

It is significant that in the chronological table we find a German Technical High School at Prague mentioned as being founded in 1806, that the Chausthal School of Mines comes next in 1810. Long before the century opened the School of Mines of Freiberg in Saxony was in existence, having been founded in 1765. In 1816 France appears on the scene with a School of Mines at St. Etienne. Belgium in 1836 contributes the School of Mines at Liège, and in the same year Spain that of Madrid, and Austria that of Leoben in 1840, while we have to wait till 1851 before the Royal School of Mines in London appears. Since then we have indeed given much more attention to this matter, and the air is filled with projects for supplying those educational facilities which our fellow-workers abroad possess in such abundant measure.

For as the tools in our possession become more complicated, we must be better trained in their use. The empiric skill of the native genius, where imagination stands instead of knowledge, gives place to the learning acquired by the patient student at the technical school, and science supplants art at furnace and in workshop. If we in this kingdom are to keep our place in the world of industry, we must be ready to make use of the changed methods as our grandfathers were ready in their day to avail themselves of the forces newly placed at their disposal. For we, as they, look out on a world of perpetual change.

The men who stood on the threshold of the nineteenth century would have been filled with astonishment could they have foreseen the changes it was to bring, giving us a world in which time and space are all but excluded from our calculations. A telegram with which we greet a distant friend in America reaches his hand hours before the sun has travelled westwards to mark there the same time as it marked here when our message was despatched. Jules Verne, by the exercise of his imaginative art, told us how with great good fortune his hero encircled the world in eighty days. With no trouble to ourselves beyond taking a ticket from a tourist agency, we could travel westwards from London till we reached this city again from East in a day or two more than half that time.

But let me picture to you one who, one hundred years ago, should have said to the most skilled and far-sighted man of that day, "Within a century from now corn grown on the western slopes of the Rocky Mountains

will be conveyed by steam along an iron road to the sea coast, borne over the sea in a ship made of iron and propelled by steam, and sold in the London market cheaper than it can be grown in Essex." Not one of his anticipations would have been thought within the range of the barest possibility.

Beyond doubt we, who stand on the threshold of the twentieth century, may look forward to changes as great and far-reaching before the next hundred years are run out. New forces are again being placed within our reach. The ultimate possibilities of the electric current are not yet within sight, though, with the eyes of faith, we may guess at them. It may well be that the steam engine will be as obsolete as the horse gin before the twentieth gives place to the twenty-first century, and that the new machine will be in truth the heat engine towards which the first experimenters worked. Our views of the constitution of matter are in a state of flux, and though the highly abstruse questions involved in this may seem far removed from these technical questions which chiefly occupy us, they are no more remote than may have seemed the discovery by Oersted of the deflection of the magnetic needle by an electric current. Yet that discovery contained the germ of the electric telegraph.

And if I to-day look forward, as I picture that other man to have done a century since, what form might my guess of the future take? How in a hundred years will the great swiftly-gliding ship of those days be propelled? With little, or mayhap with no machinery on board, with barely any crew she speeds on her way drawn by the electric force generated at Niagara, and transmitted over the Atlantic by wireless telegraphy. She crosses to New York, takes her cargo, and returns as she came.

Strange as my forecast may seem, it is no more incredible than what has happened since 1807. The things which to us are commonplace would have been deemed impossibilities by our forefathers.

The world moves on in a succession of dreams and their fulfilment. The wild imaginings of one age become the splendid realities of the next, for

"... all experience is an arch wherethro'
Gleams that untravell'd world whose margin fades
For ever and for ever when I move."

COBALT LAKE.

Cobalt Lake occupies an area of 51 acres in the heart of the Cobalt mining camp. The McKinley-Darragh location covers 3 1-2 acres of the southern end, and the remaining 47 1-2 acres are the property of the Cobalt Lake Mining Company, Limited. The company also owns a strip of 33 feet of land, half the road allowance, along the eastern side of the lake.

Early in the autumn of 1906 the Ontario Government announced its intention of selling to the highest bidder the mineral rights of Cobalt Lake. On November 22nd of the same year official announcement was made of the conditions of sale, and December 20th was set as the last day on which tenders would be received. The successful tender set the purchase price at \$1,085,000. Of this amount about three-quarters was subscribed by an Ottawa syndicate, the remainder by Toronto and American capitalists. The whole amount was subscribed by

about 670 persons. A marked cheque for \$108,500 (10 per cent. of the purchase price) accompanied the tender.

A company was very rapidly organized, with an authorized capital of \$5,000,000. Of this \$4,000,000 was issued at once. Each subscribed to the purchase price received three shares of a par value of one dollar each, for each dollar of cash paid by him. This \$3,255,000 allotment was made to the original subscribers. Brokerage and organization expenses amounted to \$240,000. To provide for immediate development, \$300,000 of treasury stock was issued. A considerable portion of this was taken up at 85 cents by members of the original syndicate.

During the latter part of the month of January, 1907, about one-quarter of the shore line was stripped. This work was necessarily unsatisfactory, on account of snow, ice and severe weather. In February, Mr. E. L. Fraleek