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A Science Service Feature

? WHY THE WEATHER ?

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FROST DAMAGE TO HIGHWAYS

"Frost damage," says the Engineering News-Record, "is a large annual charge against highway upkeep. No state in the northern frost zone escapes its yearly bill for repairing 'boils' and 'heaves'. Traffic every spring is denied the full use of highways until the roadbeds have settled and the maintenance crews have restored stable conditions of foundation and surfacing. It is impossible to estimate the annual cost of this frost action. As the preliminary records of the past winter clearly indicate, each season presents a different accounting, but in the round of years the accounting runs into huge sums, both in repair costs and in charges for delayed traffic."

The upheaval of a road surface by the action of frost, known to highway engineers as "frost boils", is due to the freezing and expansion of water beneath the surface, and evidently cannot occur if suitable provision is made for drainage when the road is built. Apparently the technique of making repairs has been well developed, but not enough attention has been devoted to preventive measures.

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