

constant within the limits of the same family. Perhaps the readiest explanation is that the valve being very small, Verrany and others have overlooked it in *Chiroteuthis*; but it seems at present impossible to explain the discrepancy regarding *Histioteuthis*.

It seems advisable provisionally to rank the present form in the same family with *Calliteuthis* and *Histioteuthis*, to which it is certainly allied, under the name Chiroteuthidæ, Gray; which will be equivalent to d'Orbigny's Lorigopsidæ without its type-genus, and which seems to be uncertain in respect of the presence of a siphonal valve.

Verrill has proposed¹ a new family, Histioteuthidæ, but in our present lack of knowledge on many points connected with these interesting forms the step seems to me hardly justified, especially in view of the existence of a genus so clearly intermediate between the two principal genera as the present.

Calliteuthis, Verrill.

Lorigopsis, Owen (*pars*).

Calliteuthis reversa, Verrill (Pl. XXXIII. figs. 12-15).

1880. *Calliteuthis reversa*, VII., Amer. Journ. Sci. and Arts, vol. xx. p. 393.

1881. " " VII., Ceph. N. E. Amer., p. 295, pl. xlv. fig. 1.

1884. " " VII., Second Catal., p. 243.

Habitat.—Station 168, east of the North Island, New Zealand, July 8, 1874; lat. 40° 28' S., long. 177° 43' E.; 1100 fathoms; blue mud. One immature specimen taken at the surface.

Station 232.—The *Hyalonema* ground off Ino Sima Island, Japan, May 12, 1875; lat. 35° 11' N., long. 139° 28' E.; 345 fathoms; green mud. One specimen.

Several stations off the eastern United States, depths 1000 to 3000 fathoms (Verrill).

Verrill's admirable description and figures leave no room for doubt as to the identity of the Challenger specimen with his species. The temptation is great to regard it as also synonymous with Sir Richard Owen's *Lorigopsis ocellata*,² the more so as this is from the China Sea, while the Challenger individual was taken near Japan. The only differences which I can discover on a careful perusal of his diagnosis are, firstly, the form of the fin, which does not extend posteriorly beyond the extremity of the body; secondly, the smaller relative size of the suckers, and thirdly, the fact that the horny rings of these are extremely prominent and toothed.

The mantle-connective is a little more complicated than Verrill's description would indicate; the sockets on the base of the funnel are pyriform hollows, the deeper portion being posterior; the ridge on the mantle itself is divided into two portions, of which the posterior is much the more prominent, and separated by a distinct gap from the anterior, which is low and narrow.

¹ Ceph. N.E. Amer., p. 431.

² *Trans. Zool. Soc. Lond.*, vol. xi. p. 139.