

sciences: the importance and place of the great October revolution in the history of mankind (E. M. Yaroslavsky); twenty-five years of the great October revolution and the patriotic war of the Soviet people (G. F. Alexandrov); Soviet State—a State of a new type (A. J. Vyshinsky); philosophical science in the U.S.S.R. during twenty-five years (M. B. Mitin); development of historical sciences in the U.S.S.R. during twenty-five years (B. D. Grekov); Soviet historiography (E. V. Tarle); a quarter century of Soviet literature (A. N. Tolstoi).

OBITUARIES

Sir William Noble

SIR WILLIAM NOBLE, who died on November 10 at the age of eighty-two, had devoted the whole of his active and strenuous life to the service of electrical communication, in which he rose from the humble grade of telegraph messenger to the leading position in the British Empire. He was appointed as a Post Office telegraphist at Aberdeen in 1877 at the age of sixteen, and at once began to show a keen interest in the electrical and technical sides of the telegraph service. He gained many medals, prizes and other honours and after a few years became a lecturer in electricity and telegraphy at Gordon's College, Aberdeen. It was not, however, until 1893 that he obtained a transfer to the P.O. Engineering Department as sectional engineer at Aberdeen. He soon attracted the notice of his departmental chiefs and thereafter his advancement was rapid. In 1897 he was personally selected for appointment as first-class engineer on the headquarters staff in London, by Sir John Gavey, who had had occasion to observe a highly original and efficient means he had devised for the mechanical testing of telegraph poles. Further promotions carried him through the grades of technical officer, assistant superintending engineer, and staff engineer, to that of superintending engineer for the London District in 1907. In 1912 he became assistant engineer-in-chief and in 1919 he succeeded Sir William Slingo as engineer-in-chief, a position which he held until his retirement from the Government service in June 1922.

Sir William Noble, who received a knighthood in 1920, was intimately concerned with all the many scientific, technical and commercial developments of the Post Office communications services during his long period of responsible office. As an administrator he had a genius for selecting the right man for the right place; he made quite exceptional efforts to make and maintain personal acquaintance with all the leading personalities of his great staff throughout the country. Every good and enterprising officer could count upon his understanding assistance and support, and he was accepted as guide, philosopher and friend by all.

Shortly after his transfer to headquarters in 1897 he plunged into the heavy work of the initial 'telephoning' of London on the basis of underground multiple cables in all central areas and the 'central battery exchange' system throughout. This involved pioneer work of much diversity and the careful gathering and maturing of experience in readiness for the complete transfer of the National Telephone Company's local exchange system to the Post Office in 1911. (The National Trunk Line system had been transferred to

the Post Office in 1895.) The full transfer in 1911, and its aftermath, also brought him much strenuous work, not the least of which was the unification and fitting in of the large technical staff of the National Telephone Company with that of the Post Office; in this delicate work he played by far the most important part, and its smooth and successful accomplishment stands to his credit. He had the subsequent development of the new situation well in hand when unfortunately the outbreak of the War of 1914-18 put a stop to everything. The changed financial situation and the industrial difficulties and confusion of the early post-war years introduced further obstacles, and meanwhile public criticism of the shortcomings of the country's telephone service became acute. Sir William's manful efforts to put the past and the future in proper perspective, both in the public Press and before parliamentary committees, will still be within the recollection of many.

When, a little later, Parliament set up the Geddes Committee with instructions to wield the economy 'axe' among Government departments, Sir William's able demonstration of the economic side of the Post Office Engineering Department, and its methods of continuously assessing and fostering the efficiency of capital and maintenance expenditure in all districts, carried conviction, with the result that his Department was one of the very few Government departments to receive a complimentary testimonial from the Geddes Committee.

Sir William was deeply interested in, and did much to encourage, the adoption of long-distance trunk telephone cables in place of overhead wires on pole lines. Even before the advent of the telephone repeater, communication from London to Birmingham, Leeds, Manchester and Liverpool had been provided by means of multiple twin cables carrying comparatively heavy copper conductors. On the invention of the thermionic valve, with its almost limitless applications to the amplification of high-frequency electrical oscillations, he recognized at once that the situation had been transformed by the introduction of a new factor which would place the means of achieving world-wide telephony in the hands of his successors.

His interest in radio communication was continuous from the early days in which he assisted Sir William Preece in experiments in inductive (or perhaps one should say earth conductive!) wireless telegraphy between parallel wires along the opposite sides of Loch Ness, up to the times when he was chairman of the first Broadcasting Committee and afterwards one of the founders of the British Broadcasting Company, of which he was a director from 1922 until 1926.

The development of the automatic switching systems of telephony was another subject very near his heart, and one in which he retained an active interest after his retirement from the Post Office in 1922 when he became a director of the General Electric Company. From that date until quite a short time before his death he was managing director of that Company's telephone manufacturing works at Coventry, a source from which has emanated much of the automatic switching plant, telephone repeater equipment and many other items of communications engineering used by the Post Office and other administrations.

Sir William's commercial and social activities were many and varied. He made many friends and few, if any, enemies. On his professional side he may be

summed up as a man of abounding energy, vision and executive power.

Sir William was always proud of his Aberdeen origin and the feeling was mutual; "a citizen of no mean City", he used to say. T. F. PURVES.

Dr. Alexander Lauder

ALEXANDER LAUDER died at Greenock, his birth-place, on November 11, at the age of seventy-three. He studied first under Prof. Dittmar, in what is now the Royal Glasgow Technical College, and then with Prof. Crum Brown at Edinburgh before taking up his first appointment as assistant to Prof. (later Sir J. J.) Dobbie in the newly founded University College of North Wales at Bangor.

In addition to assisting in the Chemistry Department, he took up the study of agricultural chemistry and carried out experimental work, more particularly in connexion with the field experiments. In conjunction with Prof. Dobbie, he made an elaborate investigation into the alkaloids of *Corydalis cava* and worked out the constitution of these alkaloids, the results being published in a series of papers in the *Journal of the Chemical Society* (1892-1904). Along with Prof. Dobbie, he took up the study of absorption spectra and investigated the connexion between the chemical constitution and the absorption spectra of certain organic compounds, in which work they were pioneers.

In 1904 Dr. Lauder was appointed head of the Chemistry Department of the newly founded Agricultural College, Edinburgh, and in 1907 also became responsible for the teaching of agricultural and forest chemistry to the University degree classes. In addition to his teaching, he carried out many investigations in various branches, giving particular attention to the composition of milk as affected by the feeding of the animal, the composition of swede turnips and heather and differences of a chemical

nature in potato varieties. Most of that work was published in the *Scottish Journal of Agriculture* and in *Agricultural Progress* or in special reports. He retired in 1936.

Dr. Lauder had also a long record in administration, for he acted at various times as secretary and treasurer to the College and as director of studies for four or five years immediately after the War of 1914-18. He served on the councils of the Royal Institute of Chemistry and the Society of Chemical Industry, and was chairman of the East of Scotland Branches of the Chemical Society and the Royal Institute of Chemistry. He was prominently identified with the work of the Royal Society of Edinburgh and served on the council for ten years and was assistant secretary to the ordinary meetings for five years. He also took an active share in the work of the British Association, being for a time secretary of the Agricultural Section, and president of the Section for the Leicester meeting in 1933 when the subject of his address was "Chemistry and Agriculture".

Dr. Lauder was much interested in music and in English literature. He was a member of the Reid Orchestral Committee for many years, an active member of the Bach Society, and various other musical bodies. He had accumulated a library of standard English works, the study of which gave him much pleasure.

By those who knew him, he will always be remembered for the services he gave so ungrudgingly, for his sound judgment, for his wit and generous nature.

WE regret to announce the following deaths:

Prof. J. Macfarlane, emeritus professor of botany in the University of Pennsylvania, on September 16, aged eighty-seven.

Prof. Umetaro Suzuki, president of the Scientific Research Institute, Manchukuo, emeritus professor in the Imperial University of Tokyo, aged sixty-nine.

NEWS and VIEWS

Presidential Address to the Royal Society

IN the course of the presidential address to the Royal Society, delivered as customary on St. Andrew's Day, Sir Henry Dale noted that Sir Henry Tizard, foreign secretary of the Society, has returned from a scientific mission to Australia, and that Prof. A. V. Hill, the senior secretary of the Society, has gone to India as a result of a request sent to the Society by the Government of India. Prof. Hill is to consult with that Government on scientific affairs, and in particular is to advise on scientific and industrial research in relation to measures of post-war reconstruction, and on the co-ordination of such plans in India with corresponding activities elsewhere. During his absence, Prof. E. J. Salisbury will take Prof. Hill's place as biological secretary of the Society. During his visit to India, Prof. Hill hopes to carry out a unique ceremony. It is part of the formal admission of fellows of the Society that they subscribe the obligation in the Charter Book; of the six Indian fellows, only two have hitherto been able to do this. Prof. Hill has accordingly been provided with a sheet of suitable parchment on which the

fellows' obligation is inscribed, and the four Indian fellows who have not yet signed the Charter Book will be formally admitted to the Society.

Sir Henry Dale then passed on to discuss the needs of research. He claimed for science its share of credit for the change of prospects now apparent in the War; and remarked that while science cannot afford to relax its efforts, it must also look to the future. If Great Britain is to hold its place alongside new civilizations built from their foundations on modern science, such as those of the U.S.S.R. and China, we must think of research on a higher as well as larger order than hitherto. The Royal Society will welcome any movement advocating great expansion of the nation's support of applied research, whether through the Government's Research Councils, through Departments concerned with the uses of science for defensive preparations in peace-time or for other national interests, or with the training of recruits for research by the universities. Fundamental researches also must not be neglected. British discoverers are as great as any in a world era of great discovery, but often they have lacked proper equipment and