

whenever the pawl is unlocked, the beater or sley, and cords connecting the roller with the beater or sley and arranged to wind around the roller, when it is turned by the weight. 2nd. The gauge roller J, provided with the pins β and weighted cord γ_6 , the spring pawl $\gamma_2 \gamma_3$, the treadle J₁, the supporting spring k , the rods $\gamma_4 \gamma_5$, the beater H and the connecting cords l . 3rd. A stretcher to hold the web during the process of finishing, and roll it up when finished, consisting of two corresponding pairs of standards, two rollers, each supported by one pair and provided at one end with a set of teeth on its periphery, a pawl on each pair of standards arranged to engage with the tooth periphery, mechanism for holding the pawls disengaged with the tooth periphery supporting the edges of the web, and brackets projecting from the standards for supporting the rails. 4th. The standards M M₁, the rollers NN₁, toothed at u and u_1 and provided with cranks u_2 and u_3 , the spring pawl u_4 and eccentric disk u , rails u_5 and supporting brackets attached to the standards. 5th. The standards A C, roller B, belt b_1 , cord b_2 , rod b_3 adjustable in rests b_4 , roller D, provided with the sheet of canvas d and weighted cords d_1 , pulleys d_3 , roller E, adjustable set in the standards A, spring e , harness F F₁, treadles F₂ F₃, pivoted beater H, toothed gauge roller J provided with the weighted cord γ_6 , spring paws $\gamma_2 \gamma_3$, rods $\gamma_4 \gamma_5$, treadle J₁, cords β and rollers I provided with the crank i and ratchet wheel i_1 . 6th. The standards A C, roller B, belt b_1 , cord b_2 , rests b_4 , rod b_3 adjustable therein, roller D provided with the sheet of canvas d and weighted cord d_1 , pulleys d_3 , roller E, adjustable set in the standards A, spring e , harness F F₁, treadles F₂ F₃, pivoted beater H, toothed gauge roller J provided with the weighted cord γ_6 , spring paws $\gamma_2 \gamma_3$, rods $\gamma_4 \gamma_5$, treadle J₁, cords β , rollers I k_2 u_2 , standards M M₁, rollers NN₁, toothed and provided with cranks and adjustable pawls, adjustable brackets O and rails u_5 . 7th. A crossing mechanism consisting of a frame, a crossing blade or needle, the main body of shaft, of which is straight and arranged to revolve in said frame, and a system of wheels and shafts set in the frame, whereby the blade is made to revolve by the operator at the same time that he is pushing it through the fabric. 8th. A crossing mechanism provided with a blade or needle having a straight main body or shaft, and bent and perforated at the forward end, in combination with mechanism controlled by the operator, for causing the blade to revolve during its passage through the fabric. 9th. The frame Q, handle R, revolving shafts s s_1 , gear wheels S S₁, driving wheel S₂ and blade P, affixed to the shaft s and provided with the bent and flattened tip p and the eye p_1 .

No. 14,559. Improvements on the Construction of Buildings. (*Perfectionnements dans la construction des maisons.*)

James M. Peck, Flushing, N. Y., U. S., 8th April, 1882; for 10 years.

Claim.—1st. The siding panels composed of grooved and tongued boards connected by battens, rabbeted upon their edges so as to form projecting tongues, in combination with upright frame timbers, grooved to receive said tongues. 2nd. The portable building composed of the rabbeted and grooved frame timbers, siding panels composed of grooved and tongued boards connected by battens rabbeted upon their outer edges, to form projecting tongues, and the roof composed of grooved boards or battens connected by rabbeted boards having bevelled upper sides leading downward and away from the joints, the several parts connected and secured together. 3rd. A siding or roof composed of a series of sheets or panels, each of which is constructed of a number of grooved and tongued boards O secured together by battens P. 4th. In a roof for portable or permanent buildings, the combination with the ridge X and roofing boards h , of the cap Y ploughed out at an angle adapted to fit the ridge X, roofing boards and battens.

No. 14,560. Improvements on Adjustable Seats for Carriages. (*Perfectionnements aux sièges mobiles pour les voitures.*)

John Moon, Amherst, N. S., 8th April, 1882; for 5 years.

Claim.—1st. The combination, with the box A of a vehicle or sleigh, of a seat H bearing on removable side flaps I, and a rear seat of larger size sliding to mask the seat H when the flaps I are removed. 2nd. The combination, with the box A of a vehicle or sleigh, of the front seat H having sides C provided with removable flaps I and hinged at the front D to overturn, and a rear seat J of larger size, sliding on the edge of the box and moving forward to encompass the sides C of the front seat, when the flaps I are folded down and the seat H overturned, whereby when returned the seat will nest in the seat J.

No. 14,561. Improvements in Bricks.

(*Perfectionnements dans les briques.*)

George Yon, Montreal, Que., 8th April, 1882; for 5 years.

Claim.—A wall constructed of the combined bricks A, each having projections a and flat side a_1 opposite to said projections, bricks B each having recesses b and a flat side b_1 opposite to said recesses, and bricks C having each a projection c and a flat side c_1 opposite to said projection.

No. 14,562. Improvements on Safe Combination Locks. (*Perfectionnements aux serrures à combinaison pour les coffres-forts.*)

Henry Lemmon, Guelph, Ont., 8th April, 1882; for 5 years.

Claim.—1st. In combination with the combination lock A of a safe, and a register spindle B, two or more gear wheels a c d or their equivalents, as a crank to separate yet connect the two, and operate the one by the other. 2nd. In combination with the block A and plate D, the automatic mechanism to operate the plain D and locking bolts C C consisting of the ratchet wheel K on the spindle g , pawl i , spring j on the upper part of the plate D. 3rd. In combination with the lock A and plate D, the ratchet wheel E, pawl H, connecting rod I, pulleys k l , friction wheel o , dog J. 4th. In combination with the pawl H and dog J, the screw socket n containing the friction wheel m on the rod I, to adjust the length of the same. 5th. In com-

ination with the plate D, the slit L through which the spindle g passes.

No. 14,563. Improvements on Apparatus for Lighting Gas by Electricity, Part of Which is Applicable to Other Electrical Appliances. (*Perfectionnements aux appareils à allumer le gaz par électricité, en partie applicables aux autres appareils électriques.*)

Charles L. Clarke and John Leigh, Manchester, Eng., 8th April, 1882; for 5 years.

Claim.—1st. The construction of an electric gas lighting apparatus in a tubular or cylindrical form in three parts, by the combination of (1) a battery (2) an induction coil condenser and contact breaker (3) a lighting tube with terminal points, each of the parts being so constructed that the requisite metallic connections are established by simply screwing the parts together end to end. 2nd. The peculiar construction of the contact breaker, whereby each pressure on the button or pusher only causes two or three vibrations sufficient to develop an inducted electric spark of a duration long enough to light a jet of gas. 3rd. The peculiar construction of the interchangeable battery, whereby, when the strength of the battery has become exhausted, it can be removed by unscrewing and another substituted. 4th. The use of the exciting fluid above named, in connection with a battery of this kind.

No. 14,564. Process for Preparing Iron and Steel used for the Manufacture of Nails, Tacks, Brads and Shoe Nails, &c. (*Procédé pour préparer le fer et l'acier employés dans la fabrication des clous, brochettes, clous à parquet et caboche, &c.*)

Seth R. Foster, St. John, N. B., 8th April, 1882; for 5 years.

Claim.—The process of preparing iron and steel for cutting into nails, tacks, brads and shoe nails, by the application of lime or any pigment of moisture of pigments, in solution with water to the surface of it and letting it dry thereon, for the purpose of preventing the scale on the iron or steel from wearing into the knives, dies and other tools of the machine, while cutting.

No. 14,565. Improvements on Cultivators. (*Perfectionnements aux cultivateurs.*)

Gottlieb Bettschen, Wilmot, Ont., 8th April, 1882; (Extension of Patent No. 8115.)

No. 14,566. Improvements on Car-Couplings. (*Perfectionnements aux accouplages des chars.*)

George F. Bond, Troy, N. Y., 11th April, 1882; for 5 years.

Claim.—1st. The combination, with the draw-head A provided with an aperture B in the bottom, of the cam block C, the cam block being mounted on a transverse shaft D, extending to the side of the car and provided with handles G at the ends, and of guide plates F provided with guide slots E for the shaft D. 2nd. The combination, with the draw-head A provided with an aperture B in the bottom, of the swinging cam block C in the aperture, the shaft D, the handle G, the connecting bar N and the angular lever M pivoted on the top of the car. 3rd. The combination, with the draw-head A provided with an aperture B in the bottom, of the swinging cam block C provided at the inner end with a transverse check ridge I. 4th. The combination, with the draw-head A provided with an aperture B in the bottom, of the swinging cam block C provided at the inner end with a transverse check ridge I, and at the outer end with a guide ridge H extending from top to bottom.

No. 14,567. Improvements in Paper Files. (*Perfectionnements aux serre papiers.*)

George G. Nanerth, Cincinnati, Ohio, U. S., 11th April, 1882; for 5 years.

Claim.—1st. An outer case provided with the racks d e , the pins a and the cover D provided with the lugs h and notches F. 2nd. An outer case provided with the racks d e , and the cover D provided with the lugs h fixedly attached to the cover and arranged in such a manner that the lugs are caused to engage with or be detached from the racks by sliding the cover horizontally. 3rd. The combination of the cover D provided with lugs h , and the case provided with the racks d and e , two or more of said racks being provided with guards g . 4th. The combination of the cover D provided with the lugs h , the notches F and the case provided with pins a , and the racks d , the front edge of the racks d being provided with guards g . 5th. The combination of the cover D provided with lugs h , the notches F and thumb hole H, and the case provided with pins a , and racks d , the front edge of the racks d being provided with guards g . 6th. In combination with a filing case, the rack provided at or near its lower end with a lug f . 7th. A rack for a filing case dovetailed and provided at its lower end with a lug f . 8th. A rack for a filing case dovetailed as shown and provided with guard g . 9th. A rack for filing case provided at or near its lower end with a lug f , and having guard g . 10th. The combination of the cover D provided with lugs h , and the racks d and e dovetailed, the lower ends of said rack being provided with lugs f , said racks being secured in dovetailed recesses in the sides of the case. 11th. A rack for a filing case provided with a guard g and at its lower end with a lug f , the rack being dovetailed. 12th. The combination of the cover D provided with lugs h , and the case provided with the racks d e , said racks being dovetailed and retained in dovetailed recesses in the ends of the case.