

The deposit is believed to extend over a considerable space. We may therefore look for continued extension of this branch of industry.

The Goderich brine is remarkable for its purity. The salt received the Gold Medal at the Paris Exposition of 1867, and the First Prize at the New York State Fair of the same year. The analysis of the brine by Dr. T. Sterry Hunt showed its composition to be, 1,000 parts:—

Common Salt.....	259.000
Gypsum.....	1.882
Chloride of Calcium.....	432
Chloride of Magnesium.....	254

261.568

From this it appears that 21 6-10 gallons of brine will give a bushel (56 lbs. weight) of salt.

Borings at Kincardine have also been successful in reaching brine.

*Peat.*—Peat, although of vegetable origin, may fairly be dealt with in an article on mining, when we remember the kindred origin of coal, and the vast importance of peat to a country where no coal exists.

It is calculated that in Ontario the peat beds already known cover not less than 30,000 acres, and in many places have been sounded to a depth of 25 feet without finding bottom.

During the present summer (1868) a company has been formed for the purpose of working a deposit covering some 3,000 acres in the County of Welland. The peat is torn into shreds, dried, and compressed into solid blocks, by machinery. About \$20,000 have been expended during 1868, and it is expected that next year companies will be formed for the purpose of working other peat beds in Ontario.

#### Miscellaneous.

*Pyrites.*—This mineral abounds in many parts of Ontario. The bed at Elizabethtown, near Brockville, has been excavated for a space of 50 feet by 30 feet, without finding any end. It is valuable as a source of sulphur, and for the manufacture of sulphuric acid; the quantity used annually in England for the latter purpose being 270,000 tons, or thereabouts, at \$10 a ton. (*Geology of Canada.*)

*Cobalt.*—The only available ore of cobalt in Ontario is the above-mentioned bed of pyrites, a ton of which would yield, treated in the large way, about 8 lbs. of oxyd of cobalt, worth \$24. The quarrying of the ore and the separation of the oxyd would cost about \$14, leaving a profit of \$10. (*Geology of Canada.*)

*Phosphate of Lime* occurs in quantity between the St. Lawrence and Ottawa Rivers. As a manure it is worth in England £6 10s. sterling per ton. Several deposits are worked, but no statistics have been received.

*Mica* in considerable quantity exists in rear of Kingston. A quantity from this district was sold at Paris in 1862, for the use of the French navy, at \$2 per lb.—(*Geology of Canada.*)

*Marble* abounds among the Laurentian rocks. That of Arnprior is largely in use.

#### Mining Regulations.

The mining regulations of Ontario are distinct as regards the precious and inferior metals.

Mining for the precious metals is regulated by an Act entitled "An Act respecting Gold and Silver Mines (1868)" whereby the Act 27 and 28 Vic., cap. 9, amended by 29 Vic., cap. 9 (1865), is repealed.

Under this Act the Lieut. Governor in Council may, by Order in Council, declare any tract described in such Order in Council a "Mining Division." He may also appoint Inspectors of such Divisions, who shall be *ex officio* Justices of the Peace of all Counties or Districts included in such Divisions, and shall settle all disputes as to boundaries of claims, use of water, access thereto, damages by licenses to others, and generally to settle all difficulties arising under this Act.

Inspectors may, on receipt of \$5.00, grant a Miner's License, to continue in force for one year, and to be renewable for a further term of one year on payment of a further sum of \$5.00. The licensee is authorized to explore and to mine, for one year, on any unsold Crown Lands within the Division, and may stake out and work one claim.

#### Dimensions of Claims.

*Alluvial Mines.*—If on any river or creek, 100 feet front by 100 feet to the rear, measured from water's edge.

If in a gully, 100 feet along said gully, to extend from hill to hill.

If on a surface or hill-side digging, 100 feet square, except where a company intend to hill tunnel, when the officer of the division may grant such larger claim as he may think fit.

For working any bed of a river, the officer shall determine as circumstances may require, the size and position of claims.

*Quartz Mines.*—For each person, 150 feet along a lead by 100 feet on each side thereof. For companies, 100 feet along lead for every additional miner, not to exceed 1,000 feet altogether.

Discoveries to be reported. Discoverer entitled to two of the largest claims prescribed by this Act.

Party walls three feet thick to be left between each holding on Crown Lands, to be used in common for access to streams.

Mills must be licensed and furnish returns. Parties applying for licenses are required to give bonds to the amount of \$2000.

Royalty from 2 to 10 per cent. to be fixed from time to time by the Lieut.-Governor in Council, and to vary for different divisions and mines according to yield. Proprietors may mine on private lands subject to above royalty.

Mill owners to receive from the Treasurer of the Province 5 per cent. on royalty actually paid by them.

No action having been taken under this Act, statistics of the yield of gold in Ontario are not obtainable.

*Mining for the Inferior Metals.*—Each mining tract in unsurveyed territory is to be of blocks of 200 or 400 acres. They must be surveyed by a Provincial Land Surveyor, and paid for at the value of \$1 per acre. In surveyed townships, mineral lots are to be sold for \$1 per acre when the lands are held at less than that sum, and at the same price as other lands in townships where they are held at more. Payment must, however, be made in cash.