The essential characters of the test in *Cornuspira* can be stated in very few words. It is discoidal or complanate in contour, and consists simply of a non-septate porcellanous tube coiled upon itself in one plane, the open or very slightly constricted end serving as the aperture. It is isomorphous with *Spirillina* in the hyaline, and with *Ammodiscus* in the arenaceous series.

The Cornuspiræ are connected with the true Miliolæ by Kübler's genus Ophthalmidium, which embraces a number of dimorphous varieties, spiral and non-septate in their earlier stages, and subsequently Spiroloculine in their mode of growth. The affinity of the genus with Planispirina and Hauerina is indicated by the little discoidal Planispirina exigua, the shell of which is planospiral throughout, but the early whorls are non-septate like Cornuspira, whilst the later convolutions are segmented as in the two former genera. Lastly, its relationship to Orbitolites is attested by the deep-sea Orbitolites tenuissima, in which not only is the initial portion of the test distinctly Cornuspiriform, but occasionally even the later whorls revert to the non-septate condition.

One or two species of *Cornuspira* attain large dimensions, but for the most part the genus is represented by specimens of relatively minute size.

The geographical range of the genus is world-wide, without much reference to latitude or depth of water. The finest known specimens, however, are from various points in the North Atlantic, at depths of from 300 to 600 fathoms.

Its geological distribution probably commences with the Liassic period, but some doubt exists as to the Mesozoic species, owing to the failure of authors to discriminate between *Cornuspira* and the isomorphous genera. From the commencement of the Tertiary epoch it is found in microzoic deposits of almost every age down to the present time.

## Cornuspira foliacea, Philippi, sp. (Pl. XI. figs. 5–9).

Orbis foliaceus, Philippi, 1844, Enum. Moll. Sicil., vol. ii. p. 147, pl. xxiv. fig. 26.
Operculina striata, Czjzek, 1848, Haidinger's Nat. Abhandl., vol. ii. p. 146, pl. xiii. figs. 10, 11.
, plicata, Id. Ibid., p. 146, pl. xiii. figs. 12, 13.
Cornuspira planorbis, Schultze, 1854, Organism. Polythal., p. 40, pl. ii. fig. 21;-1860, Wiegmann's Archiv, p. 287.
Operculina ammonitiformis, Costa, 1856, Atti dell' Accad. Pont., vol. vii. p. 209, pl. xvii.

fig. 16.

Spirillina foliacea, Williamson, 1858, Rec. For. Gt. Br., p. 91, pl. vii. figs. 199-201. Cornuspira foliacea, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 408, pl. xv. fig. 33.

Cornuspira foliacea may be taken as the type of the genus. The test is proportionately thinner and flatter than that of most of its congeners, and the successive convolutions widen more rapidly; it is devoid of exogenous ornament, but often marked with curved transverse lines of growth. The aperture, in fully grown specimens, is a