

the whole intestine is about 2 cm. The interior of the first division of the intestine is traversed by numerous fine longitudinal folds, one of which is much stronger than the rest, and passes through the small cylindrical portion which joins the anterior and posterior divisions of the intestine, it can be recognised from the outside. In the rectum the folds are not so strongly developed. The *contents* of the whole *digestive tract* form a brownish-black mass of unrecognisable animal débris; in the stomach there were fragments of Hydroid polyps, Copepoda, and torn prickles of the stomach itself.

The *two anterior livers* (fig. 9, *c,c*) are small, the right hand one is formed of two lobes, and is a little larger than the left hand one (length 5 mm.); both open into the first stomach, into which also opens the *chief mass of the liver*, (fig. 9, *d*) by its short wide bile duct (fig. 9, *e*). The liver measures 3 cm. in length, and has a diameter of 5 mm. anteriorly, 2.5 mm. posteriorly, and about 7 mm. in the middle; it was a trifle flattened, its colour like that of the anterior livers, brownish-blackish-grey; it is divided into a number of disk-like lobes, by fewer or more superficial transverse furrows. It has no traces whatever of any prolongations into the papillæ, nor are there any traces on the body-wall of cavities at the base of the papillæ for the reception of such diverticula. The walls of the liver are thin and delicate, and show a quantity of transverse anastomosing trabeculæ; the cavity extends throughout the liver. The contents of the liver were precisely similar in character and appearance to the contents of the rest of the alimentary canal.

The *heart* is like that of other species of *Bornella*,¹ the ventricle quite spherical, and about 2 mm. in size. The course of the posterior aorta has been already described by me.² Transverse sections of the dorsal papillæ showed an opening on either side for the arteria and vena papillaris (branchialis).

The *renal syrinx* was attached to the outer side of the rectum; it was pear-shaped, and had a length of 2.5 mm. Its colour was yellowish-white and the longitudinal folds were quite visible from the outside. The *urinary chamber* has been already described by Hancock and myself;³ its breadth is .4-.5 mm.; it gives out numerous branches from both sides, and shows the usual knobs. The strongly branched *renal tubes* (fig. 12) surround the intestines, and contrast by their whitish colour with the liver and hermaphrodite gland.

The rather pale ochre-yellow *hermaphrodite gland* is 14 mm. long by 7 mm. broad, and 3 mm. high, and covers the upper and (further back) the left side of the anterior half of the liver, and is somewhat sunk within its surface, but is marked out from it by the contrast of colour; it consists of nine not quite equal lobes, all of which, with the exception of the foremost, are paired. The lobes are roundish (fig. 13), and strongly faceted; the free surface is finely granulated, the granulation being not so distinct upon the facets. The structure (Pl. XVII. fig. 17) of the lobules is as usual; the white club-shaped

¹ Bergh., *loc. cit.*, p. 298, pl. xxxvii. fig. 8.

² Idem.

³ Bergh., *loc. cit.*, p. 299.