

wall, to which is fixed the aorta. The chamber commences at the hinder end of the liver, and extends a little in front of its anterior boundary; it is covered on either side by the masses of renal tissue (fig. 3, *dd*), which do not exceed 1·5–2 mm. in breadth, except in the anterior and posterior extremities, and are of a yellowish colour within, changing to white upon the outside; they are traversed from within outwards by prolongations of the clefts lying on the side walls of the urinary chamber; the cavities appear more or less distinctly through its walls, and are round or somewhat angular in form. Behind is the simple opening of the duct of the renal syrx (fig. 3), just beside the ascent of the vena hepatica magna to the branchia, and of the intestine to the anal papilla, and the continuation of the urinary chamber ascends as a urethra to the renal groove. The *renal syrx* (fig. 3) is bulb-shaped, of 75 mm. greatest diameter; the folds of the interior can easily be seen from the outside; the ciliated cells are as usual. The duct of the renal syrx is about 1·5 mm. long, opening into the chamber; in the interior are the usual villi and papillary outgrowths.

The sexual products in the *hermaphrodite gland* were hardly developed. Thus the *anterior genital mass* was not large, 4·5 mm. long, 1·5 mm. broad, and 3·5 mm. high; the main efferent ducts, moreover, projected 1 mm. The whole genital mass is yellowish in colour. The ampulla of the hermaphrodite duct lies in many coils, when unrolled it is about 1 cm. long by 4 mm. diameter. The long vas deferens is considerably thinner than the ampulla, and covers it for the most part with numerous windings; its length, when unrolled, is about 1·4 cm.; below it is much thinner and passes into the penis, which is thicker, and reaches a length of 2 mm. The last-mentioned organ (*præputium*) is provided with a small papilla at the bottom of its cavity. The spherical *spermatheca* (fig. 4, *a*) is about 1·5 mm. in diameter; the vaginal duct (fig. 4, *b*) is about a half longer than the receptaculum seminis, below it is somewhat enlarged, and forms the vagina; the uterine duct (fig. 4, *c*) is much thinner; close by its origin is the short-stalked sausage-shaped *spermatocyst* (fig. 4, *d*), which has a length about equal to that of the spermatheca. Both receptacula seminis were filled with detritus. The *mucous gland* is heart-shaped, somewhat compressed; on its outside, at the posterior end, a part of the yolk-yellow albuminiparous gland was laid bare. The duct of the mucous gland is provided with the usual fold.

*Chromodoris runcinata*, Bergh (Pl. VI. figs. 1–4).

*Chromodoris runcinata*, Bergh, Malacolog. Untersuch., *loc. cit.*, Heft xi., 1877, pp. 479–481, Taf. li. figs. 32–33, Taf. liii. figs. 5–12.

*Habitat.*—Pacific Ocean (Port Jackson).

A single specimen was dredged in company with *Rizzolia australis* at Port Jackson, on the 17th of April 1874, from a depth of 2 to 10 fathoms.