

testicular portion bears numerous and variously sized ovarian follicles. The *hermaphrodite duct* takes its course along the furrow on the under surface of the gland, and is formed of numerous ductules (fig. 17, *a*), which unite together; it passes over to the posterior portion of the mucous gland and swells out into an ampulla.—The *anterior genital mass* is longish and rounded-subquadrangular in shape; it is more convex upon the upper side than upon the lower; its length is 9 mm., breadth 7 mm., and 5.5 mm. in height. On the upper side are the windings of the yellowish, strong vas deferens, which ends in front in the large penis; the latter forms the anterior end, and is generally more than one-half of the genital mass. The backward continuation of the vas deferens passes round the left margin of the genital mass, and runs along its under surface as far as the ampulla of the hermaphrodite duct, which latter forms the hinder end of the genital mass. The *ampulla*, which is situated beneath the hinder end of the genital mass, is yellowish in colour, small, and rather thin. The *vas deferens* is long and strong, its length is 4.5 cm., and the diameter everywhere 1.5–1 mm.; the longer hinder part of it (fig. 20, *c*) probably acts as a prostate gland, it is yellowish in colour, but somewhat less stout than the anterior muscular portion (fig. 20, *b*), which is about 1.6 mm. long; these two divisions are separated by a constriction (fig. 20, *a*). The *penis* is short and sac-like, slightly arched, 8 mm. in length with a diameter of 4 mm.; the wall is rather thick, the structure of the whole organ resembles that of other species of *Bornella*. The short inferior portion is unevenly wrinkled on the inside; the remainder is smoother and lies between two similar stout *festoons*. These structures are usually 1–1.5 mm. in thickness and the same height; they unite with each other below (fig. 19) and above (fig. 18) the circular orifice (fig. 18, *a*) of the vas deferens; they have the margins as well as the surface somewhat wrinkled. On the margin are developed a number of black *spines* (altogether about 220) arranged in a single row. These spines (figs. 21, 22) are found in furrows at the rounded summit of cones, about twice as high as the spines themselves; the tissue of these cones is prolonged for a short distance up the axis of the spines, which are therefore very firmly attached, and do not easily break off. The straight, slightly S-shaped spines are of the average height of .28 mm.; their contour is rounded; they are broader below, and end in a point above. The *spermatheca* is pear-shaped, about 2 mm. long, and lying on the right side of the mucous gland, it was distended with semen; its duct, hardly as long as the organ itself, opens into the vestibulum genitale close to the opening of the *mucous gland*. This latter organ is yellowish, but chalky white on the under surface and on the left side; at the hinder end it has a large brown twist, which is blackish-blue above; the efferent duct is short, and has the usual fold.

The species I have just described is strikingly different from the three other previously examined species of *Bornella* (*Bornella calcarata* from the Antilles Sea, *Bornella digitata*