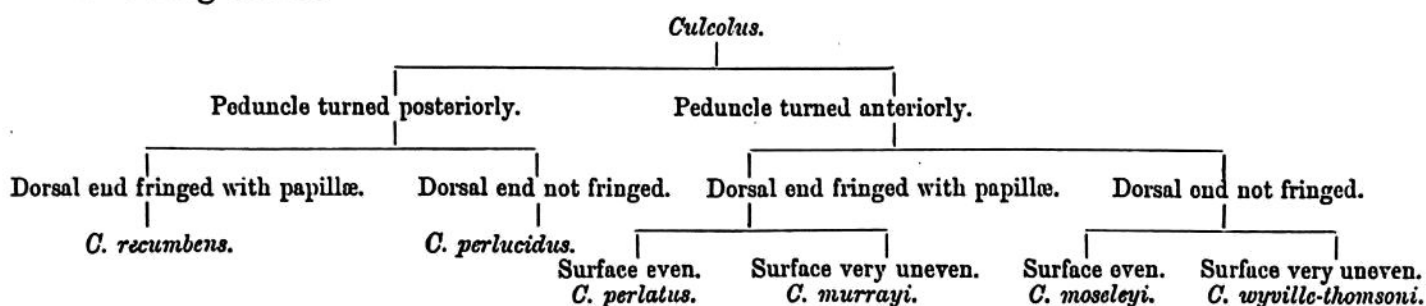


following account. A short generic diagnosis, and a description of the six species for the reception of which the genus was formed, were given in the third part<sup>1</sup> of my Preliminary Report on the collection. The morphological peculiarities, however, were merely referred to; while histological details, and remarks on the structural characteristics and their bearing on our knowledge of the other members of the group, were omitted as being out of place in a Preliminary Report intended merely to supply a short description of the new species.

The genus *Culeolus* contains six species of Simple Ascidians, which in the first rough classification of the collection were arranged in the genus *Boltenia* on account of their long peduncles. A short examination, however, of their details of structure sufficed to show that they could not be referred to that or any other known genus. Further investigation revealed several peculiarities common to the species, such as the structure of the branchial sac, in which they differed from all previously known Simple Ascidians; it likewise showed that, although well-marked specific differences were present, and characteristics might be taken from almost every organ, the six species were closely allied, and possessed common characters, which rendered their union under one generic title necessary.

The species may be distinguished by means of external characters alone, as shown in the following table:—



Of three of the species—*Culeolus wyville-thomsoni*, *Culeolus perlatus*, and *Culeolus moseleyi*—only a single specimen was obtained, consequently in these the examination was limited to those points which were necessary for a diagnosis of the species, and the description below contains in addition only such observations as could be made without further injuring the unique specimens. The other three species, each of which is represented by more than one specimen, will be described more in detail, commencing with *Culeolus murrayi*, which may be taken as the type of the genus.

*Culeolus murrayi*, Herdman (Pl. VIII. and Pl. IX.).

*Culeolus murrayi*, Herdman, Preliminary Report, Proc. Roy. Soc. Edin., 1880–81, p. 83.

*External Appearance.*—Like the other species of the genus it consists of two parts, a more or less oval “body” borne on the summit of a long thin “peduncle” (Pl. VIII. fig. 1).

<sup>1</sup> Proc. Roy. Soc. Edin., 1880–81, p. 82.