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INVENTIONS PATENTED.

No. 6725. Improvements on Barn Door Rollers.

(Perfectionnements aux roulettes de portes de granges.)

Samuel H. Moore and Edward Y. Moore. Chicago, Ill., U. S., 31st October, 1876, for 5 years.

Claim.—The combination of the wheel A provided with recess B and hub C, the plate D or its equivalent provided with flange E and hub G, the rollers b b, screw a, washer H and nut d.

No. 6726. Fittings for Carrying Cattle in Vessels and Carriages.

(Dispositions pour le transport des animaux dans les vaisseaux et les voitures.)

Francis H. Relfh. London, Eng., 31st October, 1876, for 5 years.

Claim.—1st. The combination with vertical posts or stanchions (inade movable when not required) of a yoke receiving the head of the animal and constructed so as to slide up and down said stanchions. 2nd. The combination of the stanchions A, breast bar B and belly band or belt M arranged to be lifted or tightened up. 3rd. The floor K arranged to be lifted to any angle to counteract the list of the vessel.

No. 6727. Improvements on Steam Boiler and other Furnaces.

(Perfectionnements aux fourneaux des chaudières à vapeur et autres.)

William S. Hutchinson Chicago Ill., U. S., 6th November, 1876 for 5 years

Claim.—The combination with the boiler A and furnace B, of the air chamber D provided with a series of air pipes J, and the steam pipe F provided with a series of jets G, whereby hot air and steam commingled are ejected by the pressure from the boiler into the fire box for promoting the combustion of the fuel.

No. 6728. Improvements on Ship's Pumps.

(Perfectionnements aux pompes des navires.)

John Brokenshire, Kingston, Ont., 7th November, 1876, (extension of Patent No. 613), for 5 years.

Claim.—1st. The internal chamber A in connection with the barrels B B, the plungers C C and the valves D D together with the hole or plug H for sounding and the opening M as access to the same, and the turncock L, with pipes K adjusted. 2nd. In combination with the above the construction of the spouts or double guides R in connection with the friction rollers S S and receptacles P P (Suffederes), and No. 6729 issued in its place.)

No. 6729. Improvements on Ship's Pumps.

(Perfectionnements aux pompes des navires.)

John Brokenshire Kingston Ont 8th November 1876, (re issue of Patent No. 613), for 5 years.

Claim.—1st. The arrangement and construction of a double acting ship's main suction pump all above deck, 2nd. The central chamber between the working barrels; 3rd. The arrangement of the suction pipes with plug and hole for sounding; 4th. The combination and arrangement of two or more types on a ship's main suction pump.

No. 6730. Improvements on Liquid Coolers and Reservoirs.

(Perfectionnements aux réfrigérateurs-réservoirs à liquides.)

Frederick W. Camell, Orangeville, Ont., 9th November, 1876, for 5 years.

Claim.—The hollow cylinder B centrally located within the casing A and forming an annular chamber or space F extending from the base plate C to the head piece D, in combination with the aperture H and tap J.

No. 6731. Machine for Steam Cooking.

(Machine à faire la cuisine à la vapeur.)

Wiram F. Fuller Toledo, Iowa, U. S., 9th November, 1876, for 5 years.

Claim.—The combination of the vessel A a series of vessels B C D having interior flanges, perforated pipe B₁, interior tube B₂ tubes C₁ and C₂ of smaller diameter central perforated tube D₁ and the convex perforated false bottom G.

No. 6732. Screw Plank Machine.

(Machine à ébaucher de vis.)

Samuel Vanstone and John W. Hoard. Providence, R. I., U. S., 9th November, 1876, for 5 years.

Claim.—1st. A pair of die rolls arranged side by side and between which the pieces of stock to be shaped are dropped one by one in a line parallel with the axis of the rolls, both rolls revolving in the same direction and operating to squeeze and roll the stock upon its axis as it is reduced to shape by the movement of the dies; 2nd. A pair of die rollers revolving both in the same direction and provided with peripheral dies adapted to receive, hold and roll between them a rod of metal lying parallel with their axis and to reduce same to a double screw blank partially or fully severed at the centre; 3rd. In combination with the rolls an adjustable automatic wire feeding device and an automatic wire cutting apparatus adapted for feeding and severing the wire in the desired lengths preparatory to rolling and shaping; 4th. In combination with the die rolls, the chute G, the automatic forks or detainers E and an automatic gate 7, operating to hold position and deliver the rod or piece of wire to the die rollers at the proper juncture in their revolutions; 5th. The combination of an automatic wire feeder, an automatic wire cutter, an automatic detainer and deliverer of the severed piece and die rolls adapted to receive such pieces between them and parallel with the axis of the rolls, and to roll and shape them.

No. 6733. Sash Pulley and Compensating Method of Hanging Window Sashes.

(Poulie de croisee et méthode compensatrice de suspension des croisées de fenêtres.)

Adam Williamson, Kingston, Ont., 9th November, 1876, for 5 years.

Claim.—1st. The construction of the shell or case B in which the pulley A revolves, and its application to the window frame D D. 2nd. The method of hanging the window sashes F F'. 3rd. The combination of pulley and shell A B with the method h h.

No. 6734. Drill Chuck. (Mandrin de foret.)

George M. Pratt Middletown, Ct., U. S., 9th November, 1876, for 15 years.

Claim.—1st. In combination with the chuck head and levers the cylindrical follower with longitudinal recesses having inclined bottoms for the purpose of operating said levers without straining the same. 2nd. In combination with the cylindrical follower having longitudinal recesses and the levers for actuating the clutches, the inclined grooves on the side walls of said recesses for returning the levers and clutches. 3rd. The adjustable set screws in the holder B acting as fulcrums for the levers.

No. 6735. Grain Separator and Smut Mill.

(Séparateur des grains et cylindre emolteur.)

Alexander Laudlow Orangeville, Ont., 9th November, 1876, for 5 years.

Claim.—1st. The shoe S with riddles r r and spouts p h as applied for riddling the wheat and conveying the same to the suction tube C and spout s of the smut mill B; 2nd. The combination of the separator A having a shoe S, riddles r r and spouts p h, with the cylinder B₁ of the smut mill B.

No. 6736. Cement to Replace Fire Earth in Making Smelting Furnaces.*(Ciment remplaçant la terre à feu pour faire les fourneaux de fonderie.)*

Jean M. Parent, Beauport, Que., 9th November, 1876, for 5 years.

Résumé.—Le procédé de composer un ciment avec du quartz, de la glaise et du sable magnétique.*Claim.*—The process for making a cement with quartz, clay and magnetic sand.**No. 6737. Threshing Machine Tooth.***(Dent de machine à battre.)*

Jonathan W. Waterman, Oregon, Wis., U. S., 9th November, 1876, for 5 years.

Claim.—The threshing and hulling tooth A, having the tapering sides from the poll a to the convex bit edge b, and the edges of said sides convex-concave and tapering back again to said poll, and furthermore provided with the double concaves or re-entered planes f.**No. 6738. Shirt Stretcher.***(Planche à tendre les chemises.)*

James Elliott, Montreal, Que., 9th November, 1876, for 5 years.

Claim.—1st. A frame constructed in two or more parts adapted to fit into the inside of a shirt and to be joined together therein so as to keep it stretched to its full extent, and thus to prevent the contraction of the cloth in drying; 2nd. The combination of the arms A B, the connecting pins and sockets a b, the strips C E and distance piece D with connecting pin c and socket d.**No. 6739. Washing Machine. (Machine à laver.)**

Allen D. Ferris and Albert N. Ferris Blakeley, Ma., U. S., 9th November, 1876, for 5 years.

Claim.—1st. The frame A B, suds box C D E F, curb G, lever H and cleat I; 2nd. The combination of the stationary cleat I and the detachable stop bar J with the pivoted suds box C and with the frame A B.**No. 6740. Compound Metal Working Machine. (Machine à travailler le métal composé.)**

Hollis W. Moore, Olean, N. Y., U. S., 9th November, 1876, for 5 years.

Claim.—1st. The combination of the standard A provided with the curved ledge B, pivoted eccentrics C and curved groove b, and the slide D provided with ledge H, eccentric C' and curved tongue d, the latter fitting in the groove b; 2nd. The slide E carrying the shear blade G and punch H, lever I with eccentric f stirrup J, connecting bar K and lever L with the tire upsetting devices in combination with the standard A having shear blade G, and die H.**No. 6741. Improvements on Hide Handlers.***(Perfectionnements aux cuves de tanneries.)*

Otis W. Bean, Tecumseh, Mich., U. S., 9th November, 1876, for 5 years.

Claim.—1st. The combination with a tan vat a horizontal platform adapted to receive the hides upon its surface and to be raised and lowered in the vat, 2nd. The combination of the platform B and posts D U, top cross beam E, binding chains C G and hoisting chains G G.**No. 6742. Improvements on Broom Machines.***(Perfectionnements aux machines à balais.)*

Alphonso Walrath and Edward D. Bronson, Amsterdam, N. Y., U. S., 9th November, 1876, for 5 years.

Claim.—1st. The combination of endless belt or belts X having U-shaped holders with spring rods x₁ supported at their ends only and situated below and at the sides of said belt or belts, 2nd. The spurred carrying belt C₁ C₂ for the covers in combination with the inclined endless belt H provided with spotting knives h h, said belt opening at right angles to the carriers for the purpose of spotting or bevelling the broom corn stock while the covers are being carried to the wreeder, 3rd. The combination of a grooved pressure roller G with spurred belt C₂ for the purpose of pressing the heads of the covers down upon the spurs, 4th. In combination with spurred carriers for the covers of the brooms and with spotting knives h h, stirrup fingers M M which will partly or completely free the trimmed or spotted heads from the spurs of said carriers, 5th. A laterally movable pulley guide d for the wrapping wire, in combination with pulley o, bobbin d, drum o, friction strap of and treadle O; 6th. The rod P having vertically cutting knife p and obliquely cutting knife p₁, in combination with a rotating broom handle holder, 7th. In combination with means for holding and carrying forward the covers, the treadle f, lever F, arms f₁ and E, pinion a₂, short shaft a₁, pulley a₃ and the driving mechanism thereof; 8th. The revolving endless cover carriers mechanically connected with the broom holder in combination with a suitable clutching device; 9th. A rotating cutter for cutting the shoulders of the broom in combination with a suitable rotary broom holder, 10th. A rotating cutter situated on a movable shaft or support, in combination with a broom holder whereby the cutters may be brought at will against the broom corn, 11th. A C-shaped holder H; 12th. The combination of a hollow shaft or broom holder G, clamping levers g₁ and rotating cutter S₁, 13th. The combination of a rotating cutter shaft S, lever S₁ and rotating broom holder, 14th. The combination of unequal pulleys V V₁ or a driving shaft B with endless movable belt wheels W V₂ on broom holding shaft Q having cog s u and fixed clutches W having cogs to w, 15th. The combination of treadles Z Z with wires or rods Y Y a vers X X springs z z and wheels U U.**No. 6743. Improvements on Self-binding Harvesters.***(Perfectionnements aux moissonneuses-lieuses.)*

James F. Gordon, Rochester, N. Y., U. S., 9th November, 1876, for 5 years.

Claim.—1st. The vertically reciprocating binder arm F hinged to a vertical axial shaft D or its equivalent, whereby the arm is given a horizontal oscillation laterally across the grain, in combination with its vertical reciprocation; 2nd. In combination with the vertical axial shaft D, binder arm F, and twisting mechanism, the oscillating arm E, 3rd. In combination with a binder arm F, movable twisting mechanism shaft D and arm E, the connecting rod F₁ and crank D; 4th. In combination with the reciprocating binder arm F and vertical axial shaft D the swinging arm G, 5th. The combination of the wire spool M, friction roll O, strap P₁, yielding roller M₁, spring Q and the binding wire S; 6th. In combination with the adjustable platform k the vertical brackets h; 7th. In combination with the swinging arm G, the steadying roller V and track N; 8th. The pivoted trip cam b constructed and arranged to operate in conjunction with the clamping jaw T; 9th. The pivoted switch U in combination with the stationary track or trucks Y Y and roller b of the pivoted arm X; 10th. The driving pinion H of the binder provided with the flanges, 11th. The connecting rod or pitman F₁ extended beyond the point at which it is pivoted to binder arm for the purpose of forming a take-up for the wire.**No. 6744. Fulling Mill. (Moulin à foulon.)**

Willard H. Mase and Silas Terwilliger, Matteawan, N. Y., U. S. 9th November, 1876, for 15 years.

Claim.—1st. The combination of the hammer arm and its pendent link with the friction roller and cam, 2nd. The combination of the hammer arm, the pendent link, the friction roller, the cam and the guide for the pendent link.**No. 6745. Improvements on Invalid Bedsteads. (Perfectionnements aux couchettes de malades.)**

Asahel J. Goodwin, Brookline, Mass., U. S., 9th November, 1876, for 5 years.

Claim.—1st. The combination of the slide frame or bed supporter B with the bedstead A, provided with means of supporting an additional bed; 2nd. The combination of the toggles E E, lever F, bar G and pin G with the bedstead A and the slide frame B; 3rd. In combination with the bedstead A its slide frame B and their rails C D, arranged and provided with ledges and the sliding board or seat H; 4th. The combination of the frame L and shaft K with the notched cams I and shaft K; 5th. The combination of the rails b d with the rails a C, said rails being so arranged that the ends of the slats in rails D d are between the ends of the slats in rails a C.**No. 6746. Machine for Washing, Cooling and Purifying Petroleum. (Machine à laver, refroidir et épurer le pétrole.)**

John R. Minnick, London, Ont., 9th November, 1876, for 5 years.

Claim.—The combination of the supply pipe A, pivot plug B, revolving swivel C, perforated arms D and screw to hold swivel E.**No. 6747. Improvements on Blanks of Screws and Bolts. (Perfectionnements aux ébauches de vis et de boulons.)**

Samuel Vaustone and John W. Hoard, Providence, R. I., U. S., 9th November, 1876, for 5 years.

Claim.—1st. A rolled screw blank, whether single or double, and with its shank straight tapering, a swelling and its head and point or either formed in the act of rolling; 2nd. The process or method of forming screw blanks, whether single or double, by rolling over pieces of wire between die rollers, 3rd. A screw blank having a swelled shank.**No. 6748. Improvements on Car-couplings. (Perfectionnements aux attelages de wagons.)**

Ninian H. Dolsen, Chatham, Ont., 9th November, 1876, for 5 years.

Claim.—1st. The side pieces C C having the extensions D bolted together for strengthening the draw head, 2nd. The combination with the gate swinging on post F and closed by spiral spring G, of the spring bolt H and catch J, operating automatically for supporting and releasing the draw pin, 3rd. The provision to the draw bar of the covering K for protecting the draw pin, 4th. The draw pin constructed of the pin portion a having an arm b projecting horizontally and bent vertically, and a leg c to support the pin in the coupling link, 5th. The combination of a hook-shaped draw pin and a volute spring Q engaging with its heel for throwing the hook forward when retracted in uncoupling, 6th. The draw link having steel springs S S bolted to a fixed centering and provided with the head block U.**No. 6749. Method of Heating and Refrigerating Liquids and Apparatus therefor. (Manière de chauffer et refroidir les liquides et appareil pour cet objet.)**

William Lawrence, London, Eng., 9th November, 1876, for 5 years.

Claim.—1st. The method of, and apparatus for, refrigerating liquids by passing the heated liquid over the external surfaces of corrugated metal plates enclosing or forming parts of water chambers, and by cooling by one, two or more waters differing in temperature, 2nd. The construction of apparatus for the above purpose with transverse axis or centres for reversing, turning over or placing the apparatus at any desired inclination for rising, washing or cleansing the inside of the chambers or their external surfaces, and also for repairs (when required) by soldering or otherwise, 3rd. The converse method and use of the apparatus for heating liquids (instead of for refrigerating or cooling them), 4th. The construction and use of the apparatus for heating by steam and for condensing steam.

No. 6750. Construction of Gates, Fences and Railings.

(Construction des barrières, clôtures et garde-fous.)

William T. Cleveland, Richmond, Que., 9th November, 1876, for 5 years.

Claim.—The application of iron or other metal tubes exclusively for fences, &c. having their ends cut with screw threads to screw into the socket joints by which the fences, rails, gates, &c., are lengthened and the frame work put together and braced without the necessity of rivetting, welding or nailing; 2nd. The method of running hot sulphur or other cement into the tubes to secure the wire rigidly in its place, thereby adding materially to the strength and rigidity of the work.

No. 6751. Improvements on Stuffing Boxes for Steam Engines.

(Perfectionnements aux boîtes d'étoupe de machines à vapeur.)

Charles T. Sleeper, Charles C. Jerome and James M. Hill, Chicago, Ill. U. S., 9th November, 1876, for 5 years.

Claim.—1st. The conically arranged metallic rings *a*, or their equivalent, sitting around the piston rod *E* and compressed against it, and the conical cap *F*, preferably by the action of steam for the purpose of making a steam tight joint around the said piston rod *E*; 2nd. The tubular sleeve *E* provided with the conical cap *F* adjusted to extend through and admit of a radial movement within the plate *C*; 3rd. The combination with plate *C* sleeve *E* provided with the conical cap *F* and collar *H* of the ring *G* fitted around the said sleeve *E* between the collar and plate. 4th. The combination with the cap *F* and plate *C* and *J* of the springs *K*.

No. 6752. Buggy Spring Coupling and Support.

(Ajustage et support des ressorts de bugleys.)

John McBride Strathroy, Ont., 9th November, 1876, for 5 years.

Claim.—The combination of the iron clips *F F* attached to the axle and head block at the junction of the reaches *D D* with the axle, and head block having arms extending along the reaches and rivetted thereto with sockets or eyes at *C* in the arm of each clip for the insertion of the bar *B B* in such manner that the bar rests transversely across the reaches *D D* between the axles, but contiguous thereto also the coupling of the conical springs to these bars when so placed or inserted and resting as aforesaid on the reaches *D D*.

No. 6753. Improvement in the Moulds and Manufacture of Glass Lamps.

(Perfectionnement dans les moules et dans la fabrication des lampes de verre.)

Hiram Dillaway, Sandwich, Mass., U. S., 9th November, 1876, for 5 years.

Claim.—1st. The moulded article or lamp bowl provided with the stellated waste oil interceptor and having such the neck and the remainder formed in and by a mould and the lower or cylindrical portion subsequently contracted and closed, and fixed to a peg or foot; 2nd. The mould composed of the series of sections *D*, the parts *E* and *I* the tubular cylindrical portion *F* and the plunger *G*; 3rd. The process of making the said article or lamp bowl, such consisting in forming its neck and body parts in a mould and open, and subsequently heating and contracting or closing the cylindrical open part *d* of the blank and fixing to it a peg or foot; 4th. The combination of the projections *p* and *q* with the plunger *G*, the parts *E* and *I*, the tubular portion *F* and the series of sections *D*.

No. 6754. Window Sash Fastener.

(Arrête-croisette de fenêtre.)

Elbert Stannard, West Brook, Ct U. S. 10th November, 1876, for 5 years.

Claim.—1st. The combination with the vibrating prop *D* having spurs *e* above and below its pivot and arranged in line with and adapted to form a part of the parting strip of the holder or seat plate recessed into the window frame in line with said strip and provided with grooves *e* to engage with said spurs; 2nd. The combination with the parting strip sections and the parting strip groove of the sash holder consisting of the pivoted prop *D* and its holder or seat plate *E* notched at the ends extending into said groove and engaging with said sections; 3rd. The combination with the seat plate *E* and its pivoted prop of the recessed sash plate *K* having an offset *z*.

No. 6755. Improvement in Shafting Couplings.

(Perfectionnement dans l'accouplement des arbres.)

Robert Poole, Baltimore, Md. U. S. 14th November 1876 for 5 years.

Claim.—The combination of the grooved shafting the elliptic tapering split sleeve enveloping the key carried by said sleeve and the clamping nuts working on the inclined surfaces of the sleeve.

No. 6756. Manufacture of Illuminating Gas.

(Fabrication du gaz d'éclairage.)

Myron H. Strong, Brooklyn, N. Y., U. S., 14th November, 1876, for 5 years.

Claim.—1st. The combined process of making non-luminous gas and alternately heating the retort for again making the gas by admitting into the retort coal dust or similar carbonaceous material and reheating the retort by the combustion of the coke of the carbon; 2nd. In combination with the process of manufacturing illuminating gas by passing non-luminous gas through highly heated carbon the process of making such non-luminous gas from pulverized carbon introduced in steam into a highly heated retort in the presence of steam; 3rd. The process of making gas by admitting steam into the retort while coal dust or other pulverized carbonaceous material is being fed thereto in combination with the process of reheating the retort by the combustion of the additional carbon which is introduced, thereto; 4th. A retort, a steam supply a contiguous supply of coal dust and a second supply of coal dust near the end of the retort from which the gas escapes, whereby the coal dust exposed to the highest heat in the presence of steam is decomposed to form non-luminous gas, and this is brought into contact with the second supply of carbon to enrich or carburize such non-luminous gas.

No. 6757. Improvements in Rudder Supporters.

(Perfectionnements aux supports des gouvernails.)

Frank S. Manton, Providence, R. I. U. S., 14th November, 1876, for 5 years.

Claim.—1st. In combination with the rudder post *a* of the circular plates *b* and *c* provided with grooves and with the anti-friction balls or their equivalent; 2nd. The plates *b* and *c* made in two parts and provided with the anti-friction device.

No. 6758. Shaft Coupling.

(Accouplement des arbres.)

Asa B. Cook, Erie, Pa., U. S., 14th November, 1876, for 5 years.

Claim.—The screw threaded nut *C* having the interior ring or flange *e* in combination with a screw threaded hub *A* and split taper sleeve *B*.

No. 6759. Furnace Grate.

(Grille de fourneau.)

Jesse Reynolds, Philadelphia, Pa., U. S., 14th November, 1876, for 5 years.

Claim.—1st. The combination of rock shafts *H* provided with bars *h*, said bars being so arranged on the shafts as to form teeth for crushing and grinding the cinders as the said shafts are rocked simultaneously and in the same direction; 2nd. The rock shafts *H* provided with bars *h* having ribs *i*; 3rd. The combination of the bars *h* with rock shafts *H* elongated; 4th. The combination of the series of rock shafts *H* and their bars with the frame *G*; *G* and *G*; formed in two sections joined together; 5th. The combination of the frame and its rock shafts with the supporting rollers *a* to permit the withdrawal of said frame; 6th. The combination of the frame and its rock shafts with the leages *p* on the sides and rear of the fire place.

No. 6760. Spring Bed Bottom.

(Fond de lit à ressorts.)

Thomas DeWitt, Chatham, Ont., 14th November, 1876, for 5 years.

Claim.—The combination of the block *C C* with the slats *D D*.

No. 6761. Lamp Post.

(Poteau de réverbère.)

William DeLany, Cobourg, Ont., 14th November, 1876, for 5 years.

Claim.—The combination in a skeleton post of bars and rings and the method of keeping the bars in position by means of the inner and outer rings.

No. 6762. Saw Mill Dog.

(Clamau de scierie.)

Alfred Mephram, Fayette, Ohio, U. S., 14th November, 1876, for 5 years.

Claim.—1st. The block *C*, adjustable log dog *H*, cranked pinion *I*, ratchet lever *K*, ratchet wheel *J* and toothed standard *A*; 2nd. The block *D*, adjustable plank dog *N* and bars *O P* combined with the block *C* and standard *A*.

No. 6763. Brewery Plant.

(Materiel de brasserie.)

Andrew B. Walker, Liverpool, Eng., 14th November, 1876, for 5 years.

Claim.—The construction and application of the peculiar forms of tubular screws and others, and also their various modes of action, namely: rotary, reciprocating, jolting, shaking, jumbling and circular motions; the application of the above to the various processes used and purposes.

No. 6764. Improvements in Reed Organs.

(Perfectionnements aux orgues à anches.)

James S. Robinson, North East, P. U. S., 14th November, 1876, for 5 years.

Claim.—1st. In combination with an actuating device a series of cams or inclines arranged on one bar or shaft to operate the mutes or stops of an organ; 2nd. In combination with the mutes of an organ a bar or shaft provided with cams or inclines for operating said mutes by a movement of said bar or shaft; 3rd. In combination with a rotating shaft with cams the rack and pinion *G J*; 4th. In combination with the sliding rack *G* with kurr push *G*, the jointed ratchet bar *H*; 5th. In combination with the sliding frame *G* and cam bar or shaft *J*, the spring *T* for giving a return motion to the same; 6th. In combination with the mutes *F*, the registers *D* within the name board *C* for indicating the position of said mutes; 7th. A combination with the main board *C* of an organ the mute register *D* in combination with the name board *C* and the *L* shaped slot through which passes the stop actuating levers *S Q* or its equivalent; 9th. A jointed or springing stop actuating lever in combination with a cast *slot L*, or its equivalent, in the name board *C* of an organ; 10th. The combination of the key *K* and name plate *V* placed on the name board *C* for indicating the position of the stop; 11th. The combination of the treadle *N*, sub treadle *N'*, with the sustaining bars *L* for adjusting the said treadle to various heights; 12th. In combination with the pedal part *P* of an organ case the sliding curtain board *O*; 13th. The adjustable treadle *N* and sub treadle *N'* in combination with the exhaust *V* of an organ; 14th. In combination with an organ the swinging and adjustable lamp bracket; 15th. The lamp sustaining bracket for organs composed of the adjustable attaching bracket, jointed arm and lamp receiver; 16th. The register name plate *M* made with attaching stem with eye, *m* for securing the same in place; 17th. An organ treadle *N* made with a reversible carpet *n*.

No. 6765. Improvements on Chairs and Seats.

(Perfectionnements aux chaises et aux sièges.)

Thomas Testevin, Council Bluffs, Iowa U. S., 14th November, 1876, for 5 years.

Claim.—1st. A fabric for chair seats and other purposes composed of a spring wire warp *a* and fibrous web woven together; 2nd. The combination with a seat frame of a back supporting frame having elastic side pieces *d d*; 3rd. The combination with a seat frame and a spring back frame attached thereto, of a spring supported *spring* and seat bottom; 4th. The combination with a seat frame of the vertically adjustable suspended seat *E*; 5th. The combination with a suspended seat *E* and a flexible back covering said seat and attached thereto at the rear edge of an adjusting roller *D* adapted to be locked against backward rotation; 6th. The combination with the flexible and adjustable seat back *E* of the end wise movable sheathed springs *L*; 7th. The combination of the segment rack *b*, elastic back *d* and bearing loops *b'* for adjusting and retaining

the back frame C at any desired inclination; 8th. The combination with the suspended swaying seat E of a stay G for holding it stationary; 9th. The combination with the suspended seat bottom D and flexible seat back E of the springs F and angular rear supporting springs S; 10th. The combination with a flexible seat bottom and back of the springs S connecting the same; 11th. The combination with a flexible vertically adjustable seat bottom L of the concave central brace C between uprights A; 12th. The sectional suspension spring S consisting of a hooked section K and a bent and perforated section E, the latter being arranged in a recess in the chair arm and secured in position by the stop bolt J; 13th. The combination with the seat frame of the back support having elastic side pieces, the flexible web constituting said back and connected with the seat L, said seat being suspended by springs from the arm pieces; 14th. A chair seat suspended within the seat frame by springs and by a flexible webbing, the latter forming the back support by means of which universal horizontal motion is secured.

No. 6766. Table Bedstead. (*Table-couchette.*)

Emerick Kiss, New York, U. S. 14th November 1876, for 5 years.

Claim.—1st. A table bedstead in which is combined the stationary head frame A a series of independent sections C hinged together and to the head frame, the hinged foot board D the sectional hinged rails H B; and the table leaf I hinged near the upper end of the head part A of the head frame A; 2nd. The combination of the stationary head frame A series of hinged sections C hinged foot board D braces F having slots c and the studs d on one of the sections C; 3rd. The stationary frame in connection with the sectional side rails H B hinged together and to the head frame and the series of hinged sections C and hinged foot board D; 4th. The combination with the table leaf I and head frame A of the hook and staple A I or their equivalent devices for retaining the leaf in an elevated position.

No. 6767. Bush Cutting Implement.

(*Outil pour abattre les arbres.*)

Oliver Pickering Needham Mass U. S. 14th November 1876, for 5 years.

Claim.—An improved bush cutting implement formed of the recessed and flanged back plate A made with a V-rim in the bottom of its recess, the face plate B and the cutters C made with V shaped forward ends and V-shaped cross grooves upon their rear sides.

No. 6768. Turbine Water Wheel.

(*Roue-turbine hydraulique.*)

Anna G. Wagner, (wife of Asbert H Wagner) Chicago Ill U. S. 14th November, 1876, for 15 years.

Claim.—1st. The water wheel proper with a concave periphery having its projecting upper and lower rims in the same vertical plane, and a horizontal annular flange arranged midway between said rims and partially dividing the concavity in the wheel into two equal parts with a contracted water way between them; 2nd. A two part water wheel bucket with a curved top back and bottom, an inclined upper portion a vertical lower portion and a horizontal twist or bent between the upper and lower portions; 3rd. The combination of the horizontal concave faced wheel, its annular dividing flange and the two part buckets having their upper portions inclined to the axis of the wheel and radial thereto, and their lower portions for the greater part vertical and tangential to the axis; 4th. The combination of the wheel casing having a vertical face or periphery, the double chutes therein, the partitions between the chutes, the series of swinging gates pivoted in the double chutes and formed to correspond with the partitions separating the chutes, and the buckets, whereby each gate controls a two part or double chute and regulates the admission of water to two buckets; 5th. The combination of the casing having an annular vertical face or periphery the chutes therein the series of pivoted gates, the gate regulating ring the arms connecting the gates and regulating ring, and the adjusting bolts or pivots working in the connecting arms; 6th. In the combination of the casing, the regulating ring, the operating shaft adjustably connected therewith, the swinging gates and the independently adjustable connections between the gates and the regulating ring, whereby the gates are rendered both independently and simultaneously adjustable; 7th. The combination of the casing having a vertical face or periphery a flange a and an internal shoulder a and the wheel having a concave periphery, an upper rim bearing against the internal shoulder of the casing and a central annular flange bearing against the aforesaid flange of the casing.

No. 6769. Process and Apparatus for Converting Nitrogenous Substances into a Fertilizer.

(*Procédé et appareil pour convertir les substances nitrogenées en engrais.*)

Henri O. P. Lassargay, Pantin, France, 14th November, 1876, for 5 years.

Claim.—1st. The process for converting nitrogenous substances into a fertilizer consisting essentially in steeping such substances in a diluted sulphuric acid bath holding in solution a sulphate or other mineral salt in the proportion or about the proportions described, then partially drying the material and finally subjecting it to the action of heat; 2nd. The apparatus consisting essentially of the chambers C D and flue B, each provided with suitable apertures c d and dampers c d in combination with the steam pipes B B; the pipes i i fan I, chest K and pipe k; and a steam generator and superheater; 3rd. The chamber D having a perforated false bottom or diaphragm E, inlet and outlet apertures F and a tramway or track e in combination with the chamber C, and the steam pipes B B and the pipe M; 4th. The chamber D provided with a diaphragm or partition H having apertures h and dampers h, in combination with the pipes i i and fan I; 5th. The chamber D having diaphragm H provided with apertures and dampers h h, the fan I and pipes i i in combination with the chest K having thermometer L, and the pipes k; having a suitable valve; 6th. The combination of the chambers C D with a generator of chlorine; 7th. The combination of the chambers C D and flue B, the steam pipes B B and the furnace of a generator with the aperture B3 and dampers b3 and an exhaust fan.

No. 6770. Apparatus for Generating, and Engine for utilizing, a motive Gas obtained from Water.

(*Appareil à produire et machine pour utiliser le gaz à l'eau.*)

Robert D. Bradley, Preston, Md., U. S., 14th November, 1876, for 5 years.

Claim.—1st. The process for producing the intensely energetic non-condensing, non explosive gas from water, by mechanically disintegrating the same by forcing in through minute perforations which are of a size too small to permit the formation of drops and the assuming of the spheroidal state and injecting it in this condition against the heated surface of a generating cell. 2nd. The generating cells B1 constructed of strong material arranged radially and communicating with a central compound chamber, in combination with the water B2 passing through compound chamber B and having radial branches or glands b1 entering the generators and terminating in bulbs provided with minute perforations, 3rd. The generator cells B1, compound chamber B and the contained water pipe B2 with glands b1 in combination with a series of superposed intensifier cells C connected with chamber B through pipes b3 and communicating with each other through perforated diaphragms c. 4th. The air tight chamber A having a hollow base and containing the generators and furnace, in combination with the air-pipe I having cock D and the smoke pipe H communicating with the furnace above and hollow base below; 5th. The combination with the case A having a hollow base of the waste pipe G coiled about the generators and leading through the hollow base to the furnace; 6th. The combination with the case having a hollow base and an air pipe I and smoke pipe H communicating therewith, of the waste pipe G leading through the hollow base to the furnace and adapted to feed the air and smoke to the same by induction; 7th. The combination with a set of pistons, of a case or block containing cylinders arranged and connected by valves and ports so as to permit the motive fluid to operate consecutively on the smallest area of pressure and expansively upon the largest for the return stroke; 8th. The combination with a set of stationary pistons having ports for the induction and discharge of the motive fluid, of a reciprocating case containing cylinders corresponding to the pistons arranged for the different areas of pressure for the different strokes and connected by a valve and ports; 9th. The stationary pistons L1 having discharge ports b and the stationary piston L2 having the induction ports I, in combination with the heart-shaped block M having cylinders M1 M2 arranged and connected by valve I through t; 10th. In reciprocating case containing three or more cylinders arranged with different areas of pressure for the different movements and connected by ports, in combination with the plug valve I having a projecting arm and the stationary tappets t1 t2 for the purpose of effecting a communication between the cylinders; 11th. The reciprocating case M carrying the cylinders and the stationary pistons L1 L2 having the induction and discharge ports, in combination with the valves L1 L2 and the connecting rods p p1 p2 receiving motion from a lock shaft and eccentric or other suitable mechanism for imparting reciprocating motion; 12th. The combination with the crank shaft O and a pitman N of the reciprocating heart-shaped block M moving upon its stationary pistons as guides and having a cross head pin m; 13th. The stationary solid pistons having central induction and discharge ports with controlling valves.

No. 6771. Tack Machine. (*Machine à broquette.*)

Charles P. Weaver Norristown, Pa. U. S. 14th November 1876, for 5 years.

Claim.—The combination with a handle lever pivoted in front, of pivoted strap B, are bar C having slotted chord C and the pin D fitting loosely in sockets a c and passing through middle of are-bar.

No. 6772. Improvements on Reaping Machines. (*Perfectionnements aux faucheuses.*)

David Maxwell, Paris, Ont., 14th November, 1876, for 5 years.

Claim.—1st. The combined use of the wood portion a and the cast iron portion A in constructing the main frame of the machine, and the manner in which the pipe box h and box e are secured to it and of adjusting the box e by the set screw c; 2nd. The application and form of the hubs of the driving wheel C and spur wheel D, with the clutch teeth c1 and d on their contiguous surfaces; 3rd. The combination whereby the tilting of the machine is effected by means of the rocking bar I having castings keyed on each end, viz: to plate i is attached the tongue J and to the bracket K, the lever L for tilting the machine, the rocking bar I acts as a hinge joint betwixt tongue J and frame A of machine, and also by the rocking movement by means of the tilting lever, it answers as a medium by which the guards are raised or lowered to pass over obstructions or take up lodged grain; 4th. The position and mode of attaching the tongue J and the brace K to main frame A; 5th. The manner in which the finger beam S is attached to the main frame A by the wrought iron bracket P Q R being bolted to the finger beam S, rod P passing up through lug n cast on main frame A; 6th. The combination of the driving wheel C and spur wheel D on slip key b1 with coupling lever s, spring latch s1 and notch m; 7th. The combination and arrangement of the whole.

No. 6773. Artificial Stone. (*Pierre factice.*)

Llewellyn L. Leathers, Oakland, Cal., U. S., 16th November, 1876, for 5 years.

Claim.—1st. The process for making a saponaceous mixture or solution; 2nd. An artificial stone composed of sand and cement moistened with a saponaceous mixture or solution before tamping, in about the proportions named.

No. 6774. Improvements on Grinding and Pulverizing Machines.

(*Perfectionnements aux machines à mouler et triturer.*)

Jerome J. Webster, Magog, Que., 16th November, 1876 (extension of Patent No. 1224) for 5 years.

Claim.—1st. The novel combination of the frame a, bed d, plunger blocks c, discs d, cylinder e, shaft f, strap g, pulley h, superflcies h1, wheel i, supplement k, feed pipe l, discharge pipe o and door p with or without projections m and n; 2nd. The novel combination of the discs d, cylinder e, shaft f, wheel i, superflcies h1, supplement k, pipes l and o with or without projections m and n.

No. 6775. Improvements on Lamp Wicks and Burners.*(Perfectionnements aux mèches et aux becs de lampes.)*

Henry C. Scott, Clinton, Ont., 20th November, 1876, for 5 years.

Claim.—1st. A stationary lamp wick composed of an upper asbestos section E and a lower section D of common wicking, in combination with a stationary wick tube a, section of the flame protecting plate and a regulating slide b fitted around and moving upon the outside of the tube. 2nd. The combination of the stationary wick tube a, regulating slide b and stop disc G attached to the lower end of the slide. 3rd. The perforated or wire gauze flame protector constructed in two sections, one of which is movable vertically; 4th. The combination of the cone C and the annular section of wire gauze or perforated plate c attached to the bars of said cone; 5th. The combination of the cone C, sections of wire gauze or perforated plate 1 and c and slide G.

No. 6776. Machine for Punching and Shearing Metal. *(Machine u poinçonner et découper le métal.)*

Isaac S. Van Winkle, San Francisco, Cal., U. S., 20th November, 1876, for 10 years.

Claim.—1st. The swinging head piece A carrying a punch C and cutter D and operated by the cam gear J K, 2nd. The weighted handle P in combination with the shaft e, cam gears J K and swinging head piece.

No. 6777. Milk Safe and Refrigerator. *(Garde-lait réfrigérant.)*

Joseph F. Pool, Monroe, Wis., U. S., 20th November, 1876, for 5 years.

Claim.—1st. The solid shelf G constructed to conform snugly to the internal shape of the safe, in combination with door A, provided with rib a; 2nd. The central shaft E, solid stationary shelf G, revolving shelves G' G', ribs a a' and doors A' and H, all arranged to form a combined milk safe and refrigerator.

No. 6778. Steam Feather, Hair and Moss Renovator.*(Machine à rafraîchir la plume, le crin et la mousse par la vapeur.)*

Andrew Munroe, Lindsay, Ont., 20th November, 1876, for 5 years.

Claim.—1st. The combination of the wooden frame or stand a, supporting renovating box C. 2nd. The combination of the steam pipe B as it rests in notches in wooden frame or stand o supporting renovating box C as an axle on which it turns, also having under side perforations opening into open space T. 3rd. The combination of the half circle renovating box C with wooden frame or stand O, 4th. The combination of the buttons D D keeping steam pipe B in its place in wooden frame or stand O, 5th. The combination of the hooks G G holding up and fastening renovating box C to wooden frame or stand O; 6th. The combination of the fan L with axle H running through its middle and fan, also running horizontally through renovating box C.

No. 6779. Improvements in Carriages.*(Perfectionnements dans les voitures.)*

John Eakot, Paslinch, Ont., 20th November, 1876, for 5 years.

Claim.—A tail board spring fastener for vehicles composed of the angle plate M having opening E and pivoted spring catch L notched and inclined to one end and provided with lifting handle D, and the catch G having an inclined shoulder to engage with catch L.

No. 6780. Carriage Reach. *(Flèche de voiture.)*

Robert Menary, Orangeville, Ont., 20th November, 1876, for 5 years.

Claim.—The parallel reaches E having branches F respectively clipped to the lower and upper sides of rear axle A and bent ends clipped to the head block C, and brace bar J secured to the reaches E and pivoting on the king bolt at the under side of the front axle B, the whole coupling the front and rear axles.

No. 6781. Improvements on Military Accoutrements.*(Perfectionnements aux équipements militaires.)*

William S. Oliver, Halifax, N. S., 20th November, 1876, for 5 years.

Claim.—1st. The combination of the magazine brace and kit brace detachably connected; 2nd. The combination of the magazine brace, the kit brace and the magazine bag transferable from the shoulders to the loins and adapted to be applied by either brace, 3rd. The magazine brace, 4th. The kit brace provided at its centre part with metal eyes or loops, 5th. The magazine brace and kit brace in combination with the magazine bag and kit bag provided with hooks and adapted to engage the braces, 6th. The combination of the waist belt, the magazine brace, the kit brace, magazine bag and the kit bag; 7th. A set of accoutrements comprising a kit brace and bag, a waist belt and a coat yoke. 8th. The magazine bag provided with shiftable hooks. 9th. The magazine bag or the kit bag, 10th. The magazine brace combined with cavalry cartridge or ammunition pouches, 11th. The coat yoke constructed and provided with hooks. 12th. The canteen strap, 13th. The water bottle cup and water bottle strap arranged and adapted for application to the waist belt.

No. 6782. Improvements on Brushes.*(Perfectionnements aux pinceaux.)*

John L. Whiting, Boston, Mass., U. S., 20th November, 1876, for 5 years.

Claim.—The combination with the tapering handle a a' of the butt b with its projections c c c and the ferrule e.

No. 6783. Improvements in Sofa Bedsteads.*(Perfectionnements aux sofas.)*

Henry F. Hover, Philadelphia, Pa., U. S., (Assignee of James K. Stockton and Milo L. Stockton), 20th November, 1876, for 5 years.

Claim.—1st. A sofa bedstead or lounge bed having a reversible seat, the automatic head mattress D, 2nd. The combination in a bed lounge of the seat B, revolving mattress D, arranged and operating in combination with each other.

No. 6784. Improvements on Bath Tubs.*(Perfectionnements aux baignoires.)*

Charles A. Blessing, Philadelphia, Pa., U. S., 20th November, 1876, for 10 years.

Claim.—1st. The combination with the water supply and waste pipes of a bath tub and supply cock of a siphon-shaped overflow pipe connected with the supply and waste pipe, 2nd. The combination with the water inlet pipe, hot and cold water supply pipes and waste pipe of a bath tub, of a single cock for admitting hot or cold water separately or together into the tub and to discharge the same into the waste pipe, 3rd. The combination with a shower bath pipe and pipes for admitting hot and cold water into the shower pipe of a single cock for permitting a simultaneous flow of water from the tub and into the shower pipe, 4th. The combination with a bath tub having recesses formed in its lining of a removable seat and suitable retaining device therefor.

Lists of Patents issued up to 18th Dec., 1876, but not yet Officially published in the Patent Office Record.

No. 6785 J. Man, Montreal, Que., "Washing Machine," 20th November, 1876.

No. 6786. T. Hoeltge & A. Hoeltge, Cincinnati, Ohio, U. S. A., "Sheet metal Elbow," 20th November, 1876.

No. 6787. W. W. Bartlett, Portland, Me., U. S. A., "Spring Bed Bottom," 20th November, 1876.

No. 6788. W. R. Landfear, Brooklyn, N. Y., U. S. A., "Latho for Turning Spool," 20th November, 1876.

No. 6789. W. R. Smith, (assignee of G. A. Blodget), Elmira, N. Y., U. S. A., "Screen Holder," 20th November, 1876.

No. 6790. C. T. Arnould, Titusville, Pa., U. S. A., "Rail Joint," 20th November, 1876.

No. 6791. A. French, Philadelphia, Pa., U. S. A., "Lamps and Vessel Connection," 20th November, 1876.

No. 6792. T. T. Prosser, Chicago, Ill., U. S. A., "Machine for Indenting the Surface of Wire," 20th November, 1876.

No. 6793. G. Brougham, Chicago, Ill., U. S. A., "Meat Can," 20th November, 1876.

No. 6794. A. O'Neill, Baltimore, Md., U. S. A., "Pipe Joints," 20th November, 1876.

No. 6795. J. S. Pessinger, Birmingham, Cl., U. S. A., and G. W. Pessinger, Brooklyn, N. Y., U. S. A., "Elliptic Spring Fitting Machine," 20th November, 1876.

No. 6796. T. Whitwell, South-Stockton, Eng., "Blast Furnace," 20th November, 1876.

No. 6797. H. Platts, Ithaca, N. Y., U. S. A., and T. G. Taylor, Toronto, Ont., "Billiard Cue and Tip," 20th November, 1876.

No. 6898. J. Popham and E. Popham, Montreal, Que., "Steam Peg Breaker," 20th November, 1876.

No. 6799. S. McCannon, Gannanque, Ont., "Artificial Stone," 20th November, 1876.

No. 6800. A. O'Neill, Baltimore, Md., U. S. A., "Mode of Constructing and Laying Pipe," 20th November, 1876.

No. 6801. J. M. Laughlin, Boston, Mass., U. S. A., "Horse Shoe Nail Machine," 20th November, 1876.

No. 6802. G. H. Spencer, Jersey N. J., U. S. A., "Spring Attachment for Vehicles," 20th November, 1876.

No. 6803. E. B. Regna, Jersey, N. J., U. S. A., "Valved Nozzle for Bottle Stoppers," 24th November, 1876.

No. 6804. H. M. Pierce, Detroit, Mich., U. S. A., "Process for Obtaining Pyroigneous Acetic Acid," 24th November, 1876.

No. 6805. W. T. Lake, Picton, Ont., "Fluid for Hardening, Toughening and Refining Iron," 24th November, 1876.

No. 6806. J. Cairns, P. Cairns and G. Cairns, Barro, Ont., "Fanning Mill," 24th November, 1876.

No. 6807. C. N. Fisher, Willis, Texas, U. S. A., "Brick Machine," 24th November, 1876.

No. 6808. J. S. Bogle, Springfield, Ohio, U. S. A., "Spring Hoe," 24th November, 1876.

No. 6809. H. R. Ferris, Cleveland, Ohio, U. S. A., "Hand Truck," 24th November, 1876.

- No. 6810. C. Votli, Newark, N. J., U. S. A., "Shado Holder for Lamp," 24th November, 1876.
- No. 6811. M. W. Parrish, Jackson, Mich., U. S. A., "Gravity Battery," 24th November, 1876.
- No. 6812. E. M. Mallett, Westville, Mich., U. S. A., and J. Stuart, Stanton, Mich., U. S. A., "Steam Wash Boiler," 24th November, 1876.
- No. 6813. M. Côté, Sherbrooke, Que., "Machine for Cleaning Cutlery," 24th November, 1876.
- No. 6814. J. Dwyer, Detroit, Mich., U. S. A., "Oven Attachment for Stoves," 24th November, 1876.
- No. 6815. W. Adamson, Philadelphia, Pa., U. S. A., "Process for Treating Substances with Hydrocarbon," 24th November, 1876.
- No. 6816. R. Barclay, Paris, Ont., "Escapement," 24th November, 1876.
- No. 6817. J. S. Guthrie, London, Ont., "Corset," 24th November, 1876.
- No. 6818. J. Bradley, Washington, U. S. A., "Apparatus for Emptying Privy Vaults, &c.," 24th November, 1876.
- No. 6819. A. Steele, Lobo, Ont., "Potato Washing Machine," 24th November, 1876.
- No. 6820. A. W. Comstock, Mount Pleasant, Iowa, U. S. A., "Punching and Shearing Machine," 24th November, 1876.
- No. 6821. J. G. Mole, Batavia, Ill., U. S. A., "Wire Fence," 24th November, 1876.
- No. 6822. T. S. Seabury, St. James, N. Y., U. S. A., "Wire Fence," 24th November, 1876.
- No. 6823. N. Mercier, Montreal, Que., "Ointment," (extension of Patent No. 1235), 24th November, 1876.
- No. 6824. W. Gillilan and J. A. Jones, (assignees of J. K. Gillilan), Syracuse, N. Y., U. S. A., "Door Spring and Hinge," 30th November, 1876.
- No. 6825. W. H. Landon, Princeton, Ont., "Stove," (extension of Patent No. 1239), 2nd December, 1876.
- No. 6826. D. A. Ritchie, Charlestown, Mass., U. S. A., "Metallic Pipe," (extension of Patent No. 2061), 2nd December, 1876.
- No. 6827. H. C. Traphagen, New York, U. S. A., "Window Scaffold," 2nd December, 1876.
- No. 6828. S. G. Stryker, Elmira, N. Y., U. S. A., "Spring Gun," 2nd December, 1876.
- No. 6829. S. Warrick and G. S. Brush, Montreal, Que., "Steam Engine," 2nd December, 1876.
- No. 6830. J. G. Phillips, Bangor, N. Y., U. S. A., "Door Fastening," 2nd December, 1876.
- No. 6831. S. Bachand, Covansville, Que., "Dumping Waggon," 2nd December, 1876.
- No. 6832. G. Blair, Prescott, Ont., "Printing or Stereotyping Machine," 2nd December, 1876.
- No. 6833. J. E. Waterous, Brantford, Ont., "Improvement for Transmitting Power," 2nd December, 1876.
- No. 6834. A. Pelletier, Washington, U. S. A., "Street Pavement," 2nd December, 1876.
- No. 6835. R. Jacobi, Puebla, Mexico, "Safety Brake for Cars, Vehicles, &c.," 2nd December, 1876.
- No. 6836. J. Johnson, Waterloo, Ont., "Agricultural Harrow," 2nd December, 1876.
- No. 6837. O. Tomlinson, Bombay, East Indies, "Car Axle Box," 2nd December, 1876.
- No. 6838. S. Turner, Hamilton, Ont., "Swell Attachment for Pipe or Reed Organs with Pedal Keys," 2nd December, 1876.
- No. 6839. H. G. Creveling, Espy, Pa., U. S. A., (assignee of B. Edgar), "Ear Muffler," 2nd December, 1876.
- No. 6840. Wm. Turner, Mount Carmel, Ill., U. S. A., "Tonic Alternative Compound," 2nd December, 1876.
- No. 6841. G. H. Thomas and W. J. McMurty, Bowmanville, Ont., "Sewing Machine Shuttle," 2nd December, 1876.
- No. 6842. D. M. Lamb, London, Ont., "Oil Process," (re-issue), 4th December, 1876.
- No. 6843. J. Flight and P. C. Lake, Oswegatchie, N. Y., U. S. A., "Harrow," 12th December, 1876.
- No. 6844. J. M. Harper, El Paso, Ill., U. S. A., "Fly Trap," 12th December, 1876.
- No. 6845. A. Blood, Manchester, N. H., U. S. A., "Railway Car and Locomotive Truck Supports," 12th December, 1876.
- No. 6846. W. G. Garrison, Volga City, Iowa, U. S. A., "Tubular Heating Stove," 12th December, 1876.
- No. 6847. W. Rusk and G. Rusk, Paisley, Ont., "Force Pump," 12th December, 1876.
- No. 6848. H. I. Godfrey, Montreal, Que., "Improved Cheek Reel," 12th December, 1876.
- No. 6849. Jas. Arless, Montreal, Que., "Supplementary Flooring for Decks of Ships, &c.," 12th December, 1876.
- No. 6850. G. E. J. Hanwell, Belleville, Ont., K. S. Pithan, Brooklyn, N. Y., and R. F. M. Chase, New York, U. S. A., "Improved Gearing," 12th December, 1876.
- No. 6851. J. H. Hobbs, Wheeling, Va., U. S. A., "Glass Chandelier," 12th December, 1876.
- No. 6852. J. C. Clapp and T. Snell, Toronto, Ont., "Water Meter," 12th December, 1876.
- No. 6853. E. Chanteloup, Montreal, Que., "Hot Water Furnace," 12th December, 1876.
- No. 6854. T. H. Moore, Henthcote, Ont., "Waggon Brake," 12th December, 1876.
- No. 6855. J. W. Bent, Chicago, Ill., U. S. A., "Extension Table," 12th December, 1876.
- No. 6856. J. Arless, Montreal, Que., "Horse Stalls for Carrying Horses at Sea," 12th December, 1876.
- No. 6857. L. M. Crosby, Ashtabula, Ohio, U. S. A., "Wash Board," 12th December, 1876.
- No. 6858. J. Cochran, jr., Cornwallis, N. S., "Pump Bucket Packing," 12th December, 1876.
- No. 6859. G. W. Tucker, Waterbury, Ct., U. S. A., "Sleigh Bell," 12th December, 1876.
- No. 6860. J. Riddell, Pakenham, Ont., "Fanning Mill," 12th December, 1876.
- No. 6861. G. H. Johnson and C. G. Moulton, Erie, Pa., U. S. A., "Stove," 12th December, 1876.
- No. 6862. G. E. J. Hanwell, Belleville, Ont., G. Merrill, Newburyport, Mass., U. S. A., and R. T. M. Chase, New York, U. S. A., "Improved Valve or Damper," 12th December, 1876.
- No. 6863. S. Noxon, jr., Ingersoll, Ont., "Harvester," 12th December, 1876.
- No. 6864. C. W. Jones, Centreville, Mich., and S. A. and E. A. Jones, Sturgis, Mich., U. S. A., "Fruit Dryer," 12th December, 1876.
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- No. 6868. H. G. Ashton, (assignee of J. E. Maynadier), Boston, Mass., U. S. A., "Safety Valve," 12th December, 1876.
- No. 6869. A. Nobel, Paris, France, "Blasting Gelatine," 12th December, 1876.
- No. 6870. J. Foreman, South Cayuga, Ont., "Metallic Wheel Hub," 12th December, 1876.
- No. 6871. T. R. Barstow, Cleveland, Ohio, U. S. A., "Apparatus for Purifying Paraffine," 12th December, 1876.
- No. 6872. W. Jones, Guide Bridge, Eng., (Assignee of C. T. Powers Sheffield, Eng.), "Self-acting Thread Winder," 12th December, 1876.
- No. 6873. T. Hoyt, (Assignee of E. Hoyt), Stamford, Ct., U. S. A., "Chain Pump Ratchet," 12th December, 1876.
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- No. 6875. J. D. Mulrennan, Merriton, Ont., "Process for Facilitating Combustion in Furnaces of Boilers and Attachment for Applying the same," 12th December, 1876.
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- No. 6877. D. Herald, Gore's Landing, Ont., "Boat and Canoe Mould," (extension of Patent No. 1252), 12th December, 1876.
- No. 6878. C. S. Calvert, Philadelphia, Pa., U. S. A., "Whistle Tree Tree Fastening," 15th December, 1876.
- No. 6879. M. Soderberg, Lund, Sweden, and M. Armstrong, Jersey, N. J., U. S. A., "Process for Lining, Bating and Tanning Skins," 12th December, 1876.
- No. 6880. T. B. A. Royer de la Bastie, Chateau of Richemont, France, "Process for Tempering Glass," (re issue), 18th December, 1876.
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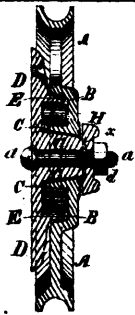
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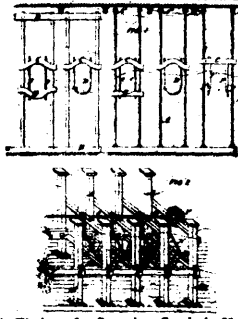
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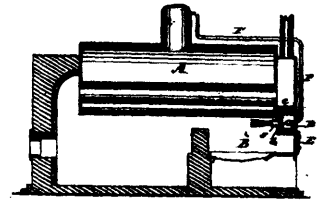
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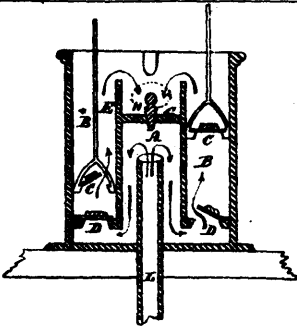
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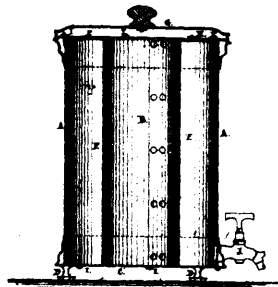
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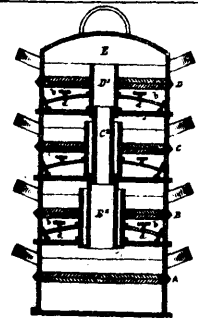
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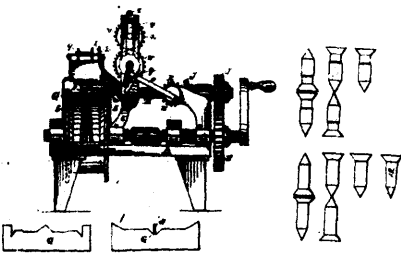
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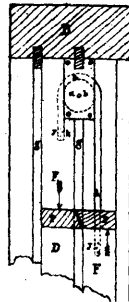
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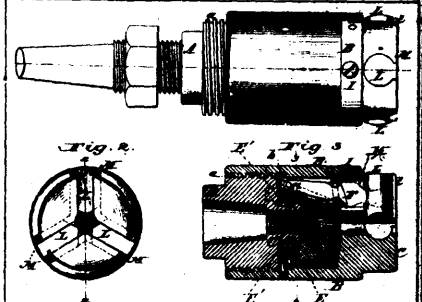
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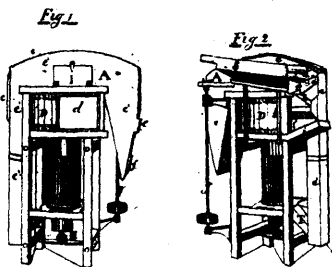
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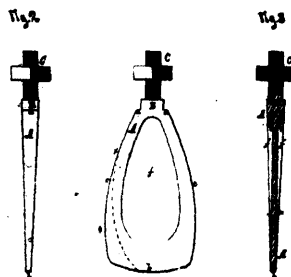
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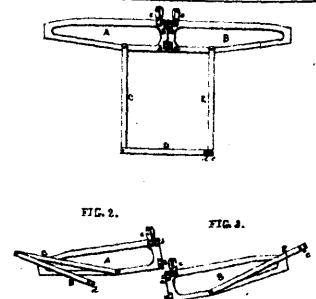
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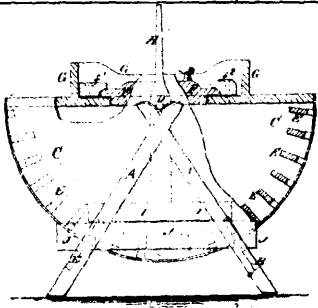
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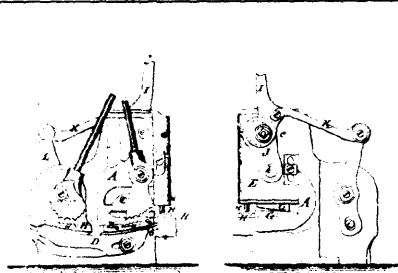
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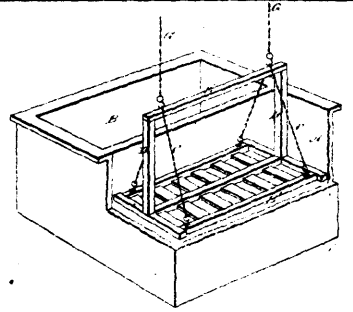
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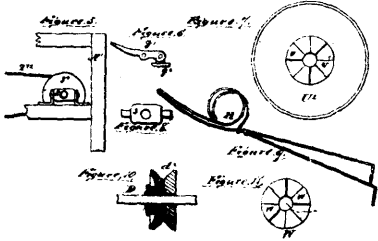
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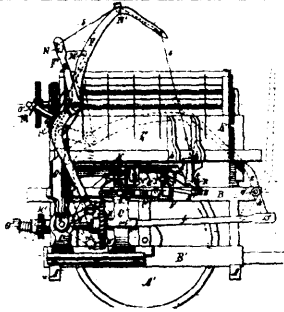
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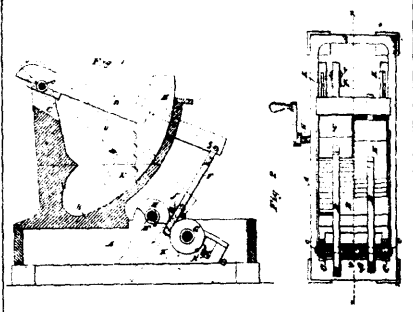
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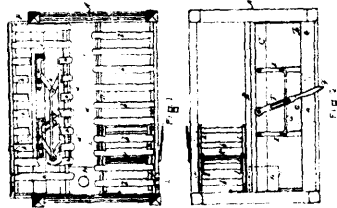
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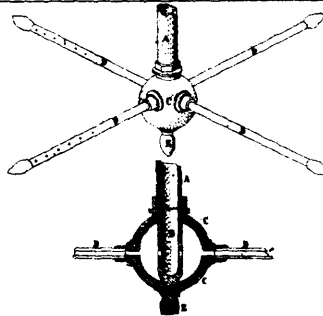
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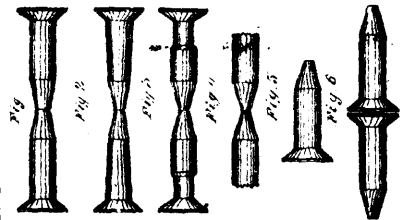
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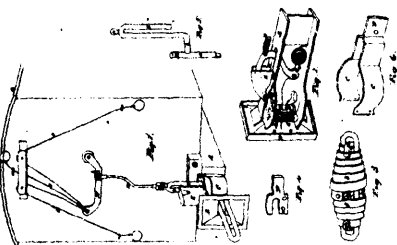
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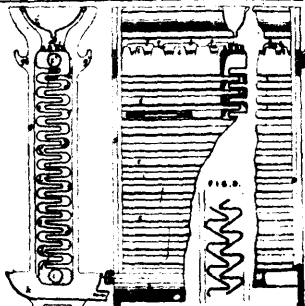
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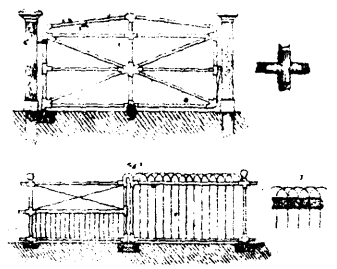
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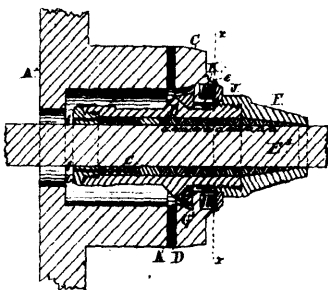
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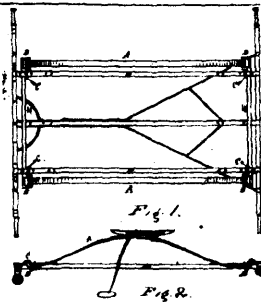
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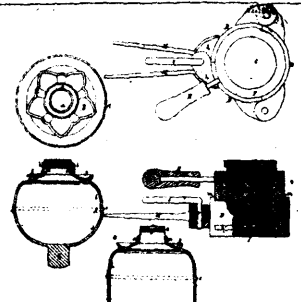
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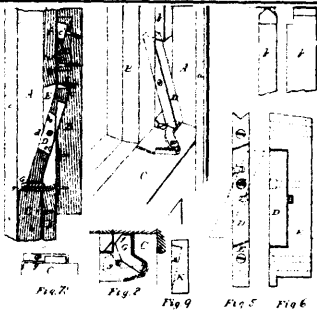
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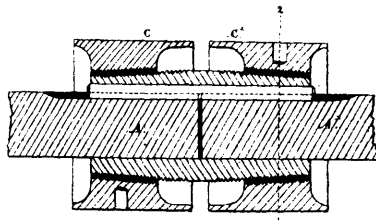
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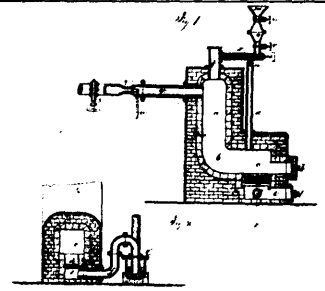
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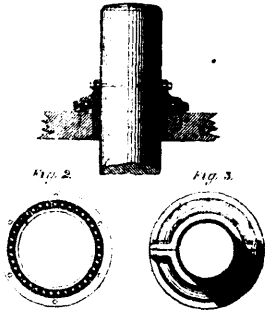
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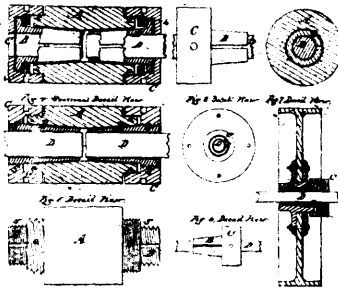
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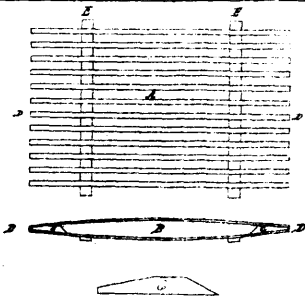
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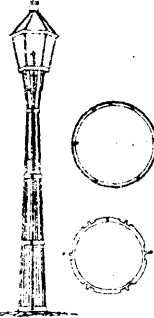
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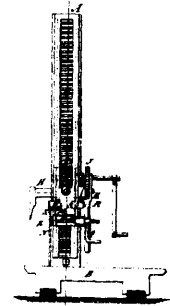
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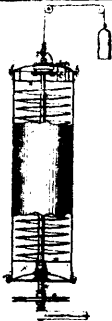
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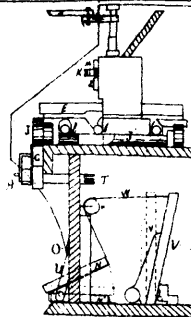
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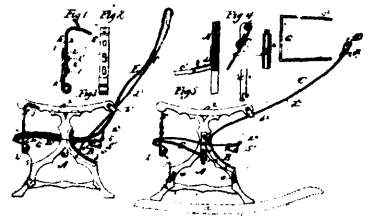
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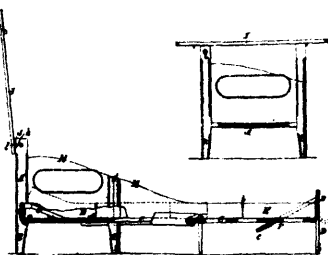
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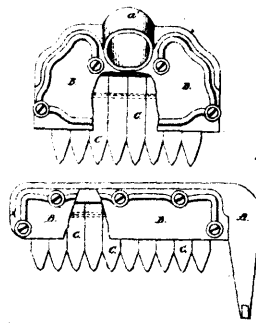
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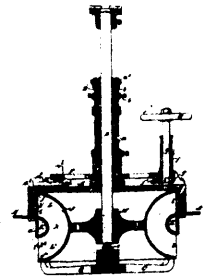
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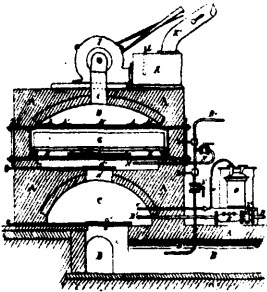
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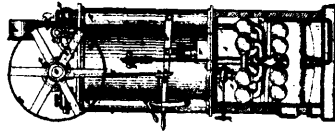
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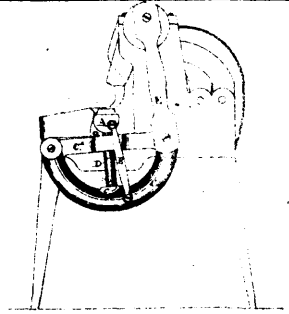
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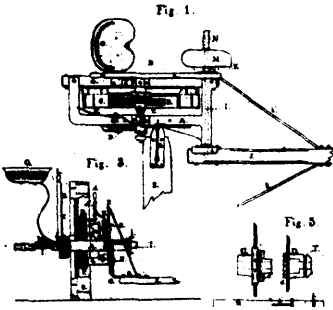
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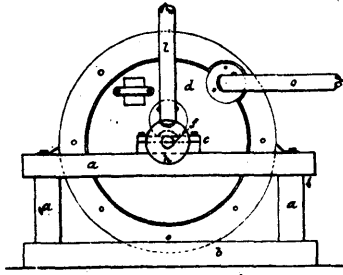
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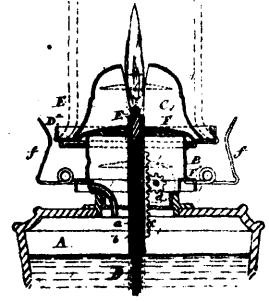
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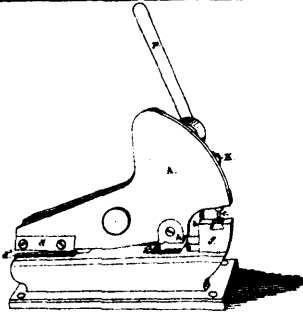
6772 Maxwell's Improvements on Reaping Machines.



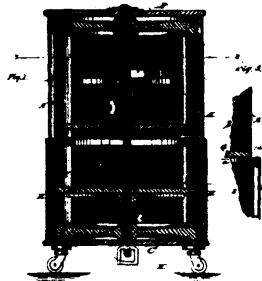
6774 Webster's Improvements on Grinding and Pulverizing Machines.



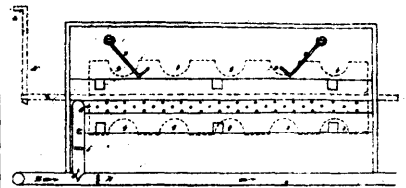
6775 Scott's Improvements on Lamp Wicks and Burners.



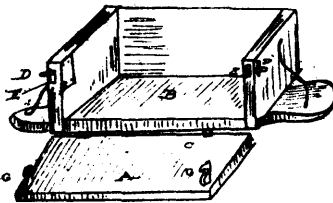
6776 Van Winkle's Machine for Punching and Shearing Metal.



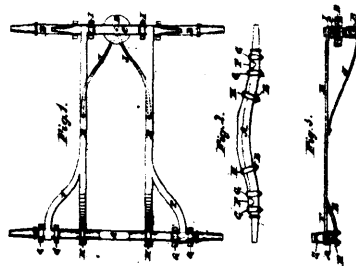
6777 Pool's Milk Safe and Refrigerator.



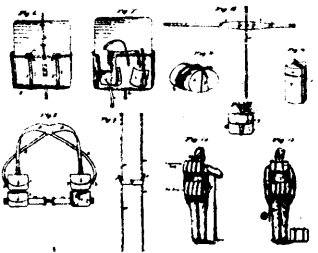
6778 Macroe's Steam, Feather, Hair and Moss Renovator.



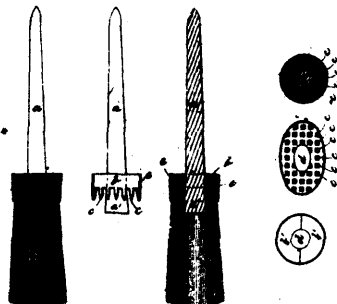
6779 Saket's Improvements in Carriages.



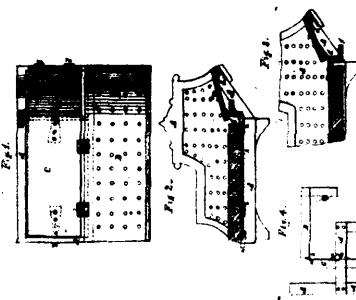
6780 Menary's Carriage Reach.



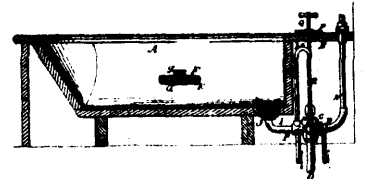
6781 Oliver's Improvements on Military Accoutrements.



6782 Whiting's Improvements on Brushes.



6783 Hover's Improvements in Sofa Bedsteads.



6784 Blessing's Improvements on Bath Tubs.