



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

STOP SAYING THAT TRAVEL IS TOO EXPENSIVE

Passenger-carrying freighters are the secret to low-cost travel.

Yes, for no more than you'd spend at a resort, you can take a never-to-be-forgotten cruise to Rio and Buenos Aires. Or through the Canal to either New York or California. Or to the West Indies or along the St. Lawrence River to French Canada. In fact, trips to almost everywhere are within your means.

And what accommodations you get: large rooms with beds (not bunks), probably a private bath, lots of good food and plenty of relaxation as you speed from port to port.

Depending upon how fast you want to go, a round the world cruise can be yours for as little as \$250-\$300 a month. And there are shorter trips. Fast uncrowded voyages to England, France, the Mediterranean; two- or three-week vacations up and down the Pacific Coast or from New York to New Orleans. Name the port and the chances are you can find it listed in "Travel Around the World."

This is the book that names the lines, tells where they go, how much they charge, briefly describes accommodations. Hundreds of thousands of travelers all over the world swear by it. Travel editors and travel writers say "To learn how to travel for as little as you'd spend at a resort, get "Travel Routes Around the World."

The big 1951 edition is yours for \$1, and your dollar also brings you two priceless reports:

1. **FREIGHTER LIFE:** What vagabond voyaging is all about. What the ships are like, who goes on them, what you eat, etc. Plenty of photos.
2. **LANDS IN THE SUN.** Where to stay awhile—even retire—in the West Indies, Mexico, Guatemala, and other lands to the south where the dollar buys so much more.

A big \$1 worth. Send for your copies of all 3 guides now. On a sheet of paper, print name and address, write "Send 3 travel guides" and mail with \$1 bill to HARRIAN PUBLICATIONS, 55 PARKWAY, GREENLAWN, NEW YORK.

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.


Science News Letter, May 12, 1951

CARGILLE MICRO BEAKERS

Glass.....Capacity 1ml
For weighing small quantities of materials for analysis.

For semi-micro procedures
Useful for many reactions and tests—saving space, time, material.

16 for \$1.00 Dept. 8-NL Gross \$7.50



INDEX OF REFRACTION LIQUIDS

For identification of Minerals & other Solids
by the Immersion Method of Microscopy

Range 1.400-1.700, intervals of 0.002
or as selected. Index certified to ± 0.0002
Range 1.71-1.83, intervals of 0.01

Write for Price List 84-SNL

R. P. CARGILLE
118 Liberty Street New York 6, N. Y.