

## MEDICINE

**Scent in Lipstick Causes Skin Trouble in Sensitive**

**C**HANGE the scent of your lipstick, girls, if the kind you are using brings on a skin trouble.

The doctors have traced some cases of lipstick dermatitis—the skin disorder that occasionally develops among users of a lip rouge—to the perfume it contains.

A particular offender is a perfume containing methyl heptene carbonate, The Journal of the American Medical Association states. (Feb. 8.)

A young woman came to her doctor with a breaking out on the skin, which he traced to her use of lipstick. She had been using a certain brand for years with no ill effects until she changed shades.

By patch tests on the girl's arm, the physician found that she was sensitive not to the oil or dyes in the rouge, but only to the perfume used in two shades of lipstick of the brand she had been using.

The same test was made on thirty-eight other women. Exactly half of the thirty-eight were sensitive to the lipstick that had methyl heptene carbonate in its perfume. Other possible components of the perfume used in lipsticks gave no reaction.

*Science News Letter, February 15, 1936*

## CONSERVATION

**"Weed Trees" Needed To Make Wildlife Thrive**

**W**ILD birds and game animals will come back in larger numbers, and thrive better, if all our forests are not kept "perfect" from the timber-producing point of view, W. L. McAtee of the U. S. Department of Agriculture told the North American Wildlife Conference at its Washington meeting.

To produce the most board feet per acre, forests are grown exclusively of one species, usually of conifers like pine or spruce. All other trees, like beech, oak, maple, wild cherry, sourwood, persimmon, are ruthlessly eradicated as "weed trees," just as a farmer will consider goldenrod and wild sunflower as weeds to be plowed out if he finds them in his cornfield. Trees grown in this way lace their tops together in a closed canopy, which again is desirable for growing timber.

But such a forest has a bare floor, with no place for birds and game ani-

mals to hide themselves and their young from hungry enemies. The trees yield no food they can eat, no brush grows on the deep-shaded ground, and the friendly "weed trees," with their beechnuts, acorns, and berries, are gone. So the lumberman's "perfect" forest becomes a biological desert.

Mr. McAtee stressed the point that in regions planned for maximum timber production the standard forestry practices should be followed, with full consciousness that wildlife will be diminished. This is just as legitimate as planting corn even though wildflowers and meadowlarks cannot live in the cornfield. But in forested areas where hunting, recreation, or wildlife conservation is an objective, weed trees and other game-favoring "messy" growths must be permitted.

*Science News Letter, February 15, 1936*

## CHEMISTRY

**Chandler Medal Awarded To Prof. W. F. Giauque**

**P**ROFESSOR William Francis Giauque of the University of California—the man who stimulated research which ultimately led to the Nobel Prize winning discovery of the heavy isotope of hydrogen and heavy water—is the 1935 winner of the Chandler Medal of Columbia University.

In an announcement by Columbia University Trustees, Prof. Giauque's experiments on the discovery of three varieties—or isotopes—of oxygen were cited as outstanding research instrumental in his selection for the award.

The award committee, consisting of Profs. Arthur W. Thomas, Arthur W. Hixson and Leo Baekeland, all of Columbia, commended the oxygen research for stimulating world-wide research on all of the lighter elements including hydrogen, nitrogen and carbon and ultimately led to the identification of a new isotope of hydrogen—deuterium, component of heavy water—by Prof. Harold C. Urey of Columbia.

Prof. Giauque's discovery that there were three kinds of oxygen instead of one, each with a different atomic weight was made with Prof. H. L. Johnson of Ohio State University.

Besides his oxygen isotope research, Prof. Giauque has contributed to knowledge of the theories concerning heat and entropy and especially made advances in the field of low-temperature studies near absolute zero.

*Science News Letter, February 15, 1936*

**IN SCIENCE**

## ECOLOGY

**Alfalfa-Like Weed Resists Both Drought and Cold**

**D**ROUGHT-threatened, as well as cold-stricken, areas are badly in need of a forage plant that can withstand wide ranges of temperatures.

After a long search a weed has been found by a group of Soviet scientists that not only satisfies this condition, but can serve also as good feed under ordinary conditions. It is known as sickle lucerne, and it grows in a large number of types on the steppes of the Ukraine.

This weed is remarkable in its endurance, can stand the longest, most devastating droughts, as well as the coldest snowless winters. It grows in sandy, clay, rocky, limy, and salty soils. It has a strongly developed fibrous root system running in all directions and making use of the slightest moisture in the soil. In this respect it is said to be far superior to alfalfa.

The food value of the sickle lucerne makes it a desirable feed plant. It contains 14.70 per cent. of nitrogen and 3.92 per cent. of fat.

Of all varieties of this weed the one growing on the island Biruchem in the Asov Sea is distinguished for its height. It grows to be nearly four feet high, which makes it easy for mowing by machine. The possibilities of cultivating sickle lucerne are being studied.

*Science News Letter, February 15, 1936*

## ENGINEERING

**German Pile Driver Operates by Explosions**

**N**EWEST pile driver in use in Germany has an easily operated explosion cylinder instead of a heavy weight dropped from a high tower.

The device operates, in principle, like the explosion in an automobile engine. The expansion drives a piston down on the top of the pile. Although the device weighs 1,100 pounds, it is raised two feet by the recoil of each explosion. Two men are needed for its operation.

*Science News Letter, February 15, 1936*

# FIELDS

## BOTANY

### White Men Discover Indian Spinach

**I**T TURNS out now that Indians in Arizona eat an Indian sort of spinach. They have been eating it for years, and liking it.

The plant grows plentifully around Wupatki National Monument in the Hopi Indian country. Hopis prepare and eat it, just like white man's spinach.

Word received at National Park Service headquarters says that modern dwellers at Wupatki have tried their first mess of Indian spinach. The verdict sounds as if the Indians were "one up" on the white man on this spinach situation, for it is "similar to spinach, but without the sand."

*Science News Letter, February 15, 1936*

## PHYSICS

### Speaking Clock Developed by British Post Office

**A**SPEAKING clock used by the British Post Office department to tell time over the telephone was demonstrated at the Annual Exhibition of Scientific Apparatus, sponsored by the Physical Society and held at Imperial College of Science and Technology, in London.

The speaking clock announces the time automatically every ten seconds day and night with an accuracy of one tenth of a second. Each hour the system is checked against the astronomical clocks at Greenwich Observatory.

The telephone time announcements run: "At the third stroke it will be eleven seventeen and forty seconds." The spoken words are followed by three "peep" signals of 800 cycle tone, at one second intervals and lasting one tenth of a second.

Four glass disks, carrying sound tracks photographically recorded, make the announcement. One disk turning 60 times each minute carries records of the odd numbers 1 to 59, and a second disk the numbers 2 to 58, together with the word "o'clock."

A third disk speaks the hour and carries also the phrase "it will be." The

fourth disk makes the preliminary announcement "At the third stroke" and adds the final part of the speech "and ten seconds."

Optical systems and photoelectric cells turn the disk records into electric current which operates the loud speaker.

*Science News Letter, February 15, 1936*

## ENGINEERING

### Robot Control Distributes Electric Power in South

**E**LECTRICAL robots, operating over telephone lines without destroying their ability to carry ordinary conversation, are being used to transfer, steady and control electric power loads through interlocked power systems of the South.

How power companies in Tennessee, Alabama, South Carolina and Georgia exchange power automatically by remote control stations as needed was described to the American Institute of Electrical Engineers by J. T. Logan of the Georgia Power Company of Atlanta.

The power-controlling signals going over the telephone lines of the company are in frequencies beyond the lines of audibility—higher than 20,000 cycles a second. The signals increase or withdraw power from the lines as the load varies throughout the day.

Mr. Logan gave a typical example to explain the operation of the system.

Suppose Tennessee wants 30,000 kilowatts of power from Georgia generating stations. The chief power dispatcher at Atlanta sets his power contacts at 28,000 kilowatts for a "raise" power order and 32,000 kilowatts for a "lower" power order.

As long as the power load from Tennessee remains between the 28,000 and 32,000 kilowatts, no control is needed. But if increased withdrawal of power in Tennessee drops the line load to below 28,000 kilowatts, the robot control sends the signal for more power to the Georgia generating plant, miles away.

If fewer Tennessee consumers are using power and the line load goes to the upper limit of 32,000 kilowatts, the same robots cuts the power being supplied to the line by the generators.

Formerly, said Mr. Logan, the company's telephone lines were used to transmit such information verbally and dispatchers changed the power loads manually. Fewer power interruptions and most constant line supply are advantages of the new method. Releasing the telephone lines for other use has already more than paid for installation.

*Science News Letter, February 15, 1936*

## BIOLOGY

### Fungi Thrive on Copper, Supposed to be Poisonous

**C**OPPER is supposed to be deadly poison to molds and other fungi; but Clifford L. Bedford, of the University of California fruit products laboratory, has found one form that thrives in even a saturated solution of copper sulphate. It does not feed on the copper salt, but can absorb nourishment from several kinds of sugar as well as from starch in the presence of the strong copper solution.

Solutions of other copper compounds, as well as of salts of other heavy metals such as mercury, silver, cobalt and lead, were sometimes toxic to the fungus.

*Science News Letter, February 15, 1936*

## BIOLOGY

### Heavy Water Speeds Plant Growth, Slows Fungi

**H**EAVY water, with double-weight instead of ordinary single-weight hydrogen atoms, speeds the growth of ordinary green plants but slows the growth of non-green plants such as fungi. This discovery is announced by Prof. A. J. Ewart of Melbourne University.

In his experiments, bacteria and fungi were retarded in growth. Yeast was either not affected at all or was slightly accelerated, although it also is a non-green plant. Oat seedlings and other green plants grew faster.

Heavy water did retard green plants at one life stage: it slowed down germination of seeds. But once they were sprouted their growth was more rapid.

*Science News Letter, February 15, 1936*

## ZOOLOGY

### Lions Get Spotlight as Zoo Tries Floodlighting

**L**IGHTING up the lions with the latest floodlighting effects has been tried successfully at the Paris Zoo.

Using a complete switchboard with dimmers, the lion pit was lighted with red and yellow projectors, creating picturesque effects of the animals in their rocky den at night. The animals were protected against glare.

Seals have no more privacy than a goldfish with the new-fangled lighting. Their tank was flooded with powerful under-water lights to show their swimming antics.

*Science News Letter, February 15, 1936*