

STATISTICS

United States Now Has Complete Death Records

DEATHS are now recorded for the first time in the whole United States. With the admission of the State of Texas to the U. S. death registration area, just announced by Secretary of Commerce Roper, the Census Bureau is able for the first time to compute reliably the death rate for the entire nation. The cause of every death in the United States will now be a matter of record, as will also the age, sex, occupation and nativity of the dead person.

When the Census Bureau first began to gather vital statistics for the nation, in 1902, only ten states and the District of Columbia were included in the death registration area. Gradually other states have been added. But six states have been admitted only during the past six years.

Texas is still not included in the area of registration of births. It is hoped that this will be attained during the coming month, however, thus making Uncle Sam's vital statistics 100 per cent. complete so far as area is concerned.

Science News Letter, September 30, 1933

ENGINEERING

Boulder Dam Sets Record For One Day's Concreting

AN ALL-TIME construction record for pouring concrete was established on the Boulder Dam project when in one day 7,000 cubic yards of the liquid stone were mixed and placed in forms on the job, according to engineers of the U. S. Bureau of Reclamation and Six Companies, Inc., builders of the dam.

Out of the total amount of concrete poured during a 24-hour day, 6,150 cubic yards went into the dam and the balance was placed in a spillway on the Arizona cliff of Black Canyon above the damsite.

The largest amount of concrete poured in any one day on any project heretofore, according to figures available at Boulder City, Nev., was 3,600 cubic yards on the Conowingo Dam and power plant in Maryland.

Boulder Dam, 730 feet high, tapering from a 650-foot base to a 45-foot crest and averaging 770 feet in width, will be the most massive structure ever built. It will require 3,400,000 cubic yards of concrete, weighing 7,000,000

tons. Two and one half years have already been spent on construction and approximately 30 months more will be required for completion. The project, including the dam, a powerhouse and reservoir appurtenances on the Colorado river, will cost the government \$108,800,000 of which \$48,000,000 have already been appropriated.

Science News Letter, September 30, 1933

PSYCHOLOGY

Arguments Change Minds Of 1300 University Students

AN ARGUMENT is most effective when it is addressed orally to a woman alone, Dr. Franklin H. Knowler reported to psychologists.

When thus presented it produces a much greater change in attitude on the part of the listener than when it is presented to men, in printed form, or to persons in an audience, Dr. Knowler said.

Thirteen hundred university students took part in the experiment which disclosed these facts. A special test was used to determine their initial attitude on the prohibition question. Then they were presented with one or another of two types of argument on the question. The first type was mainly an appeal to reason; the second was an appeal to emotion.

A second test of attitude showed that both types of appeal were about equally effective, and both produced a significant change in attitude.

Science News Letter, September 30, 1933

PALEONTOLOGY

2,000 Tons of Sandstone Hold Dinosaur Skeletons

SKELETONS of two huge dinosaurs have been discovered near Graybull, Mont., by Barnum Brown of the American Museum of Natural History. Mr. Brown expects to dig them out, but not this year.

To get them out will require a major job in stone-quarrying, for a mass of sandstone 45 by 65 feet in area and 10 feet thick will have to be moved. This figures up to 29,250 cubic feet. Allowing an average weight of 143 pounds per cubic foot for sandstone, the total weight comes to something over 2,000 tons, or about 15 carloads.

The discovery of the skeletons is announced in *Science*.

Science News Letter, September 30, 1933

IN SCIENCE

ASTRONOMY

Lost Minor Planet Believed Relocated

ATINY POINT of light, just visible in a strong telescope, has been picked up by Dr. E. F. Carpenter of the Steward Observatory of the University of Arizona. It is believed to be the lost asteroid Zerlina, one of many hundreds of tiny, usually disregarded planets that swing around the sun.

When first observed, Dr. Carpenter's object was of fourteenth magnitude, far too faint for naked-eye visibility. Its astronomical location was right ascension 22 hours 16 minutes 16 seconds, declination plus 28 degrees 55 minutes 30 seconds. The discovery has been reported to Harvard College Observatory, which is the American clearing house for astronomical news.

Science News Letter, September 30, 1933

BOTANY

Fungi More Numerous Than Higher Green Plants

PLANTS that tear down are more numerous than plants that build up. This appears from a survey of the fungi reported to the official journal of the Botanical Society of America, by Prof. G. R. Bisby of the University of Manitoba.

Comparative counts of plant lists from large geographical areas show fungus species at least as prominently as species of green plants, and when the lists from smaller regions, in which the plants are more completely known, are compared the fungi rise to majorities that are sometimes topheavy.

Fungi are divided into two classes, those that live by devouring dead and decaying plants and animal material, which includes most of the mushrooms, puffballs, molds and yeasts; and those that are parasitic, like the most common diseases of plants. Of the two groups, the fungi that attack non-living matter outnumber the parasites and are more widely distributed.

Science News Letter, September 30, 1933

CE FIELDS

ARCHAEOLOGY

2,000-Year-Old Mitten Found in Swedish Bog

A WOOLEN mitten lost about 100 B.C., and a woolen cloak lost centuries before that, have been found in peat bogs in southern Sweden.

At the Stockholm Historical Museum, where the long-lost articles were brought for safe keeping, experts determined the ages of the garments by examining pollen grains left in the yarn. The plants which yielded the pollens are known to have grown in Sweden in definite periods. The mitten dates from shortly before the Christian era, but the cloak, much older, dates from the Bronze Age.

Both garments were made of coarse, double-spun brownish wool yarn, mixed with animal hair, probably from cattle.

Science News Letter, September 30, 1933

CHEMISTRY

Encyclopedia of Reactions Planned for Chemists

AN ENCYCLOPEDIA of chemical reactions, believed to prove very valuable to research workers of the future, has been started by Prof. C. A. Jacobson of West Virginia University. The plan of the proposed publication is presented in the current issue of the *Journal of Chemical Education*.

The work is based on an ingenious scheme for quickly locating any chemically active substance and the reagent with which it reacts. These are arranged alphabetically and are numbered under each element. Opposite these two will be found, briefly stated, the conditions governing the reaction, as well as the completed equation expressing the reaction products, together with reference to the original publication.

It is international in character and scope, and the conditions for the reactions will eventually be printed in English, French and German.

Dr. Otto Reinmuth points out in an editorial note:

"A truly exhaustive search of chemi-

cal subject matter is seldom attempted and probably represents in reality only an ideal to be approached as closely as possible. A work of the type proposed by Dr. Jacobson would combine the convenience of an index with a considerable portion of the informational content of abstract and reference works."

It is the hope of the initiators of this scheme that sufficient support will be obtained to carry the work to completion.

Science News Letter, September 30, 1933

EDUCATION

Science Doctorates Increase During Depression Years

THE YEARS of depression have had a stimulating effect upon higher education, it appears from a report to *Science* by Dr. Clarence J. West and Miss Callie Hull of the National Research Council.

The number of doctors' degrees granted by American universities in the sciences has steadily increased from 1,025 in 1929 to 1,343 in 1933, these investigators found. The 1,343 doctorates granted in 1933 were distributed among the sciences as follows:

Chemistry, 417; physics, 123; zoology, 115; psychology, 101; botany, 79; mathematics, 78; engineering, 75; geology, 66; physiology, 39; agriculture and forestry, 36; bacteriology, 36; pathology, 23; anatomy, 17; entomology, 17; genetics, 15; horticulture, 15; anthropology, 13; pharmacy and pharmacology, 13; archaeology, 10; astronomy, 10; geography, 10; public health, 10; medicine and surgery, 10; metallurgy, 9; paleontology, 6.

Science News Letter, September 30, 1933

PLANT PHYSIOLOGY

Fungus Disease Menaces Snapdragons in England

SNAPDRAGONS, favorite flowers in English gardens, are menaced by the appearance of a new fungus disease. The disease has long been troublesome in flower gardens in Canada, the United States and Bermuda. How it got into England is as yet unknown. The causal fungus is related to the very destructive rust fungi of wheat, oats and other grains belonging to the rust genus *Puccinia*.

Science News Letter, September 30, 1933

ORNITHOLOGY

200 Young German Storks Get Free Train Ride

STORKS have been getting scarce lately in western Germany. Germans, especially the younger generation, have been concerned over this, for the long-legged birds, long given to nesting on housetops and unused chimneys, are popular birds and are supposed to be carriers of good luck as well as new brothers and sisters.

Ornithologists found no scarcity of storks in East Prussia, and felt that moving a few of the surplus stork population would do no harm. So 200 young birds of this season's crop have been captured and given a free train ride into western Germany where they were released near Essen. The funds for the purpose were supplied by the Emergency Commission for German Science, and the railways came half way with reduced fares for storks.

Now the ornithologists are wondering whether these transplanted East Prussian storks will return to their new homes next spring after a winter's sojourn in Africa, or whether they will go back to the land of their ancestors.

Science News Letter, September 30, 1933

PALEONTOLOGY

Bones of Extinct Mammal Found Near Mexico City

BONES of a gigantic extinct mammal recently found near the Mexico City, suburb of Guadalupe have proved to be those of a genus near *Megatherium*, or giant ground sloth, found in the past in the Argentine, but never with certainty before in Mexico. The exact species has not yet been determined by its discoverer, Prof. Federico K. G. Muellier, of the Mexican Institute of Biology.

The find consisted of an entire pelvic bone, several vertebrae and ribs, parts of the extremities, and four fallen molars, all belonging to a single specimen. They were unearthed in an excavation near which bones of a fossil elephant had previously been discovered.

They lay at a depth of from four to six feet below the surface of the ground in a layer of clay, deposited perhaps by late pre-glacial lakes, to judge by fossil snail-shells the same strata also contained.

Science News Letter, September 30, 1933