

intestine can be made out in *D. hepaticum* depends entirely on the dark contents: the bifurcation was here observed from the dorsal surface, but the branches were empty. The longitudinal muscular fibres are strongly developed on the ventral surface, and the ventral surface of the neck has two sets of oblique decussating fibres, as in *D. hepaticum*.¹¹ The transverse vitello-duct can be easily seen with the naked eye. The right half is longer than the left, and the common duct, leading obliquely upwards (towards an Ootype?), is narrower than either.

4.—*DISTOMUM VARIEGATUM*. Rud.

In looking for *Polystomum*-eggs from a specimen of *Rana halecina*, Kalm, in the way recommended by Zeller,¹² I found that a worm had been voided by the frog, which turned out to be *D. variegatum*, Rud. It had been partly macerated from exposure to the water; the acetabulum was consequently even more than ordinarily difficult to make out, and the characteristic coloration was destroyed. The application of pierocarminate, however, is particularly successful in rendering distinct the different organs in Trematodes, and probably more so in such a case as this from the previous bleaching.¹³

The intestinal coeca were entirely destitute of contents, and their epithelial lining (average individual cells of which [Fig. 7] measured superficially 0.03 mm. \times 0.021 mm.) was well seen.

The left lung of the same animal yielded only one well-coloured example of the worm.

My examples agree well with Pagenstecher's description and measurements,¹⁴ except that the ventral sucker was easily discoverable in the fresh worm, and that the testes, three in number, which seemed to be composed of flask-shaped cells empty of their contents, and with the neck of the flasks converging to the vas deferens, could hardly be called small. The vitelligenous glands, as Blanchard has already figured,¹⁵ are in the form of six or seven scattered racemose clumps on each side, with a connecting longitudinal stem.

¹¹ Leuck. Mensch. Par., I., 537.

¹² Zeit. für. wiss. Zool. XXVII, p. 255, f. n.

¹³ After writing the above, I notice that the use of pierocarminate has been already recommended by Dr. G. Duchamp (Journal de Micrographie, July, 1878).

¹⁴ Trematodenlarven und Trematoden, p. 41.

¹⁵ Ann. des Sci. Nat. S. S. VIII., Pl. 13, f. 1.