# Questions

ASTRONOMY-What color are stars smaller than the earth? p. 54.

ENGINEERING - Why may wooden snow picket fences be on the way out? p. 56.

MEDICINE—What could your "different" cold this winter have been? p. 55.

NUTRITION—What three diet essentials are apt to be left out at this time of year? p. 61.

PHYSICS—How many H-bombs would be needed to paralyze our big centers? p. 53.

STATISTICS-Why will there be fewer wedding bells in the next decade? p. 56.

TECHNOLOGY—What are the advantages of vacuum metallizing? p. 52.

Photographs: Cover, Harvard University; p. 51, Bell Telephone Laboratories; p. 53, Funk Foundation for Medical Research; p. 54, Johns Hopkins University; p. 55, Lockheed Aircraft Corp.; p. 64, Riverside Manufacturing Co.

# Do You Know?

American doctors wrote 400,000,000 prescriptions during 1952.

More than 350 miles of roads in 17 states and Canadian provinces use rubber in the pavement.

A 60-watt light bulb produces enough light to stimulate egg production of 100 hens in the morning.

Two pounds of alloy steel can be drawn into a wire 20 miles long to make hairsprings for 300,000 watches.

Thor Heyerdahl, leader of the Kon-Tiki expedition raft across the Pacific, next plans to explore the Galapagos Islands off Ecua-

### *YOUR HAIR*

Its Health, Beauty and Growth By Herman Goodman, M.D.

A medical specialist tells you what to do to save and beautify your hair, stimulate healthier hair growth, and deal with many problems, as: Danduff-gray hair—thinning hair—care of the scalp—baldness—abnormal types of hair—excessive oiliness—brittle dryness—hair falling out—infection—parasites—hair hygiene—glands—diet—coloring—and myriad other subjects concerning hair

coloring—and my, many problems of hair retention, "Discusses the many problems of hair retention, regrowth and removal."—Science News Letter.

287 pages—PROFUSELY ILLUSTRATED!
Price \$2.95, Incl. postage, 5-day-Money-Back
Guarantee

COUST TO Post 456-H

EMERSON BOOKS, Inc., Dept. 456-H 251 W. 19th Street, New York 11

NUTRITION

## Teosinte High in Protein

The poor man's corn of Central America and Mexico, closest known relative of corn, is found to be high in protein, much of which is the amino acid, methionine.

➤ A NEW aid to good nutrition, especially for peoples forced to live largely on vegetable and cereal diets, has been discovered in a plant called teosinte, known in Central America and Mexico as the poor man's corn.

Teosinte is the closest known relative of The good news about it is that it contains more total protein than corn and, even more significant, more than twice as much of the amino acid, methionine, as

This discovery was made by Drs. Irving E. Melhus, Francisco Aguirre and Nevin S. Scrimshaw of Iowa State College, Ames, at the Guatemala Tropical Research Center, Antigua, and the Institute of Nutrition of Central America and Panama, Guatemala.

Lack of the amino acid, methionine, is what makes the predominantly vegetable diets of peoples in underdeveloped areas of the world such poor nourishment. These people cannot get more methionine in their diet through meat and other sources of animal protein because of "basic agricultural, economic and cultural reasons," Dr. Melhus and associates point out.

Ground teosinte, it now appears, might be mixed with wheat or corn flours or used alone to make biscuits, tortillas and other products that would add good protein to vegetable diets. It can be crossed with corn and possibly give a hybrid of higher protein and methionine content. Five such crosses have been made and while these did not differ significantly from corn in chemical composition, their progeny are expected to show marked variation in nourishing qual-

Teosinte kernels are smaller than corn kernels and have a hard, inedible hull. Natives of Central America and Mexico have grown teosinte with corn for a long time, have cultivated it as cattle feed, and in a few localities have eaten it themselves as a corn substitute, particularly in times of famine. Until now, however, little has been known of its nutritive value. Details of this study are reported in Science (Jan. 9).

Science News Letter, January 24, 1953

**PEDIATRICS** 

### Treat Child's Colds

➤ THE FREQUENT colds and repeated attacks of bronchitis, infectious asthma and pneumonia which many children get, even before school age, should be attacked by a vigorous program of penicillin treatment to prevent chronic, disabling lung diseases such as bronchiectasis, Dr. Walter Finke of Rochester, N.Y., declares in the Journal of the American Medical Association (Jan. 10).

Chronic lung and bronchial disease, he states, rivals tuberculosis as a cause for lost manpower and, in terms of production time lost, it exceeds the common cold in importance.

Absences and days lost from school were cut in half by the treatment program he advised, he reports. This consisted in giving penicillin, at first by injection and aerosol sprays. After the active infection had subsided, penicillin was given by mouth to prevent reinfections and relapses.

"Striking and immediate improvement" of the lung or bronchial condition and of the child's general health resulted, Dr. Finke reports.

Preschool children particularly need to have their repeated lung and bronchial illnesses treated vigorously, since lung damage often starts very early.

Dr. Finke thinks children get most of their colds, bronchitis and the like from "intimate household contacts" and not, as generally believed, from outsiders, especially in school.

Science News Letter, January 24, 1953

TECHNOLOGY

#### **Traffic Diary Records Problems on Highways**

➤ A DEVICE that fits into an ordinary passenger car and records all stops, starts and speeds of an automobile as it moves through traffic has been developed at the University of California at Los Angeles.

It was designed by D. L. Gerlough, assistant engineer in the Institute of Transportation and Traffic Engineering, who calls it a "pushbutton traffic diary."

Cause and location of delaying factors on the highways-such as intersections, pedestrians, signals and parking of cars-are registered in code on the chart by pushing various buttons of the device.

Analysis of the chart presents a typical picture of factors involved in the traffic flow on a particular thoroughfare. instrument is being tested in San Diego, Calif. It operates on current from a generator driven by the speedometer cable.

Science News Letter, January 24, 1953