

The sounding at Station No. 37, at a depth of 2,435 fathoms, has already been fully described as an example of the most recent method of determining extreme depths with accuracy. Two Miller-Casella thermometers, numbered 100 and 103 respectively, were lashed to the sounding-line in their copper cases, one a little above the other, about a fathom and a fathom and a half above the 'Hydra' sounding-machine. These two instruments had been prepared and tested with extreme care, and had been employed throughout the first cruise; their freezing-points had been again verified at Belfast in case the enormous pressure to which they had been subjected might have affected the glass, and we had absolute confidence in their indications. The indices were set before the instruments were let down at the temperature of the surface,  $21^{\circ}1$  C., and  $21^{\circ}15$  C. They were allowed to remain at the bottom for ten minutes, and on their return to the surface in upwards of two hours and a half, they were unanimous in recording a minimum of  $1^{\circ}65$  C., the slight differences between the two instruments, which gave the almost inappreciable error for one of them of  $0^{\circ}05$  C. at  $21^{\circ}$  C., being imperceptible at the lower temperature.

It had a strange interest to see these two little instruments, upon whose construction so much skilled labour and consideration had been lavished, consigned to their long and hazardous journey; and their return eagerly watched for by a knot of thoughtful men, standing, note-book in hand, ready to register this first message, which should throw so much light upon the physical conditions of a hitherto unknown world.