STATION 81. ORGANISMS FROM SURFACE-NETS. Surface Organisms.—The following species are recorded from the surface at this Station:—

PTEROPODA (Pelseneer, Zool. pt. 65).

Clio (Creseis) acicula (Rang).

AMPHIPODA (Stebbing, Zool. pt. 67).

Phorcorrhaphis zamboangæ, n.sp.

Willemoes-Suhm writes: "In the morning some surface things were brought to me, among which I found some *Diphyes*, an Amphipod of probably unknown genus, many small Schizopods, *Styliola*, and many of those small bicornous *Salpæ*, besides the Zoëæ and ever-present *Sagitta*. There was also a *Salpa* presenting a peculiarity in the lilac glands of the digestive cavity; these glands showed interruptions due either to want of secretion, which is not very likely, or to separation into several."

STATION 82.

Station 82 (Sounding 146), Azores to Madeira (see Chart 6 and Diagram 3).

July 14, 1873; lat. 33° 46' N., long. 19° 17' W.

Temperature of air at noon, 72°8; mean for the day, 71°9.

Temperature of water:-

Surfac	ce, .	•		70.7	700 fat	homs,			46·2
25 fathoms,				65.5	800	,,		•	43.6
50	,,			61.8	900	,,			41.2
75	,,			59.3	1000	,,			39.7
100	,,		,	57.8	1100	,,		•	39.0
200	"			53.8	1200	"			38.6
300	,,			52.0	1300	,,			38.2
400	"	•		51.0	1400	"		•	37.8
500	,,			49.6	1500	"			37.5
600	,,	•		48.2	Bottom,		•		36.6

Density at 60° F. at surface, 1.02715; bottom, 1.02695.

Depth, 2400 fathoms; deposit, Globigerina Ooze, containing 79.79 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 8.30 a.m. got up steam, and at 9.15 a.m. shortened and furled sails. At 10.30 a.m. sounded in 2400 fathoms. Took serial temperatures down to 1500 fathoms. Made current observations, and found surface current running south at the rate of a quarter of a mile per hour. At 3 p.m. completed observations, and made all plain sail. At 7.30 p.m. shortened and furled square sails, and got up steam. At 7.40 p.m. proceeded under steam.

Distance at noon from Pt. Pargo, Madeira, 116 miles. Made good 54 miles. Amount of current 10 miles, direction S. 14° W.