

from a wood veneer out after the mantle plane of a cone around the cone B, adapted to receive the leather tip and carries at its bottom end, the handle D, provided with the load plate C, substantially as described.

No. 35,321. Hinge Mortising Machine.

(Machine à mortaiser les charnières.)

The Storms Manufacturing Co., Chicago, Illinois, (assignees of James Alexander MacKenzie, Minneapolis), all of the U. S. A., 3rd November, 1890; 5 years.

Claim.—1st. In a device for forming hinge mortises, the combination, with a frame having an operating handle, of a stationary knife stock for the front knife, laterally adjustable stocks for the side knives, and a sliding knife mounted in ways of the frame and adapted to be projected between the side knives, substantially as described. 2nd. In a device for forming hinge mortises, the combination with the frame having a stationary stock for holding the front knife, one or more movable stocks for holding the side knives, and a removable sliding knife and an operating lever for moving said knife, substantially as described. 3rd. In a hinge mortiser, the combination, with the cutting knives, of a depth gage having bearing feet inclined from front to rear, and an inclined cross bar fitted to an inclined way of the frame, and secured thereto by screws passing through elongated apertures in the cross bar, whereby mortises of different depths may be cut, substantially as described. 4th. In a hinge mortiser, the combination, with the operating knives, of a depth gage having its bearing feet inclined from front to rear, whereby the device is adapted to cut a mortise thicker at its outer than at its inner side, substantially as described. 5th. In a hinge mortiser, the combination, with the front and side knives, and a sliding knife movable in ways in the frame, of an operating lever for said sliding knife pivoted between its ends upon a fulcrum rod, and adapted to be moved laterally along said rod to take its lower end out of engagement with the sliding knife, substantially as described. 6th. In a hinge mortiser, the combination, with the front and side knives and a sliding knife movable in ways in the frame, of an operating lever for said sliding knife pivoted between its ends upon a fulcrum rod, and adapted to be moved laterally along said rod to take its lower end out of engagement with the sliding knife, and a spring adapted to hold said lever normally in engagement with the knife, substantially as described.

No. 35,322. Fire Alarm Regulator.

(Regulateur pour avertisseurs d'incendie.)

Clarence J. Spike, Hedley V. McLeod and Arthur C. Hawkins, all of Halifax, Nova Scotia, Canada, 3rd November, 1890; 5 years.

Claim.—1st. In an electric fire alarm regulator, the combination of a dial plate and its index arm, connected by the cog wheels *a*, *a'*, and lever *o*, to a bar *k*, with the cylinder containing a series of pins or other corresponding signals indicating an alarm, and with means for transmitting such signals automatically, substantially as described. 2nd. In an electric fire alarm regulator, the combination of a dial plate *b*, and index arm *c*, cog wheels *a*, *a'*, arm *f*, connected to slide *j*, and insulated bar *k*, with the cylinder *d*, its train of wheels and the push button *p*, and its mechanism, substantially as described. 3rd. In an electric fire alarm regulator, the circuit breaker *j*, travelling on an insulated bar *k*, and arranged between the cylinder *d*, and the frame of the regulator, in combination with the cylinder and frame, substantially as described. 4th. In an electric fire alarm regulator, the circuit breaker *j*, hinged to a sleeve *l*, and traveling on the insulated bar *k*, so as to be operated upon by the projections of the cylinder *d*, in combination with the cylinder *d*, and its pins *r*, substantially as described.

No. 35,323. Pressure Regulator.

(Regulateur de pression.)

The Consolidated Car Heating Co., (assignees of James Finney McElroy), all of Albany, New York, U.S.A., 3rd November, 1890; 5 years.

Claim.—1st. In a regulating-valve, a casing having a steam-passage, a balanced-valve controlling the inlet of the steam therein, by means of a spring-controlled diaphragm located in a diaphragm chamber, having restricted openings connecting it with the steam passage, substantially as described. 2nd. In a regulating-valve, a casing having chambers N, and O, separated by the partition M, 3rd. In a regulating-valve, the combination, with the casing having a steam and diaphragm-chamber connected by a restricted opening only, of the spring-controlled diaphragm, adjustably connected to the stem K, the socket-piece O, lever R, pivotally connected with the valve-stem S¹, having aperture *a*, screw-threaded portion *e*, upper valve *d*, lower adjustable valve *s*, and nut *i*, substantially as described.

No. 35,324. Manufacture of Iron and Steel.

(Fabrication du fer et de l'acier.)

Hiram Gilbert Bond, city of New York, New York, U.S.A., 3rd November, 1890; 5 years.

Claim.—The method, substantially as herein described, of smelting or refining iron ore, or crude, or pig iron, which consists in treating it in the presence of the salts of barium.

No. 35,325. Closet Cistern.

(Réservoir de latrines.)

David Lancaster Dwinell and Miller Bros. & Toms, all of Montreal, Quebec, Canada, 3rd November, 1890; 5 years.

Claim.—1st. In water closet cisterns, a depressible and submersible siphon outlet. 2nd. In water closet cisterns, having siphon out-

lets, a stand pipe, a portion of which is normally above the water line, and depressible beneath the same, for the purpose set forth. 3rd. In water closet cisterns, provided with siphon outlets, a stand pipe having a portion of its length collapsible, for the purpose set forth. 4th. In water closet cisterns, the combination of a stand pipe, the upper end of which is held normally above the water line, and depressible beneath same, a hood or cap suspended over such pipe, and means for suspending such hood and elevating and depressing said pipe, as set forth. 5th. In water closet cisterns, a siphon outlet having a portion of its length flexible for the purpose set forth.

No. 35,326. Grain Separator.

(Séparateur des grains.)

William Lorenzo Gibson, Minnville, Oregon, U.S.A., 3rd November, 1890; 5 years.

Claim.—1st. In a grain separating device, the agitating rollers having spiral flanges coiled oppositely from their central portions, and provided at their ends with spiral flange-sections coiled oppositely to the spiral flange, the ends of which they adjoin, substantially as set forth. 2nd. In a grain separating device, the agitating shafts having inclined ovoid disks, in combination with the oppositely inclined disks mounted at the ends of said shafts. 3rd. A grain separating device, comprising a series of pairs of shafts having spiral flanges and inclined disks, and provided at their ends with oppositely coiled spiral flange-sections and oppositely-inclined disks, substantially as and for the purpose set forth.

No. 35,327. Manufacture of Vinegar.

(Fabrication du vinaigre.)

Aurèle Resther and Ferdinand Quézieme Lavigreur, both of Montreal, Quebec, Canada, 3rd November, 1890; 5 years.

Résumé.—Un système de générateurs à doubles compartiments A et B, séparés par la cloison *a'*, traversés par les tubes *b*, *c*, *d*, en combinaison avec le baril E contenant le filtre à charbon *u* de la liqueur alcoolique avant son entrée dans le baril D, ainsi que le feutre *r* et les tubes de communication *o*, *p*, *q*, *z*, en combinaison aussi avec les barils D, munis des tubes spéciaux de communication *e*, *f* et *g*, *h*, *i*, *m*, ainsi que de la soupape *o*, en combinaison aussi avec les barils F à deux compartiments M et H, à cloison médiane V et à soupapes *c*, *h*, *u* avec ouverture *b* et les tubes de communication *d*, *a'*, *m*, *m'*, *m*, le tout tel que ci-dessus décrit et pour les fins sus-mentionnées.

No. 35,328. Universal Joint Coupling for Pipes.

(Joint universel de tuyau.)

Joseph Walker, Clark's Green, Pennsylvania, U.S.A., 3rd November, 1890; 5 years.

Claim.—1st. In a pipe coupling, the combination, with the pipe having a semi-spherical enlargement B, at its end, of the cap C, and ring D, fitted to the contour of said enlargement, and the cap B, for holding said cap C, and ring D, in position, substantially as described. 2nd. In a pipe coupling, the combination, with the pipe having the semi-spherical enlargement or head, of the cap C, seated against the enlargement B, the ring D, shaped to conform to said enlargement, the packing F, and the screw cap E, enclosing ring D and united to cap C, substantially as described. 3rd. In a pipe coupling, the combination, with the pipe having the semi-spherical enlargement or head, of the cap C, seated against the enlargement B, ring D, shaped to conform to said enlargement, cap E, enclosing ring D, and united to cap C, packing F, ring G, and means for adjusting it, substantially as described.

No. 35,329. Car Coupling. (Attelage de chars.)

George Washington Powell, Sunny South, Alabama, U. S. A., 3rd November, 1890; 5 years.

Claim.—1st. In a car coupler, the combination, with a draw-head provided on its lower edge with a longitudinal slot, of a coupling-latch pivoted in said draw-head, hangers, a transverse shaft having bearings in said hangers, said shaft formed or provided with a cam, and a vertical lever secured to the end of the transverse shaft, and extending upward above the roof of the car, and a laterally-extending guideway through which said lever passes, substantially as set forth. 2nd. In a car coupler, the combination, with a draw-head provided upon its upper and lower edges with longitudinal slots, of a spring pressed coupling-latch pivoted in said draw-head and working in the slot, said latch terminating in a hooked end adapted to engage the coupling-link, hangers, a transverse shaft having bearings in said hangers, said shaft formed or provided with a cam, a vertical lever secured to the end of the transverse shaft and extending upward above the roof of the car, and a laterally-extending guideway through which said lever passes, substantially as set forth.

No. 35,330. Vehicle. (Voiture.)

Cornelius John Sullivan, Bar Harbor, Maine, U.S.A., 3rd November, 1890; 5 years.

Claim.—1st. In a vehicle of the class described, the combination, with a seat, of a pair of oppositely arranged Y-shaped spring standards for supporting the same, each of the standards consisting of opposite strips bolted together at their lower ends to form a shank, and diverging toward their extremities and secured to the seat, substantially as specified. 2nd. The combination, with one of the U-braces for connecting the buckboard and driver's platform, of a pair of Y-shaped spring-metal standards arranged in line with each other and at the centre of the seat, each standard consisting of a pair of strips bolted together near their lower ends to form a shank, and diverging after they leave their points of connection, and having its