

EMINENT ENGINEER PASSES AWAY.

In the person of Sir Collingwood Schreiber, who died on March 23, at his home in Ottawa, aged 87, Canada has lost one of her greatest engineers and railroad builders. For sixty years the late Sir Collingwood had been actively associated with the building and development of both publicly and privately-owned railways in this country, and for his outstanding services in connection with the construction of government lines he was knighted in 1915. He was born in England and came to Canada as a young man, in 1852. He first secured a position on the engineering staff of the Toronto and Hamilton Railway, staying with this road until 1856. Having demonstrated his capabilities as an engineer, he was then taken into partnership in the engineering firm of Fleming, Ridout & Schreiber, of Toronto, thus becoming associated with Sir Sandford Fleming. He remained in practice until 1860, when he superintended the construction of the Northern Railway now a part of the northern division of the Grand Trunk—till the year 1863. During the four years following he was engaged in the construction of the Pictou Railway, in Nova Scotia, and then assisted in laying out the Temiscouata section of the Intercolonial Railway. Later he built and became superintending engineer of the Eastern Extension Line, now part of the Intercolonial, and in 1873 was appointed chief engineer and general manager of all government railways in operation. Seven years afterwards Sir Collingwood also was appointed as chief engineer of the C. P. R., succeeding his old partner, Sir Sandford Fleming. He retained his position on the government railways and with the C. P. R. until 1892, when he became chief engineer of the Department of Railways and Canals. Later he was appointed deputy minister of the department, and continued to administer this office until 1905. In that year he became general consulting engineer of the Dominion Government and chief engineer of the western division of the National Transcontinental Railway. Since that time his chief work has been the inspection of the construction of the Grand Trunk Pacific.

SLIPPERY PAVING BRICKS.

A study of paving bricks shows that their greatest disadvantage is the smoothness and slipperiness which they develop as the result of wear. This is so serious as to preclude their use in many places where they would otherwise be extremely satisfactory.

Various methods have been tried in order to overcome this smoothness, such as grooving the upper surface of the bricks, imprinting a pattern in low relief, and so on, but such devices are clearly only palliative, and are often accompanied by serious drawbacks.

What is required is a hard and impervious material which will remain rough under abrasion in-

stead of being polished. The United Mosaic Works of Friedland-Sinzig claim that by the use of a material the particles of which are hollow, they have been able to produce an ideal paving material, and one which is quite impervious to water, yet never becomes quite smooth. The nature of the material is not disclosed; it is presumably some form of kieselguhr, which consists of minute hollow particles. On mixing a suitable kieselguhr with an appropriate bond and making bricks from the mixture and burning to a sufficient high temperature, it should be possible to produce an impervious brick which would not wear smooth, but whether such a brick would be sufficiently hard and durable remains to be proved.

Joe Keefe

MINERAL EXPORTS TO BRITAIN.

Canada's mines have been working overtime furnishing metal for the outside world. For the United Kingdom alone, the exports of copper in 1917 totalled 144,613 hundredweight, worth \$1,080,133, as compared with only 53,855 hundredweight, worth \$403,851, in 1913. Nickel worth \$1,862,796 (124,001 hundredweight) was sent to the United Kingdom, compared with 48,267 hundredweight, valued at \$718,145, in the year before the war. The bulk of Canada's nickel still goes to the United States, and the figures for the fiscal year 1917 were 702,203 hundredweight, worth \$7,062,758.

Some forms of lumber have tended to swell Canada's war exports considerably. In 1917 the Dominion sent 50 per cent. more spruce and other deals to the United Kingdom than in 1913, but the price had so increased that the value of this form of export nearly doubled, being \$8,594,803, as compared with \$4,683,821.

Only 74 horses, worth \$14,400, were exported to the United Kingdom in 1913. By 1916 the number had risen to 21,833, worth \$3,899,822. In 1917 the number dropped again to 9,499, worth \$1,898,820.

A curious feature of the customs report is that it records imports of gold bullion from the United Kingdom in 1917, worth \$14,46,131, as compared with only \$98,409 worth in 1916.

More than 250,000 refugees from the regions taken from Russia by Germany are seeking safety from the German troops on the eastern frontier of the Ukraine.

Baking of white bread and rolls will be discontinued throughout the United States after April 13.

"The war is becoming more and more a machine war, and along with the change comes a steady decline of casualties—Manchester Guardian.