

to the tip of the head, which is more or less truncated, that the cephalic slits are comparatively short, extending on to the anterior surface of the head, where they do not, however, coalesce, but leave a small interval in which the proboscidian aperture is situated.

This is all that can be said of the external appearance.

The internal structure further confirms the supposition which the external characters point to, viz., that these two specimens belong to the same species. Thus, certain chief points in the series of transverse sections made through both the specimens coincide to a degree that may be judged of by the following table:—

	In Specimen <i>a</i> .	In Specimen <i>b</i> .
The superior brain commissure is situated in section No.	30	34
The inferior brain commissure is situated in sections No.	35-39	38-44
Canal of the posterior brain lobe is situated in section No.	43	51
The mouth begins in section No.	55	60
The mouth ends in section No.	84	103
First appearance of nephridia in section No.	97	112

In specimen *a* (May 8, 1873) there are noticed four transverse deferent ducts to the longitudinal nephridial duct on the left side (in sections 138, 175, 217 and 278), and four on the right side (sections 147, 191, 217 and 278).

In specimen *b* (May 20, 1873) there is a less regular arrangement, some of the deferent ducts being double, *i.e.*, two at the same level or in the same section. Once in this specimen this is so arranged that in the one section (No. 197) there are four deferent ducts cut nearly throughout their whole length. In the portion of the œsophageal region sectionised, which, however, does not embrace the whole nephridial region, I count in this specimen on the left side six deferent ductules (sections 112, 144, 156, 159, 197, 207), and to the right also six, which are only partly opposite to the left ductules (sections 142, 168, 178, 180, 197, 208). In judging of this apparent discrepancy it should not be lost sight of that the short distance separating the two ductules 156 and 159 on the left is still symmetrically repeated on the right side in 178 and 180, though somewhat further backwards.

A commissure uniting the two vagus nerves after they have left the brain and before they have yet reached the œsophagus was distinctly noticed.

The histological details of the integument fully correspond to the type of *Cerebratulus corrugatus*, which will hereafter be more fully described and figured (*cf.* Pl. XIII. fig. 6), and which is diagrammatically represented in fig. 9 of Pl. XI. as differing from figs. 10 and 11.

One of the specimens showed a very curious pathological degeneration, which I will however, only touch upon very briefly. The muscular tissue on a restricted but ring-shaped region not far behind the head, and only as far as the circular and longitudinal muscular coats are concerned, is replaced by (or gradually passes into) a homogeneous