

Cocconeis Ehr. (emend. Grun.)**Cocconeis arcta** A. Sch.

Sch. Atlas, Pl. 191, fig. 1.

The type locality is unknown, Schmidt merely saying "Gazelle Expedition." It is a somewhat questionable member of this genus. Found in dredging from Station 43b, scarce.

Cocconeis kamchatklensis Mann, sp. nov.

Pl. I, fig. 4; see also Sch. Atlas, Pl. 191, figs. 40, 42-43, unnamed.

Valve a perfect and broad ellipse with neither angular nor protruding apices; upper valve having a strong marginal band of coarsely beaded costae, equally wide around the entire valve, there being three beads in each row; pseudo-rhaphé line evident, bordered on each side by a straight row of closely set beads, outside of which are two to three rows of similar beads which are, however, progressively curved and the beads more loosely and irregularly set, producing thereby a wavy appearance, a considerable space between the outer of these rows and the compact marginal band; under valve unidentified.

Length 0.043 mm., width 0.029 mm., 10 lines in 0.01 mm. in marginal band.

By comparing the illustration of this species here given with Schmidt's figures mentioned above, and for which he recognized there was no name, a close resemblance will be seen. The suggestion of Cleve to group these under *C. Scutellum* Ehr. is rightly rejected by Schmidt. In fact Cleve's assembly of forms under *C. Scutellum* in his Nav. Diat., II, pp. 170-171, is a hodge-podge without boundaries. Nor can they be united with the fossil *C. antiqua* of Brun (Diat. Jap., Pl. 8, fig. 5), a loosely dotted species with a wide central area that always shows a unique onesidedness. It may be added, this species somewhat resembles *C. arctica* Cl. in Vega Diat., Pl. 35, fig. 4a, a form with a decidedly sigmoid rhaphé and pseudorhaphé. Found in two dredgings, Stations 23 and 43b.

Cocconeis paniformis Br.

Sch. Atlas, Pl. 189, figs. 16-21.

This is one of the species which, as just stated, Cleve arbitrarily puts into *C. Scutellum*. Found in dredging from Station 41.

Cocconeis Scutellum Ehr.

Sch. Atlas, Pl. 191, figs. 17-27.

An extremely cosmopolitan diatom in both fossil and recent deposits. More or less represented in most of the dredgings, abundant at Stations 41 and 41c.

Coscinodiscus Ehr.**Coscinodiscus Asteromphalus** Ehr.

Sch. Atlas, Pl. 63, fig. 12; Van Heurck Syn., Pl. 130, figs. 1-2, 5-6.

This species, rather characteristic of arctic waters, was surprisingly scarce in the dredgings examined and all the specimens were smaller and more delicate than the type, thereby approaching *C. Oculus-Iridis* Ehr. which is classed as a variety of *C. Asteromphalus* by many authors. Frequent only at Station 43a.

Coscinodiscus concinnus W. Sm.

Sch. Atlas, Pl. 114, figs. 8-9.

All specimens were small forms with coarse areolation, very unlike the type structure. The two marginal processes set about 2/5 of the circumference apart, characteristic of this species, were above the usual size. Found in only one dredging, from Station 13a, but generally present in the plankton hauls, particularly from Stations 6b, 20a, 42x and 46b.