

the former and vertically-reciprocating die *c*, combined with the presser levers *f, f*, and hammers *m, m*, substantially as described. 5th. In a machine for making staples, the former and vertically-reciprocating die *c*, combined with the presser levers *f, f*, and chambers *m, m*, and an automatically-operated ejector moving upon the former, substantially as described. 6th. The die *c*, having a dovetail head *e*, combined with the plunger, a head-block correspondingly recessed to receive the die-head and fitted to the plunger side bars *c5, c6*, clamping blocks and adjusting and fastening means, substantially as described. 7th. The former and die combined with the spring-controlled clearer wedge block *c4*, its side pieces *c7, c8*, plate *c2* and its side pieces *c5, c6*, all substantially as described.

No. 25,724. Hot Air Distributor and Fuel-Saving Device. (*Calorifere à Air Economisant le Combustible.*)

Thomas Boggess, Hamilton, Ont., 13th January, 1887; 5 years.

Claim.—1st. In a stove for distributing hot air, the combination of a stove *A* with its two fuel-admitting doors *H*, the two ash-pans *I*, one on each side, the movable grate rest *D* on bricks or metal, and an aperture in the stove, at any point below the grate, for the purpose of admitting the air-pipe *B*, substantially as and for the purpose hereinbefore set forth. 2nd. In a stove for distributing hot air, the combination of a stove *A* with its connections, as described and claimed, and the peculiar construction of the grate *C* made in halves having bars, and, when together, forming an aperture in the centre, for the purpose of admitting the air conducting pipe *B* through the same, substantially as and for the purpose hereinbefore set forth.

No. 25,725. Incidence Window for Lighting Basements, Vaults, etc. (*Fenêtre d'Incidence pour Eclairer les Soubassements, les Voutes, etc.*)

The American Crystal Light Company, Boston, Mass. (assignee of Isidore Schoenberg, Baltimore, Md.), U.S., 13th January, 1887; 5 years.

Claim.—1st. An incidence window, composed of a frame, with a parallel series of glass blocks of right-angled triangular shape, having their long sides or hypotenuses in the plane of the frame, with the blocks projecting upwardly so as to expose their two sides, substantially as and for the purpose described. 2nd. An incidence window composed of a frame having parallel grooved rails, with a parallel series of blocks slid between the rails, with their acute angles in the grooves and the long side in the plane of the frame, substantially as and for the purpose described. 3rd. An incidence window, composed of an inclined frame for its upper end most remote from the building, and having triangular prismatic blocks with one face in the plane of the frame, and with the block itself projecting upwardly, substantially as shown and described.

No. 25,726. Power Press. (*Découpoir.*)

James L. Board, (assignee of James H. Clapp), Chicago, Ill., U.S., 13th January, 1887; 5 years.

Claim.—1st. In a power-press, the combination, with an eccentric shaft and a cross-head having suitable impression dies, of the split pitman *B*, screw-threaded link *C*, connected with the cross-head by means of a ball and socket joint, and means for compressing the split portion of the pitman shank, substantially as described and for the purposes specified. 2nd. The combination, with the reciprocating cross-head, of the blocks *B, B*, slotted and grooved as described, and means as the set-screws *a1*, for adjusting the same laterally, substantially as and for the purposes set forth. 3rd. The combination, with a reciprocating cross-head, of a die-box, a counterpart adjusted to engage the same when depressed, and means for imparting a yielding counter-pressure to said counterpart and for limiting its upward movement, substantially as described. 4th. The combination of the adjustable cross-bar *L* with the tang *j*, die *J* and die box *H*, substantially as and for the purpose specified. 5th. The combination of the dies *J, H* and their counterparts, of the reciprocating cross-head *C* and means for imparting thereto a lateral and longitudinal adjustment, substantially as and for the purposes set forth.

No. 25,727. Mechanical Movement.

(*Roue à Palette.*)

Mark B. True and Albert P. Sawyer, Newburyport, Mass., U.S., 13th January, 1887; 5 years.

Claim.—1st. The combination, with the rotatable disk plate or wheel *A* and the spindles or axles *C, C* carried by it, of the circular rod or ring *E* arranged to occupy an eccentric position in relation with the disk *A*, by means of the inner rollers *G, G* and the outer rollers *Gr, Gr*, and the cranks *D, D*, connecting said ring and disk, substantially as and for the purpose herein set forth. 2nd. The combination of the inner rollers *G, G* and the outer rollers *Gr, Gr*, with the eccentrically arranged ring *E*, the cranks *D, D*, the spindles or axles *C, C* and the rotatable disk *A*, essentially as and for the purposes herein described.

No. 25,728. Latch. (*Loquet.*)

William W. Dey and William I. Marshall, Altona, Penn., U.S., 13th January, 1887; 5 years.

Claim.—In a latch, the combination of a keeper having the shoulders *e1* on its rear edge, a swinging locking plate pivoted to the keeper at an intermediate point of its length, and having a flange or rib at its rear end, which projects therefrom into the path of the shoulders *e1*, and is adapted to come in contact with the said shoulders, to limit the movement of the plate, and the door plate having the projecting lug adapted to ride upon a bevelled shoulder at the front end of the locking plate, substantially as described and for the purpose set forth.

No. 25,729. Balance Valve for Locomotives.

(*Soupape Equilibrée pour Locomotives.*)

Arlington Foster, David W. Thompson, Abraham F. Walter and Samuel J. Burnison, (assignees of Lewes Kneeder), Caledonia, Iowa, U.S., 13th January, 1887; 5 years.

Claim.—1st. The combination, with the valve having the column *C* provided with the studs *E*, of the yoke *K* adapted to fit on the column, and having the opening *4* for clearing the studs, substantially as described. 2nd. The combination of the slide-valve, having the column *C* and the spring pressed-plate *O*, to bear against the top of the steam-chest, the yoke on the column, and the valve-rod attached to the said yoke, substantially as described. 3rd. The combination of the slide-valve having the column *C*, the expansible ring *L* on the said column, said ring being divided and having its ends connected together by the tongue or link *M*, the springs bearing under the ring, and the plate *O* on the upper side of the ring, substantially as described.

No. 25,730. Soap Press. (*Presse à Savon.*)

James L. Board, (assignee of James H. Clapp), Chicago, Ill., U.S., 13th January, 1887; 5 years.

Claim.—1st. The combination, with a soap-press having a loose matrix inclosed within a box, the counterpart of which matrix is attached to a reciprocating cross-head, of a bar arranged to move longitudinally in bearings, and provided with arms at or near its respective ends, which are in turn connected with said cross-head and loose matrix, substantially in the manner and for the purposes specified. 2nd. In a soap-press, a rigid bar loosely supported in bearings, in which it is fitted to slide and provided with rigid arms at or near its ends, one of which is connected with the cross-head, and the other by an intermediate pin *G* or equivalent means, with the lower section of the die, whereby the latter may be positively raised to the surface of the box upon the return stroke of the cross-head, substantially as described. 3rd. The combination, with a soap-press, the wale-die of which is attached to a reciprocating cross-head operated by a lever and counterpoise weight, of the reciprocating bar *E* provided with arms *F, F*, the former of which is connected with the cross-head, and the latter with a loose vertical pin in contact with the movable matrix *d*, substantially as and for the purposes set forth. 4th. The combination, with a soap-press, the wale-die of which is attached to a reciprocating cross-head operated by a lever and counterpoise weight, of the reciprocating bar *E* provided with adjustable arms *F, F*, the former of which is connected with the cross-head, and the latter with a loose vertical pin in contact with the movable matrix *d*, substantially as described and for the purposes specified. 5th. The combination, with a soap-press, the wale-die of which is attached to a reciprocating cross-head operated by a lever and counterpoise weight, of the reciprocating bar *E* provided with arms *F, F*, the former of which is connected with the cross-head, and the latter with a loose vertical pin beneath and in contact with the movable matrix *d*, and the spring *e* for initiating a backward stroke of the cross-head, substantially as described. 6th. In a soap-press, the reciprocating bar *E* having adjustable arms *F, F* connected with the respective dies thereof, substantially as and for the purposes set forth. 7th. In combination with the dies and die-box of a soap-press, the adjustable device *J*, whereby said dies may be adjusted to form cakes of varying thickness, substantially as specified. 8th. In combination with the dies and die-box of soap-press, the adjustable die-support *J* and means, as a jam-nut, for locking the same in position when adjusted, substantially in the manner and for the purposes described.

No. 25,731. Magneto-Electric Signalling Apparatus. (*Appareil Magneto-Electrique à Signaux.*)

The Bell Telephone Company, (assignee of Charles W. Brown), Montreal, Que., 13th January, 1887; 5 years.

Claim.—1st. In a magneto-electric signalling apparatus, the combination, with the Siemens armature *A* and ringing mechanism, of the gears *C, C*, and automatic cut-out composed of main cut-out shaft *M*, sleeves *N* and *P*, collar *n*, clutch ring *O* and spring *Q*, all constructed and operating substantially as herein set forth. 2nd. The combination, with the armature *A*, ringing mechanism, gears *C, C*, and the automatic cut-out herein described, of the switch-lever *H* with knife-edge *H1*, retractile spring *I* and clip springs *K*, all as and for the purposes described. 3rd. The combination, with the armature *A*, ringing mechanism, gears *C, C*, automatic cut-out, as herein described, and switch-lever *H*, of a strong current protector *L* placed in the line circuit, substantially as and for the purposes set forth.

No. 25,732. Combination Music Porte-folio and Music Leaf Turner. (*Porte-feuille et Tourne-feuille de Musique Combinés.*)

James R. Sage, George A. Knodell and Richard Rodgers, St. John, N.B., 13th January, 1887; 5 years.

Claim.—1st. As a new article of manufacture, a combination music portfolio consisting of the connected foldable leaves, a rigid strip carried by one of the leaves, a laterally movable strip arranged parallel with the rigid strip, the bracket secured to the rigid strip for guiding the movable strip, and the springs interposed between lips of the brackets and the movable strip, to force the latter toward the rigid strip, substantially as described for the purpose set forth. 2nd. In a music portfolio, the foldable leaves having a rigid strip provided with guide grooves, in combination with a laterally movable strip, the brackets carried by the movable strip and having the studs and coiled springs encircling the studs, substantially as described. 3rd. In a music leaf turner, the combination of a series of pivoted swinging arms, each having a right-angled lip arranged alongside of and out of contact with each other, when the device is in use, a spring connected to each arm and an independent clamp for each arm arranged in line therewith, to engage the end *R* and out of the path of