

I. CONSERVATION OF RESOURCES AND DEVELOPMENT OF INDUSTRIES.

In dealing with the question of Industrial Research in the brief time at my disposal the key note of what I shall have to say will be "The Conservation of our Natural Resources, and the Scientific Development of our National Industries".

AGRICULTURE.

Three of our chief sources of wealth, I may point out, are our agricultural lands, our cheap electrical power, and our mineral deposits. Of these the agricultural industry is by far our greatest national asset. The importance of this industry was early perceived by our Governments and Legislatures, and due provision has been made already for its proper development. Through the agency of the Dominion Experimental Farms inaugurated by the late Dr. William Saunders and through the activities of the Ontario Agricultural College under the Presidential guidance of Dr. Mills, and Professor Creelman, as well as by the laudable work of the late lamented Dr. C. C. James, great advances have been made in the selection of the most suitable seed grains, the best breeds of dairy cattle, horses and other farm animals, and vast improvements have been made in recent years in the preparation, storage and transportation of our dairy products. From what has been accomplished so far we may safely say that our agricultural industry is now on an eminently satisfactory basis, and that it is developing on sound lines. Much can still be done, however, to ameliorate the disabilities of farm life, by improving roads, by increasing facilities for education, by adding to the comfort of farm dwellings and the beauty of their surroundings, and by a more extensive use of electric power in farm operations. Speaking generally, too, I may be permitted to say that our agricultural lands are not as intensely fertilised as they should be, and production is not as much by half as it could easily be by proper treatment of the soil. And we have the remedy at hand if we would but use it. The vast deposits of calcium, potassium, and phosphate bearing minerals in Canada require but to be worked to furnish us with unlimited supplies of mineral fertilising agents. Our electrical power, too, can furnish us with vast supplies of nitrates if we would but apply it. At Niagara Falls, Ontario, already we have in the American Cyanamide Works, an industry of some thirty-thousand horse-power capacity in which thousands of tons of fertilisers made by the extraction of nitrogen from the atmosphere are manufactured each year. But the whole of this output goes to the country to the south of us, and is used to increase the pro-