



Tulip Tree

► ALL THROUGH the whole eastern part of the United States, and well into the West where men have seen fit to plant them as ornamentals, tulip trees are coming into bloom. It can be spotted as a somewhat rough-barked but tall and stately tree, big as a cottonwood, with a vast bed of tulips plucked up off the

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ground and scattered carelessly about over its crown.

Although the gorgeous magnolias of the South do not venture very far north, the tulip tree, a fairly near relative, upholds the family traditions through a wide stretch of country well above the Mason-Dixon line. West of the Mississippi it occurs naturally little if at all, but will thrive as a cultivated tree as far west as one can grow six-foot cornstalks, and it deserves wide acquaintance. It does receive full appreciation in the cities of the East, however. Its only drawback in the windy stretches of the prairie states is that winter storms will sometimes break off branches, for the wood is short and rather brittle.

Though this weakness of its wood precludes it from consideration as a first-rank hardwood, the tulip tree still has a useful place as a timber producer. Its fiber is even and smooth and rather soft, which makes it nice material for the veneer knife. For this reason, and because it is a fast grower, the tulip tree is being cultivated to some extent on cut-over lands as a regular timber crop.

The tulip tree is also variously known as tulip poplar, yellow poplar, whitewood and fiddle-tree. The latter name is in recognition of its very odd leaves, which with their squared or slightly bifurcated ends and constricted sides have some faint suggestion of a violin shape about them. The Greek name which Linnaeus gave it, however, is a bit of classic poetry to the sensitive ear—Liriodendron. It means "lily tree."

The beautiful flower-cups whence the tree gets both the commonest of its common names and its classical title are of about the size and shape of tulips, and have colors that no tulip need be ashamed of. In their internal structure, however, they are quite different. Instead of the triple arrangements of stamens and pistil parts, they have indefinite numbers arranged in spirals. This is a mark of relatively primitive rank in the evolutionary scale of plants; and, indeed, the tulip tree is placed by botanists very near to the front of the book, along with its magnolia relatives.

Science News Letter, May 12, 1951

TECHNOLOGY

Less Gasoline Needed For High Compression Engines

► CARS OF the future with engines having a 12-to-1 compression ratio will permit a saving of 30% in the amount of fuel required, the American Petroleum Institute meeting in Tulsa, Okla., was told by Charles L. McCuen of General Motors Research Laboratories. They will require, however, a fuel of high octane number.

Road and laboratory tests already made with a 12-to-1 compression ratio engine were reviewed by him. The engine, mounted in a 1951 standard Cadillac sedan chassis, registered 29 miles per gallon at 30 miles per hour and about 20 miles per gallon at 70 miles per hour. Aiding the engine to achieve these records, an improved type of automatic transmission was used.

The 12-to-1 compression engine will not be put into production in the immediate future, however, because the needed high-octane gasoline is not generally available. Before it can come into wide use, the petroleum industry will have to manufacture larger quantities of this fuel and provide for its distribution and sale at roadside gasoline stations.

"We believe that commercial development within the next few years will be found somewhere between our present production designs of 7.5-to-1 compression ratio and the compression ratios represented by these experimental 12-to-1 engines," Mr. McCuen said.

Science News Letter, May 12, 1951

MEDICINE

Eat Vitamins Regularly To Reduce Craving for Drink

► EAT YOUR vitamins regularly and you won't crave drink. This advice is based on studies reported by Drs. E. O'Malley, V. Heggie, M. Trulson, R. Fleming and F. J. Stare of the Harvard School of Public Health, and the Alcoholic Clinic of Peter Bent Brigham Hospital, Boston.

Noting that rats voluntarily took more alcohol when half-starving on a "marginal diet" and took less when huge doses of vitamins were given, the Boston scientists tried giving vitamins to 50 chronic alcoholics. About half the alcoholics were given huge daily doses of most of the known vitamins. The same number got mock-vitamin pills. After several weeks, the two kinds of pills were reversed. Those that had been getting vitamins got none, the others got the vitamins.

Result: Less craving for alcohol in many patients when getting the extra vitamins. Most of them getting the vitamins also reported feeling better. The studies were reported at the meeting of the Federation of Societies for Experimental Biology, Cleveland.

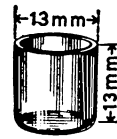
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