

ARCHAEOLOGY

Official Shrine of Chinese Emperors Found

AN OFFICIAL shrine where lofty emperors of China went personally to sacrifice farm animals to a pastoral Earth Goddess has been discovered by an expedition from the Freer Gallery of Art of the Smithsonian Institution. A report issued at Washington, D. C., says that the site was explored by W. J. Chang and K. Z. Tung, directed by C. W. Bishop, archaeologist of the Freer Gallery staff.

Abandoned for almost 2,000 years, the site of the shrine still has a reputation for the supernatural, and this awe of the place proved one clue that led to its scientific discovery. The shrine was in a sheltered recess at the foot of a rocky hill standing alone in a plain.

The shrine is believed to have been built about 113 B.C. by an emperor of the Han dynasty, Han Wu Ti. Early in the Christian era, the capital was moved and a new mound to the Earth Goddess was erected. So completely was the old shrine forgotten that the archaeologists found it only after tracking a number of false clues.

Excavations revealed bricks and tiles with Chinese inscriptions, stone knives, copper objects, iron arrowheads, and shell and bone implements. These are being studied by Chinese specialists.

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BIOGRAPHY

American Microbe Hunter Honored By Royal Society

DR. THEOBALD Smith of the Rockefeller Institute, Princeton, N. J., pioneer American microbe hunter, has been awarded the Copley medal of the Royal Society of London in recognition of his original research and observations on diseases of animals and man.

One of Dr. Smith's most notable achievements was the discovery that Texas cattle fever was caused by the bite of an infected tick. This work was done while he was with the U. S. Department of Agriculture in Washington. This discovery not only showed the way to prevent the fever which had been causing tremendous economic loss to the cattle industry, but pointed the way for the discovery that malaria is carried by mosquitoes and African

sleeping sickness by the tsetse fly.

Another of Dr. Smith's important contributions to science and the welfare of mankind was the discovery of the cause of bovine tuberculosis. He was the first to distinguish the bacillus of this disease from the bacillus of human tuberculosis.

Dog lovers all over the world will be glad to know that one of the two British scientists who discovered a vaccine for protecting dogs from distemper has been awarded a medal by the Royal Society. The recipient of the medal is Dr. P. P. Laidlaw, of the Medical Research Council. He is well known to scientists for his studies of viruses, the puzzling agents that cause diseases such as influenza and distemper which is thought to be the canine counterpart of the 'flu. Development of the distemper vaccine was made in collaboration with G. W. Dunkin under the auspices of the Field Distemper Council.

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ZOOLOGY

Elephants in Africa Bothered by Mail Planes

STORIES of the fabled Roc, the great bird of the Arabian Nights, that could pick up an elephant as a hawk picks up a hen, are recalled by the present plight of African elephants, which are very much annoyed by the overhead rush of airmail planes.

Capt. R. J. D. Salmon reports that the huge beasts' dislike of the noise of the motors has changed their habits completely, and caused them to seek new feeding grounds to the north and south of their former range. This in turn has brought some of them into contact with cultivated areas where they have damaged native gardens.

Unrest is spreading among the elephants. Until three years ago the majestic old bulls yearly mustered on the East Nile, but this has ceased. If the herds become more restless and insist on entering inhabited areas, reduction in the total number is inevitable.

Captain Salmon holds out little hope that the wild elephants will ever become accustomed to the noise of airplane engines. He observes that the trained elephants in the Belgian Congo never become really indifferent to the sound of gasoline engines, and it seems unlikely that the herds in Uganda will ever learn to browse peacefully as the airmail goes overhead.

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IN SCIENCE

MEDICINE

Convicts Escape Disease And Win Freedom

TEN Mississippi convicts who risked their lives to aid science walked out of the state prison at Parchman, Miss., alive and free.

Their liberty was restored to them as reward for their heroic service to the society against which they committed their crimes. They furnished the proof with their own bodies that encephalitis, sometimes called sleeping sickness, is not carried by mosquitoes.

The proof enables scientists, seeking to protect society from the disease, to narrow the range of investigation and so to come closer to knowledge of how the disease is transmitted from the sick to the well.

Another group of convicts, volunteers from the Virginia state prison, are giving further proof that mosquitoes do not spread the disease. These men started to serve their sentence as human guinea pigs later than the Mississippi group.

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GENERAL SCIENCE

Exiled Jewish Scientists To Teach in Jerusalem

GERMAN Jewish scientists, deprived of their posts by the Hitler government, are being added to the staff of the Hebrew University at Jerusalem, Chancellor Judah L. Magnes announced. Prof. Adolf Fraenkel, formerly of the University of Kiel, will occupy a chair in pure mathematics in the Einstein Institute of Mathematics. Prof. Ludwig Halberstaedter of Berlin, who is now in Palestine, is slated to take over a new chair in radiology, the establishment of which is expected soon. Suitable candidates for Hebrew University posts in psychology, physical chemistry, physics, pharmaceuticals, pathology and clinical chemistry, as well as for several new chairs in the languages and the humanities are being sought.

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CE FIELDS

ORNITHOLOGY

Rare Bird Courtship Shown By New Museum Group

See Front Cover

ROMANTIC squires and young knights of the sunset days of feudalism paid court to the lovely ladies of their fancy in elaborately built bowers set in corners of the castle grounds. Even in these livelier days, when troubadours carry saxophones and steel guitars instead of plaintive lutes and melancholy citherns, secluded bowers do not come amiss.

But long before the first love-courts were held in the Languedoc, the bower-birds of the tropics were bowing and scraping and displaying their finery before their inamoratas, in elaborately constructed bowers which they built and brightly adorned, and they may be at it still after the last lad has ogled the last lass. The cover-picture of this issue of the SCIENCE NEWS LETTER, showing a new group mounted in the Field Museum in Chicago, is of a species of bower-bird from New Guinea. It is the habit of this species to use bright berries and fruits as ornaments for his dancing platform. When they wither, he carefully deposits them on a trash-heap, and replaces them with fresh ones.

Once the lady has accepted him, they set up housekeeping in a tree near by. But the bower is not abandoned. The male continues to use it for a play-room.

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PUBLIC HEALTH

Children's Weight Normal In Spite of Depression

THE WEIGHTS of American school children have not been materially affected by the depression, it appears from a survey made by Dr. Carroll E. Palmer of U. S. Public Health Service.

"There is substantially no change in the weight of boys and a slight increase in the number of underweight girls during the last few years of the economic depression," Dr. Palmer concluded from his findings.

"Inasmuch as body weight of the young and growing child is usually affected by severe nutritional deficiencies, it may be inferred that the nutritional status of children now is certainly not markedly below that which obtained during the preceding decade," he pointed out.

The survey was made among elementary school children of Hagerstown, Md.

Dr. Palmer suggests two reasons why the weights of Hagerstown children have not shown the effects of the depression. The first is the aid provided deserving and distressed families by a well-organized and highly efficient welfare agency such as Hagerstown possesses. The second reason is that in times of stress more attention may be given by the poorer families themselves to dietary matters.

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PSYCHOLOGY

Typewriter Script Read As Easily As Linotype

TYPEWRITER script can be read with almost the same speed and accuracy as the printed type produced by the linotype, Dr. Edward B. Greene found in tests conducted at the University of Michigan.

Students, in ten-minute tests, read the linotype a little faster than the typewriting when both were in 7-point size, but found the typewriting easier when in 10-point size, the "elite" size more commonly used in typewriters. The differences were so small, however, that linotype and typewriter script may be considered practically equal in legibility. It must not be assumed, however, that they would necessarily be equivalent for students not so advanced, for other kinds of type, or for longer periods of reading, Dr. Greene warned.

Both linotype and typewriter samples were arranged in double columns on 8½ by 11 inch sheets with an intercolumn space of about half an inch (15 mm.) All the samples were printed on a white, medium weight, bond paper in black ink without extra spacing between lines. The spacing between letters of the linotype material varied to fill the line and make the right margin even; spacing of the typewritten material was always the same and the right margin left uneven.

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PSYCHIATRY

New Clinic Treats Slight Mental Ailments

NEW HOPE for the patient who needs very brief treatment in a mental hospital is afforded by the new approach to the mental health problem exemplified in the new psychiatric clinic at the Boston State Hospital, Boston.

A commitment to a state hospital for mental disease is not the life sentence many people believe it to be. Nearly half, 45 per cent, of the patients admitted to the Boston State Hospital during a period of ten years remained only six months or less. Nineteen per cent, were there not more than 30 days.

The new clinic is designed to segregate these recoverable cases from those who are violent, infirm, or hopelessly ill. It also furnishes agreeable surroundings with private rooms, wide verandas, visiting rooms, and windows without bars. There are plenty of facilities for modern therapeutic methods, and also barber shop and hair-dressing rooms, cafeteria, and other provisions for the comfort and happiness of the patients.

The new clinic and its purposes are described by Dr. James V. May, Massachusetts Commissioner of Mental Diseases, in the Monthly Bulletin of the Massachusetts Society for Mental Hygiene.

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ENGINEERING

Diesel Powered Automobile Makes New Speed Record

A NEW WORLD'S speed record for diesel powered automobiles was made at London by Capt. G. E. T. Eyston at Brooklands track, traveling 102.86 miles per hour over a measured mile and 103.25 miles per hour over a kilometer. Despite heavy rain that necessitated nonskid tires, Capt. Eyston beat the previous record of 100.75 miles per hour created at Daytona, Florida, in February, 1931, by C. L. Cummins.

The engine has a 8.85 liters cylinder displacement and develops 130 horsepower from six cylinders. It was made by the Associated Equipment Company. Identical engines are used in many London omnibuses. Its total weight is only 1414 pounds.

The car is a comfortable fourseater saloon model with an entirely enclosed streamlined body.

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