A RESEARCH into the harboring of plague by wild rodents and the specific prophylaxis and therapy of the disease in man, is being undertaken by the South African Institute for Medical Research, Johannesburg. The work is to be carried out largely in a mobile laboratory on the veld. The present staff of the institute is to be augmented by a bacteriologist and an entomologist.

THE first elaborate attempt to preserve the native antelopes that abound in the northwest corner of South Dakota is to be carried out in an area of approximately 15 square miles near the Slim Buttes of Harding County.

AN effort to save from extinction the European buffalo, said to be the rarest living mammal in the world, has begun in Stockholm with the opening of a 100 acre preserve, where these animals will be allowed to live and breed under natural conditions. Out of a total of only fifty-six European buffaloes known to be living at the present time, seven are to be found in Sweden, and up to the present time this herd has been kept in the open air museum of Stockholm.

THE Belgian Colonial authorities are now laying off a large tract of territory in the Kiva district (the gorilla country), and this is to be a sanctuary for gorillas and for all other wild animals. Within these bounds not only the fauna but also the flora will be left undisturbed. Provision has been made for a sufficient number of wardens to prevent the intrusion of hunters and to prevent the destruction of plants or trees. The sanctuary will be a sort of Garden of Eden where the animals may live amid their natural surroundings, without fear of man. This reserve lies in the northeastern part of the Belgian Congo between Lake Kiva and Uganda. It embraces the three volcanoes of Mount Mikeno, Mount Karissimbi (altitude 13,500 feet) and Mount Visoke, comprising an area of about 250 square miles of high and healthy territory, with a variety of temperature varying from the mild climate of the plains to the colder atmosphere of the mountain heights. Here the gorilla may live in peace, and the scientists disarmed may come and study the living animal on his native heath.

FISH planting in the streams and lakes of the national parks is becoming an increasingly important item in park administration, according to the Department of the Interior. During the last year, through the cooperation of the United States Bureau of Fisheries and the Montana State Bureau of Fisheries, 18,635,200 Lock Leven and brook trout fingerlings and black-spotted trout fry and eyed eggs were planted in the lakes and rivers of Yellowstone National Park. Most of the fish-planting operations have been in charge of the Bureau of Fisheries, which maintains a hatchery at Yellowstone Lake, although the planting of nearly 100,000 fingerlings supplied by the Montana State Bureau of Fisheries was done by park rangers.

To observe scientific methods of growing timber crops as developed during the past 15 years in the historic Harvard forest at Petersham, the Northeastern Forest Research Council and a committee of the pulp and paper industry met there on September 4 and 5, according to *Chemical and Metallurgical Engineering*. The Research Council was appointed by Secretary of Agriculture Wallace last winter for the purpose of promoting forest research and of working out more reliable methods of growing timber in the forests of the northeast. The council, which is composed of representatives of all interests concerned with forest research, is acting in an advisory capacity to the Northeast Forest Experiment Station, forest schools, state forestry departments and other forest research agencies in the northeast. The meeting will be devoted primarily to studying the successful forestry operations carried out by Harvard University during about fifteen years of intensive forest management. The conference will also discuss present and proposed forest research programs in the forests of the northeast, the location of substations for the Northeastern Forest Experiment Station, and the Clarke-McNary forestry bill passed by the last session of the congress.

UNIVERSITY AND EDUCATIONAL NOTES

BY the will of the late Mrs. Arabella D. Huntington the Hampton Normal and Agricultural Institute will receive $100,000, the American Museum of Natural History $50,000 and the American Geographical Society $25,000.

MARIETTA COLLEGE, Ohio, has received $50,000 by the will of the late Catherine A. Mather, daughter of the first president of the college.

RADCLIFFE COLLEGE, Cambridge, Mass., has received a bequest of $5,000 through the will of the late Joseph H. Clark, of Boston, the income of which "shall be devoted to the advancement and encouragement of original research in such a manner as to the college shall seem best."

A GIFT of £10,000 has been made to the London School of Medicine for Women by an old student of the school who wishes to remain anonymous.

SIR ROBERT BORDEN, former prime minister of Canada, is to be installed as chancellor of Queen's University at the fall convocation.

DR. JAMES LUKENS MCCONAUGHY, president of Knox College, Galesburg, Illinois, has been elected president of Wesleyan University, Middletown, Connecticut.

JAMES R. WITHROW, professor of chemistry at Ohio State University, has been appointed professor of chemical engineering in the university and will head the new department of chemical engineering which has just been organized.

DR. THOMAS W. TURNER has resigned as professor of botany at Howard University, Washington, D. C., and is now head of the biology department at Hampton Institute, Hampton, Va.

OTTO KOPPIUS, assistant professor of physics at Oberlin College, has accepted an appointment as associate professor at the University of Kentucky.

DR. JOHN PAUL VISSCHER, late Bruce Fellow of Johns Hopkins University and special investigator of the United States Bureau of Fisheries, has been appointed assistant professor of biology in Western Reserve University.

DR. LOUIS LEON THURSTONE has been appointed assistant professor of psychology at the University of Chicago.

DR. A. C. SHEAD, of the University of Illinois, has been appointed assistant professor of chemistry at the University of Oklahoma.

DR. ROBERT DAY WILLIAMS, professor of psychology at Pomona College, has been appointed visiting lecturer on psychology at Harvard University for the first half of the academic year.

DR. H. H. DIXON, professor of botany in the University of Dublin, has been appointed Regius professor of botany in the University of Glasgow in succession to Professor F. O. Bower, who has retired.

DR. FRANK CLARE WILKINSON, of the University of Liverpool, has been appointed to the newly created chair of dental science in the University of Melbourne, Australia.

DR. PAUL SCHRÖDER, professor of psychiatry and neurology at the University of Greifswald, has been appointed professor of psychiatry at the University of Leipzig to take the place of Professor Bumke who has resigned.

DISCUSSION AND CORRESPONDENCE

ON THE RELATIVITY MOTION OF MERCURY

IN a note published in the September fifth number of SCIENCE, Professor Poor seems to have become confused as to the meaning of the gravitational radius (1.47 km) of the sun as used in Einstein's theory of gravitation. This confusion is perhaps due to the fact that Eddington, in his treatment of the subject, takes the velocity of light as unity and is not very explicit as to the physical dimensions of the quantities which he uses. Making no restrictions as to the units employed, Einstein's theory leads to the following equations for a planetary orbit,

$$\frac{d^2u}{d\phi^2} + u = \frac{m_e}{h_e^2} + 3m_e u^2, \tag{1}$$

$$r^2 \frac{d\phi}{ds} = h_e, \tag{2}$$

whereas Newton's theory gives

$$\frac{d^2u}{d\phi^2} + u = \frac{m_n}{h_n^2}, \tag{3}$$

$$r^2 \frac{d\phi}{dt} = h_n, \tag{4}$$

where m_e is the constant obtained by integrating Einstein's field equations and m_n is the gravitational mass of the sun in astronomical units. Moreover ds and dt are related to a sufficiently high degree of approximation by the equation

$$ds = c\ dt$$

where c is the velocity of light.

Comparing (2) and (4) in view of this relation it is clear that

$$h_n = c\ h_e$$

Eddington shows that the second term on the right hand side of (1) is very small compared to the first. So neglecting this term comparison of (1) and (3) gives

$$m_e = \frac{h_e^2}{h_n^2} m_n = \frac{m_n}{c^2}$$

As we are making the gravitational constant unity, Newton's law has the dimensional form $LT^{-2} = m_n L^{-2}$, showing that m_n has the dimensions L^3T^{-2}. Therefore, the gravitational radius m_e is of the dimensions of a length, and does not change from 1.50 km to 13.5 $(10)^{20}$ km according to the choice of units, as Professor Poor would have it do.

LEIGH PAGE

YALE UNIVERSITY

MODIFICATIONS RELATING TO THE "NEW INTERNATIONAL ENCYCLOPAEDIA"

IN a recent number of SCIENCE, Vol. LX (1924), page 82, attention was directed to a very obvious error relating to Copernicus which appears under his name in the 1923 printing of the well and favorably known American encyclopaedia noted in the heading of this article. It should have been stated then that