NEWS and VIEWS

Imperial Institute of Entomology

In the early part of the century the importance of entomology to the health services and to agriculture in the Overseas Empire was at last beginning to be realized. In 1909 the Entomological Research Committee of the Colonial Office was formed, with Sir Guy Marshall as scientific secretary. In 1913, when the Committee extended its outlook and became the Imperial Bureau, and later the Imperial Institute of Entomology, Sir Guy became director, and he has just retired; he has thus guided the fortunes of entomologists in the Government Services abroad for more than thirty years, ably supported by Dr. S. A. Neave, who has been assistant director since 1913. The period has seen great changes in the position of entomology in the Empire. From a few isolated workers, largely unaware of each other's work, or even of each other's existence, there has developed a small army of several hundred field workers; and much of this progress has been due to the Imperial Institute of Entomology. Instead of being completely out of touch with work elsewhere, the field entomologists have had the invaluable Review of Applied Entomology, which has summarized progress in agricultural and medical entomology for the past thirty years. It is difficult to-day to imagine how one got on without this journal.

Another great difficulty of the entomologist abroad was that of getting specimens identified. This problem was one of the first to be tackled by the Bureau, and for many years now the words "kindly identified by the Imperial Institute of Entomology", so frequent in entomological papers from all over the Empire, are a testimony of the great value of this work. No appreciation of the work of the Institute would be complete without mention of the Parasite Laboratory at Farnham Royal, from which useful parasites and predatory insects have been distributed to all parts of the world. Sir Guy Marshall has built up his organization with energy, with vision and with a sympathetic understanding of the difficulties of the man in the field; and now, on his retirement, he hands on the reins of government to his assistant director. Dr. Neave has succeeded to a difficult task in difficult times, but the work he has already done with the Review, with the Zoological Record, with the "Nomenclator Zoologicus" and in many other ways, leaves no doubt that the Imperial Institute of Entomology is still in capable hands.

Prof. William Peddie

The retirement is announced of Prof. W. Peddie from the Harris chair of physics at University College, Dundee, in the University of St. Andrews. Born in Orkney in 1861, Prof. Peddie was educated in Orkney and Edinburgh, and graduated in that University in mathematics and natural philosophy. A student of Prof. P. G. Tait and a lecturer in the Department of Natural Philosophy, Prof. Peddie obtained the degree of D.Sc. from Edinburgh. He has always taken a keen interest in the work of the Royal Society of Edinburgh, and has served on the Council and as vice-president. In 1907 he was appointed as Harris professor in Dundee in succession to Prof. J. P. Kuenen, the first occupant of the chair, and for thirtyfive years has carried on the work of the Department of Physics. In addition to text-books on elementary dynamics and physics he has written works on colour

vision (1922) and on molecular magnetism (1929), two subjects on which he has specialized, and he has frequently contributed the results of his work to NATURE.

Prof. Peddie reached the conclusion that the Young-Helmholtz theory of colour vision is the simplest, but the mechanism proposed by them is not an essential part of the theory. The formal laws of action, and these alone, constitute the essence of the theory. A paper published in the *Philosophical Magazine* in September 1941 gives a summary of six years' work on magnetization in crystalline media. The results in general sustain Weber's theory, which originated almost a century ago. An appreciative reviewer of his book called the modern presentation "Peddie's theory". The theoretical aspects of physics have always aroused his interest, and in discussing in 1931 the philosophy of "As If" in physical science he wrote: "The idealist, if he is an investigator in physical science, cannot avoid acting upon the postulate of realism. Nothing else gives him a foothold for work. He has to regard the universe 'as if' it were real. All our philosophies are necessarily based upon postulate; all our science is founded upon faith."

Biology and Human Welfare

Speaking at a conference at Newnham College, Cambridge, under the chairmanship of Mr. L. J. F. Brimble on August 8, Sir John Orr outlined his conception of the place of science in the post-war era. Pleading for a clearer vision of the great new world, he said: "What we need to go for in the new world is not the application of physical science for the production of goods to get money-power, but the application of biological science to build better men and a better society." The first step in the new world must be the abolition of poverty, and we must concentrate on building men and women before we build new cities. Sir John expressed the view that the age which is now passing away is largely the age of physical science, with its inventions and discoveries, which have given us power over the forces of Nature. It is to be hoped that when this War is over the age of physical science will be replaced by an age of biological science—the study of life in all its manifestations. Reviewing some of the results of the age of physical science he pointed out that in spite of the new inventions and discoveries the standard of life up to 1840 or 1850 actually fell below what it was before. The reason was that instead of applying the new machines wisely men had applied them to produce goods to sell to get money. "It was not that men were individually bad," he said, "but their whole background was bad. The fundamental ideal of the age was bad and, not only that, men did not even have the vision to see that this system must inevitably collapse, as it did during the War of 1914-1918.

One could have predicted a few years ago that the present War was inevitable. Now it has come it is destroying the age of the application of physical science to the production of money-wealth. Money is losing its power. The age of physical science is being destroyed by the machines which the system itself created. The old ideas are going with it, and to talk of reconstruction in the sense of getting back to 1938 is to talk sheer nonsense. In spite of the fact, however, that they have been driven by the