

NEWS AND VIEWS

Terrorism in Aerial Attack

THOSE of us who experienced the heavy attack on London by the German Air Force on Saturday night (May 10-11) were once more convinced of its deliberately indiscriminate nature with the obvious aim of striking terror into the hearts of Londoners—an aim as ineffectual as it was barbaric. Never has there been a raid in which so much damage was done, in brilliant moonlight, to buildings of architectural and cultural value—Westminster Abbey, Dean's Yard, Westminster Hall, the Houses of Parliament, the British Museum, etc. On the other hand, we venture to say, never was there a raid in which so little damage was done to objectives of military importance. One of the editors of *NATURE* had occasion to go from Westminster through a heavily raided area while the attack was at its height; and once again he was firmly convinced of the absolute futility of this form of attack—futile from the point of view of the Nazis' own war strategy. For the enemy did nothing to further his own aims, though he did much against them in rousing the ire of the British and, afterwards, the contempt of every balanced thinker throughout the world.

The *Völkischer Beobachter* stated that "British broadcasting reports that London is one single sea of flames—the Luftwaffe's heaviest retaliation attack on the British metropolis". Retaliation, in modern warfare, is useless; it is merely an expression of hysteria. The same newspaper asserted that "Naturally the British again assert that our mass attack was indiscriminate, but the High Command reports objectively that the region round the bend of the Thames—that is, the centre of London's docks and business quarters, was again the focus of attack". The considerable area through which one of the editors passed was being deliberately attacked and continued to be the objective of incendiaries and high explosives for several hours. That area is miles from the London docks. Furthermore, nowhere did he see signs of terror, but heroic battling with the fires and grim though calm working on ruined buildings while bombs continued to rain down. No amount of this kind of brutal bombing of buildings which are a nation's—even a world's—heritage and of helpless civilians can bring such a people to its knees. Neither can it help the enemy one jot; rather does it condemn him as unworthy of the wonderful heritage that should be his in his own country, unworthy of all that art and science are able to place at his disposal. Other cities—Plymouth, Bristol, Liverpool, Glasgow, Manchester, Birmingham and many others—will assuredly voice the same opinion.

New Type of Airscrew

INFORMATION has just been released of the successful use of a new type of airscrew on British aircraft, principally those of the Fleet Air Arm

operating from the deck of an aircraft carrier. It consists of two co-axial airscrews, one directly behind the other, rotating in opposite directions, each having controllable pitch blades. The development of this device, known as a 'Contraprop', is due to the necessity for turning into thrust the rapidly increasing horse-power being given by the latest aero-engines. Up to 2,000 h.p. is now given by engines coming into service, which on certain types of fighters gives speeds of more than four hundred miles per hour.

The principal trouble in absorbing such powers has been the increase of diameter of the airscrew. The limit, both aerodynamical and practical, is now about reached, in the increase of diameter and multiplication of blades. The placing of one propeller behind the other defeats both of these troubles and simplifies the problem of undercarriage design, especially of the tricycle type, by allowing the machine to be lower, as the smaller diameter needs less ground clearance. Airscrew torque, which causes a machine to tend to swing to one side when taking off, is cancelled out by the opposing directions of rotation. This is important in the case of machines taking off from a confined space such as an aircraft carrier's deck. The absence of torque also increases the rapidity of certain manoeuvres in the air. A special control, combined with the adjustable pitch mechanism, enables either propeller to be kept working if the other is damaged, which in effect increases the reliability of the power unit as a whole. For fighting purposes it is made so that cannon can fire through the centre of the hub if required. It is claimed that the device can be produced at no greater weight than a single propeller capable of absorbing equivalent power.

The Transport Problem in Great Britain

THE appointment of Mr. F. J. Leathers to the new post of Minister of War-time Communications, thus combining the duties of Minister of Transport and Minister of Shipping, is to some extent an answer to criticisms of the transport systems of Great Britain made in the eighth and tenth reports of the Select Committee on National Expenditure. Both reports are highly critical of the lack of foresight which has allowed the present shortage of coal supplies and stocks and the difficulties in handling shipping at the docks to develop. Even under war conditions, the Sub-Committee on Transport Services considers that a ship can be unloaded and loaded again more quickly than transport can take traffic from, or bring traffic to, the ports. The failure to secure the existence of equipment such as powerful cranes and elevators which could be transported to and erected at the ports where need arose is strongly condemned. The Sub-Committee recommends the acceleration of delivery or transfer of such mechanical equipment and also that there should be no cessation