

the diameter greater, and (2.) in possessing a cylindroidal rather than a cylindrical outline, while (3.) one has the valves exactly hemispherical, whereas in the other more protuberant form they are somewhat globular. Whether such distinctions have more than a varietal significance must at present remain somewhat doubtful, although the evidence would seem to indicate that a specific value may be ultimately assigned to them.

It may also be noted that the line bounding the upper valve in fig. 12 is undulating, while in fig. 15 it is straight, but provided with three well-marked involutions which are directed towards the centre of the frustule. The radiating awns in fig. 12 are also relatively larger and somewhat more elegant than in fig. 14.‡

*Corethron*, sp. (Plate XV. fig. 7.)

The organism here represented, which has been figured from a preparation made on board the Challenger, is also manifestly a member of the present genus. In it the awns, which are not represented in full length in the figure, are very strong, long, and ribbed, and—a circumstance which is characteristic of the genus—they are never numerous, while their diameter is almost uniform throughout.

As this form has not been observed from its zonal aspect its real specific value must remain doubtful.

SECTION B. *Connecting zone complex, annulate; awns echinated.*

*Corethron hispidum*, n. sp. (Plate XXI. figs. 3 and 5.)

Forma cylindrica, annulata; valvis hemisphæricis spinulosis; setis costatis, echinatis. In mari Antartico.

Although the frustules shown in the present figures undoubtedly belong to the same species, in only one are the details of structure represented. The connecting zone is composed of many hoops which are united together, and in this respect, through the genus *Lauderia* of Cleve, the genus *Corethron* approaches that of *Rhizosolenia*. The awns are strong, thorny, and costate, become gradually attenuated from their origin to their distal ends, where they are reduced to mere lines, and spring from the margin of the hemispherical valve, the surface of which is roughened by very minute thorns. The presence of these thorns has been employed in naming this interesting species.

*Corethron murrayanum*, n. sp. (Plate XXI. fig. 4.)

Forma cylindrica, annulata; valvis convexis, lævibus; setis costatis, echinatis. In mari Antartico.

This somewhat large beautiful cylindrical organism—the longitudinal axis of which is equal to the diameter—has two convex valves, which have the form of the segment of a sphere. The cylindrical median zone is annulated, and a definite line of suture, as in