

Poultry Association of Great Britain. Mr. Taylor was appointed to the staff of the Ministry of Agriculture and Fisheries in December 1946 as a poultry advisory officer in the National Agricultural Advisory Service.

#### Mr. C. S. Windebank

MR. C. S. WINDEBANK has been appointed managing director of the Esso Development Company. This Company conducts and co-ordinates research, contract and patent work for the benefit of the Esso group of petroleum companies in Europe. Mr. Windebank took first-class honours in chemical engineering at the University of London, and in 1936-37 was at the Massachusetts Institute of Technology, where he was awarded the degree of M.Sc. In 1937 he joined the technical staff of International Association (Petroleum Industry), Ltd., in London, and later, in 1940, he was released from the Army in order to undertake technical work with Esso European Laboratories on aviation fuels. On the formation of the Esso Development Company in 1947 Mr. Windebank was made manager of the Research Department.

#### Royal Society of Edinburgh: New Fellows

THE following were elected fellows of the Royal Society of Edinburgh at the ordinary meeting held on March 7. Dr. Charlotte Auerbach, 9 Fountainhall Road, Edinburgh 9; Dr. R. S. Barclay, statistician to the West Highland Survey; Dr. W. Black, principal scientific officer to the Scottish Society for Research in Plant Breeding; John Cameron, Sheriff of Inverness, Moray, Nairn, Ross and Cromarty; Prof. W. H. J. Childs, Physics Department, Heriot-Watt College, Edinburgh; Dr. Ethel D. Currie, University of Glasgow; Dr. D. P. Cuthbertson, director of the Rowett Research Institute, Bucksburn, Aberdeen; Dr. A. M. Gillespie, 135 Craiglea Drive, Edinburgh 10; Mr. D. Grant, 19 Falcon Road West, Edinburgh 10; Dr. F. Gross, Zoology Department, University of Edinburgh; Mr. J. Jack, Mayfield, Monktonhall, Musselburgh, Midlothian; Prof. R. V. Jones, Natural Philosophy Department, University of Aberdeen; Dr. Sheina M. Marshall, principal scientific officer, Scottish Marine Biological Association Laboratory, Millport; Mr. N. G. Matthew, 126 West Savile Terrace, Edinburgh 9; Dr. Christina C. Miller, Chemistry Department, University of Edinburgh; Mr. H. C. Pawson, assistant director and senior tutor in agriculture, King's College (University of Durham), Newcastle-upon-Tyne; Dr. I. A. Preece, 7 Blinkbonny Road, Edinburgh 4; Dr. Doris L. Reynolds, 7 West Mains Road, Edinburgh 9; Dr. H. O. W. Richardson, Natural Philosophy Department, University of Edinburgh; Dr. H. Sington, London; Dr. J. Smart, Zoology Department, University of Cambridge; Dr. R. H. A. Swain, Bacteriological Department, University of Edinburgh; Mr. G. Waterston Harestanes, Longniddry, East Lothian; Mr. R. G. White, director of the Animal Breeding and Research Organisation, Agricultural Research Council; Dr. F. N. Woodward, director of the Scottish Seaweed Research Association.

#### Use of the Term 'Coliform'

THE term 'coliform' has for some time had an obscure meaning, and it has become increasingly clear that a definition is desirable. Those interested in medical and veterinary bacteriology have used it to embrace only the morphological characters of many

species, not of *Bacterium coli* alone, but also of the dysentery bacteria, the salmonella and other Gram-negative rods similar to *Bacterium coli*. On the other hand, the term 'coliform' is restricted by many water and dairy bacteriologists to those organisms which are not only morphologically similar to *Bacterium coli* but which also resemble it in its cultural and biochemical characteristics; some have even regarded it as being synonymous with *Bacterium coli* of faecal origin. Because of this confusion and also because there is now a closer liaison between all those who study bacteria from whatever aspect, a committee of nine representing this variety of interests was appointed by the Society for General Microbiology and by the Society for Applied Bacteriology. This committee met on several occasions to discuss various aspects of the matter, and it is hoped that bacteriologists in general will be able to agree upon the meaning of the term 'coliform' which has been put forward.

Dr. Reginald Lovell (for the Society for General Microbiology), Royal Veterinary College, London, N.W.1, and Dr. C. B. Taylor (for the Society for Applied Bacteriology), c/o Messrs. Lever Brothers and Unilever, Ltd., Port Sunlight, Cheshire, have forwarded the following relevant portions of the committee's report: "(1) The term 'coliform' means 'like *Bacterium coli*', or 'coli-like'. (2) 'Coliform' is an adjective, and as such has no generic or ecological significance. (3) It is proposed that the term 'coliform' should refer to Gram-negative rods resembling *Bacterium coli* in morphology and staining reactions, but not necessarily in cultural and biochemical characteristics. (4) That the widest publicity should be given to this definition to prevent the term being employed to define different specific types by different workers, or to restrict the term to particular branches of bacteriology. The committee is convinced that the proposed definition is the only one satisfactory to all interests in bacteriology and is opposed to any definition based on ecology or biochemical reactions. Existing systems allow for classification of organisms grouped under the wide term now proposed."

#### University of Birmingham

At the annual meeting of the Court of Governors of the University of Birmingham, the Pro-Chancellor, Mr. Sydney Vernon, announced that the progress of building at the University would be accelerated in the present year by an increase in the available supplies of material and labour. Among the first requirements to be met is the extension of the students' union. At present a part of the new engineering building is well advanced, and it is hoped that a further portion will be undertaken very shortly. The estimated cost of the much-needed halls of residence is such as to postpone indefinitely their realization. Present needs have been met to some extent by the erection of a number of prefabricated huts which are regarded as temporary, though they appear to be more durable than the old wooden Army huts erected in 1919, some of which are still in use. The doubling of the University population during the ten years following the War was regarded as being in the national interest; but Birmingham has already more than achieved this aim, the present number of students being between 3,250 and 3,500, a figure at which the Vice-Chancellor considers it might well be stabilized.

Among experiments aimed at broadening the education of the undergraduate, mention was made of

the action in the Department of Electrical Engineering, where Prof. A. Tustin has eliminated much detail from third- and fourth-year honours courses to make room for lectures and discussions on philosophy, literature, economics, and the impact of the natural sciences on society. The students are expected to write a substantial essay each session on some topic outside their professional syllabus, and a departmental library of books on non-technical subjects has been provided. The results so far appear highly satisfactory. The problem of staff salaries has been accentuated by the recommendations of the Spens Report. Whatever solution is found, the effect on university welfare will be profound. The problem is not one of standard of living but of competition for the best human material, without which the costly measures being taken to give university education to a greater proportion of the best of the youth of Great Britain will not produce the results they should.

### University of Natal

THE University of Natal is celebrating at Pietermaritzburg on March 15 and Durban on March 19 the granting of a charter to the University which became effective at the beginning of this year. Sir Raymond Priestley, vice-chancellor of the University of Birmingham, Lord Eustace Percy, vice-chancellor of the University of Durham, and Prof. J. Dover Wilson, formerly regius professor of rhetoric and English literature in the University of Edinburgh, are visiting South Africa for these celebrations. They are travelling under the Commonwealth University Interchange Scheme initiated by the British Council as a result of recommendations made at the Congress of Universities of the British Commonwealth last July. Under the scheme the Council will award travel grants to university teachers travelling on recognized study leave; distinguished scholars invited for short visits; and postgraduate research workers holding research grants. The grants are made on the recommendation of a committee representing the Association of Universities of the British Commonwealth, the Committee of Vice-Chancellors and Principals of the United Kingdom, and the Universities Advisory Committee of the British Council.

### Exchequer Grants for Universities in Britain

SIR STAFFORD CRIPPS, Chancellor of the Exchequer, in a written answer in the House of Commons on March 1, stated: "I am providing £12,814,500 for recurrent grants to universities. This amount includes provision for the additional expenditure which universities will incur in bringing into operation the revised scales of payment for teachers in the medical and dental schools. . . . The progress of the universities' scheme for physical expansion necessitates an increase in the amount required for non-recurrent grants, and I am providing £4½ million for this purpose as against £2,600,000 this year."

### Effects of the Mild Winter

THE unusually mild weather over the greater part of the winter of 1948-49 in England and Wales has not only produced many remarkably interesting phenological observations, but also substantially contradicted the various theories and averages upon which amateur and professional meteorological observers forecast a probably severe winter for this period. Indeed, one London wild-life quarterly produced in the winter of 1948-49 a paragraph: "Nature-

wise observers predict an unusually severe winter". Their reasons were: "(1) There has been an unusually heavy crop of wild berries. (2) Squirrels have been noticeably active in gathering and storing nuts. (3) Flocks of wild geese from Iceland and Russia have arrived earlier than usual. (4) Wild swans are arriving in considerable flocks. . . . (5) In the Highlands the deer have left their mountain fastnesses a month earlier. . . ." In each case the oft-quoted forecast had been disproved even so recently as the mild winter of 1947-48, which followed an abundant berry crop—the result of a previously good growing season. Very large flocks of pintail and wigeon have been recorded on the Cheshire Dee despite the mild winter.

January was free from the cold and snowy conditions usually prevailing at this time of the year. On January 24 a mallard duck was reported with a nest of four eggs in a hollow tree at Worcester College, Oxford, and it had increased its clutch to seven by January 27. In North Wales the lesser celandine was in flower from January 9 at Llanarmon, as was the water-crowfoot, and by the third week dog's mercury, hazel and barren strawberry were in flower. The coltsfoot was first reported flowering in Cheshire on January 16, compared with the thirty-five years average date of March 3. Hazel catkin flowers appeared seventeen days earlier than the thirty-five years average. The chiffchaff has been reported wintering in southern England. In Shropshire the chaffinch was first heard in song on January 31 compared with February 6 in 1948, February 5 in 1944, and February 7 in 1943. The Merseyside Naturalists' Association recorded forty species of plant in flower by March 1, 1949, compared with April 1, 1948.

### The Eyasi Skull

THE June 1946 issue of the *Journal of the East Africa Natural History Society* contains two articles, one by Dr. J. S. H. Beakey entitled "Report on a visit to the site of the Eyasi skull found by Kohl-Larsen", and the other by W. H. Reeve on "A geological report on the site of Dr. Kohl-Larsen's discovery of a fossil human skull, Lake Eyasi, Tanganyika Territory". In the course of an expedition to the region of Lake Eyasi in Tanganyika Territory during 1934-36, Dr. Kohl-Larsen discovered there parts of three human skulls, together with some artefacts and fossil mammalian remains. The actual site is situated on the flats bordering the lake, and is approximately at the level to which the water rises during the wet seasons. The fossil human skull came from the so-called bone bed, a deposit of slightly consolidated sand. As the Eyasi deposits have not been disturbed, they must be subsequent to the earth movements which immediately followed the Middle Pleistocene in those regions. There seems, however, no reason, either on archaeological or geological grounds, to question their late Pleistocene age, a date assigned to them by Dr. Kohl-Larsen. It may be added that the Eyasi strata contain minerals often found in Olduvai Bed 5, which also belongs to the same period.

### Archæology in the Vaal River Basin

THE Archaeological Survey of the Union of South Africa has recently published a pamphlet entitled "Early Man in the Vaal River Basin" (Archæological Series, No. 6. Pretoria: Government Printer, 1948. 5s.). This interesting paper includes an article by Prof. H. Breuil on the earlier stone-age finds in the