A Science Service Feature

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? WHY THE WEATHER ? Mailed October 3, 1931

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NATURAL HYGROSCOPES

A species of puffball, Geaster hygrometricus, is known as the "barometer earth star" because of its supposed power of predicting weather. As it develops, the two outer coats split into segments, which remain united at the top of the ball, forming a star-like pattern. The coatings differ in composition and do not absorb moisture to the same degree. The result is that in wet weather or when there is considerable moisture in the air the segments stand out from the plant. In a dry atmosphere the inner layer contracts more than the outer and causes the segments to curve in sharply. Thus the plant serves as a crude hygroscope.

In the 'eighties of the last century another natural hygroscope enjoyed newspaper notoriety under the name of the "Araucarian shell." The American Meteorological Journal said of it:

"It is the cast off shell of a Chilean crab, which remains white in dry weather, but, on the approach of moist weather, shows small red spots, which grow as the moisture increases. By the time rain falls, the shell has become entirely red."

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