

buildings have been received and it is expected to have the station in working order before winter. Already the gathering of observations on the relations of erosion and run-off to the forest cover have begun. The Manti National Forest was chosen as the site for this experiment station because it offers exceptionally good opportunities for investigating problems of practical value in connection with regulated grazing. Ephraim and other towns in its neighborhood have suffered severely from floods following violent rainstorms in the mountains, and it has already been proved conclusively that the overgrazed condition of areas on which the natural vegetative cover has been seriously altered is responsible for the formation of torrents and the rapid discharge of debris-laden floodwaters. In a recent destructive storm the water ran clear from a part of the watershed which was within the National Forest, and in good condition as a result of well-regulated grazing, while from other areas it swept down sand and boulders. One of the objects of the study will be to learn how the maximum of grazing use of natural forest land can be obtained without injury to forest reproduction and stream flow. The national forests provide range during a part or all of the year for a considerable part of the stock produced in the western states. Approximately one and one half million head of cattle and horses and seven and one half million head of sheep and goats occupy the forest lands each year. These figures do not include nearly three hundred thousand calves and over four million lambs and kids for which permits are not required. The experts of the department believe that when the ranges which were denuded by many years of improper use are restored to a normal condition of productivity it will be possible to provide feed for a much larger number of stock without injury to forest growths or watersheds, and both the stockgrower and the consumer of meat products will thus be benefited. Consequently every effort is being made to determine practicable means of regenerating depleted ranges. All of the studies which are about to be initiated have this point in view.

UNIVERSITY AND EDUCATIONAL NEWS

HARVARD UNIVERSITY and Middlebury College will each receive ultimately half of \$125,000, left by Daniel A. Kimball, of Stockbridge.

THE heirs of Michael Cudahy have given \$10,000 toward the endowment fund of Newman Hall, at the University of California, and \$1,000 each has been given by four other donors. The Newman Club is an organization of the Roman Catholic students of the university. Through the generosity of Archbishop Patrick W. Riordan, of San Francisco, who contributed \$40,000 (from his "jubilee fund"), and through the aid of other friends, the club occupies Newman Hall, an admirably appointed building, which contains meeting rooms, a chapel, a library, bowling alleys, social rooms, a kitchen, etc., and which serves as a center for the social and religious life of the Catholic students. Its privileges and hospitalities are open also to the other students of the university.

DR. DON R. JOSEPH, formerly associate in physiology and pharmacology at the Rockefeller Institute, has been appointed associate professor of physiology at Bryn Mawr College.

THE following new appointments have been made at Toledo University: Oscar William Irvin, B.S. (Kentucky), professor of mechanics and physics; Rudolf Pintner, M.A. (Edinburgh), Ph.D. (Leipzig), professor of psychology and education.

THE following appointments have been made to the staff of Macdonald College, Ste. Anne de Bellevue, Quebec: Wilfrid Sadler, M.D.D., of the Midland Institute, Kingston, Derbyshire, England, assistant in bacteriology; D. W. Hamilton, Ph.D., of the New Brunswick Normal School, assistant in physics; W. M. Aikenhead, B.S.A., assistant in horticulture; Alex. R. Ness, B.S.A., assistant in animal husbandry. Professor W. Saxby Blair has resigned the chair of horticulture and accepted the position of superintendent of the Kentville, Nova Scotia, Experimental Fruit Farm and dominion maritime horticulturist. The following graduates have been

appointed district demonstrators, local representatives of the college, whose function is to promote interest in scientific agriculture and to advise farmers on scientific questions: G. W. Wood, L. C. Raymond, A. A. Campbell, L. V. Parent, R. Newton.

DISCUSSION AND CORRESPONDENCE

A NEW MATHEMATICAL PRIZE

ALFRED ACKERMANN-TEUBNER has founded a new mathematical prize by establishing a capital of 20,000 Marks at the University of Leipzig. For the present a prize of 1,000 Marks shall be given every other year, and the surplus interest shall be added to the capital until this amounts to 60,000 Marks. After the capital has reached 60,000 Marks all the interest, less expenses, shall be used for an annual prize, which shall be given for published work in the domain of the great German mathematical Encyclopedia.

The donor of the capital for the prize reserves the right to bestow it in 1914, without any restrictions; but after this date the prize is to be awarded, in order, for work in the following subjects: (1) History, philosophy, teaching and education; (2) mathematics, especially along the lines of arithmetic and algebra; (3) mechanics; (4) mathematical physics; (5) mathematics, especially along the line of analysis; (6) astronomy, theory of probability and theory of errors; (7) mathematics, especially along the line of geometry; (8) applied mathematics not provided for in what precedes, especially geodesy and geophysics.

Those who have received the Nobel prize shall not be considered in connection with the awarding of this prize and preference is to be given to German mathematicians, but the prize shall not be restricted to the scholars of this nationality. As long as the prize is awarded every second year, papers or monographs which have appeared during the preceding sixteen years may be considered, but only those which have been published no longer than eight years can be considered when it is awarded annually.

The prize is to be awarded for work which exhibits a prominent advance along scientific or pedagogic lines, and the limits of the subject matters to be considered shall, in general, be those of the German encyclopedia. If new penetrating mathematical theories should arise, work along these lines may also be considered. Alfred Ackermann-Teubner is at present the senior member of the great publishing firm of B. G. Teubner, of Leipzig, Germany, and has for many years taken an active part in various mathematical activities. The capital for the prize mentioned above is a consequence of the friendly relations between the donor and various prominent mathematicians.

It is probably fortunate that these prizes are to be given for work already published and not for competing memoirs relating to subjects proposed by some committee. Many of the leading mathematicians do not enter into the race of preparing competing memoirs, and it seems likely that more good will be done if mathematicians feel free to pursue those lines in which they can work most successfully. The subject of mathematics has become so broad that real progress calls for forward movements in many fields. All the various helpful interrelations can not be foreseen by a few men.

G. A. MILLER

SCIENTIFIC BOOKS

Monographs on Biochemistry. The Chemical Constitution of the Proteins. Part I. Analysis. By R. A. H. PLIMMER, D.Sc. Second edition. London and New York, Longmans, Green and Co. Pp. x + 188. 1912. 5s. 6d. net.

Although the knowledge concerning the chemical constitution of the proteins gained since the appearance of the first edition of this monograph is relatively small, the amount of information contained in this second edition is much greater than that furnished in the first. The author now gives us a more detailed account of the methods of hydrolysis of the proteins and the estimation of the amino-acids which result thereby. The