## Canadian Antural History.

The Salmon.

(Salmo Salar.)

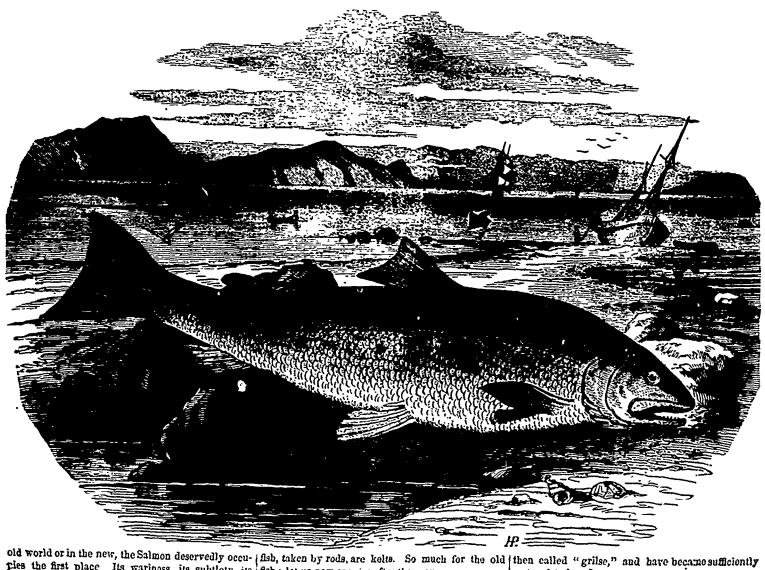
HITTERTO, in our sketches of Canadian Natural History, we have purposely confined ourselves to animals and birds. To have described our native to deprive our readers of the immediate opportunity of verifying our descriptions by their own observa tions and researches. With the arrival of the genial summer-time, however, when our rivers and creeks are swarming with fish, and net and rod and line are put into requisition for the capture of the fluny prey, the objection no longer holds good.

Among all fresh water fishes, whether found in the

is with thoir heads, thus displacing the gravel and forming their first paraulal. The excavation varies in depth from nine to eighteen inches, according to the nature of the material or the requirements of the situation, of which, no doubt, the fishes themselves are the best judges. When the trench is sufficiently deep, the female deposits in it the ripest portion of her ova, and the male sheds his milt among them. A i careful observer may perceive both products falling into, and settling at the bottom. As soon as the restored, and they are then known in Scottish parlance onely did ounces. After remaining absent a few as weel mended ketta. The majority of early spring months, they return to the fresh water. They are

of the "parr" hatched together, all do not change into the second or "smolt" state at the same time. Frequent controversies have been waged on this stage of the Salmon's history, and few natural'sta seem able to decide positively whether certain fishes are young salmon-or a distinct species to which the name of Parr has been attached.

In the second or smolt period, the scales, and many of the specific forms and colours of the Salmon show themselves. The ush now seeks the salt water, going thes while the ice king held sway, would have been spective deposits are made, another tilting takes down rivers to the ocean, and remaining there during place against the gravel, which has the effect of not winter. So salubrious is the sea, so enlarging the only covering the ova deposited, but of forming an influence of its wide domain, that no sooner has a other paraties. They then drop down stream and smolt of a very few ounces in weight been launched rest, and soon after find their way to the salt water. I into that vast bring abyss, than it suddenly expands By the time they reach the sea, much of their fine in growth, even as the children of the Anakim. lustre-destroyed by the spawning process-is re- a short time it will weigh more pounds than it previ-



ples the first place. Its wariness, its subtlety, its fish; let us now enquire after the spawn. strength, its determined courage and endurance, as well as the unsurpassed quality of its flesh, place it without a rival. The life-history of the Salmon is interesting. and some of its stages, even at the present day, are involved in considerable obscurity. Without presuming to advance any theory of our own, we will briefly attempt to record the history of a salmon from its earliest entrance on existence, until it has attained maturity, as ascertained by the best authorities of the present age.

The places usually selected by the parent fish for the deposition of her roo, or ova, are rippling fords or shallows, of not more than two or three feet in depth, where the gravel is clean and not too heavy, and the water clear and in constant flow. They begin by falling down a few yards below the chosen spot, and commence digging a trench, by tilting up against

The period required for hatching the ova varies with the season and time of deposition. If spawned early, the fry appear in from 90 to 100 days. When they first emerge, they are very slender, but extremely agile little things, about three-quarters of an inch in length, and with none of their fins developed except the pectoral. Beneath the body, a comparatively large bag of beautiful transparent red substance-resembling a pale coloured current—is attached to the abdomen, affording the young fish nourishment for several weeks. As the contents of the bag are assimilated, it gradually approaches in colour the rest of the body, and in from 27 to 50 days it entirely disappears. In this stage of its existence our young Salmon is called by several names-"parr" being probably the most popular. This period continues

matured to breed.

The Salmon is emphatically the angler's fish. Possessed of a most rapacious appetite, he readily seizes the gaudy fly which the expert piscator has defly dropped with gossamer lightness in a mimic whirlpool, or a circling eddy. The well-known "twist" of the angler's wrist'fixes the barbed hook in the red gills of the scaly victim, and the struggle begins ;for not without sierce and determined resistence is the stream-monarch going to be brought to bank. The firm nerve, the educated eye, the most skilful and delicate manipulation are necessary if the tackle be fine and the fish large. Under such circumstances, hours are sometimes necessary before he is everpowered, and even then he must be piloted to the edge of the stream with the "eye of faith and the foot of instinct." We once, in a North of England stream, about one year, and it is somewhat remarkable that "worked" a fourteen pound Salmon by means of a