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Sept. 24, 1926

A Science Service Feature

Mailed September 17, 1926

? WHY THE WEATHER ?

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SIMPLE WEATHER OBSERVING.

Complex and expensive though the equipment of Government weather stations is, one may very simply and inexpensively set up an observatory. Perhaps a thermometer is considered the first essential, but the barometer has some claim to this distinction. One can estimate the temperature fairly well, but it is difficult to get any knowledge of the pressure without a barometer. The usual changes in atmospheric pressure are too small for our perception. So perhaps a barometer should be the first purchase for an observatory. A thermometer is the next essential, and can be used for finding both air temperature and humidity. A barometer may be had for \$5, and a good thermometer for about \$1. Means for obtaining at least roughly quantitative observations of wind, cloudiness, and rainfall can be devised with practically no expense.

Direction cross-arms and a vane of wood, metal, or cloth can readily be set up. One can learn to estimate wind velocity to within the nearest 5 miles an hour, by the feeling or the effects of the wind on water or trees. For observing cloudiness, it is easy to divide the sky into quarters or tenths. Rainfall can be noted in general terms, according to time of beginning and ending and its apparent intensity, light, medium or heavy. Almost as easy, however, is the observation of actual depth of fall. A straight-sided can of 3 to 12 inches diameter, preferably with a funnel top to prevent some of the loss by evaporation, can be set in the open and the catches of rain measured with a ruler or in a graduate. Snowfall is fairly simple to measure. The occurrence of miscellaneous phenomena such as halos and thunderstorms are easy to record, while brief word descriptions of the general character of the day will make any record complete enough, for reasonably accurate mental reproduction later.

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