

proceedings were furnished us by a gentleman connected with the company.

"The Marmora Iron Works, the property of the Marmora Foundry Company, are situated on Lots Nos. 9 and 10 in the fourth Concession of that township. The works, which are erected on the bank of the Crow River, a short distance from the foot of Crow Lake, are very extensive, and consist of two blasting furnaces of good size, one of which has been within a few months almost newly built, and lined with Stourbridge brick, and is ready for use at any time when the operations of the company may be resumed. The blast (which is what is called the "hot blast,") is furnished by a new and improved cylinder apparatus with air-heating ovens on the most approved principle, and is driven by a powerful and never-failing stream of water. This furnace has been in blast but for a short period, and that only for the purpose of testing the practicability of working the ore, so as to produce such a quantity of iron per diem as would leave reasonable expectations of the manufacture proving profitable. The company, therefore, spared no expense in fitting up the furnace; which was done under the superintendence of an eminent iron founder, and practical assistants. The quantity of iron (pig) produced from this furnace was five tons per day of very superior quality; and it was found that the probable cost of manufacture, in a blast of longer duration, would not exceed three pounds or three pounds five shillings per ton.

"Owing to some difficulty between the directors and a portion of the stockholders who had refused payment of their stock, the works were stopped after this experiment, and will not probably be resumed for a year or two, unless the Company succeed in leasing the premises to some practical person; a course which they would prefer, rather than carry them on in future on their own account.

"The premises of the Company are very extensive, and comprise (in addition to the blast furnaces, and several large houses for storing charcoal) a large stone building with trip-hammer, for the manufacture of bar iron, of several stone buildings and houses used for shops, boarding houses, &c., and about twelve frame dwelling houses, occupied formerly by the work-people of the establishment, and which are now rented out to various parties. There are also a flouring mill, a saw mill, and a building formerly a tannery, but now about to be converted into a clothing and fulling factory, all driven by the same stream (which is capable of propelling three or four times as much machinery from the same head), over which a very handsome and substantial bridge was last year built. A church (Roman Catholic), built of stone, and of very neat construction, is situated nearly opposite the bridge, on the western bank of the stream. All of these buildings are on the property of the Company, and form together a compact and flourishing village, in which is a post office. On the north side of the village, and also on the property of the Company, a town plot has been laid out, and a few lots sold, on which buildings are now being erected by the purchasers; but the whole of the grounds on which the buildings above described stand is intended to be reserved by the Company for the purpose of leasing to tenants.

On the south side of the village is a well cultivated farm, with handsome dwelling houses and suitable outhouses, gardens, &c., also the property of the Company.

"The ore bed (or rather the main ore bed from which the furnace was supplied, for there are many valuable beds of magnetic iron ore in the neighborhood, and some of bog ore), is situated on a high bank on the shore of Crow Lake; it is mined easily, and loaded on board scows for transport to the works, from which the ore bed is distant about three miles and a half. The ore is a magnetic oxyde, very rich, three tons yielding two tons of iron. Excellent cast iron as is made from this ore, it is still more suitable for bar iron; the toughness and ductility of what has been made there giving it a preference to the best Swedes iron."

Prof. Chapman, in his valuable and very interesting work, "Minerals and Geology of Canada," speaking of *Magnetic Iron Ore*, says:—"This, when pure, is the most valuable of all the iron ores. Its black streak, and strong magnetism, (and, when crystallized, its form), easily distinguish it from specular iron ore. In the Laurentian rocks of Canada, it occurs in vast beds, rendering this Province one of the richest iron-containing countries in the world. It occurs abundantly amongst the metamorphosed silurian strata of the Eastern Townships. Its principal "Laurentian" localities comprise: the Townships of Marmora, Belmont, and Madoc, with those of south Sherbrooke, Bedford, and Crosby, in Canada West; and the Township of Hull and Litchfield, on the Ottawa, Canada East. The supply at these localities is apparently inexhaustible. In the form of black magnetic sand (either alone or mixed with *iserine*), this ore is also of exceeding common occurrence on the shores of many of our lakes, islands, &c. The black iron-sand of the Toronto "Peninsula" is a well-known example.

TECHNICAL EDUCATION.

In our last number, we briefly alluded to the educational and industrial future of our new Dominion; and demonstrated, we think, the neglect hitherto to afford a technical education for those of our youths who are, or may be, intending to follow engineering or mechanical pursuits.

In another portion of this number we publish a letter from an esteemed correspondent, approving, in very complimentary terms of some of our remarks, and objecting to others.

In referring to the liberal grants to agriculture, and the benefits thereby accruing to that interest, we did not intend to convey the idea that the improvement had been secured by means of technical education for farmers; but rather, by the offer of liberal prizes to those who, in competition,