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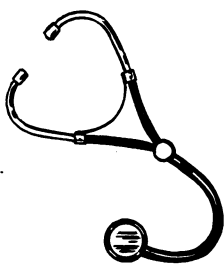


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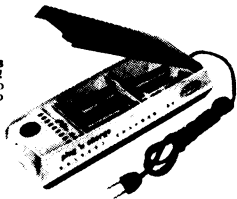
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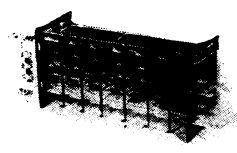


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## New Road Barriers

(Continued from p. 38)

strip in one test. The slabs, which were about two feet high and only a few inches wide, were placed about two feet apart along the divider and facing one another.

A test car then took aim at the slabs, which were reinforced with metal to keep pieces of the concrete from scattering.

The three California researchers conducting the tests found that the slabs could slow up an out-of-control car without a sudden jerk, yet could help keep the car out of the lane of oncoming traffic.

The researchers admitted, however, that further study was needed with this type of barrier to get improved performance and to find an inexpensive way of replacing damaged slabs.

### Tests with Rose Hedges

In another series of crash-tests, an instrument-equipped automobile was driven into multiflora rose hedges to study the possibility of a living guard rail. A dense hedge, about ten feet wide, nine feet high and more than 300 feet long was rammed a dozen times by the car from all angles at speeds ranging from 22 to 50 mph.

The hedge did, indeed, make a good barrier, according to the test results. The car, which was slowed up gradually by the hedge, wasn't damaged at all—and neither was the driver.

This type of barrier requires wide divider strips, however, so the hedges can have enough room to grow without stretching their branches out over the highway to annoy drivers. In addition, the hedges need regular garden care and take a long time to grow back when damaged.

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Hundreds of old Christmas trees were used in yet another test. The trees were nailed and tied to center posts on stretches of two Chicago expressways to find whether live evergreens could help make the highways safer.

These trees were found to have two important advantages. First, they helped keep drivers from getting blinded by the headlights of oncoming cars. Second, they helped keep the driver on the highway and off the median strip by breaking the monotony caused by a continuous row of hedges or steel barrier.

Planted on a divider strip, these trees certainly would not stop a speeding out-of-control car from slicing into an opposite lane, but they can prevent many drivers from losing control as a result of being temporarily blinded by the glare of headlights.

Safety barriers, whether they are wire fencing, steel beams, hedges or even tiny trees, are not expected to eliminate all highway traffic deaths, but they will help halt the most deadly of highway accidents—the head-on collision.

• Science News Letter, 88:38 July 17, 1965

### MEDICINE

## Unusual Arthritis Type Linked to Excess Iron

► THERE IS SUCH a thing as having too much iron.

A former newspaperman admitted to Yale Clinical Research Center, New Haven, Conn., for study of mild polyarthritis was found to have a disorder of iron metabolism, hemochromatosis. A team of physicians of the Yale University School of Medicine reported that it seems possible that his arthritic condition was caused by the excess deposits of iron.

Bloodletting, or phlebotomy, reduced the content of iron in the liver, but biopsy of the painful knee joint revealed large deposits of the granular iron-containing pigment called hemosiderin. The joint had a distinctive rusty color.

"This unexpected finding," the physicians say, "supports the suggestion that iron deposition in hemochromatosis is occasionally responsible for symptomatic arthritis."

Tests for rheumatoid arthritis were negative but X-rays showed an unusual mixture of osteoarthritis and osteoporosis, conditions of the bone often seen in aging persons. The patient was 64 years old.

This patient's case is similar to another that was reported in 1964. In both patients, arthritis developed insidiously at about the same time the hemochromatosis became severe enough to "manifest pancreatic insufficiency and diabetes."

The physicians say their view suggesting that the hemochromatosis caused the joint symptoms cannot be proved, but "alert clinical observations" with joint biopsies and attention to the joints when others are autopsied after hemochromatosis should establish whether or not the excessive iron condition causes arthritis.

Drs. Siegfried J. Kra, J. W. Hollingsworth and Stuart C. Finch reported the study in *The New England Journal of Medicine*, 272:1268, 1965.

• Science News Letter, 88:46 July 17, 1965

