

juveniles, whose numbers are now formidable. It is an educational problem, yet official education has scarcely more than touched the fringe of it. The duty of dealing with it should be placed upon the local education authorities. Juveniles should be advised to remain at school until situations can be found for them. The age of compulsory insurance should be lowered to fourteen years and credit should be given against the Unemployment Fund for school attendance beyond that age, as recommended by the recent Royal Commission. The scheme procedure of Mr. Fisher's Act of 1918 should be adopted, local authorities submitting area schemes to the Board of Education, and receiving the grants in aid through the Board. But the fundamental need is that the national conscience should be aroused to the gravity of the position: a society awake to the de-civilising influence which enforced idleness must have upon this large section of its future citizens could not tolerate a half-hearted handling of the evil.

CHEMISTRY AND AGRICULTURE

DR. A. LAUDER in his presidential address to Section M (Agriculture) reviews the progress of agricultural chemistry since Sir J. H. Gilbert addressed Section B (Chemistry) of the Association on the same subject in 1880.

A critical survey of the modern views on the constitution of the soil, and of the methods employed in soil surveying and in soil analysis, is given, as well as an account of recent developments in the manufacture and use of fertilisers.

The important progress made in biochemistry in the last twenty-five years and the light this fuller knowledge throws on problems of animal nutrition and disease are discussed in detail.

In the concluding section of his address, Dr. Lauder deals with certain aspects of agricultural development and in particular with the suggestion that the application of science to agriculture is one of the causes of the prevailing agricultural depression. This is shown not to be the case, and it is pointed out that whatever opinion may be held as to over- or under-production of agricultural produce in the world as a whole, this much at any rate is clear; that an increased production of home-grown food is of paramount importance to Great Britain. Since the War, many industries have either disappeared or been greatly reduced in importance, and it is

practically certain that there is going to be a permanent displacement of labour in certain trades. There is no better way of using this displaced labour than to employ it on the land to increase home agricultural production. It is unnecessary to point out or minimise the obstacles to so profound a change—the disinclination of an urban population to move to the country, the problems of housing and wages, and the necessity of obtaining a remunerative price for the food produced, being only some of the more obvious difficulties involved.

Dr. Lauder states that it is most important to supply the consumer with as large a proportion as possible of fresh food which has not been subjected to chilling or freezing or to any of the chemical manipulations or treatment which are much too common nowadays. The aim of the home producer should be to produce the type of food in largest quantity where this quality of freshness is of the highest importance, for example, meat, milk, butter, eggs, poultry and market-garden produce and fruit. In this way he could best meet the menace of overseas competition. At the same time much work would require to be done to educate the consumer to appreciate the superior value of fresh home-grown food as against that which has been chilled or preserved.

The modern farmer must now choose between two courses. He might either adhere to traditional systems under which his products have to meet those of overseas competitors who possess dominant advantages in the production of most of their crops, or, on the other hand, he might alter his system to meet the new conditions and produce those commodities which will command an unassailable position in the home market.

This alteration in the system of farming would mean many important changes; more concentrated foods would have to be grown, for example, beans and peas, and less concentrated foods imported. In this connexion, the highly nutritive quality of young grass and the methods for its utilisation should receive more attention; the growing of hay on a quality basis and the adequate use of silage should also be mentioned.

In conclusion, Dr. Lauder points out that the importance of agriculture, not merely as a means of producing additional home-grown food, but as an industry of fundamental social value, is now being realised by all sections of the community.