

one of my series of sections measured 0.6 mm. In another series, however, it was more oval and measured 0.9 by 0.5 mm. The gland is not situated near the cardia but at a considerable distance, about half-way between the cardia and the dorsal surface of the body. The gland is a true tubular one; its wall consists of a single layer of cells only. The shape of these cells may be seen in Pl. VI. figs. 4 and 5. Each cell is cylindrical or rather conical, its base always being greater than the other extremity, which is directed towards the interior of the gland. The bases of the different cells are parallel to the nearly smooth outer surface of the gland; the other extremities of the cells, however, are as a rule not flat but convex, or even protuberant towards the interior of the canal which runs through the gland. In thin sections the outer surface of the gland is marked by a double line; the outer one is here and there distinctly sinuous, and between the two lines small nuclei are visible, which are rather flat; they are placed in the cavities between the inner and the outer margin. There can be no doubt that in this way a rudimentary *membrana propria* is formed. The connective tissue surrounding the glands has smaller meshes and is very rich in nuclei.

The dimensions of the glandular cells are about 0.1 mm. in length and 0.03 mm. in breadth. Each cell has granular plasmatic contents and a very large oval nucleus. In preparations stained with aluminium carminate the body of the cell as well as the nucleus has taken up the colour. The first is beautifully lilac-coloured, the latter darkly violet. Each nucleus is coarsely granulated and measures 0.036 by 0.02 mm. It contains a smooth and brilliant nucleolus of 0.009 mm. in diameter. In each nucleus the nucleolus is situated in the centre of a clear space, which, as a rule, is placed towards that side of the nucleus which is directed towards the internal surface of the gland. The clear space—which gives the impression of a clear vesicle with fluid, but which has no distinct contour of its own—is on one side separated from the surface of the nucleus only by a very narrow layer of the granular substance which fills the nucleus. The nucleus has a distinct external contour.

All the cells are built after the same type; but there are very characteristic differences between the cells of two different specimens of *Scalpellum parallelogramma*. In the first place there is a very marked difference in size; the length is nearly the same (0.09 mm.); the breadth, however, measures only 0.013 mm. and the nuclei are not, as in the first specimen which I investigated, placed close to the internal surface of the glandular cells, but beyond the middle: they are nearer to the external than to the internal surface. The structure of the nuclei is the same; they are more elongate and slightly pointed towards the outer extremity.

In a series of sections through the cephalic part of the body of *Scalpellum nymphocola*, these glands which I propose to call "pancreatic glands" are also represented. In this species the form of the gland is the same as in *Scalpellum parallelogramma*, the