

MEDICINE

Anti-Tularemia Serum and Vaccine to Get Trial

ASERUM and vaccine, devised by Dr. Lee Foshay, department of bacteriology, University of Cincinnati Medical College, as preparedness against tularemia, or rabbit disease, has been supplied the Public Health Center in Cincinnati, Ohio, for inoculation of hunters in preparation for the approaching opening of the hunting season.

The vaccine is to immunize against the disease, and the serum is for treatment of infected persons.

These preparations were supplied the Cincinnati Health Center last year by Dr. Foshay and were found to have provided a high degree of protection against the disease to approximately 100 persons who were inoculated with them.

Dr. Foshay has been experimenting with the tularemia serum and vaccine for the past five years. Further experiments, however, will be necessary, Dr. Foshay states, before the preparations may be accepted as "standard."

Dr. Frank K. Harder, acting city health commissioner, has issued a warning to hunters to avoid dead rabbits lying in fields, and sick rabbits too easily shot. He advised that gloves be worn in handling rabbits.

Science News Letter, October 6, 1935

PHYSIOLOGY

Find Loud Noise Causes Deafness By Nerve Damage

CONTINUOUS exposure to constant noise of sufficient loudness will cause deafness due to nerve damage, Dr. M. H. Lurie of Harvard University told members of the American Academy of Ophthalmology and Otolaryngology.

By listening in with a special kind of radio hook-up on the hearing apparatus of cats' ears, Dr. Lurie and associates were able to learn much about the causes of different kinds of deafness. Some of their conclusions are:

1. Deafness of adult life can be caused by the neglect of mild ear trouble of childhood.
2. Exposure of people to loud noises for long periods of time will cause a dying of the sensitive hearing cells in the ear, followed by deafness.
3. Certain diseases and drugs, typhoid fever, mumps, influenza, quinine and alcohol, cause actual destruction of the nerve endings of the inner ear.
4. Explosions can dislocate these spe-

cial hearing cells, throwing them off the vibrating membrane on which they rest.

5. Unregulated noise over long periods may seriously injure the nerves by which we hear.

In the course of the experiments the investigators found in the animals tested all the different types of deafness that human beings have. These included the inherited type of deafness; deafness caused by disease of the drum and bones of the ear that bring the sound to the inner ear; the chronic deafness caused by repeated colds; deafness in which the nerve of hearing itself is involved; and loss of hearing as a result of the animal hearing loud noises for a long period of time.

Besides studying these various kinds of deafness with the super-radio apparatus, the investigators examined the animals' ears microscopically in order to find, if possible, the exact causes of the conditions.

Science News Letter, October 5, 1935

MEDICINE

Finds That Liver Extract Relieves X-Ray Sickness

X-RAY sickness, which has been a distressing accompaniment and sequel to X-ray treatment in many cases ever since the rays were first used in treatment, may be relieved by liver extract, Dr. Barton R. Young of Temple University Medical School reported at the meeting of the American Roentgen Ray Society.

The liver extract may be injected into either muscles or veins.

Dr. Young gave the extract to a series of thirty patients who suffered from nausea and vomiting following X-ray treatments. Over half of the patients were completely relieved by the liver extract and about one-fourth more were partially relieved. The remainder were not helped.

Just why the liver gives relief to these patients Dr. Young said could not be explained at the present time. It is not a specific cure for X-ray sickness because it does not help all patients. There is no way of telling in advance which patients will be relieved. But it produces no harmful effect, so Dr. Young advises using it on every patient suffering from X-ray intoxication. By using liver extract, it is possible to give larger X-ray doses over larger areas of the body, especially when the X-ray treatment is directed to the abdomen.

Science News Letter, October 5, 1935

IN SCIENCE

SEISMOLOGY

New Guinea Has Second Earthquake in 4 Days

NEW Guinea's northern coast and the adjacent sea bottom were shaken by the second strong earthquake in four days, on the morning of Monday, Sept. 23, at 4:18.3 a. m., Eastern Standard Time. Time and position of the quake were determined by seismologists of the U. S. Coast and Geodetic Survey, on the basis of information gathered by wire by Science Service.

The epicenter, or spot of greatest earth movement, was only a little off the equator; it was in latitude one degree north, longitude 138 degrees east, somewhat to the northwest of the shock of Friday, Sept. 20.

Seismograph stations reporting to Science Service were those of Georgetown University, Washington, D. C.; St. Louis University, St. Louis, Mo.; the University of California, Berkeley, Calif.; Seismological Observatory, Pasadena, Calif.; and the observatories of the U. S. Coast and Geodetic Survey at Tucson, Ariz., and Chicago.

Science News Letter, October 5, 1935

PSYCHOLOGY

Learn to Draw by Dancing Suggests Psychologist

GYMNASTICS or dancing as preliminary training for drawing is the suggestion made in Germany by Prof. Gunter Schiebe as the result of a study of 2519 drawings made by 478 children aged all the way from 4 to 18 years.

The young artist should feel a joy in movement, Prof. Schiebe says, and before he begins his drawing lessons he should be given training in the larger movements in rhythmic exercises.

The children tested in Prof. Schiebe's experiment were told to draw a tree so as to represent a certain feeling such as happiness, cold, suffering, sadness, and so on. Regardless of the child's ability in drawing, he was able to give some indication of the mood he was trying to portray, it was found. This was done by variations in the size of the tree, its general pattern, and the way the branches were pictured.

Science News Letter, October 5, 1935

E FIELDS

PALEONTOLOGY

Great Skull of Mammoth At New York State Museum

See Front Cover

LOOKING squarely at you through the frame of its great curved tusks, the huge skull of a mammoth recently placed on exhibition at the New York State Museum in Albany produces a most awesome effect. The awesomeness is not diminished, either, by the leg-like arrangement of the half-dozen supporting rods needed to hold up its ponderous weight, which somehow produces a vague suggestion of a vast, fantastic insect, striding out of an antediluvian dream.

The skull, known officially as the Randolph Mammoth, was found during excavations at the New York State Hatchery near the town of Randolph. It was in fragments, and cost more than a little difficulty and labor to get together, but the final assembly produced an almost perfect specimen.

The tusks are complete, and are unusually fine specimens. One is exactly 9 feet long, the other 9 feet 4.5 inches.

Science News Letter, October 5, 1935

PSYCHIATRY

Dream Doctors Practiced Long Before Freud's Time

CHEROKEE Indians in North Carolina have dream doctors, who practice a primitive brand of psychoanalysis that was old long before Sigmund Freud was born.

How these Indian doctors treat disease by exploring the patient's dream life has been investigated by Dr. Frans M. Olbrechts, Belgian ethnologist, for the Smithsonian Institution.

Cherokee medicine men used to think of dreams as very powerful experiences that could actually cause an illness, Prof. Olbrechts reports. But nowadays, perhaps through a touch of white man's influence, they lean more to the view that dreams are omens explaining the occurrence of a disease.

Following either theory, the dream doctor hunts for the guilty dream, even if he has to probe the patient's dream life for two or three years back. Once the dis-

ease cause is found, the doctor sets to work to make it let go its hold. The patient takes the herb or other treatment prescribed, confident that the evil is being chased out.

Among dreams that Cherokee doctors find significant, are listed these:

Burning a foot, hand, or finger in a dream will be followed by snakebite.

Dreaming that your ball team wins a game means some one in the village will soon die.

Dreaming of a train journey with a companion means the companion will die within the year.

A nightmare of the long-haired little people of the hills, evil fairies, is a forerunner of insanity.

Dreams about fish, a crowd of visitors, losing some personal belonging, or a variety of other things are signs of general sickness that the dream doctor finds significant.

In studying Cherokee medicine—of which dreams are one colorful feature—Dr. Olbrechts was guided by an old Indian manuscript which has belonged to the Smithsonian for some time, and which was partly edited by James Mooney of the Smithsonian staff before his death.

Science News Letter, October 5, 1935

ARCHAEOLOGY

Horses Found Buried With Medieval Women of Asia

GRAVES of Bronze Age men—and also women—buried with one, two or even three faithful steeds beside them have been discovered in the Altai Mountains.

An expedition from the Moscow State Museum of History, exploring seventh to ninth century graves in these mountains of southern Siberia, uncovered the burials in which horses were so conspicuous.

The skeleton of one warrior was found accompanied by three horses in full harness, a servant, weapons, ornaments of gold and silver, and other possessions. The archaeologists listed 224 antique articles from this extraordinary burial alone. One silver jug bears writing in Orkhon script, an ancient Turkish script of the seventh and eighth centuries.

Stone cases formed coffins for the bones interred in one of the mounds.

Millstones from a hand mill found in one mound, together with evidence of an irrigation system, are reported as evidence that agriculture was extensively developed in the Kuray Steppes of this mountain region.

Science News Letter, October 5, 1935

DENTISTRY

Better Dental Diagnosis With Mercury Lamp

THE HIGH intensity mercury vapor lamp is being tried out in New York City as an aid to better dental diagnosis. Instead of examining the mouth in daylight or by the light from ordinary electric lamps, Dr. M. M. Scheman of Brooklyn is using the ghostly blue-green rays from the mercury lights in his practice.

Many people are familiar with the almost sickly greenish-yellow color to which a person's face turns under the mercury light. Dr. Scheman finds that the teeth appear whiter and the mucous membrane of the mouth looks dark purple in the same rays. Mouth diagnosis is aided by bringing about a sharper contrast between healthy and unhealthy tissues, he finds.

Besides the apparent greater whiteness of healthy teeth, it has been found that there is a slight characteristic fluorescence. Tartar and film deposits on the teeth do not fluoresce in this fashion, and, as a result, stand out sharply in contrast to increased whiteness of the healthy enamel.

Since the mucous membrane tissues turn to their deep purple color, there is considerable contrast between them and the mouth disturbances which retain their normal appearance. Ramifications of the blood vessels, it is found, are more clearly defined than under normal illumination. Pathological disturbances in the mouth such as abscesses, conditions of inflammation in and about the necks of teeth and the mucous membranes are sharply accentuated by marked changes of color.

Science News Letter, October 5, 1935

AGRICULTURE

Hebrew University Starts Agricultural College

HEBREW University, Jerusalem, is constructing laboratory buildings for a new college of agriculture. It is expected that the institution will be ready for students in the fall of 1937.

Agriculture has always been the major occupation for the Arabian and Jewish population of Palestine, and it is expected it always will be. Conditions of land and climate are so different from those found in other parts of the world, however, that extensive research will be necessary for the reorganization of life on the land along modern scientific lines.

Science News Letter, October 5, 1935