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Science and Politics in India : a Contrast

FROM year to year the Indian Science Congress, like the annual gatherings of the British Association, presents to the public both in and outside scientific circles a survey of recent contributions, chiefly by its own nationals, to the general stream of progress in scientific research and intellectual development. How far this is borne out by the proceedings of the recent Congress held at Hyderabad may be judged, in part, from the summaries of the presidential address and of the addresses of the sectional presidents which appear in another part of this issue of *NATURE* (see p. 638).

It is the privilege, as well as the responsibility, of certain of the sciences that they should bear more directly than others upon human well-being ; and while it may be admitted that a too narrow concentration upon an immediately practical issue cannot but be harmful in the long run, in world conditions as they have now existed for some few years past, the activities of men of science have tended more and more to be submitted to the touchstone of their contact with current realities. Without in any degree abrogating the supremacy of the pursuit of knowledge for its own sake, it is more insistently and more constantly demanded that, as science in its origin arose out of practice, so as a return for the place now conceded it in the organization of modern life, it should contribute guidance in the diagnosis and solution of the problems of society.

Obvious as these reflections may seem, when applied to the conditions of European society, on turning to the consideration of conditions in India, they convey a warning and a moral. In contrasting, as is inevitable, the academic atmosphere of the Science Congress with that of the political arena,

it is difficult to feel that the advantage in grasp of reality does not lie with the former.

The inauguration of the constitution followed on popular elections of a magnitude unprecedented, which gave a majority in six out of the eleven autonomous provinces, into which British India is now divided, to the Congress party. This sweeping victory, for it is nothing less, has been attributed to organization. This party alone, working on lines somewhat similar to those of a British election, was able to put directly before the rural elector the policy of reform and social amelioration which it proposed to pursue. When, however, the victorious party was brought to the practical test, it would seem, in the eyes of most reasonable individuals, to have proceeded to stultify itself by refusing to accept office in those provinces in which the electoral results had laid that responsibility upon it. The patent division of opinion on the wisdom of the course followed as between the leaders of the party and the general body of the Indian Congress, whatever attempts may be made to obliterate it later, gives to the whole situation an air of unreality, which unfortunately tends to confirm the view that with many, though not perhaps with all, the policy of agrarian reform, which has been so widely paraded, is no more than a pawn in the game.

The need for reform in India, and more especially agrarian reform, is so great and so insistent, that eventually, when once the elector has grasped the relation of his vote to political power and social reform, that power will be placed continuously and consistently in the hands of those who are able to give a practical demonstration of their grasp of what has been termed here the realities of the

situation. At present, it is anticipated that Congress will attempt to throw upon the Government the onus of its failure to carry out its policy of social amelioration. In the recent election, many of the voters, it is stated, have suffered from the delusion that in voting for Congress they cast their vote against the Government. As was once said on another continent, "You cannot fool all the people all the time". The sincerity of Congress will be put to a severe test, if and when measures of reform are put forward by the coalition Governments set up in those six provinces where the Congress party is in the majority, and must needs vote for or against such measures of reform.

In the atmosphere of intrigue and legalistic argument which has followed the appointed day, it is something of a relief to turn once more to the findings of science and to enter upon the realm of fact. A rapid glance through the reports of the Indian Science Congress addresses now available will show how far the various branches of science, as studied in India and represented in these addresses, for the most part in the nature of general surveys, are alive to the vital problems of the population, of which the speakers themselves form part. It is indeed the vastness of this population which makes it essential that scientific methods of study should be applied to its problems. It has been pointed out on many occasions that even the functions of Government in India, now in the hands of the natives of India themselves,

cannot be carried out efficiently without the knowledge of the varied racial and cultural discriminations revealed by anthropological studies.

To some extent provision for this has been made by the reservation of areas mainly inhabited by aboriginal or jungle tribes for the administration of the Governor; but the knowledge which must temper administration of the jungle tribes, must equally inform the whole of agrarian reform. No form of life is so impatient of change, so conservative, as the agricultural; and as Dr. Venkatraman pointed out in his presidential address, which deserves the careful attention of all who are interested in the future of India, there are few individuals throughout the whole of that sub-continent who are not affected more or less directly by the life and well-being of the Indian village. How vital the effect of the condition of the Indian village and the village agriculturist may be on the future of this great country is foreshadowed by the president of the Agricultural Section, when he points out that India at present produces two thirds only of the food-stuffs it requires. It is perhaps no rash prophecy to suggest that the future of India rests not with the party which shows itself most adroit and subtle in manipulating the political machine, but with that body of opinion which is most ready to accept the findings of science and to adapt them to the needs of the people in the amelioration of social and material conditions.

Air Raid Precautions

The Protection of the Public from Aerial Attack a Critical Examination of the Recommendations put forward by the Air Raid Precautions Department of the Home Office. By the Cambridge Scientists' Anti-War Group. Pp. 127. (London: Victor Gollancz, Ltd., 1937.) 2s. 6d. net.

IN this book, the authors—a group of anti-war scientists at Cambridge—have published a slashing attack on the recommendations put forward by the Air Raid Precautions Department of the Home Office for the protection of the public, and they offer scientific evidence to show that these measures are entirely inadequate.

The chief criticisms made in the book are as follows:

(1) 'Gas-proof' rooms prepared according to the instructions given in the Air Raid Precautions

handbooks are not gas-tight; and the results of the tests that were made by the authors show that, assuming the air outside contains enough mustard gas to kill a man in an hour, it would penetrate such rooms in sufficient concentration to kill him in three hours. Besides, millions of people live in such conditions that they are unable to set aside a room as a gas shelter.

(2) A privately manufactured gas mask costing 17s. 6d. (not the type which the Government proposes to issue) was tested, and although it was found to be fairly satisfactory, the complaint is made that no mask can give complete protection against mustard gas because the latter affects the whole surface of the body.

(3) Incendiary bombs would be used in such numbers that the present fire brigade system would be inadequate to deal with the resulting fires.