

South-Eastern Union of Scientific Societies

ANNUAL CONGRESS

THE fortieth annual congress of the South-Eastern Union of Scientific Societies was held at Bournemouth on June 26-29, under the presidency of Prof. A. C. Seward, Master of Downing College, Cambridge.

In his presidential address, Prof. Seward took as his subject "The Herbarium of the Rocks". He invited his audience to accompany him on a journey to a partially reconstructed forest of the Tertiary era. The Miocene Mascall flora of the John Day Basin of Oregon shows a close resemblance to that of the present-day Redwood Forest belt, although the former is many miles north of the latter. During the Oligocene period, Redwood forests very similar to those of California to-day have left traces in the Bridge Creek flora of the Crooked River Basin, south of the John Day Basin, and amongst other elements of this, for the most part dicotyledonous, flora is an Asiatic element showing relationship with Chinese plants. A similar flora to the Bridge Creek flora is found to have a wide range, since it occurs in Switzerland, Greenland, Siberia and Manchuria, but it is now confined to a narrow belt on the coast of California and Oregon. The Goschen flora of Upper Eocene times is another flora that differs widely from modern floras in corresponding latitudes. The view that these floras owe the members that they have in common to a southward migration of the parent plants from high northern latitudes has been confirmed in recent years. There must be a common origin for the similar living floras on both sides of the Pacific. Fifty-nine per cent of the genera of the Goschen flora are recorded from Cretaceous beds in the northern hemisphere where now is an arctic climate. Prof. Seward suggested that perhaps the Cretaceous ancestors of Tertiary plants were more tolerant of low temperatures. The ring of Tertiary floras that girdles the polar regions shows a decline of climate as compared with those of Cretaceous times. The Mull flora has much in common with that of arctic lands, and this with the other Tertiary flora represented by the inadequately-studied flora of Bournemouth show that there were then two distinct botanical provinces.

In the Archæological Section, Mr. T. D. Kendrick spoke on "Early Christian Art in the British Isles". Mr. J. B. Calkin demonstrated that prehistoric Bournemouth was full of interest. He has made a large collection of pottery and flint implements, which for want of a public museum are not available to the general public. His story of Bournemouth began with prehistoric man's implements found in the gravels between that town and Christchurch. Whilst there is no evidence of glacier conditions, the area was abnormally cold during parts of the Pleistocene era. Acheulean man lived here before the gravels were laid down, which were due to subsidence. At one time the area contained more than a hundred barrows. Few have been properly excavated, an exception being those of Hengistbury. Strangely enough, scarcely a single barrow faces Poole Harbour. Ten drinking beakers out of eighteen for the whole of Hampshire have been found in the district. Two food-vessels have come from Swanage, associated in

each case with a human skull. In one Bronze Age site more than a hundred urns came to light, although most of them had been destroyed. An early Iron Age culture was found in Long Field, Hengistbury, corresponding with that of Hallstatt on the Continent. Mr. Calkin exhibited many of the remains to which he alluded in his paper.

Prof. R. J. Tabor and Prof. M. C. Potter read papers of a botanical nature. The Rev. F. C. R. Jourdain spoke on ornithological progress during the past fifty years, and commented on the new nomenclature that he and others were successful in bringing into effect, and on the increased study of bird-life as shown by the British Ornithologists' Union, now numbering more than 400 members, although it commenced in 1858 with twenty members. Some attention was given to the modern recognition of races of birds as well as species. "If the breeding ranges of two forms overlap or coincide and yet remain apart they must be species; if on the other hand they are obviously closely allied and yet replace one another geographically they are races." The hooded and carrion crows are distinguishable at a glance, and although they as a rule have different breeding ranges, there are places in Scotland, Germany and Russia where they interbreed. Mrs. K. Grant spoke on "Migration of Butterflies" and showed an exhibit from the entomological department at Rothamsted.

In the Geological Section, Dr. H. D. Thomas made out a good case for certain lines of evolution, or trends, in respect of fossil foraminifera and other lowly forms of life. A lecture by Lieut.-Colonel C. D. Drew on "Recent Excavations at Maiden Castle" was followed by a visit under his guidance by about seventy members to the earthworks. Here the cutting into the filled-up ditch, which had yielded neolithic evidence, was seen and also the remains of the Roman temple, round which were strewn innumerable roofing-tiles. Reference should be made to the small bronze bull which was found, with the upper parts of three human figures on its head and back; this was afterwards seen in the Dorchester Museum. In the museum was noticeable a large area covered with Roman tessellated pavement, laid down as originally on the floor of a Roman villa.

Dr. Vaughan Cornish gave one of his delightful talks on "Scenic Amenities in Town and Country".

Visits were made to Corfe, Littlesea, Beaulieu Abbey, Poole Pottery Works, Wareham, and other places of scientific interest, whilst on the social side of the Congress, the Mayor and Corporation gave the Union a civic reception at the Pavilion.

Educational Topics and Events

EDINBURGH.—Sir Charles Sherrington has been appointed Gifford lecturer for the years 1936-37 and 1937-38.

At the medical graduation ceremonial on July 17, the honorary degree of LL.D. was conferred on Prof. A. N. Richards, professor of pharmacology in the University of Pennsylvania.

LEEDS.—Mr. H. S. Clough has given £250 towards the erection of an observatory to house the telescope and other astronomical instruments recently presented by Mrs. Bolton of Bramley.

LONDON.—The following appointments have been made: Dr. James Whillis, since 1923 lecturer in anatomy at the College of Medicine, Newcastle-on-Tyne, to be reader in anatomy (Guy's Hospital Medical School) as from October 1; Dr. Jerzy Neyman, since 1927 lecturer in mathematical statistics at the Central College of Agriculture, Warsaw, and also since 1928 head of the Biometric Laboratory, Nencki Institute, Warsaw, to be reader in statistics (University College) as from October 1.

The title of professor of statistics in the University has been conferred on Dr. E. S. Pearson, in respect of the post held by him at University College.

The Sir George Jessel studentship in mathematics for 1935 has been awarded to Mr. A. E. Chapman, of University College.

Mr. E. P. Stibbe, senior demonstrator of anatomy at the London Hospital Medical College, has been appointed to the University readership in anatomy tenable at King's College from October 1.

PROF. A. NORMAN SHAW has been appointed head of the Physics Department and director of the Macdonald Physics Laboratories at McGill University, Montreal, in succession to Prof. A. S. Eve, who has retired.

A 'SABBATICAL YEAR' for university teachers is a notion that has obviously much to recommend it, but it has failed hitherto to gain effective acceptance in Great Britain as a feature of university policy. In a statement recently submitted on behalf of the Association of University Teachers to the University Grants Committee, it has been urged as a "highly desirable reform" and in an article by Mr. G. F. H. Harker, of University College, Cardiff, published in the April issue of the *Universities Review*, the case for it is argued with considerable force. The writer quotes Bertrand Russell's "Every university teacher ought to have one year in every seven to be spent in foreign universities . . ." and points to the spectacular rise of America to the front rank in so many fundamental branches of thought and action as attributable in some measure to American universities encouraging the members of their teaching staffs to do this very thing. English universities are more or less autonomous, and are proud of the fact, but they suffer, especially the smaller ones, from a correlative tendency to isolation. During vacations the average university teacher, except for spells of necessary relaxation, divides his time between private work for supplementing his income and the preparation of lecture courses for the ensuing session. Moreover, only a lengthy stay abroad, and that not during vacations, can give any real insight into universities in another country.

THE Tennessee Valley Authority has provided for the world an object lesson in the operation of a planned economy without recourse to compulsion. The salient features of this vast undertaking are already widely known in Great Britain thanks to the recent publication in *The Times* of special articles by Prof. Julian Huxley. An account of its more specifically educational aspects is given in *School Life* of March under the heading "A New Frontier in Education". The authority assumes towards its labour force responsibilities more like those of the head of a family than the mere cash nexus of the paymaster. It charges itself with the organisation of an environment

suitable for a civilised life. In its various training programmes it has grappled successfully with the difficulties of providing ample facilities for instruction for employees without disorganising the work on which they are engaged. The normal working hours are 5½ hours a day for six days a week. For the more talented workers opportunity is provided for changing every five weeks from one to another of ten different types of work. The authority has created a civil service of its own in which appointments are, it is stated, made on the basis of merit only. This would-be Happy Valley covers 40,000 square miles and some six million people are or will be affected.

Science News a Century Ago

Death of Gilbert Thomas Burnett

ON July 27, 1835, at the early age of thirty-five years, Gilbert Thomas Burnett, the first professor of botany in King's College, London, died, worn out by "multiplied literary, lecturing and professional labours". The son of a London surgeon and born on April 15, 1800, Burnett began the study of medicine at fifteen years of age, and, after commencing practice as a surgeon, gave lectures on medical and general botany at the Great Windmill Street School of Medicine. He frequently lectured at the Royal Institution, gave a course at St. George's Hospital, and in 1831, on the opening of King's College, was appointed to the chair of botany. At the time of his death he was also professor of botany to the Apothecaries' Society. His "Outlines of Botany" in two volumes appeared shortly after his death, while a large series of "Illustrations of Useful Plants Employed in the Arts and Medicine", which was published during 1840-49 with drawings by his sister, contained text chiefly by Burnett himself.

J. D. Forbes in the Pyrenees

ANOTHER entry from the "Journal" of Forbes during his visit to the Pyrenees in 1835, dated July 29, said: "I left Luz on foot at half-past five, for Gavarnie. . . . Beyond Gèdre, where we breakfasted, I found in accordance with the accurate account of Charpentier, magnificent crystallised limestone in the granite: the granite here, like that of Héas, is altogether a strange rock, and often passes into a slaty structure, becoming gneiss, or mica slate, besides enclosing masses of these rocks, and forming an absolute breccia. But where crystalline, it seems to me never stratified; the fissures and the flat surfaces they leave can never be traced to any distance, and when they disappear, are as often at right angles to the former as not. The appearance of vertical stratification is often caused by the rain courses, as in the valley of the Reuss at St. Gothard, to some parts of which this valley has a great resemblance. . . ."

Berzelius in Paris

ON July 31, 1835, *The Times* announced that "The celebrated chymist M. de Berzelius has just arrived in Paris. He is accompanied by one of his former pupils M. Dahestraeno, professor of chymistry at Stockholm. It is the intention of these two savans to remain in Paris until the beginning of September, when they will set out for Germany, to be present at the meeting of the naturalists at Bonn."