

A Science Service Feature

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? WHY THE WEATHER ?

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Authority on Meteorology.

"HARNESING" ATMOSPHERIC MOISTURE

That the invisible water vapor in the atmosphere may be utilized to produce mechanical effects is illustrated in the operation of various hygrometers and hygrosopes, where the absorption of atmospheric moisture by some hygroscopic substance, such as a human hair or a piece of twisted catgut, induces the movement of a pointer or a recording pen. Another illustration of this process is described in an old edition of "The Shepherd of Banbury's Rules to Judge the Changes of the Weather." (London, 1744).

Here we read:

"There has been found a method of dividing mill-stones by the mere force of the air, which is done in this manner. They divide a block of this kind of stone as big as a large rolling stone into as many parts as they design to make mill-stones, and in the circles where the block is to be divided they pierce several holes, which they fill with saw wood dried in an oven, and expose the stone to the air in moist weather; when the wood swells to such a degree as to split the stone as effectually as if it was done by iron wedges driven by sledge-hammers."

Apparently the advantage of this operation over simply pouring water on the wooden wedges was that the latter plan would have caused excessive shattering of the stone.

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