

strong, broad, horizontal, as in bottom fish generally; it is inserted so that its inner ray corresponds to the anterior dorsal ray.

Scales rather small and cycloid; there are about ten series between the origin of the dorsal fin and the lateral line, and about eight between the lateral line and the anal. The lateral line is broad and very distinctly marked; its scales correspond only to about every second transverse series; they have their hind margin raised and free, and two small but distinct pores open above and below each scale.

Colour brownish, lower parts of the head and abdomen black; buccal and branchial cavities black. A stripe between each pair of dorsal rays; the membrane between the three middle caudal rays, the anal fin, the outer (respectively lower) sides of the pectoral and ventral fins blackish.

The œsophagus passes into a long and wide cœcal sac, which, however, does not reach backwards to the middle of the length of the abdominal cavity. The pylorus is on the same level as the cardiac end of the stomach; two short and wide pyloric appendages are placed opposite to each other. The intestine runs straight backwards without any lateral bend, and is separated from the short rectum by a circular fold, the course of which is also visible externally. The mucous membrane of the intestine is densely and deeply folded, the folds being raised in a reticulated fashion. The liver consists of a right and a left lobe, connected by a thin transverse bridge. The left lobe is broad and flat, extending somewhat further backwards than the stomach. The right lobe is far more bulky, extending nearly to the end of the abdominal cavity, and hollowed out on one side for the reception of the intestinal tract. This lobe is connected with the transverse portion of the liver by a long and thin strip of the substance of the liver. Gall-bladder of moderate size. Air-bladder absent.

The ovaries are closed cylindrical sacs, and attached to each other along their whole length; they did not contain ova.

Bathysaurus agassizii, Goode and Bean,¹ described from a specimen 21 inches long, and obtained at a depth of 647 fathoms in the Atlantic, lat. 33° 35' N., long. 76° 0' W., is probably not specifically distinct from the Pacific specimen. It seems to be a fish with a somewhat deeper body, but, then, it was ascertained to be a "female, full of nearly mature eggs."

Bathysaurus mollis (Pl. XLVI. figs. B, B').

Bathysaurus mollis, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 182.

D. 15. A. 11. P. 15. V. 8.

Adipose fin present. Rays of the fins, especially the front rays of the dorsal, rather elongate.

¹ Bull. Mus. Comp. Zool., vol. x., 1883, p. 215.