

*Technitella legumen*, like many other monothalamous and monostomous Foraminifera varies exceedingly in external contour; indeed it appears capable of assuming any shape, from a long pointed oval to a curved cylinder with rounded ends. The aperture too varies considerably in different specimens. The broken test (fig. 9) corresponds pretty closely to the characters given by Mr. Norman in the original description, in which it is stated that "the mouth-opening is in the form of a contracted tube," and pursuing the general similitude of the test to a legume, the neck is said to "represent about the same proportional length and width to the cylinder as the basal portion of the pea-pod, where it passes into the calyx, does to the pod itself." Since the publication of the paper referred to, a considerable number of specimens of *Technitella legumen* have come under my notice, and I have found no uniformity in these particulars that would lead me to regard them as furnishing specific characters of any value.

Recently my friend Mr. Robertson of Glasgow has dredged the species in some abundance in the living condition on the west coast of Scotland; and almost the whole of his specimens have a superficial coating of sand or mud. One of them is represented in its natural state in Pl. XXV. fig. 11. The sandy coat is sufficiently coherent to resist ordinary washing, but it can be disintegrated and removed without difficulty, and the characteristic spicular test appears underneath. Whether this is a mere local peculiarity, depending on some exceptional condition of the sea-bottom, or the normal habit of the animal when living, cannot at present be determined; but it is an interesting fact in connection with the tendency exhibited by some other Foraminifera, notably *Truncatulina lobatula*, to protect themselves under certain circumstances with a covering of sand. That in all such cases the material is selected and incorporated by the sarcode enveloping the test, there can, I think, be no doubt.

The distribution of the species, so far as known, is as follows. South of Bukken, Norway, 150 to 200 fathoms, and thirty miles west of Valentia, Ireland, 112 fathoms (Norman); off Cumbrae, 60 to 65 fathoms (Robertson); at two Challenger Stations in the South Atlantic—south of Pernambuco, 350 fathoms, and east of Buenos Ayres, 1900 fathoms; off Christmas Harbour, Kerguelen Islands, 120 fathoms; off Sydney, Australia, 410 fathoms; north of the Society Islands, 2350 fathoms; and lastly, one or two broken specimens in soundings off the Fiji Islands.

*Technitella raphanus*, n. sp. (Pl. XXV. figs. 13, 14).

Test free, elongate, subcylindrical, straight or somewhat curved; broad near the superior extremity and tapering to a point at the inferior. Aperture a simple round orifice formed by the gradual constriction of the superior end of the test. Length,  $\frac{1}{8}$  inch (3 mm.).