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A Science Service Feature

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? WHY THE WEATHER ?

Dr. Charles F. Brooks,  
Secretary, American Meteorological Society,  
tells of:

HEAT ON MOUNTAIN SLOPES

Mountaineers, including those who climb only the more lowly eminences in vacation country, occasionally experience a degree of heat while on the slopes, which does not afflict those whom they left behind in the valley below. Coupled with the warmth begot of violent exercise the effect may be disastrous upon the inexperienced climber.

The chief reason for such a heated condition of a mountain slope is the fact that the air is clear and permits the rays of the sun to reach the earth in nearly full vigor. Another and important reason is that the angle of slope under the hottest circumstances is such as to be practically at right angles to the line of the sunbeams, a condition, which of course results in a greater degree of heat than when the rays fall at an acute angle, just as the sun high in the heavens warms the ground more than when lower, even though the intensity of light on a surface held perpendicular to the rays may be the same.

When the crest of peak or ridge is reached the oppression disappears, nor would it be felt on the slope away from the sun, even though no shadow were cast.

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Science Service,  
1115 Conn. Ave.,  
Washington, D. C.