

Traffic Signs*(Continued from page 106)*

yellow marker is reserved for railroad crossings. A diamond-shaped marker means slow down, and this general message of the diamond can be read before the driver comes within reading distance of the words curve or hill. An octagon sign means stop. And a square sign indicates a school, hospital, or other situation which may require a little more than ordinary care on the part of the passing driver.

Some progressive cities have begun to adopt this method of conveying an idea by color and shape as well as by the words on a sign. In Washington, stop signs at the entrance to boulevards are now made octagon shape, in accordance with the system on the U. S. highway routes. But so recent is this idea that the majority of local drivers have not appreciated that the form of the sign has any particular significance.

This use by a city of one of the new highway devices shows how a really uniform sign language will fit into cities as well as country roads. A model city traffic code, which includes provisions for signals and signs, is in process of development to show local traffic officials how nationwide standardization can be effected. It has been stated that the New Jersey legislature will probably take the lead in putting such a model code into practical city use, once an agreement on details is reached by the experts formulating it.

Questioning the Cities

To find out what the cities are doing, and just how much difference there is in local practices, the American Engineering Council has sent out questionnaires to local committees in 125 cities with a population of more than 50,000, and also to 75 additional selected cities where special conditions exist. These questionnaires will show how electric traffic signals are used, what sort of caution and stop signs are used, how tall the letters on them are and what colors and kinds of paint, wood, and metal are considered satisfactory, and so on until a large collection of valuable information regarding traffic materials and devices is set down for study by statisticians and engineers.

The Highway Research Board, which was organized under the National Research Council to coordinate the results of highway research throughout the country, points out

*(Just turn the page)***GEOLOGY****Vesuvius Rumbles**

Vesuvius, which is reported restless is not yet dangerously active, volcanologists believe, though the time for a serious outbreak may be approaching.

Following the last great outbreak of Vesuvius, in 1906, several hundred feet of the summit were blown off and the crater was widened and deepened. The new crater, with a depth of 1,200 feet and very steep sides, slowly began to fill up again, and a small interior cone began to build.

Dr. Henry S. Washington, of the Geophysical Laboratory of the Carnegie Institution of Washington, who has visited Vesuvius many times and took part in a special study of its last great eruption, states that the lava level has been rising until it is very near the rim.

"Vesuvius, however, seldom sends lava flows over the rim of the crater," he states. "Usually they break out on the sides of the mountain, accompanied by the eruption of vast clouds of smoke and ashes."

Vesuvius spouting lava is a sight of wonder, but to thousands of people who live within its reach, and to the archaeologists who are digging out the old city of Herculaneum it is a menacing spectacle. News from Vesu-

*(Just turn the page)***PHYSIOLOGY****Heat from Heart Beat**

A quite normally beating heart, like an automatically equipped storage battery, "discharges" and "recharges" within the period of each beat. From his researches on the hearts of turtles and king crabs, at the Johns Hopkins University, Dr. Charles D. Snyder and his associates have found that even a single beat of the heart will produce heat in proportion to the energy expended.

"This explains at last," Dr. Snyder declared, "the wonder of the heart's great regularity, its constant vitality and the age long mystery of its indefatigability."

In their experiments every precaution was taken to exclude heat from outside sources. The hearts of turtles and king crabs were used because they will keep beating a long time after the animal itself has been killed. A small thermos jar was placed inside a larger one and in the cap of the smaller jar were fixed hard rubber posts to which the muscles were attached. Through the cap were perforations for the wires connecting the thermopile with

*(Just turn the page)***BOTANY****Rubber for United States?**

Rubber raising in the United States, a project which enjoyed a renewal of public interest following Thomas A. Edison's recent visit to Washington, is at bottom a problem of the relation of plants to climate. If Edison's hopes of establishing rubber plantations in the United States are to be realized, either hardy forms of the present rubber-yielding plants of the tropics will have to be evolved, or certain rubber-yielding plants native to the temperate zones will have to be bred up to a point where their rubber content will pay for its own extraction.

All the present rubber trees and vines are warm-climate plants. The Para rubber tree, *Hevea*, which now produces by far the larger part of the world's crop on the East Indian plantations, is decidedly a tropical form. It will just consent to grow in southern Florida, but will not grow for money unless it is permitted to hug the equator. It is out of the question for the United States proper, though it would thrive in the Canal Zone and the Philippines.

The original "India rubber" of the Orient was the product of a species of fig, the same tree used as an ornamental in thousands of apartments, and in larger size as a display piece in many greenhouses. This tree is slightly hardier than the *Hevea*, but is still very sensitive to frost, and could hardly be expected to pay its way even in the South unless new

*(Just turn the page)***PSYCHIATRY****Mental Disease in Children**

An appreciable increase in the number of young people who fall prey to mental diseases is found by Dr. Menas S. Gregory, head of the psychiatric department of Bellevue Hospital.

People are more enlightened about the danger of letting mental and nervous ills gain headway, and as a result more youthful cases reach the hospital, he says, but this does not fully explain the increase.

"The higher standards of the present day are largely responsible," he states. "The demand for material luxuries is greater today than it has ever been. The longings of youth are more intricate, more difficult to attain. They are more likely to be thwarted. And an increase in thwarted longings and ambitions makes for an increase in abnormal mental and nervous states."

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