

Released upon receipt
but intended for use
February 22, 1930

A Science Service Feature

? WHY THE WEATHER ?

Mailed February 15, 1930

By Charles Fitzhugh Talman,
Authority on Meteorology.

ICE ON THE WIRES

The telephone poles are of sturdy timber, as sound as creosote can make them, and strongly guyed; built to withstand inevitable loads of ice. There are four cross-arms to a pole; ten wires to an arm.

Yesterday the wires were slender copper strands. Today they are sagging glassy cables, as thick as your wrist, with a fringe of icicles by way of extra embellishment. The ice weighs about two pounds to the running foot. Allow one hundred and ten feet as the spacing between poles, and you get a total of nearly four and a half tons added to the burden carried by each pole.

Collapse is not likely to result from the mere downward pressure. Lateral strain does the trick. Somewhere along the line a tree, midway between two poles, staggers over, bringing a few additional tons to bear on the overloaded span. There is a mighty crash as branches, wires and shards of splintered ice smite the earth. The "lead" has parted, and forty channels of speech have gone out of business.

With the terrific tension suddenly released on one side of a pole, the unbalanced pull in the other direction is beyond the limit of endurance. The tall shaft sways and slumps to the ground, or breaks squarely off at the base and thunders down. The next pole on the line follows its example, and then one after another, in quick succession, all the poles for a stretch of miles topple like a row of tenpins.

(All rights reserved by Science Service, Inc.)

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