

better example of the interaction of universities and industrial pursuits—of pure science and technology—could be given than that of the newly effected commercial synthesis of indigo. At the present moment, Germany is on the eve of the wholesale absorption of a great Anglo-Indian industry, that of indigo production, by the invention of a German firm of chemists. After many laborious years of research by Prof. Bacyer, of Munich, this German firm has succeeded in manufacturing indigo on a commercial scale, from naphthaline, which can be produced in enormous quantities, at a cheap rate. The result is, that this firm are prepared to supply indigo to the whole world at a price with which indigo planters cannot compete, and thus they have obtained possession of an industry of the annual value of three millions of pounds sterling.

Another industrial chance, which was lost to England, is thus mentioned by Prof. Starling: "It is noteworthy that Hofmann, years ago, when professor at the School of Mines, London, strongly urged the Government to institute and support chemical laboratories, so that we might retain in England the aniline dye industry, then being developed by Perkins. His advice, however, was unheeded; and the whole of this industry is now in the hands of Germany, to whom we send the waste products of our gas-works, in order to buy back, at a large price, the aniline dyes, manufactured from these same waste products."

Dr. Hodgins calls attention to the fact that Canada has, at Glasgow and Buffalo, impressed the world with the great variety and value of its mineral and other natural products. These exhibits suggest great industrial possibilities for Canada. We must not allow the United States, England, or even Germany, to take away from us trade which we can control equally well, if we go about it in the right way, and the advantages arising from the development of our vast resources can be largely retained by giving due attention to technical education for our young men. Have we any W. Firths to encourage them?

THE WOOLEN TARIFF.

The letter of Jonathan Ellis, the Port Dover knit goods manufacturer, quoted elsewhere, has been followed by a letter, reproduced in this issue, by T. A. Russell, secretary of the Canadian Manufacturers' Association. The Toronto Globe has been fair enough to print these letters, and it is to be hoped that their appearance in this medium will help to arouse the Government to a sense of the peculiar injustice done to the woolen industry by the preferential tariff, as it now stands. What is said in these letters has been said more than once in the Canadian Journal of Fabrics, in the past year or two, but as Mr. Russell brings some instructive figures down to date, our arguments are well reinforced.

Of all branches of the textile industry, the woolen branch, as we have said, is hit with particular force, and stands pitted against the best equipped of all of Britain's industrial armies—the only one, it may be said, that so far has stood the shock of the world's competition. The Canadian mills have also to stand against the smuggling that goes on from Germany to Canada, via England, under the shelter of the preferential tariff. It is rather a coincidence that we have had within the past few days the testimony of a British woolen manufacturer in condemnation of the Government's folly in this business. C. J. Alexander, ex-president of the South of Scotland Chambers of Commerce—a district representing the bulk of the Scotch tweed trade—spoke the other day, before the woolen section of the Canadian Manufacturers' Association, dwelling upon the unwisdom of the policy of the Dominion Government in discouraging the woolen business. Mr. Alexander instituted comparisons between Canada and the United States, showing that while this country imported \$10,000,000 worth of woolen goods last year, the imports of the United States only amounted to \$14,000,000. This was due to the fact that the United States grants a much larger measure of protection to the woolen manufacturers than Canada. Mr. Alexander was of the opinion that the tariff on woolens should be materially increased in this country, until such a time as the industry becomes firmly established. He stated that while he was a free trader, so far as Great Britain was concerned, he believed that what Canada required was a true national policy." This, coming from the representative of the tweed district of Scotland, and from a man who has been for years familiar with the conditions of trade in the United States and Canada, as well as in his own country, should not be lost upon our people and Government.

—Reference was made in our September number to the large amount of electrical power applied to the cotton manufacturing industry in Canada. Mention was made of the Dominion Cotton Manfg. Co.'s Hochelaga mills, and to the Imperial Cotton Mills, of Hamilton, a description of the former having appeared in our August issue. Our readers interested in this development will not forget the large electrical installation of the Montreal Cotton Co., at Valleyfield, which was described and illustrated two or three years ago in this paper. The Montreal Cotton Co. has 3,600 electrical horse-power, which is probably the largest installation of any textile mill in the world, owned and applied to its own work exclusively. The company has four generators of 600 h.p. each, and one of 1,200 h.p., with 45 motors in various parts of the mills, ranging from motors of 30 h.p. up to those of 200 h.p. Taken altogether, we do not know of any country in the world that has applied electrical power to cotton manufacturing to the extent Canada has done.