

and a furnace room, said room having means for attaching suitable pipe for converting it into a furnace for baking and cooking purposes, and the drying chamber having a series of cleats arranged in vertical rows for receiving drawers and ice box and racks to form shelves, when the section is in use as a safe, substantially as and for the purposes set forth.

No. 24,521. Wood Ornamentation.
(*Décoration du Bois.*)

William A. Compton, Liberty Corner, N. J., U. S., 19th July, 1886; 5 years.

Claim.—1st. The combined cutting and pressing tool, having an embossing surface formed thereon, one or more recesses formed in said embossing surface, and a projecting cutting edge affixed at the margin of such recess between the edge of the recess and the adjacent embossing surface, as and for the purpose set forth. 2nd. The embossing tool having a recess formed in its surface, and provided around the entire margin of such recess with a projecting cutting edge, affixed to the tool at the margin of such recess. 3rd. An embossing roller having a recess formed in its surface, a projecting cutting edge affixed at the margin of such recess, and one or more cutting edges projected from the bottom of such recess within the margin. 4th. An embossing roller having a convex embossing surface in longitudinal section, a recess formed in said surface, and provided with a projecting cutting edge or edges affixed at the margin of such recess.

No. 24,522. Machine for Nailing Packing Cases. (*Machine à Clouer les Caisses d'Emballage.*)

William H. Hutchinson, Toronto, Ont., 19th July, 1886; 5 years.

Claim.—1st. In a box nailing machine, the adjustable jaw G, hand nut i, fixed head a, in combination with the adjustable jaw Y, hand nut z, spiral springs h, h, and spring heads f, z, substantially as and for the purpose hereinbefore set forth. 2nd. In a box nailing machine, the driving punches h, b, cross-head D, in combination with the double connecting rods l, l, cranks r, r, shafts g, g, driving gear wheels P, P, pinion wheel S, friction driving pulley n, o. 3rd. In a box-nailing machine, the adjustable extension F, hand nuts n, n, slots v, v, in combination with the face plate B, substantially as and for the purpose hereinbefore set forth. 4th. In a box nailing machine, the dies c, c, spring catches T, T, in combination with the die bar L, slots e, e, substantially as and for the purpose hereinbefore set forth.

No. 24,523. Ventilator for Stoves.
(*Ventilateur pour Poêles.*)

Warren M. Brinkerhoff, Auburn, N.Y., U. S., 19th July, 1886; 5 years.

Claim.—1st. The combination, with a stove and its smoke pipe, of an elbow interposed between the two, and an air pipe or duct rising from a point near the floor and passing directly through the wall of the elbow, forming a close joint therewith, and communicating with the air at its lower end, and opening at its other within the elbow or smoke pipe above the point of junction of the air pipe and elbow, substantially as described. 2nd. The combination, with a stove and its smoke pipe, of an elbow interposed between the two, and an air pipe or duct of less size than the elbow or smoke pipe rising from a point near the floor and opening within the elbow or smoke pipe above its junction therewith, the elbow being provided at the point of junction with an extension or sleeve of about the same size as the air pipe, and the said air pipe engaging said extension or sleeve, substantially as described.

No. 24,524. Metallic Packing for Stuffing Boxes, etc. (*Garniture Métallique pour Boîtes à Etoupe, etc.*)

John B. Deeds, Terre Haute, Ind. U.S., 19th July, 1886; 5 years.

Claim.—The combination, in a stuffing box, of an annular packing made in longitudinal sections having inclined meeting edges, each section having a corresponding recess midway its end, to form an annular chamber around the rod, and each end bevelled to form a double conical ended annulus, elastic rings at each end of the packing and bearing on its conical ends, and a follower to compress said rings, as and for the purpose set forth.

No. 24,525. Stone Breaker and Ore Crusher.
(*Concasseeur pour la Pierre et le Minerai.*)

Philetus W. Gates, Chicago, Ill., U.S., 19th July, 1886; 5 years.

Claim.—1st. The combination of a gyratory shaft, provided with main and auxiliary crushing surfaces, and a hopper provided with reversely-tapered crushing surfaces, the respective sets of opposing crushing surfaces being together adapted for breaking stone or other substances into fine pieces, while the lower of said sets is adapted to be moved entirely out of operative relation, and the upper set to be used alone for breaking the stone or other substances into coarser pieces, substantially as and for the purpose described. 2nd. The combination, with the vertically adjustable gyratory crusher shaft and heads, of a hopper having main and auxiliary crushing surfaces, the latter of which is made separate from the former, substantially as described. 3rd. The vertically adjustable gyratory shaft, provided with main and auxiliary crushing surfaces of different degrees of taper, the latter of which is constructed separately from the former, in combination with a hopper provided with reversely-tapered breaking surfaces, and an adjustable step block, substantially as and for the purpose described. 4th. The combination of the gyratory crushing shaft crusher head, formed of main and auxiliary crushing surfaces having different degrees of taper, the hopper or concave having reversely tapered breaking surfaces and an adjustable step block, substantially as and for the purpose described. 5th. In a stone breaker or crusher, the combination of the lower, sub-

stantially parallel breaking or crushing surfaces, adjustable gyratory shaft and the upper greater and reversely divergent crushing surfaces, substantially as described.

No. 24,526. Window Cleaner.
(*Laveuse de Fenêtre*)

Martin Bourke, Youngstown, Ohio, U.S., 19th July, 1886; 5 years.

Claim.—1st. In a window cleaner, the combination, with a suitable head, of a cleaning strip folded upon itself, and removably and adjustably connected thereto, substantially as and for the purpose set forth. 2nd. The combination, with the tubular head or holder, of a cleaning strip adjustably connected thereto, substantially as and for the purpose specified. 3rd. The combination, with the tubular head or holder having a bearing flange, of a cleaning strip seated and held within the head or holder, substantially as and for the purpose described. 4th. The combination, with a tubular head or holder, and a folded cleaning strip inserted therein, of a key extending through the head or holder, substantially as and for the purpose set forth.

No. 24,527. Horse Hay and Grain Fork.
(*Fourche à Cheval pour le Foin et le Grain.*)

Joseph Sullivan, Westmeath, Ont., 19th July, 1886; 5 years.

Claim.—1st. In the hay and grain fork, the shanks G, G, having piece P rigidly attached to one shank, clevis J attached to said piece P, pulley h attached to the other shank, lines w, w, prongs I, I, rigidly attached together and to shanks G, G, substantially as shown, in combination with the two pieces f, block o and hay or grain car, as described and shown. 2nd. In the hay or grain car, having jaws d, d, springs m and n, as described, in combination with block o, and hay or grain fork, substantially as and for the purpose hereinbefore set forth.

No. 24,528. Curtain Fixture.
(*Bâton de Rideau.*)

Henry W. Simms, Bay City, Mich., U.S., 19th July, 1886; 5 years.

Claim.—1st. In a curtain fixture, the combination, with the roller a, provided with a pivot J, the bracket g provided with a slot P carrying the pivot o and a lifting spring beneath the pivot, of a wheel S secured to the end of the roller, and provided with the curved projections t on its side face, the portion U extending above the wheel and having the curved portion o reaching over the wheel and forming the loop m, substantially as and for the purpose set forth. 2nd. In a curtain fixture, the combination, with the roller a having an enclosed actuating spring and an end pivot o, the bracket g provided with a slot P carrying the pivot o, and a lifting spring q beneath the pivot, the upward extending portion U and the curved portion o forming a loop v, of the wheel S secured to the roller, and provided with the curved projections t on its side face, and passing within the said loop v to lock the roller, substantially as and for the purpose set forth. 3rd. In a curtain picture, the combination, with the roller having a longitudinal central opening in one end for a portion of its length, with an extension piece passed into the said opening, and provided with one or more longitudinal ribs projecting from its sides, and supplemental pieces of the roller having a central opening, and passed upon the said extension piece and against the outer end of the principal roller, substantially as and for the purpose set forth. 4th. In a curtain fixture, the combination, with a curtain roller a having a longitudinal central opening a, of an extension piece b passed into the said opening and provided with the ribs c, and the supplemental roller sections d provided with a central opening and passed upon the piece b, substantially as and for the purpose set forth. 5th. In a curtain fixture, the combination, with a shade roller having an enclosed actuating spring, a rod e passing into the end of the roller and connected with the spring and provided with a flattened portion d and pivot h extending from the roller, a bracket j provided with a slot supporting the pivot, of a wheel K resting on the part d and provided with the opening m and a lug n extending from the bracket and engaging with the opening m, substantially as herein set forth and shown. 6th. In a curtain fixture, the combination, with a shade roller having an enclosed actuating spring, and a rod e passing into the end of the roller and secured to the spring and provided with a flattened portion d and a pivot h extending from the roller of a wheel K having a central opening l resting upon the portion d and provided with the opening f and a lug e extending from the end of the roller and engaging with the opening f, substantially as and for the purpose set forth. 7th. In a curtain fixture, the combination, with the bracket having the projecting portions t, provided with the side projections n, of the vertical piece e provided with the openings h having the reduced portion j, substantially as and for the purpose set forth. 8th. In a curtain fixture, the combination, with the supporting bracket, of the projecting parts i provided with the side projections n, the vertical piece e provided with a series of openings h having the reduced part i, and the inclined portions j, on the sides of the part i, and the rib m, substantially as and for the purpose herein set forth.

No. 24,529. Heating Apparatus. (*Calorifère*)

Alexander Walker, Montreal, Que., 19th July, 1886; 5 years.

Claim.—1st. The combination, with a hot water circulation coil, of a reservoir or supplementary coil, connected to same by feed and return pipes and acted upon by a heater, and an expansion tank through which products of combustion are taken, the whole being mounted on a movable stand, all as herein set forth and for the purposes described. 2nd. The combination, with the heating chamber E, of pipe K, tank H and cover H, all as and for the purposes set forth.

No. 24,530. Device for Sharpening Mowing Machine Knives. (*Appareil pour Ré-mouler les Couteaux des Faucheuses.*)

Charles O. Poulson, Linwood, Penn., U.S., 19th July, 1886; 5 years.