

Thermometer.	Difference.
Standard . . . . .	+ 0°·12 C.
54 . . . . .	+ 0·72
56 . . . . .	+ 0·67
76 . . . . .	+ 0·65
73 . . . . .	+ 0·76
Thomson . . . . .	+ 0·03

During these experiments the water in the cylinder was of course maintained as far as possible at the same—or at a known temperature; a certain amount of calorific effect must, however, be produced by the sudden compression of the water, and the next series of experiments was performed in order to determine the amount of that effect. Three of Phillips's encased maximum thermometers (Sir William Thomson's design), being entirely protected from any effect from compression, were employed for this purpose, with the following result:—

Pressure, 6,817 lbs. = 2,500 fathoms.

Thermometer.	Difference.
11,424 . . . . .	+ 0°·05 C.
9,649 . . . . .	+ 0·22
9,645 . . . . .	+ 0·11

So that this source of error is absolutely trifling.

The true error of the Miller-Casella thermometer, as deduced from these observations, is—

For 250 fathoms 0°·079 C.

For 2,500 fathoms 0°·79 C.