

Released upon receipt
but intended for use
November 24, 1932

A Science Service Feature

? WHY THE WEATHER ?

Mailed November 17, 1932

By Charles Fitzhugh Talman,
Authority on Meteorology.

FIGHTING THE ICE STORM

What an ice storm can do to the lines of the electric power companies was illustrated in December, 1929, when loads of ice caused a general breakdown of the distribution of power from Niagara Falls. On the lines of one power company fifteen great steel towers collapsed. All the power lines from the Falls to Buffalo were wrecked but one, and this had to be withdrawn temporarily from service in order that its icy coating might be melted by the process of sending a "heating current" through the wires; an expedient frequently resorted to in the electric power industry for preventing as well as for removing ice deposits. The repair crews had great difficulty in making their way over the roads, which were blocked at hundreds of points by fallen trees, and airplanes were used to good advantage in locating breaks.

The electric railways use various cutting and scraping devices attached to the cars for removing ice from overhead trolley wires and third rails. A less common practice is to melt the ice from third rails by the application of calcium chloride fed from a tank car. It is only in recent years, however, that the engineering industries have taken up in earnest the problem of combating the serious evil of the ice storm. One enterprise in this connection lately undertaken by the National Electric Light Association, with the cooperation of the Weather Bureau, is that of gathering statistics of the frequency and amount of glaze deposits in different parts of the country. A frame set up outdoors at each of several Weather Bureau stations carries a series of wires of different diameters, and at the end of a storm the local observer measures the thickness of ice deposited on each wire.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and Constitution Ave.
Washington, D.C.