When all the instruments had been attached to the line it was eased down 400 or 500 fathoms by being passed round the drum of the donkey-engine, which was fitted with a break for this purpose. When that amount of line had been eased out it was allowed to descend freely, the ship being kept exactly over the spot where the sinkers entered the water. As the line ran out the exact time each 100 fathom mark entered the water was registered and entered in its appropriate column in a book provided for that purpose, and the interval between these times was calculated and entered in another column. These intervals gradually increase in length as the depth increases, the sinkers being retarded in their descent by the friction of the line as it passes through the water, which increases with the amount of line paid out; they will, however, be found to increase in regular proportion as long as the sinkers are descending, but directly they reach the bottom there will be a sudden lengthening of these intervals, as then only

TABLE *showing the Mean Rate of Descent of Sounding Lines with Weights of 3 and 4 cwt. attached.*

No. 1 line with 3 cwt. attached.			No. 1 line with 4 cwt. attached.		
Interval.	Time each 100 fathom mark entered water.	Depth in fathoms.	Time each 100 fathom mark entered water.	Interval.
m. s.	h. m. s.		h. m. s.	m. s.
...	9 0 0	500	9 0 0	...
1 8	1 8	600	0 59	0 59
1 13	2 21	700	2 1	1 2
1 18	3 39	800	3 7	1 6
1 23	5 2	900	4 17	1 10
1 28	6 30	1000	5 31	1 14
1 33	8 3	1100	6 49	1 18
1 37	9 40	1200	8 11	1 22
1 41	11 21	1300	9 37	1 26
1 44	13 5	1400	11 7	1 30
1 47	14 52	1500	12 40	1 33
1 50	16 42	1600	14 16	1 36
1 52	18 34	1700	15 55	1 39
1 54	20 28	1800	17 37	1 42
1 56	22 24	1900	19 22	1 45
1 58	24 22	2000	21 10	1 48
2 1	26 23	2100	23 1	1 51
2 3	28 26	2200	24 54	1 53
2 5	30 31	2300	26 49	1 55
2 7	32 38	2400	28 46	1 57
2 10	34 48	2500	30 45	1 59
2 12	37 0	2600	32 46	2 1
2 14	39 14	2700	34 49	2 3
2 16	41 30	2800	36 54	2 5
2 18	43 48	2900	39 1	2 7
2 20	46 8	3000	41 10	2 9