

The Canadian Rubber Company, of Montreal, Limited, have issued some handsome catalogues during the past few weeks. Catalogue "C" deals comprehensively with Interlocking Rubber Tiling and other unique rubber floor coverings. The catalogue is printed in several colors, and all the illustrations are in half-tone. Catalogue "D" is devoted exclusively to Rubber Belting and Rubber Covered Rolls. The book comprises 90 pages, with a handsome embossed cover in gold and black. A quantity of valuable information concerning the care and use of rubber belting is here given, and the illustrations, of which there are a great number, are all in half-tone. This belting catalogue will no doubt be keenly sought after by the trade. Catalogue "E" (60 pages, with cover) describes the principal lines of rubber and special hose manufactured. Much valuable information is given as to the care of hose, and many half-tone illustrations accompany the text. This catalogue is in keeping with the other high-grade trade catalogues of the Canadian Rubber Company. Any of the catalogues issued can be obtained from the sales branches of the company throughout Canada, or direct from the head office, Montreal.

Messrs. Wayland, Williams & Dadson, who are making a specialty of gas engines and gas-producing plants, have removed their offices from the Board of Trade Building to 321 St James Street, Montreal. This is a young but progressive firm. They already have a couple of suction gas plants installed in Montreal, and their new location should bring them more prominently before the public.

The Robb Engineering Company has received an order for two 100 horse-power Robb-Mumford boilers from the Western Canadian Collieries, Blairmore, Alberta. This company has also received an order from the Dominion Coal Company for two 100 horse-power Robb-Mumford boilers.

The Canadian Westinghouse Co., Limited, Hamilton, Ont., have issued a well printed and handsomely illustrated catalogue of electrical apparatus manufactured at the Canadian works. Copies of this catalogue may be obtained by applying to the general office of the company at Hamilton.

The Locomotive & Machine Company, of Montreal, Limited, publish a catalogue descriptive of the Atlantic Shovel designed by Mr. A. W. Robinson, M.A.Sc.E. The catalogue contains an interesting preface relating to the requirements of the modern shovel.

We have received from the Wellman-Seaver-Morgan Company, Cleveland, Ohio, a catalogue descriptive of mine cages, skips or cars, and sheaves. The catalogue contains upwards of 40 pages, and is illustrated throughout.

## DIGEST OF RECENT PATENTS—MINING AND METALLURGICAL.

Specially reported for the Canadian Mining Review.

June 13, 1905.

792,440.—Apparatus for treating ferruginous ore for the manufacture of iron and steel therefrom. Montague Moore, Melbourne, and Thomas J. Heskett, Brunswick, Victoria, Australia. The combination of a gas-furnace, an inclined revolving cylindrical deoxidizing-chamber, and a vertical chamber connecting the lower end of the former with the upper end of the latter chamber, said vertical chamber being provided with air-inlets, and said chamber with means such as for supplying gas thereto.

792,223.—Metallurgical Furnace. Jacob Lansing, San Francisco, Cal. The combination of a furnace having a plurality of upright inter-connected furnaces, each having a normally closed ore-chamber and a fire-box beneath the ore charge, a water-containing receptacle, a connection between each ore-chamber and the receptacle, a stack separate from and devoid of connection with the water-containing receptacle, connections between the fire-boxes of the furnaces and said stack and valves in the connections by which the heat of the furnace-fires may be diverted from the ore-chambers, means for inducing a draft through the receptacle, and the ore-chambers and intermediate connections, and means for maintaining a continued circulation of cooling fluid through the receptacle.

792,022.—Electric Furnace. Ernst Haagn, Hanau, Germany, assignor to the firm of W. C. Herasus, Hanau, Germany. The combination with a recess in the wall of the furnace and reaching to near its heating or melting chamber, of a conductor-piece leading to said heating or melting chamber, and engaging in said recess, and a metal indicator connecting the ends of said conductor-piece and said conductor in said recess and being so disposed that it can be watched from without and indicate by its commencing red heat the correct strength of the current.

June 20, 1905.

792,642.—Melting Furnace. William E. Williams, Chicago, Ill. A furnace provided with a single opening and mounted to be revolved in two planes, combined with a set of fixed concentric flues for supplying air and fuel for discharging furnace-gases, respectively, and means for connecting the furnace and flues and otherwise closing the former, and means for rotating the furnace while so connected.

792,776.—Magnetic Separator.—Elwin C. Kavanaugh, Holyoke, Mass. In a magnetic separator, an enclosed magnetic cylinder rotatably mounted in a pulp receptacle, or conduit, having pole-pieces and magnet-coils therein, and having a hollow endwise extending journal, combined with a receptacle connected with the hollow journal, and a quantity of oil in part contained in said receptacle and filling the space within the magnetic cylinder.

792,729.—Briquetting or Moulding Machine. Grant W. Rigby, Pittsburg, Pa. The combination with a machine-frame, a reciprocating feed-box provided with mould-recesses therein, reciprocating plungers adapted to enter said mould-recesses, a rod within said feed-box, agitator-bars on said rod, a bracket on said frame having a slot therein, and a crank-lever connected to said rod and engaging with said slot for moving said rod to agitate the material within said feed-box during the movement of the latter.

792,619.—Portable Furnace for melting steel or other metals. Louis Rousseau, Argenteuil, France. The combination with a combustion-chamber of a juxtaposed circular chamber, conduits or flues connecting the two chambers, supports fixed in the second chamber, a crucible resting on said supports, a conduit divided into two branches leading respectively under the combustion-chamber and into the space around said chamber, a vertical rod crossing the two branches, a valve in each branch mounted upon the said vertical rod, the two valves being located at right angles to each other, a removable cover upon the combustion chamber, a tube projecting through this cover, and means for tilting the furnace.

792,660.—Dumping-Car. Daniel King, Pinkney, Tenn. A dumping-car, a truck-frame having transverse truck-beams near each end, a rock-shaft having bearings on said beams, a body-beam near each end of the car and firmly attached to said shaft, outside the truck beams, and a body supported thereby, and means for holding the body-beams to prevent rocking save when the car is dumped, all combined.

792,682.—Coal or Grain Distributing Apparatus. Charles A. Turner, Norfolk, Va.—The combination with a vertical shaft, a table thereon, and radial wings or vanes secured to the upper face of the table, of a bracket engaging the under side of the table, means for suspending said bracket from a support above the same, and means for rotating the shaft.

June 27, 1905.

793,392.—Furnace for Limekilns or other Structures. John D. Owens, Marion Ohio. An upper main combustion-chamber having a flame outlet and a charging-door, the floor of said chamber being formed of grate-bars spaced as described, a lower auxiliary combustion-chamber having an imperforate floor to receive the partly-burned fuel falling from the upper chamber, a passage extending upward from the lower chamber to a point below the grate of the upper chamber, and an air-supply conduit arranged to conduct the air from the exterior over the fuel in the lower chamber to the upwardly-extending passage, whereby said upwardly-extending passage conducts the air and the gases from the lower chamber and constitutes the air-supplying means for the upper chamber, and means located within said passage below the grate for controlling the amount and equalizing the delivery to the grate of the air and partially-consumed gases.

793,150.—Dump-Car. Spencer Otis, Chicago, Ill., and George B. Maltby, Cleveland, Ohio, assignors to National Coal Dump-Car Company, Rapid City, S.D., a corporation of South Dakota. The combination of a supporting-frame portion provided with centre sills, a body-bolster for each end of the car arranged underneath the centre sills and extending transversely of the same, discontinuous sub-bolsters arranged between the body-bolster and the floor level of the car and extending out from each side of the centre sills, and truss-rods extending from end to end of the car and passed over the inner ends of the sub body-bolsters.

793,238.—Discharge for Coke-Ovens. Carl Schroeter, Chicago, Ill. A discharger for coke-ovens and retorts adapted to remain in the coking-chamber during the coking operation, and comprising a metal plate equal in width to the oven and bent at substantially right angles to form a horizontal member lying upon the sole of the retort and a vertical member of substantially the height of the charge, a similarly-bent bar constituting a reinforcing-rib secured to said plate longitudinally and substantially centrally thereof, and a pair of tie-rods uniting the free ends of said horizontal and vertical members.

July 4, 1905.

793,816.—Ore-Treating Furnace. Aaron M. Beam, Denver, Colo. In an ore-treating furnace, a rotary flue-cylinder, one end of which connects with a smoke-stack, while its other extremity projects into a combustion-chamber, a stationary conduit extending through said combustion-chamber, an ore-cylinder concentrically located inside and attached to said rotary flue-cylinder, its extremity extending into and being covered by said stationary conduit, suitable means for feeding ore into and through said ore-cylinder into said conduit, and means for conveying the ore through said conduit.

793,668.—Coke-Oven Attachment. Daniel F. Lepley, Connellsville, Pa. In an apparatus for the utilization of waste gases from coke-ovens, a gas-conduit and an adjustable flue member movable to a position to place the charging-hole of the coke-oven in communication with said conduit, or to open the same to the outer air.

793,926.—Conveyor for Metal Bars. Victor E. Edwards, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a corporation of Massachusetts. The combination of a series of conveyor-bars, teeth projecting from said bars, and having inclined sides and arranged in alternating rows or series, with the inclined sides of the teeth in one series overlapping the inclined sides of the teeth in the next adjacent series, and means for bringing the different series successively into supporting relation to a metal bar held thereon.

793,795.—Briquet, and Process for making same. Edward E. Marsh, Los Angeles, Cal., assignor of one-half to William P. Wagy, Los Angeles, Cal. A briquet comprising coal and lime or gypsum thoroughly intermingled and moistened by a solution of gelatin and bichromate of potash in substantially equal parts.

793,720.—Apparatus for Separating Slimes, etc., from Metal-bearing Solutions. Ernest L. Godbe, Salt Lake City, Utah. An apparatus comprising a tank, a revoluble drum working therein, a filtering medium fixed to the periphery of the drum, suction mechanism coacting with the interior of the drum, a scraping device coacting with its exterior, and an apron depending from the scraper adjacent to the face of the filtering medium and entering the tank to maintain a vacuum within the drum.