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A Science Service Feature

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? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society,
says:

HIGH ALTITUDE, LOW PRESSURE

The air pressure at sea level is about 15 pounds to the square inch, which in the United States serves to maintain a column of mercury at an average of 30 inches as measured by the barometer. But pressure decreases rapidly with altitude. To use rough figures, the mercury falls one inch for each 1,000 feet of ascent. Thus, for example, when the barometer stands at 30 inches on the seacoast, it is less than 24 inches on Mt. Washington, 6,300 feet high. The air pressure is 12 pounds to the square inch instead of 15.

An ordinary aneroid barometer, the kind with a clock face, placed in an automobile will give a crude estimate of altitude as one motors through the country. If the hand moves down the scale half an inch, say from 29.5 to 29, the ascent has been about 500 feet. Much closer altitude readings are readily possible with automobile barometers now on the market, which read in feet. Mountain climbers' aneroids have sliding scales to show altitude as well as barometer units.

(Tomorrow: Mountain Clouds)

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