

THE annual report of the Zoological Society of London, just received, shows that the society is proceeding with the publication of volume 59 (for 1922) of the *Zoological Record*, and has arranged for the compilation of the materials for volumes 60 and 61 (literature of 1923 and 1924). The society is willing to lose as much as £500 a year on the undertaking, but further losses must be made up in other ways if the service is to be continued. The donations received up to December 31 amount to £624. 3s. 4d., of which £150 is contributed by the British Museum of Natural History, £100 by the Royal Society, £50 each by the British Association and the Entomological Society of London, and smaller amounts by other societies and individuals. The largest amounts from America are £25 from Mr. T. Barbour, of the Museum of Comparative Zoology; £22. 4s. 6d. from the University of Michigan; £23. 0s. 4d. from the Academy of Natural Sciences of Philadelphia; and £16. 0s. 0d. from the Entomological Society of America. The Zoological Society has made a donation of £100 to a fund for the purchase of the Farne Islands as a permanent sanctuary for birds.

WE learn from the *Journal* of the American Medical Association that a recommendation that a general health survey of Philadelphia be made "as a necessary preliminary to the sesqui-centennial celebration" was made April 1 to the public health administration section of the American Public Health Association in a report presented by Murray P. Horwood, assistant professor of biology and public health at the Massachusetts Institute of Technology. He has made an exhaustive study of health conditions in Philadelphia and in the report includes thirty-one recommendations for improvement in city methods of fighting infectious diseases. The sesqui-centennial health survey is intended to eliminate the possibility of contagion to the hundreds of thousands of visitors who are expected to visit Philadelphia in the summer of 1926.

ADOPTION of metric units of weights and measures in merchandising will be a topic of discussion before the convention of the Chamber of Commerce of the United States, to be held at Cleveland in May. On May 5 the metric issue will be prominent, the national council being called upon to advise whether the pending metric referendum shall be submitted to nationwide vote of American business organizations. A year of study and conference was devoted to world standardization by the metric committee of the Chamber of Commerce of the United States, and its report will be the basis of the vote. Japan and Russia in 1921 adopted metric units for commercial use, and China is also gradually standardizing on the metric measures. All the civilized world is now on the metric basis, except the United States and the British Commonwealths. The Congress of Chambers of Com-

merce of the British Commonwealths voted overwhelmingly for adoption of the metric units, and American business men are expected to do likewise.

THROUGH the generosity of the Association of Apparatus Makers of the United States, the *Journal of the Optical Society and Review of Scientific Instruments* announces a prize of \$250 for the best paper on scientific instruments and methods presented between May 1 and December 31, for publication in the instrument section of the journal. The *Journal* publishes in the instrument section original articles describing new instruments or new methods for research or instruction in any branch of science such as physics, chemistry, astronomy or biology. The prize will be awarded by a committee to be appointed by the National Research Council. Manuscripts should be sent to the following: Paul D. Foote, editor-in-chief, Bureau of Standards, Washington, D. C., or F. K. Richtmyer, managing editor, Rockefeller Hall, Ithaca, N. Y.

ON account of the conflict between the meeting of the next (Fourteenth) International Geological Congress, to be held at Madrid in the spring of 1925, and the meeting of the Geographic Congress which is to take place in Cairo at the same time, the Spanish government has decided to postpone its entertainment of the International Geological Congress until the spring of 1926, when the geologists will be convened in Madrid by invitation of the Spanish government.

A CORRESPONDENT writes: "Mr. E. B. Starr, manager of the Celite Company at Lompoc, California, lately discovered a skeleton of a huge animal embedded in the Miocene diatom deposits. This was secured for Stanford University by Eric Jordan and William Olmstead, students in geology. The skeleton seems to be that of an extinct sea-cow, probably new to science. It is 14 feet long, with a small, hard head, and great ribs, three inches in diameter."

UNIVERSITY AND EDUCATIONAL NOTES

THE Rockefeller Institution has offered, subject to the consent of the municipal council, to build and thoroughly equip a laboratory for the school of physiology and biology of the University of Copenhagen, under the direction of Professor August Krogh.

PRESIDENT KENYON L. BUTTERFIELD, of the Massachusetts Agricultural College, has for the second time been offered the presidency of the Michigan Agricultural College.

DR. W. W. CHARTERS has been appointed dean of the graduate school of the University of Pittsburgh. Professor J. F. L. Raschen, at his own request, has been relieved of the executive work of the graduate school, which he has carried for the past seven years.

DR. W. K. GREGORY, of the American Museum of Natural History, has been made professor of paleontology in Columbia University.

DR. JOHN HINCHMAN STOKES, head of the section of dermatology and syphilology at the Mayo Clinic, Rochester, Minn., has been elected to the professorship of dermatology in the Medical School of the University of Pennsylvania.

THE department of entomology at the University of Kansas has been reorganized, with Dr. H. B. Hungerford as head and also state entomologist for the southern half of the state. Other members of the department are Dr. Paul B. Lawson, Mr. Philip A. Read, Mr. R. H. Beamer and Miss Kathleen Doering.

DR. LOUIS K. OPPITZ, of Howard College, Birmingham, Ala., has been elected professor of physics at Colorado State Teachers College, Greeley, Colo. During the coming summer Dr. Oppitz will teach physics at Baylor University, Waco, Texas.

DR. OTTO MEYERHOF, associate professor of physiology at the University of Kiel, who was recently awarded the Nobel prize in medicine for his work on muscles, has been called to Berlin.

DR. PAUL SCHERRER, professor of physics in the Zurich Technical School, has been called to the University of Bern as successor to Professor A. Forster.

DISCUSSION AND CORRESPONDENCE

MAGNETIZATION CURVE, NAMES FOR ITS PARTS

THE magnetization or B-H curve of iron (see Fig. 1) is used and discussed by physicists and engineers so much that its different parts deserve separate names. At the present time the "knee" is the only recognized term in several languages, and the other

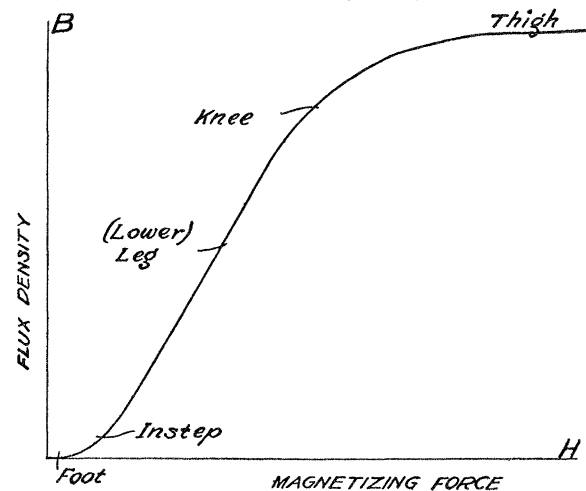


FIG. 1

parts are only referred to descriptively as "below the knee," "above the knee," "on the saturated part," etc. In writing or speaking about this curve I have felt at times handicapped by such a lack of recognized terms, and I propose to call the remaining parts of the curve in accordance with the common names for the parts of the human lower limb, namely, the *foot*, the *instep*, the *leg* (or lower leg), and the *thigh*. The names "leg" and "thigh" can also be used for the corresponding parts of a saturation curve of an electric machine, for the parts of a mechanical stress-strain diagram below and above the elastic limit, etc.

The only objection to such terms is that they have to be different in each civilized language, and it may be preferable to give them the corresponding Latin or Esperanto names. This will also meet the objection of some older people about mentioning lower limbs in society.

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THE LEARNING CURVE FOR A SNAIL

YERKES trained an earthworm to go through a T-maze made of glass some twelve years ago. Miss Mary Pinkney Mitchell, a student in the educational psychology laboratory of University of Denver, working under the direction and guidance of the writer, has now trained a land snail, *Goniobasis pleuristriata* Say, for three months, using some three trials a day. The apparatus is a glass T-maze somewhat similar to that of Yerkes, the drive used is light from a 75-watt Mazda lamp. Hibernation of the snail was prevented by keeping it in an improvised incubator.

The training of the snail was begun December 3, and is being continued. The average time for the first five trials in the maze was 857 seconds, and for the last five trials to date is 316 seconds. The total errors for first five trials were 4, and there are now no errors made at all. In all there have been 102 trials made by the snail. There are of course fluctuations in the time curve, but there is a positive tendency for the time to decrease with successive trials so that the smoothed-out curve indicates learning of a more or less permanent character.

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SCIENTIFIC BOOKS

Social Psychology. By FLOYD HENRY ALLPORT, associate professor of psychology, University of North Carolina. Houghton Mifflin Co. Pp. viii + 453.

Of late years there has been some tendency to con-