

insect by means of tungus-parasites. Prof. A. H. R. Buller describes the mechanism by means of which the common mould-fungus, *Pilobolus*, is able to shoot its spore-case, containing many thousands of spores, a distance of several feet. Sunlight striking obliquely on the protoplasm of the cell beneath the spore-case gives rise to a stimulus resulting in a movement which places the axis of the stalk on which the spore-case is borne in the line of the light-ray. The fungus may be described as having an optical sense-organ or simple eye which it uses for laying its gun in a definite direction. *Pilobolus* lives in fields on the dung of herbivorous animals, and by directing its guns towards the source of brightest light is enabled to shoot its sporangia into open spaces on to grass and other herbage. Herbivorous animals eat grass and sporangia together, and the spores are passed unharmed in the solid excreta in which they germinate.

Mr. F. T. Brooks discusses the inheritance of disease-resistance in plants in the light of recent Mendelian work. It has been shown that susceptibility and immunity to yellow rust disease among varieties of wheat are genetic factors operating in a Mendelian way, and Mr. Brooks suggests that resistance and susceptibility of potatoes to wart disease may afford a similar case. He points out, however, that we are very much in the dark as to what is the essential factor conferring resistance, and the possibility that changed conditions of environment may break down to some extent the resistance-powers of the host as regards certain diseases. There are also short papers of local interest and on new or rare British species. Mr. Ramsbottom explains the "Californian bees," the identity of which has been puzzling folk during the past two years. The organism is the well-known ginger-beer plant which was investigated by the late Prof. Marshall Ward, and consists of two organisms, a yeast and a bacterium, living in symbiosis and causing alcoholic fermentation in a sugary solution.

University and Educational Intelligence.

CAMBRIDGE.—A special Syndicate appointed to consider possible alterations in the regulations for the Mathematical and Natural Sciences Tripos with the object of facilitating the acquisition by candidates in one subject of a knowledge of the other has reported in favour of the addition of mathematics to the list of subjects for the Natural Sciences Tripos, Part I. Arrangements are proposed by which part of the papers set in the Mathematical Tripos, Part I., may be used as papers in the Natural Sciences Tripos, Part I. The reform will be of considerable assistance to students reading physics, physical chemistry, and chemistry.

LONDON.—The Senate has received with great satisfaction a communication from the executors of the late Sir Ratan Tata intimating their continuance for a further period of five years of his benefaction of 1400*l.* a year to the Ratan Tata Foundation. This will henceforth be administered as a distinct department by the London School of Economics.

The following doctorates have been conferred:—*D.Sc. (Economics)*: Mr. T. E. G. Gregory, an internal student, of the London School of Economics, for a thesis entitled "Tariffs: A Study in Method." *D.Sc. (Chemistry)*: Mr. S. C. Bradford, an external student, for a thesis entitled "On the Theory of Gels," and other papers; and Mr. E. B. Maxted, an external student, for a thesis entitled "The Influence of Inhibitors on the Occlusion and Activation of Hydrogen by Palladium and Platinum," and other papers.

MANCHESTER.—The executors of the late Mr. Hermann Woolley, who was for many years treasurer of the University, have given a donation of 100*l.* towards the endowment of a lectureship in pharmaceuticals.

The following appointments have been made:—Reader in geography, Mr. W. H. Barker, of University College, Southampton; assistant lecturer in physics, Mr. W. S. Vernon; and assistant lecturer in chemistry (technology), Mrs. M. B. Craven.

OXFORD.—The Romanes lecture for 1922 will be delivered at 6 p.m. on May 24 in the Sheldonian Theatre by Prof. A. S. Eddington, Plumian professor of astronomy at Cambridge and president of the Royal Astronomical Society. The subject will be "The Theory of Relativity and its Influence on Scientific Thought."

On January 31 Congregation rejected by 65 votes to 62 the preamble of a statute by which it was proposed to discontinue the Delegacy of the University Museum, and to establish in its place a Board consisting of the heads of the departments of natural science in the University. The opinion of the teachers of science was divided on the question, some, both of the professors and of the college tutors, being opposed to the change. It is, however, probable that there is an almost general conviction that the present constitution of the Delegacy is capable of amendment, though the particular scheme of reform proposed by the Council did not commend itself to the majority. The statute was introduced by the Rev. G. B. Cronshaw, fellow of Queen's, and was supported by Sir C. S. Sherrington and Prof. W. H. Perkin and by the president of Magdalen. It was opposed by Mr. H. B. Hartley, fellow of Balliol, and by Mr. N. V. Sidgwick, fellow of Lincoln.

FIELD-MARSHAL LORD HAIG has been elected Chancellor of the University of St. Andrews in succession to the late Lord Balfour of Burleigh. Lord Haig was elected Rector of the University in 1917, and the office of Chancellor, to which he has now succeeded, is held for life.

ON Wednesday, February 8, at the Sir John Cass Technical Institute, Aldgate, E.C., Prof. W. Rothenstein, principal of the Royal College of Art, will distribute the prizes and certificates gained by the students during the past session and give an address on "Education and Industry."

Two Theresa Seessel research fellowships at Yale University are being offered, the object of which is the promotion of original research in biological studies. Applications for the fellowships, which are each of the value of 300*l.*, should be made to the Dean of the Graduate School, New Haven, Conn., U.S.A., before May 1 next, accompanied by reprints of scientific publications, letters of recommendation, and a statement as to the particular problem which the candidate expects to investigate.

It is announced in the *British Medical Journal* that three Canadian universities—Toronto, Western, and Queen's—are co-operating with the Ontario Medical Association in a scheme similar to that adopted by the University of Bristol to keep medical practitioners in outlying districts in touch with recent developments in medicine by means of extension courses. The province has been divided into ten sections, and at a central point in each it has been arranged to hold various courses and give lectures covering a period of six weeks in each year. The courses have already commenced and have proved very popular, many practitioners travelling hundreds of miles to attend them.