In

Physical and Chemical Analysis.	
Lead Carbonate	71.42 p.c.
Lead Hydroxide	28.57 p.c.
or	•
Oxide of Lead	86.10 p.c.
Carbonic Acid	11.77 p.c.
Water	2.13 p.c.
Specific gravity	6,562
Volume, 12.53 lbs. per gallon.	

"The percentage of carbonate is a little higher than the average, but not enough to cause the slightest trouble. fact, this analysis shows the finished article to be of very fine

quality." There is, therefore, no reason for doubting the ability of the Trail lead to satisfy all demands of the Canadian market, and the continued importation of dry white lead, practically free from duty, must soon cease.

## **Obituary Notices.**

In the death of Mr. Marcus Smith, of Ottawa, the Dominion loses one of its oldest and best-known civil engineers. Mr. Smith was born at Berwick-on-Tweed, England, on the 10th of July, 1815, and was therefore in his ninetieth year. He came to the United States at the age of thirty-four, and removed to Canada two years later, in 1851. In 1852 he was employed on the location of the Sarnia branch of the then Great Western Railway, and in 1853 was made chief engineer. He returned to England in 1860, and was sent to an important position on the Cape Town and Wellington Railway in South Africa, where he remained until 1865. Returning to England, he was recalled to Canada in 1868, and received an appointment on the staff of Sandford Fleming, then chief engineer in charge of the construction of the Intercolonial Railway.

Mr. Smith resigned this position in 1872, to become deputy to the chief engineer of the Canadian Pacific Railway, and was given charge of the surveys in British Columbia. From 1886 until 1892 he held a position as consulting engineer in the Government service.

The REVIEW regrets to chronicle the death of Mr. John F. Mr. Stairs died in the Stairs, ex-M.P., of Halifax, N.S. Toronto General Hospital on the 25th of September of an affection of the kidneys, from which he had been suffering for some time.

Mr. Stairs was born in Halifax on the 19th of January, 1848, and was in his fifty-seventh year. He was the eldest son of Hon. Wm. J. Stairs, the founder of the firm of Stairs, Son & Morrow, one of the oldest and most responsible shipchandlering firms in Canada. The late Mr. Stairs entered the firm at an early age, and devoted himself to the development of various local enterprises, which were conspicuously successful.

At the time of the founding of the original Nova Scotia Steel and Forge Company, in 1890, Mr. Stairs was one of the first to join with Mr. Graham Fraser in promoting and building up the Forge Works at Trenton, N.S. He was also president of the New Glasgow Coal, Iron and Railway Company, and was prominent in the amalgamation of these two companies in the year 1895. In all the work of building up

the present Nova Scotia Steel and Coal Company from the original Forge Company, Mr. Stairs played a prominent part. and should justly, with Mr. Graham Fraser, be considered as one of the founders of Nova Scotia's prominence in the iron and steel industry.

In politics, Mr. Stairs was a Conservative and strong protectionist.

## Notes Concerning Northern Ontario.

A considerable amount of exploratory work has been done this season through Northern Ontario, with a view to ascertaining more fully what it contains in minerals, timber and agricultural lands. Reference has already been made to the valuable discoveries of cobalt, native silver and other ores on the line of the Temiskaming and Northern Ontario Railway, and the full extent of these deposits is not yet known, as fresh discoveries are constantly being made. With the facilities for shipment and getting in supplies which the new line will furnish, these deposits will be vigorously worked. One man who possesses a claim is said to have taken out \$70,000 in native silver from a vein discovered only three months ago. Rich ore is being stored in ore sacks until the railway is ready to carry it away. New deposits of nickel have been found, and arsenical ores also abound. A mispickel property is being operated by New York parties, and a Sudbury company is developing an iron pyrites mine.

At Temagami a valuable iron mine has been found close to the railway, in which B. O'Connor, of that place, T. N. Caldwell, of Lanark, and Sir Wm. Mulock have each a third interest. At another point Major Leckie has a deposit of iron pyrites, and copper and gold have been found by prospectors. T. W. Gibson, Director of Mines, Aubrey White, Deputy Minister of Crown Lands, the members and officials of the Railway Commission, and several Grand Trunk and other officials recently drove over the line from the end of the rails to Haileybury, and found evidences of mineral wealth The writer spent some time on Lake at various points. Temagami and adjoining waters last month, where in a number of places prospecting is going on with a certain amount of success.

Farther north, in the Abitibi country, J. G. McMillan, who has charge of an exploring party, reports that in the country so far explored the rocks are Huronian, with few outcroppings. In only one place was the Laurentian formation encountered. Most of the land is level and covered with stratified clay. It is wet, on account of the level nature of the country, but the banks of the rivers are high, so that it can be easily drained, except where there are muskegs, and these do not cover more than one-tenth of the area. These. too, can be drained off, as the peat surface is not deep-from 3 to 6 feet—extending in some places to 10 or 12 feet. In the township of McHart Huronian greenstone was found, varying in appearance, with veinlets of serpentine and a bluish quartzose schist bearing magnetite; in Tully township a greenstone impregnated with pyrites; in Little township a bluish quartzose schist bearing magnetite and pyrites; in Wark and Gowan townships the only rock seen was a hard schist with some stringers of quartz. Glacial accumulations In McHart are some moraines, one being noticed are few. 60 or 70 feet high, heavily timbered with birch. In the south-west quarter of Little there are some sand ridges covered with jack-pine. The rocks along the Abitibi River

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