

them. The fish afterwards cover up the eggs with sand or pebbles, or leave them, and in due time the eggs become transformed into fish.

II.

The quantity of eggs which the female fish of all sorts deposit is very considerable; of some it is truly prodigious. The carp, for example, produces about a quarter of a million at a time; the perch a great many more; the trout seven or eight hundred; the salmon several hundred; the sturgeon between six or seven millions; and the pike a vast number. A very small portion of milt suffices to give life to a large quantity of eggs. It would therefore appear that nothing in the world ought to be more abundant than fish of all descriptions.

But only a very small portion indeed of the eggs come to maturity; some naturalists calculate that not one in a hundred do so. Of the rest no inconsiderable portion are devoured by other fish. The males of some species, and indeed the females too, also eat their own eggs; and a great quantity are destroyed by getting mixed with mud and dirt.

III.

It certainly seems strange that man, who has done so many wonderful things,—who has, so to speak, scaled the heavens, to learn the movements of suns and planets,—who has plunged deep into the earth for mineral treasures,—who has turned many a morneful morass, and dreary forest, a barren waste, into fruitful corn-fields or abundant pasturages, who has made the tremendous agent, electricity itself, docile to his will; it is strange that he, with his vast ingenuity, should never have bethought him of taking measures for preserving the eggs of fish, and thereby secure to himself, in all climates and at all seasons, an abundant supply of wholesome food.

Still stranger perhaps is it to find, that though he has taken immense pains to discover the secrets of nature, even in matters of mere scientific, or, if we may so say, idle curiosity, centuries passed away before it occurred to him that he might do with fish what he has done for animals, and birds, and plants,—assist and control, and improve, the operations of nature; that is to say, instead of leaving the female to deposit her eggs and the male his milt, and then abandon them, he might cause the female to discharge her burden, and the male his fecundating liquor, where pleased; that he might assist them in the operation; and that for so doing he might obtain a living fish from almost every egg.

But the strangest thing of all undoubtedly is, that when he *did* learn that he could produce fish as well as the fish themselves—when scientific naturalists discovered that by casting some of the male's milt on the female's eggs fish would be brought forth, as surely as if the operation had been done by the parents in the bed of a river—it never struck him that herein was the means of increasing, a million and a million fold, the production of his lakes and rivers and streams, and reservoirs and ponds—of making in a word, the waters as fruitful, in their way, as the land is of corn and grain.