absolutely stuffed with eggs pressed one against the other. The oviduct passes under the branchio-cardiac vessel (Pl. IV. fig 4, od.), that is to say, on the dorsal side of this, as in the Œgopsids (Ommatostrephes, Onychoteuthis, Enoploteuthis, &c.). Near its extremity it is inflected towards the median line (Fig. R) and there presents a swollen oviducal gland, of an arched form (Pl. IV. fig. 5), with parallel striæ (Fig. R, vi). Finally, the oviduct opens immediately after, obliquely (its opening being anterior, whilst its extremity is directed transversely near the axis), on the left side of the renal orifice almost at the same level (Fig. R, vii).

4. Nidamental Glands.—Quite behind the pallial cavity, upon the ventral surface of the visceral mass, there is on each side of the ink gland (Pl. I. fig. 7) a swollen nidamental gland, of an irregular ovoid form, with the long axis oblique, with a radial appearance and leaved structure (Fig. C, iv; Pl. I. fig. 6; Pl. II. fig. 1; and Pl. IV. fig. 1, n.g.), as in the majority of Decapods.

Before the nidamental glands, and partially under their anterior portion, there

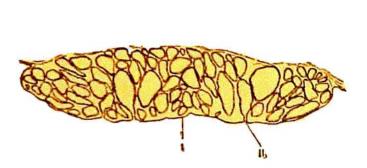


FIG. U.—Transverse section of an accessory nidamental gland of Spirula reticulata; × 18. i, ventral side; ii, glandular pore.

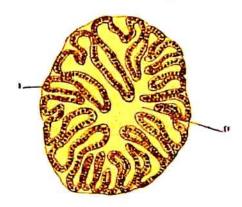


FIG. V.—Transverse section of an ovarian egg of Spirula reticulata; × 100. i, vitelligenous follicle; ii, egg substance.

exist in the specimens procured by the Challenger (Pl. I. fig. 7, x), by the "Blake" (Pl. II. figs. 1, 2, x), and by Professor Giard (Fig. C, iii), prominences forming full compact organs almost in contact, the one with the other, on the median line. These prominences cover the kidneys, described above, but have not any relation with them; they can be taken away without the renal cavities being opened, and therefore belong to the integuments.

Their structure (in the specimen, imperfectly prepared, which has been examined) reveals sufficiently the character and glandular function of these organs (Fig. U). They are formed of numerous cæca opening on the ventral surface by little pores. Besides their structure, their situation determines them to be accessory nidamental glands (compare specially a young Sepia¹); the fact that these organs have not been noticed in the Spirulæ already described need not astonish us, and we may suppose that

¹ Brock, Ueber die Geschlechtsorgane der Cephalopoden (Zeitsch. f. wiss. Zool., Bd. xxxii. pl. iii. fig. 28, 1879).