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 Tileen, professor of civil engineering at Johns Hopkins University, has been elected professor of engineering mechanics in Yale University and assigned to the Sheffeld 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.
Ar 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, eivil 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 crossesThe 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-


