

son why underlying water might not in some cases have a temperature higher than that of the layers above it; but the thermometer is not constructed to show such an anomaly: having once registered its minimum, it has no power of amendment.

I have no hesitation, therefore, in saying that any single indication with a thermometer on Six's principle is not trustworthy, and that a fact in temperature distribution can only be established by a series of corroborative determinations.

Although the gross errors to which an unprotected thermometer is liable from pressure may be said to be got rid of by the addition of the outer shell, a certain amount of error in the same direction still remains, probably from a slight compression of the unprotected parts of the tube. This error, which is one of slight excess, although for practical purposes it might perhaps be safely regarded as the same for all thermometers, is in detail special to each instrument, and all our thermometers were tested by Captain Tizard, and their individual errors tabulated for every 100 fathoms.

The following table, which is given as an example, is in Fahrenheit degrees:

Number of Thermometer.	Correction for 100 Fathoms.	For 500 Fathoms.	For 1000 Fathoms.	For 1500 Fathoms.	For 2000 Fathoms.	For 2500 Fathoms.	For 3000 Fathoms.
0 1	0	0·2	0·5	0·7	0·9	1·1	1·4
0 2	0	0·2	0·4	0·6	0·8	1·0	1·2
0 3	0	0·2	0·4	0·6	0·8	1·0	1·2
0 4	0	0·4	0·7	0·8	0·9	1·1	1·1
0 5	0	0·3	0·6	0·8	0·9	1·1	1·2
0 6	0	0·3	0·6	0·8	0·9	1·1	1·2
0 7	0	0·2	0·4	0·6	0·7	0·9	1·1
0 8	0	0·2	0·4	0·6	0·8	1·0	1·2

These particular thermometers were part of a batch sent out to us late in the cruise, specially strengthened, and certainly of a better construction than those which we had had before. By testing a large series of the earlier instruments in a Brahma's press, Captain Davis had come to the conclusion that, when subjected to a pressure corresponding to a depth of 2000