

LIST OF ALL THE SPECIES OF MADREPORARIA DREDGED BY H.M.S. CHALLENGER
IN DEEP WATER, AND OF A FEW SHALLOW WATER FORMS, TOGETHER
WITH DESCRIPTIONS OF THE SPECIES, AND SOME ACCOUNT OF THE
ANATOMY OF CERTAIN SPECIES.

Family TURBINOLIDÆ, M.-Edw. and H.

Caryophyllia, Stokes.

Caryophyllia berteriana, Duchass.

A single perfect specimen only obtained, and fragments of a second.

Station 3. South of the Canary Islands. Lat. 25° 45' N., long. 20° 12' W. 1525 fathoms.

Caryophyllia lævicostata, n. sp. (Pl. I. fig. 1, 1a).

Corallum conical, attached by a long stout cylindrical pedicle, which enlarges and becomes encrusting at its base. Surface of the wall of the calice with a polished and brightly glistening appearance. Primary and secondary costæ prominent, equally developed, with slightly sinuous edges extending from the exsert septa to the commencement of the pedicle. Tertiary and quaternary costæ marked only by faint striæ. Calice oval, deep; septa all exsert, with coarsely granulate surfaces, the primary and secondary especially prominent with rounded upper margins in six systems and four cycles. Pali stout and prominent, slightly sinuous, with their surfaces beset with short conical projections; twelve in number opposite the tertiary septa only. Columella composed of four spirally-twisted processes.

Height 3 cm.; long diameter of calices 24 mm.; shorter diameter 18 mm.

A single specimen only dredged, attached to a dead Stylasterid.

Station 343, off Ascension Island, 425 fathoms.

Caryophyllia clavus, Scacchi.

Var. *smithi*, Duncan (?).

Station 75. Off Fayal Island, Azores, 450 fathoms. All small dwarfed attached specimens.

Station 308. Off Tom Bay, Patagonia, 175 fathoms. Attached to Gorgonoid stems.

Var. *borealis*, Duncan (?). One small attached specimen.

Station 192. Off the Ki Islands. Lat. 5° 42' S., long. 132° 25' E. 129 fathoms.

Var. *transversalis*, n. var. (Pl. I. fig. 2, 2a).

Wall of the calice marked by a series of transverse, undulating, slightly prominent accretion ridges of epitheca, marking apparently a succession of intervals of rest in the growth of the calice. Surface of the coral smooth. Costæ little marked, being obliterated by the ridges, except towards the pedicle, where they are present as numerous