without a distinct ectochrote, 1.6 mm. in thickness, growing out in one or two places into low papillary or ridge-like processes.

Spicules.—I. Megascleres. 1. Oxea, fusiform, sharply pointed, 6·1 mm. and over by 0·064 mm. 2. Orthotriæne, rhabdome conical, attenuating to a sharp point, 7·15 by 0·11 mm., cladi 1 mm. long. 3. Protriæne, rhabdome 11·78 by 0·079 mm., cladome terminal or subterminal, in the latter case the cladal origin is situated 0·28 from the end of the ecactine, cladi 0·25 mm. in length. 4. Anatriæne, rhabdome 22·5 mm. and over by 0·04 mm., cladome nearly terminal, cladal centre usually about 0·008 mm. from the end of the ecactine, which forms a slight rounded projection in the front curve of the cladome; cladi 0·18 mm., chord 0·16 mm., sagitta 0·15 mm. long, sometimes the chord is wider, 0·20 mm. long.

II. Microscleres. 5. Sterraster, large, spherical, depressed, ends of the actines polygonal, 0.004 mm., bearing five to six recurved spines at the edges, diameter 0.32 mm. 6. Somal spheraster, a well-marked centrum and numerous conical, sharply pointed, or bacillary, strongylate actines; diameter 0.012 mm. 7. Choanosomal oxyaster, no distinct centrum; actines long, conical, roughened or smooth, sharply pointed; diameter 0.04 mm.

Colour.—Reddish-brown. Size, 135 mm. by 122 mm. by 100 mm. Habitat.—Vigten Island, Norway (Norman).

Section 4. Monotriana.

Species possessing but one form of oxea and but one form of triæne. Both species included in this section are insufficiently characterised.

Cydonium simplex (O. Schmidt).

Geodia simplex, O. Schmidt, Spong. Atlant. Gebiet., p. 70, 1870.

Sponge.—"A fragment, differing only in the simplicity of the spicules from Geodia (Cydonium) gigas" (O. Sch.).

Spicules.—I. Megascleres. 1. Oxea, 2.5 by 0.038 mm. 2. Orthotriæne, rhabdome 1.85 by 0.032 mm., chord 0.426 mm.

II. Microscleres. 3. Sterraster, 0.07 mm. in diameter. 4. Aster, 0.02 mm. in diameter.

Habitat. - Greenland.

Remarks.—The measurements of spicules were obtained from a type-slide in the British Museum.