

wards in other portions of the Dominion. These trials having resulted satisfactorily, attention was then turned largely to the rearing of the (locally) important commercial fishes of Ontario, more especially the salmon-trout, and the whitefish of the great lakes. By close, personal study, and application to the subject on the part of the originator of this industry, satisfactory results followed the undertaking, not only in the hatching of fry, but also by the introduction and invention of various kinds of fish-breeding apparatus, having for their object, not only the saving of labor and utilizing of space in the hatcheries, but also economising and systematising the general work in connection with this peculiar industry. This knowledge, and these inventions, having been perfected at the Newcastle Nursery, have been applied, and are now generally adopted in all of the fish-breeding establishments in the Maritime Provinces; by this measure, and by uniformity in the construction of the several hatcheries in the Dominion, a similarity of procedure is carried on at each hatchery in the country, which has proved to be of great service in their practical and commercial working.

A misconception evidently prevails in the minds of many persons, with regard to the descriptions of fish bred at the Newcastle Hatchery, by confounding the name of the migratory salmon with that of the salmon-trout of the great lakes. Whilst large numbers of the salmon have been reared at Newcastle, greater attention has of late years been given to the hatching more extensively of the really commercial fishes of Ontario, namely, the large lake trout or salmon-trout, and the whitefish of the great inland seas and other waters of that Province. By reference to the annual reports of the Fisheries branch of the Department it will be found that the numbers of the impregnated ova of these fish deposited in the Newcastle Hatchery out number by nearly four-fold those of the migratory salmon; taking the past three years for example, the following statement is given, viz. :—

	Salmon.	Salmon-trout.	Whitefish.
1877.....	750,000	1,300,000	1,000,000
1878.....	850,000	1,840,000	1,000,000
1879.....	350,000	1,265,000	1,200,000
	<u>1,950,000</u>	<u>4,405,000</u>	<u>4,200,000</u>

And from the Sandwich Hatchery upwards of *forty-eight millions* of young whitefish have been turned out during this same period of three years. No other kinds of fish except these just mentioned and the speckled trout have, as yet, been artificially reared in the Ontario hatchery.

It may also be mentioned that the distribution of the young salmon and other kinds of fish bred at Newcastle has not been confined to that immediate neighborhood nor to the waters of Lake Ontario alone, for they have been widely spread throughout other parts of Ontario and the Province of Quebec, reaching from the Saugeen River (entering Lake Huron) in the west, to the Magog Lakes, in the Eastern Townships; large deposits of fry have also been put in many of the interior or more northerly lakes and rivers of both Provinces; some have also been sent to the waters of Nova Scotia. In point of fact, the Newcastle Hatchery, besides being the principal fish-rearing nursery, has been the general experimental and distributing fish-breeding establishment of the Dominion.

Commercial traffic in the salmon of Lake Ontario, even in their most palmy days, never was carried on largely, from the fact that it was held to be almost impossible to catch them during the summer months in the open waters of the lake. A few enterprising fishermen, however, introduced the use of the trap or pound net which was found to be the only engine by which these fish could be taken; for a few years a considerable number were caught in this way. Serious objections were raised by the inhabitants against this mode of fishing, which culminated eventually in prohibiting the use of trap nets by legislative enactment. The great bulk of salmon taken in Ontario in former years (and they certainly