

chamber, said flues being supplied with air from the exterior of the stove, substantially as shown and described. 2nd. In a heating stove, the combination of a hot air chamber at its top, a hot air space surrounding the fire chamber, and flues or pipes for admitting outside air, heating same and carrying it to the hot air chamber, substantially as shown and described. 3rd. In a heating stove, the combination of a hot air chamber at its top, an air space surrounding the fire chamber and communicating with the hot air chamber, vertical pipes passing through said air space, their lower ends open to receive cool air, and their upper ends communicating with pipes crossing the fire chamber and opening into the air space near its inlet to the hot air chamber, substantially as and for the purpose specified. 4th. In a heating stove, the combination, with the fire chamber, the air space surrounding same and having air inlets, of the vertical pipes K, transverse pipes L and hot air chamber I, substantially as and for the purpose set forth. 5th. In combination with the hot air chamber I, and with the flues for introducing outside air, heating it and carrying it to said hot air chamber, the distributing pipes N, as and for the purpose described.

No. 25,369. Heating Stove. (*Poêle de Chauffage.*)

Matthew Van Wormer, Malden, Mass., U.S., 16th November, 1886; 5 years.

Claim.—1st. A stove, having a hot air chamber at its lower end, which is adapted to be supplied with hot air from the radiation of the fire above, and a flue connected with said chamber for carrying hot air around the inner casing of the stove and discharging it at the top, substantially as and for the purpose shown and described. 2nd. A stove, having a hot air chamber at its lower end, a continuous flue or series of flues extending up one of the sides, across the fire-chamber, and thence down the opposite side of the stove to said hot air chamber, substantially as and for the purpose specified. 3rd. A stove, having a chamber near its lower end, into which is admitted outside air, a continuous flue for carrying said air up one side of the stove across the fire chamber and down the other side, a hot air chamber at the bottom, into which said air is introduced, and a flue connected with said chamber and carrying the heated air around the inner casing of the stove and leading it to a discharge opening at the top, all substantially as shown and described. 4th. In a heating stove, the combination of the cold air inlets Q, the cold air chamber H, the continuous flue R, S, T, the hot air chamber K, the flue N and hot air passage P, substantially as and for the purpose set forth. 5th. The combination with the flue N and passages d and T of the damper g, substantially as and for the purpose described. 6th. The combination with the flue N, passages d and T and damper g, of the damper f, arranged substantially in the manner and for the purpose specified. 7th. The combination in a heating stove, of the damper P with the smoke outlet O, said damper having straight sides and being adapted to only partially close said smoke outlet, for the purpose described. 8th. In a heating stove, the combination with the inner casing, an outer casing, and with the fire chamber and ash-pit of the cold air inlets Q, cold air chamber H, continuous flue R, S, T, hot air chamber K, flue N, connecting pipe d, hot air passage T, open cap G, smoke passage O and dampers f, g, and P, all combined and arranged substantially in the manner and for the purpose so forth.

No. 25,370. Mason's Hawk.

(*Palette de Barbouilleur*)

Robert R. Courson, Newark, N.J., U.S., 16th November, 1886; 5 years.

Claim.—1st. The improved mason's hawk, combining therein a terra-cotta, or similar earthen board and a handle, substantially as and for the purposes set forth. 2nd. The improved mason's hawk, combining therein terra-cotta board, having its pores filled with cellulose, or equivalent matter, and a suitable handle, as set forth. 3rd. The improved mason's hawk, combining therein the earthen board, wire cloth and handle, substantially as and for the purpose set forth. 4th. A mason's hawk, having the body or board thereof composed as a whole, or in part, of terra-cotta, or equivalent plastic material, substantially as set forth. 5th. A mason's hawk, having the body or board of terra-cotta and wire cloth, substantially as and for the purposes set forth. 6th. A mason's hawk, having wire cloth arranged between upper and lower sections of the board thereof, substantially as set forth.

No. 25,371. Fanning Mill. (*Turarc-Cribleur.*)

Charles Jackson, Harriston, Ont., 16th November, 1886; 5 years.

Claim.—1st. The combination, with the lower shoe 6, of the lever 17 fulcrumed thereto, and to cross-bar 18 connecting the sides of the mill rod 15, rock shaft 8, having arms 10, 13, 15, pitman 11 and rod 14 for reciprocating the lower shoe endwise and the upper shoe sidewise, as set forth. 2nd. The series of screens 24, having the cross-bars 25, of the frames at the end nearest the fan, bevelled inwardly and upwardly from the outside, for the purpose set forth. 3rd. The series of screens 24, having the cross-bars 25, of the frames rabbeted to form a ridge 25, and foundation for the series, as set forth, for the purpose described. 4th. The series of screws 24, having downwardly extended strip of metal 27, as set forth for the purpose described.

No. 25,372. Switch and Signal Lock.

(*Fermeture d'Aiguillière et de Signal.*)

Isaac May, Brooklyn, N.Y., U.S., 16th November, 1886; 5 years.

Claim.—1st. The combination, with the switch or signal levers and the pivoted handles, of notched lock bars at right angles, or nearly so, to the switch levers, bent levers, and connections between the pivoted handles and notched lock bars, the lock-box, across which the lock-bars slide, and bolts with bevelled ends within the lock-box and between the notched lock-bars, substantially as specified. 2nd. The combination, with the switch or signal levers and the pivoted handles, of notched lock-bars at right angles, or nearly so, to the switch levers, bent levers and connections between the pivoted handles and notched lock-bars, the lock-box across which the lock-

bars slide, and a row of separate bolts with bevelled ends in line with each other, and base-plates to the bolts, extending across beneath the lock-bars, substantially as specified.

No. 25,373. Rubber Pad Cover for Carriage Steps. (*Matelas en Caoutchouc pour Marchepieds de Voitures.*)

John T. Dickey and Elmer H. Rogers, Trenton, N. J., U. S., 17th November, 1886; 5 years.

Claim.—A cover pad for carriage-steps, composed of a plate or pad B, provided on its under side with a continuous under-turned margin d, constituting a pocket adapted to receive and enclose all the edge of the step-plate, except at two points where the step-arm is joined to said plate, whereby said pad will be retained in place without other fastenings, substantially as set forth.

No. 25,374. Spring Bed Bottom.

(*Sommier Elastique.*)

Orion N. Elkins, North Troy, Vt., U. S. (Assignee of Eli H. Loughton, Potton, Que.), 17th November, 1886; 5 years.

Claim.—1st. A spring, consisting of inner and outer conical coils integrally bent from one piece of wire, the wire intersecting radially at the larger end of the coil, and both the ends of the wire terminating at the tapering end of the spring, substantially as set forth. 2nd. The bed bottom frame, consisting of the body section composed of longitudinal rails 1, transverse bars 2 and 3, the head section consisting of longitudinal bars 4 and transverse bars 5, and both sections connected by cross-bars 6, 7, pivoted together, and means for holding the cross-bars in position to support the head section inclinedly, as set forth. 3rd. The combination, with the body section, head section and cross-bars, as set forth, of rod 9, slotted irons 11, slotted irons 12, having a rock 13, rod 10, provided with pawl 14, and bar 15 for adjusting and maintaining head section inclinedly, as set forth. 4th. The tie wires 17, interlocking in pairs, each pair connecting four springs, as set forth.

No. 25,375. Machine for Covering Wire and other Cores. (*Machine à Couvrir le Fil de Fer et autres Noyaux.*)

John C. Belk and George Frazor, Tombstone, T. A., U. S., 17th November, 1886; 5 years.

Claim.—In a wrapping machine, the combination of two disks D and D' carrying spools on their outer faces, and having pinions a, at their inner or adjacent faces, with a driving wheel M between the two disks and gearing with both pinions, substantially as set forth.

No. 25,376. Fire Extinguisher.

(*Extincteur d'Incendie.*)

Henry A. Mansfield and Henry M. Harrington, Bridgeport, Conn., U.S., 17th November, 1886; 5 years.

Claim.—1st. In a fire extinguisher, a generating cylinder having a discharge tube, and an operating shaft having lugs or cross-pieces at its lower end, in combination with a chemical reservoir having slots 8, engaged by said lugs, an opening at its opposite end, and a rest provided with a valve adapted to engage said opening, as described. 2nd. In a fire extinguisher, a chemical reservoir having a slot 8 at one end and an opening at its other end, in combination with a rest, whereby said reservoir is supported, and which is provided with a valve to engage said opening, and an operating shaft having a cross-piece adapted to engage slot 8, whereby the reservoir may be turned to remove the opening from the valve, as described. 3rd. In a fire extinguisher, a rotating chemical reservoir, having an opening 9 at one end, in combination with a vertically movable rest, whereby said reservoir is supported and which is provided with a valve adapted to close said opening, threaded rods 14 which pass through said rest, and nuts upon said rods whereby the valve is forced tightly against the reservoir after the latter has been turned into position, as described. 4th. In a fire extinguisher, rest 10, having lips 11 and valve 12, in combination with a chemical reservoir, having an opening adapted to be closed by said valve, a slot 8 and an operating shaft having a lug or cross-piece adapted to engage said slot, substantially as described. 5th. In a fire extinguisher, the cap having a recess 19, packing, and an operating shaft having a boss, whereby the packing is held in place, and a lug or cross-piece 17, in combination with a rotating chemical reservoir, having an opening 9 and a slot across its top which is engaged by the lug or cross-piece, whereby said reservoir may be turned to operate the device, substantially as described. 6th. The operating shaft, having lever 18 and cross-piece 17, in combination with a rotating chemical reservoir, having an opening 9 and a slot 8, which is engaged by said cross-piece, a rest for supporting the reservoir and a spring 25 which locks the lever in the closed position, as described. 7th. The operating shaft, having cross-piece 17 and the chemical reservoir having slot 8 and opening 9, in combination with a movable rest having a valve adapted to engage said openings, threaded rods adapted to pass through said rest, and nuts engaging the rod whereby the valve is pressed against the opening, as described. 8th. In a fire extinguisher, a chemical reservoir made of reticulated material, and provided with means for engagement as slot across its top, and with an opening in its bottom near the side, for the purpose set forth, in combination with a valve adapted to close said opening, and an operating device, for example a lever, having a cross-piece to engage the slot, whereby the reservoir may be rotated to discharge its contents, substantially as described. 9th. The generating cylinder rest 10, having valve 12, and a discharge tube having a strainer 24 to prevent precipitated chemicals from entering the tube, in combination with chemical reservoir 7, having slot 8, and operating shaft 16, having cross-piece 17, whereby the reservoir is turned away from the valve, as described. 10th. The operating shaft and lug or cross-piece 17, in combination with a rotating chemical reservoir, having an opening 9 and a slot 8, which is engaged by said lug, a packing 27 in said slot between the lug and the material of the