

(No. 2) and occasional anatriænes; a sterrastral layer 0·8 mm. thick; and an inner fibrous layer 0·08 mm. thick.

*Spicules.*—I. Megascleres. 1. *Somal oxea*, 3·57 by 0·45 mm. (N.) and 3·2 by 0·055 mm. (H.). 2. *Cortical oxea*, 0·45 by 0·004 mm. (H.). 3. *Orthotriæne*, rhabdome 3·38 by 0·042 mm. (N.) and 3·14 by 0·067 mm., cladi 0·366 mm. long (H.). 4. *Protriæne*, rhabdome 0·006 mm. in diameter, cladi 0·1 mm. in length (N.), rhabdome 5·7 by 0·02 mm., cladi 0·118 mm. in length (H.). 5. *Anatriæne*, rhabdome 0·0194 mm. in diameter, cladi 0·1 mm., chord 0·13 mm. long (N.), rhabdome 6·6 by 0·0276 mm., cladi 0·126 mm., chord 0·13 mm., sagitta 0·13 mm. long (H.).

II. Microscleres. 6. *Sterraster*, spherical, 0·077 mm. (N.), 0·067 mm. (H.), in diameter. 7. *Somal chiaster*, actines short, cylindrical, truncate or tylote, 0·007 mm. in diameter. 8. *Choanosomal chiaster*, actines slender, conical, usually truncate, sometimes roughened near the ends, 0·04 mm. in diameter.

*Colour.*—Yellowish-grey.

*Habitat.*—Adriatic.

*Remarks.*—The letter (N.) indicates that the measurements were taken from a fragment of *Geodia gigas*, presented to Dr. Norman by O. Schmidt, (H.) from a whole specimen obtained by Professor Haddon from the Zoological Station, Naples. The two sets of measurements are fairly accordant.

Amongst the hispidating oxeas I observed some very slender anatriænes with minute cladomes, the chord not measuring above 0·007 mm. The appearance of these small spicules, where we usually meet with the most completely developed forms, was so unexpected that it naturally arrested attention and led to further investigation, which was rewarded by finding that the small cortical oxeas sometimes bear cladi like those of the anatriæne, and in one instance a typical fusiform oxea, only 0·394 by 0·004 mm. in size, was seen, bearing at its distal pointed end a true anatriæne cladome, with a chord only 0·004 mm. long. The resemblance of these minute anatriænes to the cladose tylostyles of *Proteleia sollasi*, Ridley and Dendy, is a very suggestive fact. Between the last named sponge and *Cydonium gigas* there can hardly be any close connection, and if we cannot regard the cladose spicules of either as directly descended from those of the other, we are led to conclude that we have here a new and striking case of homoplastic development. The hispidating oxeas share with the other spicules of the sponge a molecular structure which is similarly plastic to the influence of tangential strains in the ectosome, leading to a triradiate branching near the ends.