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We judge ourselves by what we feel capable of doing; but the world judges us by what we have already done.

Longfellow.

DR. EUGENE HAANEL,

Dominion Superintendent of Mines.

At noon-day, Monday, March 12th, 1906, we witnessed a remarkable scene at the Canadian Club of Toronto. Two hundred keen business men sat spellbound, listening to a story of scientific achievement and trade possibilities as wonderful as the vision of glory and wealth told by Raleigh and Drake on their first return from the Spanish Main. The orator of the day was a man of striking personality: above medium height, grey hair brushed back, body as erect as a grenadier, face bearing marks of strain, but with an expression like a summer's day; for, with a slight Teutonic accent, he spoke with conscious power, "as one having authority." By way of exordium, the influence of iron and steel in making for progress and civilization was told with masterly skill, followed by a panoramic word-view of the immense magnetic iron ore resources of Canada, hitherto incapable of being smelted in the blast furnace on account of their highly refractory nature. Then was narrated the fact that upon his initiative the Dominion Government sent a Commission across the Atlantic to Sweden and France to investigate the latest processes of electric smelting. Based upon the Commission's report, he (the speaker) submitted a memorandum to the Minister of the Interior (Hon. Frank Oliver), suggesting electric smelting experiments on a comparatively large scale. At this stage, a glance at the faces of the audience as they listened with breathless interest, was a sight never to be forgotten. The silence was profound; for, with the art that conceals art, the speaker led his auditors step by step to Dr. Heroult's electric furnace plant at Sault Ste. Marie, and then, in imagination, throwing open wide the doors, disclosed fifty-five tons of pig iron piled in serried rows, successfully made from titaniferous, nickel-ferro-pyrrhotite and sulphurous, magnetic ores, at an expenditure of electrical energy, electrode and fuel consumption simply startling, and almost ludicrously low in the matter of cost. The orator concluded with these pregnant words:

> The Government has furnished you with facts on which to base a sound judgment as to the feasibility of commercially engaging in the manufacture of pig iron by the electric process; with that its duty to the nation is done, it remains with you business men to apply, perfect and profit.

A scene of enthusiasm followed, for every man present realized what this triumph in metallurgical science meant to his country. The hero of this historic scene was the distinguished man whose portrait appears above, and whom we delight to place in our gallery this month among the men in Canada who have "done things."

Dr. Eugene (Emil Felix Richard) Haanel was born at Breslau, Germany, May 24, 1841. Graduated from Gymnasium, Breslau, 1858. Received A.M., Athens, Ohio, U.S.A., 1872; and Ph.D., Breslau, 1873. Endowed with the gift of teaching, he subsequently occupied the following chairs: Professor of Science, Adrian, 1886; Professor of Natural Science, Albion, 1868-72; Professor of Physics and Mineralogy, and Director of Faraday Hall. This institution, erected by Dr. Haanel, was the first Science Hall in Canada. He was also Dean of the Faculty of Science, Victoria University, Cobourg, Ont. The last period of his academic career was as Professor of Physics, Syracuse University, U.S.A., 1889-1901, where he erected the "Esther Baker Steele Hall of Physics." Then came the call, in 1901, to fill the important position of Superintendent of Mines to the Dominion Government, a service which has just culminated in the signal triumph told above, and which is destined to place Canada in the forefront of nations in the practical application of electro-thermic processes for the smelting of magnetic ores, and developments in iron and steel industry.

Dr. Haanel's place in science for original work will be associated with (1) Hydriodic acid as a blow-pipe reagent; (2) Gypsum tablets in blow-pipe analysis; (3) Hydrobromic acid and tetranchloride of tin in blow-pipe reagents.

In technical literature he will be remembered as the author of "Location and Examination of Magnetic Ore Deposits by Magnetometric Measurements."

He is a member of the following learned societies: Physical Society, Canadian Mining Institute, Canadian Royal Society (charter member), Faraday Society, North of England Institute of Mining and Mechanical Engineers.

Such, briefly told, is the public career of one whom "The Canadian Engineer" is glad to honor. Lord Beaconsfield once said that "there is no gratitude in politics." We trust, however, that the services which Dr. Haanel has rendered to this country at a critical stage in its industrial history will receive the substantial recognition which they justly deserve.