

42 cm. long, taken at Station 41 in 1365 metres. We see here a great number of rings, perhaps twenty in all, but these rings

are in many respects essentially different from the annual rings in the scales of boreal fish. In the latter the central rings are as a rule very large, the subsequent rings becoming narrower as the fish grows older. If the rings in the scale of *Bathygadus* signify periods of growth, these would seem to be of a peculiar character.

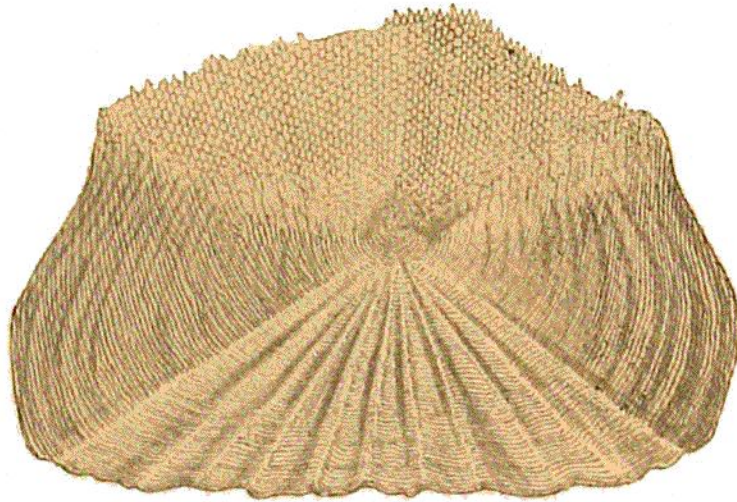


FIG. 564.
Scale of *Cantharus lineatus*, Montagu (White).
Length of fish, 42 cm.

Fig. 564 is the scale of a fish 42 cm. in length from the coast banks of Africa, *Cantharus lineatus*, taken in shallow water at a high temperature. This scale also shows rings which are very distinct, especially towards the periphery of the scale.

In Fig. 565 I have represented a scale from a surface fish, *Polyprion americanus*, 49 cm. in length, taken in the surface waters at Station 56.

In the scales of all these fishes, taken under such various conditions, we observe peculiarities of structure, resembling the rings produced by the periodicity of growth in the scales of fish from boreal waters. There seems thus to be every reason for subjecting the growth of the scales and other organs of

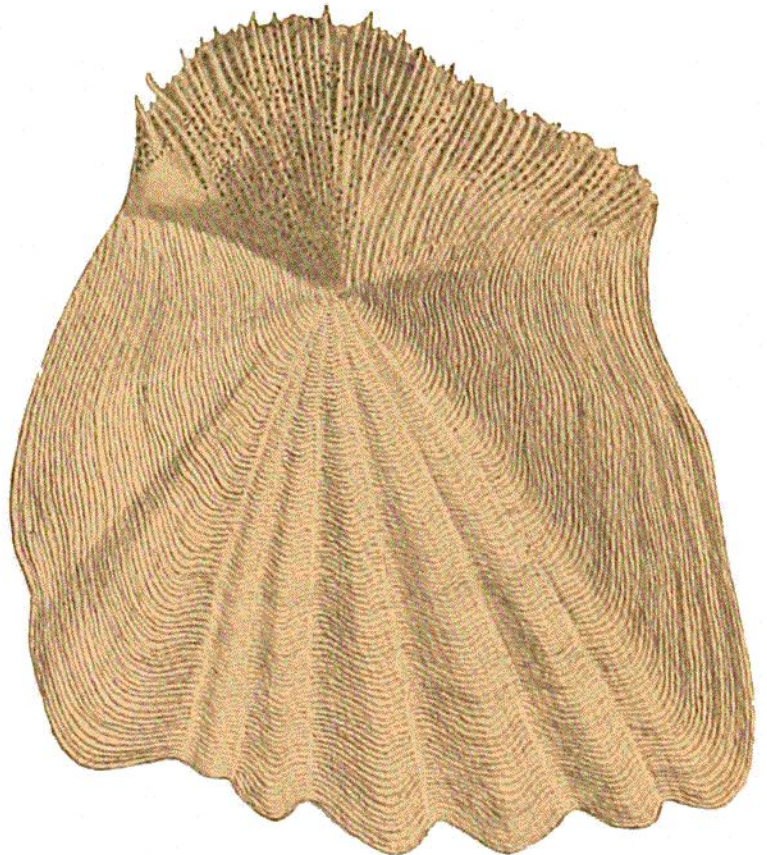


FIG. 565.
Scale of *Polyprion americanus*, Bl. and Schn.
Length of fish, 49 cm.