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? WHY THE WEATHER ?

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Authority on Meteorology

FROST-FIGHTING SCHEMES

According to Floyd D. Young, a well-known American authority, though many methods of protecting orchards from frost have been proposed and tried, no satisfactory substitute has yet been found for the use of small heaters scattered through the orchards.

"Huge sums of money," he says, "have been spent in developing gigantic machines designed to create artificial winds in the orchards; central heating plants, with pipes radiating to every part of the orchards, have been set up, tested and removed; overhead sprinklers have sprayed water on the trees until the weight of ice has broken them down in many cases; chunks of iron have been hung in the trees to 'absorb' the frost; and the use of aeroplanes has been urged to lay down smoke screens over entire districts. Steam boilers have been set up in the groves and a choking mixture of steam and ammonium chloride has been shot in among the trees to create an artificial fog. Even the use of dynamite has been suggested to break up the frost by exploding in the air above the orchards." None of these schemes has been found practical.

Orchard heating, as distinguished from the ancient practice of "smudging," which was designed merely to produce a blanket of smoke, dates only from the year 1897, when the use of coal baskets was begun in the orange groves of southern California. The heaters have been greatly improved. The most widely used fuel is now oil, while the favorite solid fuel is petroleum coke.

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