

NEWS and VIEWS

Hope Professorship of Zoology at Oxford :
Prof. G. D. Hale Carpenter, M.B.E.

THE best wishes of scientific men everywhere go to Prof. G. D. Hale Carpenter on the occasion of his retirement from the Hope professorship of zoology at Oxford. He has occupied this chair since 1933 when he succeeded the late Sir Edward Poulton. After taking his degree in the honours school of natural science at Oxford, Prof. Carpenter gained a scholarship at St. George's Hospital Medical School, London. There he completed the usual medical courses, and obtained the certificate with distinction of the London School of Tropical Medicine. Thus qualified, he joined the Colonial Medical Service in 1910 and was appointed in the same year to the Royal Society's Sleeping Sickness Commission in Uganda. In the First World War he served in the East African Campaign during the years 1914-18. Afterwards he was made specialist officer for the control of sleeping sickness in Uganda from 1920 until 1930 and, in the following year, he retired from the Colonial Service.

Settling in Oxford amid highly congenial surroundings, Prof. Carpenter identified himself with the aims of the Hope Department, and it must have been a source of gratification to him when he followed in the footsteps of the great protagonist of Darwinism only two years later. All through his African career he was an ardent field naturalist. His duties in connexion with tsetse-fly problems took him constantly into the field. Many of his experiences and observations are embodied in his two books "A Naturalist on Lake Victoria" (1920) and "A Naturalist in East Africa" (1925). While at Oxford he has established a teaching course in entomology and published in collaboration with E. B. Ford a handbook on "Mimicry" in Methuen's Biological Series. This latter book embodies much of Carpenter's original work and notably his field observations on mimetic Lepidoptera and their enemies. In this way he has replied to the many critics of the mimicry theory who, as often as not, had no such first-hand information with which to support their contentions. During his tenure of the Hope professorship, in addition to his writings on Lepidoptera, he has developed the scientific value of the associated collections along sound lines. In particular, predeceous insects and their prey and the evidence of bird attacks on Lepidoptera deserve special mention. Prof. Carpenter has served as president of the Royal Entomological Society of London (1945-46), and as a vice-president of the Linnean Society.

Dr. G. C. Varley

DR. G. C. VARLEY, who has been appointed to the Hope professorship of zoology at Oxford, was educated at Manchester Grammar School and went up to Cambridge with a major open scholarship in natural science at Sidney Sussex College in 1929. He obtained a first class in both parts of the Natural Sciences Tripos and was awarded the Frank Smart Prize for zoology in 1933. In the same year he was appointed to a research studentship at Sidney Sussex College and became superintendent of the Entomological Field Station. During 1935-38 he was a research fellow of his College and in the latter year he obtained the degree of Ph.D. for a thesis on "The Natural Control of the Knap-weed Gallfly". In 1938 he was appointed to a University demonstratorship

and became curator of insects in the University Museum of Zoology at Cambridge. During the early part of the War, he was engaged in research on wire-worm control, and in 1941 he joined the Army Operational Research Group of the Ministry of Supply. Here he did distinguished work on the application of radar to coast defence and was promoted to the rank of senior experimental officer. After the end of the War, in 1945, he was appointed to the readership in entomology in the Department of Zoology at King's College, Newcastle-on-Tyne. Dr. Varley's main interests lie in the field of population studies with particular reference to insects, and he has a wide knowledge of the whole field of ecology. He is a first-class naturalist and a man who has exceptional powers for interesting his students in all branches of his subject. His new appointment will give him the opportunity of developing to the full his chosen field of work at a university which has already made such important contributions to the study of animal ecology.

Paris Academy of Sciences :

Prof. Robert Courrier

THE Paris Academy of Sciences has two 'secrétaires perpétuels': Prince Louis de Broglie, and very recently, Prof. Robert Courrier, who was elected in May in succession to the late Prof. Alfred Lacroix. Prof. Courrier, who was born in 1895, began his medical studies at Nancy, but they were interrupted by the First World War. On demobilization in 1919, he went to Strasbourg to work in the laboratory of the well-known endocrinologist, Prof. P. Bouin. He was appointed a professor in the Faculty of Medicine at Algiers in 1926, and went to Paris in 1938, where he has since held a chair in the Collège de France. He was elected to the Academy of Medicine in 1941, and to the Academy of Sciences in 1944.

Prof. Courrier's work has been on the glands of internal secretion. One of his first investigations concerned the thyroid, when he showed that one can inhibit this gland by massive doses of the thyroid hormone. He produced important evidence in support of the theory of Prof. Bouin, on the elaboration of the male hormone by the interstitial tissue of the testicle. He played a large part in the early researches on the female sex hormones; he found in the human female the follicular hormone which Allen and Doisy had just discovered in the sow; he found this hormone outside the ovary, and in particular in the amniotic liquid, and he remarked that it could pass through the placenta and the mammary gland, and powerfully affect the foetus and the newly born. He demonstrated the hormonal dualism of the ovary, at a time when leading workers held the view that only one hormone was secreted. With his pupils he has studied for a long time the functional relations connecting the two ovarian hormones, and he has made a detailed analysis of the endocrinology of gestation, which he has described in a recently published book.

Mathematics at University College, Bangor:

Mr. D. E. Littlewood

MR. D. E. LITTLEWOOD, whose appointment to the chair of mathematics at the University College of North Wales, Bangor, in succession to Prof. T. G. Cowling, has recently been announced, is well known as an algebraist. His best-known work is concerned with the theory of group characters, a branch of algebra which has been extensively developed in the last fifty years and which has an unusually wide

application to fields as diverse as the algebraic theory of invariants and modern quantum mechanics. Littlewood's work is in the direct line of tradition associated with the names of Frobenius, Alfred Young, and Schur; and his book, "The Theory of Group Characters" published in 1940, is a standard work on the subject. In recent papers, Littlewood has developed a calculus of a class of symmetric functions known as Schur functions which have recently been shown to have extensive applications in invariant theory.

Promethium, the New Name for Element 61

AT a symposium held by the American Chemical Society at Syracuse University on June 30, J. A. Marinsky and L. E. Glendenin, who during the War had succeeded in separating element 61 from the other uranium fission products, proposed to christen this element 'promethium'. They explained their choice by a reference to Prometheus, "who stole fire from heaven for the use of mankind and for his audacity was chained to a mountain by the gods and set upon by vultures. This name not only symbolizes the dramatic way in which the element may be produced in quantity as a result of man's harnessing of the energy of nuclear fission, but also warns man of the impending danger of punishment by the vulture of war." In a review published some eighteen months ago (*Nature*, 159, 8; 1947) the conclusion was reached that Prof. C. D. Coryell's group, to which Marinsky and Glendenin belong, had the strongest claim to the discovery of element 61 and was entitled to give it a name. Some may perhaps think the present proposal a little far-fetched, since there are more impressive effects of atomic energy known than the production of small quantities of a new rare earth, and classical students may take exception to the vultures—since Prometheus' quarrel was with Zeus, the bird sent by his antagonist to torture him was, naturally, an eagle; but the etymology of this new name will soon be of as little importance as that of dozens of other element names which are much less appropriate. There are still the rival claims for 'illinium' and, more recently, for 'cyclonium' (see *Chemical and Engineering News*, 25, 2555; 1947), and it is, therefore, too early to say whether the chemists of Coryell's group will be generally recognized as the discoverers of element 61; but their brilliant work seems to merit this international recognition, and there is a great likelihood that promethium (symbol Pm) will take its permanent place in the table of the chemical elements.

Commonwealth Plant Breeders' Meeting

AN informal meeting of Commonwealth plant breeders was held at the School of Agriculture, Cambridge, during June 24–25. Representatives from Australia, Canada, England, Malaya, New Zealand, Northern Ireland, Scotland, Sierra Leone, South Africa, Sudan, Tanganyika and Wales were present; Dr. P. S. Hudson, director of the Commonwealth Bureau of Plant Breeding and Genetics, acted as chairman. The proceedings of the meeting included a review by Dr. P. S. Hudson and Mr. R. H. Richens of the work of the Commonwealth Bureau of Plant Breeding and Genetics since the last similar meeting, short reports by the delegates of the principal lines along which plant breeding is developing in the various Commonwealth countries, and an account by Dr. P. S. Hudson of the results of the meeting held at Washington last April, between the Food and Agriculture

Organisation, the Commonwealth Agricultural Bureaux, the U.S. Department of Agriculture and other bodies, on genetic stocks. Among the resolutions passed at the meeting, several deprecated any reduction in the number or length of the abstracts appearing in *Plant Breeding Abstracts*, the periodical published by the Commonwealth Bureau of Plant Breeding and Genetics; support was given to a proposal to institute a standing inquiry service whereby plant breeders should be sent details at regular intervals of all published articles bearing on their own field of research; and suggestions were made to provide for an efficient service for the maintenance of genetic stocks of crop plants. The proceedings of the meeting will be circulated to the delegates and to other interested bodies.

Olympic Torches

THE Organising Committee of the XIVth Olympiad approached the Department of Scientific and Industrial Research in 1946 for assistance and advice on the design of a torch to be carried by relays of runners across Europe from the plain of Olympia to Wembley Stadium in London, and on the most suitable fuel. This problem was undertaken by the Fuel Research Station, and the actual investigation was carried out by Dr. L. R. B. Shackleton. After many trials, it was decided that the most suitable fuel was hexamine in the form of tablets. Hexamine gives a non-luminous flame, and to make the flame visible in all weathers 6 per cent of naphthalene was added. The fuel was manufactured by Promedico Products, Ltd., 22, Turle Road, London, N.4. Prototype torches made at the Fuel Research Station were tried out by runners, first from the South London Harriers and, after certain modifications in design, by officers from the Royal Naval College, Greenwich. In the final design of the torch, seven tablets are enclosed in a perforated metal cylinder with an inner sleeve concealing the lower three tablets. As the upper tablets burn away, the lower reserves are forced up into the burning zone by a spring. In order to facilitate lighting, the Wessex Aircraft Engineering Co., Ltd., Salisbury, provided a tablet of nitrate composition which was introduced on top of the fuel pack. A quick-match, provided for ignition, protruded through the perforated container. One or two final refinements were introduced at the concluding stages to safeguard the effectiveness of the torches during transport to the various countries through which the relay runners had to pass. The fuel tablets were totally enclosed in a nitro-cellulose cover provided by Casceloid, Ltd., High Holborn, London. This cover burned immediately on ignition, leaving no carbon residue. The perforated metal fuel container was also capped and sealed with adhesive tape. Both of these precautions were considered necessary to preserve the fuel and to avoid any risks of accidental ignition.

Museum of the History of Science, Oxford

SINCE 1940 the Museum of the History of Science, Oxford, has been making inquiries as to the whereabouts of a number of valuable and irreplaceable objects which had been stored at the beginning of the War by the late curator of the Museum, Dr. R. T. Gunther. These included the oldest dated instrument in the world, an astrolabe dated A.D. 984, the astrolabes of Queen Elizabeth and Archbishop Laud, the sundial made by Nicolaus Kratzer for Cardinal Wolsey, and many other treasures. Dr. Gunther died without revealing the place where he had stored these