

certainly these organs stand in great contrast with the dull un-intelligent eyes of the shark or the sturgeon.

On account of its peculiar projecting teeth, four protruding from the upper jaw and two from the lower jaw, the fish bears in British Columbia the name of Rat-fish or Rabbit fish, and the terms are appropriate as the mouth recalls most strikingly that of a rodent. They are white or semi-transparent, and unlike the teeth of sharks and rays are never replaced if lost. No doubt mollusks and crustaceans form a large part of its food.

The gill arrangements are most remarkable, for instead of the five to eight exposed gill-openings in front of each breast fin, such as we find in sharks, the Chimæra has a large operculum or gill cover consisting of several broad plates marked by distinct lines of division, and most effectively shielding the four-paired gills within. The gill chamber opens by a narrow slit near the base of the peduncle or stalk of the pectoral fin, on each side of the head. No doubt the lines marking the separate opercular plates are the tracks of mucus canals. Similar large smooth plates encase the whole head. They resemble a coat of mail resplendent with a brilliant metallic appearance. The head is especially striking from its bright silvery lustre, over which, in life, all the colours of the spectrum spread, golden yellow, rosy pink, emerald green, pearly blue, indeed every prismatic tint. If Chimæra is one of the sea's most grotesque creatures, it is, in its rainbow glory, one of its most resplendent. The shrunken, faded brownish or yellow examples of Chimæra, exhibited in our museums, convey no idea of the real splendour of this strange marine vertebrate. The crude semblance as if made of wrinkled leather, is utterly unlike the smooth glittering, living fish. In allusion to its beautiful colours the Norsemen call it the gold or silver fish ; but its external appearance is not less remarkable, to the naturalist, than its anatomical structure.

In my dissection of a number of specimens in 1895 I noted some of its structural features. Thus the short and capacious intestine exhibited the spiral partition or valve, which we also find in sharks and ganoids.