amount of flexibility in one of the long, many-jointed tests, but when dry the narrow sutures become exceedingly brittle.

When first taken out of alcohol some of the specimens were in the condition represented in Pl. XXVII. A, fig. 3, coated with mud, and they were scarcely recognised as pertaining to the same organism. It was found on examination that the mud was a loose accessory coating, which could be removed with a soft brush, and that underneath was a sandy test similar to fig. 1 or 2. It is manifest that even a thin layer of compact mud, filling in the inequalities of the surface, must afford great protection to a slender, jointed test like that which has been described. In these specimens each terminal lobe had a brush-like tuft of sarcode-filaments at the oral end, showing that they had been dredged in the living condition.

The distribution of Aschemonella catenata appears to be governed by bathymetrical rather than geographical conditions. Its habitat includes seven Stations in the North Atlantic, ranging from the entrance to Davis Strait (the locality of the specimens originally described by the Rev. A. M. Norman) to within a few degrees of the equator; the depths varying from 390 to 2740 fathoms; one Station in the South Atlantic, east of Buenos Ayres, 1900 fathoms; one in the South Pacific, off Kandavu, Fiji Islands, 210 fathoms; and three in the North Pacific, from 1850 to 2900 fathoms. The average depth of the twelve Stations enumerated is 1800 fathoms. By far the finest series of specimens is that from Station 244, in the deep area of the North Pacific.

## Aschemonella ramuliformis, n. sp. (Pl. XXVII. figs. 12-15).

Test free, elongate; forming an irregular, more or less branched, sometimes segmented tube, with numerous apertures, lateral and terminal. Walls very thin, but hard and firmly cemented; exterior only slightly rugose, interior surface smooth. Length,  $\frac{1}{3}$ rd inch (8 mm.).

The long branch-like forms of *Aschemonella* appear at first sight very distinct from those which consist of a number of inflated chambers united by stoloniferous tubes; but in reality they are not easily separated, and at best the distinction is of no more than varietal significance.

The test in this variety takes the form of a tube with irregular outline; sometimes branched, but more frequently having the aspect of a bough with the branches lopped off, the "scars" bearing rounded orifices. There is sometimes a constriction at the point where a branch joins the stem, as shown in the section, fig. 15, and in so far the test is polythalamous. The exceeding thinness of the walls in comparison with the size of the cavity is well illustrated in the transparent section, fig. 14, which also exemplifies the comparatively smooth condition of both the exterior and interior surface of the test.