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A SCIENCE SERVICE FEATURE

? WHY THE WEATHER ?

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WHY CITY STREETS ARE HOT

A number of factors contribute to the heat of our city streets in summer. In a built up section, the enclosing walls cut off breezes, and trees to provide shade are frequently lacking. Pavements, and the walls of buildings serve as radiators to warm the confined air. Street surfaces are generally dark in color and usually dry, and hence heat very readily. On sunny summer days, the temperature of pavements is commonly over 100 degrees Fahrenheit, indeed Chicago claims to be able to fry eggs on its sidewalks during hot spells. At all events, an egg could have been cooked one hot day on a tar roof in Worcester, when the temperature of the roof was 157 degrees Fahrenheit, or one degree above the temperature necessary to coagulate albumen.

It is known that a large part of the tire trouble experienced by motorists is due to expansion of the air in the tire by heat. High pavement temperatures would doubtless play a large part in aggravating this condition.

During the day, experiments show that air several feet above a pavement may be three degrees or four degrees Fahrenheit hotter than air over a nearby grass surface. Even after sunset one can feel the radiation of heat from an asphalt pavement. Unfortunate are the many children who must live and play so largely on city streets in summer time.

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