56.4, 32F (1181:74.9)

Article XVIII.— NOTICE OF A NEW SPECIES OF FASCIOLARIA FROM THE EOCENE GREEN MARLS AT SHARK RIVER, N. J.

By R. P. WHITFIELD.

Some years ago I described in Monograph XVIII of the U. S. Geol. Surv. (=Vol. II, Pal. New Jersey) three species of large Fasciolaria from the Eocene green marls at Shark River, New Jersey, under the names F. hercules, F. samsoni, and F. propingua. Now, in working over the J. J. Crooke material for incorporation with the general palæontological collection for the purpose of cataloguing, there turns up an additional species of this peculiar nodose group of the genus that is typified among recent shells by Fasciolaria trapezoidea. This new one differs from those described previously from this same horizon in being slightly shorter in the spire and below in proportion to the transverse diameter across the body volution; the beak also is shorter, the nodes on the whorls are quite as prominent as in F. hercules and count ten on the body volution as in that, but the whorls are shorter, giving a shorter spire. This species I propose to designate by naming it after the donor of the material.

Fasciolaria crookiana, sp. nov.

FIGS. I AND 2.

Shell large and massive, with the spire and beak from the middle of the body volution subequal; volutions strongly nodose on the periphery and the nodes transversely oblique, the space between the nodes and the suture sloping rapidly at a low angle; body below the line of nodes somewhat swollen in the upper third, and below this rapidly contracting to the strong, short beak or columella; columella marked by a single nearly vertical plication or fold; surface, so far as determinable, marked only by lines of growth.

Geological position and locality. — In the green marls of the Lower Eocene at Shark River, New Jersey, in the collection presented to the Museum by the late J. J. Crooke of Staten Island, N. Y.

The specimen shows evidence of the shell having been quite thick in substance, like those of its living congeners, as there are numerous casts of either worm or sponge borings in the shell substance which seem to radiate from the crest of the nodes where the shell would probably have had a greater degree of thickness than elsewhere.



Fig. 1. Fasciolaria crookiana, front view.

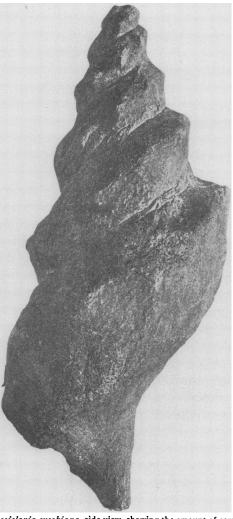


Fig. 2. Fasciolaria crookiana, side view, showing the amount of compression.