

## OCEANOGRAPHY

**Note from Liner Columbus Drifts to West Indies**

**A** BELATED Valentine message, from a fine German ship now on the bottom of the ocean, is reported in the *Hydrographic Bulletin*, published by the U. S. Navy for the information of American seafaring men.

On Feb. 14, 1939, Officer K. Pfennig of the liner Columbus set adrift a sealed bottle containing an identifying record. A strange, strong thread of Columbian coincidence runs through the story of that drifting bottle. For it was put overboard near the Canary Islands, first stopping-point of Christopher Columbus on his great discovery voyage in 1492; and on Dec. 14, 1939, it was washed ashore on St. Kitts Island, which is one of the claimants to the title of Columbus' first landing-place on this side of the Atlantic, and is now a British possession. Borne by ocean currents, the bottle had drifted about 3,200 miles.

And in the meantime, the great ship from which this wandering messenger was launched, to drift slowly along Columbus' track, has become a victim of the new war between Germany and Britain. Threatened with capture, the Columbus was burned and scuttled by her own crew on Dec. 20, 1939, when her capture by a British warship seemed imminent.

Apparently not even a war can disturb the leisurely calm of a British West Indian official, for although the interesting bottle came ashore in mid-December, the news of its contents was not communicated to the Hydrographic Office of the U. S. Navy until mid-February.

*Science News Letter, February 24, 1940*

## PHYSIOLOGY

**Man is Longest-Lived Mammal, Studies Show**

**L**ONGEST-LIVED among mammals is man himself, it is indicated by Maj. Stanley S. Flower, British zoologist who has collected data on this much-discussed subject for many years. Centenarians are found with increasing frequency nowadays, Major Flower states in the current issue of *Fauna*, and he has one apparently authentic record of a human being reaching the age of 114 years.

The elephant, which was long supposed to top man for age, is an exceptionally long-lived animal even though its oldest veterans fall a couple of years short of the half-century mark. Other long-lived big animals in Major Flower's

records are a rhinoceros that lived to be more than 40 and a hippopotamus that reached the age of 41 years and 6 months.

Size, however, has no necessary connection with age: figures for lion, tiger and domestic cat are 25, 19 and 20 years, respectively. Record age for a captive gorilla is 13 years, for an animal still living at the Philadelphia Zoo, while a little Cebus monkey nearly doubled that figure, dying at 25.

Ages of 500 years and more, claimed for turtles and tortoises have proved to be exaggerations. However, there are apparently authentic records of tortoises reaching ages of 125 and 152 years, and a somewhat less dependable figure of 123 years for a common box turtle. Outside the turtle family, reptilian ages are not extraordinary.

*Science News Letter, February 24, 1940*

## AGRICULTURE—ENGINEERING

**Iowa Tall Cornstalks Used as a Snow Fence**

**A** NEW use for cornstalks after they have done their botanical bit in producing ears of corn: As a natural snow fence. In Black Hawk County, Iowa, road authorities asked farmers to pick by hand the ears from 20 rows of corn next to the road leaving the stalks in place to trap the snow as much as 100 feet back from the road. Snow plowing costs have been greatly reduced.

*Science News Letter, February 24, 1940*

## BOTANY

**Find Laziness in Corn Is Hereditary Defect**

**L**AZY CORN, that sprawls flat on the ground instead of standing erect, is given a physiological explanation (*The Botanical Gazette*) by Dr. John Shafer, Jr., of Cornell University.

If a normal cornstalk (or any other plant) is laid horizontally, about 60 per cent of its auxin, or growth-promoting hormone, becomes concentrated on the lower side, making that side grow faster and causing the stalk to curve upward into normal position again.

In lazy corn this condition is reversed. The plant perversely concentrates 55 per cent of its hormone on the upper side of the stalk, keeping it prostrate.

Laziness in corn is a hereditary defect. Such corn is of course useless for practical purposes and is grown only as a curiosity and for purposes of scientific experimentation.

*Science News Letter, February 24, 1940*

**IN SCIEN**

## INVENTION

**Sweeping Cloaks Are Used To Give Skiers Stability**

See Front Cover

**S**WEEPING cloaks that the "Phantom of the Opera" might have enjoyed are the newest trick for ski enthusiasts invented by Prof. Hans Thirring of the University of Vienna. Looking like sails the ski cloaks act, however, in a reverse way. They are not designed to make one go faster, but rather to obtain greater stability.

They are designed for the great middle class of skiers—neither the expert nor the complete novice. The former can maintain their equilibrium with their arms and the latter never attain speeds sufficient to bring the stabilizing effect into action.

Prof. Thirring was led to his invention by the knowledge that at the end of a ski run, when the speed gets faster, there comes a time when one feels safer than at slower speeds. The body seems to rest on air. By maneuvering the cloak it is possible to obtain this effect of extra stability more easily. One might compare the invention with the balancing bar which a tight rope walker carries to keep equilibrium.

*Science News Letter, February 24, 1940*

## PHYSIOLOGY

**Museum of Health Vouches For These Health Facts**

**H**EALTH facts authenticated by American Museum of Health exhibits: An area about the size of a penny on each side of your nose allows you to smell. The normal human ear is capable of receiving sound waves of 16 to 16,384 vibrations per second. The average healthy grown person's body has 25,000,000,000 red blood corpuscles, 30,000,000,000 white corpuscles and 1,250,000,000,000 platelets. The human skeleton has 245 bones. Swimming develops your lung capacity more than any other activity. The typical person breathes 7.03 quarts of air per minute while resting flat on the back, 45.46 quarts while swimming.

*Science News Letter, February 24, 1940*

# CE FIELDS

## ETHNOLOGY

### Skis a Lapp Invention, Ethnologist Suspects

**S**KIS on which Finland's soldiers speed over snowy battleground were invented right up in that part of the world, by ancient Lapps. So thinks a Smithsonian Institution ethnologist, Herbert W. Krieger, who has trailed a good many inventions into the shadowy past.

When, and exactly where in the Arctic, the Lapps first felt the thrill of skimming along on skis, nobody can say, explains Mr. Krieger. Lapps overlapped from Scandinavia to Russia, and their country has been little investigated by archaeologists. But Lapps have used skis a very long time. Lapps have a reputation for being averse to violence; and we may picture early ski-experts engaging in peaceful travel. In warfare, skis have been used for several centuries.

Russians, who are now bringing Siberian troops into the fight against the Finns, are drawing these men from a region familiar with old-fashioned Arctic travel methods. In Siberia, snowshoes shod with seal fur have a long history. To an ethnologist, it looks as though Russia overlooked a bet when she stressed mechanized warfare to the neglect of the Arctic's time-tried horse-and-buggy means of getting over ground.

Some medieval Norse skis were made one longer than the other, the longer being for gliding and the shorter for climbing. The shorter one was fur-covered to provide a brake.

*Science News Letter, February 24, 1940*

## MEDICINE

### Phenothiazine Found Useful in Veterinary Medicine

**A**CHEMICAL related to sulfanilamide, known as phenothiazine, has been found highly effective in the treatment of several species of parasitic worms in livestock by scientists of the U. S. Department of Agriculture. As soon as manufacturers make suitable application to the Secretary of Agriculture, it will be released as an accepted veterinary medicine.

Phenothiazine first came into scien-

tific notice half-a-dozen years ago when it was found to be highly toxic to insects and very slightly so to warm-blooded animals. This original research was carried out by L. E. Smith of the Bureau of Entomology and Plant Quarantine. Investigations since then have led Department of Agriculture scientists to believe that it is one of the most versatile chemicals brought to light in recent years.

In addition to its effectiveness against insects, worms and other cold-blooded forms of life, phenothiazine has been found to have marked fungicidal and bactericidal properties. In the latter field, it has been used as an internal antiseptic in human medicine, in the treatment of cystitis, pyelitis and allied diseases.

Researches on the use of phenothiazine in human medicine have been conducted by Dr. Floyd DeEds of the Stanford University School of Medicine, to whom a public service patent on this phase of its applications has been granted.

*Science News Letter, February 24, 1940*

## PHYSIOLOGY

### Females More Thrifty Even In Utilization of Iron

**T**HE CHARACTERISTIC difference between the prodigal male and the thrifty female holds good even for the way anemic bodies of the two sexes use iron for blood-building, latest scientific researches seem to show.

When an anemic female is fed only a tiny amount of iron—a time when most economical use of the iron is of vital importance—she actually retains more iron than the male, in spite of her smaller body size. This and other facts showing a sex difference in utilization of iron were learned from studies made by Drs. Louise Otis and Margaret Cammack Smith, of the University of Arizona (*Science*, Feb. 9). The studies, to be sure, were made on male and female rats, but these small laboratory animals are much like humans in their nutritional requirements.

The rats had their iron reserve supply depleted by an exclusive milk diet. Then rats of both sexes were fed the same amount of iron. The females showed their thrift by their greater gain of hemoglobin (red coloring matter of the blood) and when the iron content of their bodies was determined, the amount of iron per gram of rat was always higher for females than for males fed the same amount of iron.

*Science News Letter, February 24, 1940*

## CHEMISTRY—FORESTRY

### Chemistry Aids Lumber Against Natural Enemies

**C**HEMISTRY is coming increasingly to the aid of wood as a building material, protecting it from natural enemies and defects that have militated against its use, L. F. Livingston of E. I. du Pont de Nemours and Company told the American Forestry Association at Biloxi, Miss.

Chemical treatment is becoming of particular importance as the proportion of second-growth wood in the lumber supply increases, Mr. Livingston pointed out. Second-growth wood will do the work demanded of it as well as lumber cut from virgin timber stands, but its greater porosity gives enemy organisms, particularly fungi, easier opportunity to enter and spread.

Outstanding accomplishments of chemical treatment of lumber, as outlined by the speaker, have been the stopping of the spread of stain fungi through the use of mercury and chlorophenol compounds, the overcoming of the tendency to "check" in seasoning by means of moisture-attracting chemicals such as invert sugar and synthetic urea, and present hopeful progress toward the solution of the problem of swelling and shrinking, with resulting aggravations of jamming doors, sticking drawers, warping tables and rattling windows.

*Science News Letter, February 24, 1940*

## RADIO

### Instrument Enables Blind To Do Radio Servicing

**P**IANO TUNING has long been a successful vocation for those who cannot see. Now, thanks to a new instrument developed by radio instructor Charles G. Barany of Baltimore's Boys Vocational School, No. 293, and called the videlyzer, those with the handicap of blindness may very well become efficient radio servicemen.

When a blind boy came into his class, Mr. Barany worked out a radio circuit analysis instrument on which meter readings could be made by feel through use of the fingers instead of the eyes. Circuit diagrams were prepared in lines and symbols raised above the surface of the paper so they also could be read by feel. Successful use of the new instrument by blind technicians gives hope that other handicapped persons can take up this necessary work in a modern world despite their loss of sight.

*Science News Letter, February 24, 1940*