Coleman for the school of medicine. The gift is in the form of a memorial to their daughter and will be used to endow the chairs of ophthalmology, surgery and gynecology.

ANNOUNCEMENT has been made of the gift by the Carnegie Corporation of \$20,000, annually for two years, to the University of Louisville medical department, while plans are being perfected for raising an endowment fund. The added income will be used largely in developing the department of pediatrics.

CAMBRIDGE UNIVERSITY receives by the bequest of the late Mrs. Constance Jenkinson £2,216 for the purpose of founding a lectureship for the encouragement and advance of research in comparative and experimental embryology in the university, to be called, in memory of her late husband, the John Wilfred Jenkinson Memorial Lectureship.

DR. CHARLES K. EDMUNDS, for the last fifteen years president of Canton Christian College, China, was installed on July 1 as provost of Johns Hopkins University. Dr. Edmunds is an alumnus of Johns Hopkins and for eleven years was in charge of the Carnegie Institution's magnetic survey of the China coast.

DR. WILLIAM H. S. DEMAREST, president of Rutgers College, has resigned. The dean of the college, Walter T. Marvin, became acting president on July 1.

DR. A. PRINGLE JAMESON has resigned from his position as professor of zoology in Mills College, Oakland, California, and has accepted a lectureship in the University of Cambridge, where he will have charge of investigations on the parasites of domestic animals. Dr. Horace Gunthorp, of the University of Washington, has been appointed as head of the department of zoology at Mills College.

DR. WILLIAM G. SMEATON and Dr. Floyd Bartell have been promoted to full professorships in the department of chemistry, University of Michigan.

DR. SAMUEL C. HARVEY has been appointed professor of surgery at Yale University.

DR. JOHN FAVILL has been appointed clinical professor in the department of medicine at Rush Medical College at the University of Chicago.

At the University of Minnesota Dr. Karl S. Lashley has been promoted to be professor of psychology.

DR. RICHARD BUETNER, of the University of Leyden, formerly of the Rockefeller Institute, has been appointed assistant professor of pharmacology in the University of Louisville medical department.

DR. EDMUND M. SPIEKER, of the United States Geological Survey, has been appointed assistant professor of geology at Ohio State University. C. D. HURD, of the University of Illinois, has accepted an assistant professorship in organic chemistry at Northwestern University.

RECENT appointments in the faculty of the University of Arkansas include George C. Fracker, dean of the college of liberal arts of the University of Dubuque, to be professor of psychology and philosophy; Paul A. Cushman, assistant professor in the Brooklyn Polytechnic Institute, to be professor of mechanical engineering; Claud F. Clayton, University of Minnesota, to be associate professor of rural economics.

DR. GLOVER M. ALLEN has resigned as secretary of the Boston Society of Natural History and has been added to the staff of the department of zoology at Harvard University as lecturer on zoology. Dr. Allen will remain librarian of the Boston Society and will also continue his researches on the mammal collections of the Museum of Comparative Zoology.

Dr. HARRY SELTZ, instructor at the University of Pennsylvania, has been appointed instructor in physical chemistry at the Carnegie Institute of Technology in Pittsburgh.

## DISCUSSION AND CORRESPONDENCE

## THE FOSSIL ELEPHANTS OF MINNESOTA

DURING the last year and a half several very remarkable finds of elephant remains have been made within the state of Minnesota. These consist of parts of the skeleton in almost perfect preservation. The first was discovered while making an excavation for the abutment of a bridge over a new dredge ditch that drains the area south of Blue Earth River, eight miles southeast of the town of Blue Earth, and four miles west of Frost. This area is an old post-glacial lake bed, according to Dr. George A. Thiel, who superintended the removal of the bones, and in which no drift was cut by the ditch. The bones were in clay and sandy layers seven to ten feet below the surface, the upper four or five feet of which pass into a black soil. The skeleton was apparently somewhat scattered as originally deposited, for only a few vertebrae, a half dozen ribs, a radius, the head of a humerus and of a femur, three tarsal bones and various other fragments were recovered. But these are sufficient to show the size of the animal and for its identification, since a comparison of them with the next specimen indicates that they came from an animal similar in every respect.

The second of these recent finds is the best and most complete specimen so far found in the state. It came from Mr. P. D. McMillan's farm in the eastern part of Freeborn County and was found in the superficial deposits of the area which was formerly Rice

Lake. Some years ago this was a swamp and shallow lake area. Here and there wooded knolls and knobs thirty to forty feet above the general level were islands in the old lake. The filling ranges from a fine gravel to sand and clay with a thick muck soil at the top. Within the last few years a large ditch has been dug through this area and it is now completely drained and bids fair to be one of the finest farming sections of the state. Last spring (1923), when the ditch was being widened and deepened, the dredge threw out parts of the skeleton of a mammoth. These attracted the attention of Mr. McMillan, who brought the upper jaw to the University of Minnesota. Further search was then instituted and this resulted in the recovery of about one fourth of the skeleton. The specimen was found in a stiff blue clay about fifteen feet below the surface with no drift above it. Apparently the skeleton was lying crosswise with the ditch, the tusks being out under the bank. It seems that it had not been disturbed since it sank into the soft muds of the lake and probably the balance of the skeleton is still in place. The portions recovered consist of the upper jaw with an excellent pair of teeth, fragments of the pelvis, one femur, two tibias, tarsals, meta-tarsals, phalanges, one humerus, the larger part of one ulna, various fragmentary ribs, fragments of the cranium and tusk sheaths, vertebrae from the neck, back and tail. Measurements of certain of the skeletal elements indicate an animal about eleven feet high, and the teeth exhibit the usual formula for Elephas columbi with seven to seven and one half lamellae to one hundred millimeters.

Most of the previous finds have been of the teeth only and these have been so associated with the drift that it was impossible to determine whether they belonged to the glacial or the post-glacial period. These recent finds seem to indicate that the Columbian elephant survived the glacier in Minnesota and that perhaps we may hope to make other even more important finds as the great muskegs and swamp areas of northern Minnesota are drained.

The following is a list of the elephant remains so far known to have been found within the state:

(1) Elephas columbi, a tooth from Rock County, Minnesota.

(2) Elephas columbi (?), fragments of vertebrae from Kenyon, Goodhue County, Minnesota.

(3) *Elephas columbi* (?), part of the pelvis found in river gravels eight feet below the surface at Red Wing, Goodhue County, Minnesota.

(4) Elephas columbi, a tooth from the river gravels near Red Wing, Goodhue County, Minnesota.

(5) Mastodon americanus (?), a vertebra "found in a bed of coarse gravel eight feet below the surface," at Owatonna, Steele County, Minnesota.

(6) Elephas columbi (?), a large piece of bone from the drift at Brainerd, Crow Wing County, Minnesota. (7) Elephas columbi (%), a part of a femur labeled an ''elephant leg bone from the drift at the site of the M. & St. L. roundhouse, Cedar Lake,'' Minneapolis, Hennepin County, Minnesota.

(8) *Elephas columbi*, a tooth from Hastings, Dakota County, Minnesota.

(9) Elephas columbi, a tooth dredged from the Mississippi River at St. Paul, Minnesota.

(10) *Elephas columbi*, portions of a skeleton from postglacial lake beds, four miles west of Frost, Faribault County, Minnesota.

(11) Elephas columbi, about a fourth of the skeleton, including the upper jaw and teeth, from post-glacial lake beds sixteen miles northeast of Albert Lea, Freeborn County, Minnesota.

(12) *Elephas columbi* (?), base of the skull, showing the occipital condyles, from the drift thirty feet below the surface at Russell, Lyon County, Minnesota.

(13) *Elephas columbi* (1), a tusk, originally four feet long, from the glacial gravels thirty feet below the surface at Farmington, Dakota County, Minnesota.

(14) Mastodon americanus (?), a tusk from the superficial deposits (glacial?) at Stillwater, Washington County, Minnesota.

The remains of Pleistocene mammals and of those that immediately succeeded that period are frequently found in the gravels, peat bogs and old lake beds of Minnesota. Among these the Columbian elephant is probably the most common, but no very great attempt has been made to collect those picked up from time to time nor to make a record of the finds as they are reported. But from the number that come in to the university by this casual manner it would seem they must be abundant.

CLINTON R. STAUFFER

UNIVERSITY OF MINNESOTA

## IS THERE AN ENTOMOGENOUS FUNGUS ATTACKING THE CITRUS RUST MITE IN FLORIDA?

It has been observed annually since 1912 that the citrus rust mite (*Phyllocoptus oleivorus* Ashm.) reaches the point of maximum infestation some time just after the beginning of the rainy season. This is usually the last of June or very early in July. At this time they are usually present in countless numbers. In some instances a single grapefruit may be infested with more than a half million mites. Shortly after the point of maximum infestation is reached the mites disappear as if by magic, so that by the middle or end of September it is nearly impossible to find a single mite present. In some cases more than an hour of diligent search is required to find a single specimen.

There is considerable evidence to show that this disappearance of the citrus rust mite is due to a fungus disease. In many instances the mites congregate on a small area of the fruit which is in the most