in London from June 25 to 30 at the invitation of the British government under the presidency of the Duke of York. The Air Ministry has arranged a pageant on June 30.

UNIVERSITY AND EDUCATIONAL NOTES

ACCORDING to a new agreement between the board of permanent officers of the Yale School of Medicine and the corresponding boards of Yale College and the Sheffield Scientific School, admission to the combined course in either undergraduate school will be on a competitive instead of an automatic basis as heretofore. Those seniors will be eligible as candidates for the course whose scholarship standing during the junior year has been seventy-five or above, and who have satisfied the science and language requirements of the medical school. Their applications, which are due before July 1, following the completion of junior year, will, however, be considered in conjunction with all other applications, and the medical class chosen from the entire number of candidates. The Yale undergraduates who are admitted will take the entire first-year medical work and receive credit for the B.A. or B.S. degree. The degree of M.D. is awarded after three years' additional study. As only sixty students are admitted each year from several hundred applicants, the decision to select all members of the first year class in the Yale School of Medicine on the same basis will interest premedical students throughout the country.

DR. W. A. WHITE, superintendent of the Government Hospital for Insane at Washington, D. C., announced the establishment of a school at St. Elizabeth's for the instruction of physicians in the treatment of mental and nervous diseases.

PROFESSOR D. H. DAVIS, of the department of geology of the University of Michigan, has accepted a professorship in the University of Minnesota.

DR. EDWARD A. DOISY has been appointed professor of biochemistry at St. Louis University, the appointment to take effect on August 1, 1923. Dr. Doisy is at present associate professor of biochemistry at the Washington University School of Medicine.

DR. J. C. M. BRENTANO has been appointed lecturer in physics at Manchester University.

DISCUSSION AND CORRESPONDENCE

THE FEEDING POWER OF PLANTS

IN a recent paper in SCIENCE[1] under the caption quoted above, Mr. Truog elaborates and supplements the discussion of his theory on the "feeding power of plants" as detailed in earlier publications.[2] His most recent discussion, as well as his earlier ones, are open to such serious question in many important respects that we deem it essential to comment on the principal objections to his theory and his assumptions. Several minor points in the paper first cited above which are open to serious question are not discussed in this review because of the limited space available (in this paper) and because the importance of the points which we do discuss should not in any wise be dimmed by matters of lesser magnitude.

Mr. Truog makes the fundamental assumption that each and every plant species, or group of plants, is characterized by what we may term a specific avidity for the ions in solution in the root medium, and that such specific avidity is contingent upon the reaction of the cell sap and the behest of the law of mass action. This assumption is, in turn, based on the alleged or actual percentages of the various ions found in different kinds of plants. This implies, of course, the fundamental power of the individual root cell to absorb ions in a characteristic manner. In all this discussion, Mr. Truog evidently underestimates the fact that the differences between plants which are in question may be caused, not by the difference in the specific absorbing powers of individual cells, say of legumes and grasses for example, nor yet by the specific reaction of the cell sap, but by the difference in extent of root system, and the difference in the amount and intensity of CO_2 production by roots. The enormous differences which obtain among different kinds of plants as regards the extent of

[1] SCIENCE, N. S., 56, 1922, pp. 294-298.

[2] SCIENCE, N. S., 41, 1915, pp. 616-618. *Res. Bull.* 41, 1918, Wis. Agr. Exp. Sta. *Soil Science*, 5, 1918, pp. 169-195, and others there cited.