

NEWS and VIEWS

National Institute of Agricultural Engineering

THE Institute for Research in Agricultural Engineering, University of Oxford, has been taken over by the Ministry of Agriculture to form the nucleus of a new national institute which has been established at Askham Bryan, near York. The general function of the National Institute of Agricultural Engineering will be to foster the development and better utilization of agricultural machinery of all kinds. Its work will be organized in three main departments. The Agricultural Department will provide a clearing-house for information about machines and methods for the benefit of both farmers and manufacturers; and will aim both at bringing equipment needs to light and at suggesting the means by which they can be met. The Engineering Department, which is to be adequately equipped with drawing office and workshops, will be concerned directly with design and improvement. In the case of new inventions, it will provide the necessary link between the original idea and the device which is ready for development, by undertaking the final stages of design and constructing prototype machines. The Field Station Department will be equipped to carry out whatever tests, trials or demonstrations may be required. One of its main duties during war-time will be to try out, adapt and demonstrate in other districts, labour-saving devices and methods which individual farmers up and down the country have worked out for themselves. The Institute will be guided in its work by the Agricultural Machinery Development Board, which was set up earlier in the year under the chairmanship of Lord Radnor. The director of the new Institute is Mr. S. J. Wright, formerly director at Oxford.

Planned City Growth

THE extent to which Mr. F. J. Osborn's admirable statement of the main essentials of planning, so far as they affect the ordinary citizen, originally written in 1918, is still valid to-day is a tribute to his powers of analysis and exposition (*New Towns After the War*. By F. J. Osborn. Revised edition. Pp. 72+8 plates. (London: J. M. Dent and Sons, Ltd., 1942. 4s. 6d. net.) It is also at least in part a reflection upon the general failure to apply those principles or even to learn from the bitter experience of the decade after the War of 1914-18. On both counts the 1942 edition deserves a warm welcome, and the new matter included, notably the illustration of the way in which Welwyn Garden City exemplifies the original thesis or formula, and the brief but well-chosen book list, enhance its value. The book is a concise re-statement of the argument for building new industrial towns, surrounded by country belts, as part of the reconstruction programme. Stressing the necessity for a national plan and criticizing the absence of policy which permitted the expansion of a few great cities at the expense of the countryside and of the smaller towns of Britain, with grave effects on the lives of town-dwellers and the efficiency of industry, it outlines broadly a policy commensurate with the needs of the time, the soundness of which is emphasized by the fulfilment of many of the author's predictions as to the trend of unplanned city-growth.

The close connexion of housing with public health, with transport, with problems of industrial and

agricultural organization, with child welfare and education, national and local government and every aspect of the civic and cultural life of the community, leads Mr. Osborn to insist that there is a maximum size for a modern town. He advances the formula that a town should be of a population large enough to allow of efficient industrial organization and full social activity, but no larger. The urban area should be limited to a size requisite to house this population well, and should be surrounded by a zone of open land large enough to possess a distinctively rural and agricultural character. The whole of the land, including the urban area and the rural zone, should be owned and administered in the interest of the community. The application of this formula is well illustrated by reference to Welwyn Garden City, the foundation of which by Sir Ebenezer Howard in 1919 was an outcome of the original publication of the book. Mr. Osborn directs attention to the importance of some of the special problems involved, such as the location of new cities in relation to rural needs, some of which, like that of general control and liberty of individual taste in design, have not yet been fully thought out. The conditions of State support are indicated and Mr. Osborn gives an inspiring glimpse of the possibilities inherent in developments on these lines if the opportunities are used by creative minds alive to the social issues involved.

Dr. A. Yakubov

MELIK-PASHAYEV, chief geologist to the Azerbaijan Oil Combine, has recently provided the Press Department of the Soviet Embassy in London with some interesting information concerning the career of Akhad Yakubov, vice-chairman of the Azerbaijan Branch of the Academy of Sciences of the U.S.S.R. As a young man Yakubov's overriding aim was to master the science of geology and place his knowledge at the service of his country. More particularly was he concerned with the applications of geology to the economic exploitation of petroleum deposits. Experience as a technician in the oil fields of Baku and later at Lokbatan gave him a sure practical knowledge of the oil industry, which was implemented by his studies at Azerbaijan Industrial Institute and at the Azerbaijan branch of the Soviet Academy of Sciences, where he took his doctor's degree in geological and mineral sciences with honours. While in charge of oil extraction at a new field which was being developed on the slopes of Lokbatan mud volcano, Yakubov became convinced of the fallacy of the then widely held belief that mud volcanoes were incompatible with oil-bearing strata.

Detailed studies lasting over a period of ten years confirmed Yakubov in this view, and between 1934 and 1941 he published eight books elucidating the connexion between mud volcanoes and oil deposits. Summarily, Yakubov believes that "mud volcanoes are a direct indication of the existence of oil- and gas-bearing deposits" and that "the distribution of oil and gas is determined by the same laws as operate in regions where there are no mud volcanoes". His work considerably increases prospects of oil discovery in Azerbaijan and is of immense practical value in the prosecution of the war against Germany. Early this year Yakubov was decorated with the Order of Lenin and afterwards was awarded a First Stalin Prize. Born in 1908, he is now at the height of his creative powers and plays a leading part in the scientific, political and public life of his country.