

the "Hydra" tube was reddish mud, containing, however, a considerable quantity of carbonate of lime. The color and composition of the mud were not uniform. The upper layer—that which had been forced farthest into the tube—was much redder than that which was nearest the mouth of the tube, and which had consequently come from a greater depth.

This is a phenomenon with which we are now very familiar, particularly among the red clays from great depths. It seems to be due to some deoxidizing process taking place slowly, and consequently visibly affecting only those deeper layers which have been deposited for a considerable length of time.

As to the determination of depth, this sounding was perfectly satisfactory. Being still near the Islands, we did not expect the depth to be nearly so great as it was, and the "Hydra" tube was weighted with 3 cwt. only; but the sea was smooth and the weather fine, and it was easy to keep the ship nearly stationary. The following table gives the time-intervals in the running-out of the line:

Fathoms.	Time.			Interval.		Fathoms.	Time.			Interval.	
	H.	M.	S.	M.	S.		H.	M.	S.	M.	S.
500	6	36	17	.....		2400	7	9	38	2	14
600	6	37	16	0	59	2500	7	11	53	2	15
700	6	38	29	1	13	2600	7	14	11	2	18
800	6	39	48	1	19	2700	7	16	26	2	15
900	6	41	12	1	24	2800	7	18	37	2	11
1000	6	42	48	1	36	2900	7	20	59	2	22
1100	6	44	25	1	37	3000	7	23	26	2	27
1200	6	46	3	1	38	3100	7	25	45	2	19
1300	6	47	45	1	42	3200	7	28	11	2	26
1400	6	49	32	1	47	3300	7	30	38	2	27
1500	6	51	20	1	48	*3400	7	33	5	2	27
1600	6	53	12	1	52	3500	7	41	40	.....
1700	6	55	7	1	55	3600	7	44	20	2	40
1800	6	57	5	1	58	*3700	7	47	12	2	52
1900	6	59	2	1	57	3800	7	57	22	.....
2000	7	1	6	2	4	3900	8	0	19	2	57
2100	7	3	8	2	2	.....	.....			} At the rate of	
2200	7	5	13	2	5	3925	8	1	18			3	56
2300	7	7	24	2	11	3950	8	2	23	4	20