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? WHY THE WEATHER ?

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FROST FIGHTERS

California doesn't like smoke. Neither do we like the black soot sometimes found on oranges. During recent years many attempts have been made to provide a substitute for the smoky oil heaters which are used to protect orchards on frosty nights. It was noticed that usually only the lowest air became very cold. Some inventors therefore tried to introduce various air mixing machines to bring down the warm upper air. One such "wind jamaer" was equipped with an aeroplane propeller at the top of a 40 foot tower. This machine drew down a tremendous current of somewhat warmer air from above. It contained a furnace by which the air could be still further heated if necessary. Nevertheless it was a failure because it could not spread the heated air over a large enough area to be of any practical value. At a distance of over 125 feet, its effect was scarcely felt. The latest type of wind jammer, though heavily backed, has also proved futile. In this device a huge elbow pipe discharged hot gases from a furnace horizontally over the tops of the trees, 35 feet above the ground. The hot air escaped so rapidly into space that its effect was negligible.

Running warm water in irrigating trenches through orchards is helpful only when the temperature falls very little below the danger point. Rain from overhead sprinklers will raise the temperature a few degrees, but only makes matters worse in really cold weather by producing an artificial ice storm. At present California orange growers must continue to rely on the oil heater, smoke or no smoke.

(Tomorrow: Siberian Winter and Gulf Stream)
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