

is now based on scientific and orderly lines and has become just as much a part of science as engineering, chemistry and physics”.

Retirement of Prof. A. Morley Davies

AFTER more than thirty years' service as demonstrator, lecturer and assistant professor, Dr. Arthur Morley Davies will shortly retire from the Department of Geology of the Imperial College of Science and Technology and readership in the University of London. Opportunity was taken by his colleagues in the Department to make him a presentation on Tuesday, June 25. Prof. Boswell recalled that Prof. Davies joined the College fifty-one years ago, and became a member of a stimulating group of students which included such well-known figures as H. G. Wells, R. A. Gregory, A. T. Simmons, A. E. H. Tutton and A. V. Jennings. Tribute was paid to Prof. Davies for his long and devoted services to geology, to the College and to learned societies. The Royal Geographical Society conferred honorary fellowship on him, and the Geological Association honorary membership, as a mark of appreciation of his help and counsel during many years; and the Geological Society awarded him its Murchison Fund and, later, its Lyell Medal in recognition of his original work. Prof. Davies is the author of textbooks of geography, local geology, palæontology and, recently, of two volumes on the Tertiary faunas, which will long remain a standard work of reference.

Memorial to Sir Patrick Geddes

THE Outlook Tower, standing on the Castle Hill, Edinburgh, was intended by the late Sir Patrick Geddes to express and exhibit stages of social development, using the history and geography of Edinburgh and Scotland as particular illustrations, and passing from them to the British Empire, the United States of America, Europe, and the world as a whole. The Tower was founded by him in 1892 as a type museum of geography, history and sociology and as a centre of civic and regional study; and it will always be associated with his name. There could be no more appropriate means of commemorating Sir Patrick Geddes' work and influence than by establishing the Outlook Tower upon a permanent basis, and thus enable it further to be developed as an active centre for the dissemination of his ideas. With this end in view, a memorial, signed by a number of his friends and admirers, has been circulated, inviting contributions and asking also for the loan of any original letters or personal reminiscences, which with a considerable body of material already collected will be classified and edited so as to be available to students of civics and sociology. As Geddes was the apostle of town and regional planning, and devoted his life to promote intelligent and stimulating relationships between man and his environment, we hope that the response to the appeal now made will be ready and generous. Contributions should be sent to Sir Thomas B. Whitson, 21 Rutland Street, Edinburgh, and letters

or other personal communications bearing upon Sir Patrick Geddes' life and work to the honorary secretary, Outlook Tower, Castlehill, Edinburgh.

Gas-Storage of Fruit

FIVE coolers, specially made to complete the equipment of the experimental refrigerated chambers at the Ditton Laboratory of the Department of Scientific and Industrial Research, were presented to the Laboratory on July 5. Three of the coolers were given by Mr. S. W. Mount, of Patricksbourne, Canterbury, on behalf of a number of British fruit-growers who are owners of gas-stores; the other two by Lord Dudley Gordon on behalf of Messrs. J. and E. Hall, Ltd., refrigerating engineers of Dartford, by whom the coolers were designed and made. Sir Frank Smith, Secretary of the Department of Scientific and Industrial Research, in accepting the gift on behalf of the Department, said that it indicated the confidence of those concerned in the fruit-growing industry in the work of the Department.

IN the course of his remarks Sir Frank Smith said that English apples do not do so well in cold storage as those from some other parts of the world; they are liable to rapid wastage on removal from store as the direct result of exposure to the low temperature. Fortunately, the Department has been able to find a solution of this difficulty, namely, 'gas-storage'. At a temperature of 41° F., with the oxygen in the atmosphere reduced to 10 per cent, and with the carbon dioxide raised proportionally to 10 per cent—a result which can be simply achieved by controlled ventilation in a gas-tight store—the Bramley's Seedling can be kept in first-rate condition for so long as twelve months. The first commercial gas-store in Great Britain was built by Mr. Mount in 1929; to-day there are some forty gas-stores in operation with a total capacity of about 400,000 bushels. Gas-storage as a method of preserving fresh fruit is only in its infancy. During the 1934–35 season, home-grown pears, of the variety Conference, were kept in gas-storage at the Ditton Laboratory for some months, with highly promising results. The Laboratory has also carried out preliminary experiments on the gas-storage of tomatoes, and again the results have been sufficiently promising to warrant development.

Conference on Folk-Dancing

A CONFERENCE on folk-dancing, which is being held in London on July 15–20 in connexion with an International Folk-Dance Festival, will afford an exceptionally favourable opportunity for the comparative study of this survival of European folk art and ritual. Students from all parts of Europe, it is stated in a preliminary announcement by a correspondent of *The Times* in the issue of July 6, will be present, and will discuss selected and especially significant dances still found among the peasantry of the remoter parts of Europe. These will be illustrated in many instances by dancers of the country of origin, who are attending the conference

specially for the purpose. Thus Roumania will be represented by the seasonal hobby-horse dance performed by the Calişari with their heavy bells. The dance and its numerous seasonal parallels in other parts of Europe will be demonstrated and discussed by Prof. Vula. A Bulgarian theme, the 'spring maiden' of folk dance and song, will be analysed by Mme. Raina Katzarova, of the Ethnographical Museum, Sophia, who will illustrate her argument with movements by Bulgarian dancers. The interesting form of the sword dance found in Piedmont, with its singular combination with the maypole ritual and its resemblances in detail to the sword dance of Britain, will also be shown and afford an opportunity for comparison with a presentation of the Austrian sword dance, which has given evidence for an alternative explanation of the dance to that generally accepted. Britain, the Netherlands, France and Norway are among other countries providing material for discussion. The international folk-dance festivals which have been held in London in recent years have provided much interesting material for consideration, but on this occasion the conjunction of a conference dealing with study of the rituals, of which the dances preserve the evidence, should do much to advance the scientific study of this important department of primitive religion. The Conference will meet at the Cecil Sharp House, Regent's Park, London, N.W.1.

North East Coast Institution of Engineers and Shipbuilders

THE North East Coast Institution of Engineers and Shipbuilders will celebrate its jubilee on July 16-19 at Newcastle-on-Tyne. The Institution held its inaugural meeting on November 28, 1884, and from then until the present time has been one of the most active bodies concerned with the advancement of the sciences of engineering and shipbuilding not only in Great Britain, but also throughout the world. Representatives will attend the meeting from the leading British kindred societies and allied bodies, and also from France, Germany, Holland, Italy, Japan and the United States. The papers to be presented at the meeting will deal with the history of engineering during the past fifty years in the following sections: liners, cargo ships and tankers, coasters, marine turbines, reciprocating steam engines, marine boilers, marine heavy-oil engines, and recent progress in electrical and general engineering. Dr. John T. Batey will preside at the meetings. A pleasurable feature will be the presentation of acknowledgments to founder members. Notable among these are Sir George B. Hunter, Mr. J. Denham Christie, Prof. R. L. Weighton and Mr. W. G. Spence (the initiator and first honorary secretary of the Institution). The honorary fellowship of the Institution will be conferred upon the following: Mr. George Stephen Baker, superintendent of the William Froude Laboratory; Vice-Admiral Sir Harold A. Brown, engineer-in-chief of the Fleet; Sir Cecil Algernon Cochrane, chairman of Armstrong College Council, 1923-35; and Sir Arthur William Johns, director of naval construction.

Ultra-Violet Transmitting Glass

SPECIMENS of ultra-violet transmitting plate glass produced by Messrs. Pilkington Brothers Ltd., of St. Helens, Lancashire, show a region of high transmission in the region near 3650 Å., with an almost complete opacity to the visible spectrum except in the extreme violet, where the transmission is, however, said to be only about 1 per cent. Tested with a powerful spark source and a monochromator, the claims of the makers were found to be justified. The transmission in the ultra-violet was comparable with that of an 'ultra-violet' glass from another source, the cadmium line near 3610 Å. being freely transmitted; but whereas Messrs. Pilkington's new glass showed no transmission in the visible region when tested with a pocket spectroscope, the other glass showed a marked transmission band in the red. The glass can be manufactured in large sizes; specimens have been submitted of thickness 8 mm. and 11 mm. respectively. In view of the increasing importance of fluorescence tests, and other applications of ultra-violet radiation, numerous uses should be found for it, since its opacity to visible radiations should facilitate the distinction between genuine fluorescence and effects of reflected light. It may be worth noting that in very thin layers this new glass is of a blue-green colour. A prism of small angle ground to a very thin edge should make a very pretty example of dichromatism.

Scent and the Weather

HITHERTO, success in hunting has depended largely on popular omens of hunting conditions and on the practical experience of Masters of Hounds. The relation of scent and the weather formed the subject of a recent scientific study (see NATURE, April 14, 1934, p. 548). Now a meteorological officer of the Royal Air Force (R. G. Veryard) has supplied information enabling the Master to arrange place and time of meet to fit in with the best scenting conditions. In a pamphlet issued by the Masters of Foxhounds Association of India (Lieut.-Col. C. J. R. Turner, 47th Sikhs, Chaman, Baluchistan. 3 rupees), although specially written for the Peshawar Vale Hunt, he discusses many points which are of more than local interest. An inversion, or low lapse-rate of temperature, involving a restriction of the upward motion of eddies, is mainly favourable for good scenting conditions. The author does not agree with Mr. Budgett's view that for scenting conditions to be good the ground must always be warmer than the air, because a superadiabatic lapse-rate near the ground causes atmospheric turbulence which dissipates even scents which were quite strong initially. The number of good and bad scenting days are approximately equal during a calm, but, with a moderate wind, up to 3 on the Beaufort scale, the rate of evaporation is increased and scent may be good. If the air is less than 30 per cent saturated, scenting conditions are likely to be poor. Scent is more likely to be good if the soil is moist than if it is dry. The best hunting conditions in Peshawar obtained when the air temperature registered between 40° and 65° F.,