

be, but every successive step increases the probability of its truth; and probability, as Bishop Butler taught, is the guide of life. Meantime it is, one may say, the positive duty of everyone who has the opportunity, to fill up, so far as is in his power, the gaps that still exist in the chain of evidence. Here is an especially promising field for naturalists resident in tropical regions.

Before concluding this address there are two points on which I should like to lay some special emphasis. One is the undesirability—I had almost said folly—of undervaluing any source of information or any particular department of study which does not come within the personal purview of the critic or commentator. "I hold," says Quiller-Couch, "there is no surer sign of intellectual ill-breeding than to speak, even to feel, slightly of any knowledge oneself does not happen to possess." This is a temptation to which many of us are liable; and falls, I fear, are frequent. It was a matter of sincere regret to me to find one of my most valued scientific friends speaking publicly of the Odes of Horace as a subject comparatively devoid of interest. I can only confess my utter inability to sympathise with my friend's point of view. If he had merely said, "Excellent as those works may be, I have other things to do than to attend to them," I could approve; but that is a different matter. The failing that I speak of is, unfortunately, by no means unknown among scientific men, and is perhaps rather specially prevalent when such subjects as those of my present address are in question. I can recall a very eminent man of science, no longer living, speaking with scarcely veiled scorn of those who occupied themselves with "butterflies in cases." This was in a presidential address to a section of this association. If so little respect is paid by a leader of science to work done in another part of the field, it is perhaps not to be wondered at that one of his Majesty's judges should speak of the formation of a great collection of butterflies—a most valuable asset for bionomic research—as the "gratification of an infantile taste." This or that collector may be an unscientific person, but it would be easy to show that the study of insects in general, and of butterflies in particular, is one of the most efficient of the instruments in our hands for arriving at a solution of fundamental problems in biology.

My second and final point is this: I have not hesitated to affirm my conviction of the importance in evolution of the Darwinian doctrine of natural selection. This necessarily carries with it a belief in the existence and general prevalence of adaptation. I am willing to admit that at times too much exuberance may have been shown in the pursuit of what Aubrey Moore called "the new teleology." "Men of science," it has been said, "like young colts in a fresh pasture, are apt to be exhilarated on being turned into a new field of inquiry; to go off at a hand-gallop, in total disregard of hedges and ditches, to lose sight of the real limitation of their inquiries, and to forget the extreme imperfection of what is really known." This is not the utterance of some cold outside critic, but of a great exponent of scientific method—no other than Huxley himself. It may be true of some of the wilder speculations of Huxley's date. I am by no means sure that there is not truth in it as applied to some of the developments of a later time. But however wide of the mark our suggested explanations and hypotheses may be, the net result of all our inquiries, after the gradual pruning away of excrescences and superfluities, will be a real advance into the realms of the unknown. We may feel perfectly assured that the objections so far brought against our own interpretations are null and

void, but we may yet have to give way in the light of further knowledge. "Let us not smile too soon at the pranks of Puck among the critics; it is more prudent to move apart and feel gently whether that sleek nose with fair large ears may not have been slipped upon our own shoulders."<sup>1</sup>

#### UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

BRISTOL.—Under the will of the late Dr. Joseph Wigglesworth, whose interest in bird life is widely known, his ornithological library passes by bequest to the University. This library of more than 1000 volumes, including finely-bound copies of the works of Gould, Seebohm, Dresser, Lilford, Levaillant, and other leading authorities, is probably one of the best in the kingdom. It will be housed in a separate room in the new University buildings, and will be kept up to date. Dr. Wigglesworth gave the residue of his estate to the University after his widow's death for the furnishing and maintenance of this special library. The advantage to a university of facilities for prosecuting specific lines of research can scarcely be overestimated. Situate, as is Bristol, in a district rich in birds, it is to be hoped that the studies to which Dr. Wigglesworth devoted so large a portion of the little leisure obtainable in a busy and fruitful life will be stimulated by a bequest which will serve to keep his own work in remembrance.

CAMBRIDGE.—Dr. A. E. Shipley, Master of Christ's College, has resigned the office of Vice-Chancellor and been succeeded by Dr. Peter Giles, Master of Emmanuel. During his period of office Dr. Shipley devoted himself consistently to progressive measures, and was most active in furthering schemes of scientific importance. He has had two years of very strenuous work under abnormal conditions, and members of the University are grateful to him for the devoted attention he has given to all matters affecting their best interests.

GLASGOW.—During the summer an unusually large number of university lecturers have been promoted to professorial chairs at Glasgow and elsewhere. Prof. Henderson, formerly assistant, and lately professor, at the affiliated Royal Technical College, has been appointed to the Regius chair of chemistry in the University; Dr. T. S. Patterson, Waltonian lecturer, to the Gardiner chair of organic chemistry; Dr. E. P. Cathcart, formerly Grieve lecturer, to the Gardiner chair of physiological chemistry; Dr. C. Browning, formerly lecturer in clinical pathology, to the Gardiner chair of bacteriology; and two other lecturers in the arts faculty have also been promoted to chairs in the University.

The Queen's University of Belfast has elected Dr. A. W. Stewart, lecturer in physical chemistry at Glasgow, to its chair of chemistry, and Dr. T. Walmsley, lecturer in embryology at Glasgow, to its chair of anatomy. Dundee University College (St. Andrews) has appointed Dr. F. J. Charteris, lecturer in pharmacy at Glasgow, to its chair of materia medica, and Dr. J. F. Gemmill, research fellow and formerly lecturer in embryology at Glasgow, to its chair of natural history. Dr. Shaw Dunn, lecturer in clinical pathology at Glasgow, has been appointed professor of pathology in the University of Birmingham. Dr. W. E. Agar, lecturer in zoology and heredity at Glasgow, has been appointed professor of biology in the University of Melbourne. Dr. Leonard Findlay, Gow lecturer in medical diseases of children, has also been

<sup>1</sup> Dowden.

appointed Director of Child Welfare to the International Red Cross organisation at Geneva. Three lecturers in the departments of economics, history, and modern languages have received professorial appointments in other universities.

LONDON.—A course of lectures on "A General Survey of the Globe and its Atmosphere," with practical work, will be given at the Meteorological Office, South Kensington, by Sir Napier Shaw, reader in meteorology in the University, on Fridays at 3 p.m. during the second term, beginning on January 23 next. The informal meetings at the Meteorological Office for the discussion of important contributions to current meteorology in Colonial or foreign journals will be resumed at 5 p.m. on Monday, November 3, 1919, and will be continued on alternate Mondays until March 22, 1920, with the exception of December 29. Students wishing to attend should communicate with the Reader at the Meteorological Office. The lectures are addressed to advanced students of the University and to others interested in the subject. Admission is free by ticket, obtainable on application at the Meteorological Office.

The academic teaching of military science as a subject of curricula for degrees of the University is to be resumed in the session now opening. Some years before the war military science was introduced as an optional subject for the Intermediate and Final Courses for the B.A. and B.Sc. degrees. The syllabuses have recently been revised by the Senate in the light of experience gained during the war, and it is expected that, in view of the large number of students who have gained practical military experience during the war, the subject will attract an increased number of students. The subject can be studied in the University both as a branch of general education and, in the case of candidates for University commissions in the Regular Army, as a preparation for their profession. Both classes of student will be able to obtain practical military training in the University Contingent of the Officers Training Corps. The post-war conditions under which commissions in the Regular Army may be obtained by University candidates have not yet been published.

SHEFFIELD.—Prof. J. O. Arnold, who recently resigned his position as professor of metallurgy and dean of the faculty of metallurgy in the University of Sheffield, has been in failing health for some time, and, much to the regret of the University authorities, he has found himself unable to continue his work. Prof. Arnold was appointed in 1889 professor of metallurgy in succession to the late Prof. W. H. Greenwood at the technical department of the Firth College, which afterwards became a constituent part of University College, Sheffield, and later of the University of Sheffield. The applied science department of the University has kept pace with the applications of science to the steel industry, and taken a prominent part not only in the supply of trained men to these industries, but also in producing in rapid succession a number of valued contributions to the science of metallurgy. Prof. Arnold himself has been an active contributor for many years of valuable papers and researches carried out in the laboratories of his department. In 1912 he was elected a fellow of the Royal Society, and in 1916 a member of the council of the Iron and Steel Institute. He lectured before the British Association during its visit to South Africa in 1905, and he became the first dean of the faculty of metallurgy recently established in the University. His colleagues and friends wish him renewed health and vigour, which they trust may come to him now that he has allowed himself to relinquish some

of the strenuous duties which he has performed so successfully for many years.

DR. EDWARD HINDLE, Kingsley lecturer and Bye fellow of Magdalene College, Cambridge, and assistant to the Quick professor of biology, has been elected to the chair of biology in the School of Medicine, Cairo, Egypt.

DR. R. H. A. PLIMMER, reader in physiological chemistry, University College, London, has been appointed as head of the biochemical department of Craibstone Animal Nutrition Research Institute, which is under the direction of Aberdeen University and the North of Scotland College of Agriculture.

MR. J. R. TAYLOR has been appointed to the newly-created post of director of humanistic studies in the Huddersfield Technical College. Mr. Taylor is a graduate of the University of Edinburgh, and for several years past has occupied the position of lecturer to University tutorial classes under the University of Leeds.

News has just reached us of munificent bequests made to educational institutions in the Commonwealth of Australia by the late Sir Samuel McCaughey. Bequests made to the Sydney University, the Brisbane University, soldiers and their dependents, and the Presbyterian Church in New South Wales and Queensland are proportions of the residue of the estate, and the amounts are, therefore, contingent upon the sum realised by the estate. The estimated value of the estate is 1,750,000l., and it is believed that, after certain legacies, amounting to about 230,000l., and the other specific bequests are provided for, the residue of the estate will amount to 1,394,000l. Among the specific and the residuary bequests based on this estimate for educational, religious, and charitable purposes, the following are mentioned in the *Sydney Morning Herald*:—Sydney University, 465,000l.; Brisbane University, 232,000l.; Scots College, Sydney, 20,000l.; Sydney Grammar School, 10,000l.; North Sydney Church of England Grammar School, 10,000l.; Cranbrook Church of England Grammar School, 10,000l.; Newington College, 10,000l.; and King's School, Parramatta, 10,000l. The university bequests are unconditional. The gift to the University of Queensland (Brisbane) will enable that institution to do what it has always wanted to do, and never had the chance of doing: become a university, and more than a place for imparting a certain amount of (chiefly) technical instruction. The political world is rather a troubled one, and the type of Labour Party in power has not taken much interest in higher education. So the University has been cramped for funds, and unable to get much past its initial stage. With the gift to Sydney it is hoped that in a few years' time this institution will be a far bigger force for good than it now is. State education policy has brought secondary education to the people, with the natural result that the University is thronged, and that the buildings have been taxed to the limit of their capacity, the staff, especially on the scientific side, being far too heavily burdened. Now there is a prospect of an end to that condition of affairs, and, as the State will doubtless add to the buildings, the new revenues can go to strengthen the staff and bring in a number of leading men. A great increase in the graduate travelling scholarships is also desired, so that more of the best men of the University may spend some years in England and elsewhere. It is hoped that Cambridge will soon allow a Sydney B.Sc. to enter for the Tripos without making him pass the Little-go.