

In the consolidated mines, at a depth of 290 fathoms, thermometers sunk in a cross course of the rock (killas) indicated at the vein 92° and 88° ; 10 fathoms from it, 86.3° and 85° ; 24 fathoms from it, 85.3° and 84° . Here the metallic vein is the hottest part; Mr. Fox thinks, because of its allowing hot waters to ascend. The temperature 85.3° is at least 35° above that of the climate, and the ratio is consequently 1° in 49.6 feet; or, allowing 10 fathoms to the depth of variable temperature, 1° in 48 feet.

And still more lately, experiments made by Captain Oats in Tresavean copper mine gave the following results.

Depth.		Air.	Rock.	
			No. 1.	No. 2.
26 feet	In granite	53.3°	57.0°	52.8°
200	lode	77.2	76.0	75.5
200	again	77.7	76.0	75.5
250	lode	83.2	82.5	82.0
262	lode	85.5	82.5	82.0

Ratio, 1° in 48 feet from the surface; or,
 1° - 46 - from a point 10 fathoms below surface.

Humboldt observed, in mines near Guanaxuato (Mexico),

At 502 mètres depth in	Valenciana mine	36.8° centig.
193 -	Rayas	33.7 —
134 -	Villalpand	29.4 —

The surface temperature is 16° . The volcanic character of the country is perhaps unfavourable for accurate inferences.

Second Class of Experiments. In Stratified Rocks.

Saussure, in the salt mines of Bex, found

At 108 mètres depth the temperature	14.4°
183 - - -	15.6
220 - - -	17.4

Ratio deduced, 1° centigrade for 37 mètres.

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