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# The Canadian Patent Office

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### INVENTIONS PATENTED.

#### No. 5719. Valve Indicator.

(Indicateur de soupape.)

John S. Wallace, Brettlund, Ohio, U. S., 21st February, 1876, for 5 years.

Claim.—The combination of the sliding rod A, pointer D, and indicator scale C, with a slide valve.

#### No. 5720. Machine for Stretching and tacking Carpets. (Machine à étendre et clouer les tapis.)

James W. Bradshaw and James A. Carnrike, Trenton, Ont., 21st February, 1876, for 5 years.

Claim.—The combination of the foot A, teeth B, handle C, tack tube D, spring tube E, hammer E, spring G, cord H, pulleys J, and J', hopper K, and india rubber band L.

#### No. 5721. Improvement in Harrows.

(Perfectionnement des herses.)

Addison H. Whiteside and Milton S. Whiteside, Onarga, Ill., U. S., 21st February, 1876, for 5 years.

Claim.—1st. A harrow tooth connected to the beam by a right angled arm at the upper end fitted in a hole oblique to the cross section of the beam; 2nd. The combination of the staple C, having the outward swell and rearward extension, with a harrow tooth connected with the beam by a right angled arm of the upper end in a hole oblique to the cross section.

#### No. 5722. Seed and Plaster Sower.

(Semoir à grain et à plâtre.)

James W. Gamble, Aylmer, Ont., 21st February, 1876, for 5 years.

Claim.—1st. The arrangement of lugs C, axle A, and seed box B, as a mode of attaching the seed box; 2nd. The shaker D, in combination with the seed box B; 3rd. In combination with the shaker D, the seed box B, the operating devices consisting of pitman rod K, crank J, shaft H, bevel wheel and pinion E, G, and traction wheel F; 4th. In combination with the seed box B, the frame M, roller N, chains Q, ratchet O, lever P, seat T, and chains S.

#### No. 5723. Improvements on Plough-clevises.

(Perfectionnements aux volées de charrues.)

John G. Miller, Fredericksburg, Va., U. S., 21st February, 1876, for 5 years.

Claim.—The combination of the adjustable notched clevis E, the adjustable tree clevis F, and the rod H, with each other, and with the beam and handles of a plough.

#### No. 5724. Shirt-front Board.

(Planche à devant de chemise.)

Henry Woodward, Toronto, Ont., 21st February, 1876, for 5 years.

Claim.—1st. The bosom board A, with neck B; 2nd. The binder frame C, C, with pins D, D, and springs d, d, for pressing upon the adjusting bar E; 3rd. The combination of the bosom board A, with binder frame C, C.

#### No. 5725. Improvements on Condensers and Heaters for Steam Engines.

(Perfectionnements aux condensateurs et aux bouilleurs des machines à vapeur.)

Franklin D. Cummer, Detroit, Mich., U. S., 21st February, 1876, for 5 years.

Claim.—1st. In a jet condenser the perforated saddle or its equivalent sliding upon or within the perforated injection pipe; 2nd. The valve P, in the perforated injection pipe E; 3rd. In a jet condenser and pump, the suction main B, extended to form a junction with the exhaust water pipe I, and the combination therewith of the stop valves C, and J; 4th. The combination with a jet condenser the feed water heater M, provided with the inclined diaphragm O, perforated injection pipe N, and eduction pipe N'; 5th. The enlargement or pocket d, in the top of the feed water eduction pipe N, communicating with the interior of the heater M, through one or more orifices e; 6th. In combination with a condenser, a pump having the lower end of its discharge pipe submerged.

#### No. 5726. Cheese-safe. (Garde-fromage.)

Frank Northrup and Robert A. Little, Detroit, Mich., U. S., 21st February, 1876, for 5 years.

Claim.—The rectangular cheese-safe with a folding door, the combination therewith of the turn-table C, pivoted therein.

#### No. 5727. Manufacture of Plumbers' Traps.

(Fabrication des outils de plombiers.)

Charles S. Watson and James Rose, Montreal, Que., 21st February, 1876, for 5 years.

Claim.—1st. The novel manufacture of plumbers traps in casting the part a, with the bridge di, in one and the same piece therewith; 2nd. The novel manufacture of plumbers traps in casting them in two agreeing parts a, a, and b, and uniting them; 3rd. The novel manufacture of plumbers traps in casting them in two agreeing parts a, and b, and uniting them; 4th. The manufacture of plumbers traps the part a, arranged to agree with another part a, the two being united forming an S, trap and further arranged to agree with a part b, whereby the same part a, with the part b, united forms a P trap.

#### No. 5728. Improvements on Bedsteads for Invalids.

(Perfectionnements aux couchettes de malades.)

Edward S. Piper, Toronto, Ont., 21st February, 1876, for 5 years.

Claim.—The movable bracket C, in combination with a socket B, (attached to bedstead A), and tray E, and stand F, exchangeable for each other.

#### No. 5729. Burglar-alarm. (Alarme-voleur.)

Carmi H. Williams, Chicago, Ill., U. S., and Henry C. Voigt, Kingston, Ont., 21st February, 1876, for 5 years.

Claim.—1st. The folding tooth n, and spring j; 2nd. The combination of the lever l, provided with the lip k, and the tooth n, provided with a projection for starting or opening the tooth; 3rd. The folding tooth n, and spring j, in combination with the lever l, and inclined pin m, and the case A, B, C.

#### No. 5730. Hot Air Furnace.

(Calorifère à air chaud.)

Adam Laidlaw, Hamilton, Ont., 21st February, 1876, for 5 years.

Claim.—1st. The recess E, in the front of the fire pot D, in connection with the grate H, the covering teeth M, and the sloping top of the ash pit O; 2nd. The covering teeth M, in connection with the grate H, the recess or opening E, and the sloping top of ash pit O.

**No. 5731. Improvements in Stove Doors.***(Perfectionnements aux portes de poêles.)*

Dennis Moore and William A. Robinson, (Assignees of W. Morand), Hamilton, Ont., 26th February, 1876, for 5 years.

*Claim.*—1st. In combination with a stove door having the socket *b*, therein and door casing having the button bearing *h*, thereon, the turning and endwise moving stem *A*, with its button finger *D*, collar *E*, hand piece *F*, and spring *G*; 2nd. In combination with a door having the socket *b*, and door casing having the finger bearing *h*, the turning and sliding stem *A*, with its finger *D*, collar *E*, and hand piece *F*, the spring *G*, and the shield socket *J*; 3rd. In combination with a door having the socket *b*, in a turning thimble *L*, in the socket *n*, in the door, the stem *A*, with its finger *D*, collar *E*, and hand piece *F*, and the spring *G*, surrounded with the collar by the thimble.

**No. 5732. Waggon-jack. (Chèvre à voiture.)**

William Hartt, (Assignee of B. W. Stanton), Almena, Mich., U. S., 26th February, 1876, for 5 years.

*Claim.*—The combination of the slotted standard *A*, castings *B*, *B*, with holes *b*, *L*-shaped arm *C*, pin *d*, lever *D*, *E*, and slide *k*.

**No. 5733. Refrigerator. (Réfrigérant.)**

Edward S. Piper, Toronto, Ont., 26th February, 1876, for 5 years.

*Claim.*—In combination with an ice box *B*, the outer casing *E*, (either made to cover all the ice box or only the circular part) pipe *F*, and tap *G*.

**No. 5734. Radiator. (Radiateur.)**

William Fleeton, West Shefford, and Cassius H. Wells, Cowansville, Que., 26th February, 1876, for 5 years.

*Claim.*—The combination of the flues *b*, *b*, and conical deflector *B*, with the shell *A*, provided with the removable cap *A*.

**No. 5735. Manufacture of Horse Shoe Nail.***(Fabrication du clou à cheval.)*

John B. Wills, Keesville, N. Y., U. S., 26th February, 1876, for 5 years.

*Claim.*—1st. The improved manufacture of blanks for horse shoe nails in first forming them to the configuration shown, then annealing them and afterwards extending the point end cold whereby an annealed body with a hardened point is produced; 2nd. The combination of the small role *k*, with or without the recess *l*, segmental dies *h*, and *g*, of enlarged diameter having groove *i*; 3rd. The dies *h*, of the configuration shown, whereby the blank is left with a comparatively thick point end in the first treatment of the blank in combination with dies *h*, for afterwards elongating the point end of the blank; 4th. The combination of the dies *g*, and *h*, having projections *d*, with the plate *a*, having projections *c*, and cut *e*; 5th. The combination of the guides *p*, *q*, *o*, and *r*.

**No. 5736. Manufacture of Illuminating Gas.***(Fabrication du gaz d'éclairage.)*

James H. Needels, Nashville, Ten., U. S., 29th February, 1876, for 5 years.

*Claim.*—1st. The process of manufacturing illuminating gas, consisting in combining with the heavy gas produced by the ordinary retort system a variable proportion of an illuminating gas having a lighter specific gravity, the said lighter gas being obtained by forcing a current of air through gasoline or a substance having similar qualities held as a liquid or in a gaseous form in a sealed tank, the through combination of the two gases being obtained by injecting the lighter gas into the leading pipe from the retorts to the holder in such manner that at each stroke of the air forcing pump a known and governable quantity of each gas will be caused to pass into a common pipe leading to the holder; 2nd. The retort process of manufacturing illuminating gas from two or more gas producing ingredients, such as coal and oil or coal and fat, the said process consisting on causing the gas produced from the oil, fat or other ingredient to traverse a tube the full length of the furnace, thence to enter and traverse the coal retort, thence to the purifying apparatus as usual; 3rd. The fixed or portable retort holder *A*, consisting of an outer metallic casing *A*, provided with inwardly projecting flanges at its perforations, the said holder being lined with fire brick *A*, on the lower faces and the retort arched over with a similar material in such manner that a chamber *d*, is formed between the crown of the arch and the casing into which the products of combustion are lead by the opening *e*, *c*, *e*, to the flue; 4th. The combination and arrangement of the force pump *I*, pipe *J*, with diaphragm *i*, sealed tank *H*, provided with the perforated division plates *h*, between which carded cotton or wool is placed, pipe *J*, leading pipe *K*, and pipe *K*<sub>1</sub>, the said pipes *J*, *K*, and *K*<sub>1</sub>, being arranged as an injector; 5th. The combination with the pipe *K*, *K*<sub>1</sub>, and *J*, of the regulating valve *K*<sub>2</sub>, and check valve *K*; 6th. The detachable shields *B*, in combination with the independent and detachable retorts *B*; 7th. The purging and heat distributing walls *C*, in combination with the retorts *B*; 8th. The tar box *D*, placed below the level of the retorts and leading pipe *D*; 9th. The hydraulic main *E*, provided with two sealed chambers *E*<sub>1</sub> and *E*<sub>2</sub>; 10th. The water pipe *F*, arranged to inject a spray of water upward and within the pipe *F*, for the purpose of washing and purifying the gas as it passes downward to the hydraulic main.

**No. 5737. Window-fastener. (Arrête-croisée.)**

Jacob G. Filman, Barton, Ont., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination with a window sash, the lever *f*, catch bolt *h*, links *g*, operated by the spring *i*; 2nd. In combination with a window sash, the perforated plate *a*, and socket plate *c*; 3rd. In combination with a window sash, the lever *f*, catch bolt *h*, hinged together and operated by spring *i*, for fastening sashes with or without the plates *c*, and *e*.

**No. 5738. Liquid Meter. (Spiritomètre.)**

Asa S. Libbey, Lawrence, Mass., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination of the tank *A*, with the pipe *B*, its ball and socket valve *C*, the bracket *E*, and rod *D*; 2nd. The combination of the tank *A*, with the rod *G*, and faucet *H*; 3rd. The combination of the tank *A*, with faucet *H*, spindle *G*, cam *F*, rod *D*, bracket *E*, ball and socket valve *C*, pipe *B*, vent *M*, cam *O*, and lever *K*, each with each.

**No. 5739. Metallic Roofing. (Toiture métallique.)**

Eliphath Watson, Northwood-Centre, N. H., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The supporting posts *C*, having the elongated base and enlarged cap with the recess *d*, for the reception of the ribs *r*, of the bearers *D*; 2nd. The bearers *D*, provided with the ribs *r*, and projections *f* the latter being perforated by the elongated orifices *g*; 3rd. The wallpieces *l*, provided with the deep-groove, in combination with the roofing plates *H*, and the gutters *G*; 4th. The supporting plates *E*, resting upon the wall *A*, in combination with the roofing plates *H*, and the covering pieces *F*; 5th. The combination of the beams *B*, with the supports *C*, bearers *D*, roofing plates *H*, *H*, and covering pieces *F*.

**No. 5740. Process of Dressing Wood Mouldings. (Procédé pour aligner les moutures en bois.)**

Michael A. Owens, Brooklyn, N. Y., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The method of preparing or dressing mouldings by forming a recess or undercut under the lower edges of the same leaving said mouldings attached to the wood from which they are formed by a shank to allow the mouldings to be separated by cutting the shank; 2nd. Mouldings for enamelling the undercuts *b*, on the strip below the grooves *d*, which separate the parallel rows, said undercuts extending underneath the base edges of the mouldings.

**No. 5741. Spring Bed-Bottom.***(Fond de lit à ressorts.)*

William Crich, Toronto, Ont., 2nd March, 1876, for 5 years.

*Claim.*—1st.—A spring bed bottom composed of longitudinal slats *A*, cross slats *B*, *B*, hinged frame *C*, and springs *D*, *D*; 2nd. The spiral spring *D*, *D*, and the bend or curve in the outer coil; 3rd. The combination of the hinged frame *C*, with the springs *D*, *D*, and slats *A*, *A*, *B*, *B*.

**No. 5742. Plate Printing Press.***(Presse d'imprimerie à planche plate.)*

James Milligan, Brooklyn, N. Y., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination with one or more plate beds or planks of an endless chain driven by power, and a polygonal bed with guide ledges upon its upper portions; 2nd. An endless chain moved around stationary wheels in combination with planks or plate beds to which the chain is connected, and a bearing bed upon which the planks are supported as they are moved; 3rd. The combination with the plate bed and endless chain of a stop motion operated automatically; 4th. The combination with a clutch and its slide and lever of the arms *3* and *4*, upon the shaft *2*, the knob *6*, and the studs *1*, upon the chain; 5th. The blanket and blanket roller, and the means for returning the blanket and roller to the normal position in combination with a plate and plate bed moving beneath the blanket; 6th. The combination with the blanket roller *o*, and plate bed of the fingers *16* and *20*, and lugs *1*, *2*, *21*; 7th. The glass shield *s*, applied in front of the blanket roller; 8th. The ink fountain *z*, with movable end plates *z*, applied to and combined with the inking rollers *z* and *r*; 9th. The combination with a power plate printing press in which the plates and plate beds are moved progressively beneath the inking apparatus, of a cloth roller revolving in contact with the plate and a metal roller revolved by power adjacent to the ink fountain; 10th. The roller or rollers *z*, in combination with the cloth roller *r*, and mechanism for giving an endwise movement to the said roller *z*; 11th. The combination to a plate printing press of a blanket roller, a blanket adapted to press upon the engraved portion of the plate, and automatic mechanism for commencing the movement of the blanket before contact with the plate, then allowing the blanket to be moved by contact with the plate and mechanism for continuing the movement of the blanket roller as the plate and sheet move away from the said blanket; 12th. The combination with a cloth inking roller in a plate printing press, of a metal roller revolved by power and taking from the ink fountain a supply of ink, and mechanism to adjust the cloth roller and ink roller in relation to each other, and regulate the amount of ink transferred from the latter to the former.

**No. 5743. Improvements on Sap-Spouts.***(Perfectionnements aux tuyaux à sève.)*

George Scott and Hubert Delage, Montreal, Que., 2nd March, 1876, for 5 years.

*Claim.*—The screw base *A*, of any shape, sectional or entire as applied to sap-spouts.

**No. 5744. Collar Folding and Pasting Machine. (Machine à plier et coller les faux-cols.)**

Richard Jellyman and George N. W. Rice, (Assignees of C. Spofford) Montreal, Que., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination in a machine for folding and pasting the ends of collars or other articles of a carrying table *A*, carrying chains *K*, pasters *N*, revolving folders *T*, folding guides *V*, and compressing rollers; 2nd. The combination of the table *A*, confining frame *R*, revolving rollers *T*, and pasters *N*, and carrying chains; 3rd. The revolving folder *T*, provided with a folding device *l*, one or more having an angular or retiring side *l*, arranged as set forth, so that the folders can operate without touching the hand ends of the advancing collar; 4th. The revolving folder *T*, constructed with one or more folding devices *l*, in combination with the table having a slot *Q*, and a folding guide; 5th. The combination of the pasting device *N*, and folding devices *T*, *l*, *V*, with the roller compressing devices *F*, *F*.

**No. 5745. Oil Burning Stove.**

(*Poêle consommant l'huile.*)

Edwin G. Adams, Cohoes, N. Y., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination with the case A, of a bottom perforated chamber D, suspended in water and a subjacent oil chamber B, the two chambers connected by a pipe F whereby the oil may be forced by any suitable pressure out of its chamber B, and up to the surface of the water in the burner chamber D. 2nd. The combination with pipe connected chambers B, D, of a tube C, open at both ends, one in the water space of the case A, and the other below the oil. 3rd. The perforated plate G hinged to top of burner chamber D, and provided with a jointed handle extending to the outside. 4th. The casing L, made with a flaring lower part, and a contracted upper part, and provided with a box made close except its forward end and with a smoke pipe, to adapt it to be placed over the fire box of a stove. 5th. The cap P, made larger than the pipe N, having its lower end connected with the said pipe by a ring plate, and having its closed upper end perforated without the sides of the said pipe N, in combination with the pipe N, and case L.

**No. 5746. Improvements on Bias Cutters.**

(*Perfectionnements aux ciseaux à tailler de biais.*)

Elijah S. Coon and Levi A. Johnson, Watertown, N. Y., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination with the base plate of the gauge or guide for the goods and the scissors holder placed at an angle to the line of feed or travel of the goods; 2nd. The gauge or guide and scissors holder arranged relatively to each other as described, and adjustable to increase or lessen the distance between them; 3rd. The combination of the gauge or guide for the goods, the scissors holder set at an angle to the line of feed or travel, and the presser; 4th. The slotted base plate with scales of division thereon, in combination with gauge or guide and the scissors holder adjustable one or both on said plate; 5th. The combination of the slotted base plate having scales of division thereon, the scissors holder, the gauge or guide, and the presser attached to and moving with said guide for operation.

**No. 5747. Cook-Stove. (Poêle de cuisine.)**

Charles Faucet, Sackville, N. B., 2nd March, 1876, for 5 years.

*Claim.*—1st. A cooking stove for burning coal having one or more independently arranged fire pots E, bearing on an ash-pit H, and supporting the top A, B, of the stove forwardly; 2nd. Constructing said stove of top and bottom parallel plates A, B, and a band C, having doors D, for feeding the fuel to the fire pot or fire pots. 3rd. Constructing said stove below the fire pot or pots with an ash-pit H, raised above the hearth plate J, and provided with doors and dampers I, in front. 4th. An elevated oven for stoves constructed of an inner and an outer section, the former removable telescopically. 5th. An elevated oven for stoves having annular flanged rings N, secured to the inner section P, and ring L, secured to the outer sections K, to form close connecting joints when the sections are telescoped together. 6th. The removable bars R, connecting at the ends with the rings N, L, for securing the sections of the oven together; 7th. The cast metal ring Q, for fitting the lining P, thereto; 8th. The provision of buttons S, applied to the ring N, for holding the sections together. 9th. The provision of a deflector plate T, having a flanged bearing E, for the inner section; 10th. The provision of holes W, W, on the sections K, for the passage of a wire to tie the buttons.

**No. 5748. Machine for Folding and Pasting the Ends of Collars.**

(*Machine à plier et coller les bouts des faux-cols.*)

Richard Jollyman and George N. W. Rice, (Assignees of C. Spofford), Montreal, Que., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination with a folding table A, a paste roller F, and one or more carrying chains B, of a reciprocating depressor G, and a reciprocating folder H. 2nd. The combination with a folding table A, a paste roller F, one or more carrying chains B, and a folding mechanism of compressing rollers L, and a heating drum E.

**No. 5749. Self-Adjusting Wrench.**

(*Cle à écrou mécanique.*)

Peter Campbell, Hamilton, Ont., 2nd March, 1876, for 5 years.

*Claim.*—The movable saw B, with its arm L, working on the projection c, in the box, in connection with the link E, the pins H, the lever or handle F, and the saw A.

**No. 5750. Saw-Sharpening Machine.**

(*Machine à affûter les scies.*)

William L. Covel, Beloit, Wis., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The yoke A, in connection with levers C, rods H, connection D, pitman E, screw I and block B. 2nd. The combination of the form head H and form 15, arms U and V, rod W, arm z, rock shaft y, arm z, feed head A, and rod 9. 3rd. The combination with the worm pinion L, and gear wheel m, movable bar t, and lever 7. 4th. The combination with the emery wheel arbor frame Q, and hanger 20, pulleys a, u, 13, and indirect screws 1, 5th. The combination of the track A, carriage B, cars C, and thumb circle d.

**No. 5751. Improvements on Sewing Machines.**

(*Perfectionnements aux machines à coudre.*)

George W. Simmons, (Assignee of T. S. L. Howard,) Boston, Mass., U. S., 2nd March, 1876, for 5 years.

*Claim.*—1st. The combination of the spring g, the looper a, and finger b, when by the slack of the loop of the under thread is properly taken up. 2nd. The detachable bed piece D, in combination with the bed piece F, and means for adjusting and securing them together; 3rd. The combination of the guard 4, and looper a.

**No. 5752. Warp-Tension Regulator.**

(*Régulateur de tension de la chaîne.*)

Alexander M. Fyfe, Cornwall, Ont., 2nd March, 1876, for 5 years.

*Claim.*—The combination with the warp roll A, of levers E, or equivalent devices connected with the latter or other moving part of the loom, and automatically causing a forward motion of the roll in unison with the opening and closing of the shed.

**No. 5753. Bed and Seat Spring.**

(*Resort de lit et de siège.*)

John M. Blenheim, Ont., 2nd March, 1876, (Extension of patent No. 809,) for 5 years.

*Claim.*—The arrangement of the frames a and b, slats c, springs e, upright pieces d, and staples f, and the combination and arrangement of the said frames a and b, slats c, springs e, upright pieces d, and staples f.

**No. 5754. Improvements in Pot Covers.**

(*Perfectionnements dans les couvercles de pots.*)

William H. Barker, Windsor, N. S., 2nd March, 1876, (Extension of patent No. 828,) for 5 years.

*Claim.*—The novel combination of the cover a, flap or lid b, and projection c.

**No. 5755. Bag-Holder and Truck.**

(*Union accroché-sac*)

John Hewitt, Hamilton, Ont., 3rd March, 1876, for 5 years.

*Claim.*—1st. In combination with a truck or beam, a bag holder constructed with a double hinge for holding up the bag J, a valve being filled; 2nd. A bag holder consisting of the frames C, D, provided with legs E, E, and F, F, respectively, and bar G, all hinged together with the pin H, and forming a compound or double hinge for holding and supporting a bag; 3rd. A bag-holder C, D, G, used in combination with a truck A, or an upright beam K, or its equivalent.

**No. 5756. Method of Recovering Alkalies.**

(*Procédé de récupération des alcalies.*)

Henrik C. F. Størmer, Christiania, Norway, 3rd March, 1876, for 5 years.

*Claim.*—1st. The rarefaction of the latent heat in exhaust steam for boiling and evaporating the fluids containing lye in the chemical manufacture of wood, paper pulp, &c. 2nd. The apparatus consisting of the boiler A, condenser F, pump G, vessel K and the various pipes and connections. 3rd. The reservoir N, the series of pipes o, in the evaporator, and the other parts of the apparatus.

**No. 5757. Apparatus for Cutting, Dressing, Planing, Turning and Shaping Stone.**

(*Appareil à tailler, polir, raboter, tourner et façonner la pierre.*)

John D. Brunton, London, Eng., 3rd March, 1876, for 5 years.

*Claim.*—Imparting to circular cutters a positive rotatory motion on their own axis independent of the rotation which they would otherwise derive from their contact with the stone under operation.

**No. 5758. Lamp-Burner. (Bec de lampe.)**

Henry A. Chapin, New-York, U. S., 3rd March, 1876, for 5 years.

*Claim.*—1st. The combination of the body of a lamp burner, an extinguisher and a catch, whereby the burner is absolutely precluded from being removed from the reservoir or fount to which it may be applied until the said extinguisher is manipulated to put out the light. 2nd. The combination with a mouth or orifice in a filling tube provided in a burner or reservoir of a lamp, and a cover for such mouth or orifice of an extinguisher, and an appliance for precluding the opening of such mouth or orifice while the extinguisher is in its normal position; 3rd. The part of a burner consisting of the extinguisher G, rod and catch H; 4th. The part of a lamp burner consisting of the extinguisher G, and its rod; 5th. The extinguisher G, provided with a rod c, and combined with a lamp burner. 6th. The renewable wick tube tip provided with a tang or strap at the bottom for insertion between the lower portion of a wick tube proper to which the said tip may be applied and the adjacent parts of the body of the burner; 7th. The combination of an air distributor having on one side of the wick tube an opening of suitable size to permit the insertion of a match or other means for lighting the wick, and a cover for such opening preferably perforated to correspond with said air distributor. 8th. The combination with the body of a lamp burner of a filling tube extending upward through the same laterally outward beyond it, and provided at a considerable distance from the wick tube with a mouth or orifice fitted with a cover. 9th. The combination of the following elements to wit. The wick tube C, D, extinguisher G, catch H or its equivalent for precluding the replenishing of the reservoir or fount while the wick is a light, the opening through which the wick may be lighted, and a suitable cover for the latter.

**No. 5759. Waggon-Jack. (Chèvre à voiture.)**

Charles D. Knapp, Sutton's Flats, Que., 3rd March, 1876, for 5 years.

*Claim.*—The combination and arrangement of the levers C, D, and E, with the pedestal A, and post B.

**No. 5760. Oat-Meal Cutter.**

(*Hache-grau d'avoine.*)

Ferdinand Schumacher, (Assignee of A. J. Ehrlichson,) Akron, Ohio, U. S., 3rd March, 1876, for 5 years.

*Claim.*—The combination of the perforated plate C, and horizontal knives D, or their equivalent, both or either adapted to be moved.

**No. 5701. Manufacture of Glucose.***(Fabrication de la glucose.)*

Samuel H. Johnson, Stratford, Eng., 3rd March, 1876, for 5 years.

*Claim.*—1st. The treatment of grain in a permeable condition with dilute acids or in conjunction with alkalies thereby removing fuel oil and nitrogenous substances; 2nd. The treatment of grain in a permeable condition by combining with it such an amount of acid as is necessary to effect its transformation into glucose; 3rd. The treatment of acidified grain in a permeable condition by causing steam to permeate the interspaces between the grains; 4th. The construction and use of connecting apparatus; 5th. The process of manufacturing glucose.

**No. 5702. Apparatus for Generating Gas for Heating Purposes.***(Appareil à produire le gaz pour le chauffage.)*

William G. Wood, Ingersoll, Ont., 3rd March, 1876, for 5 years.

*Claim.*—1st. The retort A; 2nd. The combination of retort A, with steam pipe C, hydro-carbon pipe E, and cold air pipe F; 3rd. The combination of steam pipe C, and cold air pipe E, with the retort A; 4th. A method of generating a highly inflammable gas in the introduction of a steam of hydro-carbon, steam and cold air in a retort.

**No. 5703. Oat-Meal Cutter. (Hache-grauu d'avoine.)**

Ferdinand Schumacher, (Assignee of W. Heston,) Akron, Ohio, U. S., 3rd March, 1876, for 5 years.

*Claim.*—1st. The bars D, applied in relation to the plate G, and knives C; 2nd. The combination of the bars D, with the knives C, and plate G.

**No. 5704. Fish Extract. (Extrait de poisson.)**

Stephen L. Goodale, Saco, Me., U. S., 3rd March, 1876, for 5 years.

*Claim.*—1st. The use of the juices of fish for production of food extract; 2nd. The new article of food described composed of a concentrated extract of fish.

**No. 5705. Oat-meal Cutter.***(Hache-grauu d'avoine.)*

Ferdinand Schumacher, (Assignee of H. Kruse), Akron, Ohio, U. S., 3rd March, 1876, for 5 years.

*Claim.*—The bevelled knives D, D, applied in relation to the plate C, serving both to cut the grain and as a gauge to regulate the size of the particles of meal.

**No. 5706. Boat Detaching Device.***(Appareil à détacher les bateaux.)*

Robert McMaugh and Archibald McMaugh, St. Catharines, Ont., 3rd March, 1876, for 5 years.

*Claim.*—1st. A shackle or clasp consisting of two curved fingers A, hinged conjointly in a swivel head B, their lower points to impinge in combination with a pivotal bar C, transversely thereto, held by a releasing locking mechanism; 2nd. A mechanism for locking the fingers A, consisting of a bifurcated bar C, provided with a spring D, having a pin E, to engage with a hole in one of the fingers A; 3rd. A mechanism for unlocking the fingers A, provided with a bifurcated bar C, spring D, and pin E, consisting of the cam lever F, rotary on the end of the bar C and engaging with the under side of the spring D; 4th. A mechanism for double locking the fingers A, when locked, consisting of the cam lever F, grooved in the side face of the cam and an engaging lug H, projecting from the finger A, and locking by the rotary motion of the cam on the end of the bar C.

**No. 5707. Hot Air Furnace.***(Calorifère à air chaud.)*

John B. Pierce, Buffalo, N. Y., U. S., 7th March, 1876, for 5 years.

*Claim.*—1st. The combination of the hot air furnace and two connected radiators respectively arranged above and below the smoke exit of the furnace, the gases escaping from such smoke exit passing into the upper radiator through which they circulate, and from which they are conducted into the lower radiator at one end to escape into a branch smoke exit at the other end; 2nd. The radiators B, C, provided with the partitions b, and valve c, combined with the pipes J, and P, and made removable; 3rd. The radiator C, provided with a partition b, and gravitating weighted valve c, in combination with the hot air furnace A.

**No. 5708. Air-tight Screw Cap for Coal Oil and other cans and Fruit Jars, and Machine for Manufacturing the same.***(Bouchon en vis hermétique pour les bidons à pétrole et autres et les pots à fruits, et machine pour les fabriquer.)*

John H. Stone, Hamilton, Ont., 8th March, 1876, (Extension of Patent No. 843), for 5 years.

*Claim.*—1st. The male and female screw caps plate I, of tin or other metal; 2nd. The arrangement and combination of a screw cap press I, horizontal or perpendicular for making tin or sheet metal screw caps consisting of the spindle A, cutters B, B, collars c, o, dies C, C; 3rd. The combination of the pinions E, E, e, e, and screws f, i, for opening the dies C, C; 4th. A movable or adjustable die and tap attached to a lathe for making tin or sheet metal screw caps.

**No. 5709. Hand-loom. (Métier à bras.)**

Samuel H. Powers, Woodstock, N. B., 10th March, 1876, for 5 years.

*Claim.*—1st. The foot beam F, having connection with the lathe bar C, for beating up the filling without actuating the shuttle; 2nd. The mechanism for holding the treadles in place on the forward motion of the lathe D,

consisting of the treadles f, actuating the harness i, catches z, to hold harness i, place, ratchet wheel z, fastened to shaft o, following the rotary motion when actuated by rod n, in the forward motion of the lathe parts p, secured to post A, to hold the shaft O, at any desired point to open the harness where by while the harness remains in place the lathe may be actuated any number of times.

**No. 5770. Machine for Rocking Cradles.***(Machine à bercer les berceaux.)*

Charles Barlow, Cookshire, Que., 11th March, 1876, for 5 years.

*Claim.*—The cam plate A, with the straight and circular grooves B, and C, and the slotted crank E, the roller and pin b, with the sweep F, the disc T, with the pins M, and N, also the lever H, all combined.

**No. 5771. Heat Radiator. (Radiateur de chaleur.)**

Emerson C. Angell, New York, U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. The combination with the tubes A, J, of tubes M, rising from a continuously open draft flue B, F, that has a valve near each end provided with valves N, just above said flue, and above these valves connected by cross pipes, so that all the flues M, will empty into a continuous tube, being thus easily cleaned, and a direct or indirect draft being had as wanted; 2nd. The employment of the scrapers Q, or analogous devices for the cleaning of the flues B.

**No. 5772. Furnace for Roasting Ores containing the Noble Metals.***(Fourneau à griller les minerais contenant les métaux précieux.)*

Robert M. Fryer, New York, U. S., 11th March, 1876, for 5 years.

*Claim.*—The furnace A, cone L, and bottom H.

**No. 5773. Waggon Axle Nut.***(Noix d'essieu de waggon.)*

Thomas C. Stewart, Hamilton, Ont., 11th March, 1876, for 5 years.

*Claim.*—1st. In combination with the iron axle B, the L-shaped grooves E, E, for receiving the projections J, J, and catch bar F, on the nut D, for locking the nut on the axle; 2nd. In combination with the axle B, the cap or nut D, provided with projections J, J, and catch bar F, in the recesses a, and operated by the spiral spring I; 3rd. The locking of the cap or nut D, on the axle B, by means of grooves, projections and spring catch bolt.

**No. 5774. Horse-power Sawing Machine.***(Scièrie force cheval.)*

Tobias B. Fox, St. Vincent, Ont., 11th March, 1876, for 5 years.

*Claim.*—1st. The saw guide N, composed of two braces O, the two stays Q, to steady and straighten it, and of the crutch P, to keep the log saw G, from jerking when sawing in combination with the feeder L; 2nd. The feeder L, guiding the saw guide N, in combination with the uprights H; 3rd. The arrangement comprising the yoke with spikes X, the chain Y, and the hand lever Z, in combination with the feeder L; 4th. The slanting stop T, of the bunk Q, in combination with the truck O, 5th. The log head to the log post K, in combination with the log wheels I, 6th. The combination of the jack A, the worm screw C, the pulion D, the foot lever J, the tumbling rod E, the gig lever M, and the log post L, with the log wheels I, the truck O, and the track N, to gig properly the logs to be sawn; 7th. The combination of the balance wheel B, the pitman C, the crutched pitman D, the saw pitman F, the head block I, the hand lever K, and the log saw G, with the main frame A; 8th. The combination of the coupling bar U, and coupling pin V, of the track N, with the main frame A, for the purpose of keeping the log saw G, from breaking its teeth thereon.

**No. 5775. Improvements in Wooden Pumps.***(Perfectionnements dans les pompes en bois.)*

Joshua W. Frazee, Toronto, Ont., 11th March, 1876, for 5 years.

*Claim.*—A porcelain lined cylinder A, held within the stock B, by means of the tapered spurs c, or thread c.

**No. 5776. Labelling Machine.***(Machine à étiqueter.)*

Jonathan Higelow, Boston, Mass., U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. The combination of the paste trough I, paste roll J, belt levers M, and arms N, with the label holder G, and paste apparatus D, arranged in such manner that the weight and velocity of the can being labelled shall operate the same so as to apply a long or overlapping label; 2nd. The combination of the bent levers M, arms N, and roll or post R with the ratchet wheel S, screw shaft T, and label holder G, arranged in such manner that the weight and velocity of the can being labelled shall cause the label holder to rise.

**No. 5777. Horse-rake. (Râteau à cheval.)**

Alexander Howell, (Assignee of W. Green), Brantford, Ont., 11th March, 1876, for 5 years.

*Claim.*—1st. The levers F, fitted on and moving on hubs of wheels A, having slots G, and tapered holes I, 2nd. The double crank K, rods L, stir M, and foot lever N.

**No. 5778. Improvements on Fences.***(Perfectionnements aux clôtures.)*

Alfred F. Allan, London, Ont., 11th March, 1876, for 5 years.

*Claim.*—1st. A portable fence constructed in separate panels by means of the standards A, and E, upper and lower boards B, B, and intermediate boards C, C, or wires D, D; 2nd. In combination with the above, the posts F, pins G, posts H, and braces I.

**No. 5779. Sash-balance. (Contre-poids de croisée.)**

John Berndt, Detroit, Mich., U. S., 11th March, 1876, for 5 years.

*Claim.*—The combination with sashes B, C, of the cord D, pulley F, and clamp G, the first being brought down through a vertical hole in the top of lower sash, and partly through the mullion thereof, the second arrangement within a slot, and the third attached to the surface of said mullion.

**No. 5780. Process for Producing Gelatine Relief Plates for Printing.**

(*Procédé pour produire des plaques en relief d'imprimerie en gélatine.*)

William H. Mumler, Boston, Mass., U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. The process of obtaining level, straight and true surfaces on gelatinous-films from which to produce relief plates for printing from by grinding the surface of said film with emery cloth or other suitable a brading material properly extended upon and secured to a true flat surface of wood or other suitable material. 2nd. The process of producing relief surfaces upon gelatine plates by photographing or printing from a photographic negative, the picture to be reproduced upon the surface of said gelatine plate grinding the surface of the plate either before or after printing thereon the picture, and then treating it with acetic acid; 3rd. The process of producing gelatine relief plates by photographing or printing from a photographic negative on positive upon the surface of the gelatine-plate the picture to be produced in relief, treating the plate with acetic acid until it has eaten away the gelatine to as great a depth as possible without injury to the lines remaining the acid and coating or filling the parts acted upon by acid with a paste made of bone black and any suitable gum, or with india ink, black shellac, varnish, or other opaque or semi-transparent substance, then exposing the plate to the direct rays of light without the negative or positive plate, and after removing the paste or other opaque or semi-transparent substance, treating the gelatine plate with acetic acid a second time; 4th. The process of producing gelatine relief plates, treating the plate, after a partial relief has been produced to a coating of bone black, paste, india ink, black shellac, varnish, or other opaque or semi-transparent substance; 5th. The method preventing the emery or other abrading material from scratching the surface of the gelatine plate, by filling the interspaces of the abrading surface with tallow, or equivalent material.

**No. 5781. Rotary Broiler. (Gril rotatoire.)**

John Schranker, Lancaster, N. Y., U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. A rotary broiler composed of two vertical clamping discs or frames mounted on a horizontal shaft so that the articles to be broiled are presented edgewise to the fire and cooked on both sides simultaneously. 2nd. The combination of the disc C, provided with shaft d, and threaded socket e, of the handle C, mounted on the shaft e, provided with screw e', for adjusting the discs towards and from each other in clamping and releasing the article to be broiled; 3rd. The combination with the case A, B, of the rotary clamping discs C, C', shaft d, e, handle d', crank h, and shield K.

**No. 5782. Improvement on Stock Cars.**

(*Perfectionnement des wagons à bestiaux.*)

John R. McPherson, Jersey City, N. J., U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. The purpose of feeding and watering animals in stock cars, while being transported by rail, a feed and water troughs arranged parallel with car track, at a distance therefrom, free of the car walls and suitably elevated to prevent feed and water to said animals in or upon such car or stock car when the train passing over said track is stopped at said troughs, the cattle remaining in or upon the car. 2nd. The purpose of utilizing the ordinary cattle cars for feeding and watering, the combination of such a car having side openings A, for the heads of the cattle with fixed track troughs C at suitable distances on the track, or at depots upon each side from which the stock feeds and waters when the train is stopped for that purpose; 3rd. The combination in a stock car, of the sectional doors D, E, F, in which the intermediate section E, are combined with the long shutters B, of the side openings, to furnish continuous side openings from end to end of the car through which the cattle feed from the fixed track troughs. 4th. For the purpose of utilizing the ordinary cattle car for feeding and watering, the combination of such a car having side openings A, for the heads of the cattle with fixed track troughs C, said troughs provided with divisions C', C', and water supply pipes H.

**No. 5783. Improvements on Hydrants.**

(*Perfectionnements aux bornes-fontaines.*)

James V. Hayes, Solomon Drillard and George B. Hayes, Buffalo, N. Y., U. S., 11th March, 1876, for 5 years.

*Claim.*—The combination of the passage B, steam passages e and e', divided by diaphragms d, d', and having the inlet and outlet openings f, and g.

**No. 5784. Car Truck Shifting Apparatus.**

(*Appareil à déplacer les wagons de leurs trains.*)

Robert H. Ramsay and George N. Scarlett, Cobourg, Ont., 11th March, 1876, for 5 years.

*Claim.*—The trucks D, on rails C, arranged at both longitudinal sides of the car to be transferred, and bars I, placed transversely under its body and bearing in the trucks D, to sustain the car body when transferred from the main way tracks, and a pit A having inclines at both ends and through rails B, to effect a change of trucks without elevating or lifting the car body.

**No. 5785. Button Holing Attachment for Sewing Machine.**

(*Appareil de machine à coudre pour faire les boutonnières.*)

Samuel J. Baird, Richmond, Va., U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. An extension lever consisting of the two pieces A, and B, the latter having a slot diagonal to the line of its movement upon A, and of un-

equal diameter, with lips or projections at the wider part. 2nd. A perpendicular cam shaft d, having two cams of different diameter and throw, in combination with the slot and its projecting lips, whereby the proper vibration and adjustment are accomplished for the successive forming of the sides and barring of the ends of the button hole; 3rd. The double rack G, and rack guide F, in combination with the adjustment cam k; 4th. A reciprocating driving shaft and twist shaft, in combination with the automatic pawl o, and ratchet wheel D; 5th. The driving shaft and twist shaft, in combination with a segment gear, rack and sliding bars, 6th. A four leaved ratchet, having the two opposite leaves in one plane and the alternate leaves in another plane, and reciprocating bars one of which moves in the plane of each pair of leaves, in combination with the cam shaft and extension lever.

**No. 5786. Waggon Tongue Support Spring.**

(*Ressort porte-timon de voiture.*)

William Burgess, Etobecoque, Ont., 11th March, 1876, for 5 years.

*Claim.*—1st. The clevis F, formed with eyes instead of hooks for hanging on tongue bolt c, the adjusting bolt I, and guide stud K. 2nd. The clevis F constructed with the bolt I, in one piece when so required. 3rd. The combination with the tongue A, and axle D, of the sprg g E, with oblong slot K', clevis F, and adjusting bolt I.

**No. 5787. Improvements in Graters.**

(*Perfectionnements aux râpes.*)

Robert Soper, London, Ont., 11th March, 1876, for 5 years.

*Claim.*—1st. A grater consisting of the cylinder A, coil spring C, rod D rotary grater H, arm I, bearings J, J', crank K, and cleat or hook L. 2nd. In combination with the above, a case or cap O, having an opening P, at side and secured by collar c, and pin b, to the cylinder A.

**No. 5788. Improvements in Gaff-fastenings.**

(*Perfectionnements aux ajustages des cônes de vergues.*)

James H. David, Damariscotta, Me., U. S., 11th March, 1876, for 5 years.

*Claim.*—The guard E, journals C, C', guard F, with openings g, in combination with the ring D, nuts f, f', rope e, gaff B, with opening or slot b, mast A.

**No. 5789. Vehicle Spring. (Ressort de voiture.)**

William F. Whitney, Poughkeepsie, N. Y., U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. The combination with the body A, and side bars B, of a vehicle of one or more torsion springs attached to the body, and having torsion arms arranged to connect with the side bars of the vehicle; 2nd. The torsion spring E, or E', fastened at each end and having one or more torsion arms G, or G', secured to them at a point or points between the fastenings by which said springs are united with the body; 3rd. The parallel torsion springs E, E', composed of one continuous bar connected transversely at one or both ends and having combined with them torsion arms applied to connect the body through the intervention of the springs, with other portions of the vehicle.

**No. 5790. Machine for Edging Shingles.**

(*Machine à chanfreiner le bardau.*)

James E. Austin and Cassius W. Colby, Iowa, Mich., U. S., 11th March, 1876, for 5 years.

*Claim.*—1st. The combination of a stationary circular saw and a laterally adjustable circular saw mounted upon the same arbor, each of the said saws having plan cutters formed in the plate set inwardly toward the other saw and bevelled from the outside, when the said saws are adapted to edge and plane both sides of a shingle from the under side of the tables; 2nd. The combination of the slide O, arm G, sleeve P, rod Q, pedal R, shaft S, sector T, arm U' and connecting rod V, with the feed roll for carrying forward the shingles; 3rd. The combination of the guide d, sleeve b, bar e, arm e, shaft f, lever g, box sleeve i, fork h, and guide bar j, with the frame A, and sleeve of the movable saw for adjusting the latter upon its arbor; 4th. The combination of the jointer h, with the box slide l.

**No. 5791. Extension Clothes Horse.**

(*Séchoir à linge à rallonger.*)

Samuel B. Denton, Port Dalhousie, Ont., 11th March, 1876, for 5 years.

*Claim.*—1st. The laterally extended feet B, in combination with the supports A, hinged at top, and bars D, with rounded ends, to form an extension clothes horse. 2nd. The combination of the hook G, with the middle or corner supports, to keep the clothes horse from leaning too much and from coming down open and flat on the ground. 3rd. The combination of the hooks F, F', fixed to the corner supports A, hooking with the horizontal bars D.

**No. 5792. Liquid Meter. (Spiritomètre.)**

Edward R. Carpenter, Collingwood, Ont., 11th March, 1876, (Extension of Patent No. 579), for 5 years.

*Claim.*—1st. The combination of the vessel A, made of glass or any suitable material with a graduated scale, so arranged as to exhibit its contents and permit the quantity withdrawn at any time to be noted base B, cock C with three way plug connected to a reservoir E, by a pipe D. 2nd. In connection with the aforesaid combination in a tube F, with a valve G.

**No. 5793. Machine for Making Clips for Railway Rail Joints.**

(*Machine à faire les éclisses pour les joints des rails de rail routes.*)

John Forbes, Halifax, N. S., 16th March, 1876, (Extension of Patent No. 569), for 5 years.

*Claim.*—1st. The bending levers E, swinging in rocking frames D, and actuated by cam shafts I, 2nd. The stationary cams F, for controlling the motion of the outer ends of the levers E; 3rd. Providing the cam

shafts B, with cams a, a<sub>1</sub>, and a<sub>2</sub>, 4th. The arrangement and combination of the shaft e, carriage L, block N, shaft K, frame K<sub>1</sub>, divided half nut m, m<sub>1</sub>, and spiral springs n, n<sub>1</sub>, for removing the formed clip from the mould I, 5th. The arrangement and combination of the spring pins P, bolts P<sub>1</sub>, sliding blocks R, provided with pieces S, crank arms S, connecting bar J, and lever J<sub>1</sub>, for simultaneously locking the cam shafts B, to the spur wheels G.

**No. 5794. Machine for Making Clips for Railway Rail Joints.**

(*Machine à faire les éclisses pour les joints des rails de railroutes.*)  
John Forbes, Halifax, N. S., 16th March, 1876, (Extension of Patent No. 569), for 5 years.

**No. 5795. Brick Machine. (Machine à briques.)**

Joseph Close, Woodstock, Ont., 16th March, 1876, (Extension of Patent No. 526), for 5 years.

*Claim.*—1st. The stamping stock D, the press gauge G, and roller pin E, attached to the rim of the wheel B, 2nd. The open spurs I, in the stamping box B, the covering plates K, the cross bar M, and weight box N, attached thereto by the chain P; 3rd. The lever Q, and ratchet R, 4th. The mould frame roller S, attached by a series of levers to the long lever V, the roller pin W, fixed to the rim of the wheel X, the lever weight Y, and lever block Z.

**No. 5796. Horse Shoe Nail Machine.**

(*Machine à clou à cheval.*)

Nelson W. Goodrich, Vergennes, Vt., U. S., 16th March, 1876, (Extension of Patent No. 1904), for 5 years.

**No. 5797. Horse Shoe Nail Machine.**

(*Machine à clou à cheval.*)

Nelson W. Goodrich, Vergennes, Vt., U. S., 16th March, 1876, (Extension of Patent No. 1904), for 5 years.

**No. 5798. Improvements on Saw Mills.**

(*Perfectionnements aux scieries.*)

Benjamin F. Crabtree, Amity, N. Y., U. S., (Assignee of F. N. Whitecomb), 20th March, 1876, for 5 years.

*Claim.*—1st. The conical pulley G, adjusted upon the end of the saw arbor B, by the end screw f; 2nd. The tubular box or bearing p, provided with a vertical projection n, on its upper and lower side and held by vertical screw pivots s, to form the self-adjusting bearings for the inner end of the counter shaft k, 3rd. The combination of the counter shaft k, eccentric bearing box l, and the collar or sleeve h, held by the vertical pivot screws r, 4th. The combination of the eccentric bearing box l, lever N, connecting bar o, shaft R, with arm P, and lever S, the segment a, with notch x and the spring hook y, 5th. The combination of the ratchet wheels H, H<sub>1</sub>, on the shaft E, shells G, G<sub>1</sub>, pawls m, m<sub>1</sub>, springs n, n<sub>1</sub>, links t, t<sub>1</sub>, collars L, L<sub>1</sub>, and shaft L<sub>1</sub>, 6th. The combination of the shells G, G<sub>1</sub>, having spring pawls m, and arm p, cast in one piece, and the shaft H, having notches s, s<sub>1</sub>, and lever J; 7th. In combination with a head block A, and knee B, the short shaft a<sub>2</sub>, and coiled spring o<sub>2</sub>, extending up to the side of the knee and the bar d<sub>2</sub>, projecting from said knee; 8th. The combination of the stationary bar P, with notches on its outer face with bent portion f<sub>2</sub>, of the connecting rod H<sub>1</sub>, and the notch e<sub>2</sub>, in the head block.

**No. 5799. Machine for Fastening Window Sashes. (Machine à assujétir les croisées.)**

Levi H. Montross, Simcoe, Ont., 20th March, 1876, for 5 years.

*Claim.*—The combination of the arms C, C, having cam-shaped faces working eccentrically with the pivot E, and spring F.

**No. 5800. Improvements on Pump Valves.**

(*Perfectionnements aux valves de pompes.*)

Linus Hubbard and William A. Hart, Buffalo, N. Y., U. S., 20th March, 1876, for 5 years.

*Claim.*—1st. A steel or other hard metal valve seat piece C, provided with a wrench section E, valve seats D, D, and screws F, F, adapted to screw into the body H, on one side, and the cage B, on the opposite side, 2nd. A removable reversible double seated valve piece in combination with the parts B and H.

**No. 5801. Machine for Drying Tobacco, Fruits, &c. (Machine à sécher le tabac, les fruits, &c.)**

Joab Seales, Toronto, Ont., 20th March, 1876, for 5 years.

*Claim.*—1st. A box A, provided with dampers M, and ventilating shaft L, and heated by steam pipe K, in combination with travelling endless belts B, and C, 2nd. The scrapers O, provided with friction rollers R, and attached to the cross piece O<sub>1</sub>, in combination with the springs R, and frame P, applied to the travelling belts B, and C, 3rd. The process for treating tobacco, fruit, and other materials, the said process consisting in passing the material to be operated upon, on endless travelling belts through a close chamber or box heated by hot air or steam, the said box being provided with a perforated steam pipe adapted to moisten the material when desired during its progress through the chambers and fitted with inlet and outlet flues for controlling the admission and exit of the air.

**No. 5802. Oil Squeezer. (Pressoir à Huile.)**

Edward Rawlings, Montreal, Que., (Assignee of H. Olsen), 20th March, 1876, for 5 years.

*Claim.*—1st. An oil squeezer constructed with two sides A, A, hinge B, squeezer surface of corrugated metal E, horse hair bands G, rods f, strip of leather L, metal strips I, and handle C.

**No. 5803. Hydraulic Hoisting Machine.**

(*Élévateur hydraulique.*)

William Askwith, Montreal, Que., 20th March, 1876, for 5 years.

*Claim.*—The combination of cylinder X, cover J, piston rod H, piston head I, gun block G, rope wheels D, E, F, three-way cock K, tank C, float cock S, check valve T, and cock V.

**No. 5804. Improvements on Chairs.**

(*Perfectionnements aux chaises.*)

Joseph A. Eno and Charles H. Sherraden, Council Bluffs, Iowa, U. S., 20th March, 1876, for 5 years.

*Claim.*—1st. The combination with the legs of a chair of the divided cross-braces D, and clamps E.

**No. 5805. Fire Extinguisher.**

(*Éteincteur d'incendie.*)

Joseph H. Connelly, New Brighton, Pa., U. S., 20th March, 1876, for 15 years.

*Claim.*—1st. The combination of a system of carbonic acid gas main-distributing pipes valves and connections to the several rooms or compartments in or parts of the building to be protected, and one more fixed or permanent carbonic acid gas generators connected with such system of mains for the supply of carbonic acid gas thereto for extinguishing fires, 2nd. The combination of a steam ejector nozzle with a system of main service and distributing pipes of a carbonic acid gas apparatus in order to employ steam in connection with carbonic acid gas in extinguishing fires, 3rd. The combination of a steam ejector with a line of hose from the carbonic acid gas service pipe for the throwing by the ordinary hose nozzle of a stream of carbonic acid gas and steam; 4th. The combination of a gas ejector with the discharge pipe or orifice of a fire plug for the throwing of a stream of carbonic acid gas and water in the extinguishing of fires, 5th. The combination of a gas hose, a water hose and a gas ejector at the place of union; 6th. The combination of a fixed or stationary receiver or receivers for the storage of water charged with gas under pressure with a carbonic acid gas main or generator, a water main and service pipes, 7th. A service or battery of portable gas receivers with a hose or pipe connection thereto, to and in combination with a hose leading from a fire plug or pump; 8th. The nozzle H, for throwing gas by steam pressure, having handles h, of a low-heat conducting capacity.

**No. 5806. Improvements on Churns.**

(*Perfectionnements aux barattes.*)

John Wood, South Elmsley, Ont., 20th March, 1876, for 5 years.

*Claim.*—1st. The dasher shaft H, having the perforated vertical extension wings H, connected by a circular horizontal plate I, 2nd. The provision to the exterior of the chamber A, of the casing J, having internal ribs K, at the sides and bottom, and provided with inlet and outlet apertures L, M.

**No. 5807. Improvements on Steam Engines.**

(*Perfectionnements aux machines à vapeur.*)

William H. Law, Riverside, Pa., U. S., 20th March, 1876, for 5 years.

*Claim.*—1st. The combination with any stationary engine of the bed plate A, formed as an inverted arc and having chord B, with or without scroll end; 2nd. In any semi-portable horizontal engine, the combination of the bed-plate A, flanges H, and vertical boiler I; 3rd. In combination with the bed-plate A, of any horizontal engine, the hollow cylinder K, attached thereto, spring N, and pin L, secured to the axle of a pair of wheels; 4th. In combination with any vertical boiler, the flanged hollow cylinder K<sub>1</sub>, having spiral spring inside it, and pin L<sub>1</sub>, with axle of wheel formed upon it, 5th. In combination with the end of any connecting rod, the arrangement with the brusses S<sub>1</sub>, S<sub>2</sub>, of the brass S, with sloping upper-surface corresponding with the under-surface of the block T, hollowed out and filled in elastic material V.

**No. 5808. Improvements in Gas Stoves.**

(*Perfectionnements dans les poeles à gaz.*)

Charles Burnham and Joseph G. Taite, Philadelphia, Pa., U. S., 20th March, 1876, for 5 years.

*Claim.*—1st. The base A, reflector B, and gas ring D, 2nd. The combination of the reflector and gas ring with the radiating drum C.

**No. 5809. Knitting Machine. (Machine à tricot.)**

Jonas Hinekey, Norwalk, Ohio, U. S., 20th March, 1876, for 5 years.

*Claim.*—1st. The serrated bar I, thread carrier T, and looper C, 2nd. The teeth J, having the hooks 74, 3rd. In combination with the teeth J, having the hooks 74, the grooves 10; 4th. The thread carrier T, 5th. The thread carrier T, provided with the spring cap T<sub>1</sub>, and throat 19, 6th. The spring cap T<sub>1</sub>, provided with the hook 18, 7th. The looper C, cam 79, and lever P, 8th. The looper C, provided with the elongated stud 18, 9th. The finger 94 and 95, arranged to operate in combination with the looper C, teeth J, and the thread carrier T; 10th. The slot B, for actuating the finger 95; 11th. The rib 52, in combination with the slot A, and finger 95, 12th. The bracket Q, provided with the cam 79, 13th. The bracket Q, provided with the pin 24, and cam plate Z; 14th. The pitman R, extended to form the finger 94, or integral with the same in combination with the lever P, 15th. The finger 95 pivoted directly to the finger 94, and provided with the stud 93, and with a spring at its pivoted support 90, 16th. The tri-armed lever P, pivoted to the bracket Q, and supporting the thread carrier T, looper C, pitman R, and strip 22; 17th. The stripper 22, in combination with the looper C, carrier I, teeth J, and fingers 94 and 95, 18th. The stripper 22, provided with the spring 21, to permit it to yield in passing under the teeth of the bar I, 19th. The stripper 22, provided with the fingers T; 20th. The adjustable thread guide F, in combination with the carrier T; 21st. The pitman S, provided

with the latch 54, in combination with the stud O, and disk F; 2nd. The fan G, having two free ends 42, in combination with the disks F, E, and cam 39; 2nd. The plate 38, provided with the studs 43, in combination with the stud 54, and cam 39 for changing the ends of the fan G; 24th. The sliding plate 75, provided with the stud 44, and cam E; 25th. The spring pin 36, in combination with the plate 75, and bracket C; 26th. The plate 75, provided with the stud 44, and cam E, in combination with the plate 38, and studs 43; 27th. The plate 75, provided with the dog 51; 28th. The cam E, having the rounded ends 127, for assisting in revolving the plate 38, on its axis; 29th. In combination with the plate 75, the rod 34, and lever 30; 30th. The bar 91, provided with the groove V, and feather W, in combination with the carrier T; 31st. The feather W, provided with the cross-bar 98; 32nd. The cross bar 98, provided with the ridge 27; 33rd. The lever 25, provided with the studs 28, and 281; 34th. The sliding bar 24, provided with the bracket r and rod t, in combination with the lever 25; 35th. The bent arm 23, in combination with the sliding bar 24, and arranged in respect to the bar 1; 36th. The bar 1, gauges L, I, and arm 23; 37th. The gauge L, provided with the projection 33, in combination with the dog 51, of the plate 75; 38th. The gauge L, provided with the projection 33, in combination with the lever 25; 39th. The sliding bar 24, provided with the spring jaw 12, in combination with the index wheel h; 40th. The index wheel h, provided with the screw 3, in combination with the spring 4, and counter bored hub 9; 41st. The pointer i, in combination with the wheel h, and screw 8; 42nd. The wheel k, provided with the blank 100; 43rd. The pointer i, provided with the wheel k; 44th. The combination of the wheel h, pointer i, screw 8, and wheel k; 45th. The indicator 109, in combination with the wheel h, and pointer i; 46th. The disk F, provided with the stud 102; 47th. The stop lever l, provided with the projection m, in combination with the wheel k, and stud 102; 48th. The stop lever l, provided with the arm n, and spring z; 49th. The stop lever p, provided with the bent arm 112; 50th. The lever p, pivoted directly to the lever l, and provided with the spring 53, in combination with the stud 102; 51st. In combination with the arm 112 of the lever p, the hook y; 52nd. The combination of the tension plate u, guide f, and arm 112; 53rd. The tests 37, in combination with the discs F, F.

**No. 5810. Board for Ironing Shirt Fronts.**

(*Planche à fuser les devants de chemises.*)

Isaac Ducharme, Sherbrooke, Que., 20th March, 1876, for 5 years.

*Résumé.*—La forme de la planche et la manière dont elle est construite; 2o La combinaison de la planche A, avec son cadre B, le tonnement du cadre B, et la manière de s'en servir pour fuser.

*Claim.*—1st. The shape of the board and the manner in which it is made, 2nd. The combination of the board A, with its frame B, the working of frame B, and the manner of using it for ironing.

**No. 5811. Wringing and Mangling Machine.**

(*Machine à essorer et calandrer.*)

Charles A. Mallory, Oshawa, Ont., 20th March, 1876, for 5 years.

*Claim.*—The use of a pair of India Rubber springs compressed from two clips B, B, in which are cut threads so as to form nuts and which clips B, B, act as bush to the two set screws C, C, which traverse them and bearing on the iron plates G<sub>11</sub>, G<sub>12</sub>, press on the rubber spring D, D, which in their turn force the bearings E, E, on to the spindle F, F, and impart the required pressure to the top roller.

**No. 5812. Stove-Pipe Fastener.**

(*Joint de tuyaux de poêles.*)

Robert Mainer, Orillia, Ont., 20th March, 1876, for 5 years.

*Claim.*—The application of the metal hooks A, the slots B, and the catches C, to stove pipes.

**No. 5813. Horse-Shoe Nail Finishing Machine.** (*Machine à finir le clou à cheval.*)

Charles W. Woodford, Montreal, Que., 20th March, 1876, for 5 years.

*Claim.*—1st. The combination of the dies, punch and forked guide h; 2nd. The combination of the dies z, punch c, forked guide h and jaws t; 3rd. The combination of the spring m, ring f, extremity i, and extremity k, having recess l; 4th. The guide h, having the extremity i, in combination with the extremity k, provided with recess l; 5th. The guide h, having the extremities i, and l, in combination with the spring b; 6th. The combination of the sub-frame z jaws t, and adjustable block y; 7th. The combination of the jaws t, ring z, and guide h; 8th. The recess i, or its equivalent arranged to lubricate the lower part of the nail; 9th. The recess i, or its equivalent, arranged to lubricate the lower part of the nail in combination with the part K; 10. The combination of the dies a<sub>1</sub> and b<sub>1</sub>, either made separately and held together or made all in one piece, rollers u, and y, and die m; 11th. The combination of the roller u, with the roller y; 12th. The combination of the ring f, die a<sub>1</sub>, b<sub>1</sub>, rollers u, y, and die m; 13th. The combination of the ring f, die a<sub>1</sub>, b<sub>1</sub>, and roller u, and y; 14th. The combination of the rod b, having rollers u, and y, die m and spring k; 15th. The combination of the mechanism for rolling and elongating blanks with the mechanism for bevelling and clipping the points; 16th. The combination of the rolling and elongating mechanism lubricating devices h, k, and bevelling and clipping mechanism.

**No. 5814. Self-Acting Car-Coupler.**

(*Attelage de wagons automatique.*)

John B. Winters and Porter Williams, London, Ont., 20th March, 1876, for 5 years.

*Claim.*—1st. The draw-head A, having upper and lower recesses for the reception of the two links C, F, and provided with shank iron band T; 2nd. The combination, in a draw head, of a pair of coupling hooks or dogs D, G; 3rd. In combination with the spring and pin a, b, the movable metal plate R; 4th. The lower lever L, upper lever N, and connecting rod Q, in combination with the stud K, and coupling hooks D, G, as a means of operating and controlling the same.

**No. 5815. Upright Piano-Forte.**

(*Piano droit.*)

Charles E. Rogers, Boston, Mass., U. S. A., 20th March, 1876, for 5 years.

*Claim.*—1st. The string frame A, as provided with the rebated, notched and cushioned ledge A, 2nd. The combination of the slotted slide E, its straining pin F, and operative screw G, 3rd. The combination of the slotted slides L, E, their straining pins U, F, and screws G, G, with the string frame B, and the lugs L, F, to extend from it, or a separate bar applied to it as described, 4th. The separate bar D, provided with the hook Z, and the series of lugs L, all arranged as and for application to the string frame A, and the slides E.

**No. 5816. Clover Thrasher and Huller.**

(*Machine à battre et écaler le trèfle.*)

Garat J. Uendorf, Ottawa, Ohio, U. S., 20th March, 1876, for 5 years.

*Claim.*—The discharge trough N, attached to the hopper B, below the sieves by means of a triangular brace O, and hooks P, R, thereby adapted to be turned in either directions.

**No. 5817. Improvements on Steam Pumping Engines.** (*Perfectionnements aux pompes à vapeur.*)

William H. Law, Riverside, Pa., U. S., 20th March, 1876, for 5 years.

*Claim.*—1st. The combination with a pumping apparatus of the pump cylinder a, made removable; 2nd. In combination with the pumping apparatus, the stalk k, cover h, and valves and seats f, and g, p, and q; 3rd. The arrangement of the vacuum chamber G, within the air chamber F; 4th. The arrangement of the cylinder H, mounted upon the air chamber F; 5th. The combination of the air chamber F, cylinder H, and pillow block I, all formed in one; 6th. In combination with the cylinder cover, and made in one with it, the slides K; 7th. The pumping apparatus formed in two castings, with diaphragm h, and containing upper and lower chambers c, and A, connected by valve g, pump chamber a, supply chamber B (opening by valve f, into chamber A), discharge chamber D, air chamber F, and vacuum chamber G; 8th. In combination with the plunger d, the double cross head V, V, operated by crank shaft U, and provided with extension X, working in guide W.

**No. 5818. Improvements on Filters.**

(*Perfectionnements aux filtres.*)

John F. Crease, Eastney, Eng., 20th March, 1876, for 5 years.

*Claim.*—1st. The filter composed of the vessel a, ledge b, false bottom c, ring d, rod e, handle f, metal cross f<sub>1</sub>, filtering material g, perforated plate h, upper chamber i, cock k, cock l, lower chamber m, pipe n, cock o, cock p, and plug s; 2nd. The modification consisting of the main vessel a, arranged within the reservoir of unfiltered water ledge b, false bottom c, rod e, handle f, metal cross f<sub>1</sub>, filtering material g, perforated plate h, upper chamber i, with perforated cover and lower chamber m, with its syphon r, or pipe t; 3rd. The modification consisting of the main vessel a, arranged within the reservoir of unfiltered water ledge b, false bottom c, rod e, filtering material g, perforated plate h, unfiltered water chamber i, with its perforated cover, filtered water chamber m, syphon r, ring e, packing w, and thumb screws x; 4th. The modification consisting of the main vessel a, with its projections a<sub>1</sub>, air-pipe a<sub>2</sub>, loose cover a<sub>3</sub>, ledge b, false bottom c, rod e, with its projections e<sub>1</sub>, and packing s<sub>1</sub>, handle f, filtering material g, perforated plate h, unfiltered water chamber i, and filtered water chamber m.

**No. 5819. Whipping Frame Needle.**

(*Aiguille à faire le point de chamoite.*)

William W. Clay, Paris, Ont., 20th March, 1876, for 5 years.

*Claim.*—A needle for operation in whipping frame having the shank A, spring barb B, and pointed end C.

**No. 5820. Improvement in Sheet Metal Shearing Machines.**

(*Perfectionnement des machines à tailler la tôle.*)

Anson O. Kittridge, William H. Clark & William J. Clark, Salem, Ohio, U. S., 20th March, 1876, for 5 years.

*Claim.*—1st. In combination with the squaring shears, the adjusting screws, A<sub>1</sub>, A<sub>2</sub>, miter gear B, gear C, shaft D, hand wheel E, gauge S, and frame Q; 2nd. The rails d, of the clamps F, when sunk in the surface of the table A, so that said rails shall be level or flush therewith, clamps t, i, fitted to said rails, so that the lower part of the clamp shall be below the surface of the table and secured to the rails by bolts h, to admit of their being adjusted on said rails in combination with the squaring shears; 3rd. The shaft D, having eccentric journals e, and handle K, in combination with the bar G, connected therewith by the yokes J, and hangers H, operating and cooperating in combination with a squaring shear F.

**No. 5821. Improvement in Fire-Pots for Coal Stoves and Coal Furnaces.**

(*Perfectionnement de boîtes à feu des poêles et fourneaux à charbon.*)

John F. Stewart, Hamilton, Ont., 21st March 1876, for 5 years.

*Claim.*—In combination with a self-feeding coal stove Fire Pot A, or a fire pot of a coal furnace, an opening B, for removing clinkets, &c., and closed by a door C, or slide or their equivalent.

**No. 5822. Improvements in Umbrellas.**

(*Perfectionnements dans les parapluies.*)

John P. Onderdonk, Philadelphia, Pa., U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. An umbrella or parasol in which sectors or portions of covering are attached at one and the same time to each other, and to the frame by clamps, clutches, catches, springs, teeth or wires, without sewing



or fastening; 2nd. A duplex rib for umbrellas or parasols composed of two parts between which the covering passes and to which it is secured by elastic or forced pressure or by tongues, teeth or points upon one part taking into corresponding grooves, seats or depressions upon the other; 3rd. The clamp rib D; 4th. The combination of a duplex rib B, B, with a clamp C, to secure the covering of an umbrella.

### No. 5823. Manufacture and Use of Gas for Illuminating and Heating.

(Fabrication et emploi du gaz pour l'éclairage et le chauffage.)

Joseph P. Gill, Newark, N. J., U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. The process of manufacturing hydrogen gas continuously from superheated steam by the use of hydro-carbon, to oxydize iron where-in process of oxydation by contact with superheated steam, 2nd. The process of manufacturing illuminating gas by combining hydrogen gas and superheated steam, and the vapours of hydrocarbons, and then converting them in red hot retorts into a fixed illuminating gas; 3rd. The combination of hydrogen gas and gas made from coal and from hydrocarbon liquids; 4th. The combination of illuminating gas produced from commingled hydrogen gas superheated steam, and hydrocarbon vapours, and coal gas in the hydraulic main; 5th. A duplex closed vessel or double still wherein liquid hydro-carbon is vaporized and the vapours commingled with hydrogen gas and superheated steam, no liquid of any kind filled into or allowed to accumulate in said still; 6th. A moveable dip-pipe with two floats and cup attachments to the bridge pipe and moveable lever; 7th. The combination of the boiler B, pipes a, and at, superheater s, pyrometer h, pipe p, tank T, syphon pipe J, retorts A, A1, A2, A3, A4, A5, A6, A7, stand pipes R2, floats and cup attachments and moveable dip pipe and lever P, hydraulic main M, pipes y and y1, X, Y and Y1, condensers 2, exhauster U, purifiers U2, station meter V, and holder K; 8th. The combination of boiler B, pipes a, and at, superheater s, pyrometer h, pipes p, i, n, q, m, branch pipes z, z1, closed duplex vessel or double still E, F, tank T, syphon pipe j, steam gauge t, pressure gauges u, thermometers v, syphon pipe w, pipes P, r, z, retorts A, A1, A2, A3, A4, A5, A6, A7, stand pipes R2, floats and cup attachments and moveable dip-pipe and lever P, hydraulic main M, pipes y, X, Y, Y1, condensers Q, exhauster U, purifiers U2, station meter V, and holder K; 9th. The process of making a vapour of commingled superheated steam and hydro-carbon by introducing the hydro-carbon liquid in small quantities simultaneously with superheated steam into an otherwise empty duplex still or vapourizing commingling and expansion chambers for illuminating and heating purposes; 10th. A vertical vessel or retort lined with fire brick and filled with iron chains or pieces of iron of suitable size into which a current of commingled superheated steam and hydro-carbon vapour is made to flow, the iron in said upright retort being heated by the combination of the said superheated steam and hydro-carbon vapours and then the said superheated steam being decomposed into hydrogen gas by the combined action of the heated iron and hydro-carbon, 11th. In an apparatus for the manufacture of illuminating gas from a combination of hydrogen gas superheated steam and hydro-carbon vapour, the combination of boiler B, pipes a, and at, superheater S, pyrometer h, pipe p, tank T, syphon pipe J, retorts A, A1, A2, A3, A4, A5, A6, A7, pipes g, pipes m, n, i, r, tank T, syphon pipe j, branch pipes z, z1, double still E, F, steam gauge t, pressure gauges u, thermometer v, syphon pipe w, pipes P, r, branch pipes b, retorts X, in bench No. 1, stand pipes B, floats and cup attachments and moveable dip pipe and lever P, hydraulic main M, pipes c, and ci, pipes W, Y, Y1, g, condensers Q, exhauster U, purifiers U3, station meter V, and holder H; 12th. In an apparatus for the manufacture of illuminating gas from a combination of gas made from a combination of hydrogen gas superheated steam and hydro-carbon vapours with coal gas in the hydraulic main, the combination of boiler B, pipes a, and at, superheater S, pyrometer h, pipe p, tank T, syphon pipe J, retorts A, A1, A2, A3, A4, A5, A6, A7, pipe g, pipes m, n, i, r, tank T, syphon pipe j, branch pipes z, z1, duplex still E, F, steam gauge t, pressure gauges u, thermometer v, syphon pipe w, pipes P, r, pipes R1 and P2, branch pipes b, b1, retorts N, and C, in bench No. 2, pipes Y, c, g, Y1, W, stand pipes R1, and R2, hydraulic main O, float and cup attachments and moveable dip pipe and lever P, pipes d, condensers B, exhauster G, purifiers Z, station meter s, pipes O, and holder H; 13th. In an apparatus for the manufacture of hydrogen and combined gases, the combination of boiler H, pipes a, and at, superheater S, pipe p, pyrometer h, pipe l, pipe z, tank T, syphon pipe j, duplex still E, F, pipes P, z, steam gauge t, pressure gauges u, thermometers v, syphon pipe w, upright retorts A7, filled with iron and heated from within pipe P, pyrometers h1, h2, damper D, smoke stack W, discharge pipe U, to condensers, exhauster, purifiers, station meter and holder; 14th. The process of warming and ventilating dwellings and public buildings by the admission of superheated steam at a high temperature into atmospheric air heated in a furnace by a combination of hydrogen gas and ordinary fuel or either of them with superheated steam; 15th. In an apparatus for heating and ventilating dwellings and public buildings, a brick composite or metallic furnace in which hydrogen gas may be used with or without other fuel for heating, and in which steam is generated and superheated and used to assist in heating and combined with heated atmospheric air for ventilating purposes; 16th. In an apparatus for heating and ventilating dwellings and public buildings, the combination of the ash pit space A, the fire place B, the hydrogen pipe and furnace V, the flue from furnace Q, the pipe leading from flue to chimney U, the air chamber around the furnace and flue O, the superheater M, the pipe from superheater in upper air chamber N, the pyrometer S, the syphon pipe W, the valve X, and the outlet air passages T.

### No. 5824. Improvements in Bands for Binding Grain.

(Perfectionnements dans les liens pour lier le grain.)

David Olmsted, Minneapolis, Min., U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. A prepared paper band for binding grain; 2nd. The method of fastening the band by means of an interlocking lip formed by punching through the lapped ends; 3rd. A paper band provided with one or more T-shaped holes and corresponding T-shaped tongues constructed to operate for fastening said band around the bundles.

### No. 5825. Improvements in Lathes for Turning Car Wheels and Axles.

(Perfectionnements aux tours à tourner les roues et les essieux des wagons.)

George G. Lobiell, Wilmington, Del., U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination of a lathe for turning wheels and axles with devices whereby the wheels and axles may be chucked independently of the usual centres; 2nd. The combination in a lathe for turning wheels and axles of devices for chucking the wheels with mechanism for grinding the journals of the axles; 3rd. The combination of each wheel or face plate D, with dogs K, self-adjusting to the wheels L, and slides G, carrying the dogs; 4th. The combination of the bearing a, tubular spindle H, and wheels D, and the slots therein with the detachable plates E, and their gripping dogs.

### No. 5826. Improvements on Gates.

(Perfectionnements aux barrières.)

Thomas Martin, Essex, Ont., 21st March, 1876, for 5 years.

*Claim.*—1st. The form of the frame D, with the cross bar I, and the guide-roller G, also the combination of the levers J, and K, with the lifting chains M and N; 2nd. The latch O, and the lifting bar P, as connected with the chains M and N; 3rd. The balance catch S.

### No. 5827. Method of Packing Fish for Transportation.

(Mode d'emballage du poisson pour l'exportation.)

Enoch Piper, St. John, N.B., 21st March, 1876, for 5 years.

*Claim.*—1st. The method of packing for transportation frozen fish with spongy peat in combination with crushed ice or snow; 2nd. The method of packing for transportation frozen fish with spongy peat, in combination with ice or snow; 3rd. The method of packing for transportation frozen fish with spongy peat, not in combination with ice or snow; 4th. The method of packing for transportation frozen fish with spongy peat, in combination with ice or snow and cloth; 5th. The method of packing for transportation frozen fish with spongy peat (without ice or snow) in combination with cloth or paper; 6th. The method of packing for transportation frozen fish with spongy peat, in combination with ice or snow and cloth.

### No. 5828. Improvements in Mallets for Smoothing Sheet Metal.

(Perfectionnements des maillets à adoucir le métal en feuille.)

Anson O. Kittridge, William H. Clark and William J. Clark, Salem, Ohio, U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. The handle D, jointed to the vibratory beam E, in combination with the springs G; 2nd. The yoke H, bar L, sleeve J, keys I, I, and bolt K, in combination with the springs G, and vibratory beam E; 3rd. The oil cup Q, and oil hole at, in the handle D, in combination with the springs G, and said handle D, whereby both upper and lower springs are oiled at once.

### No. 5829. Brick Machine. (Machine à briquer.)

William A. Graham, Carlisle, Pa., U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. In combination with the hopper the polygonal mould wheel D and cylindrical feed and pressure wheel C, having its adjustable bearings elastically seated forcing the wheels together in the line of their axis; 2nd. In combination with the mould wheel and radial plungers and pressure wheel C, the cam L, giving an impact to the clay in the bottom of the mould from the center outward, and then completing its compression by pressure applied in the opposite direction; 3rd. In combination with the mould wheel and radial plungers the cam I, resting on an elastic bearing; 4th. In combination with the mould wheel and knife L, supported against the solid rim of the mould wheel an auxiliary knife K, bearing on the said rim to clean it of clay and give a clean track to the friction wheels of the former; 5th. In combination with the mould wheel with radial plungers and cam for projecting the latter a scraper S, for scouring the face of the wheel and plungers; 6th. In combination with the hopper the mould wheel D, and feed and pressure wheel C, adapted to run with different peripheral velocities; 7th. In combination with the knife L, and its frame the india rubber spring M, adjustable held in position by the yoke M2, and set screw M3; 8th. The mould constructed in recess on the periphery of the flanged mould wheel, by inserting the steel plates O, O.

### No. 5830. Improvements in Axle Boxes.

(Perfectionnements dans les boîtes d'essieux.)

Reuben W. Drew, Albany, N. Y., and Daniel A. Wheeler, Weathersfield, Vt., U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. The outer shell of an axle box when bevelled out to receive a bushing or conical-shaped sleeve; 2nd. The inner sleeve or bushing provided with an annular recess B, partition walls K, induction perforations H, notches S, and the induction channel G.

### No. 5831. Stump and Stone Extractor.

(Arrache-souches.)

Elmore Graves and Thomas Rooney, Waterloo, Que., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination of the frame a, plate e, having openings m, pawl i, and levers n, and o, (either or both of said levers); 2nd. The combination of the plate e, having central openings m, pawl i, and levers n, and o, (either or both.)

### No. 5832. Improvements in Cooking Lamps.

(Perfectionnements dans les chauffe-cettes.)

John W. Cole, Brampton, Ont., 21st March, 1876, for 5 years.

*Claim.*—1st. The air chambers A, A, A, and the air tubes P, P, P, and the arrangement of the wick fibers passing through them, and the centre

aperture or air conductor I, in the self-feeding tanks S, and the arrangement of the mica M, M, in front of the chimneys at such a distance from the burners as to prevent blacking.

### No. 5833. Combined Measure, Funnel and Sprinkling Pot.

(*Mesure, entonnoir et arrosoir combinés.*)

Robert S. Galbraith and William Snow, Montreal, Que., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination of the vessel *a*, valve *g*, and neck *f*; 2nd. The combination of the vessel *a*, valve *g*, neck *f*, and rose head *g*; 3rd. The vessel *a*, provided with transparent insertion *c*, scale *d*, in combination with valve *g*.

### No. 5834. Composition of Matter for Cementing Wood, Stone, Leather or Earthenware.

(*Composé pour coller le bois, la pierre, le cuir ou la faïence.*)

Henry R. Wilcox, Victoria, Vt., U. S., 21st March, 1876, for 5 years.

*Claim.*—A compound composed of the mixture of glue, whitelead and alcohol dissolved in water.

### No. 5835. Machine for Sharpening Horse Shoe Calks.

(*Machine à aiguiser les crampons des fers à cheval.*)

Erastus Gleason and Robert Hamilton, Greenwich, N. Y., U. S., 21st March, 1876, for 15 years.

*Claim.*—1st. The combination of the standard *B*<sub>1</sub>, having top surface *B*<sub>1</sub>, shoulder *C*<sub>1</sub>, and vertical dove tail groove *C*<sub>1</sub>, with the standard *B*<sub>2</sub>, having projecting top *b*, dovetailed projections *b*<sub>1</sub>, and the slide *C*, having vertical dovetail groove *c*, and operated by the cam lever *D*; 2nd. The combination of the reversible-dies having dovetailed projections *m*, with the standards *B*<sub>1</sub>, and slide *C*; 3rd. The combination of the standards *B*<sub>1</sub>, and slide *C*, having dovetailed-groove *c*, and *c*, and removable dies and cam lever *D*, pivoted between the ears *E*, the pitman *f*, and a treadle *g*.

### No. 5836. Improvement on Screw Propellers.

(*Perfectionnement des propulseurs à hélice.*)

Elbert B. Porter, Havana, Cuba, 21st March, 1876, for 5 years.

*Claim.*—A screw propeller constructed with semi-elliptic curved and twisted blades attached at one or both ends to the shaft, and provided with projecting interior and exterior auxiliary blades or wings.

### No. 5887. Seed Sower. (*Semoir à grains.*)

James Harris, Fort Erie, Ont., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination with the stationary seed receptacle *B*, of one or more revolving discharge spout *C*, and suitable actuating mechanism; 2nd. The combination with the rest *A*, and driving wheel *F*, of the seed receptacle *B*, revolving spouts *D*, and endless band *G*; 3rd. The combination with the seed receptacle *B*, provided with an opening in the bottom, and revolving discharge spouts *D*, arranged underneath the same, of the adjustable gate *I*, for regulating the flow of seed to the discharge spouts.

### No. 5838. Improvements on Pumps.

(*Perfectionnements aux pompes.*)

William Adair, Liverpool, Eng., 21st March, 1876, for 5 years.

*Claim.*—Under the first part (*a*) the combination of the parts *a*, *b*, and *d*, *b*; the combination of the part *a*, *b*, *e*, *f*, and *g*; under the second part, the apparatus described under the third part; the construction, arrangement and combination of the parts *x* and *y*.

### No. 5839. Machine for Shaving Feathers.

(*Machine à ébarber les plumes.*)

Gilbert M. Richmond, Geneva, Wis., U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination of the block *A*, and knife *B*, arranged with the tapering space between them; 2nd. In combination with the subject matter of the above claim, the holding plate *D*, for holding the feathers.

### No. 5840. Balanced Sash. (*Croisée à contre-poids.*)

William Cooper, Strathroy, Ont., 21st March, 1876, for 5 years.

*Claim.*—1st. A winding mechanism fastened to the meeting-bar of the lower sash having connection with the pulley-cords or cord, and provided with a ratchet wheel *J*, and pawl *K*; 2nd. The spring catch *L*, for fastening the lower sash.

### No. 5841. Device for Upholding Bags.

(*Accroche-sac.*)

John G. Waldo, Cainsville, Ont., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination of the slide *B*, in spout *A*, the handle *C*, and catch *E*, on the spindle *D*; 2nd. The combination and arrangement of the hooks *G*, *H*, *I*, *K*, with arms-sliding joints *L*, *L*, and connecting rods *F*, *F*; 3rd. The combination of the slide *B*, in spout *A*, handle *C*, catch *E*, on spindle *D*, with the hooks *G*, *H*, *I*, *K*, sliding joints *L*, *L*, and connecting rods *F*, *F*; 4th. The arrangement of the hooks *G*, *H*, *I*, *K*, fastened on the ends of rods *N*, *N*, sliding joint *L*, the long arm of hook *G*, being used as a lever, and acting also as a spring in conjunction with the catch *M*, and attached to a movable spout with or without hopper for use in mills and elsewhere to bag flour or other substance.

### No. 5842. Improvements on Locomotives.

(*Perfectionnements aux locomotives.*)

John D. Murray, Sarnia, Ont., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination of a steam chest *E*, provided with the pipes *H*, *G*, *H*, with the exhaust ports of the engine *C*, and with the smoke box *B*, and stack or blast chimney *B*, of the locomotive; 2nd. The combination of the valves *L*, *K*, *L*, arranged at right angles with each other and attached to the same stem *J*, with the pipes *H*, *G*, *H*, of the steam chest *F*; 3rd. The combination of one or both of the exhaust pipes *H*, *H*, with a steam pipe or pipes communicating with the boiler *A*, whereby the feed water and the cars may be heated when the engines are at rest.

### No. 5843. Machine for Conveying Grain.

(*Machine pour transporter le grain.*)

Henry Severn, Davenport, Iowa, U. S., 21st March, 1876, for 5 years.

*Claim.*—1st. The combination with a grain conveying pipe *B*, of a series of suction fans or pumps *E*, *E*, for creating a vacuum in said pipe, and by suction draw the grain through the same into receivers properly arranged; 2nd. The combination of the air conveying pipe *B*, receivers *A*, *A*, provided with air breakers *e*, *e*, the pipe *D*, and the series of suction fans or pumps *E*, *E*; 3rd. A series of suction fans or pumps *E*, *E*, arranged to communicate from the circumference of one to the centre of the next fan or pump in combination with a grain conveying pipe; 4th. The combination with the suction fans or pumps *E*, of the pipe *G*, tank *H*, pipe *I*, and air pump *J*; 5th. A continuous stream or current of water passing through with the air through a series of suction fans or pumps.

**List of Patents issued up to 27th April, 1876, but not yet Officially published in the Patent Office Record.**

- No. 5967. H. C. Mathurin & L. W. Sanborn, both of Auburn, Maine, U. S. A., "Thill Supporter," 21st April, 1876.
- No. 5968. S. W. Green, (Assignee of W. A. Lorenz.) U. S. A., "Type Setter," 21st April, 1876.
- No. 5969. J. Watson, Ayr, Ont., "Scuder Attachment to Horse Rakes," 21st April, 1876.
- No. 5970. C. Gillies, (Assignee of H. Collard, both of Gananoque, Ont.) "Iron Cultivator," 24th April, 1876.
- No. 5971. L. A. Cook, North Keppel, Ont., "Improved Hanger for Sliding Doors and Gates," 24th April, 1876.
- No. 5972. W. Parsons, Orangeville, Ont., "Drum Stove," 24th April, 1876.
- No. 5973. A. S. Macrae, Toronto, Ont., "Process for manufacturing and finishing of Pecula, Farina or Starch," 24th April, 1876.
- No. 5974. A. Middaugh, Scio, New-York, U. S. A., "Milk Tester," 24th April, 1876.
- No. 5975. G. Thausen and J. Thomsen, Woodstock, Ont., "Skimmer Attachment to Ploughs," 24th April, 1876.
- No. 5976. F. C. Jones, Montreal, Que., "Coal Ash Sifter," 24th April, 1876.
- No. 5977. F. McCabe, Ottawa, Ont., "Hose Carriage," 24th April, 1876.
- No. 5978. S. Veaset, Joliette, Que., "Improved Vehicle Wheel," 24th April, 1876.
- No. 5979. J. Hayward & J. B. Abbott, both of Gananoque, Ont., "Clothes Wringer," 24th April, 1876.
- No. 5980. J. Brokenshire, Kingston, Ont., "Ship Pump," 24th April, 1876.
- No. 5981. J. V. Hiddeson, Chicago U. S. A., (Assignee of H. J. White, Greenbay,) Wisconsin, U. S. A., "Dried Fruit Loosener," 24th April, 1876.
- No. 5982. P. Kribs, Guelpi, Ont., "Cloth Measurer," 24th April, 1876.
- No. 5983. M. Langevin, Ottawa, Ont., "Improved Moccasins," 24th April, 1876.
- No. 5984. E. P. Stedman, Ravenna, Ohio, U. S. A., "Carriage Top," 24th April, 1876.
- No. 5985. J. Zrelinski, Kleinsburgh, Ont., "Composition for curing flat and contracted footed Horses," 24th April, 1876.
- No. 5986. E. V. Bodwell, S. Catharines, Ont., & J. E. Scott, Dunville, Ont., "Lock Gate Fastener," 24th April, 1876.
- No. 5987. J. Spooner, Westbrook, Ont., "Improved Tuyere," 24th April, 1876.
- No. 5988. N. Keely, Leverington, Penn., U. S. A., "Paper Barrel," 24th April, 1876.
- No. 5989. H. M. Charlesworth, Egmondville, Ont., "Middling Purifier," 24th April, 1876.
- No. 5990. C. C. Bradley, Syracuse, U. S. A., "Self-Oiling Pitman," 24th April, 1876.
- No. 5991. O. Baldwin, Keokuk, U. S. A., Engineer, (Assignee of J. G. Henderson, of the same place,) "Chain Pump," 24th April, 1876.
- No. 5992. J. H. Staples, Boston, U. S. A., "Water-Wheel," 24th April, 1876.
- No. 5993. S. W. Greene, New York, U. S. A., printer, (Assignee of W. A. Lorenz.) "Type Distributor," 24th April, 1876.
- No. 5994. T. Mathewson, Tollendale-Mills, Ont., "Mill Stone Dresser," 24th April, 1876.
- No. 5995. A. Krupp, Essen, Prussia, "Railway-Wheels," 24th April, 1876.
- No. 5996. Wm. Lott, Elmwood, Ill., U. S. A., "Improved Pumps," 24th April, 1876.
- No. 5997. S. W. Green, New York, U. S. A., "Type Setter," 24th April, 1876.
- No. 5998. E. B. Jewett, Buffalo, N. Y., U. S. A., "Ice Preserver and Wine Cooler," 24th April, 1876.
- No. 5999. J. B. Smith, Amabel, Ont., "Car-coupler," 24th April, 1876.
- No. 6000. S. W. Green, New York, U. S. A., (Assignee of C. W. Dickinson, Newark, N. J.), "Type Distributor," 24th April, 1876.
- No. 6001. H. Kurth & E. P. Allis, Milwaukee, Wis., U. S. A., "Patent Cockle Separator," 24th April, 1876.
- No. 6002. N. C. Locke, Salem, Mass., U. S. A., "Improvement in Globe Valves," 24th April, 1876.
- No. 6003. J. F. Thomas, Hion, New York, U. S. A., "Rake," 24th April, 1876.
- No. 6004. W. Dewell, Burnhamthorpe, Ont., "Expanding Hinge Dash," 27th April, 1876.
- No. 6005. J. T. Hall, Caseville, Mich., U. S. A., "Composite Ventilating Safety Thimble," 27th April, 1876.
- No. 6006. J. McClarty, Racine, Wis., U. S. A., "Improvement in Gas Works," 27th April, 1876.
- No. 6007. R. D. Hamister & S. Milligan, Geelong, Victoria, Australia, "Universal Advertising Medium," 27th April, 1876.
- No. 6008. C. Charbonneau, Montreal, Que., "Ranoneur de cheminée," 27th April, 1876.
- No. 6009. J. Clarke, Montreal, Que., "Twine Reel," 27th April, 1876.
- No. 6010. J. B. Pike, Harwick, Ont., "Improved Hoop Coiler," 27th April, 1876.
- No. 6011. J. P. Haseltine, Coaticook, Que., "Mucilage Brush," 27th April, 1876.
- No. 6012. W. Yates, London, Ont., "Safety Attachment and Improved Steam Governor," 27th April, 1876.
- No. 6013. G. W. Laraway, Port Byron, N. Y., U. S. A., "Compressed Pulp Barrel," 27th April, 1876.
- No. 6014. A. Krupp, Essen, Prussia, "Hydraulic Brakes for Gun Carriages," 27th April, 1876.
- No. 6015. M. A. B. Shipman, Ottawa, Ont., "Clothes Rack," 27th April, 1876.
- No. 6016. G. R. McCrea, Bowmanville, Ont., "Improved Canopy for Buggies, Phaetons, &c.," 27th April, 1876.
- No. 6017. W. H. Myers, E. H. Osborne and J. McMahon Fox, Oregon, Wis., U. S. A., "Patent Door Spring and Lock," 27th April, 1876.
- No. 6018. H. P. Taylor, F. A. Perdue & J. McBride Perdue, Milwaukee, Wis., U. S. A., "Guide for Bench Planes," 27th April, 1876.
- No. 6019. G. Allan, Waterloo, Que., A. J. M. Tenny, St. John's, Que., J. Allan, St. Vincent de Paul, Que., & Jas. Allan, Montreal, Que., "Station Indicator," 27th April, 1876.

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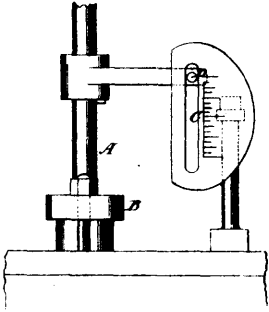
# THE CANADIAN PATENT OFFICE RECORD.

## ILLUSTRATIONS.

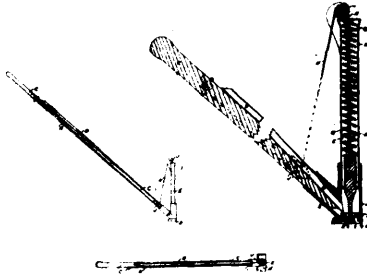
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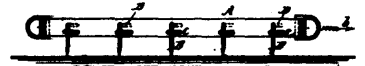
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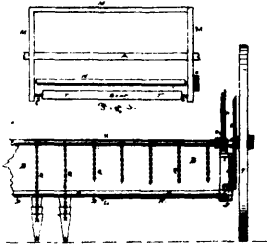
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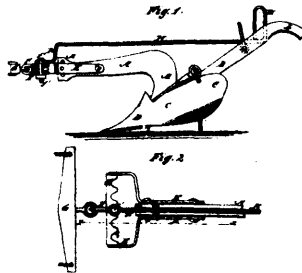
5720 Bradshaw & Carrick's Machine for Stretching and Tacking Carpets.



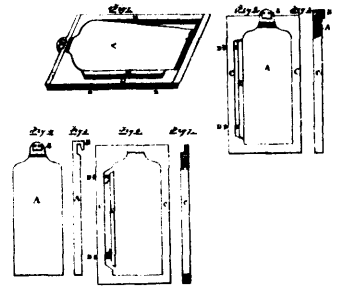
5721 Whiteside's Improvement in Harrows.



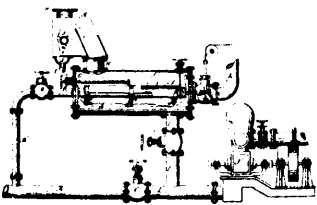
5722 Gamble's Seed and Plaster Sower.



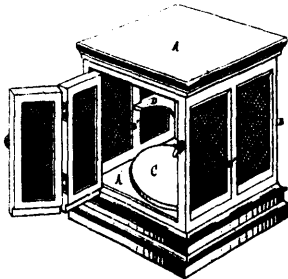
5723 Miller's Improvements on Plough-clevises.



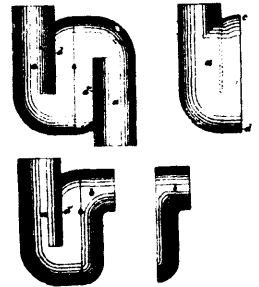
5724 Woodward's Shirt-front Board.



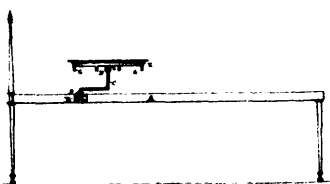
5725 Cummer's Improvements on Condensers and Heaters for Steam Engines.



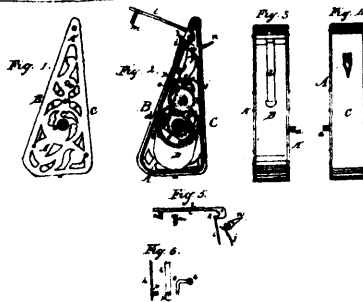
5726 Northrup & Little's Cheese-safe.



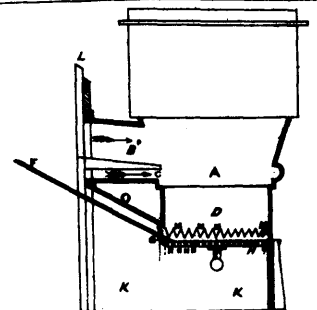
5727 Watson & Rose's Manufacture of Plumbers' Traps.



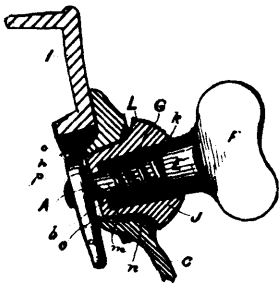
5728 Piper's Improvements on Bedsteads for Invalids.



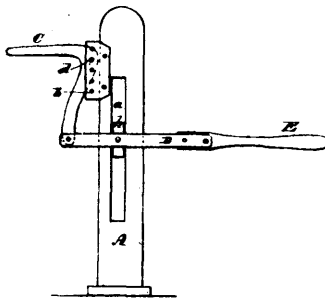
5729 Williams' Burglar-alarm.



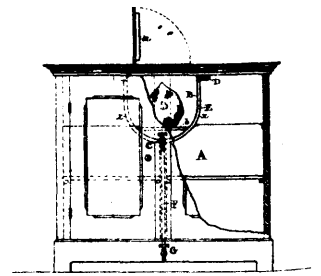
5730 Laidlaw's Hot Air Furnace.



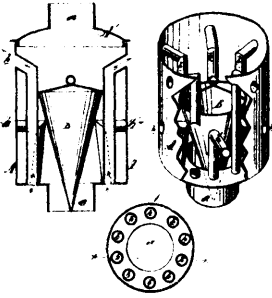
5731 Morand's Improvements in Stove Doors.



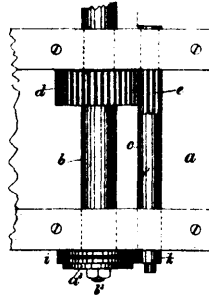
5732 Stanton's Waggon-jack.



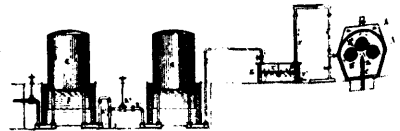
5733 Piper's Refrigerator.



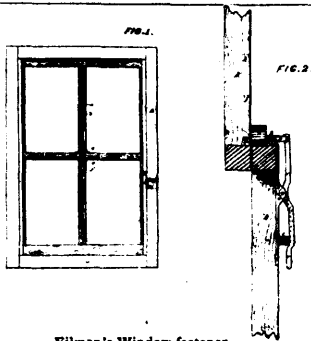
5734 Fleeton & Wells' Radiator.



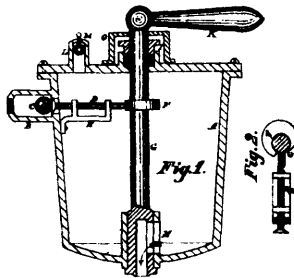
5735 Wills' Manufacture of Horse Shoe Nail.



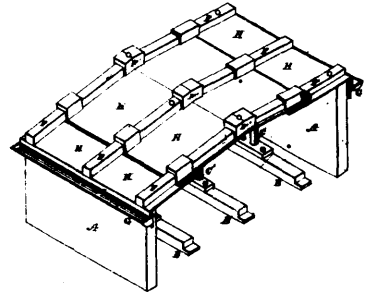
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5737 Filman's Window-fastener.



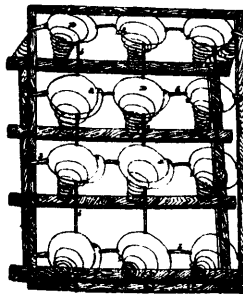
5738 Libbey's Liquid Meter.



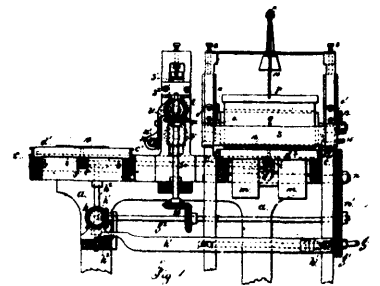
5739 Watson's Metallic Roofing.



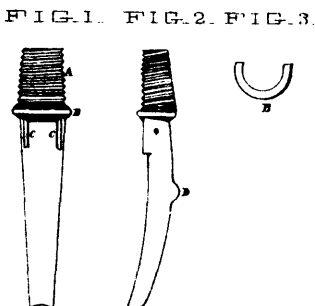
5740 Owens' Process of Dressing Wood Mouldings.



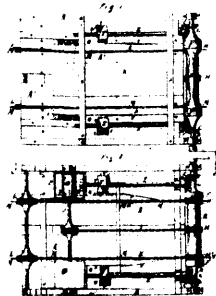
5741 Crich's Spring Bed-Bottom.



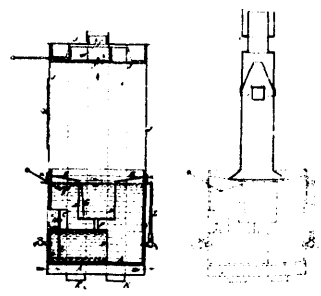
5742 Milligan's Plate Printing-Press.



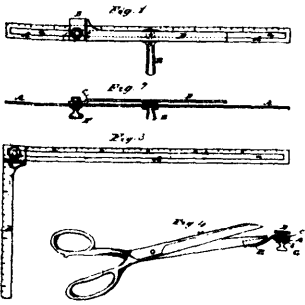
5743 Scott & Delage's Improvements on Sap-Spouts.



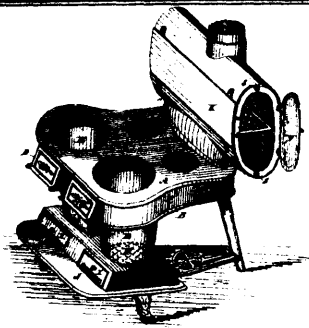
5744 Spofford's Collar-Folding and Pasting Machine.



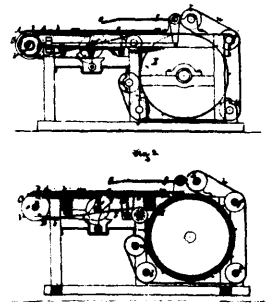
5745 Adams' Oil Burning Stove.



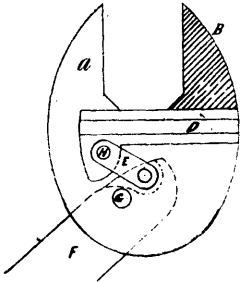
5746 Coon & Johnson's Improvements on Bias Cutters.



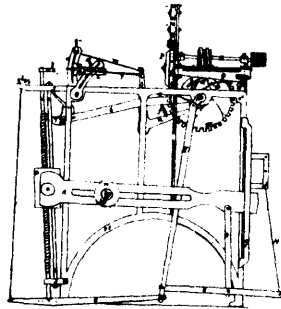
5747 Fawcett's Cook-Stove.



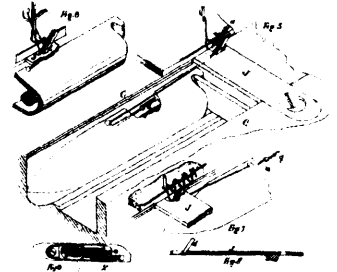
5748 Spofford's Machine for Folding and Pasting the Ends of Collars.



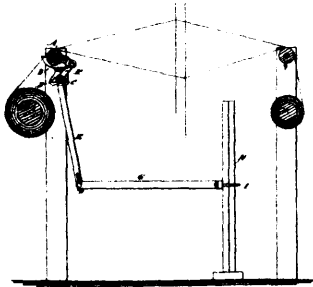
5749 Campbell Self-Adjusting Wrench.



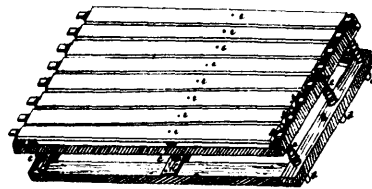
5750 Covell's Saw-Sharpening Machine.



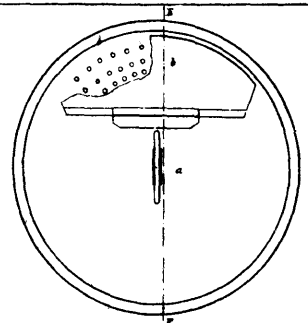
5751 Howard's Improvements on Sewing Machines.



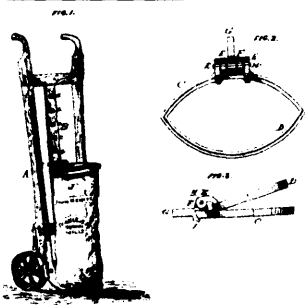
5752 Fyfe's Warp-Tension Regulator.



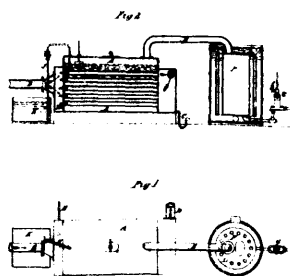
5753 Mulholland's Bed and Seat Spring.



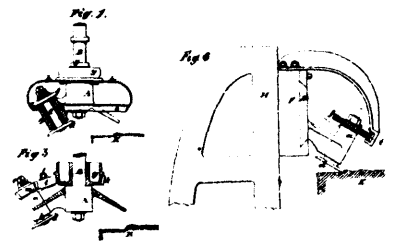
5754 Barker's Improvements in Pot Covers.



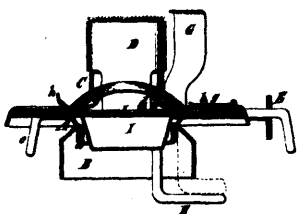
5755 Hewitt's Bag-Holder and Truck.



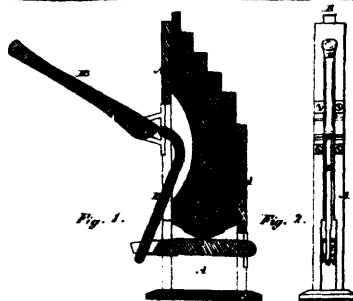
5756 Stormer's Method of Recovering Alkalies.



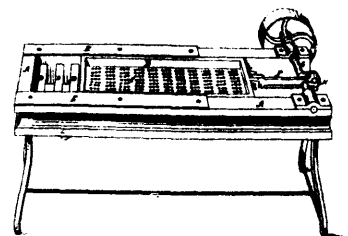
5757 Brunton's Apparatus for Cutting, Dressing, Planing, Turning and Shaping Stone.



5758 Chapin's Lamp Burner.

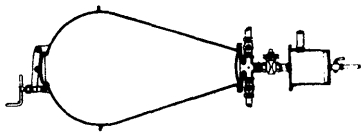


5759 Knapp's Wagon-Jack.

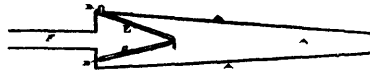


5760 Ehrlichson's Oat-Meal Cutter.

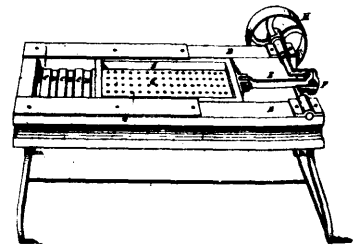




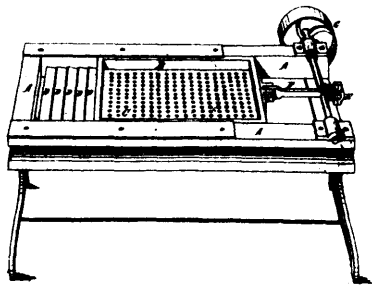
5761 Johnson's Manufacture of Glucose.



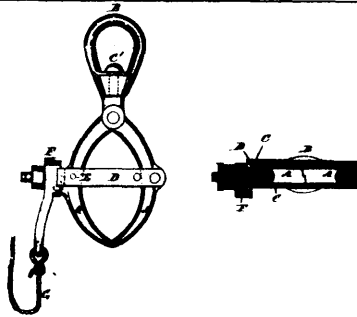
5762 Wood's Apparatus for Generating Gas for Heating Purposes.



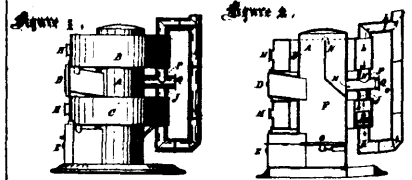
5763 Heston's Oat-Meal Cutter.



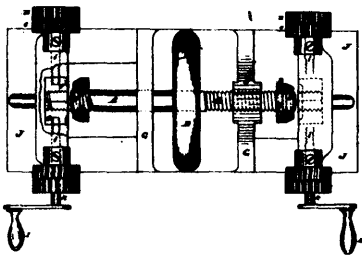
5765 Kruse's Oat-Meal Cutter.



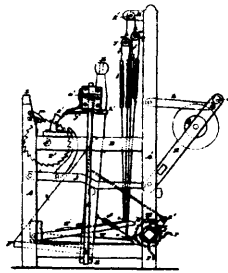
5766 McMaugh's Boat Detaching Device.



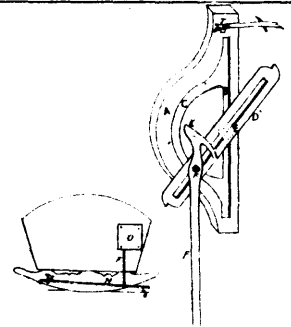
5767 Pierce's Hot Air Furnace.



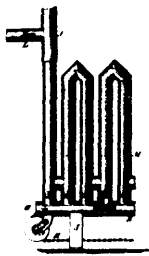
5768 Stone's Air-tight Screw Cap for Coal Oil and other Cans and Fruit Jars, and Machine for Manufacturing the same.



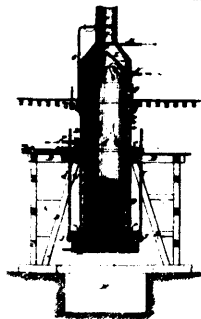
5769 Powers' Hand-loom.



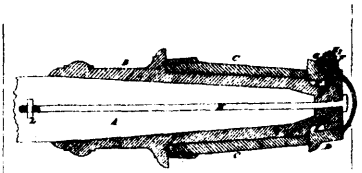
5770 Barlow's Machine for Rocking Cradles.



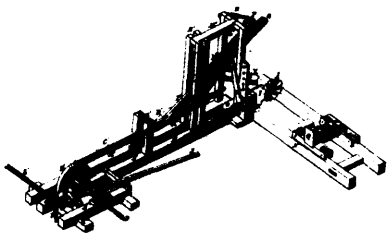
5771 Angell's Heat Radiator



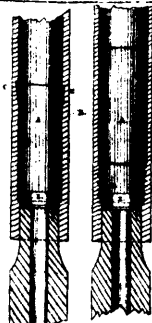
5772 Fryer's Furnace for Roasting Ores containing the Noble Metal.



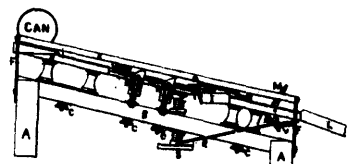
5773 Stewart's Waggon Axle Nut.



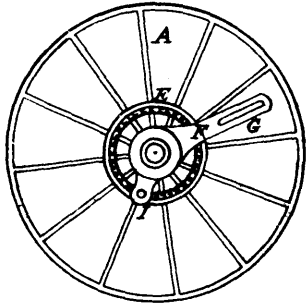
5774 Fox's Horse-power Sawing Machine.



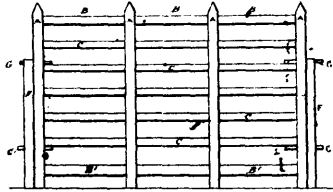
5775 Frace's Improvements in Wooden Pumps.



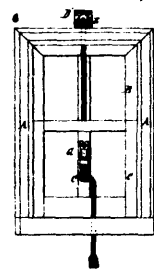
5776 Bigelow's Labelling Machine.



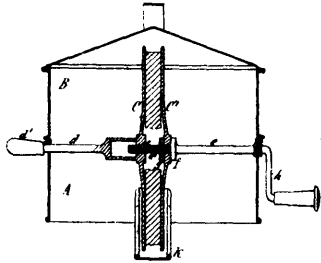
5777 Green's Horse-rake.



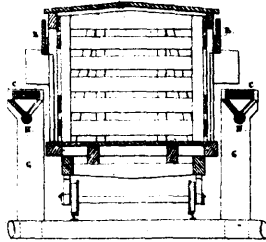
5778 Allan's Improvements on Fences.



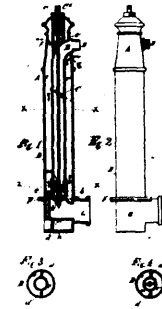
5779 Berndt's Sash-balance.



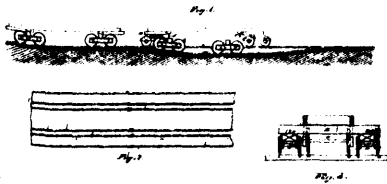
5781 Schrankel's Rotary Broiler.



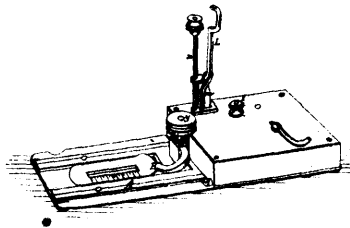
5782 McPherson's Improvement on Stock Cars.



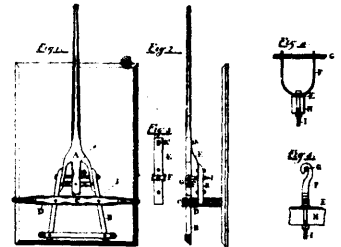
5783 Hayes' Improvements on Hydrants.



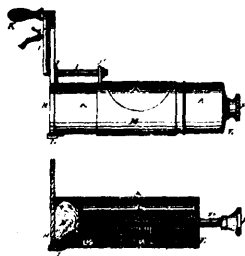
5784 Ramsay's Car Truck Shifting Apparatus.



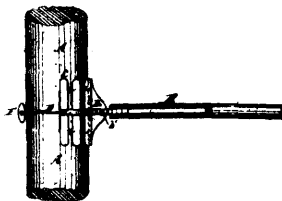
5785 Baird's Button Holing Attachment for Sewing Machine.



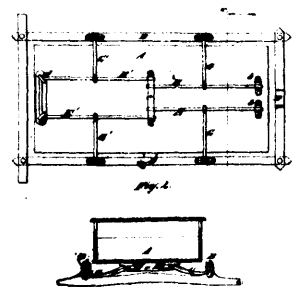
5786 Burgess' Waggon Tongue Support Spring.



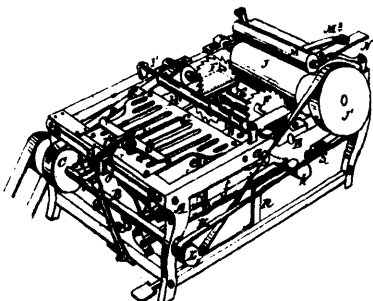
5787 Soper's Improvements in Graters.



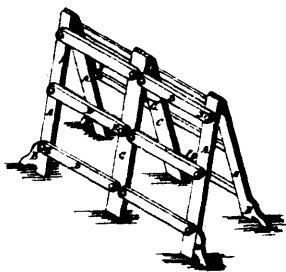
5788 David's Improvements in Gaff-fastenings.



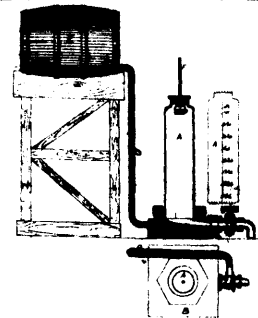
5789 Whitney's Vehicle Spring.



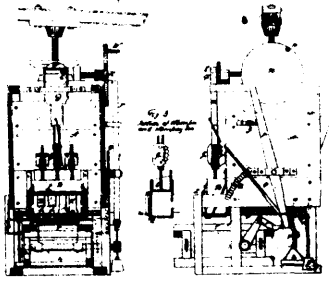
5790 Austin's Machine for Edging Shingles.



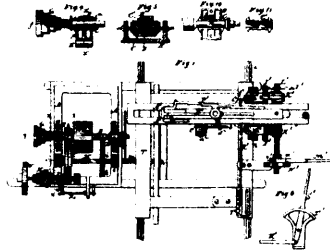
5791 Denton's Extension Clothes Horse.



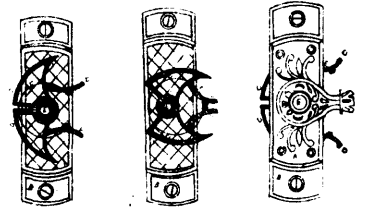
5792 Carpenter's Liquid Meter.



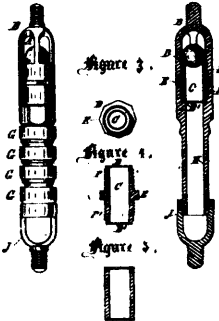
5795 Close's Brick Machine.



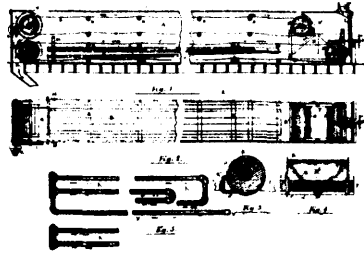
5798 Whitcomb's Improvements on Saw Mills.



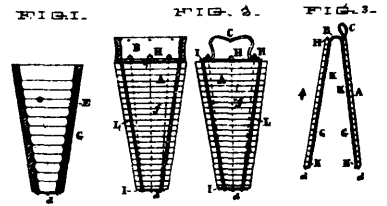
5799 Montross' Machine for Fastening Window Sashes.



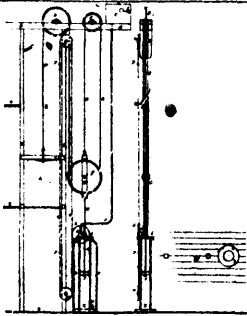
5800 Hubbard & Hart's Improvements on Pump Valves.



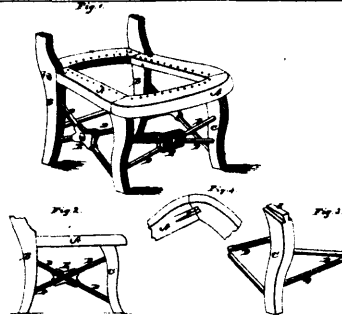
5801 Scales' Machine for Drying Tobacco, Fruits, &c.



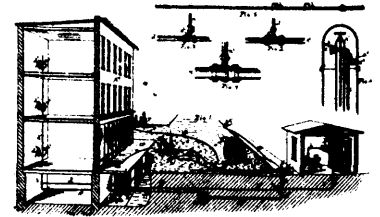
5802 Olsen's Oil Squeezer.



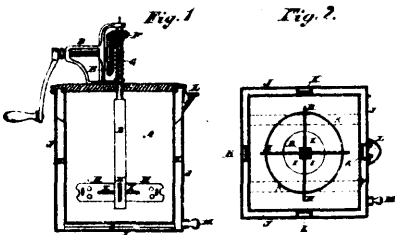
5803 Askwith's Hydraulic Hoisting Machine.



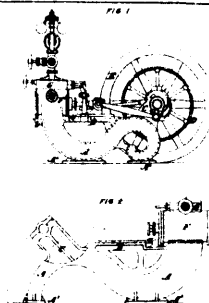
5804 Eno's Improvements on Chairs.



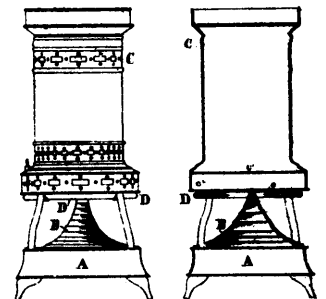
5805 Connelly's Fire Extinguisher.



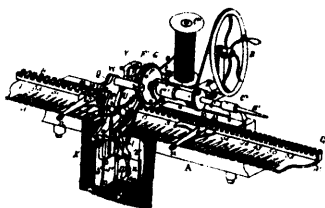
5806 Wood's Improvements on Churns.



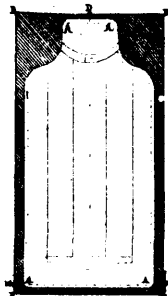
5807 Law's Improvements on Steam Engines.



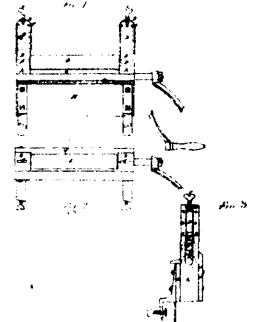
5808 Burnham & Taite's Improvements in Gas Stove.



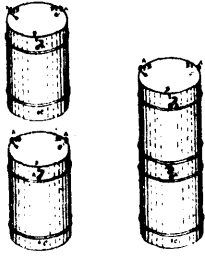
5809 Hinckley's Knitting Machine.



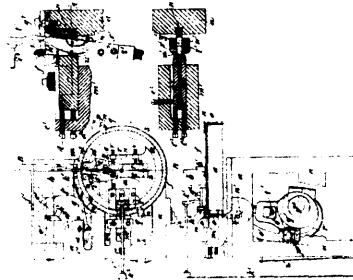
5810 Ducharme's Board for Ironing Shirt Fronts.



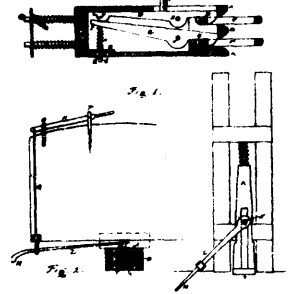
5811 Mallory's Wringing and Mangling Machine.



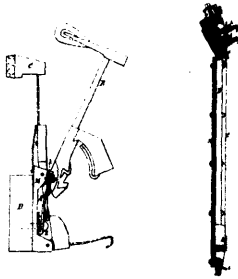
5812 Mainer's Stove-Pipe Fastener.



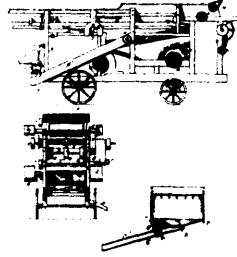
5813 Woodford's Horse-shoe Nail Finishing Machine.



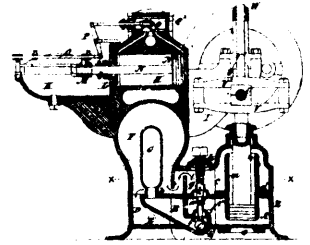
5814 Winters' Self-acting Car-coupler.



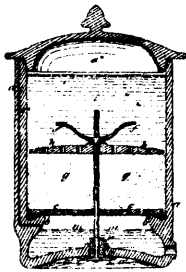
5815 Rogers' Upright Piano-forte.



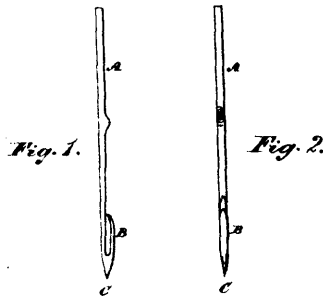
5816 Utendorf's Clover Thrasher and Huller.



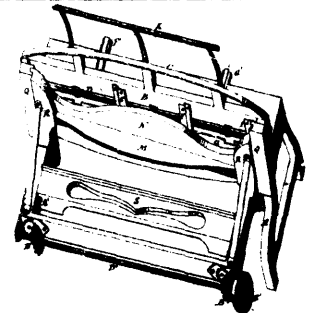
5817 Law's Improvements on Steam Pumping Engines.



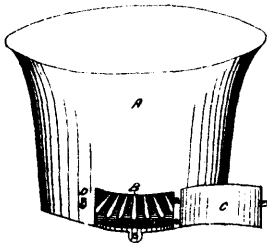
5818 Crease's Improvements on Filters.



5819 Clay's Whipping Frame Needle.



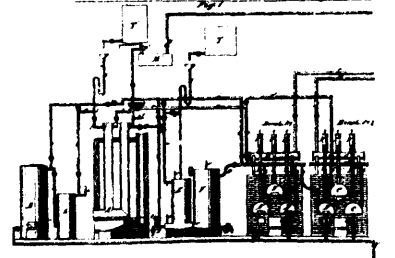
5820 Kittridge & Clark's Improvement in Sheet Metal Shearing Machines.



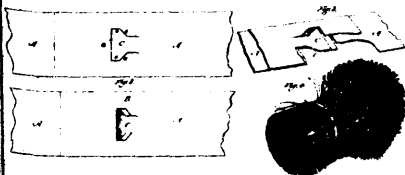
5821 Stewart's Improvement in Fire-pots for Coal Stoves and Coal Furnaces.



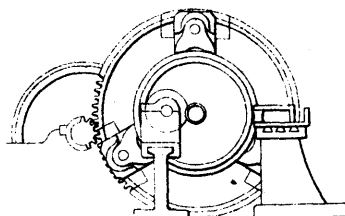
5822 Onderdonk's Improvements in Umbrellas.



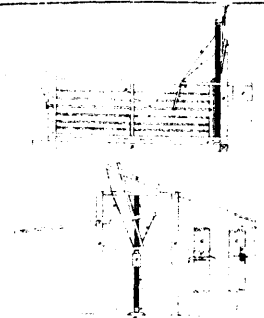
5823 Gill's Manufacture and Use of Gas for Illuminating and Heating.



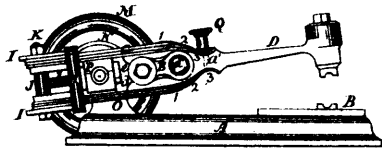
5824 Olmsted's Improvements in Bands for Binding Grain.



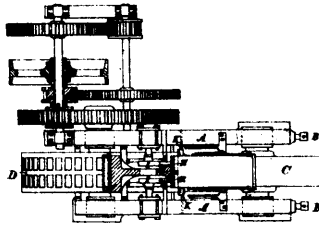
5825 Lobdell's Improvements in Lathes for Turning Car-wheels and Axles.



5826 Martin's Improvements on Gates.



5828 Kittridge & Clark's Improvements in Mallets for Smoothing Sheet Metal.



5829 Graham's Brick Machine.

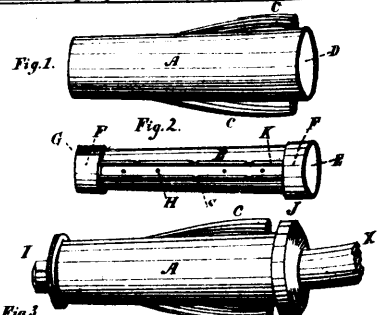
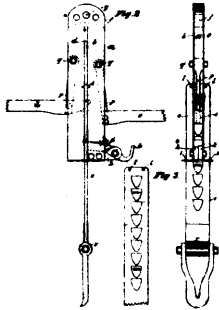
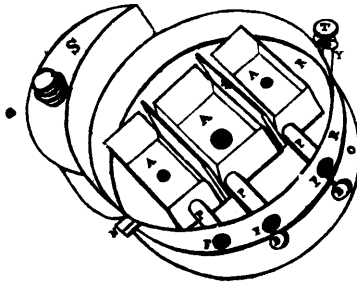


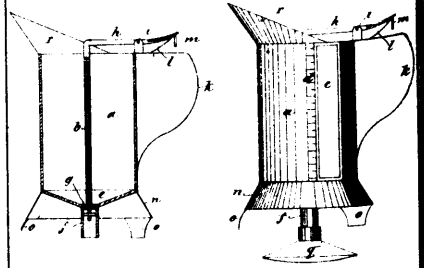
Fig. 1. Fig. 2. Fig. 3. 5830 Drew's Improvements in Axle Boxes.



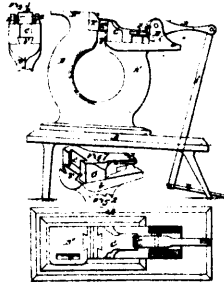
5831 Graves' Stump and Stone Extractor.



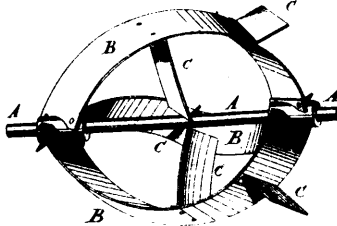
5832 Cole's Improvements in Cooking Lamps.



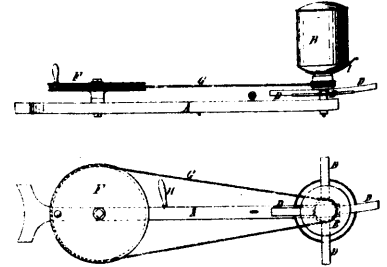
5833 Galbraith's Combined Measure, Funnel and Sprinkling Pot.



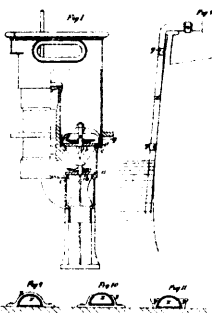
5835 Gleason & Hamilton's Machine for Sharpening Horse Shoe Calks.



5836 Porter's Improvement on Screw Propellers.



5837 Harris' Seed Sower.



5838 Adair's Improvements on Pumps.

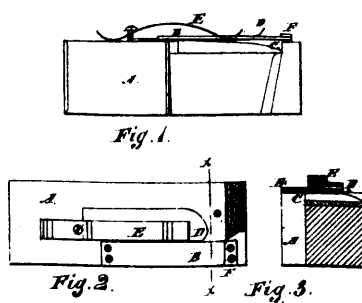


Fig. 1. Fig. 2. Fig. 3. 5839 Richmond's Machine for Shaving Feathers.

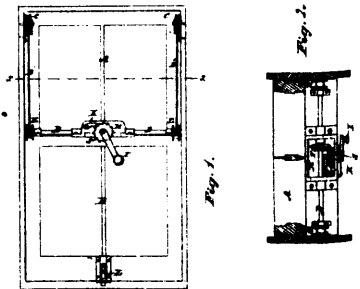
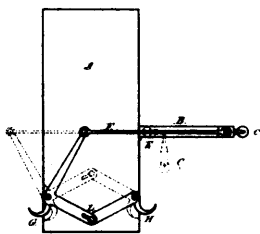


Fig. 1. Fig. 2. 5840 Cooper's Balanced Sash.



5841 Waldock's Device for Upholding Bags.

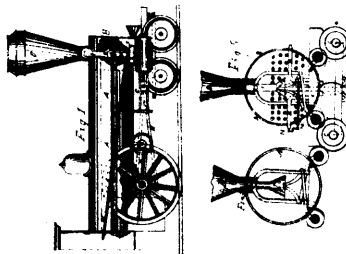


Fig. 1. Fig. 2. 5842 Murray's Improvements on Locomotives.

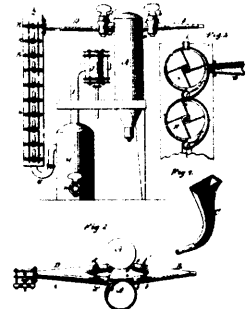


Fig. 1. Fig. 2. 5843 Severn's Machine for Conveying Grain.