

## News and Views

### Biometry at University College, London

FROM the beginning of the present session, Prof. J. B. S. Haldane changes his duties by taking on those of the first Weldon professor of biometry, and he is the first holder of a chair in the subject at any British university. The post was founded by a bequest left last year by Mrs. F. J. Weldon in memory of her husband, Prof. W. F. R. Weldon, who was one of the original editors of *Biometrika*. Prof. Haldane will give the first of a course of ten lectures on biometry at 5 p.m. on October 12. In 1895 Karl Pearson gave his first course on the mathematical theory of statistics at University College, when he was professor of applied mathematics and mechanics. The Biometric Laboratory originated at this time. In 1907 he took over the Eugenics Laboratory from Sir Francis Galton. On his death two years later, the latter left the residue of his estate for the founding of a professorship and Laboratory of National Eugenics and Karl Pearson became the first Galton professor. For the next twenty years, research and teaching in eugenics, statistics and biometry were carried out in the same Department, known as that of Applied Statistics. On the retirement of the director in 1933, separate departments for the first two of these subjects were instituted, and there are now chairs for all three at the College where they first obtained academic recognition.

### Ionospheric Disturbances and Solar Eruptions

DR. D. F. MARTYN, MESSRS. G. H. MUNRO and A. J. HIGGS, and DR. S. E. WILLIAMS, in a communication which appears on page 603, show evidence that a type of ionospheric disturbance accompanies every bright hydrogen solar eruption. The main features of the disturbance are an increase of ionization in the  $D$  region and a heating effect in and below the  $F_2$  region. When the disturbances are large they cause 'fade-outs' in short-wave communication. It is concluded that these effects are due to a greatly increased emission of the hydrogen resonance line  $L_\alpha$  from the eruptive area. This causes ionization of atomic oxygen in the  $D$  region, and dissociates the water vapour in the  $F_2$  region, thus raising the equilibrium temperature. Further evidence of a connexion between solar activity and short-wave radio 'fade-outs' is given in the note entitled "An Active Sun-spot" on page 616 of this issue.

### A New Permanent Water-Repellant for Textiles

A NEW compound of exceptional interest to both chemists and textile manufacturers is the subject of an exhibition housed at Dorland House, S.W.1, on October 5-8. This preparation, which has been given the name "Velan", has been developed during the past three years at the Manchester laboratories of Imperial Chemical Industries, Ltd., as a universal water-proofing agent for textile goods. Information

concerning the chemical composition of Velan is not yet available, but it would appear to be a complex organic substance which reacts with both hydroxyl and amino groups and on that account is able to combine with both animal and vegetable fibres. For the impregnation of textiles, Velan is used in the form of aqueous dispersions, which are readily separable from the substance without the aid of supplementary agents. The impregnated fabrics are dried, and combination between the reagent and the textile fibres is afterwards effected by heating at a temperature of 100°-150° C. It is the last stage of the process which gives permanence to the proofing.

VELAN is claimed to be the first water-repellant for textiles which will remain permanent during repeated washing, laundering and dry-cleaning processes. Further, the compound is said to be unique among proofing agents in that it imparts softness and suppleness to fabrics. Unlike rubber or cellulose lacquer waterproofings, Velan does not affect the interstices of textiles and render them impermeable to air. The proofing process has proved satisfactory with cotton, wool, natural and artificial silk, straw, etc., though cotton seems to be somewhat more satisfactory than other textiles from the point of view of the permanence of the proofing. In view of these advantages, and the fact that processing does not add greatly to the cost of manufacture, Velan should find a wide range of applications in the textile industries.

### Aid for Intellectual Unemployed in France

INTELLECTUAL workers, including men of science, writers, artists and others, have suffered no less than industrial workers during the recent years of economic unrest. In 1934 an organization was established in France with the object of providing socially useful work for the unemployed professional men and women. A list of work to be done was prepared and private donations were obtained to support the enterprise in order to see whether the idea had a practical value. Thus, in 1934 and 1935 a considerable number of unemployed were engaged in preparing a complete list of benevolent associations existing in France since 1901. The "Confédération des travailleurs intellectuels", consisting of more than 200,000 workers from various professional groups, also had the problem of intellectual unemployment under consideration. "L'Entr'aide des Travailleurs Intellectuels" (E.T.I.) was organized in order to examine the situation and to find ways and means of giving efficient assistance. The poor financial state of France excluded all possibility of help from the Government, and it was impossible to rely upon private donations. A campaign was therefore begun to obtain from the authorities permission to issue special stamps of different values, with a small surcharge, the surcharge being destined for the intellectual unemployed. The