

The *Third Class* of experiments includes chiefly Artesian wells. One of the most important is the well of La Rochelle, described by M. Fleuriau de Bellevue. The mean temperature of the district is

Air at the surface	-	-	-	11·87°
Water in the well, at 316 feet depth	-	-	-	16·25
Ditto	369½	-	-	18·12

Ratio from surface, 1° cent. for 58·5 to 72 feet, or 20 mètres.

At Southampton, a well 133 yards deep was found to have a temperature of 56½° Fahr.; the mean temperature of surface being 50°. The ratio deduced is 1° Fahr. in 46 feet English.

The importance of this branch of evidence induced M. Arago to publish a short but valuable notice of Artesian wells, which is inserted in Jameson's *Journal* for 1835, p. 235. The following table is extracted, and the ratios appended to each observation:—

		Mètres.	Ratio.
<i>Paris.</i> —Mean temp. of surface	10·6°		
Well of Port St. Ouen	12·9	66	1° in 29·0°
<i>Département du Nord.</i> —Mean temp.	10·3		
Well of Marquette	12·5	56	1 - 25·5
Aire	13·3	63	1 - 21·0
St. Venant	14·0	100	1 - 27·0
<i>Sheerness.</i> —Mean temp. of surface	10·5		
Well	15·5	110	1 - 22·0
<i>Tours.</i> —Mean temp. of surface	11·5		
Well	17·5	140	1 - 23·3
Mean result, 1° cent. for 24·6 mètres; or, 1 Fahr. for 45 feet.			

The coincidence of this with the former result is unexpected.

The conclusion from experimental observation is in harmony with that authorised by hot springs, that the earth has a general and pervading high temperature below the surface.