

THE
CANADIAN NATURALIST.

SECOND SERIES.

ON THE EXTRACTION OF COPPER FROM ITS ORES
IN THE HUMID WAY.

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PART II.—*Being a continuation from page 231.*

In adverting to the best method of putting this process in practice, it may be well first to take into consideration the best means of reducing the ore to powder. With such an ore as that of the Capel mine, it will probably be found, that, after it has passed through the operation of coarse spalling (by which it is reduced to pieces of about six inches in diameter), it cannot be further concentrated by fine spalling and picking, without the loss of much of the copper contained in the ore. (The waste from the fine spalling operation at Capel mine contained 3.4 per cent copper.) According to experience gained at the Acton mine, lime-rock after coarse spalling, can be reduced to pieces of $6\frac{1}{2}$ inches in diameter (mixed with much smaller pieces and dust) for 10 cents per ton of 2000 lbs., by means of Blake's stone breaker, that machine reducing sixty tons of such rock in ten hours. The only crusher which can at all compare with Blake's is that patented by J. J. Storer and J. D. Whelpley of Boston, which breaks the rock so as to go through holes of from three-fourths to one inch square; but it must be broken to a size of from three to four inches in diameter before it is introduced into the crusher. It may therefore reasonably be compared with Blake's. According to the inventors, Whelpley and Storer's crusher will break up eight tons of ordinary quartz