THE VOYAGE OF H.M.S. CHALLENGER.

STATION 242.

At 3.10 P.M. shortened and furled sails, and got up steam. At 4 P.M. sounded in 2575 fathoms. Obtained serial temperatures down to 1500 fathoms. At 6.30 P.M. completed temperatures and made sail to a good southerly breeze.

Distance at noon from Honolulu, 2311 miles. Made good 173 miles. Amount of current 13 miles, direction N. 25° E.

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

 PTEROPODA (Pelseneer, Zool. pt. 58).
 TUNICATA (Herdman, Zool. pt. 76).

 Notobranchæa inopinata, n.sp.
 Doliolum challengeri, n.sp.

In addition, the following are recorded in the note-books from the surface and down to 60 fathoms:—Pyrocystis, Peridinium tripos, Globigerina, Orbulina, Collosphæra one specimen of Challengeria and other Radiolaria, Sagitta, Cypridina, Saphirina and other Copepods, Hyperids, Phronimids, Euphausia, small Ethella-like shells, and Pteropods

STATION 243.

Station 243 (Sounding 385), Yokohama to Sandwich Islands (see Chart 36 and Diagram 17).

June 26, 1875; lat. 35° 24' N., long. 166° 35' E. Temperature of air at noon, 73°.8; mean for the day, 72°.8. Temperature of water :---

Sur	Surface,				7 1 .0	300 fa	thoms,		•		45·0
10	fathoms,		3 9 2		70.3	400	,,				40.5
20	"				65.6	500	"	<u>.</u>			39.1
30	"				63.9	600	"				38.1
50	**	•			60.4	700	,,				37.2
75	,,	1			59.3	800	,,				36.6
100	,,				58.3	900	,,				36.1
125	"				57.2	1000	,,				35.9
150	,,				56.3	1100	,,				35.8
175	,,	٠	3 4	ю.	55.1	1200	,,		~		35.7
200	,,				53.5	1300	,,				35.5
225	"	•		•	52.0	1400			÷		35.4
250	,,				49.6	1500	"				35.3
275	"	8		•	47.2	Bottom,			·	·	35.0

Density at 60° F. :—

Surfa	ce, .				1.02562	200 fatl	home			1.00550
50 f	50 fathoms,						nome,	•	•	.1.02552
	lathoms,	•	· · · 1·02570		300 "	"			· 1.02525	
100	"	•	•	•	1.02559	400	,,			. 1.02542

Depth, 2800 fathoms ; deposit, Red Clay.