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Fig. 14. Ditto. Girdle-face of the same individual; not very typical.

Fig. 15. Ditto. Valve with unusually elongated lateral prolongations of the chromatophore-plate. $\frac{1200}{1}$.

Fig. 16. Ditto. A typical girdle-face.

Fig. 17. *Sellaphora* (?) *bacilliformis* (Grun.), Mer. Valve, after Grunow (Arct. Diat. pl. ii. fig. 51).

XXXI.—On a Hermaphrodite Example of the Herring
(*Clupea harengus*). By THOMAS SOUTHWELL.

DR. GÜNTHER remarks ('Study of Fishes') that instances of so-called hermaphroditism have been observed in the codfish, some *Pleuronectidæ*, and in the herring; but I believe that in the latter species such instances are very rare. It may therefore be worth recording an example recently sent me by Mr. Patterson, of Yarmouth, for examination.

Mr. Yarrell exhibited the bi-sexual organ of a herring at a meeting of the Zoological Society on the 23rd September, 1845 (P. Z. S. 1845, p. 91); there is also a description of a similar compound sexual organ in this fish by Dr. A. J. Smith in the 'Journal of Anatomy and Physiology,' 1870, vol. iv. p. 258; in addition to these, Dr. Day (Brit. Fishes, ii. p. 219) refers to a third example of the same kind recorded by Malm (*Öfv. Ak. Förh.* 1876, pl. v.); this latter description I have not seen.

The example sent me, which had been removed from the fish, was of the usual form of the complete roe; it was 130 millim. long; the anterior portion, consisting of the female organ, was 95 millim. in length and 30 millim. at its greatest depth. The male organ, or milt, occupied the posterior portion of the abdominal cavity and was 35 millim. in length, tapering off sharply towards its termination. The female roe was divided transversely into two distinct lobes, each contained in the usual investing membrane, but the male portion (milt) was in a single mass, the division between the two organs being more or less vertical, but the former extending furthest to the rear along the dorsal portion. The lobes of the female organ thinned out towards their posterior outer margins and a portion of the milt obtruded between them in the form of a wedge. Both bodies were fully matured and had a healthy appearance, but owing to their having been removed from the fish, which had previously been smoke-dried, a more minute examination was impossible.

As to the relative positions of the two organs in the various examples, it has already been mentioned that in the specimen under consideration the female section occupied the anterior position, whilst the smaller male organ was confined to the posterior portion of the abdominal cavity; but in that described by Dr. A. J. Smith (which measured only $3\frac{1}{2}$ inches in length, and was therefore evidently not matured) the reverse was the case:—"The upper [anterior?], larger, and bulkier portion, 2 inches in length, was a distinct testis or milt; the lower [posterior?] and more tapering half was roe and $1\frac{1}{2}$ inches in length, the separation between the two quite distinct and divided vertically." Only one side of the generative organs was preserved, but Dr. Smith says that the other side was of exactly the same character. In Mr. Yarrell's specimen the disposal of the parts differed from both these: the "lobe of the female, or hard roe, was on one side, and the lobe of the male, or soft roe, on the other."

That the occurrence of such compound sexual organs in the herring is of very rare occurrence (it is more frequent in members of the cod family) seems probable, for I cannot learn of like examples having been previously observed by the Yarmouth fish-curers, through whose hands many millions of these fish pass annually, and who are very ready to mark any departure from the normal.

XXXII.—*Description of a new Lizard from Pitt Island, near Chatham Island, New Zealand.* By G. A. BOULENGER, F.R.S.

Lygosoma Dendyi.

Section *Lirolepisma*. Body elongate; the distance between the end of the snout and the fore limb is contained $1\frac{2}{3}$ to $1\frac{4}{5}$ in the distance between axilla and groin. Snout short, obtuse. Lower eyelid with an undivided transparent disk; nostril pierced in the centre of the nasal; no supranasal; rostral nearly twice as broad as deep; frontonasal broader than long, forming a suture with the rostral; præfrontals in contact on the median line or narrowly separated; frontal shorter than frontoparietals and interparietal together, in contact with the two anterior supraoculars; four supraoculars, second largest; seven supraciliaries; frontoparietals distinct, a little longer than the interparietal; parietals in contact