"Supply And Transport Will Win The War"

T is a truism that this war demands the devotion to military ends of the whole national energies, and that every other consideration must be subordinated to the supreme object of winning the war. Like most statements of principle that reduce a complex problem to its simplest terms, this maxim may become misleading unless we keep in mind exactly what those terms imply. We are apt, unconsciously, to confuse the end with the means, and to assume that, because the end proposed is military, the military factor must be equally predominant in the means employed, and that all commercial, industrial, and financial considerations must be swept aside when they come into conflict with the requirements of the fighting services.

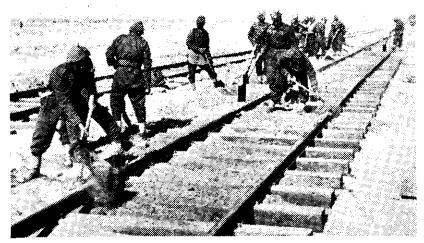
Reflection will show the fallacy of this assumption. The efficiency of the fighting services themselves depends on the maintenance of economic activities. Guns, ships, tanks, aeroplanes, munitions, and all the material of scientific warfare, are the products of industry and commerce. The food supply of the forces is as vital as the supply of war material. The maintenance of a minimum standard of life for the civil population is an essential factor of the "will to victory." The maintenance of civil industries is essential to sustain the commercial credit by means of which food and war material are procured.

In theory this is self-evident. In practice, it is not so easy to appreciate the necessity for incessant adjustment, in man-power, material and finance, between the claims of the fighting services and those of the activities by which they are sustained and equipped: yet it is useless to expect that the stream of essential supplies will continue to flow if the industries and commerce that maintain it are denied the liberty to function.

A Second Fallacy

There is a second fallacy inherent in too narrow an interpretation of the axiom with which we started. Because it is necessary for economic activities to be wrested from peaceful to warlike purposes, it is sometimes suggested, or implied, that those activities themselves should be placed under military direction. Soldiers and sailors who are, very properly, impatient of civilian interference in the field of strategy, find some difficulty at times in realising that the field of transport and supply also bristles with technical problems full of pitfalls for the amateur. It is for the representatives of the services to formulate their requirements from industry and commerce; it is for the practical experts to say how these requirements can best be met.

It will be obvious that the adjustment of military and economic considerations, so necessary if the requirements of the fighting forces themselves are to be fully and promptly satisfied, is far more difficult to-day than at any period in the past; partly because the immense size of modern armies and the application of science to warfare have greatly in-



THE WAR OF SUPPLIES is being waged in the Western Desert, where Allied troops are laying miles of desert railway track. The picture shows Indians at work

creased the demands of the services, partly because the machinery of production and distribution is so much more complex and delicate, and, consequently, so much more easily dislocated. It may, therefore, be interesting to take one primary factor in the problem—the factor of carrying-power—and see how it is adapted.

The Case of Carrying Power

It is hardly necessary to dwell at any length upon the immense importance of carrying-power in the War. The whole military effort of the British Empire is based on the possession of a mercantile marine capable, while continuing to perform its indispensable normal function, of transporting great bodies of troops to the various theatres of war, and keeping them supplied with all they require to make their presence effective.

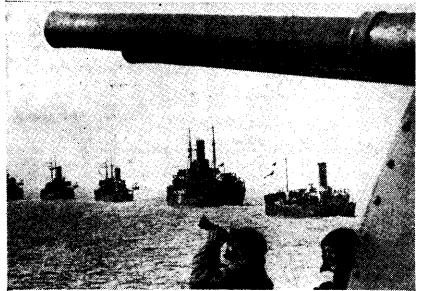
In any war in which the British Empire is engaged, the development and protection of carrying-power must be a vital factor, and if the war is waged with the assistance of allies, the strain

on British shipping is increased rather than diminished. It is necessary, therefore, to face the fact that the maintenance of carrying-power involves problems of peculiar delicacy, since they affect not merely the allocation of resources but the actual conduct of operations.

Granted that seaborne trade must be defended, it would appear at first sight that the choice of method—convoy; patrolled routes, dispersal and the like—is a question of naval strategy pure and simple. Yet if the methods adopted involve such delays in sailings, or such a prolongation of voyages as will prevent the ships from bringing in, within a given period, the essential minimum of supplies, the object of protection may be defeated, however great the security assured to the ships themselves.

Losses And Sailings

This reminds us that the percentage of losses to sailings, though a very popular test by which to judge the efficiency of the attack or the defence of commerce,



"THE DEVELOPMENT and protection of carrying power must be a vital factor": A British convoy steams homeward under the guns of the escort vessels

Says ROBERT H. NEIL, (late Captain Royal Scots Fusiliers), in this article for "The Listener"

is extremely unreliable. The one thing that really matters is the volume of supplies received by ourselves or by our opponents, and this may or may not vary in proportion to the ratio of loss.

It is quite true that the detention of shipping or the prolongation of voyages does not involve, like capture or destruction, a permanent loss of carrying-power, and losses may become so heavy as to compel the adoption of almost any measure for their reduction, even at the price of drastic interference with the movement of trade. On the other hand. the stocks of food and materials which can be carried at any one time are limited; the demands of the navy, army, and air-force for munitions and supplies are urgent and immediate; a few weeks may decide the crisis of a campaign. There is a minimum below which the supplies received during a given period cannot be allowed to fall, and it will be a small consolation, if starvation or shortage of munitions brings about defeat, to know that the tonnage after the war is greater than it might have been if risks had been run in order to maintain supplies.

Cargoes Delivered

It is by the volume of cargoes actually delivered that the success of the defence or the attack must be estimated and the volume of cargoes delivered will not depend only on the number of ships available. Much was heard during the War 1914-18 of the "tonnage problem"; but the use of this expression, with the accompanying tendency to think of the problem solely in terms of losses and replacements, is misleading. The real problem is not "tonnage" but "carryingpower" and carrying-power depends not only on the number of ships available, but on the extent to which they are utilised. It depends, that is to say, on the average cargo carried, and the number of laden voyages made within a given time.

This present struggle is demonstrating, beyond all former experience or expectation, the vital importance of carrying power to the actual conduct of war. The enormous size of modern armies and the extraordinary development of war material, have multiplied many times the tonnage required for the conduct of overseas operations, and involve the necessity of immense imports of munitions, equipment and raw material. They have accentuated, also, both by the increased volume of military supplies and the dislocation of labour, the importance of imported food and feeding stuffs.

Finally, carrying power is a far more complex problem than in the past. The number and tonnage of ships available, though still actually important, have ceased to be the only consideration. At least equally important is the part played by docks, quays, wharves, railways, cables, and shipping offices, by the whole driving power of the whole commercial organisation, in securing prompt loading and rapid discharge, accurate adjustment of services to demands, regularity of sailings, and quick turn-round.