Mining Matters.

A combine to control the mica mines of Canada is talked of

A geological survey of the county of Gaspe is being made.

A customs copper smelter is projected at Sherbrooke, Quebec.

A large find of copper is reported from Grand Manan, New Brunswick.

Gold to the amount of $80,000,000 has been taken out of the mines in the Yukon.

Mining in the vicinity of Vernon, B.C., promises to be unusually brisk the coming summer.

Sir Wm. Macdonald has given $500 to purchase radium for research work at McGill College.

A battery of coke ovens will be erected near Midway, B.C., in connection with the Ashnola smelter.

A new coal and petroleum field has been opened up on the Flat Head River, southeast of Kootenay, B.C.

Vast deposits of platinum are said to have been discovered in Siberia, where there is enough to supply the world.

A shipment of molybdenite is being tested at the Kingston School of Mines in concentrating, by J. Walter Wells.

Zinc ore is being shipped to Swansea from the Richardson mine on the K. & P. Railway. One lot of 700 tons recently went forward.

The Dominion Coal Company is about to acquire extensive coal areas at Port Morien, a large portion of which are underneath the sea.

Some $20,000 worth of mining machinery is being made by the Vancouver Engineering Works for the Cariboo Goldfields Company at Barkerville.

The output of arsenic by the Canadian goldfields was as follows: In 1899, 113,477 lbs.; in 1900, 522,400 lbs.; in 1901, 1,346,983 lbs.; in 1902, 1,600,000 lbs.

The National Corundum Wheel Company, of Clayville, N.Y., is mining corundum at Maberly, Ont. They expect to ship three or four cars a week.

United States capitalists are pumping the water out of the old Hollandia lead mine at Bannockburn, Ont., to make an investigation with a view to purchase.

H. C. Le May, of Pittsburg, Pa., a petroleum expert, has gone to Alberta to take charge of prospecting work for the Rocky Mountain Development Company.

The Elizabeth mine, belonging to the Anglo-Canadian Gold Estates, in Northwestern Ontario, has completed its plant and is beginning to turn out gold bricks.

The Deering Harvester Co. has purchased the John Armstrong corundum property in Hastings, and will use the material in their own business. The quality is very superior.

A method of lead smelting without fuel is said to have been successfully tried at Clichy, France. The production of white lead direct from ore is said to have been accomplished.

John Johnston, resident manager at Sydney Mines, for the Nova Scotia Steel Company, has been appointed general manager of the Dominion Coal Company, under G. H. Duggan.

The Canadian Corundum Company is about to put in at its mines, at Craigmont, what is said to be the largest concentration plant in Canada. The demand for corundum is increasing rapidly.

The Granby smelter, B.C., which has had two furnaces in operation has blown in a third, and will probably add a fourth, which will bring its capacity up to 1,600 tons of copper gold ore every 24 hours.

To flood the Dominion mine in Cape Breton and extinguish the fire, it was estimated 896,000,000 gallons of water would be required, which represents a lake 2¼ miles long, 1¼ miles wide and 6 feet deep.

Dominion No. 3 has the largest single rope of any colliery, and hauls more coal, it is said, for one rope than any colliery in Cape Breton. The rope is over three miles long. The output is 1,600 to 1,700 tons a day.

An immense area of coal land is said to have been discovered on the Flat Head river, East Kootenay, B.C., in the same belt as the Crow's Nest Pass. A large number of claims have been staked by Americans from Spokane.

The Denoro Mines, B.C., having been placed in funds will proceed with development work under the superintendence of R. H. Anderson of the neighboring British Columbia mine. With copper at 15 cents the outlook for Oro Denoro is considered bright.

The departments of mining and metallurgy at McGill College, Montreal, will be separate in future. Professor Stanfield will have charge of the metallurgical department, and Dr. Porter of mining engineering. By this arrangement more research work can be done.

An action is brought by the Log Cabin Gold and Copper Company against Frederick C. Fisk, Bertha C. Fisk and Charles Slack, at Buffalo, over the purchase of seven hundred acres of land in Ontario, the land being represented as mining property. Fisk is alleged to have salted the mine.

The mining rights on the Magdalen islands, Gulf of St. Lawrence, were recently sold for $32,000, and the islands for $70,000. They had belonged to the Coffin family ever since they were granted by the Crown, and have now passed into the hands of a syndicate composed of New Brunswick and Nova Scotia capitalists.

Copper mines are long lived. One of the oldest in the world is at Fahlun, Sweden, which has been worked 700 years, and has produced 500,000 tons of copper, fifteen tons of silver and one and a quarter tons of gold, representing a value of $277,500,000. In 1900 a single mine in the United States yielded 60,000 tons of copper. At that rate it will produce more copper in ten years than the Swedish mine has in 700 years.

Science and Invention.

A tidal wave visited Gore Bay, Manitoulin. It came in with tremendous force and smashed and piled up the ice in all directions. One man reports that the water went up 40 feet through a hole cut in the ice to procure water. A large number of fish were thrown up by the wave.

A Russian engineer has, it is said, discovered a deposit of natural radium. As gold is dirt cheap compared with radium the importance of such a discovery is obvious. Wonderful properties are ascribed to this new mineral, which has the power to project electrons through the atmosphere at the velocity of 120,000 miles a second.

In an iron refinery at Yon, Russia, is a machine to separate the iron from phosphorus and all other foreign matter without the intermixing of lime. Not only is the quality of the iron considerably improved, but the cost of refining and the use of other ingredients will be considerably lessened. The machine works entirely independent of heat or blast.

Artificial clay is receiving increased attention. It is used for the manufacture of artificial stone, tiles, gutters, etc., is composed of sand, chalk, cement, liquid glue and petroleum. The substances are mixed in certain quantities and a clay-like mass results, which can be formed at pleasure, and acquires an excellent degree of hardness by being subjected to heat.

The steam turbine has lately been used in the reverse direction for compressing air, an ordinary steam turbine being coupled direct to the air turbine. This air turbine is like the steam turbine, consisting of alternate rows of moving blades and guide blades, and is driven at a high speed, each row of blades increasing the pressure, and giving a steady blast.