



Soil-Saving Snow

► WINTER is often thought of as a period of hardship on the farm, of enforced inactivity on the part of farmers. True, in the North the soil is frozen, and men can neither plow nor plant. Snow lies on the ground, often covering it deeply for weeks on end. The frozen time therefore seems a useless time, and spring and summer and autumn are looked upon as the useful seasons.

Actually, it is not so. It would be well for farms in the South if they, too, could be deeply covered with snow for a part of the year. For the snow is a great soil-saver. So long as the soil is frozen hard or covered with the white blanket, it is in no condition to be eroded by water or wind. Unfrozen and naked soil, beaten by winter rains as in the South or pulled at by winter winds as sometimes in the West, has little resistance, little protection. The dreadful dust storms of the mid-thirties, that sometimes darkened even Eastern skies, blew off lands in the West that had been denied their winter snow covering by year-long droughts.

Snow cover is not only a protection against the destructive action of falling water; it is a source of moisture of the most useful kind, when spring thaws release it. Unless the land slopes too much or the thaws come too suddenly, snow water is rarely a cause of erosion. It turns from solid to liquid gradually, soaking into the ground where it will later benefit plant growth or seep slowly down to emerge as springs for thirsty animals.

Snow benefits the plants that it covers, too. A snow blanket may not be as warm as wool, but it is not as cold as it looks, either. The soil under snow is always at least a few degrees warmer

than the air immediately above it, so that hardy plants really do get a temperature benefit.

Even more important, however, is the protection snow gives against too rapid changes from cold to warm, or vice versa, when sudden thaws come in mid-winter, followed by equally sudden freezes. These sudden shifts in temperature can do immense mischief to plants, either by thawing, then re-freezing, the water in their tissues, with the formation of expanding, rupturing crystals; or by causing "heaving" in the soil, uprooting and overturning insecurely-rooted winter biennials.

Snow also protects plants in a third way. One of the worst things that can happen to many plants is to be exposed to dry winter winds which evaporate moisture from their tissues when they have no chance to replace it from the frozen soil. Snow cuts this evaporation nearly to zero, saving the plants from death by frozen drought.

Science News Letter, January 16, 1943

Floating glass, designed for lifesaving devices, weighs ten pounds per cubic foot and can be sawed, drilled, and worked in the ordinary manner.

CHEMISTRY

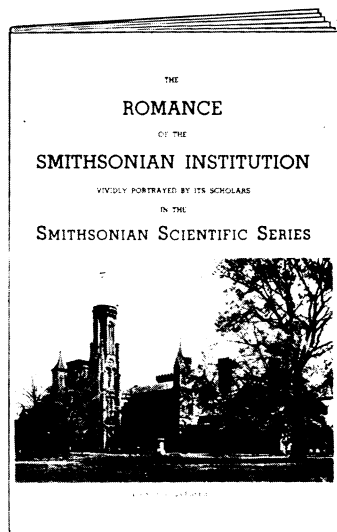
Dr. Robert E. Wilson Awarded Perkin Medal

► FOR OUTSTANDING work in applied chemistry, Dr. Robert E. Wilson, president of Pan American Petroleum and Transport Company received the Perkin Medal from the American Section of the Society of Chemical Industry at the organization's meeting on Jan. 8.

Research on such varied subjects as flow of fluids, corrosion, motor fuel volatility and contributions in the use of tetraethyl lead, has earned Dr. Wilson the award. He has over 90 patents to his credit. In succession, he has held the post of research director at Massachusetts Institute of Technology, the Chemical Warfare Service and Standard Oil Company of Indiana.

The award program honoring this record featured Dr. Thomas Midgley of the Ethyl Gasoline Corporation and Dr. Walter G. Whitman of Massachusetts Institute of Technology. Presentation of the Perkin Medal was made by Dr. Marston T. Bogert of Columbia University.

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