

few dark spots on the gill covers, which extend along the lateral line through the entire length of the body. These are most conspicuous in the females. The fins are then soft and the sides and belly covered with sea-lice.

As spawning time approaches and the fish seek the swift, shallow waters at the head of the streams, considerable changes take place in their appearance. The male assumes the appearance known in England as "Red" fish. The sides take on an orange hue, paling into yellow on the belly, the spots become of a bloody-red, and are seen on the dorsal and caudal fins; the back becomes greenish, and the cheek is striped with orange. The lower jaw also elongates into a hooked cartilaginous excrescence, which fits into the upper. The females grow darker, particularly upon the back, fins, and gill-covers, and are now called "Black" fish.

After spawning they are lank and lean, with heads much larger in proportion to their bodies. The females change to a greyish color on the back and yellow on the sides, with red and dusky spots alternating above the lateral line, and extended upon the dorsal and caudal fins, while the pectoral, ventral, and anal fins become of a blueish grey. They are now called Kelts.

In the classification given on the thirtieth page of this magazine, the Salmon belongs to the order called Cycloids; in the system heretofore in use, it falls under the order of soft-rayed abdominal fishes; family Salmonidæ, genus *Salmo*: specific name, *Salmo salar*.

The body is covered with thin oval scales, but the head is smooth or free from scales. There are two dorsal fins, the first with thirteen rays, the second fatty, long and rounded, and without any rays. The pectoral fins have twelve rays, and the ventral nine, the anal fin nine, and the caudal nineteen. The head is one-fifth of the whole length of the fish, the eyes are small, and the nostrils are placed much nearer to the eyes than to the point of the nose. The lateral line is straight, and runs very nearly through the centre. In adults, the caudal fin is lunated, but in the young fish it is considerably forked. The branchiostegous rays, or bony rays of the gill-covers, are usually from ten to twelve, but are not always the same on both sides. It has strong sharp teeth on all the maxillary and both palatine bones; there are one or two teeth, rarely more than two, and frequently but one, on the vomer, and three to five on the tongue.

Such are some of the leading features by which this beautiful fish may be distinguished, beautiful indeed, whether it swims in its native element, its sides sparkling like molten silver, or smoking on the table it graces the beginning of the feast.

As soon as the rivers are free from ice, say from the middle of May to the first of June, the Salmon, grown fat and silvery on their sea-found food, appear in the Estuaries, where they usually remain for a time, going up with the flood and returning with the Ebb. In those rivers of Great Britain which run clear as early as February, they have been observed to make a second migration to the sea before running up to spawn. I am not informed whether this has been observed in any of the Salmon rivers of the Provinces,