

metal, not only because of the remarkably excellent quality of the Canadian metal but on account of the low prices of labour and material employed here in its production, and the writer further exemplifies its quality from a test made by the superintendent of the West Point foundry, who reported a square inch of the Moisie iron resisting 20,000 lbs. more pressure than that from the most popular works in the U. S. He considers it worth from 70 to 75 dollars in gold per ton at Quebec, and the duty on importation to the States 1 cent per ton specie. The same iron he says has been manufactured into beautiful specimens of steel, unparalleled there by Messrs. Sweet, Barnes & Co., of Syracuse, and further states it is the *highest grade of iron in the market*.

I will now pass on to one or two other minerals which seem to have been almost neglected, and yet which are met with abundantly in the Laurentian Strata, and might be worked with advantageous results. The first of these is the usually despised iron pyrites, scientifically known as bisulphuret of iron. It is not uncommon to hear the remark passed on a specimen of rock in which may be seen patches or veins of a brassy, yellow coloured mineral, "it is only pyrites—throw it-away." But I hope, by shewing the uses to which it might be applied, to give some idea of its real value. From statistics of the alkali manufacture in Great Britain, we learn that the consumption of pyrites in the several alkali works, reached in 1862, 264,000 tons.

In order to give some idea of the great importance of this mineral and its products, in a manufacturing point of view, let me first state, that sulphuric acid, which is manufactured mainly from pyrites, is the agent used in the manufacture of soda from common salt; from this is obtained hydrochloric acid, used in the manufacture of bleaching powder, and chloride of lime. Soap, glass, and many other chemical products are dependent on the soda thus obtained. In one manufactory, in Lancashire, 3110 tons of sulphuric acid are used weekly for the decomposition of salt, and 700 tons for other purposes, making a weekly total of 3810 tons, most of which is made out of pyrites. The process of making the acid is very simple;—the pyrites is first calcined in furnaces of a peculiar construction, by which means the whole of the sulphur contained is expelled, and then conducted at once to