of $25,000 a year for a period of twenty-five years from Sir John and Lady Eaton. This is to provide for a full-time clinician in the department of medicine and a half-time clinician in pediatrics.

THE court of governors of the University College of North Wales, at their meeting at Bangor, appointed a deputation to wait upon the Board of Agriculture regarding the proposal to have only two schools of forestry in Great Britain—one in Scotland and the other either at Oxford or Cambridge. Fears were expressed that if this was carried into effect it would mean the extinction of the forestry department in connection with the University College of North Wales. It was felt that one of the two new schools should be established in Wales, with its large area of forests.

SIR ARTHUR NEWSHOLME, K.C.B., who is now in the United States has accepted for the academic year 1919–1920, the chair of hygiene in the new school of public health of the Johns Hopkins Medical School.

CHARLES JOSEPH TILDEN, professor of civil engineering at Johns Hopkins University, has been elected professor of engineering mechanics in Yale University and assigned to the Sheffield Scientific School.

AUSTIN F. ROGERS and Cyrus F. Tolman, Jr., of the department of geology at Stanford University, have been promoted from associate professors to professors.

MORRIS M. LEIGHTON, Ph.D., Chicago, 1916, has accepted a joint-position as assistant professor of geology at the University of Illinois and as Geologist on the Illinois Geological Survey.

AT the Massachusetts Institute of Technology the following assistant professors have been promoted to associate professorships: H. C. Bradley, department of drawing and descriptive geometry; C. E. Locke, department of mining engineering and metallurgy, and N. C. Page, department of electrical engineering. The following instructors have been appointed assistant professors: J. B. Babcock, 3d, railroad engineering; S. A. Breed, mechanical drawing and descriptive geometry; L. A. Hamilton, analytical chemistry; H. B. Luther, civil engineering; C. S. Robinson, industrial chemistry; R. H. Smith, mechanical engineering; C. E. Turner, biology and public health.

MR. WILLIAM MORRIS JONES, M.Sc., B.A., has been appointed lecturer and experimentalist in physics at the University College, Bangor.

DISCUSSION AND CORRESPONDENCE

QUANTITATIVE CHARACTER-MEASUREMENTS IN COLOR CROSSES

THE writer, although working in plant and not in animal breeding, has been struck with the desirability of finding a more exact quantitative measure of degree of distribution of coat color in animal crosses. The following is suggested. Photograph the animal in a centered position on its two flanks. On the photographic prints of the right and left sides, determine the area of the color markings under investigation with a planimeter. These areas, reduced to percentages of the entire area photographed, will give a quantitative expression for the degree of extension of the character markings. The writer would venture to suggest the following possibility in the study of the operation of an extension factor. Let the photographic prints be ruled off in square centimeter areas with India ink. Then the relation of the color areas to the region of the animal's anatomy can be definitely established upon a quantitative basis. This having been done for the parents, the operation of an extension factor could be studied both quantitatively with respect to the amount of surface over which the factor became operative, and topographically with respect to the location and range of its operation in the progeny. If desired, it would be a comparatively simple matter to construct a cross-wire screen behind which the animal could be photographed, and which would thus reproduce the areas to scale directly.

In the study of inheritance in plants, the application of this method suggests itself very readily in color-inheritance in the seed-coats of beans and other legumes. By photograph-

ing the seeds with a photomicrographic apparatus, enlarging them a sufficient number of times, it is easy to bring the markings within the range of size where the use of the planimeter becomes a practical matter.

H. F. ROBERTS

KANSAS STATE AGRICULTURAL COLLEGE,
April 28

SURPLUS BISON FOR MUSEUMS

THERE is now a great surplus of male bison in the main Canadian herd at Buffalo Park, Wainright, Alberta. This is the largest herd of bison in the world, numbering 3,561 and is maintained by the Canadian government under the administration of the Dominion Parks Branch of the Department of the Interior.

Besides these 3,561 bison, there are also 8 at the Rocky Mountains Park, Banff, Alberta, and 182 at Elk Island Park, Lamont, Alberta. In 1909, there was a total of 685 bison at Buffalo Park, 118 were imported during 1910, 1911 and 1912 from the Pablo herd in Montana, and 10 bison cows from the Rocky Mountains Park during the winter of 1913–14. With the exception of these the increase has been due to natural causes.

It is said that elsewhere the percentage of male to female calves has been higher among bison in semi-captivity within enclosed parks than was the case when the herds freely roamed the plains. This has proved to be the case in the main Canadian herd, so that there is a great surplus of male bison that are not needed for herd purposes.

It is proposed to dispose of these surplus male bison for the nominal sum of $250 each to bonafide natural history museums of Canada and the United States, and further information can be obtained by such museums from Mr. J. B. Harkin, Commissioner of Dominion Parks, Department of the Interior, Ottawa, Ontario, Canada.

This should prove a splendid opportunity not only to secure skins for mounted specimens and groups, but also for museums to send their preparators to Buffalo Park to secure photographs, color sketches and accessories for habitat groups, and to secure skeletons, anatomical preparations of internal organs and parasites.

HARLAN I. SMITH

MUSEUM OF THE GEOLOGICAL SURVEY,
OTTAWA, CANADA

INFORMATION SERVICE FOR EXPERIMENTAL BIOLOGISTS

TO THE EDITOR OF SCIENCE: The Federation of American Societies for Experimental Biology, comprising the sciences of physiology, biological chemistry, pharmacology and experimental pathology, is now organizing an information service to serve as a medium of communication between persons seeking positions for teaching or research and institutions that wish to fill vacancies in these sciences. Persons, whether members of the federation or not, and institutions desiring to avail themselves of the service may communicate with Professor Edgar D. Brown, secretary of the executive committee of the federation, University of Minnesota, Minneapolis, Minn., and such information as is available will be supplied without cost to the applicant. Applicants are requested to supply the service with ten copies of their application, which should cover the following points:

1. *For the Person seeking a Position:* age; college and university training; degrees received; academic or other positions held; list of scientific papers published; membership in scientific societies; position and salary desired; copies of letters of recommendation; names and addresses of persons who can supply further information regarding the applicant; and any other information that the applicant desires to submit.

2. *For the Institution desiring to fill a Vacancy:* title of vacant position; date to be filled; requirements as to teaching or other routine work and research; salary to be paid; prospects of tenure of office and advancement; and any other information that the institution desires to submit.

The service does not undertake to recommend or to pass judgment upon applicants. It aims merely to serve as a clearing-house for such information as the above and to