STATION 175. Station 175 (Sounding 305), Fiji to Raine Island (see Chart 27 and Diagram 13).

August 12, 1874; lat. 19° 2′ S., long. 177° 10′ E.

Temperature of air at noon, 73°8; mean for the day, 75°2.

Temperature of water:-

					0						
Surfac	e		•		77.5	600 fa	thoms,				38.9
	thoms,	12			71.5	700	,,				37.9
100	,,	12			70.8	800	"				37.2
150				2372). 9 16 93	66.0	900	"				36.8
200	"				60.8	1000	,,				36.4
250	"	-			54.2	1100	,,		•		36.2
300			·		47.0	1200	"	Ŷ		24	36.0
400	"		Ŷ.		42.0	Bottom					36.0
500					40.0		5				
))	10.0		1.0700							

Density at 60° F.:-

Surface,		. 1.02647	200 fathoms,	29	*	. 1.02647
100 fathoms.		. 1.02664	Bottom, .			. 1.02633

Depth, 1350 fathoms; deposit, Globigerina Ooze, containing 44.43 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 6 a.m. shortened and furled sails, and got up steam to sound and trawl. Sounded in 1350 fathoms. At 9 a.m. put trawl over. Obtained serial temperatures, and samples of water for analysis from 100 and 200 fathoms, and bottom. At 3.20 p.m. hove up trawl containing pumice-stones, a few specimens, and a piece of a branch of a tree, about 3 feet long, carbonised (?) at the projecting points. Made all plain sail.

Distance at noon from Api Island, New Hebrides, 574 miles. Made good 17 miles. Amount of current 9 miles, direction S. 81° W.

Animals from Trawl. The following species are recorded in the Zoological Reports from the trawl at this Station:—

SIPHONOPHORÆ (Haeckel, Zool. pt. 77).

Diphyopsis angustata (Eschscholtz). Obtained also at Stations 222 and 265 to 279.

CRINOIDEA (Carpenter, Zool. pts. 32 and 60).

Pentacrinus naresianus, n.sp. Two fragments; obtained also at Stations 170, 171, 210 (?), and 214.