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? WHY THE WEATHER ?

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VALLEYS COLDER THAN HILLSIDES

By Charles Fitzhugh Talman,
Authority on Meteorology

Partly on account of air drainage and partly for other reasons, the bottoms of valleys tend to be colder in cold weather than the upper slopes and hilltops. This fact is illustrated in the occurrence of so-called "thermal belts" on hillsides, where on frosty nights fruit trees usually escape the spring frosts that damage orchards at lower levels. In the valleys of Carinthia, says Prof. Hann, the vertical increase of temperature in winter is so well known that it has given rise to a proverb that may be freely translated as follows:

"If you climb in winter up a stair
One less coat you will need to wear."

Humphreys, in his "Physics of the Air," mentions that the Swiss peasant builds his cottage on a knoll to keep above the valley flood of cold air.

A less familiar result of these "temperature inversions" is found in the fact that at their northernmost limits plants of southern habitat are likely to be found on hillsides, while the southernmost northern species usually occur in valleys.

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21st and Constitution Ave.
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