their purpoſe: they will aſcend rivers hundreds of miles, force themſelves againſt the moſt rapid ſtreams, and ſpring with amazing agility over cataracts of ſeveral feet in height. Salmon are frequently taken in the Rhine as high up as Baſil; they gain the ſources of the Lapland rivers in ſpite of their torrent-like currents, and ſurpaſs the perpendicular falls of Leixſlip, Kennerth, and Pont Aberglaſtyn. It may here be proper to contradict the vulgar error, of their taking their tail in their mouth when they attempt to leap; ſuch as Mr Pennant ſaw, ſprung up quite ſtraight, and with a ſtrong tremulous motion.

The ſalmon is a fiſh ſo generally known, that a very brief deſcription will ſerve. The largeſt we ever heard of weighed 74 pounds. The colour of the back and ſides are grey, ſometimes ſpotted with black, ſometimes plain: the covers of the gills are ſubject to the ſame variety; the belly ſilvery; the noſe ſharp-pointed; the end of the under jaw in the males often turns up in the form of a hook; ſometimes this curvature is very conſiderable: it is ſaid that they loſe this hook when they return to the ſea. The teeth are lodged in the jaws and on the tongue, and are ſlender, but very ſharp; the tail is a little forked.

2. The trutta, or ſea-trout, migrates like the true ſalmon up ſeveral of our rivers; ſpawns, and returns to the ſea. That deſcribed by Mr Pennant was taken in the Tweed below Berwick, June 1769. The ſhape was more thick than the common trout; the weight three pounds two ounces. The irides ſilver; the head thick, ſmooth, and duſky, with a gloſs of blue and green; the back of the ſame colour, which grows fainter towards the ſide-line. The back is plain, but the ſides, as far as the lateral line, are marked with large diſtinct irregularly-ſhaped ſpots of black: the lateral line ſtraight; the ſides beneath the line, and the belly, are white. Tail broad, and even at the end. The dorſal fin had 12 rays; the pectoral 14; the ventral 9; the anal 10. The fleſh when boiled is of a pale red, but well-flavoured.

5. The fario, or trout; the colours of which vary greatly in different waters, and in different, ſeaſons. Trouts differ alſo in fize. One taken in Llynallet, Denbighſhire, which is famous for an excellent kind, meaſured t 7 inches, its depth three and three quarters, its weight one pound ten ounces; the head thick; the noſe rather ſharp; the upper jaw a little longer than the lower; both jaws, as well as the head, were of a pale brown, blotched with black; the teeth ſharp and ſtrong, diſpoſed in the jaws, roof of the mouth, and tongue. The back wag duſky; the ſides tinged with a purpliſh bloom, marked with deep purple ſpots, mixed with black above and below the ſide-line, which was ſtraight; the belly white. The ſirſt dorſal ſin was ſpotted; the ſpurious ſin brown, tipped with, red; the pectoral, ventral, and anal ſins, of a pale brown; the edges of the anal ſin white; the tail very little forked when extended. —The ſtomachs of the common trouts are uncommonly thick and muſcular. They feed on the ſhell-fish of lakes and ri­vers, as well as on small fiſh. They likewiſe take into their ſtomachs gravel or ſmall ſtones, to aſſiſt in comminuting, the teſtaceous parts of their food. The trouts of certain lakes in Ireland; ſuch as thoſe of the province of Galway and ſome others, are re­

markable for the great thickneſs of their ſtomachs, which, from ſome flight reſemblance to the organs of digeſtion in birds, have been called *gizzards;* the Iriſh name the ſpecies that has them *gillαroo trouts.* Theſe ſtomachs are ſometimes ſerved up to table under the former appellation. Trouts are moſt voracious ſiſh, and afford excellent diverſion to the angler. The paſſion for the ſport of angling is ſo great in the neighbour­hood of London, that the liberty of ſiſhing in ſome of the ſtreams in the adjacent counties is purchaſed at the rate of 101. *per annum.* Theſe fiſh ſhiſt their quarters to ſpawn; and, like ſalmon, make up toward» the heads of rivers to depoſit their roes. The under jaw of the trout is ſubject, at certain times, to the ſame curvature as that of the ſalmon.

“It is caught (fay the editors of the Hiſtory of Cumberland) in very great plenty at all ſeaſons of the year; one weighing a pound and a half is an uſual ſize, though ſome are caught of 4 lb. weight. Five or ſix ounces is a common weight; the largeſt are commonly the bell for the table, when they cut of a deep ſalmon colour. In the winter months great quantities are potted along with the charre, and ſent to London, &c. — The angler, on a favourable day, here enjoys his diver­ſion in higher perfection than in moſt places. A trout occaſionally ſtrays out of the Eamont into the lake, and *vice verſa,* out of the lake into the river. They are eaſily diſtinguiſhed by their ſpots; and it is obſerved, that a fish taken from its uſual place is not in ſo good a condition as one of equal length taken on its own ground; hence it is probable, that they do not, emigrate, except when diſeaſed or ſpawning. Geld fiſh (thoſe without ſpawn) are the firmeſt and beſt. They have been taken out of a ſolid piece of ice, in which they were frozen, as it were in a cafe, perfectly unin­jured, after an impriſonment of ſeveral hours. ”

1. The ſpecies, called, from its colour the *white,* migrates out of the ſea into the river Elk in Cumber­land, from July to September. When dreſſed, their fleſh is red, and moſt delicious eating. They have, on their ſirſt appearance from the ſalt water, the *lernaea ſalmonea,* or ſalmon louſe, adhering to them. They have both milt and ſpawn; but no fry has as yet been obſerved. This is the fiſh called by the Scots *phinocs.* They never exceed a foot in length. The upper jaw is a little longer than the lower; in the firſt are two rows of teeth, in the laſt one: on the tongue are fix, teeth. The back is ſtraight: the whole body of an elegant form: the lateral line is ſtraight; colour, be­tween that and the top of the back, duſky and ſilvery intermixed; beneath the line, of an exquiſite whiteneſs; firſt dorſal fin ſpotted with black: tail black, and much forked.
2. The ſamlet is the leaſt of the trout kind; is fre­quent in the Wye, in the upper part of the Severn, and the rivers that run into it, in the north of Eng­land, and in Wales. It is by ſeveral imagined to be the fry of the ſahnon; but Mr Pennant diſſents from that opinion. See his *Brit. Zool.* III. 303.

This ſpecies has a general reſemblance to the trout, therefore muſt be deſcribed comparatively. *1st,* The head is proportionably narrower, and the mouth leſs than that of the trout. *2dly,* Their body is deeper. *3dly,* They ſeldom exceed fix or ſeyen inches in length; at. moſt, eight and a half, *4thly* The pectoral fins have.