



The Living Fossil

► VISITORS to Washington, D. C., are always much impressed with the beauty of the avenues of ginkgo trees that line the approaches to the Department of Agriculture and that ornament the city in many other places.

There is no good reason why Washington should be the only city in the country especially favored with this famous tree, sacred to the Chinese and Japanese and grown for centuries in their temple courts. It does very well in all parts of the United States where the winters are not too severe and can at least survive as far northwest as central Iowa.

The ginkgo tree can also stand a good deal of city smoke and dust. There are a lot of young ginkgos growing in Battery Park, New York City. China is the native home of the ginkgo tree, though it has been much disputed of late whether there are any more really wild trees left in that country, the species has been cultivated so long.

Of the several genera and fairly numerous species in the once widespread ginkgo family, only one species, known botanically as *Ginkgo biloba*, is living today. It would probably have perished centuries ago, too, but for the fact that Chinese priests fostered it in their temple grounds. It has

now become fairly well distributed as a street and park tree in the United States, though it is still not as generally appreciated as it deserves to be.

A ginkgo tree has a somewhat columnar shape when young, becoming bushier as it reaches full size. Its glossy green leaves are wedge-shaped, usually deeply cleft. They turn a beautiful pale-gold hue in early autumn.

A great virtue of the ginkgo is the almost complete freedom from the fungus disease and insect pests that bedevil practically all of our other ornamental trees. Perhaps the last thing that ever wanted to chew its leaves was a herbivorous dinosaur.

There are fossil ginkgo leaves and twigs in American rocks, proving that the present importations are not a premiere, but a return engagement for this familiar handsome tree.

Science News Letter, March 31, 1951

GENERAL SCIENCE

Drugs, Money Might Spread Biological Warfare Germs

► DRUGS, cosmetics, money and papers might be used as well as air, food and water to spread germs in biological warfare attacks, Dr. Victor H. Haas, director of the National Microbiological Institute of the National Institutes of Health, declares in a special report. (JOURNAL, AMERICAN MEDICAL ASSOCIATION, March 24.)

The air, however, would probably be the principal route used, in Dr. Haas' opinion.

None of the present peacetime methods of testing the sanitary quality of water, food, milk and air could immediately be applied to detection of biological warfare, or BW agents, Dr. Haas also states.

However, he says, the basic principles can be adapted and existing equipment modified for such purposes.

Science News Letter, March 31, 1951

CHEMISTRY

Strengthen Cotton by New Cyanide Treatment

► COTTON SHIRTS and sheets can be made 10% stronger by a poisonous hydrocyanic acid treatment that Dr. Vernon L. Frampton, University of Texas scientist, discovered accidentally.

Expected to lengthen greatly the life of cotton garments laundered in soap, the new process arose from experiments attempting to stop bad effects of mold, bacteria and sunlight on cotton fibers.

Cotton deteriorates when microorganisms or the sun's rays attack the cellulose molecules in a chain, turning them into glucose, Dr. Frampton explained. The hydrocyanic acid adds a carbon atom to each cellulose molecule and strengthens the chain.

Science News Letter, March 31, 1951

INVENTION

Patent Improved Aluminum Electrical Wire Using Boron

► AN ALUMINUM wire for carrying electric currents contains a small amount of boron to give it a better combination of strength and electrical conductivity than available in other aluminum wire. Patent 2,545,866 was awarded for an invention covering the improved wire and a process for making it.

Inventors are Raymond T. Whitzel and William E. King, both of Massena, N. Y. The patent has been assigned to the Aluminum Company of America, Pittsburgh, Pa.

Aluminum has been used for many years for transmitting electric power. High purity aluminum is necessarily used, and the wire is annealed after being drawn to increase its electrical conductivity. However, annealing decreases the tensile strength.

These inventors have found that wire of high strength accompanied by improved electrical conductivity can be obtained by the addition of less than one-half percent of boron. The boron-containing aluminum can be cold-worked from the hot rolled rod without any annealing or softening operation.

Science News Letter, March 31, 1951

NUTRITION

Vitamin from Wastes Used To Fatten Pigs

► A VITAMIN discovered three years ago and now extracted from the wastes from distilling whiskey will make pigs grow faster and fatter, Drs. R. J. Cunha and H. D. Wallace of Florida's Department of Animal Husbandry and Nutrition reported to the Distillers Feed Research Council meeting in Cincinnati, Ohio.

Supplementing regular hog food with vitamin B-13 concentrate increased the consumption of feed by the animals, as well as allowed them to utilize their food more effectively.

Another vitamin, B-12, which is vital for animal growth, can be grown readily in several kinds of broths containing distillery byproducts, Dr. Harlow H. Hall of the U.S. Department of Agriculture Northern Research Laboratory, Peoria, Ill., reported.

Distillers feeds, now being produced at a rate of more than a thousand tons daily, are used as feed supplements for dairy and beef cattle, pigs, poultry, fur-bearing animals, horses, mules, dogs and fish. They are also used for making antibiotics, such as streptomycin.

Science News Letter, March 31, 1951

Most spraying or *dusting* farm crops with insecticides by airplanes is done in early morning and late afternoon periods because there is apt to be less wind at those hours.

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