derived from the examination of the Challenger samples, but may fairly be taken as an index of the relative frequency of occurrence of these organic fragments in all deep-sea deposits.

There are 348 Challenger deposits fully described in the Tables of Chapter II., and the order of frequency is as follows, the number of times the various organic remains were observed being indicated in brackets:—

Globigerinidæ (306 times), Radiolaria (274), Sponge spicules (271), Rotalidæ (269), Echinoderm fragments (266), pelagic *Pulvinulinæ* (263), Lituolidæ (244), Miliolidæ (241), Coccoliths (235), Lagenidæ (211), Textularidæ (201), Diatoms (181), Rhabdoliths (179), Ostracodes (173), Astrorhizidæ (145), Lamellibranchs (121), Pteropods (119), Nummulinidæ (112), Gasteropods (109), otoliths and bones of fish (102), Polyzoa (91), casts (78), teeth of fish (65), Heteropods (61), *Serpula*, and other worm tubes (53), arenaceous Textularidæ (34), calcareous Algæ (27), Alcyonarian spicules (24), Coral fragments (23), Coccospheres (20), *Dentalium* (19), arenaceous Foraminifera, families not given (15), Brachiopods (8), Cephalopod beaks (8), Cirripedia (7), Chilostomellidæ (1), and Crustacean fragments (1).

There are 215 purely pelagic deposits fully described, and confining our attention to these, viz., the Red Clay, Radiolarian, Diatom, Globigerina, and Pteropod Oozes, the order is somewhat different, as follows:—Radiolaria (197 times), Globigerinidæ (186), *Pulvinulina* (168), Rotalidæ (160), Coccoliths (155), Sponge spicules (155), Echinoderm fragments (153), Lituolidæ (150), Miliolidæ (142), Rhabdoliths (126), Lagenidæ (109), Diatoms (99), Textularidæ (97), Ostracodes (88), Astrorhizidæ (82), teeth of fish (60), Pteropods (51), Nummulinidæ (48), casts (46), otoliths of fish (43), Lamellibranchs (41), Gasteropods (39), Polyzoa (33), Heteropods (22), arenaceous Foraminifera (12), *Serpula*, and other worm tubes (11), Coccospheres (10), arenaceous Textularidæ (10), *Dentalium* (7), Coral fragments (7), calcareous Algæ (6), Alcyonarian spicules (5), Brachiopods (5), Cirripeds (4), and Cephalopod beaks (4).

g. Coral Reefs.

A description of coral reefs and islands, and a discussion of their peculiar features, do not fall within the scope of this work. The subject of coral reefs, and the bearing of deep-sea investigations on the question of their origin, has been dealt with by Mr Murray in several Memoirs.[1] It may, however, be here pointed out that a recent writer,[2] among

[1] Murray, "On the Structure and Origin of Coral Reefs and Islands, *Proc. Roy. Soc. Edin.*, vol. x. pp. 505–518, 1880; "Structure, Origin, and Distribution of Coral Reefs and Islands," Lecture before Roy. Inst. of Gt. Brit., March 16, 1888; "The Great Ocean Basins," *Nature*, vol. xxxii. p. 613, 1885; also Narr. Chall. Exp., vol. i. pp. 781, 782, 1885; Murray and Irvine, "On Coral Reefs and other Carbonate of Lime Formations in Modern Seas," *Proc. Roy. Soc. Edin.*, vol. xvii. pp. 79–109, 1890.

[2] R. Langenbeck, "Die Theorieen über die Entstehung der Koralleninseln und Korallenriffe, &c.," p. 158, Leipzig, 1890.