ENGINEERING

Safer Super Highways

Suggest planting of Japanese multiflora rose along superhighways. It forms a matted hedge that would absorb collision shocks, thus reduce traffic deaths.

➤ RESEARCH STUDIES conducted by Motor Vehicle Research, Inc., South Lee, N. H., indicate that a popular Japanese rose, if planted along America's new superhighways, could cut traffic deaths.

The multiflora rose can be made to grow into a matted hedge from six to ten feet tall. It gently absorbs the shock of collision when an automobile runs off the road. In contrast, large trees absorb the shock abruptly, endangering the car's occupants.

Test cars have plowed into a heavy growth of the Asiatic rose at speeds up to 30 miles an hour. The tangled branches stopped the car in 11 feet without harming driver or passengers.

Such stops approximate "panic stops" on the highway when motorists jam on the brakes in emergencies. The researchers said they believe these crash stops could have been tolerated even at speeds of 50 miles an hour.

Andrew J. White, director of MVR, Inc., states that accident investigations over many months have revealed that many lives are saved by small trees and shrubs along highways.

This led him to seek a hardy, rugged scenic shrub that could be planted along the margins of superhighways and in the middle dividing strip often filled with grass. Ideally, the shrub should thrive in many types of soil, require little or no attention, restrict its growth height and retain its automobile-braking qualities even when denuded of foliage in winter.

The multiflora rose seems to offer the best compromise of all the desired qualities.

Mr. White adds that such landscaping of highways also would produce these benefits: reduced headlight glare at night from oncoming cars, reduced force of wind gusts which sometimes make driving difficult and reduced numbers of domestic and wild animals on the road. The rose hedges also might double as living snow fences.

He estimates that highways could be equipped with the multiflora rose at about five cents per foot of road. The plants will grow after being crushed by a car and "cannot be killed out, even when burnt over," he added.

Science News Letter, December 12, 1953

GEOLOGY

Early Jadeite Mine

➤ THE ARCHAEOLOGICAL puzzle of where the ancient people of Central America got the beautiful jade from which they carved the delicate little figures of their gods in the days before Columbus or even before the Christian era, as early as 100 B.C., has been partly solved.

The solution came in the form of samples of hard, slightly greenish rock sent to scientists at the Smithsonian Institution by Robert E. Leslie of Guatemala City. He had found it in a newly re-discovered mine on the Motagua River near Guatemala City.

The mineral was identified by Dr. William F. Foshag, head curator of geology at the Smithsonian, as valuable jadeite of a quality just below that of gem standards.

New World deposits of the jade mineral found previously have provided a very scanty source of the precious stone. Very small amounts are mined in California, but most of it comes from China.

The art of jade carving is also most common in the Far East. The fact that this art was commonly practiced by the Olmec and Maya prehistoric Indians has led some archaeologists to theorize that these cultures might have originated in Asia.

But the jade used mostly in Chinese carvings comes from the mineral nephrite, whereas the stone used by the Mayas and the samples obtained by Mr. Leslie are jadeite, which is much more valuable.

Finds of other still undiscovered sources of jade may be expected, Dr. Foshag believes. Pre-Mayan artists in Costa Rica worked with a distinctive, slightly bluish jadeite and the pre-Aztec people of Mexico used a greener jade than that found in Guatemala, he pointed out.

Science News Letter, December 12, 1953

MEDICINE

Encouraging Outlook For Heart Disabled

➤ A PESSIMISTIC attitude regarding the long-range outlook for patients with the kind of serious heart disease called coronary occlusion is to a large extent not justified, statisticians and medical men of the Metropolitan Life Insurance Company in New York find.

They base their opinion on a study of 166 men who were completely disabled by this heart condition long enough to receive disability benefits under contracts issued in connection with their life insurance.

In coronary occlusion, one of the arteries supplying the heart's muscle is blocked and that part of the muscle may die.

Of the 166 men studied, no less than seven out of every 10 lived five years or longer, about half lived 10 years or longer and about one-third lived 15 years or longer. The men between 40 and 49 years at the time of the disability did somewhat better than those between 50 and 64.

In the first five years following the disability, about one-sixth of the men returned to work or were judged able to do so by competent doctors. The proportion returning to work was greater among those under age 50 when disabled. Many of those who did not go back to work could have and, the report states, "might have been better off if they had."

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FORESTRY

TVA Ready to Harvest Trees Planted in 1934

➤ HARVESTING OPERATIONS will begin after the first of the year on a crop of pine trees planted between 1934 and 1938 by the Tennessee Valley Authority on reservoir areas.

Over a five-year period, 50,000 cords of pulpwood will be cut on 8,000 acres of land. Private companies have agreed to pay the government $3.10 per cord for the wood.

This is the first harvest of pulpwood on TVA lands. The trees were planted on eroded and otherwise unproductive land in Alabama, Georgia, Mississippi and Tennessee.

Forestry officials of the authority plan other thinnings of the timber lands for pulpwood before a final harvest of sawlogs.

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VETERINARY MEDICINE

Fungus in Feed Cause Of Cattle X-Disease

➤ A FUNGUS discovered in feed pellets and a food concentrate may be one cause of the "mystery malady," or X-disease of cattle now called hyperkeratosis, the American Veterinary Medical Association states on the basis of findings by Lt. Col. Walter T. Carll of the Army Veterinary Corps.

Highly chlorinated naphthalenes found in some lubricating oils can cause the disease, it has been discovered. Contamination of feed from these oils used in farm machinery has been considered the cause of the disease which has taken a heavy toll in recent years.

The Army veterinary officer's finding that typical symptoms of the disease can be caused by the fungus suggests this as another possible cause. Col. Carll believes it "premature" to state definitely that the fungus is the cause of the disease, but the veterinary association urges further research to determine the cause.

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