NATURE

SATURDAY, JUNE 24, 1933

No. 3321 Vol. 131

CONTENTS

Editorial and Publishing Offices:
MACMILLAN & CO., LTD.
ST. MARTIN'S STREET, LONDON, W.C.2
Telephone Number: WHITEHALL 8831
Telegraphic Address: PHUSIS, LESQUARE, LONDON

Advertisements should be addressed to
T. G. Scott & Son, Ltd., 63 Ludgate Hill, London, E.C.4
Telephone Number: City 4211

The World Economic Conference

THE World Economic and Monetary Conference now meeting in London is undoubtedly the most comprehensive and authoritative congress of its kind which has ever been convened. Sixty-six governments, ten of which are not members of the League of Nations, have sent representatives. Never before has there been such a meeting of heads of governments, ministers of foreign affairs and ministers of finance, with their technical advisers and experts.

The Conference is the sequel to the work done last year at Lausanne, when an immediate financial collapse was averted by means of a temporary agreement on War debts. The Council of the League of Nations then agreed to the recommendation of the Lausanne Conference that it should convene a wider conference to tackle the whole problem of the world crisis. A Preparatory Commission of experts was appointed to report on an agenda for the business of the World Economic Conference and the report of this Commission has been made the basis of the deliberations of the present Conference.

The magnitude and difficulty of the problems discussed in this report and now confronting the Conference are only matched by the urgency of the crisis and the desperate need of the world for harmonious international action designed to secure the alleviation of its economic malaise. The number of workers now without employment has been estimated by the International Labour Office to be at least thirty millions, but even this figure gives but a very inadequate conception of the universal distress, as it takes no account of dependants or of the distress afflicting the agricultural populations of the world.

Since October, 1929, the level of wholesale prices has fallen by about one-third, thus seriously reducing the purchasing power of countries engaged in primary production and imposing a serious check to trade in practically all countries. World stocks of agricultural products and other raw materials continue to accumulate without prospect of a sale for the surplus; industrial production has been drastically curtailed and has declined by something like a third; national incomes have fallen seriously, in some cases by so much as 40–50 per cent. The total world trade in the third quarter of 1932 was only about one half the volume of that in the corresponding quarter of 1929, while its value was only about

one-third. Only about a dozen countries have retained free and uncontrolled gold currencies, with the result that fluctuating exchanges and competition between nations in currency depreciation have further served seriously to disorganise international trade, which has also been nearly strangled by high tariffs, exchange restrictions, quotas and even prohibitions, not to mention disturbances in the normal channels of trade imposed by subsidies or other methods designed to promote national economic policies. As Mr. MacDonald stated in his opening address, "no one who has surveyed the facts and watched their progress can doubt for a moment that the experiences of the last few years have proved that a purely national economic policy in this modern world is one which by impoverishing other nations impoverishes those who pursue it".

The programme of reconstruction suggested by the Preparatory Commission did not include the problem of inter-governmental debts, because this lay outside its terms of reference, but it stated that, "until there is such a settlement, or the definite prospect of such a settlement, these debts will remain an insuperable barrier to economic and financial reconstruction". During the first week of the Conference, the general conviction unquestionably appeared to be that any solutions proposed by the Conference, if they are to be effective, must be accompanied by the settlement of War debts. Mr. MacDonald, Signor Jung, General Smuts and others have been emphatic on this question. Though it lies outside the scope of the Conference, this question of debt settlement is nevertheless inseparably linked with its work of world reconstruction. The first step towards its final settlement has now fortunately been provided by the statesman-like action of President Roosevelt, who in the face of all his domestic difficulties, accepted the British Government's proposal of a payment of ten million dollars in silver in recognition of British liability, pending a final adjustment of the matter. The merit of this arrangement is that it is neither default, which would be disastrous, nor payment in full, which would have left the old problem with us and might have jeopardised the success of the Conference.

In the field of monetary and credit policy, the Preparatory Commission recommended that the objective should be the restoration of an effective international monetary standard, together with a policy of easy money designed to promote a healthy expansion of business. In its opinion, the abolition of exchange control is an essential condition of world recovery. To obtain this, it is necessary to secure balanced budgets and to restore the confidence of the foreign lending markets to prevent sudden withdrawals of short-term debts.

The Commission considered that there must be greater freedom of international trade and recalled that one of the most significant features of the present crisis is the fall which has occurred in the value and physical volume of world trade. Governments should set themselves to re-establish the normal interchange of commodities and every effort should be made to secure a general agreement for the progressive relaxation and the complete abrogation at the earliest possible date of such restrictions as prohibitions or quotas imposed on trade as a result of the crisis. In addition, it is necessary to reduce excessive tariffs. The Commission rightly concluded that any action in the direction of a return to freedom of trade has an intimate bearing on the stabilisation of currencies, as it is impossible to maintain the international monetary system except on the basis of an international economic system. In this respect the great creditor nations have a special responsibility.

The methods proposed by the experts for the restoration of world currencies are that countries on the gold standard should pursue a liberal credit policy, while those not on gold should smooth out short-term exchange fluctuations and avoid competition in exchange depreciation. When the gold standard is restored, the gold reserve requirements of central banks should be lowered while some countries should avoid demands upon the world's gold supply by adopting an improved system of the gold exchange standard. In assisting the smooth working of the gold standard, the Commission assigned an important part to the Bank of International Settlements. The general tenor of the experts' recommendations is an early and general return to an improved gold standard under such conditions as will provide safeguards against future disastrous fluctuations in the value of the monetary metal and secure a rise in world prices.

In all the opening speeches at the Conference, it was generally agreed that the problems to be solved are to stabilise currencies in relation to some common international standard, to remove barriers to world trade and to raise world prices. Equally important, all were agreed that there

must be an end to the prevailing conflict of national economic policies.

Nothing in these suggestions is really new and indeed it would be surprising if it were so, for ever since the depression began the whole world has been searching for remedies. But it is much to the good that the problems have been clearly realised and frankly stated. Now the real work of the Conference begins, and that is to work out the details and secure the adoption of practical policies which will lead to the amelioration of the world crisis. General Smuts urged that when the delegates had the reports of the technical committees before them, they should not make too much of their political difficulties but should face the issues fairly and squarely on their merits. It is much to be hoped that this will be done. The great need to-day is the restoration of world confidence, and if the Conference can do anything to achieve this, its labours will not have been wasted. To-day the nations are bound together in a world economy wherein the prosperity of each nation ultimately is bound up with the prosperity of the world as a whole.

Sir Charles Parsons

Charles Parsons: his Life and Work. By Rollo Appleyard. Pp. xiii+334+17 plates. (London: Constable and Co., Ltd., 1933.) 15*s.* net.

IT is related that when the famous little *Turbinia* was taken to France during the Paris Exhibition of 1900, Augustin Normand, the eminent naval constructor of Havre, after meeting Parsons, remarked of him "Il ne pense qu' a' la turbine; il y pense sans cesse".

For nearly twenty years, Parsons had been absorbed in the development of the steam turbine; for another thirty years it was the chief interest of his life; and it is for his work on the turbine and the turbo-generator that he will be remembered. Although its possibilities were entirely unforeseen by any of his early contemporaries, Parsons' steam turbine led to a revolution in the production of power, in the methods of generating electricity and in the propulsion of ships. In later years his reaction turbine had serious rivals in the impulse turbines of de Laval, Curtis, Rateau and others, but a study of the history of turbines and the many problems connected with them only increases our admiration for his brilliant pioneering work, and reminds us of the profound influence his investigations had on subsequent developments.

The value of any memoir of Parsons must therefore depend largely on the light it throws upon the inception of his remarkable invention and the steps by which the seemingly insuperable difficulties were overcome, and also upon the effect the introduction of the steam turbine had on the problem of power. Judged by this standard, Mr. Appleyard's book is a most welcome addition to the literature of the subject and one which can be read with pleasure even by those who are not engineers by profession. Parsons himself and his colleagues, from time to time in their various papers and lectures, dealt with the progress of turbine machinery, but to these reviews Mr. Appleyard has been able to add those personal records from which we are able to gain an insight into the methods by which success was attained.

Though Parsons started with exceptional advantages, the path he chose was by no means an easy one and the obstacles he encountered might well have discouraged the most dauntless. But no task was too hard; no problem too complex. He had "immediate insight into requirements" and, as Mr. Appleyard says, "When due thought had been bestowed upon a design, when due care had been exercised in construction, he put his work to the test with determination and courage".

While it may be said that Parsons never ceased to think of the turbine, his versatility as an inventor and his insight into physical problems was shown in many ways. Quite early in his career, following in his father's footsteps, he applied himself to the manufacture of mirrors for searchlights, and towards the end of his life found an outlet for some of his energy in the construction of large telescopes. From long experiments on the artificial production of diamonds, he could turn to the invention of the auxetophone, a form of air-operated loud speaker which was used for a season at the Queen's Hall concerts, and to the "great engineering attack on a problem of geology", the sinking of a shaft in the crust of the earth twelve miles deep.

With all these matters, Mr. Appleyard deals with sympathy and understanding, as he does also with the character and career of Parsons. In some respects the story of Parsons is unique. An aristocrat by birth, at Birr Castle, at Dublin, at Cambridge and at Elswick, he came into contact with men of science and engineers of the first