This experiment at once proved the advantage of the encased bulb. It was repeated with other thermometers with the same pressure and for the same period of time, and it was found that while the mean difference of the encased bulbs was only 0°·95, that of the ordinary deep-sea thermometers was, as in No. 57, 7°·25. It follows, also, from these experiments, that very nearly all the difference or error is due to pressure on the full bulb, and that by encasing that bulb we have a nearly perfect instrument.

The next series of experiments was made to establish a scale by which observations by the ordinary instruments might be approximately corrected for pressure. The following table gives the errors of six thermometers at different pressures. The 'standard' is an encased Miller-Casella, the last a registering minimum thermometer by Casella enclosed in a hermetically sealed glass tube on Sir William Thomson's plan.

Pressure in Fathoms.	Standard.	No. 54.	No. 56.	No. 76.	No. 73.	Thomson.
250	0°· 4 C.	0°· 8 C.	1°· 0 C.	0°· 7 C.	0°· 8 C.	0°· 0 C.
500	0 · 4	1 · 7	1 · 5	1 · 4	1 · 7	0 · 05
750	0 · 7	2 · 2	2 · 2	2 · 3	2 · 5	0 · 0
1,000	0 · 8	2 · 9	2 · 9	2 · 7	2 · 7	0 · 2
1,250	0 · 9	3 · 5	3 · 5	3 · 5	4 · 1	0 · 05
1,500	0 · 8	4 · 3	4 · 3	4 · 0	4 · 3	0 · 3
1,750	0 · 95	4 · 6	4 · 9	4 · 7	5 · 7	0 · 2
2,000	1 · 1	5 · 4	5 · 5	5 · 3	6 · 4	0 · 3
2,250	1 · 1	6 · 2	6 · 0	6 · 0	6 · 8	0 · 4
2,500	1 · 2	7 · 2	6 · 7	6 · 5	7 · 6	0 · 2

The mean difference for each 250 fathoms in each thermometer is as follows :—