receives posteriorly the strong bile duct of the first group of papillæ; along its upper wall a strong fold runs from the cardiac to the pyloric end. The large main bile duct, which receives three or four smaller ducts on each side, runs through the hermaphrodite gland, in a groove on its lower surface; the duct, receiving 3–4 lateral bile ducts, enters the stomach close to its junction with the intestine. The course of the latter is downwards and then upwards to the anal papilla, the total length 6 mm.; its inner surface has numerous fine longitudinal folds, which decrease in number, but become stouter as the intestine passes backwards. The alimentary tract throughout its whole extent contained a quantity of animal matter, the nature of which I was not able to determine; it was full of variously sized cnidæ. The hepatic lobes are conical in form, but not quite equal in size; the upper surface occasionally showed granulations. No trace of any cnidophorous sacs[1] could be detected, but a pore was sometimes visible upon the summit of the larger papillæ.—The *pericardium* was quite typical; the ventricle of the heart about 1·75 mm. long. The *renal syrinx* pyriform in shape, 1·3 mm. long; the ureter about the same length as the latter; I succeeded in tracing it as far as the renal pore.

*The hermaphrodite gland* is long, the lobes large and irregular, composed of a number of smaller lobules; the rounded testicular parts are covered nearly all over with the white or yellow ovarian follicles; the gonoblasts are developed.—The anterior genital mass is about 6 mm. long by 4 in breadth, and 4·5 mm. in height. The ampulla of the hermaphrodite duct is elongated and sac-shaped, and curved in the middle; when straightened out it measures 4 mm. in length by about 1 mm. in diameter, and is of the usual opaque yellowish-grey colour. The *ductus ejaculatorius* (Pl. X. fig. 2, *aa*) is strong and coiled; when uncoiled it measures about 8 mm. long; it is somewhat thinner in the anterior third. The penis is much thicker, the præputium (fig. 2 *cc*) has rather thick walls. The glans is conical, about 2 mm. long, its anterior half freely projecting (Pl. X. fig. 2, *de*; Pl. XII. fig. 10). Into the ductus ejaculatorius opens another (Pl. X. fig. 2, *b*) somewhat thinner duct, which probably arises from some gland. The glans and the termination of the seminal duct are quite unarmed. The spermatheca (Pl. X. fig. 3, *a*) is oval in form; it was quite empty in the specimen which I examined; the duct is nearly twice as long as the organ (fig. 3, *bc*). The mucous gland is whitish, its cavity rather large; the albuminiparous gland rather more yellowish.

Between the *bulbus pharyngeus* and the anterior genital mass was found the female of an animal in form very like *Splanchnotrophus*;[2] another was imbedded in the superior face of the hermaphrodite gland; both individuals were about 5 to 6 mm. in length. No males were detected.[3]

[1] In the doubtful species *Cratena lugubris* (Bergh, Malacolog. Untersuch., *loc. cit.*, Heft i., 1876, pp. 9–12, Taf. iv. figs. 1–15) no cnidophorous sacs were found.

[2] The animals were too much hardened to allow of any thorough examination; it was impossible to examine properly the anterior genital mass.

[3] In *Homoiodoris japonica* I found both male and female individuals resembling *Splanchnotrophus*. *Cf.* Bergh, Beitr. z. Kenntn. d. japan. Nudibr. II., *Verhandl. d. k. k. zool.-bot. Gesellsch. Wien.*, Bd. xxxi., 1881, p. 226, Note.