New York Lake Erie Oil & Gas Company, Limited. Head office, Windsor, Ont. Capital, \$1,000,000. Provisional directors:—John Wurtele Lovell, Alice Wurtele Lovell, Alfred Henry Clarke, Alexander Robe. Bartlet and Agnes Waldle McGregor, Windsor.

The Canada Process Company, Limited. Incorporated 5th of October, 1904. Capital, \$50,000. To manufacture products from all kinds of metals, minerals or compositions. Head office, Toronto. Provisional directors:—George L. Sherlock, James M. Nell and George H. Campbell-

The Senator Mill Manufacturing Company, Limited. Incorporated 28th of September, 1904. Capital, \$100,000. To manufacture machinery for the reduction and manufacture of rock ore, quartz, cement and other refractory substances. Head office, Toronto, Ont. Provisional directors:—James K. Griffin, John Ridley and William St. Clair

The Canadian Lead Company, Limited. Head office, Toronto, Ont. Capital, \$1,000,000. Provisional directors:—William Henry Eccles, Harry Arthur Bouter, John Henry Vamplew, Neil Sinclair and Frank Morison, Toronto, Ont.

Baliarat Mining Company, Limited. Head office, Toronto. Incorporated 5th of October, 1904. Capital, \$300,000. Provisional directors:

—James Stellar Lovell, William Bain, Robert Gowans, Ernest McNeil and Richard Richardson.

The Crown Oil Company, Limited. Head office. London, Ont. Capital, \$300,000. Provisional directors:—D. S. Robb, London, Ont.; Clara McDowell, B. I. Baker, Josephine W. Brake, of Buffalo.

The Northern Construction Company Limited. Incorporated 7th Sept., 1904. Capital, \$200,000, in shares of \$100. Head office, Toronto, Ont. Provisional directors:—Alex, R. Mann, Archibald Cameron Mc-Kenzle, Wm. Henry Moore, Francis Annesley and Albert Mitchell, Toronto, Ont.

The following companies have been granted Provincial licenses:

The New River Consolidated Coal & Coke Company, incorporated in New Jersey, with T. W. Holistead, of Toronto, attorney.

Minnehaha Mining & Smelting Co., incorporated Arizona. Hugh Dalston, of Wabigon, attorney.

Big Master Mining Company, incorporated in New York. Philip Edward MacKenzie, of Rat Portage, as attorney.

BRITISH COLUMBIA.

The Revelstoke Land Company, Limited. Incorporated 23rd September, 1904. Capital, \$50,000.

Greenwood Strathmore Mines, Limited. Incorporated 22nd September. 1904. Capital. \$150,000.

Digest of Recent Patents: Mining and Metallurgical.

CANADIAN.

Sept. 20, 1904.

- 770.286.—Mining Machine. William E. Hamilton. Zanesville. Ohio.

 A mining machine comprising a movable platform, a radial frame pivotelly mounted on said platform, cutting mechanism and breaking mechanism mounted on the forward end of said frame, and loading mechanism movably mounted on said movable platform and detachably connected at its forward end with the forward end of said frame in such manner that the said loading mechanism projects beneath and moves with said breaking mechanism.
- 770.624.—Gas Producer. Walter O. Amsler. Pittsburg, Pa., assignor to The Amsler Engineering Company, Pittsburg, Pa. The combination with the combustion-chamber, of a water-sealed trough below the combustion-chamber, a centrally-disposed cylindrical casing extending upwardly from the bottom of the trough, and a series of gratings supported by the cylindrical arranged in the form of a hollow frustum of a cone.
- 770.498.—Mine Car. William E. Hamilton, Zanesville, Ohio, assignor to Hamilton Manufacturing Company, Columbus, Ohio, a corporation of Ohio. A mine car comprising side and end walls, one of said walls having an opening therein, adapted to receive a part of a loading-machine, and means on said wall normally projecting into said opening to engage said part to couple said car and loading machine together.
- 770,289.—Amalgamating Machine. Frederick J. Hoyt, Chicago, Ill. The combination with a bowl, mercury therein, a semi-submerged body floated in said mercury, held centrally in said vessel, but unsupported, at its axle ends, of a charging spout over said body.

- 770,503.—Process of Forming Coal Briquets. Eli H. Larkin, St. Louis, Mo. A process which consists in mixing approximately three per cent. of crude petroleum with about ninety-seven per cent. of coal slack, then adding starch paste in about the proportion of two pounds of starch in paste form to substantially one hundred pounds of the petroleum-treated slack, and finally pressing the mixture into lumps or blocks.
- 770,283.—Ore Concentrator. Abel Guionneau, Denver, Col., assignor of two-thirds to Charles M. Fueller and Robert J. Cory, Denver. Col. A reciprocating table-concentrator, a flat, smooth table surface provided with several rows of inverted conical cups extending from the head-end portion of the table throughout a portion of each table's length, each row of cups connected together with a sunken groove or riffle.
- 770,561.—Switch-off Device for Endless Conveyors. Frederick O. Crowley, Oswego, N.Y. In combination with an endless conveyor, a guide or switch-off device upon or in close proximity to the conveyor, and having an inlet in one end for receiving the articles to be fed and its other end deflected laterally to the sides of the conveyor whereby the articles are fed by the belt from the inlet and diverted from the belt by the guide.

Sept. 27, 1904.

- 771.025.—Manufacture of Zinc White. Jacques Oettli, Lausanne. Switzerland, assignor to the firm of Syndica pour l'Exploitation des Inventions du Professeur Oettli. Berne, Switzerland. A process which consists in subjecting zinc plates to the action of electrolysis in a solution of one per cent, sodium sulphate of a temperature of approximately 60 C, obtained by means of a current of ten amp. per square decimeter.
- 771,107.—Ore Washing or Concentrating Machine. Enos A. Wall. Salt Lake City, Utah. An ore-concentrating machine or table adapted to receive actiliting impulse from the head end, in combination with an operating rod or bar attached to the head of the table a buffer-bar through which the rod passes, a spring on the rod at the inner side of said buffer-bar and a buffer-block secured to the rod or bar at the outer side of the buffer bar or timber to receive and resist the impact of the spring and suddenly stop the forward movement of the table at its head end as it moves in the direction of the tail, and means for retracting the operating rod against the spring and suddenly releasing it.
- 770,796.—Apparatus for Separating Ore. Henry F. Campbell. Boston. Mass., assignor by direct and mesne assignments, to National Magnetic Separating Company, a corporation of Maine. The combination in a magnetic separator, of a magnet: means, presenting an unobstructed surface at a due distance below the magnet, and through an uninterrupted field of such magnet, and to pass it, spread in a film of substantially uniform thickness on the surface beneath the magnet, and means for causing the particles of ore to be mechanically agitated under the magnet in a direction other than that of travel of the ore.
- 770,910.—Cooling Device for Blast Furnaces. Ludwig-Keyling. Berlin. Germany. The combination of a box in which the upper opening of the furnace is situated a plate situated in this box vertically above the upper opening of the furnace, the diameter of this plate being larger than the upper opening over the opening of the furnace, a water nozzle situated vertically above the plate, an annular channel situated around the top part of the furnace in the box and means for connecting this channel with the outside.
- 771,058.—Method of Extracting Moisture from Air for Blast Furnaces or Converters. James Gayley, New York, N.Y. The method of feeding the air-blast to blast furnaces or converters which consists in feeding the air into a refrigerating chamber, distributing it therein in a current directed successively in varying directions, artificially cooling the air in the chamber to reduce its moisture to a small percentage, supplying the dried air to a blowing machine and feeding the dried air therefrom under compression into the furnace or convertor.

Oct. 4, 1904.

771,277.—Process of Concentrating Ores. Alice H. Schwarz, New York, N.Y., assignor to Schwarz Ore Treating Company, a corporation of Arizona. A method which consists in mixing a melted fatty matter which is solid at normal temperatures with the ore, then solidifying the fatty matter and separating the gangue from the values entrained in the fatty matter while the latter is solidified.