

Born in Essex, England, in 1831, at twenty-one he came to Canada, and was appointed assistant engineer of the Hamilton-Toronto Railway. In the half century since, the distance he has travelled spans the gap between a junior assistant and the consulting engineer of the greatest engineering organization of the Dominion—the Department of Railways and Canals for Canada.

In 1852 the railway and canal system of Canada was truly a "wee infant," and as Mr. Schreiber looks back over the years of growth and the development of the St. Lawrence and Great Lakes canal system; the uniting of the Maritime Provinces with the Canadas by the Intercolonial; the bringing east of the Great North-West and the making possible a Dominion by the building of the Canadian Pacific; the moving northward three hundred miles our north boundary by the building of the Grand Trunk Pacific, it must be with great pleasure and not a little pride that he remembers his personal connection with all these nation-building problems.

A Brown, a Blake, a Macdonald, a Mackenzie, a Cartier, a Tupper or a Laurier may be convenient names for historians to associate with Canada's growth and expansion, but let us not forget the hours of patient toil, the days of planning and designing and constructing done by the Canadian engineer who, in 1855-60, was a consulting engineer in Toronto; in 1860 was appointed superintendent of the Northern Railway; from 1873 to 1880, chief engineer of Canadian Government Railways; from 1880-1893, chief engineer of the Canadian Pacific Railway, and in 1893 entering the service of the Canadian Government as Deputy Minister of Railways and Canals, and who is to-day consulting engineer of that department.

Many know Collingwood Schreiber, the engineer—few know Collingwood Schreiber, the man. A tireless worker, he mixed but little with the world outside his own circle. He had not time for those social and political functions where he of the glad hand appears, disappears and appears, and becomes known.

Always in the thick and torrent of great work, he has kept for himself clear and clean that most prized of attributes—a good name.

May he remain in our midst for many years that he may continue to receive the good wishes and kind words of his fellow-practitioners!

THE ENGINEER AND BOARDS OF HEALTH.

Lord Strathcona offers to send out from England at his own expense a sanitary expert to Montreal to advise the city council in the matter of typhoid prevention.

Five years ago the city of Winnipeg engaged the services of a sanitary expert from the United States to advise on sewerage.

Last year Toronto engaged the services of two sanitary experts—one from the States and the other from England—to advise on sewage disposal.

Last year Toronto engaged the services of a sanitary expert from the United States to prepare plans for a water filtration plant.

Last year the Quebec Provincial Board of Health engaged the services of a sanitary expert from the United States to make sanitary rivers surveys with reference to pollution. In the last instance the expert has been permanently adopted.

Canadian engineers must conclude as follows:—Either that Canada is ignorant of the existence of any

Canadian engineers competent to give an opinion on engineering hygiene in connection with any place larger than a village, or that Canada possesses no sanitary experts connected with the engineering profession of an efficient calibre.

Either the one or the other of the above conclusions must be correct, as it will surely not be maintained that, other things being equal, Canada prefers to employ engineers other than Canadian.

We are constantly being met with the phrase: "So-and-So is not a Canadian; he cannot understand local conditions." Yet when it is a question of important work of a large character, the man chosen to design and control has had no chance whatever of grasping or becoming familiar with either climatic or other local conditions.

Several years back what we are now saying of Canada might equally well have been said of the United States. It cannot, however, be said of the United States at the present day. Why? Because ever since the birth of the Massachusetts and other State Boards of Health, with their experimental and sanitary research stations, there have been trained a body of practical and efficient sanitary engineers, the usefulness of whose work has been felt throughout the whole country.

Where, throughout the Dominion of Canada, can anyone point to a centre for the practical demonstration of hygienic engineering and its application to Canadian conditions?

McGill University provides a special school course for sanitary engineering. We understand that Toronto is about to follow suit. A school training, however, will not make an expert, nor will it impress the outside public with faith in practical efficiency.

Generally speaking, if there was no other choice to be made, the public would rather appoint as engineer a competent contractor's foreman than a raw, inexperienced graduate from a school.

Where is the remedy? The remedy is to be found in studying conditions existing in the United States for the past thirty years. The conditions in the States may be summed up as follows:—

Every State Board of Health has formed a practical training centre for the moulding of sanitary engineers. No expense has been grudged by the communities in providing experimental laboratories. A body of engineers has been kept in constant touch with the evolution of types of construction and processes. Reports (both chemical and engineering) have been published without stint, fear or secrecy. Failures have been advertised in large type as well as successes.

The cream of these trained engineers have acknowledged the experiences of older countries; have visited time and again in Great Britain and Europe; returned, criticized and lectured, and have duly impressed their own countrymen with the elasticity and broadness of their knowledge.

The States look to one of its own children for the best and most complete advice, and even we here in Canada recognize the development of efficiency on the other side of the line.

Is not this a question which the Canadian Society of Civil Engineers should, and can, take up? By representations made to governing bodies, such as Provincial Boards of Health, may not the importance of the employment of the sanitary engineering expert be made apparent?