

PUBLIC HEALTH

**Dysentery Expected
From Chicago Outbreak**

PHYSICIANS throughout the country are warned to be on the lookout for cases of amebic dysentery among their patients who visited Chicago this summer and fall. This warning was sent at the suggestion of Dr. R. R. Spencer of the U. S. Public Health Service who is assisting Chicago's health Commissioner, Dr. Herman N. Bundesen, in an investigation of the dysentery outbreak in that city.

Some of the cases were not recognized as dysentery and the patients have been operated on for appendicitis and ulcerative colitis with unfortunate results, Dr. Bundesen has found. This is because the disease for the most part only occurs in tropical countries and is generally not thought of by physicians practicing in the north.

The outbreak, which started early in July, has been traced to chronic cases and carriers of the disease among the food handlers in two Chicago hotels.

Amebic dysentery is caused by a parasitic single-celled animal. It may be spread by contaminated water or foods that are eaten raw or by carriers who handle food, as in the Chicago outbreak. Cooking kills the ameba. The disease takes about three weeks to develop after infection.

Science News Letter, November 18, 1933

ARCHAEOLOGY

**Obsidian Artifact With
Mammoth Bones in Nevada**

"HIGHLY suggestive if not absolutely conclusive evidence" has been discovered that man roamed the region of Nevada as a living contemporary with ancient camels, little wild horses, huge mammoths and other animals that have long since departed from the American scene. The discovery is reported by Dr. George Gaylord Simpson of the American Museum of Natural History.

The object pointing to existence of man in such early times in America, is a small flake of dark volcanic glass, known as obsidian. It bears marks of chipping, such as a primitive man would make on material chosen for a blade. Nowhere in the region has obsidian been found, except for this piece. This fact strengthens the view that human hands transported the bit of vol-

canic glass to the place where it was dropped and where it became buried in what is now an "ancient stratum."

The obsidian flake was found when a field party, led by Fenley Hunter, was quarrying out bones of fossil animals. The important object was cut away from its resting place with a block of the undisturbed matrix still left around it, and the entire block was transported to the Museum, where the obsidian flake was removed and examined in the presence of several scientific observers.

Charcoal was found in three well-defined areas by the expedition, and is considered further evidence of human presence. The charcoal is thought to be remains of camp fires.

The animal bones immediately associated with the charcoal and the obsidian flake were remains of camel, bison, horses and deer. These were American animals of the Pleistocene or earliest post-Pleistocene geologic time.

That the discovery adds important evidence to the accumulating data pointing to early habitation of the New World by man, is Dr. Simpson's view.

Science News Letter, November 18, 1933

CHEMISTRY

**Chemists To Meet
In World Congresses**

CHEMISTS of many lands are to meet next spring in the first World Chemical Congresses to be held since the World War. The first of the two meetings, the Third Chemical and Technical International Congress of Agricultural Industries, will meet in Paris beginning March 26, and the second, the Ninth International Congress of Pure and Applied Chemistry, will open its sessions in Madrid on April 5. These meetings will mark the fortieth anniversary of the first international congress of chemistry ever held, which was organized in Paris in 1894. The last preceding world chemical congress was held in Washington in 1912.

Plans for the double Chemical Congress were described before the meeting in Washington of the Association of Official Agricultural Chemists by Dr. Atherton Seidell, who recently returned from France.

Although the first of the meetings will be restricted to agricultural chemistry, the field is so vast that 21 sections have been organized and a long series of questions to be discussed in symposia have been selected.

Science News Letter, November 18, 1933

IN SCIENCE

PHARMACOLOGY

**Antidote Found For
Bichloride of Mercury**

AN ANTIDOTE for poisonous bichloride of mercury (corrosive sublimate) has been discovered by Dr. S. M. Rosenthal of the U. S. National Institute of Health, Washington. It has already been used successfully to treat a victim of bichloride of mercury poisoning. The patient is now recovering in a hospital in Washington.

Cautious government scientists point out that the antidote is still in the experimental stage. However, results with animals poisoned by bichloride have been very good and the successful result with the first human case is considered very encouraging.

The new antidote, said to be the first known for bichloride of mercury, is formaldehyde sulfoxylate. It is given to the victim by mouth and injected into his veins simultaneously.

This type of poisoning is not very common, so that it may be some time before physicians have enough experience with it to determine its value. Dr. Rosenthal has asked hospitals to notify him of any cases of bichloride poisoning so that he may assist them in using the new antidote if they wish it.

Science News Letter, November 18, 1933

ARCHAEOLOGY

The Front Cover

Frank M. Setzler of the Smithsonian Institution is shown pointing to a little pottery bowl which he likens to the Rosetta Stone of the Nile because it is decorated with two kinds of art design, one known and the other unknown. Together with other discoveries made under Mr. Setzler's direction in mounds at Marksville, La., this bowl is expected to aid archaeologists in linking the shadowy Mound Builders with Indians of recent times. Mr. Setzler is leaning on a reproduction of the Rosetta Stone which enabled Egyptologists to read the hieroglyphics of Egypt. A complete report of this discovery was given in last week's SCIENCE NEWS LETTER.

Science News Letter, November 18, 1933

CE FIELDS

ORNITHOLOGY

Moscow Zoo To Breed Ostriches For Meat

HAVING discovered that ostrich meat has a delicious flavor, the Moscow Zoological Park has begun breeding ostriches on a large scale by means of incubators and also by a method that is described as forced mating, yielding from every pair about 15 or 16 chicks a year. When fully grown the birds weigh between 100 and 135 pounds.

It is planned to breed large numbers of ostriches in the southern steppes of the U. S. S. R. Thanks to its thick layer of fat, which originally served as a protection from the semi-tropical sun, the ostrich can endure the cold winter, even at the latitude of Moscow.

In its new home the ostrich still holds to its native calendar and begins to lay eggs in the fall, which corresponds to the spring of the Southern Hemisphere.

Science News Letter, November 18, 1933

PSYCHIATRY

Talkie Films Help Diagnosis of Disease

ANALYSIS of the tracks of the human voice upon sound films is said to give a clue towards the identification of the disease of the nervous system known as disseminated sclerosis, according to work carried out at the West End Hospital for Nervous Diseases, London. Writing in *Nature*, Miss F. Janvrin explains how this is done.

The vowel "ah" in a normal voice appears on the sound films as a series of spiky protuberances, in groups, each of which begins with a sharp upward jerk.

"The upward jerk is the result of a jet of air from the glottis. The distance from one upward jerk to the next gives the period of the laryngeal action. This period changes slowly and never suddenly. This means that the muscles controlling the tension for laryngeal action are well coordinated."

In patients suffering from the condition called ataxia the upward jerks fol-

low one another at irregular intervals. The first one stands alone, far in advance of the others. The intervals for the following ones vary from long to short. This indicates that the muscles governing action of the larynx or voice box were shaky in their coordination.

There are several diseases that can produce this state of irregularity of speech, disseminated sclerosis being one of them, according to Miss Janvrin. By means of the sound film the abnormality that leads to identification of the latter condition can be observed even when it is too slight to be detected by the unaided ear.

One of the drawbacks at present is that the patient must be taken to a film studio for the registration of the voice, but it would be quite feasible to arrange for recording over the telephone from the hospital to the studio.

Science News Letter, November 18, 1933

GEOLOGY

Glassy Stones May Be From Shattered Planets

TEKTITES, peculiar glassy stones usually of a bottle-green color, found in various parts of the world, are probably fragments of some shattered planet, like the better known meteorites, in the opinion of Dr. V. S. Dubey of Benares Hindu University, India. Scientists have disagreed as to the origin of these curious stones, some maintaining that they were formed by the action of lightning and others that they were due to meteorites causing the rocks which they hit to melt and take on a glassy appearance.

Dr. Dubey, in a communication to *Nature*, shows that the amount of radium present in tektites found in widely separated parts of the world is very nearly constant (about one ten-trillionth) and that they could not have derived this radium from ordinary meteorites, which do not contain as much radium.

"This strongly suggests," writes Dr. Dubey, "that these tektites are derived from some mass which agrees in chemical composition as well as in radio-activity with the granitic layer of the earth."

Meteorites, which are definitely known to have fallen on the earth from outer space, consist either of a mixture of iron and nickel, or of stony material which, unlike that of the tektites, is basic, that is, it contains less silica.

Science News Letter, November 18, 1933

GEOLOGY

Vanished Continent Seen As Source of Northern Rocks

WASHINGS of sand and silt from a vast northern continent, completely vanished for more than half a billion years, form large parts of the mountains of Sweden and Scotland, as well as parts of present-day North America, in the opinion of Prof. Albert Gilligan, noted British geologist. Prof. Gilligan's discussion of the subject appears in the annual report of the Smithsonian Institution.

Some of the most ancient rocks of the lands around the northern end of the earth, Prof. Gilligan notes, are sedimentary in origin; that is, they were originally sands and muds, washed down from a higher land somewhere by great rivers and deposited on the sea bottom, as the Mississippi delta is being formed today. Subsequently they hardened into stone, and later still were lifted into plateaus and mountains. The great thickness and extent of these ancient sedimentary rocks in the chain of northern lands has convinced Prof. Gilligan that a land mass of major continental size, drained by rivers of many times the silt-carrying power of the present Mississippi, must have existed around the North Pole in remotely past time.

Science News Letter, November 18, 1933

PHARMACOLOGY

New Drug Relieves Colicky Pains

A NEW DRUG that is said to be useful in relieving spasms and colicky pains in the abdomen was described by Dr. David I. Macht of Baltimore at the Richmond meeting of the southern branch of the Society for Experimental Medicine and Biology.

The name of the new drug is monobrom-hydroxy-benzyl alcohol, or bromsalizol for short. Besides its soothing effect which makes it useful in relieving colicky pains, it can be used as a local anesthetic and is said to be "less poisonous than most of other local anesthetics in use."

The studies leading to development of this drug are the result of discoveries of Dr. Macht fifteen years ago of peculiar properties of certain benzyl esters and benzyl alcohol.

Science News Letter, November 18, 1933