being twice as long, and the individual filaments much more slender and five or six times as numerous as the latter. According to Messrs Adams and Dall, Megerlia truncata occurs in the Japanese seas, but I have not seen any specimens. The habitat of the Philippine Islands given by Woodward also requires corroboration. The specimen figured by Deshayes as having been dredged off the Island of Bourbon (?) certainly belongs to the species under description, but is erroneously named Morrisia gigantea.

It is a common fossil in the upper tertiary formations of Sicily, Italy, Nice, and elsewhere.

Observations.—This is a well-known species, and has been often described, and, as may be seen from the synonyms, often very much misunderstood. Externally it certainly bears a somewhat obscure resemblance to some forms of Orthis, but has none of its real characters. The strangest mistake, however, was that of Deshayes who described and figured a specimen said to be from off the Island of Bourbon, under the designation of Morrisia gigantea. In his admirable memoir Recherches sur l'Organisation du Manteau chez les Brachiopodes articulés, 1864, Mr E. Deslongchamps treats in minute detail of the mantle in this important genus and especially of that of Megerlia truncata. He states that the microscopic flattened spiculæ of the mantle are still more abundant than in Terebratulina and have a very peculiar shape, and that the calcified portions are well defined in shape in both valves. The flattened spiculæ are wide and nearly quadrilateral with rounded extremities, the edges festooned; they form denticulated calcareous plates, and vary sufficiently in arrangement in different genera of Brachiopoda as to serve as distinguishing characteristics.

Megerlia willemöesi, n. sp. (Pl. IV. figs. 1-3).

Shell ovate, or longitudinally oval, broadest anteriorly, tapering posteriorly. Valves moderately convex, surface smooth, white. Dorsal valve moderately convex, dorsal valve not quite as deep as the ventral one, and somewhat flattened anteriorly so that the front line is slightly depressed. Ventral valve very convex, slightly flattened along the middle and especially so anteriorly. Beak produced, comparatively large and truncated by a circular foramen, separated from the hinge-line by a rather wide and high deltidium. In the interior of the dorsal valve the loop is three times attached, first to the hinge-plate, again to a median septum, and thirdly by perpendicular lamellæ which connect the lateral reflected extremities of the loop with the median septum. Length 10, width 9, depth 5 mm.

Habitat.—Fine examples of this interesting species attached to branched Polyzoa were dredged in company with Terebratula uva by the Challenger Expedition on April 4, 1874, at Station 163, in lat. 36° 56′ S., long. 150° 30′ E., off Twofold Bay, South Australia, or between Sydney and Melbourne, in 120 fathoms. Bottom temperature, 0° 7 C. Sea bottom, red clay.