

SEISMOLOGY

**Mexican Earthquake
Duplicates 1928 Shock**

THE MEXICAN earthquake of Wednesday night, January 14, centered near the Pacific shore of the Isthmus of Tehuantepec, either a short distance inland or a short distance offshore at the bottom of the Gulf of Tehuantepec. It was in latitude sixteen degrees north, and longitude ninety-six degrees west.

This determination was made by the U. S. Coast and Geodetic Survey on the basis of reports from nineteen seismological observatories, transmitted through Science Service. Scientists at the Coast and Geodetic Survey stated that the epicenter coincides very closely with that of a very destructive earthquake almost three years ago, on March 22, 1928.

Mexico City, they stated, is peculiarly exposed to damage from earthquake shocks, even when they center as far away as the present one. The city is built on the alluvial soil of an ancient lake bed, and this loose stuff shifts easily when the underlying rock strata are shaken, bringing down the buildings that have been erected on it.

Science News Letter, January 24, 1931

NUTRITION

**Use of Corn Sugar in Food
Adds Calories to Diet**

HEAVYWEIGHT calorie-counters, among others, will need to be more than usually wary in selecting sweetened, prepared foods since the Department of Agriculture's decision relative to corn sugar.

According to this decision, just announced by Secretary Arthur M. Hyde, pure, refined corn sugar may be used to sweeten prepared foods without so stating on the label. Corn sugar sold in package or bulk must be labeled as such.

However, dextrose, which is the sugar obtained from corn, is not as sweet as sucrose, the sugar obtained from sugar cane. Consequently more corn sugar will have to be used to achieve the same flavoring effect in foods. Increasing the sugar, whether in the form of dextrose or of sucrose, increases the calories. Herein lies the danger to the unsuspecting.

The general public may be affected, as well as the obese, by an increased use of corn sugar which is expected to result from the new ruling.

"The American dietary will probably be still further excessive in carbohydrates unless the people continue to learn to eat more intelligently," the American Medical Association pointed out with reference to the extra amount of sugar that must be used for flavoring when corn sugar is substituted for cane sugar. The American diet has been severely criticized because it contains too much sugar in proportion to other foods. Sugar is an energy food, but lacks vitamins and other important food elements.

Aside from the potential danger of increasing the carbohydrate consumption of the country, the ruling, as it affects sugar alone, will not have any harmful effect on the health of the country.

"It is generally admitted that the use of corn sugar in the place of cane sugar in packaged foods of all varieties does not raise, in any sense of the words, a public health problem," the American Medical Association stated.

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ZOOLOGY

**Zion Canyon Snails Have
A Little Spire and Big Feet**

LITTLE boys and girls who have heard that if they make ugly faces they will "grow that way" will be impressed by the story of the little snails in Zion National Park that have come to have extraordinarily big feet because of their extraordinary habits.

The little snails, which dot the walls of Zion Canyon, looking like black specks about the size of a match head, are apparently a unique species, Park Naturalist A. M. Woodbury states. The spire, which is plainly visible in most snails, is so reduced in size in these Zion snails that it can scarcely be seen at all, while the snail's single foot, which clings to the canyon wall, is developed to unusual proportions.

Explaining the evolution of the snail, Mr. Woodbury said that before the canyon was carved, its ancestors lived in the stream of water which later was to dig the gorge. As the canyon was carved by the river, the snails found that the tiny plants called algae on the damp canyon walls afforded better food than the river bed, and so they began to climb. The spire became smaller to prevent its being caught by debris in the water from above, and the foot became larger, the better to cling to the walls.

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IN SCIEN

PUBLIC HEALTH

**New Jake Paralysis Cases
Reported in Massachusetts**

NEW cases of Jamaica ginger paralysis have just been reported to the U. S. Public Health Service.

The reports came from Massachusetts, but a possibility of cases occurring elsewhere in the country has led the U. S. Public Health Service to issue a warning against using Jamaica ginger extracts for beverage purposes.

Whether the new cases were caused by some of the old stock which caused an epidemic of cases last year is not yet known.

The adulterant used in the ginger extract which caused the paralysis cases last winter and spring was triorthocresyl phosphate, chemists of the U. S. Public Health Service found.

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SOCIOLOGY

**Family Influence Directs
Young People's Lives**

THE burden of responsibility for the success or failure of young Americans was placed in no uncertain terms upon the family and family influence, at the gathering of social science experts on the family held in Cleveland during the annual meeting of the American Sociological Society.

"While the effects of the wider social relationships are not to be underestimated," Dr. H. L. Pritchett of Southern Methodist University declared, "the influences of family life are regarded as contributing the fundamental attitudes and patterns of behavior which determine one's success and happiness."

A list of nine kinds of homes that do not exert a desirable influence on young people was presented by L. C. Pressey of Ohio State University. Among them were: the "foreign-social-background" home, the inadequately-financed home, the recently-bereaved home, the high-pressure home, the "chronic dissension" home, the "favorite-child" home and the "old-fashioned" home.

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CE FIELDS

PHYSICS

New Standards Laboratory Is Built Underground

WHEN optical lenses must be ground accurately to within five or six millionths of an inch, the temperature in the work room should not be shifting from 70 degrees to 85, or down the scale to 65.

Vibrations make a great deal of difference, too, and dust flying about can work havoc with one of those millionths.

However, for ten years opticians at the U. S. Bureau of Standards have had to do their work in the industrial building, where dust, noises, vibrations, and temperature changes have been frequent.

These workers are rejoicing at the news just announced by Dr. C. A. Skinner, chief of the optics division, that early in 1931, the new underground, optical laboratory will be ready for use.

Dr. Skinner explains that the layman can perhaps understand the importance of tiny, accurate measurements, when he realizes that a first class telescope lens must concentrate every beam of light from a distant source, such as a star, within an area so small that even when magnified 500 times or more, the eye can perceive nothing but a point. Moreover, the final figuring in grinding optical lenses has to be done by hand, for machinery is incapable of such fine work.

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PUBLIC HEALTH

Appoint Members National Advisory Health Council

THE MEMBERS of the new National Advisory Health Council, created by an act of Congress last April, have just been appointed. This Council replaces the advisory committee of the old Hygienic Laboratory, now the National Institute of Health. The new body will advise the Surgeon General of the U. S. Public Health Service on matters per-

taining to the health of the country at large.

Four members of the old committee who will serve on the new council are: Dr. Simon Flexner, director of the Rockefeller Institute for Medical Research; Dr. M. T. Ravenel, professor of bacteriology at the University of Missouri; Dr. M. J. Rosenau, professor of public health and hygiene at Harvard Medical School; and Dr. William H. Welch of Johns Hopkins University, "dean of American medicine."

The other members are: Dr. W. S. Leathers, dean of Vanderbilt University School of Medicine; Dr. Haven Emerson, professor of public health and hygiene at Columbia University; Prof. S. C. Lind, head of the department of chemistry, University of Minnesota; Dr. W. H. Howell, director of the Johns Hopkins School of Hygiene; Dr. C.-E. A. Winslow, professor of public health at Yale University; and Dr. Alfred Stengle, professor of the practice of medicine at the University of Pennsylvania.

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BOTANY-ETHNOLOGY

New Museum Studies Plants Found in Ruins

A BOTANICAL museum of an entirely new type, whose workers study only plants and plant materials used by Indians and other primitive peoples, both ancient and modern, has been founded at the University of Michigan. Known as the Ethnobotanical Museum, the institution and its functions were described in Cleveland by Dr. Melvin R. Gilmore, who spoke before the meeting of American Anthropological Association.

It is always of interest to know what plant foods a vanished tribe may have eaten, what plant fibers they may have woven into cloth, what kinds of wood they may have used in their houses, tools, weapons and funeral biers. These things can be determined by properly trained botanists, and such work has been done in the past, though in a more or less unorganized, haphazard fashion. Now, with the new institution a going concern, its permanent staff is constantly receiving materials for identification from all over the country. And for purposes of comparison and permanent record a very considerable series of collections is being built up at the museum.

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MEDICINE

Positive Facts About Cancer Summarized Before Surgeons

CANCER is today a greater menace, a more formidable scourge, than any other malady threatening our national life, with the exceptions of crime and the drink habit," declared Dr. Howard A. Kelly of Baltimore during the meeting of the American College of Surgeons in Philadelphia.

"With all our efforts, experimentations and investigations, we are as yet far removed from any worth-while knowledge of the ultimate cause or causes of this dread enemy," he said. We do, however, know a few helpful things about it. First, we know it is not contagious. Second, like every other ill in life, it is most successfully treated in its earliest stages when it is a purely local affair. Finally, we know certain preventive measures which can be taken.

"The golden rule of prevention is to look upon every persistent sore or lump in the skin, breast, mouth or any accessible part of the body as potentially serious until a competent doctor or surgeon declares otherwise," Dr. Kelly said. Any unusual condition should be investigated at once. Delay is dangerous, he emphasized. The sad habit of watching lumps or lesions until their nature becomes obvious and both doctor and patient are at length persuaded that something ought to be done is responsible for the loss of many precious lives."

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PUBLIC HEALTH

First Cases of Tularemia Found in Canada

TULAREMIA, or rabbit fever, has been found for the first time in Canada, the U. S. Public Health Service has just reported. The first case reported was in a miner living near Timmons, Ontario. The second was in a snowshoe rabbit near Vavenby, B. C.

Because these localities are so widely separated and are both hundreds of miles north of the United States border, it seems likely that the rabbits and other rodents of Canada have been widely infected with tularemia for many years.

Tularemia is a disease of rodents which may be transmitted to man. It was first found in California, later in other parts of western United States.

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