A Science Service Feature

Released on receipt
but intended for use
March 26, 1926

? WHY THE WEATHER ?

Mailed March 19, 1926

By Dr. Charles F. Brooks
of Clark University

FORMS OF MELTING SNOW

During the spring melting northerners have been seeing smooth banks and drifts of snow transformed into miniature mountain regions full of peaks and ridges. Melting exaggerates the inequalities in a snow surface. When the wind is cold, the projecting points of snow or ice are kept from melting, but the hollows between, opening away from the wind, are rapidly warmed by the sun and deepened. Often a snow bank is riddled or vertically fluted with pockets on the southeast side, looking as if it had been gouged out with an ice cream scoop.

Somtimes a crust of thin plates of ice forms on an old snow surface. These ice plates act like panes of glass in a greenhouse. Kept cool by the wind they do not themselves melt, but allow the sunlight to shine through and warm and melt the protected snow beneath. If someone breaks a hole through the ice roof, the relatively warm moist air rising from the little cavity below may condense, forming new ice crystals around the margin of the hole.

Leaves or thin sprinklings of ashes or single sheets of paper are likely to cause the snow underneath them to melt more rapidly and so become depressed below the general surface. These things are better absorbers of the sun's heat than the unprotected white snow. If, however, you scatter a thick layer of ashes on your walk, you delay the removal of ice, for only the surface of the ashes becomes warm and the rest acts as an insulator shielding the cold mass from the sun and wind.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE,
21st and B Sts.,
Washington, D. C.