

are cushioned separately, substantially as set forth. 5th. The combination, with the drill frame and the drill-bar having a longitudinal groove *m*, of the flanged clutch-head body *N* provided at its lower end with a removable collar *n*, the ratchet ring *L* provided with a feather *m* entering the groove *m*, the pawl ring *L* provided with the pawl *l* and pin *l*, and the curved feed guide *z* secured to the drill frame, substantially as set forth. 6th. The combination, with the drill-bar provided with a longitudinal groove *m* and the drill frame, of the clutch-head body *N*, the pawl ring *L*, the ratchet ring *L* provided with a feather *m*, the tabular cap *o* secured to the body *N* and provided with pawl *q*, the sleeve *Q* on which the cap *O* loosely rests and which is provided with a ratchet rim *o*, the frame *P* secured to the sleeve *Q*, the supporting cap *R* held in the frame *P* against turning, and the divided nut *Q* having its parts pivoted to the cap *R* in the frame *P*, substantially as set forth.

No. 24,655. House Construction.

(Construction de Maison.)

Edsell Totman, Hinsdale, Ill., U.S., 5th August, 1886, 5 years.

Claim.—1st. The combination, with the parallel frame-pieces of a house, of a series of transverse planks forming siding or ceiling, movably held at their ends in grooves in the frame-pieces, and means for forcing together the planks, whereby the joints between them may be tightened, substantially as described. 2nd. The combination, with the parallel frame-pieces of a house, provided with dovetailed grooves and transverse planks having upon their ends tongues engaged with the said grooves, of means for forcing together the planks, whereby the joints between them may be tightened, substantially as described. 3rd. The combination, with the parallel frame-pieces of a house, and a series of transverse planks forming siding or ceiling, of means for tightening the joints between the planks consisting of bolts connected at one of their ends with the said frame-pieces, and at their opposite ends with a plank at one end of the series, substantially as and for the purpose set forth. 4th. The combination, with the parallel frame-pieces of a house, provided with dovetailed grooves, and a series of planks having upon their ends dovetailed tongues engaged with said grooves, of means for tightening the joints between said planks, consisting of bolts connected with the said frame-pieces and with the plank at one end of the series, substantially as set forth. 5th. The combination, with the studding of a house and a double series of planks forming inner and outer walls, of means for holding the said planks from movement at one end of the studding, a movable bar or follower at the opposite end of the studding, located in contact with the end planks of both the inner and outer walls, and tightening bolts secured in the said studding and engaged with the said follower, substantially as set forth. 6th. The combination, with the upright frame-pieces or studding of a house and a double series of planks forming inner and outer walls, of the upper planks of the series being held from upward movement, of a follower *K* forming a water-tight resting against a lower plank of each series, bolts engaged with the studding and with the follower, and a removable plank *C* below the said follower, substantially as and for the purpose set forth. 7th. The combination, with the sill and floor of a house, the vertical frame-pieces or studding and a double series of planks forming inner and outer walls, at which the upper planks are held from upward movement, of a follower located above the floor and below the lower planks of both series, bolts engaged with the studs and the follower, a removable plank *C* fitted against the sill beneath the follower, and a stationary base-board covering said follower, substantially as and for the purpose set forth. 8th. A house-wall composed of separately portable sections, each section consisting of two marginal frame-pieces united by transverse planks having their ends movably held in longitudinal grooves of the frame-pieces, and the adjacent sections being joined to each other by placing and fastening together their marginal frame-pieces, which thus form double studding at frame-pieces of the building, substantially as described. 9th. As a separately portable element in house construction, a wall-section composed of two longitudinally-grooved marginal frame-pieces *B*, and transverse planks having their ends held movably in the grooves of the frame-pieces, the whole forming an integral section or member adapted to be joined directly with other and similar sections, to form a house-wall, substantially as described. 10th. As an integral member in house construction, a panel or section composed of two marginal frame-pieces having dovetailed grooves in their proximate faces, and planks provided with dovetailed tongues on their ends inserted in said grooves, and thereby uniting said side pieces with each other and with the planks, to form such integral section or member, substantially as and for the purpose set forth. 11th. A section or panel for the construction of houses, comprising two stud- or frame-pieces and planks united with said frame-pieces by dovetailed joints, said frame-pieces being provided upon their outer faces with tongues and grooves, whereby tight joints may be formed between the contiguous sections or panels, substantially as described. 12th. A section or panel for the construction of houses, comprising two longitudinal marginal frame-pieces having grooves therein, a series of transverse planks held in said grooves, and means for forcing together the said planks so as to close the joints between the latter, substantially as described. 13th. A section or panel comprising two longitudinal marginal frame-pieces having grooves therein, a series of transverse planks inserted at their ends in said grooves, means for holding the frame-pieces in proper relative position, and bolts for tightening the joints between the planks connected with the said frame-pieces, and with the end plank of the series, said section or panel being adapted to be joined with other similar sections or panels to form a house-wall, substantially as described. 14th. In combination with converging walls having marginal frame-pieces *B*, a corner piece *P* occupying the angular space between the frame-pieces *B*, substantially as described. 15th. The combination, with studs or frame-pieces having longitudinal grooves therein, of transverse plank, sheathing or lath held at its ends in said grooves, said plank, sheathing or lath having means to receive and hold plastering, substantially as described. 16th. The combination, with the studs or frame-pieces of a house having longitudinal grooves therein of transverse laths, planks or sheathing held at its ends in the said grooves, and provided in one or both faces with dovetailed grooves affording a hold for plaster, substantially as de-

scribed. 17th. A combined sheathing and lath for buildings, consisting of laths or planks, each provided with a dovetailed groove in the middle of one of its faces, and a half groove upon its opposite face, at each of its edges, substantially as and for the purpose set forth. 18th. The improved construction in house sills consisting of the flat bottom pieces *A*, pieces *A* set on edge therein, and the pieces *A* laid on the bottom pieces, and all arranged to break joints and secured together, substantially as and for the purpose set forth. 19th. The combination, with the house-sills, consisting of three planks *A*, *A* and *A*, secured together as described, of floor-joints *J* adapted to fit over the pieces *A*, and to come flush with the top of the piece *A*, substantially as described. 20th. The combination, with grooved studs *B*, *B* and a window-sash provided with grooves *t*, of strips *u* inserted in the grooves of the studs and sash, and the means for detachably connecting said strips with the sash, substantially as described. 21st. The combination, with grooved studs *B*, *B* and window-sash provided with grooves *t*, of spring-strips *u* inserted through the sash and bearing upon the strips, substantially as and for the purpose set forth. 22nd. The combination, with grooved studs *B*, *B*, of door frames provided with side-pieces having tongues engaged with the grooves of the studs, substantially as and for the purpose set forth.

No. 24,656. Shoe Brushing Machine.

(Machine à Cirer les Chaussures.)

Levin T. Jones, Baltimore, Md., U.S., 5th August, 1886, 5 years.

Claim.—1st. A shoe brushing machine having its brushes hinged to a reciprocating frame, and each brush provided with a spring to press the brush against the foot, substantially as set forth. 2nd. A shoe-brushing machine having, in combination, a reciprocating frame, brushes hinged or pivoted to the frame, a spring to press each brush to the shoe, and a chain or equivalent stop device to limit the movement of each brush, as set forth. 3rd. A shoe-brushing machine having, in combination, a reciprocating frame, a front brush *C* provided with horizontal arms *e*, which are pivoted to the forward part of the frame, and a lift device, substantially as described, connected with the brush, as set forth. 4th. A shoe-brushing machine having, in combination, a reciprocating frame, a front brush *C* provided with horizontal arms *e*, which are pivoted to the forward part of the frame, a spring to press the brush on the shoe, and a lift device, substantially as described, connected with the brush, as set forth. 5th. A shoe-brushing machine having, in combination, a reciprocating frame, a front brush *C* provided with horizontal arms *e*, which are pivoted to the forward part of the frame, a standard fixed to the stand, and a chain connecting the brush with the standard, as set forth. 6th. A shoe-brushing machine having, in combination, a reciprocating frame, a front brush *C* provided with horizontal arms *e*, which are pivoted to the forward part of the frame, a spring to press the brush on the shoe, a standard fixed to the stand, and a chain connecting the brush with the standard, as set forth. 7th. A shoe-brushing machine having, in combination, a two-side reciprocating frame, a heel-brush hinged to one side of the frame, and projecting across a longitudinal line centered between the frame sides, and a heel-brush hinged to the opposite side of the frame projecting across the said center line, and having position at the rear of the other heel-brush, as set forth. 8th. A shoe-brushing machine having, in combination, a two-side reciprocating frame, two heel brushes, one hinged to each side of the frame and one at the rear of the other, and both overlapping a longitudinal line centered between the frame-sides, and a spring and stop device to control each brush, as set forth. 9th. A shoe-brushing machine having, in combination, a reciprocating frame, a heel-brush hinged to each side to swing in a horizontal plane, and each brush provided with an outer row *q* of bristles, and an inner row *r* shorter and stiffer, as set forth. 10th. A shoe-brushing machine having, in combination, a reciprocating frame and a toe-brush *C*, the block of which has a straight central part, and at each end a downward projecting part at an angle with respect to the central part, as set forth. 11th. A shoe-brushing machine having, in combination, a reciprocating frame and a toe-brush *C* provided with bristles, which on the side are of graduated length, whereby the ends of the bristles instead of the sides touch the shoe, as set forth.

No. 24,657. Machine for Cross-Cutting Wood. (Machine à Scier de Travers.)

Frederick Mankey, Williamsport, Penn., U.S., 5th August, 1886, 5 years.

Claim.—1st. The combination of a rotary cutter, adapted to cross-cut the surface of wood at an angle to the grain thereof, a support and means for rigidly holding the object to be cross-cut thereon, and feeding mechanism for moving said support beneath, and thereby subjecting said object to the action of said cutter, substantially as described. 2nd. The combination of a rotary cutter, adapted to cross-cut the surface of the wood at an angle to the grain thereof, a means for rigidly holding the object to be cross-cut upon said support, and feeding mechanism for moving said support beneath, and thereby subjecting said object to the action of said cutter, substantially as described. 3rd. The combination of a rotary cutter, adapted to cross-cut the surface of wood at an angle to the grain thereof, a support and means (such as clamps) for rigidly holding the object to be cross-cut thereon, feeding mechanism for moving said support beneath, and thereby subjecting said object to the action of said cutter, and yielding presser rollers adapted to bear upon said object in front of, and in rear of said cutter, substantially as described. 4th. The combination of a rotary cutter, adapted to cross-cut the surface of wood at an angle to the grain thereof, a support and means for rigidly holding the object to be cross-cut thereon, feeding mechanism for moving said support beneath, and thereby subjecting said object to the action of said cutter, yielding presser rollers adapted to bear upon said object in front and in rear of said cutter, and yielding presser shoes adapted to bear upon said object at each side of said cutter, substantially as described. 5th. The combination of a rotary cutter, adapted to cross-cut the surface of wood at an angle to the grain thereof, a means for rigidly holding the object to be cross-cut