the eggs remaining uninjured elsewhere. The Bedford Hatchery being most convenient, and after delays and difficulties, the sound eggs, some 750,000 were safely conveyed to the Nova Scotia hatchery, where in due course they were hatched and distributed along with the Bedford complement in the waters of that Province. There are indications of a con-