

*Cassidulina lævigata* is distributed, though by no means evenly, over a very wide area. It is one of the commonest of all arctic Foraminifera, occurring at almost every point at which soundings have been taken within the Arctic Circle. In the western hemisphere it has been found as far north as lat.  $83^{\circ} 19'$  N.; and in the eastern, to the shores of Franz-Josef Land, at about lat.  $80^{\circ}$  N. It is abundant over the whole northern portion of the North Atlantic, at depths ranging from 60 to 1600 fathoms, diminishing in frequency towards the equator, and is found in shallow water along the European coast-line. It is comparatively rare in the South Atlantic, but occurs off the Cape of Good Hope and in the Southern Ocean as far as the Antarctic Ice-barrier, lat.  $65^{\circ} 42'$  S.; it is frequently met with amongst the islands of the South Pacific, at depths of less than 600 fathoms, being especially common amongst those of the west coast of Patagonia; and it has also been obtained at three localities in the North Pacific: lastly, it has been collected both in the Mediterranean and the Red Sea.

The geological distribution of the species does not extend further back than the beginning of the Tertiary epoch. It has been found in the London Clay of the Isle of Wight (Brady); in the Middle Tertiaries of various parts of Austria and Hungary (Reuss); in the later Tertiary formations of Central and Southern Italy (Jones and Parker, Seguenza, Terrigi); in the Crag of the eastern counties of England (Jones, Parker, and Brady); and in the Post-tertiary deposits of Norway (Sars, Crosskey and Robertson), of Ireland (Wright), and of the Island of Ischia (Vanden Broeck).

*Cassidulina crassa*, d'Orbigny (Pl. LIV. figs. 4, 5).

*Cassidulina crassa*, d'Orbigny, 1839, Foram. Amér. Mérid., p. 56, pl. vii. figs. 18-20.

„ „ Id. 1846, For. Foss. Vien., p. 213, pl. xxi. figs. 42, 43.

„ *oblonga*, Reuss, 1849, Denkschr. d. k. Akad. Wiss. Wien, vol. i. p. 376, pl. xlviii. figs. 5, 6.

„ *obtusa*, Williamson, 1858, Rec. For. Gt. Br., p. 69, pl. vi. figs. 143, 144.

„ *lævigata*, var. *crassa*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 377, pl. xv. figs. 5-7; pl. xvii. fig. 64, *d*.

„ *oblonga*, Jones, Parker, and Brady, 1865, Monogr. Foram. Crag, App. I. II. pl. iv. fig. 16.

„ *crassa*, Id. Ibid. App. I. II.

The test of *Cassidulina crassa* is characterised by its oval outline and obtuse or rounded peripheral edge. It is relatively thicker than *Cassidulina lævigata*, and the segments are fewer in number, and comparatively short and inflated.

I can find no ground of distinction between this species and the *Cassidulina oblonga* of Reuss. The slight differences that appear in the figures are only such as may be observed in any collection of specimens, even from the same locality, and amount to no more than individual peculiarities. The species varies within certain limits, both in point of