

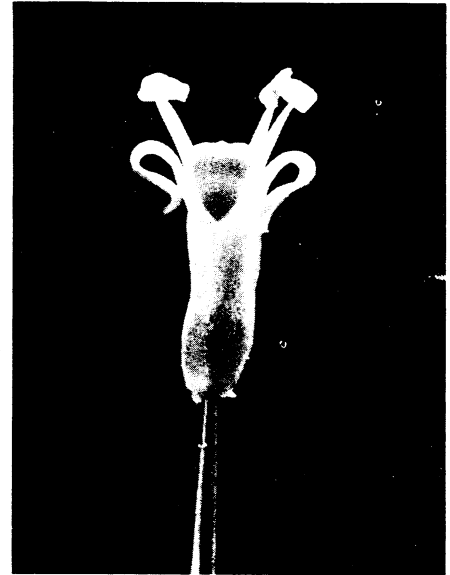
them to work on. Many of the conifers, too, toss their clouds of yellow pollen to the breeze when it has been warmed up a bit.

It used to be thought that "imperfect" flowers, dependent upon the wind for pollination, were relatively primitive and "simple"—the marks of earliest-evolved seed-plants. There is no question that the earliest-evolved seed-plants were wind-pollinated—the insects that existed in those times were ill adapted to the job of carrying pollen. But to conclude from that fact generalization that all wind-pollinated plants are primitive is a case of reasoning backward: certain wind-pollinated families, such as grasses and sedges, are relatively highly evolved; and it is becoming apparent that some of the wind-pollinated trees, like oaks and hickories, merit consideration above

the humble rank to which they were assigned by earlier botanists.

Although we may need the aid of a magnifying glass to see their tiny flowers, there is no need for magnification of the importance of wind-pollinated plants. To this group belong all grains, the beets and the cane that are the sources of almost all of our sugar, the palms that yield us nuts for oil and dates for food, such fiber plants as hemp and ramie, all softwoods and most hardwood trees, the grasses that form our pastures, lawns and golf courses, and most of the shade trees that line our streets and fill our parks. We may lavish our attention on the plants with showy flowers, but it is the ones without such adornment that really make human (and animal) life on this planet possible.

Science News Letter, April 5, 1947



DECEIVING DOGWOOD—*Things are not what they seem: this is the real flower of the flowering dogwood.*

amounts of elevated scar tissue, called keloids. Whether these are forerunners of cancer and why they occurred are unanswered questions.

Science News Letter, April 5, 1947

MEDICINE

A-Bomb Story Not Yet Told

Four or five generations may pass before the full effects of A-bombs will be felt. Jap babies show no abnormalities traceable to radiation.

➤ **EVERYONE ALIVE** in the world when the atomic bombs fell on Hiroshima and Nagasaki may be dead before it is known definitely whether Jap babies are going to be born deformed or abnormal because of A-bomb damage to their parents' germ-cells.

The effects of such damage may not show up for several generations. At 20 years to the generation, it may be 100 years before abnormalities, if they do occur, will appear in descendants of the atomic bombing survivors, it is thought.

This is because the changes, or mutations, which irradiation can bring about in some species of life, such as fruit-flies, are in most cases recessive and may go undetected for several generations.

The fact that some deformed babies have been born in Japan since the A-bombings does not mean that the deformities or abnormalities were the result of the bombings. Members of the Atomic Bomb Casualty Commission, who have just completed a special study of the situation in Japan, found no more cases of such abnormalities than would be normally expected. In any population, it was pointed out, there are always a certain number of individuals born who are not fully normal.

Sterility of a temporary nature appar-

ently occurred, the Commission found from autopsy studies made on those who died within a few weeks after the bombings. Whether any survivors will be permanently sterilized cannot be determined yet.

Starvation and infectious diseases are sterility factors which were present at the time of the bombings. If sterility does occur, it may be difficult or impossible to determine the part played by these factors and the part played by radiations from the bombs.

Members of the Commission were: Dr. Austin M. Brues of the University of Chicago and the Argonne National Laboratory; Dr. Paul S. Henshaw of the Clinton Laboratories, Oak Ridge, Tenn.; Lieuts. Melvin A. Block and James V. Neel (MC), U. S. Army, and Lieut. (j. g.) Frederick W. Ullrich (MC), USNR.

Concrete affords such a degree of protection that a person within a concrete building 500 meters (slightly under one-third of a mile) from the ground center of the explosion fared no worse, on the average, than a person standing in the open 1,400 meters distant from the blast.

A large number of burns suffered by the victims, the Commission found, healed with the accumulation of large

PHYSICS

Air Pressure Measures Roughness of Surfaces

➤ **A NEW LABORATORY** instrument called a rugosimeter, for measuring the roughness of surfaces, is offered by Dr. Melvin Mooney of the United States Rubber Company for patent 2,417,988. Air under pressure is blown through an opening in the middle of a smooth plate applied to the surface to be measured. The rougher it is, the more openings for air flow it will offer; hence a pressure gauge can be used to give an integrated reading of the surface's roughness.

Science News Letter, April 5, 1947

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