SCIENCE AND WORLD ORDER

BY SIR RICHARD GREGORY, BART., F.R.S.

A^T the Cambridge meeting of the British Association three years ago, a new Division for the Social and International Relations of Science was constituted. Since then the full forces and resources of science have been used to devastate the civilized world. Responsibility for the discovery of these powers of destruction must be accepted by men of science, but communities and Governments decide how they shall be used in purpose and policy. No limit can be seen to such powers, and no end to the horrors they present to human life, when exercised without regard for its sanctity.

Whether scientific knowledge is used for social betterment or to make civilization a mockery depends upon statesmen and not upon men of science, who, however, alone understand its possibilities. It may not be necessary to have intimate acquaintance with such knowledge in order to anticipate effects of its applications, but it is obviously desirable for statesmen and administrators to have full appreciation of its powers. Without such understanding and insight, no social structure can be made secure against disruption.

The Conference on Science and World Order, to be held at the Royal Institution, on September 26-28, will deal with a few relations of science to government, administration and other agencies concerned with constructive planning for the present and the future (see NATURE, September 13, p. 311 and p. 338 of this issue). In the main, the point of view will be that of world resources and human needs generally, and not those defined by geographical or political boundaries. Distinguished ambassadors and other leaders in close contact with governmental authority will participate in the conference, either as chairmen or contributors of papers. It is believed that the conference will thus promote social and international contacts of far-reaching consequence.

Science is responsible for the discoveries of these powers, and engineering for their applications. Knowledge of this kind, referred to use or action, determines the material shape of civilization. It is available to the whole world for work and thought; either to increase the amenities of human life everywhere or to bring misery and violent death to the peoples of the earth. We see to-day the devastating effects which scientific discovery and invention can have upon civilized life when their might is made the sole arbiter of right. The acceptance of this claim means the rejection of all

ideals of human fellowship, and reversion to conditions of the jungle.

Schemes of social reconstruction naturally differ for different places and peoples; but they should all be capable of fitting into a world framework. This means planning in an international instead of a national spirit, while giving every nation or community full opportunities to develop in its own way, provided that the common end is the betterment of conditions of life.

When civilized peoples agree to unite in such a commonwealth in which each group is autonomous, without conflict of general purpose, we may hope that the world will be saved from the dangers which now threaten to destroy it. Man has shown himself capable of rising above his animal instincts by his activities in many directions, and, wisely guided, he can use the gifts of scientific knowledge as agencies of good instead of instruments of evil.

In the terrible conflict in which many nations of the world are now engaged, there can be no doubt as to the side upon which the true spirit of science is fighting. Men of science would be false to their traditions if they failed to defend their pursuit of knowledge from the forces which now assail it. They are united with all free citizens of the world concerned with progressive human development in resisting such attacks and eliminating the evil influences which make their achievements diabolic instead of divine.

The commonwealth of science is a true democracy, in which no distinctions of birth, race, or geographical boundaries are recognized. It cannot tolerate the use of force to exclude members of any communities from belonging to its fellowship, or to deprive any citizens of their fundamental human rights. The democratic principles of science are much the same as the scientific principles of democracy, and free men of science everywhere can subscribe to them.

A declaration of these principles will be made at the close of the conference. It accepts for science the world outlook embodied in the declaration of the rights of man of the Sankey Committee, advocated by Mr. H. G. Wells, and its spirit is the same as that of the momentous Anglo-American statement of peace aims, though it does not pretend to be of the same significance. The cause in which all such declarations are made is that of all humanity. It is the cause of progressive civilization and can be attained only by action in which wisdom is combined with knowledge.