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A SCIENCE SERVICE FEATURE

? WHY THE WEATHER ?

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WEATHER IN SUMMER RAILROADING

Even in summer the railroad man must give some thought to the weather, although winter snows and ice storms are likely to cause him the most worry. First of all, temperature extremes have a racking effect upon steel and iron work. If a track is laid in the coldest weather, the ends of the rails are placed as much as 5/16 of an inch apart, to allow for hot weather expansion. In bridge construction, engineers have to make similar allowances, the girders never being solidly embedded in the concrete abutments. In these ways hot weather affects the railroads according to Guy H. Burnham who has studied the problem.

In summer, thundershowers often put electrified lines out of commission and heavy rains flood narrow cuts, wash away bridges, undermine road beds, and cause landslides. Abundant rainfall also produce luxuriant vegetation which has to be cleared from the tracks where earth ballasted roads are used. Rain also is instrumental in bringing about the oxidation of rails and the rotting away of ties and other wood work.

The weather affects not only the track and the rolling stock of the railroad, but also the goods which it transports. This is especially true of the transportation of perishable goods in which temperature is the controlling factor. To precooling and icing stations and refrigerator cars, we owe the safe transportation of many of our staple food products.

(Tomorrow: Early Frosts)

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