undermost glands is figured. These glands project into the interior of the intestine, and are, as far as I know, the only true glandular bodies which stand in connection with the alimentary canal. They are invested by the same membrana intima as the wall of that part of the œsophagus, at the end of which they are found. The form of the cells which compose them is nearly the same. The whole of the gland must be considered as having taken its origin from an excrescence and bending towards the wall of the intestine, of the hinder part of that œsophagus.

In regard to the structure of the remaining part of the intestine I do not wish to enter into any details. I only observed that the structure of the wall of that part which follows immediately after the œsophagus, and of the cæca, which penetrate as a rule as far as the sixth joint of the leg, is nearly the same. We find this wall everywhere beset with extremely numerous tubes or villi, which in some genera (*Nymphon*) are of a shorter and more rounded form, and in others (*Colossendeis*) are very slender and almost cylindrical. While the outermost part of the wall is formed of a single row of large distinct nucleated cells, these villi show a multi-cellular structure also. Each of these cells contains numerous globules, which for the most part seem to be of a fatty nature. The form of the cells is different, but they are commonly rounded. I call them cells, because each of the bodies has a distinct oval nucleus with a small nucleolus. As has been observed by almost all authors writing on the structure of the wall of the intestine, these cells often become detached from the wall, and are found lying loose in the contents of the alimentary canal. The nuclei in the cells of these villi were by no means easily observed in all the sections I studied. They were very distinct in the cells of the villi of *Colossendeis proboscidea*, Sab. (sp.).

It seems to be characteristic of the genus *Colossendeis* that the cæca destined for the different legs should branch off from the main duct, which runs straight from the proboscis to the abdomen, very close to one another, and close also to the place where the œsophagus communicates with the intestine; at least I observed that in the three species of *Colossendeis* I studied (Pl. XVII. fig. 1). The number of lateral cæca given off at both sides of the main duct is six in *Colossendeis*. Of these the first two are rudimentary, one being the rudiment of those destined for the mandibles, the other (the first lateral pair) being that for the proboscis. Each of the four remaining cæca, of which the hindermost pass through a much longer part of the body before penetrating the leg than do the more anterior ones, shows a considerable swelling in the lateral processes, at the ends of which the legs are inserted.[1] The anal aperture of *Colossendeis* (Pl. XVII. fig. 1*d*) is an oval-shaped slit. It is not placed terminally or in the median line of the abdomen, but laterally.

[1] On a transverse section of the body of a *Colossendeis* between the lateral processes for the second and for the third pair of legs, five round sections of the intestine are seen placed close to one another. This furnishes a good opportunity of comparing their structure, but no difference is observed. Compare fig. 14 of Plate XXI.