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INVENTIONS PATENTED.

No. 5529. Pegging Machine. (*Machine à cheviller.*)
Everett P. Richardson, Lawrence, Mass., U. S., 23rd December, 1875, for 5 years.

Claim.—1st. The combination of a driver and nail tube or foot and a carrier placed between the driver-stock and foot, the carrier having diametric passages or ways to alternately receive the nails and successively present them in line with the driver and the nail tube foot; 2nd. The rotary reciprocating nail carrier and the cutting and driving mechanism; 3rd. The two pairs of cutters for alternately heading and pointing the nails; 4th. The process of forming and presenting the nails to be driven, consisting in severing the wire to form heads, and next to form two points, and turning the successive nails in opposite directions from horizontal to vertical position, so as to bring each nail into position to be driven with its point downward; 5th. The nail tube foot having its position determined by the position of the surface against which it presses in combination with the driver bar c, regulated as to its throw by the foot; 6th. The process of forming nails from a metallic strip, consisting in cutting the strip alternately, diagonally and then at right angles to its length to form two points and two heads simultaneously.

No. 5530. Improvements in Dumb-stoves.

(*Perfectionnements aux poêles-sourds.*)

George W. Kennedy, Hatley, Que., 23rd December, 1875, for 5 years.

Claim.—A stove heater so arranged as to give a direct draft through the pipe A, or by means of the damper c, to become a dumb-stove with upright pillars b, b, through which the smoke passes when the damper is closed.

No. 5531. Improvements in Seed, Corn and Bean, Planters.

(*Perfectionnements aux semoirs à graines, maïs et fèves.*)

Francis B. H. Saxton and William A. Boyd, Strathroy, Ont., 23rd December 1875, for 5 years.

Claim.—1st. The arrangement of box B, F, slides C, D, and pitman H, in combination with the traction wheel I; 2nd. In combination with a seed and corn-planter, the shear L, M, and roller N.

No. 5532. Climatic and Fire-proof Paint.

(*Peinture résistante à la température et au feu.*)

John C. Smith, Dunkirk, N. Y., U. S., 23rd December, 1875, for 5 years.

Claim.—A compound of quick-lime, Paris white, oxide of zinc, chloride of sodium, common table salt, sulphate of zinc, carbonate of potash, sulphate of iron, borax, tungstate of soda, gelatine, muriatic acid, crude petroleum, coal-tar and water.

No. 5533. Railway Carriage-coupling.

(*Attelage de wagons de railroute.*)

Warren Dorr, Gardner, Me., U. S., 23rd December, 1875, for 5 years.

Claim.—1st. The link B, and the slotted hook A, applied to connect and operate with a chambered draw-bar; 2nd. A railway carriage draw-bar provided with a hook A, or projection d, and a link B; 3rd. The railway carriage draw-bar provided not only with a hook A, or projection d, and a link B, but a backstop f; 4th. A railway carriage coupling composed of a hook A, and two links B, L, applied, arranged and connected for use with a draw-bar.

No. 5534. Improvements on Cattle Stalls.

(*Perfectionnements aux stables à bétail.*)

Isaac R. Marsh and Ira Bell, Brasher Falls, N. Y., U. S., 23rd December, 1875, for 5 years.

Claim.—1st. The longitudinally moving slide F, having the inwardly projecting pins b, in combination with the movable stanchions B, for closing and locking the same simultaneously; 2nd. Providing the toggles or stops G, with lateral projecting caps P, for their convenient manipulation; 3rd. The inclined arrangement of the stanchions A, B; 4th. The elevated manger E; 5th. The friction rollers m, in combination with the slide F; 6th. The sections I, II, and the gutter L, so arranged relatively to each other as to admit of changing the area of the stall-floor; 7th. Providing the section I, with cushion K.

No. 5535. Process for Obtaining Salts of Ammonia. (*Procédé pour préparer le sel ammoniac.*)

Robert O. Patterson and Francis W. Brothers, Cheltenham, Eng., 23rd December, 1875, for 5 years.

Claim.—The manufacture of solid carbonate or carbonates of ammonia by heating gas or other liquor containing ammonia combined or not with carbonic acid condensing the aqueous vapours contained therein and depositing in suitable receivers the salt or salts thereby disengaged.

No. 5536. Station Indicators. (*Indicateurs des stations.*)

Alexander Ramsay, Montreal, Que., 23rd December, 1875, for 5 years.

Claim.—A station indicator A, roller C, cone points F, spring E, wires I, and station-cards J.

No. 5537. Fruit Honey. (*Miel de fruit.*)

Lewis Hurd, Kewanee, Ill., U. S., 23rd December, 1875, for 5 years.

Claim.—The edible liquid compound made by adding sugar and lemon to expressed fruit juice, in about the proportions set forth and at a temperature of about 100° Fahrenheit.

No. 5538. Fanning Mill and Grain and Seed Separator. (*Tarare-séparateur des grains et graines.*)

Roderick Lean and Lewis Barthel, (Assignees of J. G. Schurtz), Stratford, Ont., 30th December, 1875, for 10 years.

Claim.—1st. The peculiarities of the shoe a; 2nd. The great length of the screens b, and their combination; 3rd. The construction of the frame G; 4th. The chambers or troughs at the end of the shoe.

No. 5539. Automatic Gate. (*Barrière automate.*)

Lysander Flagg, Central Falls, R. I., U. S., (Assignee of J. S. Winsor), 30th December, 1875, for 5 years.

Claim.—1st. The vertically swinging gate bars a, a, pivoted to the posts or standards A, A, in combination with the chain-wheels C, C, and pulleys f, f, and the endless chain cord or wire rope arranged to operate the same simultaneously; 2nd. The combination with the gate bars a, a, interlocking in the centre and balanced at their ends with the standards A, A, and operating mechanism; 3rd. The combination with two or more gates of suitable mechanism arranged to open and close the gates simultaneously or successively.

No. 5540. Compound for the Removal and Prevention of Scale in Steam-Boilers.

(*Composé pour enlever et prévenir les incrustations dans les chaudières à vapeur.*)

L. Ell Hurd, Cleveland, Ohio, U. S., 3rd January, 1876, for 5 years.

Claim.—A compound for removal and prevention of scale in steam boilers composed of soda, chestnut, oak bark, charcoal, muriate of ammonia, linseed oil cake, burnt alum, sassafras bark, potato starch.

No. 5541. Bottle Stopper. (*Bouchon de bouteille.*)

Arthur Christin, Chicago, Ill., U. S., 3rd January, 1876, for 10 years.

Claim.—The tapered-stopper B, provided with the sockets b, in combination with a bottle whose diameter is less than the length of said stopper, and is provided with a collar a.

No. 5542. Bucket for Chain Pumps.*(Godel de chapelet.)*

Adon D. Crosby, Cuba, N. Y., U. S., 3rd January, 1876, for 5 years.

Claim.—A bucket for chain pumps composed of india rubber or other elastic material and provided in its upper side with a concave recess *d*, for relieving the sides of the bucket from excessive pressure.**No. 5543. Elastic Rubber Bucket for Chain Pumps.** *(Godel en caoutchouc élastique pour les chapelets.)*

Solomon C. Hamlin, Ypsilanti, Mich., U. S., 3rd January, 1876, for 5 years.

Claim.—1st. The combination of the cone A, collar B, and washers D, D'; 2nd. In combination with a bucket constructed as set forth, the groove and vent-hole in tubing arranged in the manner stated.**No. 5544. Process of Flocking Cloth.***(Procédé pour velouter les étoffes.)*

Horatio A. Slater, Webster, Mass., U. S., 3rd January, 1876, for 5 years.

Claim.—The art of flocking cloth by means of a fulling mill, such consisting in employing the flock within a bag or tube composed in whole or in part of the cloth and subjecting such bag or tube and the flock therein to the action of such fulling mill.**No. 5545. Improvements on Sash-holders.***(Perfectionnements aux arrêtes-croisés.)*

Harmon Gilmore, Simcoe, Ont., 5th January, 1876, for 5 years.

Claim.—1st. A sash-holder A, having longitudinally a V-cam slot B, the flange C, projecting from the outer edge of its frictional-side; 2nd. The bar D, provided with a screw-hole E, and prong F, for securing the holder to the sash; 3rd. The bar D, provided with a screw-hole E, and prong F, in combination with the holder A, having a V-cam slot B.**No. 5546. Revolving Drag-harrow.***(Herse à dents tournantes.)*

Henry Wells, Ottawa, Ont., 8th January, 1876, for 5 years.

Claim.—1st. The combination of the hubs I, furnished with diagonally and laterally curved long harrow teeth *g*; the shafts G, bearing the hubs I, and borne by the bearings or hangers H; the two frames A, hinged or pivoted together and journaled with the cross beam B, and the lock bars F, F, with the cross beam B, to which are secured the pole C, and the driver's seat D, to form a revolving drag harrow.**No. 5547. Improvements on Weather Strips.***(Perfectionnements aux bourrelets de portes.)*

Watson P. Widdifield, Siloam, Ont., 8th January, 1876, for 5 years.

Claim.—1st. The weather strip C, finished with a bevelled inner face to which face a narrow riband D, of rubber or other suitable material is fastened in such manner that a portion of it projects beyond the face of, and in advance of the edge of the wooden cleat; 2nd. The curtain or apron E, constructed of sheet rubber or other suitable material, and fastened at its upper edge to the lower part of the door bar F, and slotted spring G, in combination with the side strips C.**No. 5548. Improvement on Manner of Constructing Dead Pulleys.***(Perfectionnement dans la fabrication des poulies fixes.)*

Augustus Newell, Chicago, Ill., and Asa B. Cook, Erie, Pa., U. S., 10th January, 1876, for 5 years.

Claim.—1st. The two armed double hanger having angled serrations K, combined with side serrated box J; 2nd. The combination with box J, of a loose pulley E, having hub extended through and beyond same box; 3rd. The pulley hub having groove M, combined with shifter N, lever P, having double cam O, shifter R, and belt B.**No. 5549. Improvements on Barrels.***(Perfectionnements dans les barils.)*

David S. Cornell, Warwick, and William Aldridge, Brussels, Ont., 10th January, 1876, for 5 years.

Claim.—1st. A barrel constructed of a sheet of wood A, having notches B, wound upon a mandrel and held by binding hoops C; 2nd. In combination with the barrel A, the hoops D, D, heads E, E, and hoops G, G.**No. 5550. Improvements on Barrels and Cylindrical Boxes.***(Perfectionnements aux barils et aux boîtes rondes.)*

David S. Cornell, Warwick, and William Aldridge, Brussels, Ont., 10th January, 1876, for 5 years.

Claim.—1st. A barrel or cylindrical box made by concentrically or eccentrically winding a sheet or sheets of wood A, B, in one or more pieces on a mandrel; 2nd. In combination with a barrel or box so formed, the hoop D, nailed above and below the chime to retain the head E; 3rd. In combination with a barrel, &c., the outside hoops C, for retaining the barrel in form.**No. 5551. Improvements on Boilers for Steam Engines and Heating Purposes.***(Perfectionnements aux chaudières à vapeur et de buanderie.)*

George J. Tandy, Kingston, Ont., 10th January, 1876, for 5 years.

Claim.—1st. The adjustment of water tubes in the outer shell of a steam boiler for engines or for heating purposes, with the openings in the tube to permit the circulation of the water; 2nd. The caps *a*, *a*, at the ends of the tubes with the bolt *b*, and the recess or groove *c*, in the caps; 3rd. The combination of the parts of the boiler in such manner as to enclose the steam chest E, within the smoke box F.**No. 5552. Improvements in Egg-Beaters.***(Perfectionnements aux batteurs d'œufs.)*

John Howes, Worcester, Mass., U. S., 10th January, 1876, for 5 years.

Claim.—1st. The oblique openings E, *n*, giving a tangential discharge, in combination with the tube A, and piston B; 2nd. The tube A, piston B, and head D, having a series of "zig zag" openings; 3rd. A centrally supported head D, in combination with the tube A, and piston B; 4th. The tube A, and piston B, having an elastic packing compressible by the rod and nut I, without being removed from the tube A; 5th. The oblique openings E, in combination with the protecting flange K.**No. 5553. Improvements on Hand Corn-Planters.***(Perfectionnements aux semoirs à blé-d'inde à bras.)*

George W. Robinson, Bennington Centre, Vt., U. S., 10th January, 1876, for 5 years.

Claim.—The combination of a hopper *a*, having the contracted end *b*, and outlet *c*, with the oscillating-tumbler *e*, situated in front of the contracted end of the hopper, and provided with a pocket *h*, and plain surface *g*, all adapted for use upon an ordinary hoe.**No. 5554. Process for Heating Metals and Smelting Ores.***(Procédé pour chauffer les métaux et fondre les minerais.)*

Ananias Smith, Clifton, Ont., 10th January, 1876, for 5 years.

Claim.—1st. The mode and process of applying liquid fuel to blast furnaces; 2nd. The mode and process of applying liquid fuel to cupola furnaces; 3rd. The mode and process of applying liquid fuel to puddling furnaces; 4th. The mode and process of applying liquid fuel to heating furnaces; 5th. The mode and process of applying liquid fuel to lime and brick kilns; 6th. The combination of a reservoir constructed and operated with a blast furnace, with a cupola furnace, with a puddling furnace, with a heating furnace, with lime and brick kilns and a combustion chamber; 7th. A combustion chamber; 8th. The combination of a combustion chamber with a reservoir; 9th. The combination of a combustion chamber with a blast furnace, with a cupola furnace, with a puddling furnace, with a heating furnace, with a lime kiln, and with a brick kiln; 10th. The combination of a reservoir, a combustion chamber, and a glass cupola; 11th. The combination of a steam boiler with a combustion chamber, with an oil tank or reservoir and blast cupola heating or puddling furnace, lime and brick kiln.**No. 5555. Hydraulic Cement.** *(Ciment hydraulique.)*

Angus W. Shaw, Saccarappa, Me., U. S., 10th January, 1876, for 5 years.

Claim.—The hydraulic-cement, composed of clay and rocky or coprolitic lime.**No. 5556. Improvements on Fanning-Mills.***(Perfectionnements aux tarares.)*

William D. Edy and James N. Edy, Brantford, Ont., 10th January, 1876, for 5 years.

Claim.—1st. The application of an elevator to fanning mills and attached to it, in the position shown, constructed with sides M, spindle F, upper and lower elevator-rollers G and H, elevator-belts I, elevator-cups K, close-bottom L, driven sheave E, supporting-braces Q, and bracket R, which supports spindle F; 2nd. The mode of fastening the elevator to the bottom-board of the fanning-mill below the grain delivery O, by thumb screws and driving it by chain or belt D, from the sheave C, on fan-shaft B; 3rd. The combination of the grain guides with the elevator-sides M.**No. 5557. Improvements in the "Eureka Pump."** *(Perfectionnements à la pompe dite "Eureka.")*

George W. Johnson, Yarmouth, N. S., 10th January, 1876, for 5 years.

Claim.—1st. The air chamber A, placed directly over the suction pipe J, made with an open top and provided with a detachable cover B, in combination with pump D; 2nd. The branch pipe C, connecting the pipe J, and the air chamber A, with the pump D; 3rd. The curved or bent lever G, in combination with the buckets E, the pump D, and the connecting rod H, pivoted to the crank of the shaft in the usual manner.**No. 5558. Process for Converting Cast Iron into Steel.***(Procédé pour convertir la fonte de fer en acier.)*

Charles L. Jeffords, Jamestown, N. Y., U. S., 10th January, 1876, for 5 years.

Claim.—1st. The process of converting malleabilized cast iron into steel by heating the iron to a bright red colour and then immersing it in the described compound or preparation composed of animal charcoal, lamp black, sal soda, muriate of soda, black oxide of manganese, pulverized limestone, and prussiate of potash, and allowing the iron to remain therein until cold.**No. 5559. Improvements in Kneading Troughs and Yeast Mills.***(Perfectionnements aux pétrins et aux moulins à levain.)*

Fulgence Beauchemin, Roxton Falls, Que., 10th January, 1876, for 5 years.

Résumé.—1o. La combinaison du tambour du pétrin avec les lames intérieures B, B, B, B, et avec les dents ou pointes en bois D, D, D, D, D, D, D, D; 2o. La combinaison du tambour du moulin à faire le levain avec le ratier.*Claim.*—1st. The combination of the trough drum with the internal blades, B, B, B, B, and with the wooden teeth or points D, D, D, D, D, D, D, D; 2nd. The combination of the mill drum for making yeast with the rack.

No. 5560. Weather Strip. (*Bourrelet de porte.*)

William Milner, Strathroy, Ont., 10th January, 1876, for 5 years.

Claim.—The weather strip H, the projection of the extremity thereof, the combination of the sliding bar G, when attached thereto by double pivoted iron levers, the projection of the sliding bar G, to meet the jamb I, the combined application of the double pivoted iron levers and springs moved by contact of the extremity of the sliding bar or weather strip with the jamb I, and the folding of thin rubber to the upper part or back of strip to form the lower part of same, also the attachment of the weather strip to the door by double pivoted iron levers with a vertical spring without a sliding bar, also the combination of the catch C, with springs to lower or raise strip.

No. 5561. Improvements on the "Meadow Lark" Mowing and Reaping Machine.*Perfectionnements à la faucheuse-moissonneuse dite "Meadow Lark."*

John H. Grant, Grimsby, Ont., 10th January, 1876, for 5 years.

Claim.—1st. The lever E, and hook d, chain c, arranged and constructed to raise the grain table A, by the foot of the driver; 2nd. The arrangement of the tilter attachment g, e, h, k, r, &c., bolted to the main frame of the machine for adjusting the height of the cutter bar, with the hand and foot when the machine is operated as a mower.

No. 5562. Watch Case Spring.*(Ressort de boîtier de montre.)*

Ansel S. Buckelew, Jersey, N. J., U. S., 10th January, 1876, for 5 years.

Claim.—The flat bar A, having its inner edge curved and formed with the spring a, at one end, the lateral projection B, at the other end, and one or more depending supports B, near the middle part, said projection and support or supports being constructed as shown.

No. 5563. Improvements in Heating Drums.*(Perfectionnements aux poêles sourds.)*

Thomas J. O'Sullivan, Hamilton, Ont., 10th January, 1876, for 5 years

Claim.—1st. In combination with the drum a, and dampers b, the draft holes j, in said dampers cut alternately on each side of the dampers respectively; 2nd. In combination with the dampers b, and rods c, the cranks d, and lever f, handle h, for operating the dampers; 3rd. In combination with the damper rod c, the nuts e, for tightening the dampers and nuts i, g, for holding the levers f, to the cranks; 4th. In combination with a drum a, and damper rods c, the series of cranks d, and lever f, for simultaneously opening and closing the dampers b; 5th. In combination with the drum a, the arrangement of the ventilator k, on the cone.

No. 5564. Improvements in Water Closets.*(Perfectionnements dans les lieux-d'aisance.)*

Robert D. O. Smith, Washington, D. C., U. S., 10th January, 1875, for 5 years.

Claim.—1st. A water closet container provided with an outlet for ventilation combined with a bowl or receiver R; 2nd. A water closet container A, provided with a circular adjustable cover C, provided with the ventilating outlet C, located entirely upon said cover; 3rd. A water closet container A, constructed with a circular groove b, in its upper edge combined with a cover c, provided with a circular rib r, adapted to fit in said groove and compress the putty or other calking matter to ensure a tight joint; 4th. A water closet container constructed with a circular top and provided with an over hung flange f, combined with a cover C, and hook bolts d, which engage under said flange and permit the adjustment and rigid attachment of said cover; 5th. A water closet container and cover c, provided with an opening for the admission of the neck u, of the receiver or bowl combined with a conical flange depending from the edge of said opening; 6th. A water closet container or hopper provided with supporting legs to permit ready access to the soil pipe joint p; 7th. A water closet combining a container A, supported upon legs and having a circular top with a groove b, and over-hung-flange f, an adjusted cover with a rib r, which enters said groove b, hooked clamp bolts d, a ventilating neck c, and an annular drooping flange t, and a receiving bowl R.

No. 5565. Horse Rake. (*Râteau à cheval.*)

Francis G. Butler, Bellows Falls, Vt., U. S., 10th January, 1876, for 5 years.

Claim.—1st. A stud axle constructed with coverings for wheel hubs and for the rock shaft bearings and with a rearward extension g₁₁ for holding an outside stripper bar, all cast together in one piece; 2nd. The lifting device consisting of the bar r, attached at its rear end directly to the dumping arm of the rock shaft, at its forward end directly to the foot lever S, pivoted beneath the bar and connected midway by means of the link t, with the hand lever the latter having no other connection with the lifting devices; 3rd. The tooth thimbles constructed with the grooved fulcrum a, for the curved part of the tooth, the opening k₁, for its tip p, and the laterally bent projection h₁ for holding the spring tooth; 4th. The central support h, sustaining a divided rock beam B, by means of a pin the inner ends of which beam are connected by said pin upheld by such support and connecting the two parts of the beam in the line of its centre of motion; 5th. The rake tooth formed with a bent end o, p, curved as set forth.

No. 5566. Steam Pump or Boiler Feeder.*(Pompe à vapeur ou alimentateur de chaudière.)*

Thomas Northey, Hamilton, Ont., 10th January, 1876, for 5 years,

Claim.—1st. The design and general arrangement; 2nd. The steam vents or passages H, H, the vents or passages J, J, and the metallic packing rings K, K; 3rd. The combination of the double nut M, with glands N, N, the lubricating recesses P, P, and the guides for the glands R, R; 4th. The combination of the double valve seats U, U, with the valve box covers V, V.

No. 5567. Improvements on Pads for Chair Legs.*(Perfectionnements aux bourelets des pieds de chaises.)*

William T. Lintner, Marvin E. Weller and Alphonso Walrath, Fort-Plain, N. Y., U. S., 10th January, 1876, for 5 years.

Claim.—A pad for chair legs, composed of a piece of elastic material, held in place by a metallic clip or ferrule, and tacks or pins.

No. 5568. Improvements in Stave-Jointing Machines.*(Perfectionnements aux machines à joindre les douves.)*

Benjamin Barker, Ellsworth, Me., U. S., 10th January, 1876, for 10 years.

Claim.—1st. The feeding strap J, adjustable and stationary feed pulleys K, K, and the foot lever W, and its connections with the movable pulley; 2nd. The feed strap and the reversing cord connected to the dogs I, in such manner that their tension holds the dogs in the staves; 3rd. In combination with two adjustable inclined saws, the sliding carriage automatically acting dogs, and the inflexible vertically curved rail, having its radius of curvature all on one side.

No. 5569. Land Roller. (*Rouleau d'agriculture.*)

John Woolridge, Deans Corners, Ill., U. S., 10th January, 1876, for 5 years.

Claim.—1st. The tongue A, and fixed cross-bar B, in combination with the roller-frames E, E, double swivel, arranged in front and rear of the bar, the rear roller being pivoted to the end of the bar B, having a floating and circular movement; 2nd. The double swivel, composed of the bolt b, ears c, and bolt d, in combination with the roller-frame E, and cross-bar B, the rollers being attached to the ends of the said bar B, one in front, and the other in rear.

No. 5570. Improvements on Reed Organs.*(Perfectionnements aux orgues à anches.)*

George Blatchford, Mitchell, Ont., 10th January, 1876, for 15 years.

Claim.—The resonant chamber having inclined and perforated top O, in combination with top perforated vertical chamber, having grand swell S.

No. 5571. Improvements on Skates.*(Perfectionnements aux patins.)*

Peter Rodier, Detroit, Mich., U. S., 10th January, 1876, for 5 years.

Claim.—1st. The combination of the plates C, C₁, C₂, the two latter provided with the spurs f, h, with heel pedestal of a skate; 2nd. The ratchet lock-plate D, and bolt d₂, in combination with the plates C, C₁; 3rd. The toe plate E, foot plate F, side plates G, G₁, plates H, H₁, adjustable clamps J, J₁, and a locking device, in combination with the pedestals B₁, B₂, of a skate; 4th. The hook latch K, pivoted between the plates G, H₁, in combination with the notch o, and projection p, of the foot plate F; 5th. A skate having a stationary side plate, provided with an adjustable sole clamp J, a swinging side-plate, provided with a similar clamp J₁, which latter plate is pivoted to the stationary plate or to an intermediate girt plate G, and a locking device K; 6th. The plate B₆, having the clamp J, secured to an attachment thereon in combination with a swinging-plate E₆, having a clamp J₁, attached thereon; 7th. The plate B₆, formed with tongues G₆, in combination with clamps J, J₁; 8th. The combination of the plate B₆, swinging plate E₆, clamp J₁, and catch L₆, or its equivalent.

No. 5572. Book-keeping Game-board.*(Tableau démonstratif de la tenue des livres.)*

Watson F. Lamb and James B. Atwood, Wilbraham, Mass., U. S., 10th January, 1876, for 5 years.

Claim.—The gameboard having the cash and merchandise tables upon which the throws are made and the duplicate set of subdivisions B, headed respectively with different titles of accounts.

No. 5573. Wash-board. (*Planche à savonner.*)

Eliza J. Duff, Edward A. Kitzmiller and Robert P. Duff, Pittsburgh, Pa., U. S., (Assignees of Westley Todd), 10th January, 1876, for 5 years.

Claim.—1st. A sheet metal wash board having a series of raised projections B, each bound by longitudinal and transverse grooves or depressions; 2nd. A sheet metal wash board having the projections B, each bound by grooves or depressions in combination with raised projections C, in the bottoms of the interlying grooves; 3rd. A sheet metal wash board having a rubbing face, both longitudinally and transversely ribbed or corrugated.

No. 5574. Lamp Extinguisher.*(Eteignoir de lampe.)*

Axel E. Edholm, (Administrator of the Estate of Gustof F. Edholm), Lake City, Minn., U. S., 10th January, 1876, for 5 years.

Claim.—The rigid standard d, within the burner having a loop at its upper end in combination with the slide tube extinguisher a, its fin b, and the weight-chain c, passing through the floor of the burner and the standard-loop to the fin of the slide-tube.

No. 5575. Process for Imparting Resonance to Metallic Alloys.*(Procédé pour donner de la sonorité aux allages métalliques.)*

Benjamin Silliman, New-Haven, and Horace C. Wilcox, West-Meriden, Ct., U. S., 10th January, 1876, for 15 years.

Claim.—The process of submitting metallic alloys such as white metal, britannia and the like, to a regulated temperature just short of the melting point, for the purpose of permitting and securing the crystalline arrangement of their molecules, and the production in consequence of a musical ring or metallic resonance.

No. 5576. Method and Machine for Manufacturing Scale Board Boxes.*(Mode et appareil de fabrication des boîtes en éclisses.)*

Harrison W. Hutchins, Livermore-Falls, Me., U. S., 10th January, 1876, for 5 years.

Claim.—1st. The cutters *n*, upon the rotary discs *m*, *m*₁, in connection with the stationary scoring devices *o*; 2nd. In combination with the cutters *n*, and scorers *o*, the scale board cutter *a*; 3rd. The carriages *d*, and *j*, moving upon tracks *e*, *k*, and operated simultaneously by the screw shaft *p*, in combination with the cutters *n*, scorers *o*, and scale-board knife *a*; 4th. The method of manufacturing wooden boxes by tonguing, grooving and scoring the wood to form the sides thereof before the same is separated from the log, and then cutting the said sides from a rotating log of wood, then bending the same into proper form uniting the ends of the sides, and fitting the sides thus formed around a rabbeted bottom-piece; 5th. A scale board box formed of sides made and fastened, and having a bottom secured by tongues and grooves to the tongued and grooved sides of the box.

No. 5577. Improvements on Stock Cars.*(Perfectionnements aux wagons à bestiaux.)*

John R. McPherson, Jersey, N. J., U. S., (Assignee of A. N. Stevonton and T. F. McGrath), 10th January, 1876, for 5 years.

Claim.—1st. A feed and water trough composed of separate sections, each section fitting between two well posts and supported upon a continuous shaft, whereby all the troughs may be simultaneously turned into position for feeding and watering, or turned up out of the way; 2nd. The combination of the bins *A*, provided with the supply openings *H*, and sluices *B*, partitions *a*, operated by the rods *b*, and levers *c*; 3rd. The combination of trough *C*, shafts *D*, and levers *E*.

No. 5578. Shirt Bosom Stretcher and Ironing Board.*(Planche pour tendre et repasser les devants de chemises.)*

Sidney B. Morrell, Kenosha, Wis., U. S., 10th January, 1876, for 5 years.

Claim.—The serpentine hinged spring brackets *D*, in combination with the board *A*, and the stretching and crimping strip *G*, also the neck bow *B*, either permanent or adjustable.

No. 5579. Copying Telegraph. (Télégraphe écrivain.)

William E. Sawyer, New-York, U. S., 10th January, 1876, for 15 years.

Claim.—1st. The method of preparing a message for transmission consisting in transferring by pressure the lines of writing first written upon ordinary or special paper to a metallic plate or surface; 2nd. The combination with transmitting and recording mechanism, having a less speed of motion than the operating mechanism of an electro magnetic regulator operated by a line current; 3rd. The combination with transmitting or recording mechanism operated by friction of driving mechanism having a greater speed of motion than the transmitting or recording mechanism; 4th. The method of operating a copying telegraph consisting in carrying the contact style or styles transversely over or around a cylindrical surface, each style moving in one continuous direction instead of moving back and forth; 5th. The combination with a longitudinally advancing carriage, of a transversely moving, transmitting or recording style or styles; 6th. In a transmitting or recording style or styles, carried over and under a cylindrical surface; 7th. The combination with a threaded shaft, of a transmitting or recording style or styles and a cylindrical surface so arranged that the revolutions of the shaft shall both advance the cylindrical surface longitudinally and give the style or styles, a transverse circular motion in respect to the cylindrical surface; 8th. A cylindrical carriage moving upon grooved ways; 9th. A cylindrical transmitting or receiving carriage; 10th. The method of keeping the instrument at different stations in synchronism and maintaining the steadiness of their motion, consisting in the employment of friction to actuate the transmitting or recording mechanism in combination with an electro magnetic regulator, so that the motion of the transmitting or recording mechanism may be arrested without arresting the motion of the motive or driving mechanism; 11th. The combination with a transmitting or recording style or styles of friction to actuate the same; 12th. An actuating shaft having a right and left hand thread; 13th. The combination with transmitting mechanism in part actuated by a left hand thread; 14th. The combination with transmitting mechanism operating in one direction, of recording mechanism operating in the opposite direction; 15th. A transmitting or recording style whose length is adjustable by a set screw; 16th. The combination with a cylindrical carriage of a hinged binding frame for holding the message blank in place; 17th. The combination with the carriage *d*, of the point *f*₃, to engage in the thread of the shaft; 18th. The electrical circuit in which a record is effected at the receiving station by short circuiting or diverting into the main line wire by means of contact or contacts at the transmitting station, the whole or a portion of a battery current which flows in an artificial line at the receiving station; 19th. The method of operating a line of telegraph consisting in directing into the main line a portion of a battery current whose normal circuit is an artificial line at the receiving station.

No. 5580. Improvements on Axle Boxes and Axles. (Perfectionnements aux boîtes d'essieux et aux essieux.)

Adolphe Payette, Montreal, Que., 10th January, 1876, for 5 years.

Claim.—1st. In combination with any ordinary axle with longitudinal groove *b*, the axle box *D*, having an annular chamber formed therein behind the hub of the wheel; 2nd. The combination of the axle box *D*, provided at its rear end with projections entering into recesses in the collar *G*, of any axle, and with shoulder embracing the said collar.

No. 5581. Improvements on Pinch, Spike and Claw Bars.*(Perfectionnements aux pinces, clous et leviers à griffes.)*

Dennis Brennan, Elkhart, Ind., U. S., 10th January, 1876, for 5 years.

Claim.—1st. The claw bar complete; the formation of the head of the bar; the combination and relative position of the claws *c*, *c*₁, to the ample fulcrum or wide bearing *d*, the combination of head and handle of the bar producing the leverage; 2nd. The construction of the head of the bar of T-rail, and the application of the T-rail in the construction of the claw-bar.

No. 5582. Lock Nuts. (Noix de sûreté.)

James B. Atwood, Wilbraham, Mass., U. S., 10th January, 1876, for 5 years.

Claim.—An improved lock nut having its outer end or face provided with one or more slots or cavities *a*, dividing that portion of the nut into two or more divisions *b*, in combination with the projecting part *c*, at the bearing opposite the divisions *b*, whereby the latter is thrown inward against the threaded portion of the bolt when the nut is turned up to a bearing.

No. 5583. Water Filter. (Filtre à l'eau.)

Paul de la Neuville, Thompsonville, Ct., U. S., 10th January, 1876, for 5 years.

Claim.—The combination of the tank *A*, the stone filtering slot *a*, and the plate *D*, provided with a carbon filtering material; 2nd. The combination of the tank *A*, the stone filtering slab *a*, the vessel *b*, and the plate *D*, provided with a carbon filtering medium.

No. 5584. Improvements on Combined Square and Mitre Bar.*(Perfectionnements aux sauterelles pliantes à onglets.)*

John C. Rorick, Wauseon, Ohio, U. S., 10th January, 1876, for 5 years.

Claim.—1st. The adjustable bar *B*, in combination with the square *A*; 2nd. The bar *B*, having a thumb screw fastening for fixing it adjustably to a square *A*.

No. 5585. Improvement on Apparatus for Heating Water.*(Perfectionnements aux appareils à chauffer l'eau.)*

Thomas M. Carroll, Oelwein, Iowa, U. S., 10th January, 1876, for 5 years.

Claim.—The fire box *A*, smoke pipe *d*, fuel pipe *C*, and draft *B*, provided with a regulator, the said pipes being connected directly to the top of the fire box.

No. 5586. Improvements on Duster.*(Perfectionnements aux plumeaux.)*

John L. Little, Muncie, Ind., U. S., 10th January, 1876, for 5 years.

Claim.—1st. A duster made of feathers or other suitable articles upon a flexible head; 2nd. A duster or brush constructed by securing the feathers or other articles to a flexible material, and winding the same around the handle.

No. 5587. Door Knob. (Bouton de porte.)

Charles Carpenter, Hamilton, Ont., 13th January, 1876, (Extension of Patent No. 785), for 5 years.

Claim.—Casting a knob in two pieces as shown, of grey iron or malleable cast and uniting them.

No. 5588. Improvement on Lubricating Cups.*(Perfectionnement des godets de lubrification.)*

Reuben W. Drew and Margaret P. R. B. Shackell, Wife of Henry Shackell, Montreal, Que., 15th January, 1876, for 5 years.

Claim.—1st. The manner and mode of keeping the parts in place by means of the cap or stopper *B*, bushing or sediment protector *D*, and seat *C*; 2nd. The regulating rod *E*, with projection *F*, and passage *P*.

No. 5589. Tenon Fastener for Chairs and other Furniture.*(Mode d'ajustage des tenons des chaises et autres meubles.)*

Lee D. Craig, San Francisco, Cal., U. S., 18th January, 1876, for 5 years.

Claim.—The fastener *A*.**No. 5590. Sewing Machine. (Machine à coudre.)**

Jeremiah Keith, Providence, R. I., U. S., 18th January, 1876, for 5 years.

Claim.—A reciprocating work feeder in combination with a separate presser, provided with mechanism for raising and holding it off the work, when the needle may be therein, in order that the feeder may be moved backward, underneath the work, and the latter during such movement be sustained by the needle; the combination of the auxiliary shaft *R*, its cam *T*, *Y*, *Z*, *A*₁, the latch *X*, stud *g*, reverser *W*, and the lever *Q*, with the main shaft *M*, its cams *S*, *B*₁, the presser *D*, and feeder *E*, and their operative levers *P*, *F*.

No. 5591. Machine for Making Bricks and Tiles. (Machine à brique et à tuile.)

George S. Tiffany, London, Ont., 18th January, 1876, for 5 years.

Claim.—1st. Connecting the auger shaft *F*, and mill shaft *G*, by means of the bevel wheel *A*, *B*, *C*, *D*, and intermediate shaft *E*; 2nd. The arrangement of the auger wholly within the cylinder; 3rd. The use of the clutch pin *O*, in the auger shaft and slot in hub of the auger; 4th. Supporting the core of the die on a stud which is screwed into the end of the auger shaft or otherwise fastened thereto, so that the stud may be readily renewed.

No. 5592. Well-auger. (Sonde de puit.)

William W. Jilz, St. Louis, Mo., U. S., 18th January, 1876, for 5 years.

Claim.—1st. The combination of the auger *A*, bottom *F*, lip *H*, and projection *I*; 2nd. The combination of the auger *A*, bottom *F*, and perforation *J*; 3rd. The combination of the auger *A*, bottom *F*, lip *H*, projection *I*, and perforation *J*; 4th. The combination of the auger *A*, and door *E*, provided with the hinges *K*, *K*, and lugs *k*, *k*; 5th. The combination of the auger *A*, air tube *C*, lip *H*, bottom *F*, and projection *I*; 6th. The combination of the auger *A*, flattened side *B*, bottom *F*, lip *H*, and projection *I*; 7th. The combination of the auger *A*, bottom *F*, valve *G*, lip *H*, and projection *I*; 8th. The combination of the auger *A*, knife *D*, bottom *F*, lip *H*, and projection *I*.

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- No. 5613. J. L. Massie, Cowansville, Missisquoi County, Quebec, "Improvement on Heaters." (Extension of No. 4237), 27th Jan. 1876.
- No. 5614. J. L. Massie, Cowansville, Missisquoi County, Que., "Improvement on Heaters." Extension of No. 4237, 28th Jan., 1876.
- No. 5615. M. MacVicar, Postdam, New-York, U. S. A., "Improvement on an apparatus for Illustrating Geography and Astronomy," 28th Jan. 1876
- No. 5616. T. J. Sloan, New-York, U. S. A., "Improvement on an Apparatus for Thawing Frozen Water Pipes," 28th Jan. 1, 1876.
- No. 5617. W. W. St. John, Philadelphia, Penn., U. S. A., "Improvement on Piston Packing," 28th Jan., 1876.
- No. 5618. W. A. Durrin, Wilson, Wis., U. S. A., "Improvement in Stakes," 28th Jan., 1876.
- No. 5619. C. P. Baggott, & J. W. Thomson, Hamilton, Ont., "Improvement in Lock-Nuts," 28th Jan., 1876.
- No. 5620. M. E. Dow, Manchester, New Hampshire, U. S. A., An Advertising Device, 28th Jan., 1876.
- No. 5621. J. B. Wickes, New York, U. S. A., "Improvement in Refrigerators," 28th Jan., 1876.
- No. 5622. H. H. Nash, Baltimore, Maryland, U. S. A., "Improvement in Life Preserving Stools," 28th Jan., 1876.
- No. 5623. T. Schorn, & J. Kulon, Petersburg, Ont., "Improvements on Bed Bottoms," 28th Jan., 1876.
- No. 5624. W. P. Buckbee, Smithville, Ont., "Improvement on Drum Heaters," 28th Jan., 1876.
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- No. 5933. Edward Bartlett, Renfrew, Ont., A Potato Digger and Picker, 31st Jan., 1876.
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- No. 5635. F. Williams, Detroit, Michigan, U. S. A., Convertible Waggon Box, 31st Jan., 1876.
- No. 5636. F. Brammer, Little-Falls, New-York, U. S. A., Warrior-Harrow, 31st Jan., 1876.
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- No. 5665. T. Jones Frost, Que., "Improvement on Machine for Raising or Extracting Stones, Stumps and other Heavy Bodies," 8th Feb., 1876.
- No. 5666. E. A. Gillett, Boston, Mass., U. S. A., & O. S. Gillett, Buffalo, N. Y., U. S. A., (Assignees of S. H. Bailey, Boston, "Improvements on Mechanism for Bending Wood," 8th Feb., 1876.
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- No. 5668. G. G. Struhlar, Philadelphia, Penn., U. S. A., "Improvement on Neck Ties," 8th Feb., 1876.
- No. 5669. H. Mehl, Yellow Stone, Wis., U. S. A., "Improvement on Harrows," 8th Feb., 1876.
- No. 5670. H. H. Gorringe Washington, Columbia, U. S. A., "Improvements on Floating Draw Bridges," 8th Feb., 1876.
- No. 5671. W. Potter, Boonville, N. Y., U. S. A., "Improvement in Machines for Jointing and Dressing Circular Saws," 8th Feb., 1876.
- No. 5672. M. Hantley, & H. Oliver, London, Ont., "Improvement on Churn Powers," 8th Feb., 1876.
- No. 5673. J. W. Hoxie, Florence, Mass., U. S. A., "Improvement on the Manufacture of Steel," 8th Feb., 1876.
- No. 5674. J. Ewing, Jr., Burlington, Ont., & J. Hyde, Brantford, Ont., "Improvements in the Manufacture of Brooms and Whisks out of Broom Corn or any other materials for sweeping and dusting purposes," 8th Feb., 1876.
- No. 5675. B. Stern, & H. Stern, Chattanooga, Tenn., U. S. A., "Improvements on Steam Combining Heaters," 8th Feb., 1876.
- No. 5676. J. Brown & R. Muir, Woodbridge, York Co., Ont., (Assignees of D. Smith, Woodville Victoria, Ont., "Improved Threshing Machine Cylinder," 10th Feb., 1876.
- No. 5677. J. B. Wells, Keeseville Essex Co., N. Y., A Horse Shoe Nail Flushing Machine, 10th Feb., 1876.
- No. 5678. K. Knott & E. P. Bridges, London, Ont., Railway Cars for Transporting Cattle, 10th Feb., 1876.
- No. 5679. P. Patterson, Village Patterson, York Co., Ont., A Self Dumping Hay Rake, 10th Feb., 1876.
- No. 5680. C. Brewster, Montreal, "Improved Skate," 10th Feb., 1876.
- No. 5681. D. Snider, Edgely, York Co., Ont., Machine for Killing Potato Bugs, 10th Feb., 1876.

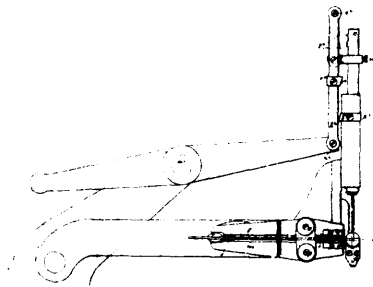
THE CANADIAN PATENT OFFICE RECORD.

ILLUSTRATIONS.

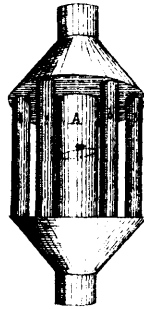
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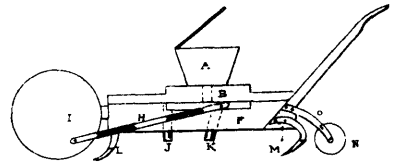
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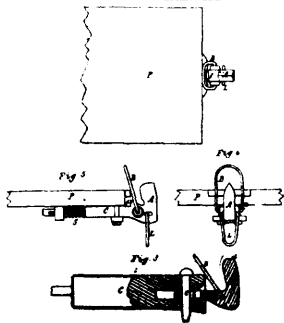
5529 Richardson's Pegging Machine.



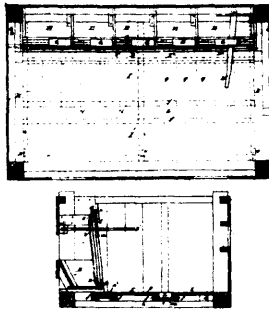
5530 Kennedy's Improvements in Dumb-stoves.



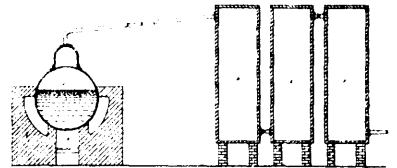
5531 Saxton & Boyd's Improvements in Seed, Corn and Bean Planters.



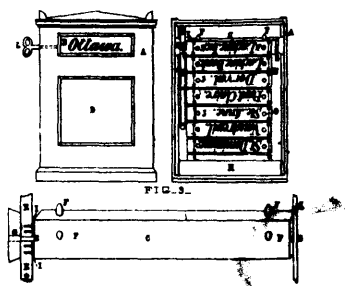
5533 Dorr's Railway Carriage-coupling.



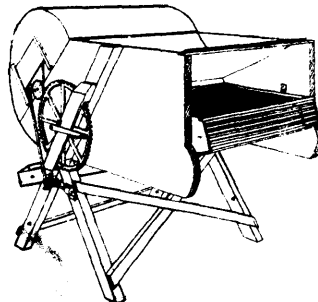
5534 Marsh & Bell's Improvements on Cattle Stalls.



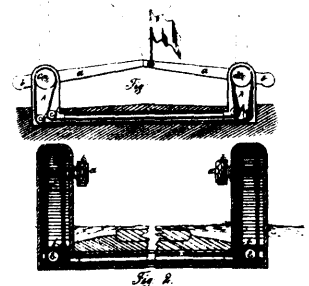
5535 Patterson & Brothers' Process for obtaining Salt from Ammonia.



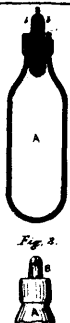
5536 Ramsay's Station Indicators.



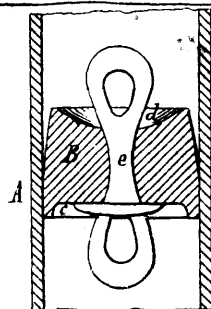
5538 Schurtz's Fanning Mill and Grain and Seed Separator.



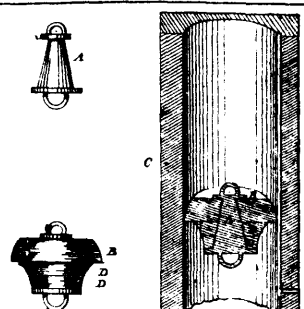
5539 Winsor's Automatic Gate.



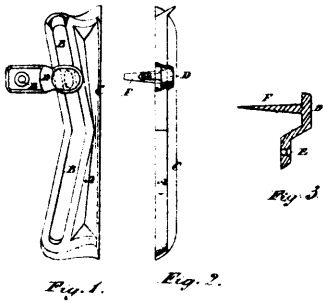
5541 Christie's Bottle Stopper.



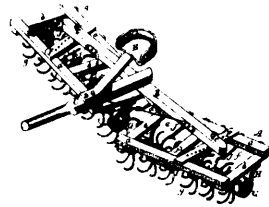
5542 Crosby's Bucket for Chain Pumps.



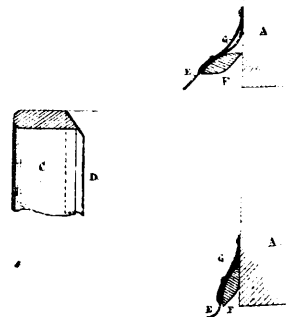
5543 Hamlin's Elastic Rubber Bucket for Chain Pumps.



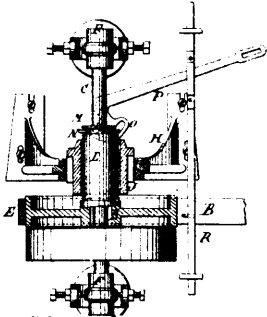
5545 Gillmore's Improvements on Sash-holders.



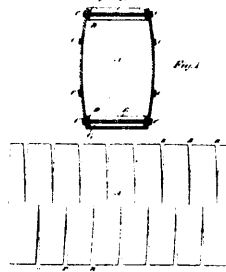
5548 Wells' Revolving Drag-harrow.



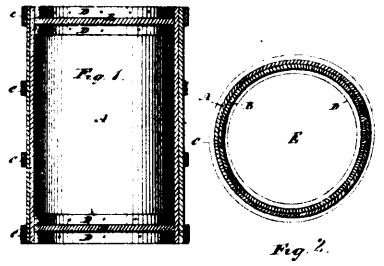
5547 Widdifield's Improvements on Weather Strips.



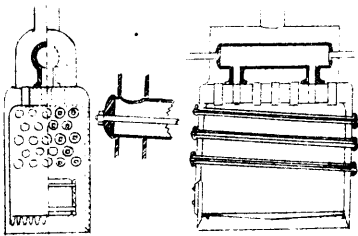
5548 Newell & Cook's Improvement on Manner of Constructing Dead Pulleys.



5549 Cornell & Aldridge's Improvements on Barrels.



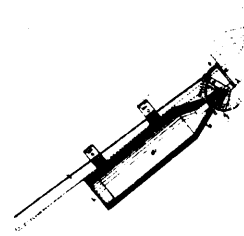
5550 Cornell & Aldridge's Improvements on Barrels and Cylindrical Box.



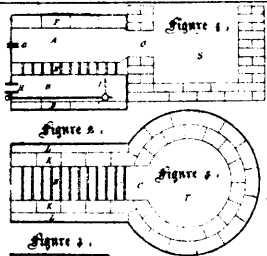
5551 Tandy's Improvements on Boilers for Steam Engines and Heating purposes.



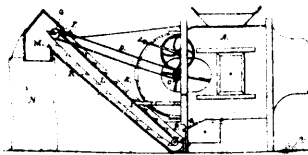
5552 Howes' Improvement in Egg-beaters.



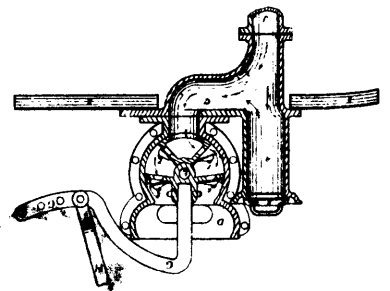
5553 Robinson's Improvements on Hand Corn-planters.



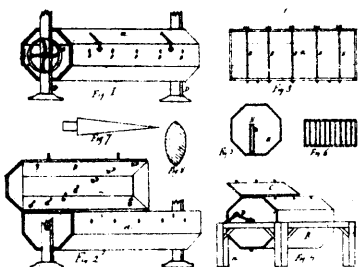
5554 Smith's Process for Heating Metals and Smelting Ores.



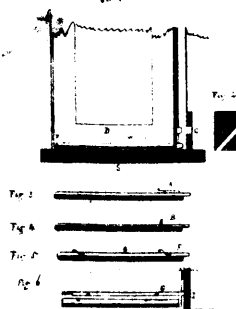
5556 Edy's Improvements on Fanning-mills.



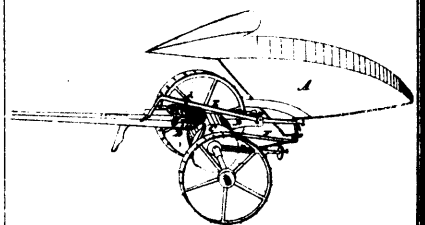
5557 Johnson's Improvements in the "Eureka Pump."



5559 Beauchemin's Improvements in Kneading Troughs and Yeast Mills.

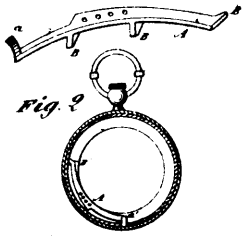


5560 Milner's Weather Strip.

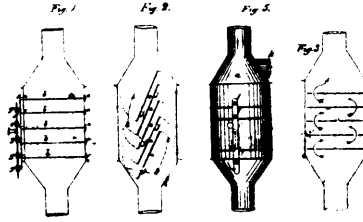


5561 Grant's Improvements on the "Meadow Lark" Mowing and Reaping Machine.

Fig. 1



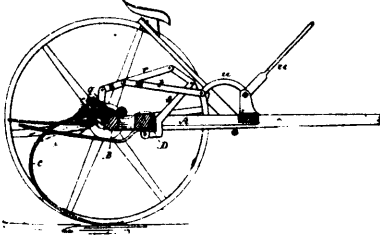
5562 Buckelew's Watch Case Spring.



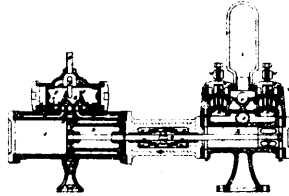
5563 O'Sullivan's Improvements in Heating Drums.



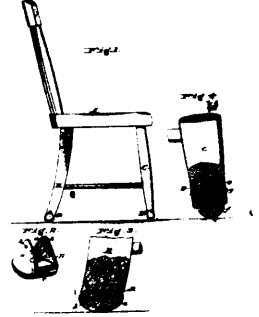
5564 Smith's Improvements in Water Closets.



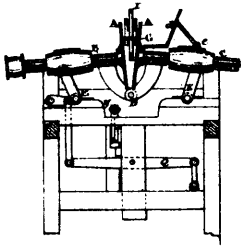
5565 Butler's Horse Rake.



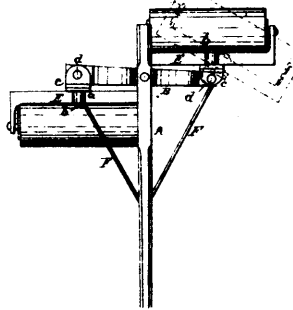
5566 Northey's Steam Pump or Boiler Feeder.



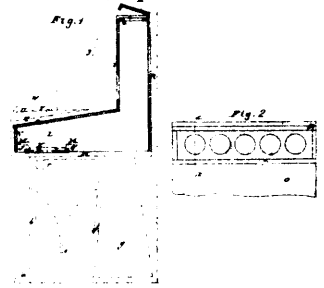
5567 Lintner, Weller & Walrath's Improvement on Pads for Chair Legs.



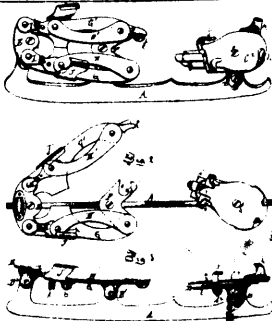
5568 Barker's Improvements in Stave-jointing Machines.



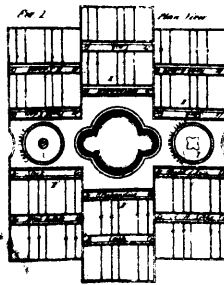
5569 Woodbridge's Land Roller



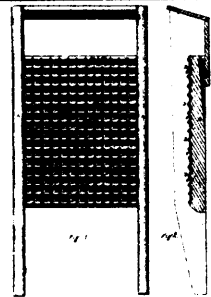
5570 Blatchford's Improvements on Reed Organs.



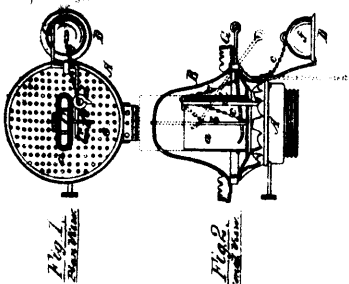
5571 Rodier's Improvements on Skates.



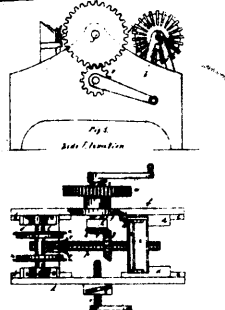
5572 Lamb & Atwood's Book-binding Game-board.



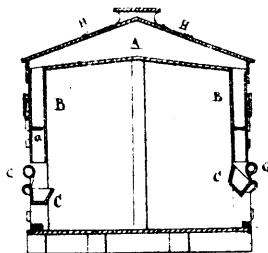
5573 Todd's Wash-board.



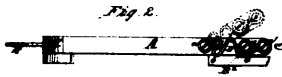
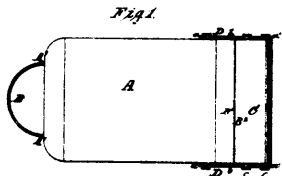
5574 Edholm's Lamp Extinguisher.



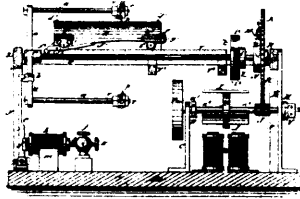
5576 Hutchins' Method and Machine for Manufacturing Scale Board Boxes.



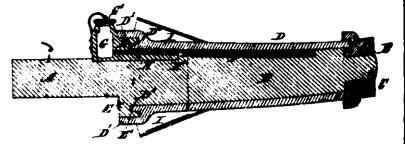
5577 Steventon & McGrath's Improvements on Stock Cars.



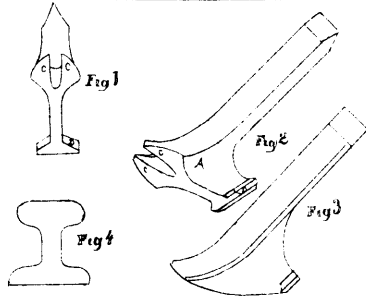
5578 Morrell's Shirt Bosom Stretcher and Ironing Board.



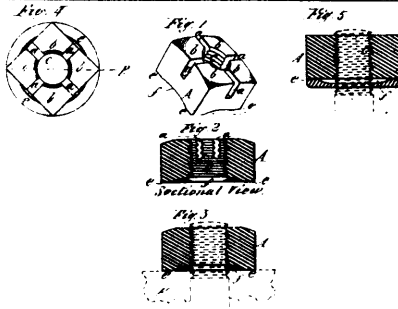
5579 Sawyer's Copying Telegraph.



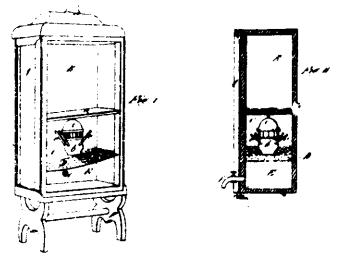
5580 Payette's Improvements on Axle Boxes and Axles.



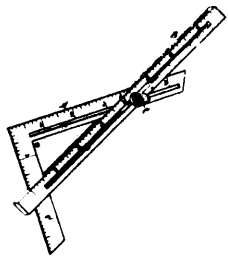
5581 Brennan's Improvements on Finch, Spike and Claw Bars.



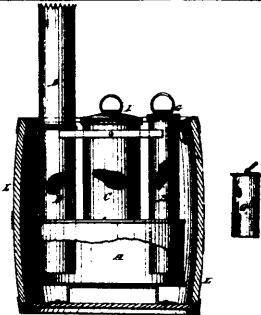
5582 Atwood's Lock Nuts.



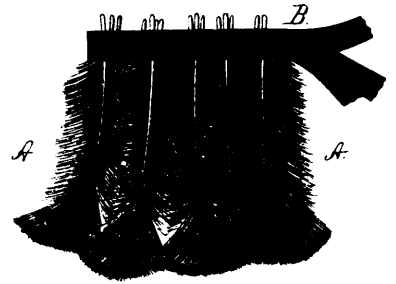
5583 Paul de la Neuville's Water Filter.



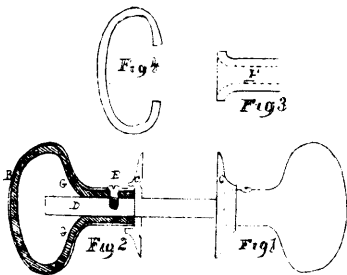
5584 Rorick's Improvements on Combined Square and Mitre Bar.



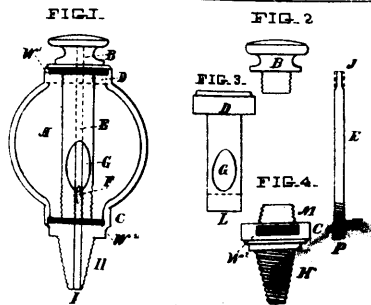
5585 Carroll's Improvements on Apparatus for Heating Water.



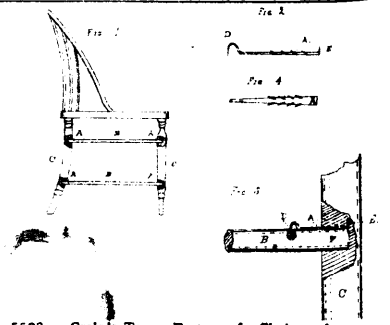
5586 Little's Improvements on Dusters.



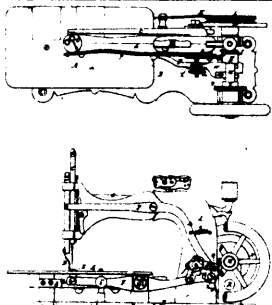
5587 Carpenter's Door Knob.



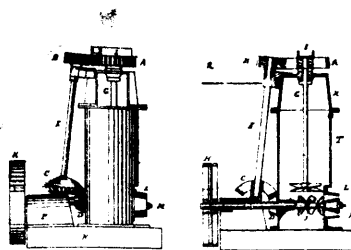
5588 Drew & Shackell's Improvement on Lubricating Cups.



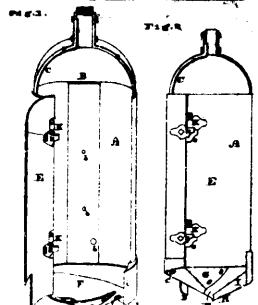
5589 Craig's Tenon Fastener for Chairs and other Furniture.



5590 Keith's Sewing Machine.



5591 Tiffany's Machine for making Bricks and Tiles.



5592 Jile's Well-auger.