

Aug. 30, 1904.

768,774—Construction of Frozen Walls for Shafts in Mines. Karl Schmidt, Erkelenz, Germany. Improved means for forming frozen walls for shafts embracing a plurality of groups of connected freezing-tubes, and a freezing medium conveyed through said groups.

768,748—Roasting-Furnace. Ottokar Hofmann, Argentine, Kans., assignor to The United Zinc and Chemical Company, Kansas City, Mo., a corporation of New Jersey. The combination of a series of shelves or roasting-hearths, a vertical hollow shaft, hollow stirring-arms connected to said shaft, a vertical air-pipe centrally located in said shaft, and branch air-pipes located in said stirring-arms, said hollow shaft having openings at top and bottom to provide for a draft there-through, and said branch air-pipes being arranged to discharge into the outer ends of said stirring-arms, the air so discharged passing through the stirring-arms to the vertical-hollow shaft.

768,976—Conveyer. Isaac Christ, Tamaqua, Pa. A conveyer comprising slotted chain-links and slotted flight-links, and double-headed pins pivotally connecting the ends of the chain-links and also supporting and locking the flight-links in position, all of said links having their slots formed with enlargements to permit the passage of the heads of said pins, the flight-links corresponding in length with the chain-links and supported against the sides thereof by said pins.

768,858—Charging Apparatus for Blast Furnaces. Walter Kennedy, Allegheny, Pa. A blast-furnace plant having in combination a skipway, a skip movable along such a way, a storage-bin arranged above the skipway at the skip-loading point, a line of track extending from the ore pile to a point above the storage-bin, and cars movable along such track.

Sept. 6, 1904.

769,280—Process of Extracting Gold from Ores, etc. Herbert S. Stark, Johannesburg, Transvaal. The process of extracting metallic gold from acid pyritic auriferous ores, consisting in treating the crushed ore with a solution of sulfocyanid of an alkali metal, in the presence of an oxidizing agent, including atmospheric oxygen, whereby the gold is dissolved out by the nascent cyanogen and hydrocyanic acid, produced in the presence of the acid in such ore by the mutual reaction of the sulfocyanid and oxidizing agent; and afterwards separating the gold from the solution thus formed.

769,489—Placer-Mining Machine. Nathaniel W. Pulsifer, Philadelphia, Pa. A hopper supported in an elevated position by suitable framework, an inclined grizzly leading therefrom, in position to receive material discharging from the hopper, a chute into which the grizzly discharges, a series of conical-shaped screens suitably mounted to receive materials from the chute, an extended assorting-table suitably positioned with relation to the screens, lateral chutes steeply inclined, having their upper ends adapted to receive material from the screens, and having their lower ends oppositely curved and downwardly curved, with the discharge ends extending in a direction parallel with the assorting table, and adapted to spread the material thereover by impetus.

769,431—Ore Concentrator. Ira A. Cammett and Frank E. Shepard, Denver, Colo., assignor to Arthur R. Wilfley, Denver, Colo. The combination in a concentrator-table, the riffles, and the separating-pieces forming the table-surface and between which the riffles are placed, the said riffles lying between and projecting above the separating-pieces for a portion only of their length, and merging into and continuously between the said separating-pieces toward the tail end.

769,461—Mining Machinery. Erastus S. Bennet, New York, N.Y. The combination with a car-body, a vertically-movable rack-bar arranged to one side of the same, and working in a support connected with the car-body, a gear-wheel meshing with the rack-bar, a worm-wheel on the shaft of the gear-wheel and a vertically-extending shaft and worm thereon meshing with the worm-wheel and means for operating the vertically-extending shaft.

769,231—Ore Concentrator. George E. Perkins, Providence, R.I. A device comprising a concentrating-table, a distributing-trough arranged near one side thereof, and having perforations in its outer side, said trough being elevated whereby middlings may be passed thereunder, a second trough elevated above the plane of said discharge-trough and terminating at a point beyond the outer side of the latter and nearer the concentrate discharge than the initial pulp-feed, means for collecting the middlings from said table and delivering them to said elevated trough, and means for supplying water to said distributing-trough.

770,155—Conveyer. Henry H. Blighouse, Canton, Ohio, assignor to the Sultman Company, Canton, Ohio, a corporation of Ohio. The combination of a delivering-conveyer, a receiving-conveyer running at an angle thereto and a slide guide along the delivering-conveyer extending above its surface, which guide is terminated or partly removed at a point remote from the receiving-conveyer to permit the articles conveyed to extend at an angle to both said conveyers, whereby the forward end of such article is conveyed in one direction by the receiving-conveyer while the rear end of such article is conveyed in another direction by the delivering-conveyer.

769,747—Cement-Kiln. Frank M. Haldeman, Alpena, Mich. A cement-kiln consisting of a kiln portion proper and a hood portion, the kiln portion comprising a casing and a lining of refractory material extending to the lower end of the casing, the hood comprising a casing having a refractory lining, the casing of the hood extending beyond its lining and adapted to telescope on the end of the kiln, and a gasket of non-heat-conducting and non-fusible material interposed between the end of the kiln and the lining and the lining of the hood.

770,111—Apparatus for Charging Blast-Furnaces. Walter R. Reece, Pittsburg, Pa., assignor, by mesne assignments, to Clarence W. Coffman, Pittsburg, Pa. A blast-furnace-charging apparatus comprising a casing having curved walls and two axially-mounted valves movable toward each other, each valve fitting against the said curved walls and having a plurality of pockets, opposite coinciding pockets, a bell beneath said valves, and an actuating-rod therefor, said valves being designed to discharge against the apex of said bell.

NEW COMPANIES.

BRITISH COLUMBIA.

The Northern Gold Mines Co., Limited. Incorporated 17th August, 1904. Capital, \$1,500,000.

The Standard Oil Company of British Columbia, Limited. Incorporated 17th August, 1904. Capital, \$1,000,000.

The Challenger Mining and Development Company, Appleton, Wisconsin. Licensed in British Columbia, August 28th, 1904. Capital, \$24,000.

MANITOBA.

The Williams Quarry Company. Incorporated August, 1904. Capital, \$100,000. Provisional directors—A. Davidson, J. Williams and J. Dolmer, Winnipeg, Man.

QUEBEC.

The St. Lawrence Coal Company. Incorporated August, 1904. Capital, \$500,000. Provisional directors—James Robinson, G. A. Forbes and Chas. Brandels, Montreal.

ONTARIO.

The Northern Iron and Steel Company, Limited. Incorporated 14th September, 1904. Capital, \$2,500,000. Head office, Toronto. Provisional directors—John Allister Currie, Duncan Donald, Fred Asa Hall, William John Lindsay, Toronto, and John Thomas Duguid, Collingwood Ont.

British Columbia Process Co., Ltd. Incorporated 28th July. Authorized capital, \$500,000, in shares of \$1.00 each. Head office, Toronto. Provisional directors—A. B. Cook, G. E. Kingsley, C. B. Taylor, R. M. Melville, C. P. Green.

Grand Valley Peat Products, Ltd. Incorporated 26th July. Authorized capital, \$200,000, in shares of \$50.00 each. Head office, Toronto. Provisional directors—J. C. Steele, W. D. Earngey, W. H. Jackson.

The Trout Creek Development and Mining Co., Ltd. Incorporated 17th August, 1904. Authorized capital, \$100,000, in shares of \$1.00 each. Head office, Trout Creek, Ont. Provisional directors, Moses Hewitt, Gilbert Trussler, Michael Corkerg, all of Trout Creek.

The Point Pelee Oil and Gas Exploration Co., Ltd. Incorporated 17th August, 1904. Authorized capital, \$40,000 in shares of \$1.00 each. Head office, Leamington. Provisional directors, Wm. C. Campbell, Andrew W. Palmer, John C. Forster, G. W. Videau, C. J. O'Hara, all of Detroit, Mich.

Mohawk National Gas Co., Ltd. Incorporated 7th Sept., 1904. Capital, \$150,000, in shares of \$25.00 each. Head office, Brantford, Ont. Provisional directors—Henry Cockshutt, E. L. Cockshutt, Wm. J. Atkins, Frank Cockshutt, Denis A. Coste.

The Eldorado Mining Company, Arizona, has been licensed in Ontario with a capital of \$50,000.