

No. 590

A Science Service Feature

April 2

? WHY THE WEATHER ?

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A FLAME BAROMETER

A diamond mine at Kimberly in Transvaal affords a novel type of barometer. In a tunnel of this mine fire-damp is continually liberated. This gas, which otherwise would be in constant danger of exploding, is made to pass out through the mouth of a funnel, at the end of which it burns with a long flame. When the atmospheric pressure is high, the gas is given off less rapidly and the flame is shorter, and conversely. It has been found that a difference of 1/10 inch in the height of mercury in the barometer corresponds to at least a foot in length of flame. The daily barometric pressure variation, so marked in the tropics, can be easily noted in the flame. Although the general connection between the two has been known for some time, this is the first time the relation between the amount of gas liberated and the external atmospheric pressure has been so accurately determined.

(Tomorrow: Climatic Effects of Lake Ice)

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