

NEWS AND VIEWS

Soviet Men of Science and the War

FOR the second time in twenty-five years the whole world is plunged into war; and already it has brought death to hundreds of thousands and disaster and unhappiness to millions. Prof. P. Kapitza, in a broadcast from Moscow on July 6, said that he was speaking in particular to British men of science and intellectuals and he reminded them that he had worked for some time in Cambridge under Lord Rutherford where he made numerous friends and carried away many pleasant memories. He wished to discuss the relations of the War to science and culture. The attitude of Fascism to science is that of a woodcutter who uses his axe to disable people instead of to cut wood. It is actuated by non-sensical theories leading to the desire for a dominant race. This is the opposite to the outlook of the Soviet Union, which is working for race equality and for the use of science and cultural achievement for the raising of the standard of living and the advancement of knowledge. In keeping with this the whole population shows the greatest interest in science. People in Great Britain often ask what is the attitude of the Soviet Union towards the man of science in his work. He could say that he and his colleagues are encouraged, as in England, to carry out what work they wish.

The Soviet people show great interest in British science and literature. Works by Shakespeare, Bernard Shaw and Priestley are performed, and Dickens and Stevenson, to name but a few classical British authors, are widely read; and now in the War all Soviet scientific workers are giving every support possible to the struggle of the people to preserve their country and those things which are so dear to them, as well as to liberate the enslaved peoples of Europe. With the British Empire and the United States they have a common enemy, Fascism, and he appealed to British men of science and intellectuals to collaborate with their Soviet colleagues with whom they have so many ideals in common.

New Building for the Soviet Academy of Sciences

BEFORE the outbreak of hostilities, the main building of the new home of the Academy of Sciences of the U.S.S.R. had been started on the Krimsky Embankment of the Moscow River. The building was designed by the Soviet architect, Prof. A. V. Shchusev, who recently stated that this would be one of the largest buildings in the Soviet capital—755 ft. long, 328 ft. wide and 131½ ft. high. The new building will house the presidium of the Academy, twelve institutes, a library with a depository for four million books, and two exhibition halls. One of the features of the building is a round conference hall, 118 ft. in diameter, with comfortable seating accommodation for a thousand persons.

Connected with each of the two exhibition halls will be a semi-circular auditorium seating a hundred and fifty persons and specially fitted for demonstration lectures.

Each of the twelve institutes to be housed in the new building will have a meeting hall, a hall with cinema apparatus, laboratories and reception rooms. If circumstances permit, the major part of the construction work will be completed by 1943, when the presidium and the institutes of the Academy will begin moving into their new quarters. Alongside the main building will be erected a large depository for fifteen million volumes, and two museums—the History of the Earth and the History of Animal Life.

Large Aircraft for the R.A.F.

IT has recently been revealed that twenty Boeing "Flying Fortresses" (B-17.C.type), all of which have been flown across the Atlantic, are now in service with the Royal Air Force. The official R.A.F. title for these will be "Fortress 1". Further supplies of an improved design (B-17.E.) are under construction in the United States. These bombers, the largest at present in service, have a span of 104 ft. and a length of 68 ft. They are equipped with four engines of 1,200 h.p. each, supercharged, can maintain a speed of 305 miles an hour at an altitude of 25,000 ft., and have a ceiling of 36,000 ft. With speeds and heights of this order they can put up a reasonable defence against enemy fighters, and the problem of providing them with fighter escorts is simplified as their performance is comparable to that of their protectors. Particular attention has been paid to protective armament, the wide angle of fire over which the machine guns can traverse giving almost complete cover in any direction.

The load carried by these machines is 5,000 lb. over a range of 2,000 miles. This enables very large individual bombs to be carried, that are considered to be necessary for the destruction of certain types of targets not always susceptible to the effect of a similar total weight of smaller bombs, carried in a number of machines of less capacity. Also there is the tactical advantage of the relatively smaller requirement in trained personnel needed for the one large machine. The Minister of Aircraft Production, Lieut.-Colonel Moore-Brabazon, recently announced in Parliament that although these machines were the biggest in the world at the time they were made, we have now under construction "three types bigger than anything in America".

The Iraq Meteorological Service

THE fourth annual report of the Director of the Meteorological Service of the Government of Iraq, for the year ending March 31, 1940, deals with a period during which a variety of causes operated to increase the difficulties in the way of the orderly