

South-Eastern Union of Scientific Societies.

THE twenty-ninth annual congress of the South-Eastern Union was held at Guildford on May 28-31 inclusive, under the presidency of Sir Richard Gregory. The subject of the president's address was "Science in Civilisation," and his task was to show that for almost all the many benefits which the modern world enjoys we are indebted to scientific discoveries, made often without fee or reward in the laboratory, by those who are engaged on scientific work from pure love of the pursuit of science. He opposed strongly the view that scientific research is devoted to the discovery of death-dealing weapons and machinery, brutally expressed by Ruskin in the words, "The advance of science cannot be otherwise recorded than by the invention of instruments to kill and put down noble life." No one held more thoroughly the view that it was the debasement of science to utilise discovery for such an ignoble end. The utilisation of scientific discoveries in the home and in everything that makes life pleasant is often completely overlooked merely because people nowadays take the things that they possess as a matter of course without inquiring to whom they are indebted for their acquisition. When practical science is diverted from its legitimate uses to the invention of instruments of death, then the news-sheets throughout the world seize upon such inventions and scatter news of them far and wide. The view that "Darwinism" stands only for "Nature, red in tooth and claw," is but a crude misconception of a great principle, repudiated alike by its founder and by its powerful exponent, Huxley.

With the growth of the various sections of the Union, it was inevitable that the reading of many of the papers overlapped. On the second day of the congress, the meetings of the Botanical and the Geological Sections were held. Dr. A. B. Rendle spoke on "Plant-pitchers and their Work," and he referred to the common sun-dew as a native example of the class. When an insect alighted on the leaf, the tentacles turned over, the insect was captured, and the digestive juices in the plant enabled the insect to be absorbed. The properties of the liquid inside the pitchers had been the subject of study of a school of botanists at Philadelphia under Prof. Macfarlane, who had definitely proved that there was secreted by the walls of the pitcher a digestive ferment which had the property of bringing into solution the proteids of the insect. Dr. Rendle emphasised the point that the pitcher formation of leaves gave one no right to conclude that that plant was an insectivorous plant.

In a paper on "Teasel-cups," Mr. R. Paulson stated that he had been investigating this subject for years, and was not satisfied that the teasel was insectivorous. How did the water get into the cup of the teasel? Some may be rain or dew, but he commenced his observations in 1921, the year of the great drought, and yet on June 28, after twenty-eight days of consecutive drought, there was water in the teasel-cup. He was convinced that water was brought up from the roots by special water-pores.

Mr. C. H. Grinling, speaking as a Nature lover, pleaded that all of his hearers might become in an increasing measure transmitters and builders of truth and knowledge, and suggested that they could never hope to be effective transmitters unless they were willing to become builders also.

Dr. A. F. Tredgold, in speaking on "Evolution and Eugenics," came to the conclusion that though the lethal chamber would do more harm to the fit who imposed it on the unfit, because the former would lose in moral character more than they would gain by the

elimination of the latter, yet he thought some means would have to be adopted by which the mentally and otherwise deficient should be deprived of the means of propagation. Altruism should guide us in dealing with the living, but it should prevent the increase of living deficients.

In the Regional Survey Section, Sir Francis Ogilvie read a paper on "The Educational Value of the Regional Survey." Prof. E. B. Poulton, in the Zoological Section, took for his subject "Some Modes of Protection in the Pupal Stage of Butterflies and Moths." Papers were read on the "Communal Life of Humble-Bees," by Mr. Ray Palmer, and by the Rev. S. O. Ridley on "Problems of Deep-Sea Life."

A paper on "The Pilgrims' Way," by Mr. Elliston Erwood, was provocative of much discussion. He adopted the theory now held by most thinking persons that the Way was in existence long before Becket's time, and that it was found useful for the pilgrims. He thought that it originally came into use in neolithic times. It was no doubt of prehistoric age. It was pointed out in the discussion by Mr. E. A. Martin that it was on the line which incoming immigrants always took, right away from the first comers in palæolithic times, and that there was probably always more than one track. The Way lies on what is probably the oldest road in the country.

Dr. William Martin lectured to a crowded audience of adults and children in the Woodbridge Road Cinema on "The Film as an Educator," and with the help of Dr. Clarence Tierney, showed some good educational films. It was agreed that as yet the value of the moving film is not adequately appreciated. Some thought that it never will be until a certain class of film is rigorously prohibited.

During the congress, visits were made to Sutton Place (the residence of the Duke and Duchess of Sutherland), Clandon Park (the seat of the Earl and Countess of Onslow), and to the Haslemere Museum. At Sutton Place, a paper was read by Mr. F. H. Elsley on the house, and at Clandon Place, a paper was read which had been prepared by the Earl of Onslow.

After many years of good and valuable service, Mr. H. Norman Gray retired from the hon. general secretaryship, and Comdr. Edward A. Martin was appointed in his place.

University and Educational Intelligence.

BIRMINGHAM.—The chair of civil engineering rendered vacant by the resignation of Prof. F. C. Lea has been filled by the appointment of Dr. Cyril Batho. Prof. Batho, after a distinguished career at the University of Liverpool, studied at Berlin and at the Technische Hochschule of Charlottenburg. He has had teaching experience at the University of Liverpool, and at McGill University, Montreal, having occupied posts as assistant professor of civil engineering and as associate professor of applied mechanics and hydraulics in the latter University. Prof. Batho has published important papers on the strength of materials and structural engineering, and has had practical experience as assistant designing engineer to the St. Lawrence Bridge Company on the new Quebec Bridge. He is also a member of the Air Research Committee of the Advisory Council of Scientific and Industrial Research of Canada.

The Council of the University has decided to establish a readership in geography.

The annual degree congregation is to be held on July 5.

CAMBRIDGE.—Mr. C. T. R. Wilson, Sidney Sussex College, has been re-appointed reader in electrical meteorology.

Mr. F. W. Dootson, Trinity Hall, and Mr. W. H. Mills, Jesus College, have been re-appointed University lecturers in chemistry.

Mr. W. M. Smart, Trinity College, has been re-appointed John Couch Adams astronomer.

DURHAM.—Mr. J. E. P. Wagstaff, fellow of St. John's College, Cambridge, and lecturer in physics in the University of Leeds, has been appointed professor of physics.

Dr. B. M. Griffiths has been appointed reader in botany. Dr. Griffiths is a graduate of the University of Birmingham and has been lecturer in botany in University College, Reading, and in Armstrong College, Newcastle-on-Tyne.

Dr. Arthur Holmes has been appointed reader in geology. Dr. Holmes was formerly demonstrator in geology at the Imperial College of Science and is now returning to academic life after an interval of travel and field-work.

LIVERPOOL.—Mr. J. C. Burkill, director of studies at Trinity Hall and Fitzwilliam Hall, Cambridge, has been appointed professor of pure mathematics in the University.

Mr. J. Rice, senior lecturer in physics, has had the title of associate professor conferred upon him.

LONDON.—Mr. R. C. Richards, B.A. (Cantab.), M.Sc. (London), formerly of Trinity College, Cambridge, has been appointed Quain lecturer in physics at University College.

THE Toronto correspondent of the *Times* states that Sir William Mulock, Chancellor of the University of Toronto, has announced a gift of 650,000 dollars (130,000*l.* at par) to the University from the Rockefeller Foundation for the establishment of a School of Public Health in connexion with the Faculty of Medicine. The gift will permit of the extension of the Department of Hygiene and the Public Health, Nursing, and Connaught Laboratories, which are dealing with the manufacture of insulin. Mr. Ferguson, Premier of Ontario, has announced that the Province would grant 125,000 dollars (25,000*l.*) for the new forestry building of the University.

THE London County Council has now published particulars of the Robert Blair fellowships in applied science and technology. These fellowships, two of which will be awarded each year, carry a monetary grant of 450*l.*, and they are entitled to rank, therefore, among the most attractive scholarships available for young engineers. Applicants must be British subjects at least 21 years of age, preference being given to students of engineering science, and to those who have completed a course of study in London institutions or have been identified with the London teaching service. In selecting candidates, the London County Council will have the advantage of the co-operation of a distinguished consultative committee on engineering, the members of which at present are Sir Dugald Clerk, Sir John Snell, Sir Wilfred Stokes, Mr. C. P. Sparks, and Sir Charles Parsons. The successful candidates will be required to undertake an advanced course of study or research in the Dominions, the United States, or other foreign countries, and at its conclusion to submit a report upon the work accomplished. The London County Council reserves the right to publish this report. The Education Officer, the County Hall, London, S.E.1, will supply further particulars to those interested. Applications for the fellowships should be made on or before June 30 in each year, including the present year, when the first fellowships will be awarded.

Early Science at the Royal Society.

June 8, 1664. The validity of Dr. Dacres's election into the place of professor of geometry in Gresham College being questioned, upon information given, that the lord mayor of London was not of the committee, and yet by his presence had carried the election by a casting vote; it was ordered, that Dr. Wilkins, Mr. Palmer, and Mr. Colwall be desired to consult Mr. Ellise about this business, how it might be redressed, to do justice to Mr. Hooke.

1681. Dr. Gale delivered in to the Society the copy of Domes-day book, which he had received from the heralds, being the gift of the Duke of Norfolk to the Society; which was delivered to the library-keeper to be registered, and safely kept in the library.

1682. Sir Christopher Wren, president, in the chair.—The Society discoursed further concerning the comparative measures of several countries, both of weight, length and capacity. The president inquired of Mr. Hooke the reason, why the measure of a degree upon the earth was not taken here in England, as had been formerly desired. To which he answered, that if the Society would defray the expence thereof, he was willing to take care of it; that the French in their experiments had made use of some of those means, which long before they had undertaken it, himself had propounded and discoursed of to the Society; and that in the use thereof they had doubtless been very accurate, as appeared from the account given in Mons. Picard's book. The president was of opinion, that the best standard would be a certain part of the length of a degree upon the earth, if at least, upon several trials of the measure of a degree in several latitudes, it should be found the same, and not different, as it would be, if the body of the earth were oval, and not perfectly globular.

June 10, 1663. Col. Long communicated his observations concerning smut in corn, with the description of it, and its difference from other vices in corn; together with his conjectures of the causes of it, and the most probable means to avoid it. His paper was ordered to be registered.—It was ordered, that Mr. Packer should be asked, who it was at Billinghurst, in Sussex, that had the skill in marking those ears of corn in flowering-time, which would not smut afterwards in two or three years.

1685. A letter of Mr. Musgrave to Mr. Aston, dated at Oxford, June 6, 1685, was read, returning the thanks of the Philosophical Society, these for the Royal Society's remitting half of the weekly payments to such of their members, as resided at Oxford, and contributed to the making of experiments.

June 13, 1666. The experiments appointed for the next meeting were—The prosecution of the magnetical ones—The new watch with a circular pendulum—The application of sand to the pendulum with two balls, showing the motion of the earth and moon together.

1683. Count Zinzendorf, envoy from the elector of Saxony, having been introduced, there were first shewn the magnetical experiments made the last week by Mr. Haak. Then Dr. Slare tried an experiment of Bartholinus.

June 14, 1665. There was read a letter of Monsr. Huygens to Sir Robert Moray giving notice of Mr. Hevelius's having printed a treatise of the late comets, and expressing the difficulty of making Mr. Hooke's new grinding instrument succeed.

1682. Upon reading the account of the [so called] "Belland," a disease common among the workmen in the smelting mills of Derbyshire, which had been sent to Mr. Hooke from Manchester, by Dr. John Carte, a physician there, Dr. Grew said, that he had an account, which he was willing to produce.