

lina sphaera, but they may generally be distinguished by the ordinary Milioline aperture, and by the extent to which the penultimate chamber is exposed. Probably the form named by Reuss *Biloculina globulus* (*loc. cit.*) is one of these; it differs considerably from that species as originally figured by Bornemann.

Specimens of *Biloculina irregularis* have been obtained from Challenger material dredged off Palma, Canaries, 1125 fathoms; off Sombrero Island, 450 fathoms; south of Pernambuco, 350 fathoms; in mid-ocean, South Atlantic, 1415 fathoms; off Fiji, 610 fathoms; off Tahiti, 620 fathoms; and north of Papua, 1070 fathoms.

The localities of the fossil (Tertiary) forms figured by Reuss, above referred to, are respectively the Septaria-clay of Hermsdorf, near Berlin, and the Salt-beds of Wieliczka in Galicia.

Biloculina sphaera, d'Orbigny (Pl. II. fig. 4, *a.b.*).

Biloculina sphaera, d'Orbigny, 1839, Foram. Amér. Mérid., p. 66, pl. viii. figs. 13-16.

„ *globulus*, Bornemann, 1855, Zeitschr. d. deutsch. geol. Gesell., vol. vii. p. 349, pl. xix. fig. 3, *a, b.*

„ *sphaera*, Brady, 1864, Trans. Linn. Soc. Lond., vol. xxiv. p. 466, pl. xlvi. fig. 1, *a, b.*

„ *globulus*, Reuss, 1870, Sitzungsber. d. k. Ak. Wiss. Wien, vol. lxii. p. 464;—
Schlicht, 1870, Foram. Pietzpuhl, pl. xxxv. figs. 30-32.

There are few Foraminifera more easily identified than well-grown specimens of *Biloculina sphaera*. The globular contour first attracts attention, then the investing character of the final chamber, which encloses the whole of that preceding it except a little circular patch just below the aperture, and lastly the aperture itself, which often presents somewhat anomalous features.

D'Orbigny in the "South America" monograph, *loc. cit.*, suggests rather than delineates the orifice, and the figure referred to in my own paper on Shetland Foraminifera was taken from a specimen of the particular form which is common in the comparatively shallow water of the Scottish coast, and shows no characteristic deviation from the ordinary Biloculine type. The shell figured in Pl. II. fig. 4 is a fair representative of the deep-water examples of the species; but the bordered V-shaped slit, which is perhaps its most conspicuous feature, is only one out of many forms the aperture assumes, and it is quite as common to find in deep-sea specimens a labyrinthic or dendritic orifice such as that portrayed in the annexed woodcut (fig. 1).

That the shell figured by Bornemann, *loc. cit.*, under the name *Boliculina globulus*, as well as those above referred to in the plates of von Schlicht's memoir, belong to the present species, hardly admits of doubt. Bornemann's name, however, is used by Reuss, in his notice of the Foraminifera of the Septaria-clay of



FIG. 1. — Labyrinthic aperture of *Biloculina sphaera*. Magnified 40 diam.