

A Science Service Feature

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? WHY THE WEATHER ? Mailed February 1, 1933

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CAUSE AND EFFECT

Speculative people are continually going off half-cocked on the subject of the supposed effects of human undertakings on the weather. Many years ago a correspondent of an American railroad journal gained the impression that heavy rains and floods were becoming more and more prevalent in North America and undertook to explain why. He stated that there were 30,000 locomotives on the continent, and that they discharged 53,000,000,000 cubic yards of "vapor" into the air every week; "quite enough," he added, "to produce a good rainfall" daily. From non-condensing engines of all kinds he estimated that the discharge of "vapor," capable of augmenting the rainfall, was about nine times this amount.

It is interesting to find a common-sense rejoinder to this lucubration in a contemporary non-scientific magazine; viz., Public Opinion. We read:

"It is a clever idea, but what does its inventor mean by a 'cubic yard of vapor'? A cubic yard of vapor in the boiler and piston is one thing, in the free air at temperature 70 it is another, and at temperature zero, still another. If instead of vapor we take the water from which it is made, we shall easily see that the 'shower of rain' per day would not well water a county. The water used by a locomotive in a run of 50 miles would barely wet down a small lawn, and that employed in a run of 1,000 miles would hardly serve to keep a five-acre lot in good condition. If the steam from 240,000 steam engines were confined to an area a few miles square, it might, if other conditions were favorable, cause a shower every day, but when it is given off over half of North America, its results would be so small as utterly to escape detection."

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