

A Science Service Feature

Released upon receipt  
but intended for use  
June 20, 1931

? WHY THE WEATHER ?

Mailed June 13, 1931

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AN ANCIENT FALLACY

Now that "visibility" has become, because of its importance in aeronautics, one of the most discussed elements of weather, it is timely to say a word about the wide-spread notion that the stars are visible in broad daylight from the bottom of a mine shaft or a deep well. This belief dates back to classical antiquity, and appears to have remained unchallenged until Alexander von Humboldt repeatedly tried without success to see stars from mine shafts in Siberia and America and also sought in vain to learn of anybody else who had done so. It has been alleged that the first astronomer royal, Flamsteed, sank a well at Greenwich Observatory for the purpose of viewing a zenith star by day. The well was actually made, but its real purpose was probably to facilitate zenith observations at night.

The idea above mentioned is a pure myth. Its survival through the ages is rather astonishing in view of the innumerable opportunities that miners and others have had to discover its falsity. The glare of the atmosphere illuminated by the sun's rays prevents us from seeing the stars in the daytime. The depth of illuminated atmosphere between us and the stars is just the same whether we stand on the surface of the earth or at the bottom of a deep shaft.

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