

of those members of the University who perished in the War, and this will ever remain a beautiful memento of his principalship.

Besides being the recipient of honorary academic degrees too numerous to mention in detail, Sir Donald MacAlister was decorated by the French and Italian Governments, and from his fellow-citizens he received the freedom of the city of Glasgow in recognition of his great services to their University and in testimony of their personal esteem. In 1929 he resigned the principalship after twenty-two years service and was unanimously elected Chancellor of the University in succession to the late Earl of Rosebery and Midlothian. His success as an administrator was largely due to an inborn aptitude for affairs, to a retentive memory for details and to a clear conception of the objects to be attained, but these were greatly enhanced by his industry, his devotion to duty and, as time went on, his wide experience.

WE regret to announce the following deaths :

Prof. H. L. Chablani, professor of economics in the University of Delhi, on January 14, aged forty-four years.

Prof. Fritz Haber, formerly director of the Kaiser Wilhelm Institute for Chemistry and professor of physical chemistry in the University of Berlin, known for his work on the thermodynamics of gas reactions, on February 1, aged sixty-five years.

Dr. William Page, general editor of the "Victoria History of the Counties of England", and a commissioner of the Royal Commission on Historical Monuments (England), on February 3, aged seventy-two years.

Capt. J. White, C.B., R.N., formerly dean of the Royal Naval College, Greenwich, previously professor of applied mechanics at the College, on January 28, aged sixty-three years.

News and Views

"Letters to the Editor"

DURING the year 1933, no less than four hundred communications appeared in NATURE under the heading of "Letters to the Editor", the big majority of which were the first announcements to be published of new work—news from the actual contributors to advances in science. Of this total, 201 were from scientific workers in universities and similar research centres in Great Britain and Ireland, and the remainder, 199, were from workers abroad distributed by continents as follows: Europe 78, America 57, Asia 37, Australia 14, Africa 13. In this week's issue of NATURE we are devoting 20 columns to 'letters' and the size of the journal has been increased to provide the necessary space. These 20 columns are, we believe, representative of the correspondence normally appearing in NATURE. The various items record current advances in biochemistry, atomic physics, radio communication, chemistry, biology and so on, and they are written by workers in Allahabad, Cambridge, Copenhagen, Dehra Dun (India), Groningen, Liverpool, London, Maine (U.S.A.), Nanking, Oxford, Schenectady, Stockholm, Sydney and Uppsala. Science truly is not confined by national boundaries. We think it a high compliment that scientific workers all over the world should regard our columns as the appropriate place to announce the progress of their labours and to discuss scientific matters and topics in which science and its methods are involved.

THIS part of the function of NATURE as an international journal of science has increased steadily in recent years. For some time past, the section of the journal devoted weekly to "Letters to the Editor" usually occupies 12 columns and frequently has been increased to 14 columns or more. Already this year we have printed 88 columns of 'correspondence', including the 20 columns appearing in this issue. Yet the waiting list is still large. The

amount of space which can be given to 'letters' in a normal issue of NATURE must of necessity be limited if the journal is to discharge the remaining part of its function as a general journal of science, and we may even be obliged in the future to ask correspondents to limit their 'letters' to about five hundred words, or one column of space. For the present, we would urge them most strongly to be concise and precise in their communications, so far as is consistent with making them intelligible to the general reader. A certain amount of specialised matter is inevitable in announcements and discussions, particularly of recent advances, but severely technical communications, of interest to a few workers only in the same highly specialised field, are out of place in a general journal such as NATURE, which endeavours to keep its readers informed of the broad lines of progress in all scientific subjects.

Dr. C. V. Drysdale, C.B., O.B.E.

DR. C. V. DRYSDALE, director of scientific research at the Admiralty, whose impending retirement is announced, has long been recognised as an authority on electrical measurements. In the early part of this century, while in charge of the Electrical Engineering Department of the Northampton Polytechnic Institute, he devoted considerable attention to measurements in the alternating current circuit, and his work on the dynamometer wattmeter, and particularly the development of the double element instrument for the measurement of polyphase power, is now well known. This was followed by several important contributions to technical literature on alternating current measurements, and included his pioneer work on the design of instrument transformers. The regenerative dynamometer together with the cone stroboscope were also devised at about this time for the equipment of the laboratories. He also investigated the possibilities of using iron cores

in dynamometer instruments and had some of the first iron-cored wattmeters built to his design which gave remarkably good performance. The simple phase shifting transformer was also designed and built, being originally intended to facilitate testing the performance of wattmeters at low power factors, and eventually this apparatus made possible his adaptation of the direct current potentiometer to the measurement of alternating potentials. This was the first self-contained instrument for this purpose, and in connexion with it he designed the first vibration galvanometer with tuning effected by variation of the magnetic control. He also gave considerable attention to accurate resistance measurement and devised a new form of standardising bridge which was a combination of the Kelvin and Carey Foster principles, and allowed of precise comparisons between standards over a wide range of values to be made with great accuracy and rapidity, and in connexion with this bridge he developed a novel and accurate ohm standard ingeniously compensated for temperature change. Some time later he designed low resistance standards with very small time constants for use in alternating current circuits.

DR. DRYSDALE'S activities were not, however, entirely confined to work in electrical measurements, for at one time he gave considerable attention to the testing of magnetic materials and investigated the rotary hysteresis in iron and steel and developed an ingenious permeameter for testing magnetic materials in bulk. He also contributed papers on the radiation from black-bodies and made some important determinations of the mechanical equivalent of light which were communicated to the Royal Society. To him also belongs the credit of initiating the teaching of technical optics, in what is now the Technical Optics Department of the Northampton Polytechnic Institute, and into this work he carried the same enthusiasm and originality that characterised his electrical work. He devoted much attention to the curvature method of teaching optics and devised many original methods of optical testing and the apparatus for carrying them out. When the War came his services were placed at the disposal of the Admiralty in connexion with submarine detection and destruction, and here his sound theoretical knowledge and brilliant inventiveness found considerable scope and resulted in the appointment from which he is now retiring. Dr. Drysdale is also known as the president of the Malthusian League and as the author of numerous papers on eugenics.

Sir William Preece (1834-1913)

WILLIAM HENRY PREECE, the distinguished electrician, was born at Bryn Helen, Carnarvon, on February 15, 1834. Educated at King's College School and King's College, London, he came under the influence of Faraday at the Royal Institution and, deciding to become an electrician, in 1852 he entered the office of Edwin Clark. The following year he was appointed a junior engineer on the staff of the Electric and International Telegraph Co. and afterwards was telegraph engineer of the Channel

Islands Telegraph Co. and the London and South-Western Railway Co., introducing many improvements in railway signalling. In 1870 he joined the staff of the Post Office, becoming in 1892 the engineer-in-chief, a position he held until 1899. His work in telephony began in 1877 and it was he who brought to England the Bell telephone with which Kelvin and Houghton gave an amusing demonstration at the Plymouth meeting of the British Association that year. As much scepticism existed regarding the capacity of the telephone, Preece arranged for the transmission of the notes of a bugle from Southampton to the Royal Institution during a lecture he delivered. A large and distinguished audience was present and at the appropriate moment Preece asked Tennyson to listen at the telephone. After doing so for a few moments, the poet remarked gruffly, "I hear nothing." Preece, catching up the telephone, after adopting a listening attitude, said, "I can hear, 'The Campbells are Coming'", and then proceeded with his lecture, none in the audience realising that the bugler had mistaken the date, and that Preece himself, like Tennyson, had heard nothing.

PREECE'S work on telephony led him in 1885 to make experiments on induction signalling and in 1892 he sent messages across the Bristol Channel from Penarth to Flat Holme. His work in this direction came to an end, however, with the use of the Hertzian waves. "Strange to say," wrote Silvanus Thompson, "he entirely missed the significance of the wireless signalling by Hertzian waves shown by Lodge at the British Association meeting at Oxford in 1894, and yet when Signor Marconi arrived upon the scene in 1896 using the same method and the same devices of oscillators, spark gaps, coherers and tappers, Preece received him with open arms and put the resources of the Post Office at his disposal with results known to all the world." By the time Preece retired three years later, wireless messages were being sent across the English Channel and between some of H.M. ships. Preece, who was admitted F.R.S. in 1881, twice served as president of the Institution of Electrical Engineers and in 1898 was elected president of the Institution of Civil Engineers. He was knighted on his retirement and was afterwards consulting engineer to the Colonies. His death took place at Penrhos, Carnarvon, on November 6, 1913.

Russian Ascent into the Stratosphere

SYMPATHY will be felt for the three Russians, Fedoseenko, Vasenko and Usyskin, pilot, engineer and student respectively, who met their deaths on January 30 in an attempt to investigate further the phenomena of the upper atmosphere. It was announced in the Press that a new height record of about 70,000 ft. had been established for a manned balloon, a conclusion arrived at from the record of the damaged barograph. The pressure reached, however, has not yet been published. Apparently the accident was due to heavy weather as the prime cause, for it appears that the balloon travelled about 350 miles in a south-easterly direction from Moscow in the