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International Co-operation

THE unanimity with which some form of deliberate planning of our national resources and of our industrial if not of our social and economic life has been suggested in technical journals of high standing and ranging over chemical industry, engineering, and the electrical and gas industries is highly significant, and is evidence of the growing realisation that a scientific age can only be safe if the powers of science are exercised with wisdom. In a speech at the annual dinner of the British Association of Chemists, Dr. E. F. Armstrong, after referring to the lack of scientific knowledge on the part of many of the world's political leaders, their opportunism and lack of definite plans, urged that chemists with other scientific workers should use their influence in industry and professionally in support of leaders who would attempt to plan the international reconstruction of the world on the basis of a definite five-year or similar plan.

It is not industry alone, however, which is insisting that problems of to-day require solution on world lines by scientific method. Even in the political sphere, the only real pieces of successful reconstruction work in post-War Europe have been schemes based on an impartial scientific analysis of the problem by the relevant experts and linked up with the appropriate action. The Austrian and Hungarian reconstruction schemes and the Greek Refugee Settlement scheme are examples of a new technique in international questions, and demonstrate beyond question the function of the technical expert in linking up knowledge and power.

The recently published report of the Basle Committee of Experts demonstrates how imperative is the need for concerted action if financial paralysis of the world is to be avoided. The dislocation at present taking place may well involve a profound change in the economic relations of one nation with another. Referring to this essential need for international co-operation, in an address on world unemployment to the Institute of International Relations at Geneva, Prof. P. H. Douglas, of the University of Chicago, pointed out that it is doubtful whether the fierce national jealousies of the world would permit the required pooling of resources and common policy, and that the issue depends upon intelligence as well as upon goodwill. There is much in the preliminary negotiations regarding the Lausanne Conference which indicates that such doubts are well founded and political prejudices still unwilling to recognise facts.

In another field we find that Major Lefebure's plea for a scientific study of the disarmament problem, and in particular for the creation of a representative scientific organisation under the League of Nations to advise on actual means for giving effect to international policy as to research on armament type, has been passed over in making preparations for the present Disarmament Conference. Further, the results of the impartial scientific investigations of many of the vexed and difficult problems related to the South Manchuria railway which have been carried out during recent years by the Institute of Pacific Relations have been brushed aside by politicians. The lack of courage, foresight, and understanding displayed in the handling of the Manchurian dispute can only be rightly assessed when we consider how much has already been provided by scientific investigations as a basis for an impartial settlement.

These recent events demonstrate that the gap between knowledge and power to which Prof. Zimmern directed attention some years ago in his brilliant study, "Learning and Leadership", has become a dangerously critical problem. Leadership has definitely weakened under the pressure of public opinion, and more and more the only hope of solving vexed problems is in entrusting the handling of them to impartial experts who are not dependent upon public opinion. The Dawes and Young Commissions were not only valuable because of the great work they did, but even more because they are typical of a new method of dealing with such questions. They applied the forces of science and expert skill and wisdom to a problem declared insoluble by governments and hopelessly vitiated by human prejudice. That their solution was only temporary and that the problem threatens to be sucked once more into the maelstrom of politics merely indicates the imperative need for extending this same technique to other international problems which react on these issues.

"Statesmen are not enough to solve the problems which arise in international affairs", General Smuts has said in a lecture on "Democracy". "The nations must become accustomed to look to the organised system of the expert report, which gives a just and impartial lead to governments and public opinion and should be regularly accepted just as judicial decisions are accepted as a matter of course. . . . Not only the discoveries of science, but the mature, sober, impartial spirit of science is what is above all else necessary for the functioning . . . of the new international system. . . . The application of the true scientific spirit to human affairs, if it were humanly possible, would mean such a reign of justice and fair play on earth as only poets have

dreamt of. The cool, serious, gentle spirit of science is, above all, wanted in the storm-tossed domain of international affairs. The scientific expert . . . may prove a most valuable link in the international organisation of the future. He will function normally and dispassionately, whether international storms may rage outside; and his findings will be quietly accepted in the end, as the higher wisdom and the better way."

In the last two years a beginning has at any rate been made on some of the problems which arise out of the application of scientific method to international affairs. At a Conference of Institutions for the Scientific Study of International Relations, held in Copenhagen in June 1931, progress was made in the fundamental study of international relations, and the possibility of a systematic study of actual problems on international relations, either on the lines of the Institute of Pacific Relations or by entrusting particular researches to individual institutions, was discussed. A study of the international implications in the relations between government authority and private economic activities of individuals and groups, with special reference to the new forms of public management, control, and supervision, national or international, direct or indirect, which have grown up since the War, and the motives and policies underlying them, is contemplated at the next Conference. The possibility of a fundamental scientific study of the problem of disarmament was also suggested.

In industry, where an international outlook has become much more prevalent and the importance of scientific leadership is increasingly recognised, the possibilities visualised by General Smuts have found even more concrete expression. Sir Harry McGowan has already thrown out the suggestion of an International Council for Chemical Industry which would plan chemical industry as a world unit in regard to production, research, and development. The World Social Economic Conference held at Amsterdam last August led to definite proposals for a five-year world plan which was to be based on world solidarity, the modification of national economic policy in accordance with its effect on world economy, and the pooling of losses due to the War. The plan involves a general moratorium on all war debts and reparation payments, a series of international loans and agreements in regard to markets and production, and the establishment of a World Research Council or Planning Board to stimulate thought and action in the planning and rational organisation of the social and economic life of the world.

Were not scientific workers, as Ruskin remarked,

“still eager to add to our knowledge, rather than to use it”, the new opportunities confronting them of making a vital contribution to the solution of our present difficulties would have been seized with avidity. Not only industry but also whole sections of the nation are disposed to accept the leadership of science and to adopt a well-thought-out and comprehensive scheme of national and international reconstruction based upon an authoritative and scientific analysis of the whole situation. No such scheme can, however, be produced until scientific workers are sufficiently concerned with the economic and social consequences of their work to co-operate with industrialists and others who are imbued with the scientific outlook and capable of assessing the value of scientific method and knowledge. In such co-operation there should be adequate safeguard against the neglect or abuse of human values, which Bertrand Russell fears and depicts so vividly in his sketch of scientific society and scientific government.

There are all the signs that the age of individualism and competition is passing and will be succeeded by an age of co-operation and planning on a world scale. The danger is still acute that old prejudices may delay the transition and precipitate a conflict from which the recovery of civilisation will be impossible. The existence of political prejudices in government circles should not lead us to overlook the facts that nowhere does prejudice and individualism linger more persistently than among the very scientific workers whose discoveries have made world co-operation and the renunciation of war at once inevitable and urgent. Even the difficulties and limitations on the intellectual classes and the intellectual progress of mankind directly imposed by the burden of armaments under present conditions have not sufficed to rouse general interest among scientific workers, or to induce them to make their fitting contribution in the analysis of the problem. Statesmen, indeed, need to take account of our prejudices as well as of the facts of life. Reason alone may be an incomplete guide for the control of human affairs and lead us into a tyranny which becomes intolerable to human nature because of its disregard for human values. Knowledge and leadership must be indissolubly linked if disaster is to be avoided, and to no class of the community is there a stronger challenge in the present emergency than that addressed to scientific workers to declare with a united and unequivocal voice the potentialities of science in the evolution of a better world order and the lines upon which a systematic policy can be evolved.

Horrors of the Next World War

What would be the Character of a New War?

Enquiry organised by the Inter-Parliamentary Union. Pp. xviii + 411. (London: P. S. King and Son, Ltd., 1931.) 16s. net.

THE appearance of this volume is opportune in view of the Disarmament Conference now sitting; it contains eighteen articles contributed by eminent writers of various nations, mostly military men or university professors. Four of them are written by Frenchmen, three each by Englishmen and Germans, and others by men born in Sweden, Japan, Denmark, Switzerland, Russia, and Greece. Each author was evidently assigned a certain aspect of modern warfare, except that in some cases there are several articles on the same subject; but this plan has some disadvantages, because it was no one's duty to sum up the often conflicting conclusions, or to consider specially the fundamental nature of war. It was neglect of this last, or a too hasty generalisation from the character of a few recent conflicts, that led to the disillusionments of the War of 1914-18 and of the subsequent conferences and conventions. Major Bratt and Lieut. Sergel, of Sweden, do, however, discuss the matter in the first four pages of their paper on aerial weapons and future war, and Prof. Politis (of Greece), in the final article dealing with the future of international law on warfare, says a few words on the subject.

The object of war is, of course, to defeat the enemy so effectually that he must sue for peace, and the best way to do this is to destroy a great part of his armed forces, so that he shall feel that further struggle is useless. If, however, the state of armaments be such that the powers of defence are greater than those of offence, mobile warfare becomes practically impossible, and then the invading army may make war upon the civil population, so that their miseries may induce an overwhelming desire for a cessation of hostilities. This is what happened in the Middle Ages, when the fortifications of the towns were able to withstand the assaults of hostile armies. Except in England, the sufferings of the ordinary people were terrible in every part of Europe in spite of the fact that Christian principles were professed far more than now. In the eighteenth and nineteenth centuries artillery had reduced the value of fortresses, with the result that wars were of comparatively short duration, and were confined to the armed forces. The peoples were not affected to the same extent in this period, and a body of law on