

Behind the gill and the kidney, on the anterior edge of the liver, and partly resting on the intestine, lies the *foliated gland* ("Feuillets muqueux," Cuv.; "Schleimdrüse" of some authors). It exhibits the usual structure, and seems to open into the branchial cavity by the same aperture as the kidney.

Most of the Marseniadæ are, like the other Prosobranchiata, *diœcious*, unisexual. The reproductive gland, *testis* or *ovary*, forms the termination and the posterior portion of the last twist of the superior visceral mass. They are both composed of long attenuated follicles.

The *vas deferens* forms a large coiled knot, with which the windings of a tubular, appendicular, *prostate* organ are associated. It is continued from the superior visceral mass to the right wall of the inferior body-cavity, within which it extends with many twistings to the penis, through which it is further prolonged to an opening at the tip. Less frequently (*Marsenia*, *Marseniella*) the *vas deferens* passes, at the root of the penis, from the body-wall into the body-cavity, where it becomes more strongly developed, and extends with multitudinous coils over the *foliated stomach* and the *bulbus pharyngeus*, finally entering the penis. The terminal portion of the *vas deferens* is, in most of the genera, free within its cavity, and can be protruded, like a finger, from the apical aperture, or on the other hand altogether retracted. The *penis* is, as we have mentioned, slightly different in the various genera.—The *oviduct* passes from the ovary into a large *mucus and albumen gland*, lying on the inside of the fasciculus of the right shell-muscle. Thence it is continued forwards as a comparatively short, but yet strongly developed *vagina*, which opens below the anal papilla. Just above the vulva, a special, short, strong-walled diverticulum is formed by the vagina. A number of minute *seminal receptacles* open into the posterior end of the mucus and albumen gland.

Among the Marseniadæ, however, several *monœcious*, bisexual genera occur (*Marsenina*, *Onchidiopsis*), a sexual relation not occurring elsewhere among Prosobranchiata, except in the but little known genus *Valvata*.<sup>1</sup> The *hermaphrodite gland* exhibits the usual structure; the *hermaphrodite ducts* are associated with a very peculiar *accessory hermaphrodite gland*; the common duct passing from the latter divides in the usual fashion. The male duct—the *vas deferens*—is associated with a tubular *prostate* rolled up into an irregular knot, and usually enveloping the greater part of the *vas deferens*. The duct is continued onwards, in the usual way, within the body-wall to the *penis*. The female portion forms a vaginal duct associated with an immense *seminal receptacle*, with a thick-walled *vestibular sack*, and with the large two-chambered *mucus and albumen gland*. The *vagina* opens by a small slit-like *vulva* below and behind the anal papilla. The above account is based on an investigation of the monœcious apparatus of the *Onchidiopsides*.

But little is yet known of the *ontogeny* of this group. In regard to the *Marsenia* proper (*Marsenia perspicua*) the reports of Peach, Henedy, and Giard enable us to

<sup>1</sup> Moquin Tandon, Observ. sur l'appareil génital des Valvées (*Mém. de l'Acad. sc. Inscript. et Belles-Lettres de Toulouse*, sér. 4, 1852, vol. xi. p. 63); *Journ. de conch.*, 1852, vol. iii. pp. 244–248, pl. ix. figs. 3, 4.