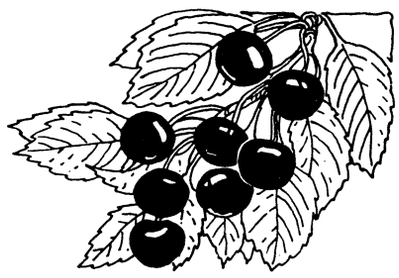
BOTANY

NATURE RAMBLINGS by Frank Thone



A Tree-Planting President

FRANKLIN Roosevelt, tree-planter on his own land and encourager of forestry on the lands that belong to all of us, follows early and eminent precedent. For America's first chief magistrate was also, in his time, an indefatigable planter of trees.

Washington loved trees. When he took command of his army at Cambridge, he chose to stand under a mighty elm, which died of sheer old age only a few years ago. At a number of places where he wanted to leave mementoes, he planted trees. It is recorded that on his estate at Mount Vernon he was always impressing upon his overseers and servants that trees are living things, and as much entitled to decent treatment as human beings.

The plantings at Mount Vernon are justly famous, and some of the trees there go back to his time—several even to his own hand. Erle Kauffman, recorder of the Washington trees, states that at Mount Vernon there are still standing, of his own plantings, seven ash trees, two tulip trees, four buckeyes, four elms, three pecans, thirteen holly trees, three coffee trees, two lindens, two beeches, three box trees, one hemlock and one mulberry. He planted trees literally in thousands, both on his own land and elsewhere.

Trees for shade and ornament were not Washington's only care. The list of fruit tree plantings recorded in his systematically kept diary is impressive. And as if in atonement for the legend of his one childhood fit of destructiveness, he seems to have made special favorites of cherry trees. His journal records varieties no longer known, or recognizable conjecturally by some similarity in name: Summer Boon, Winter Boon, Bullock Heart, May Duke, Black May, May Heart, Carnation. Pears also were favorites, and apples and plums, too. Nut trees he mentions frequently, and smaller trees prized mainly for their flowers, such as service-tree and redbud.

Washington was withal a careful farmer, and took every advantage of the best agricultural science of his day. He knew the value of crop diversification, of fertilization, of erosion control. Neatly bound volumes of farm journals still stand in rows on the library shelves in his old home: he read them as diligently as the modern farmer reads the publications of Wallace or Capper.

During the Revolutionary War, the elegant British officers (who were always boasting how they were going to capture him—tomorrow) used to mock at him as "Farmer George." If they had remembered a scrap of the Greek that as young gentlemen they were supposed to have learned at Cambridge and Oxford, they would have recognized the redundancy: "George" in the classic tongue means farmer—literally, "earth-worker"; and George rejoiced in the title.

Science News Letter, February 16, 1935

The larva of the Goliath beetle of Africa sometimes grows to be six inches long.

FORESTRY

Fire in the Forest Not Always a Devil

FIRE in the forest is not always and everywhere a red devil of destruction. Facts and viewpoints presented at the annual meeting of the Society of American Foresters in Washington make it appear that Southerners, in following the old Indian custom of burning off the dead grass and underbrush in the woods early in the spring, have been carrying on at least a rough approximation of good silviculture.

In acknowledging this, the foresters have done a handsome thing; for until quite recently it has been the fashion in professional forestry circles to denounce and wring the hands whenever Southern woods-fires were mentioned.

The Southern countrymen had no particular notion of burning the woods for the benefit of the trees. They were after a quicker crop of fresh grass for their cattle, just as the Indians before them were interested in grass for the deer they hunted.

But scientific observations, mostly under control conditions where comparison with like unburned areas is possible, have shown that within reason fire is a good thing for longleaf pine, most prized of Southern trees. This species is fire-resistant in all except its first few months of life, because of its thick bark and its trick of protecting its all-important "leader" bud with a close bundle of leaves. Fire kills less valued competing pines and hardwood species, and lets the young longleaf trees grow.

Fire, it has also been found, helps the longleaf seedlings against one of the most serious of pine diseases, the brown spot of their leaves. In one experimental area, young pines kept wholly protected from fire showed twice as much of this infection as did trees of sim-

RADIO

Tuesday, February 19, 4:30 p. m.

MENTAL HEALTH, HAPPINESS AND EFFICIENCY, by Dr. C. A. Bonner, Superintendent, Danvers State Hospital, Massachusetts.

Tuesday, February 26, 4:30 p. m.

THE FORGOTTEN AGE OF CHILDHOOD, by Dr. Paul Hanley Furfey, Department of Sociology, Catholic University of America.

In the Science Service series of radio addresses given by eminent scientists over the Columbia Broadcasting System.

ilar age that stood on ground regularly burned over.

Fire appears also to be beneficial to the soil itself, and to the grass that grows among the trees, and thus to the cattle that eat the grass. Unburned areas, to be sure, did have soil somewhat more porous than that in burned areas; but this advantage was offset by the better chemical condition of the burned-over soil. Burned-over soil produced twice as much green weight of vegetation, which was also of better nutritive quality than the plants from unburned areas. And cattle grazed in burned-over woods gained more weight and were sleeker-looking than comparison herds kept in fire-free woods.

However, lest Southern stockmen crow too easily over the "perfessers," it was noted that the common practice of burning the woods every spring is a bit too much of a good thing. Much less frequent use of fire is calculated to bring better results, in all probability. Tests of just how often the red demon can be invoked with benefit rather than harm are now in prospect.

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ARCHAEOLOGY

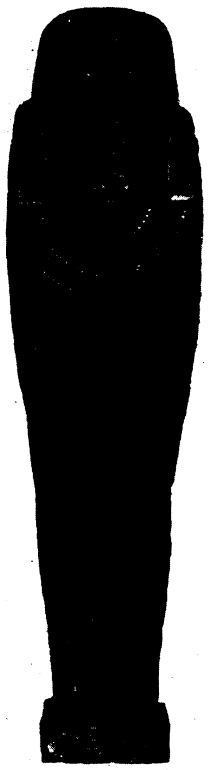
Egyptians Planned Their Own Funerals and Mummies

AN EGYPTIAN of the olden times took such interest in his own funeral that he conferred with undertakers about the trappings, plenty of time in advance.

If he should be suddenly taken off without planning the funeral, there was quite a risk that his mummy mask would not be a good likeness. And the sacred formula written on his coffin might not be aptly chosen for insuring greatest benefits after death. Relatives were not so critical of these matters.

Results of this old concern over funerals are vividly shown in a "mummy room," at the University Museum of the University of Pennsylvania. Many burial relics are exhibited for the first time since they were discovered by various archaeological exhibitions. The mummy of "So-and-So" is one exhibit which shows that undertakers were sometimes careless and ignorant, in times when education was at low ebb.

About 2200 B.C., an Egyptian funeral called for a "soul-house." These curious objects made of pottery resemble small doll houses, with rooms and pillared porches. Inside, the soul of the dead was expected to seek shelter, while consuming food offerings.



MUMMY OF "SO-AND-SO"

An Egyptian undertaker of small learning scrawled on this coffin, in the blank spaces, the prayers ordered by the customer. The name of the coffin owner quite stumped him, so he wrote "So-and-So."

A feature of funeral equipment in the Graeco-Roman period was a mummy-label. The Museum has a collection of these wooden labels, bearing the names of departed people of Egypt. Like some modern method of tagging babies in a hospital, the ancients of this period had tags tied to a mummy to identify it before placing it in the coffin.

Mummy portraits were a style of the Roman period in Egypt. These are almost the only examples of Roman painting in wax that have survived the ages. The wax portrait adorned the house of an individual during his lifetime, and after death the portrait was fastened over his face or put on the coffin, replacing carved wooden mummy masks of earlier times.

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Zuni Indian women of the Southwest are so used to balancing large pottery jars on their heads that some can even run without touching the jar with the hands.

ENTOMOLOGY

Winter in Midwest Leaves Chinch Bugs Ready For Ill

WEATHER conditions so far this winter have not been severe enough to discourage the widespread menace of the chinch bug, the Bureau of Entomology, U. S. Department of Agriculture, informed Science Service. During the latter part of January and the first days of February there was an almost continuous sheet of ice over Iowa, where the pest is expected to be at its worst next summer, but this probably did not have much effect on the hibernating insects, snug in their winter quarters among the roadside grasses. Unless beating rains come during the migrating period, in late spring and early summer, chinch bugs will be very bad over eastern Kansas, the northern half of Missouri and practically the whole of Illinois, as well as less extensively in several other states.

Grasshopper eggs also are numerous, with their greatest concentration in the western part of the wheat belt, farther west than the chinch bug area. They also are expected to be troublesome, though perhaps not so much so as they have been during the past two or three years. The Bureau of Entomology has some funds left over from last summer's campaign, and there are supplies for poison bait still in the field stations. These will be expended against the 'hoppers during the coming summer.

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