Questions

ASTRONOMY—How efficient would telescopes on the moon be?, p. 119.

BIOLOGY—Where are hairs found on whales? p. 114.

GENETICS—What plant is suggested as the immediate ancestor of corn? p. 118.

In how many ways can cells be transformed into cancer cells? p. 121.

GERONTOLOGY—What can be done to help keep elderly people healthy? p. 116.

MEDICINE—What is "brain fever?" p. 120. Has the drought aided hay fever sufferers? p. 121.

PHYSIOLOGY—What color is best for air-sea rescue gear? p. 121.

Photographs: Cover, Fremont Davis; p. 115, British Information Services; p. 117, Levitt and Sons, Inc.; p. 118, Worcester Film Corp.; p. 119, Civil Aeronautics Administration; pp. 122 and 123, Shell Oil Company; p. 127, North American Aviation.

MEDICINE

Vitamin B Offered To Treat Skin Ills

NOW A vitamin B is being offered as relief for skin itching, pain and a healing agent for skin lesions ranging from ulcers to sunburn.

After clinical tests at Bellevue Hospital and New York Medical College, a cream containing 2% pathenol, the alcohol analog of pantothenic acid, one of the vitamin B factors, has been made available by the U. S. Vitamin Corporation.

Science News Letter, August 23, 1952



PHOTOGRAPHY

Photos Catch Rockets

➤ WITH THE aid of photography, new and better rockets are penetrating farther into space, or are being developed to carry havoc to the enemy in case of World War III.

R. W. Herman of the U. S. Naval Ordnance Test Station at China Lake, Calif., told the Photographic Society of America meeting in New York that special movie cameras have been built to watch rockets that fly so fast the eye cannot be relied upon for scientific observations.

The cameras cover the take-off, flying and terminal parts of the rocket path. They yield a continuous record of what went on while the missile was in the air.

Using a strip of film that moves continuously, one camera, developed by Dr. Ira S. Bowen, director of the Mount Palomar Observatory, shoots pictures on frames of film five inches long and one inch wide.

Some of the cameras are stationary and are arranged so that the films taken by a battery of them go together to form a continuous picture of the rocket's flight. In addition to a picture of the flying missile, some of the cameras, such as the Bowen Acceleration camera, have special built-in equipment to provide a record of elapsing time. From these data, more information about the rocket can be figured mathematically.

Some of photography's applications to rocket research were outlined by Mr. Herman. Among them were these:

Photographic records can show how a rocket reacts to "shifting" weight as heavy fuel is burned. They can reveal qualities of new designs difficult or impossible to obtain in the laboratory. They provide valuable clues to what is happening in the rocket motors during take-offs.

Mr. Herman predicted rockets some day will "open vast new frontiers of the universe to man's exploration," and that photography will continue to help produce those better ships.

Science News Letter, August 23, 1952

GEOGRAPHY

Go North, Young Man

THE PIONEERS are moving northward in Canada. Geographers from all over the world were given a picture of the northward advance of civilization in Canada by J. Lewis Robinson of the University of British Columbia.

The reason for the new advance, which started in 1945, Mr. Robinson said, is improved mechanized bush-clearing equipment. This has resulted in the pioneer fringe of agriculture moving northward, Mr. Robinson told the International Geographical Union meeting in Washington.

Also, the increased number of trucks is permitting settlement to spread out from the north-south rail lines along new roads. Allied developments, such as mining and transportation routes, have aided the northward march of farming.

However, Mr. Robinson said, there are some deterring factors. He pointed to what he called a lack of "pioneer spirit" among some Canadians who do not like the lower standard of living in the northern area. In addition, there are high costs of transportation to southern markets and early fall frosts; poor soils and poor water facilities discourage some.

Conditions are not the same throughout the pioneer zone, Mr. Robinson said. The fringe extends to the northwest from westcentral Manitoba, passing north of Prince Albert, Saskatchewan, and terminating in the Peace River region of Alberta and British Columbia. There are some settlements north of this, for example in the Yukon and Mackenzie river valleys, but much of the farming there should properly be classed as gardening, he said.

Changes in the type of cash crops, better clearing methods and better organized government assistance all augur well for pioneer farming, Mr. Robinson concluded, despite the difficulties.

Science News Letter, August 23, 1952

METEOROLOGY

Most of Nation Will Get Subnormal Rainfall

➤ RAINFALL OVER most of the nation will be "subnormal" prior to Sept. 15, but "we are not forecasting a return to drought conditions," experts at the U.S. Weather Bureau's Extended Forecast Section predict.

The term "subnormal" is in relationship to the average amount of rainfall for the particular 30-day period over past years. Averages are relatively high over the drought area between Aug. 15 and Sept. 15, William Klein, extended forecaster, told Science Service.

Subnormal for Tennessee and Kentucky, for instance, means two inches or less; for the Carolinas, three and one-half inches or less; for New England, two and one-half inches or less.

Nevertheless, Mr. Klein said, the trend that appeared Aug. 1, when the long-range forecasters predicted normal amounts of rain for August and a break in the drought, has been reversed. The reversal, however, probably will not be as extreme as the conditions before Aug. 1.

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