INVESTIGATIONS INTO SAL AND TEAK

INDIAN Forest Bulletin No. 115, Utilisation (For. Res. Inst. Dehra Dun, 1942), discusses a fascinating problem in connexion with many tropical timbers which has puzzled possibly generations of forest officers, to wit, how to distinguish between the sapwood and the heartwood. This title, with the addition of the words sal (*Shorea robusta*), is the subject of the bulletin. The author in charge of the wood technology section of the Institute sums up his investigations—it is not always safe to assume that the true sapwood and heartwood of sal can be distinguished merely by their colour. The best method is to find out whether tyloses are present or not in the pore cavities. When tyloses are present the timber is heartwood, and when absent, sapwood. The colour, whether pale reddish-brown or dark reddish-brown, is immaterial and no true indication.

In Bulletin No. 113, Utilisation (1942), from the Institute is an interim report on "The Relation between Rate of Growth and Strength of Natural and Plantation Teak". "How fast should trees be grown?" inquires the author, and adds, "it is a question forest officers often have to ask themselves, and especially those in charge of plantations". Compared with India's vast forests her artificial plantations, important though they are in their several localities, are a mere grain of sand in the great whole. But this question needs consideration in India, and in tropical countries generally, just as much as it will be found to require careful study in Britain in connexion with the afforestation work of the Forestry Commission; based as so much of it is on exotic conifers.

The author of the bulletin is merely repeating a forestry platitude when he says that the chief aim (one of the chief, he remarks) of most forest plantations grown for timber is to produce high-quality timber in the shortest possible time. Marketable timber, omitting the 'high quality', would be a truer definition of modern-day practice. The first plantation formed of teak under British action was the famous Nilumbur (or Conolly) Teak Plantation, the first compartment being planted in 1843. Such was the success of this fortunately and fortuitously situated plantation (on the Beypore river some forty-eight miles distant from Calicut, west coast of Madras) that it has been copied elsewhere in India and Burma with varying success, and also in Africa and other parts of the tropical world. In many cases the young planted teak plants have shown an abnormally fast height growth in early years; in other words, the growth in a few years of a product which could often find a ready market long before it came to timber size.

The problem which is discussed in the bulletin is the question of the effect of the rapid growth on the strength of the product produced, for there are obvious limits; it is just the question of what the optimum rate of growth is for different species which remains an unknown factor. It is an accepted dictum that very fast or very slow (the latter with exceptions) grown timber is usually deficient in strength. On the subject of teak and the information gained, the author states that the existing data have been analysed and the record given in the bulletin. From the limited data available (in spite of the fact that it is just a century since Conolly commenced the

formation of the Nilumbur plantation), says the author, "it will be seen that a rate of growth of about 5–6 rings per inch has been found to produce the strongest timber, and a rate of growth faster than about 4 rings per inch produces very weak timber". It is also added that plantation teak, although fast grown, is in no way inferior to natural teak so far as its strength properties are concerned. It is worth while mentioning that the warning is given that the data available are still insufficient, except "as an interesting indication": and, it should be added, a dangerous one upon which to build up large plantations of rapid-growing exotics, wherever practised in the Empire.

THE BRITISH WAY

By LIEUT. T. H. HAWKINS

WAR makes strange situations; and no war can have thrown up a situation more strange than the one that the appearance of the Oxford Pamphlets on Home Affairs represents*. Instead of indulging their well-established habit of grousing at all things British, our fellow-countrymen are now learning to be not ashamed of expressing their deeper and more real feelings; some of the bolder individuals are even talking with unconcealed pride of the traditions and institutions of Great Britain.

The publishers of these booklets have sensed this change in the national mood and have launched a series which should prove as useful and informative as the more familiar "Oxford Pamphlets on World Affairs". The new series has been prepared on lines similar to the World Affairs Pamphlets and offers short summaries of various sides of life and living in Great Britain. They bear striking resemblances to the series of booklets called "The British Way and Purpose" which have been issued monthly to all units of the British Army since last November and should get a reception as favourable as the latter have done with the troops.

(1) Mr. McCallum's book describes the institutions and methods by which Britain is governed, how parliamentary government has grown side by side with the monarchy, the relations between the Crown, Ministers, Parliament and people and how the party system works in effecting the will of the electors. But while men of Britain are intensely proud of their forms of government, they are only too conscious of the deficiencies. Mr. McCallum would have offered a greater contribution to the future of democratic government by discussing some of the defects of our governmental institutions and their possible remedies.

(2) The pamphlet written by the member of Parliament for Keighley is a miniature guide for the newspaper reader. It explains the difference between the various kinds of reading-matter in a newspaper; the "sacred" facts and the "free" comment, "features" and advertisements. How the materials are collected from various sources is clearly set out, as is also the varying forms of newspaper ownership. Mr. Thomas then deals with some important problems such as the maintenance of journalistic standards, the control of newspapers for profit, power, or service, the influence of advertising and the power of the Press to influence public opinion.

* Oxford Pamphlets on Home Affairs. No. H(1): How Britain is Governed. By R. B. McCallum. Pp. 32. No. H(2): The Newspaper. By Ivor Thomas. Pp. 32. No. H(3): The Transition from War to Peace. By A. C. Pigou. Pp. 32. No. H(4): Britain's Future Population. By E. F. Harrod. Pp. 32. (London: Oxford University Press, 1943.) 6d. net each.

(3) Prof. Pigou's pamphlet deals with the more difficult subject of the post-war period. The following are some of the questions he poses: What is going to happen when war-time machinery is quickly reversed? How will the transition back to peace-time production be effected? Will those who were employed before the War get back to their old jobs? Will those who have reached employable age during the War find jobs? The author suggests answers to these and other problems mainly by drawing from the experiences gained during 1919-22. His essay will be of particular value to all those who are charged with conducting discussion groups in the Civil Defence Services and Armed Forces and will enable them to deal with some of the questions that are constantly being asked about the post-war period.

(4) "Britain's Future Population" discusses the tremendous problems that accompany a declining birth-rate. The method of presenting these problems leaves much to be desired, while the novel suggestions Mr. Harrod makes about the real causes of the fall of the birth-rate need fuller investigation.

In addition to the four pamphlets under review, preliminary announcements indicate that subjects to be dealt with in succeeding issues include the Civil Service, trade unions, the British political parties, education in Britain, law, money, agriculture, foreign trade, the problem of full employment and related topics.

RELIEF IN EUROPE AFTER THE WAR OF 1914-18

THE brief study on relief after the War of 1914-18, entitled "Relief Deliveries and Relief Loans, 1919-23", which has recently been issued by the Economic, Financial and Transit Department of the League of Nations, is one of a series devoted to a consideration of the lessons that may be learnt from past experience. It should prove of value in giving effect to the resolutions of the Food Conference at Hot Springs which, as Mr. Eden announced in the House of Commons on July 6, have now been accepted by the Government. Mr. Eden, in making this announcement, stated that the Government intends to press on with the task of increasing food resources and improving the diets of the people. It also intends to participate fully in the work of the Interim Commission to prepare a plan for a permanent organization in the field of food and agriculture. While the Conference was not concerned with the organization of relief supplies, attention was given to the need for increasing supplies of basic foodstuffs in the period when territories liberated from the enemy will be in need of help from outside, and Mr. Eden said that the Government is much impressed by the urgency and importance of this problem.

In reviewing the relief effort of 1919-23, it is pointed out that international relief on a scale comparable to what was required had never been previously undertaken. There was no past experience to serve as a guide, save that of the Commission for Relief in Belgium during the War of 1914-18. In regard to the volume and nature of relief, the report notes that although the child-feeding programme prevented a disastrous mortality, it was not adequate to prevent malnutrition. The real needs were never

completely met, nor were they fully surveyed. They were considered almost exclusively in terms of calories, and the study concludes that the first action required to meet such a situation with any hope of the best result is to estimate so far as possible in advance what the real needs of food (including protective foods) and such essentials as soap, medicine and clothing are likely to be and how far they can be met from the available resources.

The War of 1914-18 ended in the autumn when the need was greatest, and the possibility of relying on domestic supplies, except for cereals, was least. The shipment and transshipment of goods to Europe was expeditiously carried out and great efforts were made to effect actual deliveries with the least possible delay, but the continuation of local fighting and the breakdown of internal administrative organization in many parts of Central and Eastern Europe, the absence of information regarding local needs, particularly in these same areas, and the difficulties encountered in co-ordinating the relief efforts of the United States and the Allies, made impossible substantial deliveries of foodstuffs, except in Belgium and northern France, before the end of January 1919. The major relief period was confined to February to August 1919.

A further difficulty was the delay in obtaining legislative approval of relief credits; this could have been prevented if funds had been allocated during the War. The stock situation in the United States was not such as to put difficulties in the way of large-scale export for relief purposes: the problem was rather to dispose of surplus. In the harvest year 1918-19 the exportable surplus of foodstuffs was three times as large as the pre-war annual exports. To-day the resources of available food consist not only of the stock of provisions at any moment of time, but also of the industrial equipment for preparing certain categories of protective foods in condensed form.

The study emphasizes once more that if the tonnage available is to be utilized to the best advantage at a moment of extreme post-war urgency, a joint plan of allocation between the demands for the repatriation of troops, and transportation of foodstuffs, raw materials and other essentials requires to be made in advance. As regards financial provisions, in any policy of relief and reconstruction it is necessary to decide first what sacrifice is to be made on purely humanitarian grounds and what sacrifice it is desirable to make to prevent social disturbances and to establish such order in war-affected areas as will permit the revival of economic activity. If adequate direct aid is not granted to render a country credit-worthy, any subsequent scheme for reconstruction may break down and the credit granted under such a scheme prove unrecoverable. Relief and reconstruction are two stages in an uninterrupted process of transition, and the distinction between them is determined not by the class of goods involved but by the conditions, or absence of conditions, for repayment.

Once again the value of utilizing for relief administration the machinery which existed and only required expanding is emphasized, while the withholding of relief credits from enemy countries is regarded as a further illustration of the basic mistake of failing to consider problems of reconstruction at the outset. Finally, in considering what relief implies to any country granting it, it is necessary to consider not only the accountancy cost of the supplies that may be furnished, but also the real economic cost.