

three times the height of the radials, and closely fused, so that their sutures are rarely visible. Radials short and quadrate, with concave upper and convex lower edges; usually five in number, but sometimes four, six, or seven. Arms of from thirty to forty joints, which are united in pairs by syzygies. First brachials flattened, and quite free laterally, square or slightly longer than broad. The second similar, but somewhat shorter. The third still shorter and trapezoidal, so that the arm narrows considerably at this point. The remaining joints as long or a little longer than wide, and more convex than the preceding ones. The epizygals which bear the pinnules are rather longer than the hypozygals and irregularly pentagonal, as the pinnule facets are large relatively to the length of the joints. The first pinnule is on the eighth brachial or fourth epizygal. The two lowest pinnule-joints are somewhat trapezoidal in shape, and in contact by their broader ends. The remaining joints have a medio-dorsal keel and flattened sides, with the edge of the ventral furrow produced upwards into broad thin plates, especially in the third and following joints. The peristome is at the level of the second brachial, and protected by five linguiform oral plates which occupy the central ends of the interpalmar areas.

Colour, in spirit, brownish-white or greyish-white.

Localities.—The Lofoten Islands, 80 to 300 fathoms; the Josephine Bank.

H.M.S. "Lightning," 1868. Station 12. Lat. $59^{\circ} 36' N.$, long. $7^{\circ} 20' W.$; 530 fathoms; Globigerina ooze; bottom temperature, $47^{\circ} \cdot 3 F.$ Three small specimens without arms.

Station 16. Lat. $61^{\circ} 2' N.$, long. $12^{\circ} 4' W.$; 650 fathoms; Globigerina ooze. Two small specimens without arms.

Stem-fragments were occasionally found in the "cold area" during the cruises of the "Lightning" and "Porcupine."

H.M.S. Challenger. Station 24A. March 25, 1873, off Culebra Island; lat. $18^{\circ} 43' N.$, long. $65^{\circ} 5' W.$; 625 fathoms; Pteropod ooze. Two specimens.

Station 122c. September 10, 1873, off Barra Grande; lat. $9^{\circ} 10' S.$, long. $34^{\circ} 49' W.$; 400 fathoms; red mud. Two specimens.

Station 323. February 28, 1876; lat. $35^{\circ} 39' S.$, long. $50^{\circ} 47' W.$; 1900 fathoms; blue mud; bottom temperature $33^{\circ} \cdot 1 F.$ The occurrence of a stem-fragment here is recorded in the Station-book, but it has not come into my hands, and I am therefore unable to speak positively about it.

H.M.S. "Knight Errant," 1880. Station 5. Lat. $59^{\circ} 26' N.$, long. $7^{\circ} 19' W.$; 515 fathoms; mud; bottom temperature, $45^{\circ} \cdot 4 F.$ Two young specimens without arms.

Station 6. Lat. $59^{\circ} 37' N.$, long. $7^{\circ} 19' W.$; 530 fathoms; grey mud; bottom temperature, $46^{\circ} \cdot 5 F.$ A fragment only.

Rhizocrinus lofotensis has also been dredged several times by the surveying ships of the U. S. Coast Survey, as recorded in the following list.

SS. "Bibb," May 4, 1868, off the Samboes; 237 fathoms. May 11, 1868, off Sand Key; 248 and 306 fathoms. March 4, 1869, off Cojima, near Havana; 450 fathoms; and several times at lesser depths.