STATION 278.

	120 f	athoms,		er <b>=</b> 00	70·0	300 f	athoms,				46.2	
	130	,,			69.5	400	"				42.6	
	140	"			68.5	500	,,			•	40.0	
	150	"	•		67.7	600	"				38.7	
	160	"			66.7	700	"				37.7	
	170	"			65.3	800	"		•		37.1	
	180	"			63.8	900	,,			•	36.8	
	190	"			61.6	1000	"		•		36.5	
	200	"	8. S.		59.2	Botton	1,	•		•	36.5	
Den	sity a	t 60° F	.:									
	Surface, . 25 fathoms,			. 1.02696		200 fathoms,					1.02593	
				. 1	02694	400	,,				1.02548	
	50	"		. 1	02697	1025	,,	•			1.02556	
	100	"		. 1	02678	Botton					1.02565	

Depth, 1525 fathoms; deposit, Volcanic Mud, containing 20.47 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 5 A.M. observed Tahiti and Eimeo Islands ahead, and at 5.50 A.M. Tetuaroa Islands on the port bow. At 10 A.M. stopped and sounded in 1525 fathoms. Obtained serial temperatures down to 1000 fathoms. At 12.40 P.M. completed observations and proceeded towards Papieté Harbour, anchoring there in 11 fathoms at 4.20 P. M.

STATIONS 279 то 279с.

Stations 279 to 279c (Soundings 421 to 424), off Tahiti (see Chart 39).

October 2, 1875.

Temperature of air at noon, 80°3; mean for the day, 77°0.

Temperature of water :—

Surface, . 25 fathoms,			*	79°0	175 <b>f</b> a	thoms,	( <b>1</b>	•	61°0
				76.2	200	,,			55.3
50	"	•		76.2	225	"	٠		51.6
75	,,	•	•	74.4	250	,,			48.8
100	"			72.4	275	,,		•	46.0
125	,,	100		69.8	300	"			44.3
150	,,	 •		66.3					

At 11 A.M. got up steam, and at 12.15 A.M. weighed anchor and proceeded out of Papieté Harbour with a numerous party of visitors on board. Sounded successively outside Papieté Harbour in 420 fathoms, deposit Volcanic Mud, containing 22:30 per cent. of carbonate of lime (Station 279); in 590 fathoms, deposit Volcanic Mud, containing 25.28 per cent. of carbonate of lime (Station 279A); in 620 fathoms, deposit