

PLATE V.

- Fig. 1. Tip of one of the plumes of the polypide of *Cephalodiscus*, showing the glandular nature of the enlarged region. The filaments (*f*) have been turned to the left; *ca*, central axis of main stem; *hp*, hypoderm. The longitudinal fibres running along the axis are observed to the left as well as over the axis; $\times 210$.
- Fig. 2. Portion of the middle of a plume with the bases of the filaments (*f*), viewed laterally, after the action of a dilute solution of potash. The skeletal axis is observed in the centre of each filament, and as this skeletal axis (*sk*) widens out at its base, the double outline at each side is well marked; *ca*, central axis of main stem, with its longitudinal fibres; $\times 350$.
- Fig. 3. Transverse section of a young bud on the appearance of the first two lophophoral processes or plumes (*lp*) as two rounded bosses composed of tissue resembling hypoderm. The buccal disk (*bd*) is cut at its anterior region, but the central space (*bc*) of the organ is well developed. The collar space (*vc*) is comparatively large at this stage, and lies close beneath the nerve-centre; $\times 350$.
- Fig. 4. Transverse section of the terminal region of the body-cavity of an older bud than the foregoing, the tip of the alimentary canal (*al*) being left as a thin plate in the centre, and bound dorsally and ventrally by the median mesentery (*ms*). The great longitudinal muscle is cut near the commencement of the pedicle, and already shows the double ventral curvatures so characteristic of the latter; *bt*, basement-tissue; *co*, the body-cavity; $\times 350$.
- Fig. 5. Ovum on its escape from the adult; *ec*, egg-capsule; *ov*, ovum proper; *st*, stalk; $\times 90$.
- Fig. 6. Outline of another ovum in which the yolk is ovoid, instead of circular as in the former case; $\times 90$.