is grown in India—German chemists have invented a new fiber from straw as a substitute.

Realizing that some of the jute substitutes devised as war emergency goods by foreign countries may prove good enough to be permanent, technologists in India are all the more determined to give jute new jobs to do. India can use most of her production, if research is pushed ahead, some technologists believe.

Science News Letter, July 26, 1941

MEDICINE

Bubonic Plague Conquest May Come With Sulfa Drugs

BUBONIC plague, constant danger to life in the Orient and no stranger to the United States even today, is slated as the next conquest of the sulfa drugs. Sulfathiazole, when given with anti-plague serum, saved 98% of plague-infected mice, Dr. Karl F. Meyer, of the University of California, has announced. He believes that the drug alone will prove effective.

One human plague patient has already been treated with sulfathiazole, but did not get the drug until he had been sick with plague for 10 days. Although the drug was given too late to save this patient's life, he survived 30 days, which is at least two weeks longer than would be expected without the drug.

Plague occurs in ground squirrels and wild rodents in this country as far east probably as Nebraska, and causes one human case per year.

Although efforts are still being made to protect humans from this wild rodent plague, Dr. Meyer says he is no longer so worried about the situation, now that sulfathiazole has appeared for treatment of the patients.

Science News Letter, July 26, 1941

PHYSIOLOGY

Remote-Control Stimulation Of Nerve Moves Leg Muscles

Studies Hold Promise of Throwing Light on Problems Of Crippling Paralysis and Certain Athletic Prowess

MAKING the muscle of a frog's leg contract by remote-control electric stimulation of the nerve has been achieved by Dr. Joseph A. Gengerelli and N. J. Holter, of the University of California at Los Angeles.

Their studies are said to hold promise of shedding light on certain phases of athletic prowess and also on the problems of crippling paralyses.

Electric currents have been used in the past to excite the muscle-moving action of nerves. In those experiments the nerve was put in direct contact with an electric current. But the California researchers have gone farther. In their study the leg muscle and controlling nerve of a frog were put on a glass slide and placed between two 7 x 5 inch condenser plates which were separated by a distance of 2½ inches. The specimen slide touched neither plate. Yet when 2000 volts potential difference was applied to the plates of the condenser, the frog muscle responded by contracting. When the condenser was discharged, the muscle contracted again.

The test was carried farther by placing a drop of water on the frog leg nerve. The muscle failed to respond to the electric "wireless" between the plates. Apparently, said Dr. Gengerelli, the water acted as a shield like the metal which covers the wires leading from receiver to antenna in an automobile radio.

Science News Letter, July 26, 1941

PALEONTOLOGY

Crocodile Stomach Stones Travel Safely Through War

Stanford Geologist Wanted Them From Africa For Comparison With Stones From Stomachs of Dinosaurs

THROUGH Britain's war zones in Egypt there have come to the Stanford University geology museum two pounds of stomach stones from Uganda crocodiles. "Crocs" fill their stomachs with stones just as chickens fill their gizzards with pebbles.

Prof. Bailey Willis, veteran Stanford geologist, is telling the story of how scientific colleagues in Africa, in spite of the war, sent him by His Majesty's post bits of rock that crocodiles swallow and retain in their interior anatomy.

These crocodile stomach stones are exhibited beside stones from the stomachs of dinosaurs that lived 60,000,000 years ago. The dinosaur stones are washed out from among the bones of the giant extinct reptiles unearthed in our western states. Prof. Willis had the dinosaur stomach stone collection and he wanted to compare them with similar stones from crocodiles that he had heard about during his African travels. So he wrote to scientific friends in Uganda.

The reply was that no crocodile stomach stones were immediately available because crocodiles were getting scarce in Africa and game laws protected them. But the game warden, who could legally make such a collection, promised to send the eminent American professor the specimens he wanted as soon as possible.

All this was before the war. When hostilities began and shipping was interrupted, Prof. Willis gave up hope of getting his cherished crocodile stomach stones.

He was agreeably surprised when nearly two years later the postman delivered a parcel post packet, passed by the censor, bearing marks of having come down the Nile through Egypt and via besieged Great Britain.

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