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## ANGLO-AMERICAN RELATIONS IN RECONSTRUCTION

HERE can be few who would not agree as to the importance of intimate co-operation between the United States and Great Britain both in winning the war and in winning the peace, though there are clearly some who are dubious as to the feasibility or durability of that co-operation. The agreement between Great Britain and the United States signed last February, and the exchange of notes during September on the principles applying to mutual aid and to reciprocal aid, set forth some of the ways and means by which this essential co-operation may be made effective.

As Mr. Harold Butler has pointed out in an article in Agenda, written before he left for Washington to take charge of British information services there, the far-reaching importance of these latter documents has scarcely been generally realized. In particular, the enumeration in Article 7 of the Agreement of February 23 of the principles upon which a settlement of the Lease-Lend account is ultimately to be concluded, which is the essential part of the agreement, has been commonly overlooked. The subsequent exchange of notes detailing the terms on which war supplies and services are to be exchanged, carrying the lease-lend policy a stage further, tends to divert attention yet more from these principles. Yet it is all to the good that this latter document should make it so plain that lease-lend supplies have long ceased to be a one-way traffic eastwards across the Atlantic. There has been considerable exchange of scientific information, but it is to be regretted that the censorship in the United States has operated in such a way as to delay or prevent the transmission abroad of a journal such as Science and of individual articles in other scientific journals, thereby impeding the flow of information.

There can be no question as to the soundness of laying down so far as possible the principles upon which reciprocal aid is applied in the prosecution of the War. That is one of the surest methods of eliminating misunderstandings or any friction which may be engendered by arbitrary or injudicious handling either of the censorship or other matters. We may count on Mr. Butler to continue in Washington that invaluable work of interpretation and exposition to which he addressed himself in Great Britain.

The principles upon which a final settlement is to be concluded may be briefly summarized as follows: First, the terms "shall be such as not to burden commerce between the two countries". Secondly, their aim is not merely the promotion of Anglo-American trade, but also "the betterment of world-wide economic relations". Thirdly, the methods by which this goal is to be sought are: (a) through "the expansion, by appropriate international and domestic measures, of production, employment, and the exchange and consumption of goods"; (b) through "the elimination of all forms of discriminating treatment in international commerce"; and (c) through "the reduction of tariffs and other trade barriers". Fourthly, participation in agreements to this end shall be open to "all other countries of like mind".

Mr. Butler considers that this agreed statement of aims may prove a decisive factor in the development of Anglo-American relations. Agreement in the view that the key to a comprehensive economic settlement is to be sought in an expansionist policy immensely facilitates the discussion of the thorny problems which will have to be solved. A big step has been taken towards assuring the co-operation of the two countries during the difficult period of inter-Great Britain and the national reconstruction. United States are pledged to a joint effort in building a new world economy. The major responsibility in European restoration must indeed fall on Great Britain, but we cannot give the lead and secure the co-operation of our allies, and not least of the Soviet Union, without thinking on an international scale and creating international machinery.

These agreements pledging Britain and the United States to work together with a common plan and a common ideal provide us with the means of forging a powerful weapon in the war of ideals. As the outline of a better society begins to take shape, holding the promise not only of national freedom and individual liberty, but also of greater social security based on economic prosperity, the United Nations will fight with redoubled energy. The Anglo-American agreements may well be developed into the programme of a new international order, adding fresh driving force to the faith of the United Nations; and the remarkable series of speeches in recent months by leading men of the American administration, from the President downwards, shows the extent to which a new idealism has already gripped the minds not only of economists, sociologists and scholars, but also of statesmen. Mr. Henry Wallace's thought of "the century of the common man" rather than of "the American century" has clearly caught the imagination on both sides of the Atlantic.

These speeches of Mr. Wallace, Mr. Sumner Welles and Mr. Cordell Hull are of importance as indicating the beliefs upon which the American conception of a new order rests. Mr. Hull indeed has laid down the principles of a broad programme of world economic reconstruction in direct opposition to the programme outlined by the Nazis, and it pre-supposes an attempt to combine economic liberty with economic order. He repudiates excessive trade restrictions or discrimination in international commercial relations. Raw materials must be available to all nations without discrimination. International agreements regulating the supply of commodities must be handled so as to protect fully the interests of the consuming countries and their peoples. The institutions and arrangements of international finance must be set up so that they lend aid to the essential enterprises and continuous development of all countries, and promote the payment through processes of trade consonant with the welfare of all countries.

This programme and these principles have farreaching implications, including the condemnation of past trade policies of Great Britain and of the United States. It will be noted how far in harmony they are with the new colonial development policy which has been initiated since the outbreak of war, and with the outlook on this topic of Lord Hailey and others in Great Britain. What must be realized, however, is the importance of the American approach and the American proposals being clearly understood in Great Britain. As Mr. Butler says truly, the active prosecution of British thought on reconstruction is a war-issue as well as a peace-issue.

Neither in the United States nor in Britain, in fact, can our thought about reconstruction, whether internal or international, be confined to purely national considerations or calculations. Naturally enough, much more thinking on post-war problems has been done during the last two years in the United States, but the concern which Lord Reith and, more recently, Lord Latham have expressed in the House of Lords at Government delay in dealing with the findings of the Scott and Uthwatt Committees, and in providing the essential machinery for planning, is not entirely a domestic issue. It inspires criticism abroad which may not always be fair, but such dilatoriness towards planning is a handicap to good Anglo-American relations, as is very clear from Mr. Butler's article.

The debate in the House of Lords on November 18 and 19 arose out of a motion by Lord Latham urging the Government to introduce without delay the legislation necessary to make possible preparatory steps, so that actual planning and reconstruction may begin as soon as hostilities cease, and referred only to reconstruction in Great Britain. It produced statements from Lord Portal, Minister of Works and Planning, and the Lord Chancellor, respectively, the tenor of which was to show that the Government is actively engaged on the many intricate problems involved, while Sir Stafford Cripps in the House of Commons promised legislation during the present session. Clearly we must put our own house in order before we can approach other countries.

In this connexion the report of the U.S. National Resources Planning Board on National Resources Development in 1942 should not be without interest in Great Britain. Its review of public works planning is concerned with particular programmes in the United States, but the functional development policies described in Part III of the document are of wider interest. They show how the problems of industrial location, of transport, of the utilization of special skills, of urban conservation and development, of planning for social security, and post-war planning for children and youth, are being faced in the United States.

The introduction and first part of this report, however, are of special interest as indicating the approach of the United States to these problems. The clarification of our objectives for the onward march of freedom-loving people is seen as an essential part of the war-effort. The report looks forward to securing, through planning and co-operative action, a greater freedom for the American people, and the introduction suggests that any translation of freedom into modern terms applicable to the United States must include: (1) the right to work, usefully and creatively, through the productive years; (2) the right to fair pay,

adequate to command the necessities and amenities of life in exchange for work, ideas, thrift and other socially valuable service; (3) the right to adequate food, clothing, shelter and medical care; (4) the right to security, with freedom from fear of old age, want, dependency, sickness, unemployment, and accident; (5) the right to live in a system of free enterprise, free from compulsory labour, irresponsible private power, arbitrary public authority and unregulated monopolies; (6) the right to come and go, to speak or to be silent, free from the spyings of secret political police; (7) the right to equality before the law, with equal access to justice; (8) the right to education for work, for citizenship, and for personal growth and happiness; and (9) the right to rest, recreation and adventure; the opportunity to enjoy life and to take part in an advancing civilization.

The central problem is one of freedom and the distribution of abundance, so that there may be no unemployment while there are adequate resources and men ready to work and in need of food, clothing and shelter. The obligations which go with such rights are also recognized. The preliminary objectives are visualized as planning for full employment without demanding hours in excess of forty per week or fifty weeks in the year, using to the utmost a system of modified free enterprise. The planning of demobilization and the stimulation of planning by private enterprise, including the study of the consumer market, of industrial location and of management, the relation of Government to private enterprise, schemes of public works, transport and land development, and the extension of such services as health, nutrition and medical care, all find a place in the programme, and the section on international planning indicates that American thought is well prepared for the responsibilities in European reconstruction outlined in a recent pamphlet issued by the Royal Institute of International Affairs.

That thought on reconstruction in Great Britain and in the United States should be on such similar lines is not surprising. It was an Englishman who put the case for the Colonies before his countrymen in the House of Commons better than any of their spokesmen did before the Colonists themselves. The passage of more than a century and a half has not weakened the strength of the heritage and ideals which the Anglo-Saxon democracies share. ordeal of war has rather intensified their meaning, and Burke's words, like Jefferson's declaration, come down to us with fresh meaning and assurance of the grandeur of that common heritage. The mixing up of the two great democracies under the strain of war, the perils shared and the new comradeship in arms and in production, should assuredly lead to a fuller understanding that will promote accord and comradeship in the no less searching tasks that lie ahead in building and maintaining the peace. It is the duty of every citizen, of scientific workers no less than others, to see that every opportunity of fuller understanding is grasped and that the obstacles to co-operation, whether in peace or war, like the misunderstandings which lead to friction, are firmly and persistently swept away.

## TIDES: THEORY AND PREDICTION

Admiralty Manual of Tides By Dr. A. T. Doodson and Comdr. H. D. Warburg. Pp. xii+270. (London: H.M. Stationery Office, 1941.) 12s. 6d. net.

HE numerous and important developments in our knowledge of the tides that have been made in recent years are largely hidden away in technical journals. There has been but little written for those who wish to know something of the tides and their causes without working through the heavy mathematics which usually surrounds the subject. G. H. Darwin, in his "Tides and Kindred Phenomena" published in 1898, gave a clear non-mathematical account of the subject as it was then. Public interest in the theory of the tides was shown by the demand for further editions in Great Britain and by its translation into several foreign languages. Warburg's "Tides and Tidal Streams" (1922) was intended for seamen and for those who require a professional knowledge of the tides; but it contains a description of the chief tidal features in a form suitable for the general reader. Marmer's "The Tide" (1926) is a simple and readable account of the subject and includes references to the more recent work. addition, many text-books of geography and allied subjects have devoted a chapter to a more or less sketchy account of the tides and their causes. But there is clearly room for a book, which, while it does not avoid mathematics altogether, yet steers a middle course between the formal treatise and the popular account for the non-scientific reader, and also incorporates the developments of the last thirty years. Such a book is the "Admiralty Manual of Tides"

The book is written with a dual purpose. It is first to give a scientific account of the tides for the use of hydrographic surveyors and naval officers, and to give it in such a form that it may be readily applied. For such, it is necessary to include some mathematics, though not more than is covered by elementary algebra and trigonometry. Secondly, for those who wish to avoid mathematics, there is a connected account, based principally upon geometrical diagrams, that is complete in itself. The mathematical paragraphs are marked with asterisks and can be skipped without vitiating the main argument. The diagrams are numerous and ingenious, and no pains have been spared to make clear the various points.

There are two main lines of investigation in tidal science. The first is practical in its outlook and intention. In it, series of observations of tidal motions are made for each port under consideration. These observations are reduced to suitable form, and from this, tide tables for the future are deduced. The most successful method of reduction is that proposed by Kelvin, the harmonic analysis of the tide into its fundamental components. Recently. this method has been much improved in form and has been extended to include shallow-water and other components which formerly impaired the accuracy of the predictions. Little theory enters into this part of the subject, except the broad principle that component periodic forces in general produce oscillations of corresponding periods in a dynamical system, though with possibly different amplitudes and phases. The method has achieved great success, as is seen in the remarkable degree of accuracy of current tide tables.