



THE BROOK TROUT (*SALVELINUS FONTINALIS*).

AT DENTONIA PARK FARM.

The Trout Ponds and Hatchery.

AS we pointed out in our introductory article some months ago, it is not within the power of the majority of Canadian farmers to conduct every department on the same scale that prevails at Dentonia Park, but the principles which there obtain can be applied on any average farm with assured proportionate success. The introduction of a fish hatchery as a feature of the farm is dependent, however, upon natural conditions—proximity to a stream, and so forth, and—of vast importance—upon the aptitude of the farmer or some member of his family for studying along lines which may have been altogether unnoticed previously.

Our first illustration affords a splendid view of the hatchery proper; this is a room—the basement of the building in the background in illustration No. 4—thirty by fifteen feet. Down one side of the chamber, and about three and-a-half feet from the ground, run the troughs seen to the right of the illustration; in these are placed in tiers running the full length of the trough the small trays about fifteen inches long which contain the eggs. The trays are covered by the stream of water which flows from, and

can be regulated by, the taps at the far end of the chamber.

The troughs at Dentonia will accommodate about 500,000 eggs, which are ready for immersion about from the middle of October to the end of November. The period of incubation varies from seventy to one hundred and twenty days. The temperature of the water during this time is kept at from 38° and 45° Far. When the embryo develops into a life the newly hatched fish is about half an inch in length. Attached to it is a small sack, the yolk of the egg, by absorbing which he attains nourishment for the first month of his existence which is spent in one of the tanks which can be seen on the opposite side of the chamber. Here he remains until the sack is absorbed, which is a very critical period, as, if unable to feed he soon perishes. From the tank he is removed to entirely new quarters, the rearing cages, which are situated in close proximity to one of the ponds, and consist of a series of cages about three feet deep, through which a constant flow of water is maintained by gravitation, water in its fall being aerated. Fine wire netting at the inlet and outlet prevent the fish being washed away or the