Ehrenbergina serrata, Reuss (Pl. LV. figs. 2-7).

Ehrenbergina serrata, Reuss, 1849, Denkschr. d. k. Akad. Wiss. Wien, vol. i. p. 377, pl. xlviii. fig. 7, a.-c.

Prof. Reuss's figures (loc. cit.), though tolerably characteristic, represent only a poor specimen of this somewhat variable species. The salient character of *Ehrenbergina* serrata, that by which it is distinguished from *Ehrenbergina pupa*, consists in the extension outwards of the lateral margins of the chambers, so as to form projecting angles, in consequence of which the test presents a serrate outline. In some cases the angles terminate in slightly deflected points, as shown in Pl. LV. figs. 2, 3, but in others they are much produced, and take the shape of long horizontal spines, as in figs. 6, 7. Nor is this all. In Reuss's drawings the ventral faces of the segments are inflated and rounded in much the same way as those of *Ehrenbergina pupa*; but in well-developed examples the convex face as well as the margin of each chamber is drawn out to a point, so that there are two rows of short spines on the ventral face of the test, one row at each side of the depressed median line.

The dorsal side of the shell is smooth and shows very distinctly the regular, alternate arrangement and interdigitation of the segments. There are no depressions on the septal lines, and the surface is free from spines or other excrescences.

It is singular that *Ehrenbergina serrata* has not before been recorded as a recent species; for, though it can scarcely be classed amongst common Foraminifera, it occurs at intervals over a very wide area. Amongst the Challenger gatherings it has been identified at two localities in the North Atlantic :--off the Azores, 450 fathoms, and off the Canaries, 620 fathoms; at two in the South Atlantic, in mid-ocean, 1025 fathoms and 2350 fathoms respectively; and at one in the North Pacific, 2340 fathoms. In the South Pacific it is comparatively frequent, having been found at no less than ten Stations, varying in depth from 150 to 2075 fathoms.

The species was originally described from fossil specimens obtained by Reuss from the Miocene of Baden near Vienna, and Karrer reports its occurrence also at Nussdorf, in the same vicinity.

Ehrenbergina hystrix, H. B. Brady (Pl. LV. figs. 8-11).

Ehrenbergina hystrix, Brady, 1881, Quart. Journ. Micr. Sci., vol. xxi., N. S., p. 60.

Test biserial, earlier portion more or less coiled; somewhat ovate in general contour, distal end broad and arched. Segments few; regular and alternate in their dorsal aspect, confused on the ventral face; their free peripheral ends drawn out into lateral spines. The sutural lines of the earlier segments on the dorsal face marked with rows of spines, which sometimes coalesce so as to form fringe-like projections; the ventral