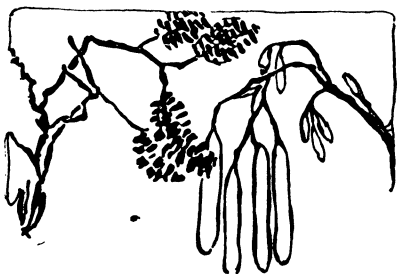




BOTANY

NATURE RAMBLINGS

by Frank Thome



Flowers of Trees

See Front Cover

FLOWERS, to most of us, practically always mean the flowers of non-woody plants. We are perennial children, always gathering handfuls of daisies and buttercups, violets and spring-beauties. To be sure, there are such things as lilacs and snowballs and roses, that grow on shrubs; but they are harder to break off, and often have the added disadvantage of thorns. So we let flowers with wooden stems into the picture with a certain unconscious unwillingness.

And the flowers of trees fare even iller than do those of bushes. Some, to be sure, we admit as of surpassing beauty—the Japanese cherries around the Tidal Basin in Washington, D. C., an apricot orchard on a California hillside, a big round apple tree anywhere. But even for these we reserve a feeling that after all they are destined to produce fruits: their real significance is to come later. Other beautiful tree flowers, like magnolia and catalpa, are mostly clean out of reach in the first place, and too big to be vased successfully if we should go to the trouble of bringing a step-ladder and capturing some of them.

As for the great majority of tree flowers, we simply pass them by as "small, green, insignificant" or otherwise not worthy of notice. Many of us, indeed, pass through life in indifferent ignorance of the fact that trees like pines and oaks and beeches have any real flowers at all.

One of the difficulties is that we have eyes that see not, unless the thing looked at is really pretty big. The beauty of the complex little structures within the catkin of an oak or alder or hazel-bush is lost on us. To most of us, they are just messy things that shed pollen, or

receive it from the wind and eventually make a seed or nut. If we could only take a gnome's-eye view of the matter, these ignored flowers would spring up in beauty and wonder of their own.

This service has been performed for us by Prof. Walter E. Rogers of Lawrence College. In a big new picture-book which he has just published, he presents magnified photographs of a great variety of tree and shrub flowers, most of which are passed up without second glance by the great majority of

people—even by the great majority of hikers in the spring woods. The female flower of a walnut becomes a rough-coated vase with a pair of plumes thrust into it; the flower of a chestnut shines forth as a fairy hand with many waxen little fingers. We not only find a new gate into botany, but artists and designers are given hints that may be profitable.

The cover design on this issue of the SCIENCE NEWS LETTER is from a photograph of a *Kalmia* flower, in Prof. Rogers' book.

Science News Letter, February 8, 1936

PHYSICS

Danish Foundation Makes Grant for New Laboratory

DENMARK'S most famous physicist, Prof. Niels Bohr, who won the Nobel Prize in 1922, has received a grant of 150,000 kroner (approximately \$34,000) to be used in founding a high current generating laboratory in the Institute of Theoretical Physics at the University of Copenhagen.

The Carlsberg Foundation of Copenhagen is the donor. The Foundation promotes scientific research and publication and finances the activities of the Danish National Academy of Science. It was started in 1876 by Capt. J. C. Jacobsen, noted founder of the Carlsberg brewing company.

The Thirge Company of Odense is giving a 56-ton electromagnet for the new laboratory, which may mean that a giant magnetic accelerator of the cyclotron type as used by Prof. E. O. Lawrence at the University of California is about to be built.

The electromagnet is the most costly part of all cyclotron equipment, especially in the larger sizes. Prof. Lawrence's apparatus weighs 85 tons, and at

Columbia University in New York City a discarded Navy magnet weighing 65 tons is being set up for use as a cyclotron particle generator.

The cyclotron apparatus speeds up charged atomic particles to energies of millions of volts and is a convenient means of creating neutrons. Neutrons are the non-electrical particles of atoms which can easily pierce the inner nuclear walls of atoms and by their impact disclose hidden atomic secrets.

Science News Letter, February 8, 1936

RADIO

February 11, 4:30 p. m., E.S.T.

THE CRIMINAL MIND—Dr. John E. Lind, St. Elizabeth's Hospital, Washington, D. C.

February 18, 4:30 p. m., E.S.T.

THE GEOGRAPHY OF DISEASE—Dr. Earl B. McKinley, Dean of the Medical School, George Washington University, Washington, D. C.

In the Science Service series of radio discussions led by Watson Davis, Director, over the Columbia Broadcasting System.



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