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# The Canadian Patent Office

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### INVENTIONS PATENTED.

No. 5026. SAMUEL T. WAGGONER, Mattson, Mich., U. S., 27th July, 1875, for 5 years: "Folding Table." (Table pliante.)

*Claim.*—1st. In combination with the hinged legs A, and top of a folding table, the arrangement of the notched spring E, (metal or wood) with the cross bars C, C, above the knee of a sitter; 2nd The arrangement of the rubber straps I, I, securing the ends of the spring E, to the base-pieces D, D.

No. 5027. CHARLES G. C. SIMPSON, Montreal, Que., 27th July, 1875, (Extension of Patent No. 537), for 5 years: "Improvements on the Art of Manufacturing Railway Locomotive and Car Wheels." (Perfectionnements dans la fabrication des roues de locomotives et de wagons de railroutes.)

*Claim.*—The novel combination of the tire b, fitted to a wheel mould heated and oxidized and placed in it; the cast-iron centre or wheel a, run in a fluid state while the tire b, is as described, causing the surface of the rolled and hammered cast steel and cast iron to unite and weld at their joint c.

No. 5028. FRANKLIN DODGE, BENJAMIN J. DENTON, and JAMES M. HART, Oswego, N. Y., U. S., 30th July, 1875, for 5 years: "Peat Machine." (Machine à tourbe.)

*Claim.*—1st. The adjustable elevating apparatus consisting of the arms C, mounted on the adjustable driving shaft B, frame C, with shafts C, and C, elevating leg C, with endless chains D, and buckets D, and shaft C, in combination with the grinding machine A, all mounted on the boat A; 2nd The shaft F, supported and operated as shown and provided with the pinions F, in combination with the racks F, attached to each side of the elevating legs; 3rd. The combination of the pioneer cutters G, with the endless travelling chain D; 4th. The elevating buckets D, the perforated back-piece D, in combination with the adjustable cutter H; 5th. The combination of the scoring points or blades H, with the buckets D; 6th The conveyor K, in combination with the elevating leg C, and the grinding machine A; 7th. The peat conveyor M, consisting of the endless travelling chain N, revolving over pulleys at each end, with bars n, and rough M, in combination with the grinding machine A, provided with the lugs L.

No. 5029. HENRY ROGERS, Eureka, Cal., U. S., 30th July, 1875, for 5 years: "Improvements on Locks." (Perfectionnements aux serrures.)

*Claim.*—The combination with the pivoted eccentric D, having recess d, of sliding knob-bolt E, for securing rigidly the eccentric in locked position on the main bolt.

No. 5030. ALLEN S. ACKER, Lockport, N. Y., U. S., 30th July, 1875, for 5 years: "Improvements on Hoes." (Perfectionnements aux houes.)

*Claim.*—1st. The hoe composed of the blade A, having the general shape of an inverted T, with two or more cutting edges, the shank B, having a boss at one end by which it is secured to the blade and a screw thread cut at the other end by means of which it is secured to the handle and the rivetting plate F, between which the blade and the boss of the shank are firmly secured together as described; 2nd The hoe blade A, having a turn or roll from g, to h, on either side of the curved part.

No. 5031. DAVID M. McPIERSON, Lancaster, Ont., 30th July, 1875, for 5 years: "Cheese Hoop." (Cercle de fromage.)

*Claim.*—1st. A cheese hoop constructed in two sections A, B, of the same diameter, one section having a hoop D, which fits outside the other section when both sections are conjoined to hold the bandage G; 2nd A cheese hoop having a bottom E, slipping within the hoop to stretch and hold the cloth F.

No. 5032. JESSE STUBBS, Mount-Pleasant, Iowa, U. S., (Assignee of F. W. Schultz), 30th July, 1875, for 5 years: "Road Scraper." (Eboueur.)

*Claim.*—In combination with the tongue E, cross bar F, and bars D, D, connected to the tongue, and pivoted to the front ends of the sides of the box A, the frame B, B, C, pivoted to the ends of the bars D, and carrying the wheels G, G, so that the scraper box and frame B, C, may be folded forward and lie up side down upon the tongue and bars D.

No. 5033. ALBERT S. HOPSON and WILLIAM W. LAMBIE, Plainview, Min., U. S., 30th July, 1875, for 5 years: "Improvements on Vehicle Springs." (Perfectionnements aux ressorts des voitures.)

*Claim.*—The combination of the elliptic spring A, curved brace B, of the form shown, the lower brace C, guide-rod D, and springs E, F.

No. 5034. CARROLL L. RIKER, Rochelle Park, N. J., U. S., 30th July, 1875, for 5 years: "Non-conducting Covering." (Couverture mauvais conducteur.)

*Claim.*—1st. A felting or non-conducting covering material or lining for excluding or retaining heat or cold, made from the head of the cat tail or reed-mace; 2nd. In combination with a felting or non-conducting covering made from the head of the cat-tail or reed-mace, hair or such other material for assisting in felting or otherwise.

No. 5035. THOMAS J. GORDON, DELOS H. BUMPUS, and WILLIAM H. KEELER, Rouseville, Pa., U. S., 30th July, 1875, for 5 years:

**"Process for Manufacturing Lubricating Oils"** (Procédé de préparation des huiles à lubrifier.)

*Claim*—The process of decolorizing and refining petroleum by filtration through anhydrous pulverized clay or anhydrous pulverized clay and sand.

No. 5036. LUCIUS A. DODGE, Keeseville, N. Y., U. S., 30th July, 1875, for 5 years: "Feeding Device of Machines for Forging Nails and Spikes." (Appareil d'alimentation des machines à forger les clous.)

*Claim*—The combination with the reciprocating griper slide G, of the supporting pivots e, e', carried by swinging arms H, I, attached to rock shafts E, J, and constituting a free parallel motion for the support, guidance and operation of said slide, as specified.

No. 5037. AMANDA T. JONES, Clinton, Wis., U. S. (Assignee of LeRoy C. Cooley), 30th June, 1875, for 5 years: "Food Preserving Process." (Procédé de conservation des aliments.)

*Claim*—The process of exhausting the air from the pores or cells of the substances to be preserved and supplying the place of the air with a simple liquid as syrup or water, at a temperature lower than that at which the chemical change of cooking begins.

No. 5038. JAMES RIGBY, Montreal, Que., 31st July, 1875, for 5 years: "Apparatus for the Manufacture of Gas from Petroleum, &c." (Appareil de fabrication du gaz au pétrole, &c.)

*Claim*—1st. The furnace A, constructed in sections so as to be capable of indefinite enlargement. 2nd. The retort E, 3rd. In any apparatus for the manufacture of gas, the arrangement of the stand pipe H, connected by pipes H', with retorts E, 4th. In combination with any furnace for the manufacture of gas, the water backs B, with or without superheating coil N; 5th. The injector Q; 6th. In combination with the retort E, and pipe H, the pipe U; 7th. In any gas apparatus, the washer L, provided with mid feathers I; 8th. The scrubber H, arranged with diaphragm H', and syphons K; 9th. The injector Q, placed on the outlet pipe T; 10th. The arrangement in any gas generator of apparatus whereby carbon gas and hydrogen gas are generated in the same retort and pass through and are commingled in the same purifiers.

No. 5039. JOHN G. EBERHARD, Akron, Ohio, U. S., 7th August, 1875, for 5 years: "Improvements on Hames." (Perfectionnements aux attelles.)

*Claim*—A hollow cast metal hame for harness.

No. 5040. MORTIMER McCALL, and JOB KING, Buffalo, N. Y., U. S., 7th August, 1875, for 5 years: "Cutting Attachment to Lead Pencils." (Appareil à aiguiser les crayons de plombagine.)

*Claim*—1st. The tube A, having a socket or open end for the insertion of the lead-pencil C, and provided with the longitudinal slot B, stop G, off set I, and knife D, attached to the knob F, and retained in the case by the coil spring H; 2nd. The perforated bottom L.

No. 5041. ARA B. DRAKE, Painesville, Ohio, U. S., 7th August, 1875, for 5 years: "Fence Post Base." (Semelle de pieux de clôture.)

*Claim*—In combination with the post A, the rod iron base and brace consisting of the vertical section B, horizontal curve C, section C, brace of section D, and secured in the ground as shown or standing thereon for supporting a portable fence.

No. 5042. WILLIAM H. LOTZ, Chicago, Ill., U. S., 7th August, 1875, for 5 years: "Hot Air Furnace." (Calorifère.)

*Claim*—1st. The hollow bridge wall across the back part of the fire pot, and in combination therewith an air tube and register for delivering a thin stream of air in a heated state at the lower edge of said bridge wall, 2nd. A pendant bridge wall across the fire

pot, separating the combustion chamber from the entrance to the eduction flues; 3rd. The combination of the following elements to wit: a fire pot having an elevated combustion chamber closed at the top, an inclined chute or magazine for delivering fuel into the front part of the same; a transverse bridge wall, a register for admitting air to the combustion chamber before the gases pass from it under the bridge wall and a flue or flues at the back of the fire pot for carrying off the heated currents; 4th. The combination of the disc register M, the ring register N, and the lever I; 5th. The annular evaporating pan L, with a projecting spout II; 6th. The flues E, F, G, H, H', and K, and damper P, in combination with a fire pot having a combustion chamber closed at the top.

No. 5043. JAMES KEDY, New-York, U. S., 7th August, 1875, for 5 years: "Improvement in Securing Knob Roses to Doors." (Perfectionnement dans l'ajustage des rosettes des boutons de porte.)

*Claim*—The wooden bush F, inside a lock.

No. 5044. JAMES L. O'CONNOR, and HENRY DOCKHAM, Monroe, Wis., U. S., 7th August, 1875, for 10 years: "Pruning Shears." (Scieur)

*Claim*—1st. A pruning machine having shorter and greater bends, or curves of the shanks and blades; 2nd. The placing and insertion of the connecting rivet or bolt in such a position as to bring the point of cutting the limb much nearer and opposite the said rivet, thus shortening the purchase and greatly increasing the power; 3rd. The widening and extending of the blade A, so as to form the hook F.

No. 5045. AUSTIN BERRY, Waterloo, Que., 7th August, 1875, for 5 years: "Improvements on Churns." (Perfectionnements aux barattes.)

*Claim*—1st. The fly wheel D, and cog-wheel F, connected together by lugs E, or other device whereby the rim of the wheel is wholly supported from the fly-wheel; 2nd. The journal bearing G, applied as set forth, as an outer bearing for the axle of the pinion H; 3rd. The top B, constructed cylindrically so as to conform with the circular contour of the bottom A; 4th. The plates I, fitted to slide over a recess in the cream chamber to shield the inlet air orifices.

No. 5046. JOHN BULL, Chattanooga, Ten., U. S., 7th August, 1875: "Improvements on Stirrups." (Perfectionnements aux étriers.)

*Claim*—The combination with a stirrup A, having cross-bar B, of the swivel-shank C, with loop D, and head e, the circular discs G, G', and the rods b, with springs d, arranged in circular form around the shank C.

No. 5047. SILAS P. LITTLEFIELD, Lynn, Mass., U. S., 7th August, 1875, for 5 years: "Station Indicator for Railway Carriages." (Indicateur de station pour les voitures de railroutes.)

*Claim*—The combination of the shafts C, C', the extensible and contractile shaft E, and their connecting universal joint D, D', with the two railway-carriages A, B, and their station-indicators F.

No. 5048. HARRIET A. SCHANDEVYL, East Sangus, Mass., U. S., 1875, for 5 years: "Improvements on Corsets." (Perfectionnements aux corsets.)

*Claim*—In combination with the two portions A, A', of a corset, provided with a shoulder strap C, or C', to each of them the two intermediate crossed straps D, D', arranged above the said portions A, A', and applied so as to connect the said two shoulder straps, or cause each of them to be connected with both of said portions A, A'.

No. 5049. COLUMBUS MUNN, Cairo, Ill., U. S., 13th August, 1875, for 5 years: "Improvements on Veneer-Cutters." (Perfectionnements aux machines à couper les bois de placage.)

*Claim*—1st. The pressure bar A, provided with the semi-circular groove a, in combination with the pressure roller D, 2nd. The cutters G, constructed as shown and adapted for use in completing at one operation the ends of a barrel stave; 3rd. In a machine for cutting wood veneers, a pressure roller placed immediately in front of the cutter, and having an independent positive motion upon or around its axis. 4th. The bar A, constructed with adjustable sectional boxes I.

No. 5050. THOMAS KATER, Hamilton, Ont., 13th August, 1875, for 5 years: "Improvements in Piano Fortes." (Perfectionnements aux pianos-fortes.)

*Claim.*—1st. A regulating rail for pianos, provided with a series of recesses or seats in its under side to receive the regulating buttons for securing a greater degree of adjustment in an upward direction; 2nd. A regulating rail for pianos, provided with a series of seats or recesses in its upper side to receive the buttons, regulating screws for securing the greatest possible degree of adjustment of the same in a downward direction; 3rd. A regulating rail for pianos, formed with an enlarged front edge, provided with a series of recesses on its top and bottom to receive the heads and buttons of the regulating screws as the same are depressed or raised; 4th. An agraffe for pianos having one or more openings for the passage of the string or strings, and a transverse opening at right angles thereto for the reception of a pin rod or bridge; 5th. The Agraffe A, placed on the turning block, plate, rail, or base having an opening or openings *a*, for the string or strings, a transverse opening *b*, and a pin or bridge *G*; passing through the latter to form a cheek in the string, and to secure a double bearing; 6th. An agraffe for pianos, having one or more string openings varying in diameter or size on opposite sides of a central transverse pin or bridge opening; 7th. The treble bar of an iron frame for pianos, provided with a channel *D*, formed in the bar parallel with and above the iron frame for the passage of the strings composing a treble note, so that the strings will be out of contact with the iron frame, and base of the treble-bar.

No. 5051. CHARLES W. LEWIS, (Assignee of G. W. Davis), Boston, Mass., U. S., 13th August, 1875, for 5 years: "Compound for Destroying Insects." (Composition insecticide.)

*Claim.*—The admixture of carbonates of lime, magnesia and iron pyrites with alkali.

No. 5052. HENRY M. WELLS, Toronto, Ont., 13th August, 1875, for 5 years: "Window Blind Fastener." (Arrête-persienne.)

*Claim.*—The clasp A, B, with its adaptation to the purposes set forth.

No. 5053. THOMAS O. A. BAYLEY, Hamilton, Ont., 13th August, 1875, for 5 years: "False Top for Box Stoves." (Faux-dessus de calorifère.)

*Claim.*—1st. The combination of the false-top A, and the sliding damper B; 2nd. The construction of the draft F.

No. 5054. DEXTER S. BAILEY, Dover, Me., U. S., 13th August, 1875, for 5 years: "Improvements on Elevators." (Perfectionnements aux élévateurs.)

*Claim.*—The combination of the sprocket wheel A, and multiplying gear B, C, D, E, with the groove-wheel F, and hand chain G, all arranged and suspended in a yoke.

No. 5055. ALEXANDER R. KOERBER, Berlin, Ont., 13th August, 1875, for 5 years: "Improvement on Musical Reed Instruments." (Perfectionnement des instruments de musique à anches.)

*Claim.*—1st. Dividing the wind chest of a reed instrument into two or more compartments C, and D, each compartment comprising in itself a separate wind chest in combination with an independent bellows B; 2nd. Having an octave in the centre of the instrument or in case of more than one division, an octave at each division overlapped or divided, the one half being given to one side and the other to the opposite side of the division.

No. 5056. WILLIAM ABERCROMBIE, Hamilton, Ont., 13th August, 1875, for 5 years: "Machine for Clamping Window-Sashes." (Machine à emboîter les croisées de fenêtres.)

*Claim.*—1st. The combination of plate *k*, provided with studs *r*, *r*, with plate *ic*, provided with female screw *bs*, in which a screw operates to adjust it in and out to suit the width of the sash to be clamped. 2nd. The combination of the adjustable clamping irons C, the bearings H, and E, and screw shaft L. 3rd. The combination of plate W, provided with female screw *bs*, with the right and left hand screws *p*. 4th. The combination of the adjustable clamping irons C, the right and left hand screws *p*, and bearings H, and E. 5th. The combination of the adjustable clamping-irons C, C, C, the right and left hand screws *p*, *p*, the bearings H and E, and the screw shaft L.

No. 5057. CARL F. W. L. DITTMAR, Boston, Mass., U. S., 13th August, 1875, for 5 years: "Improvements in Explosive Compounds." (Perfectionnements dans les compositions explosives.)

*Claim.*—An explosive compound made of sugar and glycerine treated with acids, water, and soda or the latter and salt-petre, or of sugar and starch so treated, or of sugar, starch and glycerine so treated, or of starch and glycerine treated with acids, soda and salt-petre; or of starch treated with the acids, water, soda and salt-petre, the process of treating vegetable fibre, for the purpose of rendering it explosive, such consisting, in reducing the fibre to pulp, desiccating and reducing such pulp to grains or powder, or compact forms, and treating such with acids, or such and one or more materials as specified; the process of preparing vegetable fibre for being rendered explosive by being treated by acids or other materials, such consisting in reducing the fibre to pulp, and subsequently desiccating it and reducing it to grains, powder or compact forms; in combination with the mode of preparing vegetable fibre for being rendered explosive by treatment with acids, the application to it of saccharine or starchy and alkaline solutions before treating it with the nitric and sulphuric acids; in combination with the mode of preparing vegetable fibre, for being rendered explosive, viz: by reducing it to pulp, desiccating the latter and reducing it to grains, powder or compact forms, and treating it with acids, the application to it, after such treatment of a solution of nitro or chlorate of potash, or such and nitro-glycerine; the new compound resulting from either of the modes of treatment mentioned in the four claims next preceding, in combination with the process of making an explosive compound or matter from a vegetable material reduced to pulp, dried and reduced to grains, powder or compact forms, and afterwards treated with a mixture of nitric and sulphuric acids, the treatment of the pulp with sulphuric acids as heretofore explained prior to its desiccation and subsequent treatment by the mixture of nitric and sulphuric acids, the new or improved explosive compound or matter resulting from the last mentioned claimed art or process of manufacture.

No. 5058. THOMAS B. WILSON, Manchester, Eng., and MARTIN P. HAYES, Sealorth, Ont., 13th August, 1875, for 5 years: "Evaporating Furnace." (Fourneau d'évaporation.)

*Claim.*—The combination of the furnace J, combustion chamber H, an 'double coned or other flue I, with the steam jet O, for forcing the combustion.

No. 5059. WILLIAM H. WRIGHT, Sangerties, and BYRON J. HOWD, Syracuse, N. Y., U. S., 13th August, 1875, for 5 years: "Railway Trucks." (Trains de voitures de railroutes.)

*Claim.*—1st. In a truck having wheels with sectional axles, the bridge D, supported at its outer ends by housings working in jaws and secured thereto, and the central bearings secured to the said bridge, in combination with the inner end portions of two sectional axles *a*, *a*, projecting past the inner jaws and their housings towards the centre of the truck. 2nd. In a truck having wheels carried by sectional axles, the buttons *x*, *x*, made on the inner and long ends of the axles in combination with the central bearings *ca*, and bridge D, supported by an I secured to the housings at its ends; 3rd. The housings *c*, *c*, rendered elastic and carried by jaws C, C, one on each side of each wheel and connected to the frame pieces B, B, in combination with the bridge D, having its ends attached to housings, and the central bearings secured to the said bridge; 4th. The combination of the stay plates G, G, with an outer and inner jaw, each carrying a housing for supporting a wheel having an axle disconnected with its opposite wheel and the frame pieces B, B, of the truck. 5th. The bars E, E, and E, in combination with the stay plates G, and jaws C, C; 6th. In a truck employing wheels rendered capable of revolving independently of each other and at different velocities, the bridge D, connected with and supported at its ends by elastic housings carried by jaws placed near the hub of the wheel, in combination with the inner long ends of a pair of sectional axles, the central bearing placed between the inner jaws and the bars E, E, and E, connecting with the stay plates G.

No. 5060. AUGUSTUS SANBORN, Higganum, Ct., U. S., 13th August, 1875, for 5 years: "Swivel Plough." (Charrue tourne-oreille.)

*Claim.*—1st. A share for a reversible plough having the angle of its two sides less than a right angle *o*; 2nd. A share for a reversible plough so shaped and so pointed to the land side that the nose points "land ward" in either adjustment. 3rd. The mould board *z*, made adjustable toward and from the axis *z*, by means of the bar *c*, and forked piece *f*, or their equivalent; 4th. The combination of the mould board *z*, the hook *h*, and the staple *g*, set adjustably in the pieces *h*, *h*. 5th. The ear, set back from the face of the mould board *z*. 6th. The spring draft rod having an elastic oblong figure. 7th. The mould board *z*, having neither a raised nor sunken central line and otherwise shaped as described; 8th. The furrow gauge device made of the parts *p*, *r*, *s*, or all in one piece, and having the slot *o*, *o*, *o*.

No. 5061. GEORGE E. NUTTING and JOSEPH C. GRIFFENS, N. Y., U. S., 13th August, 1875, for 5 years: "Steam Drill." (Drille à vapeur.)

*Claim.*—1st. The combination of a grooved bed mounted upon trunnions with a yoke supported upon two fixed extensible legs and one pivoted extensible leg for the purpose of facilitating the adjustment of the drill cylinder at variable elevations, and at variable angles; 2nd. A yoke provided with bearings for the trunnions of a drill cylinder belt, in combination with two fixed legs, and one movable leg, the latter pivoted in double conical face bearings by means of a screw bolt and nut for the purpose of securely holding the movable leg in prescribed position; 3rd. Projecting cylinder leg trunnions having conical face bearings and provided with wall screw-threads engaging extro-ome nuts in combination with a yoke for the purpose of securely holding the cylinder bed in prescribed position; 4th. The rocking lever J, the valve I, and the annular recess o, in the piston K; 5th. The drill stock L, and the plug h, having a transverse aperture to receive the drill passing transversely through the said stock, one end of said plug being furnished with a screw-thread and nut whereby the drill may be tightened in the stock; 6th. The ratchet wheel r, secured to end of the twisted shaft u, and the pawl p, one or more embedded in the cylinder-head combined to operate as described; 7th. The cylinder C, the cylinder heads and the bolts V, V', located in apertures made in the webs a, a', constructed and arranged as described.

No. 5062. ROBERT THOMAS, Toronto, Ont., 13th August, 1875, for 5 years: "Improvements in Cooking Stoves." (Perfectionnements aux fourneaux de cuisines.)

*Claim.*—1st. The hot air chambers V, V', V<sup>2</sup>, V<sup>3</sup>, V<sup>4</sup>, V<sup>5</sup>; 2nd. The descending pipe D, with dampers U, U, in combination with the raised flue S, and chambers V, V', V<sup>2</sup>, V<sup>3</sup>, V<sup>4</sup>, V<sup>5</sup>; 3rd. The ascending pipe G, leaving from the hot air chamber V<sup>5</sup>. 4th. The water vessel A; 5th. The pit cover H, in combination with the top F.

No. 5063. CICERO D. VAN ALLEN, Guelph, Ont., 13th August, 1875, for 5 years: "Improvements on Combined Churns and Washers." (Perfectionnements aux barattes et laveuses combinées.)

*Claim.*—1st. The regulating V-shaped dasher as described in figs 2, 9 and 11; 2nd. The manner of introducing atmospheric air into the cream by means of the air chamber D and its cone C, C in combination with the valve and atmospheric air tube in dash rod A; 3rd. The lever attachment M, with pulley H, and the weight K; 4th. The slide B.

No. 5064. JOHN P. FOOTE, Baltimore, Md., and LOUIS DUNNEMANN, Jr., Charleston, S. C., 13th August, 1875, for 5 years: "Rudder Brace." (Femeloit de gouvernail.)

*Claim.*—The combination of the frame B, flange C, plate D, and set screw E, with the rudder stock A; 2nd. The combination of the frame B having the projections or feet a, with the stand b, resting thereon.

No. 5065. WILLIAM H. GONNE, Chatham, Ont., 13th August, 1875, for 5 years: "Sash Pulley." (Poulie de croisée.)

*Claim.*—The side pieces C, pulleys A, and rivet E.

No. 5066. BENJAMIN F. LOWELL, Boston, Mass., U. S., 13th August, 1875, for 5 years: "Horse Rake." (Râteau à cheval.)

*Claim.*—The combination of the axle A, rod B, frame L, stock D, bar E, and teeth F.

No. 5067. EDWARD MARSLAND, Sing-Sing, N. Y., U. S., 13th August, 1875, for 15 years: "Liquid Meter." (Hydromètre.)

*Claim.*—1st. A liquid meter having three sections or castings A, B, and C, formed and combined together as described; 2nd. A liquid meter having a middle piece B, cast in such a shape as to form the seat for the revolving wheel D; 3rd. A liquid meter having a revolving wheel D, surrounded or enveloped by a rim E, 4th. A liquid meter having an annular chamber d, in which the liquid is collected before passing to the outlet b; 5th. A liquid meter having its cover or cap C, provided with a rent tube or plug H; 6th. In a liquid meter, the connecting rod F, provided with a hollow sleeve or socket having vertical and transverse slots, in

combination with a pin e, and cross bar attached to the floating disc D; 7th. The combination in a liquid meter of the floating disc D, and the parts A, B, and C, with the connecting rod F, and registering mechanism G, all working together in the manner described.

No. 5068. GEORGE HOLGATE, Oshkosh, Wis., U. S., and ELON TUPPER, Mount Bridges, Ont., 13th August, 1875, for 5 years: "Process of Preserving Vegetable and Animal Substances" (Procédé de conservation des matières végétales et animales.)

*Claim.*—1st. In the process of preserving animal or vegetable substances, the method of subjecting them in a free state to the fumes from a burning composition of finely divided charcoal and sulphur; 2nd. The process of preserving vegetable and animal substances which consists in submitting them to the joint fumes of finely divided charcoal and sulphur mixed; the charcoal also causing more complete combustion of the sulphur, and then putting them into water which has been impregnated with fumes of the same kind.

No. 5069. WILLIAM H. O'DWYER, New York, U. S., (Assignee of G. H. Spencer), 13th August, 1875, for 5 years: "Waggon Seat Springs." (Resorts de sièges de wagons.)

*Claim.*—1st. The combination of the bracket A, sliding frame B and guiding rod a, bearing on legs e, e; 2nd. The combination of the bracket and the rod a, secured so as to turn freely; 3rd. The combination of the sliding frame and the rod a, having an enlargement x, of soft metal; 4th. A frame consisting of one or more bent strips combined with cast metal blocks n, n', through which the strips extend and to which they are secured; 5th. The frame B, bent to fit the eye m, in combination with the yoke D, secured to the seat; 6th. The bracket A, provided with hooked projections c, c.

No. 5070. WILLIAM HALSTED, Trenton, N. J., U. S., 13th August, 1875, for 5 years: "Locomotive Spark Arrester and Extinguisher." (Arête-flammèches extincteur de locomotive.)

*Claim.*—1st. In combination with a locomotive, a smoke stack, pipe or chimney, projecting from the engine directly forward over the cow-catcher, and having its forward end turned downwards and entering a box which covers the cow-catcher; 2nd. In combination with a smoke stack or chimney projecting directly forward from the locomotive, a triangular-box or covering over the cow-catcher, the combination serving to convey the sparks and igneous matter directly forward from the smoke-stack and then down upon the track forward of the locomotive; 3rd. In combination with the box which covers the cow-catcher, a tank or water compartment located in the top of such box and provided with perforations or water outlets in its bottom, to permit the water to drip through the same; 4th. In combination with the box that covers the cow-catcher and with a water-dripping apparatus, the corrugated or grooved-plate beneath the cow-catcher, and inclining backwards, and serving to receive the falling water, and the cinders or sparks and to extinguish them.

No. 5071. ROBERT MAINER, Orillia, Ont., 13th August, 1875, for 5 years: "Rotary Tea Caddy." (Boite à thé rotatoire.)

*Claim.*—A machine constructed according to the drawings Figs. 1, 2, and 3, for the purpose of storing tea or other similar substances having a suitable number of partitions H, to form compartments for holding said tea or similar substances; the manner of construction of the bottom of discharge G, the revolving of the machine by means of the pivot F, assisted by the metal rollers D, the application of scoops C, to each discharge G, and the slide valve B.

No. 5072. JACOB BLAUVETT, Blauvettville, N. Y., U. S., 13th August, 1875, for 5 years: "Step Ladder." (Echelle à queue.)

*Claim.*—The plate A, having notched hole H, notches I, J, K, and L, in combination with plate C, having the angular headed pivot E.

No. 5073. WILLIAM S. EVANS, Orrville, Ohio, U. S., 13th August, 1875, for 5 years: "Gauge Attachment to Scissors." (Ajustage de mesure aux ciseaux.)

*Claim.*—The sliding scale attachments to scissors when consisting of the scale H, with guard i, guide-way B, with arms C, spring E, and set-screw G.

No. 5074. MORRIS L. ORUM, and CHARLES H. MELLOR, Philadelphia, Pa., U. S., 16th August, 1875, for 5 years: "Mandrel for Bending Pipes." (Mandrin pour plier les tuyaux.)

*Claim*—1st. A flexible mandrel for bending metallic pipe, consisting of a spiral coil of wire presenting a flat or flattened surface upon the exterior of the spiral; 2nd. The combination of a spiral wire mandrel and flexible plates interposed between the mandrel and the sides of the tube to be bent.

No. 5075. ORRIN B. THOMPSON, White Ash, and WILLIAM W. GRIER, Hutton, Pa., U. S., 19th August, 1875, for 5 years: "Improvements on Carriages." (Perfectionnements aux voitures.)

*Claim*—1st. The combination of the springs D, D, with the centre brace G; 2nd. The combination with the springs D, D, of the links H, H, rigidly attached to the back axle and front cross-bar; 3rd. The combination of the springs D, D, central piece G, and links H, H; 4th. The cross bar I passing between and connecting the upper ends of the links H, H; 5th. The nuts d, provided with flanges e, in combination with the cross-bar I, and links H; 6th. The combination of the springs D, D, braces or centre pieces G, cross-bars J, J, and the slotted frame K; 7th. The combination of friction plates C, C, with the axle and spring bar of a vehicle; 8th. The combination with the axle A, and upper spring-bar I, of the braces R, R, with projections f, f, clips b, b, and the bearings in the plate h; 9th. The combination of the upper friction plate C, with arms p, p, the braces S, S, plate h, and hub u.

No. 5076. HENRI E. CASGRAIN, Quebec, Que., 19th August, 1875, for 5 years: "Gas Machine." (Machine à gaz.)

*Résumé*.—1o. La combinaison du cylindre D, et tubes E, E, E; 2o. Le tube régulateur B, combiné avec l'hélice G.

*Claim*.—1st. The combination of the cylinder D, and tubes E, E, E; 2nd. The regulating tube B, combined with the screw G.

No. 5077. EDWARD V. WINGARD, Pittsburgh, Pa., U. S., 24th August, 1875, for 5 years: "Brick Burning." (Cuisage de la brique.)

*Claim*.—1st. The method of introducing the oxygenizing air into the kiln by descending currents through the combustion chambers, to insure the combustion of the gas and the air before its introduction into the kiln; 2nd. In burning bricks and other clay wares, the method of mixing the air and inflammable gases, before allowing them to come in contact with the green ware in the kiln, so that they are always at a regular temperature, and introducing into the kiln a supply of the tempered air, sufficient to make combustion perfect, or a greater or less supply as required by the means described; 3rd. The combination with a kiln, and furnace of gas combustion vaults C; 4th. The combination with a kiln of the passage d, for the introduction of sand or other comminuted refractory material, for the purpose of partially or wholly closing the opening C, communicating with the vault and kiln; 5th. The combination of the kiln furnace D, with the air chamber f, jet holes i, and the gas distributing vaults C; 6th. The combination with the gas distributing-vault C, of air induction passage, opening into its upper portion.

No. 5078. JOHN HEWITT, Hamilton, Ont., (Assignee of A. Alexander), 24th August, 1875, for 5 years: "Improvements on Ore-crushers." (Perfectionnements aux machines à broyer les minerais.)

*Claim*.—1st. The sliding or swinging yoke N, in combination with the rubbers B, B; 2nd. The rubbers B, B, provided with the corrugated dies F, straight or spiral C, C, in combination with the yoke N, and pitman P.

No. 5079. ASA NYE, Jr., Boston, Mass., U. S., 24th August, 1875, for 5 years: "Improvements on Feed Bags for Horses." (Perfectionnements aux sacs-crèches à chevaux.)

*Claim*.—A telescopic bag C, with oval hole d, and ring e, in combination with bag B, ring A, and string J.

No. 5080. JOSEPH STEGER, New-York, U. S., 24th August, 1875, for 5 years: "Air Brake." (Frein atmosphérique.)

*Claim*.—1st. In combination with the cylinder of a vacuum air brake, pistons G, each provided with heads h, h, an intervening air-chamber i, and a channel j; 2nd. The pistons G, G, each

constructed with heads h, h, in combination with the cylinder D of a vacuum air-brake, the steam pipe E, nozzle F, the piston rods C, and brake mechanism.

No. 5081. EDWARD H. GRATIOT, Plattsville, Wis., U. S., 24th August, 1875, for 5 years: "Wheat Steamer." (Étuve à blé.)

*Claim*.—1st. A wheat steamer and dryer composed of two cylindrical shaped coils of piping A, and B, one placed within the other and leaving a space between the two, through which the wheat being prepared passes; 2nd. The cone F within the boiler E, in combination with the cylindrical coils A, and B; 3rd. The perforated coils d, d, in combination with the steam pipe K.

No. 5082. GEORGE R. MOORE, Westford, Mass., U. S., 24th August, 1875, for 5 years: "Improvements on Propellers." (Perfectionnements aux propulseurs.)

*Claim*.—The combination of a carrier for the scull, fan or other device to be worked crossing the axis of the driving shaft by which it is carried, and an oscillating guide or regulator, said regulator preventing the rotation of the carrier and having oscillatory motion to accommodate the carrier, two two propellers coupled together and the engines coupled to the propellers in the arrangements represented in Fig. 3; the combination of the pivoted oscillating yoke J, with the arms D, of a propeller carrier C, arranged obliquely to the driving shaft, the ring M, combined with the propeller carrier C, and the bed, and pivoted to one at right angles to its pivots with the other.

No. 5083. GEORGE ILES, Montreal, Que., 24th August, 1875, for 5 years: "Improvements on the Adjustment of Magnetic Needles." (Perfectionnements dans l'ajustage des aiguilles magnétiques.)

*Claim*.—1st. In combination with any magnetic-needle, the transverse bar D, carrying many minute-magnets placed with like poles one way, and being practically a magnet pointing E, and W, attracted toward a piece of iron like an ordinary magnetic needle; 2nd. In combination with any compass, the longitudinal bar A, carrying many minute magnets of like poles, pointing one way and acting as a magnetic needle; 3rd. In any compass, the combination of the longitudinal bar A, and transverse bar D, equally attracted by any object; 4th. The use in combination with the longitudinal bar A, and transverse bar D, of a compensator working as described, according to known rules.

No. 5084. THOMAS SAUNDERS, and ROBERT BAIN, Toronto, Ont., 24th August, 1875, for 5 years: "Improvements on Burglar and Fire-proof Safes." (Perfectionnements aux coffres-forts.)

*Claim*.—1st. The construction of a safe having each of the frames B, and B, made of one bar of angle iron and having only one weld, and with rounded solid corners; 2nd. The construction of a safe having the body C, made of one plate having only one joint and the said joint at the bottom of the safe and riveted, the plate C, having rounded solid corners; 3rd. The improved hinge comprising the sockets D, E, F, link G, with eccentric h, and hinged pin P, in combination with the upright bar H, one or more cross bars I, sockets K, K, and handle L.

No. 5085. DAVID M. KELLY, Athelstan, Que., 24th August, 1875, for 5 years: "Machine for Trimming the ends of Bolts and Rivets." (Machine à finir les bouts des boutons et des rivets.)

*Claim*.—The combination of lever b, with the knives c, and d.

No. 5086. CYRUS G. FORCE, Cleveland, Ohio, U. S., 24th August, 1875, for 5 years: "Device for facilitating Excavations for Sewers." (Appareil pour faciliter le creusage des égouts.)

*Claim*.—1st. The combination with the car A, and the movable platform B, of a portable tressel whereby the device is adapted to the carrying forward of an excavation, such as sewers, cuts, laying of pipes, &c.; 2nd. The combination with the movable platform B, the standards D, of the sill E, extending across the excavation and uniting the base of the said standards, whereby the gauge of the tracks C, is maintained; 3rd. The combination with the movable platform B, and the standards D, of the sills D, and braces F.

No. 5087. WILLIAM LIGHTFOOT, and GEORGE H. COPPING, Toronto, Ont., 24th August, 1875, for 5 years: "Lawn Sprinkler." (Arrosoir de gazon.)

*Claim.*—1st. The adjustable concave spray distributor C; 2nd. The combination of the clamp D, rod E, with the spray distributor C, with the respective tightening screws. 3rd. The socket I, with screw I', adjustable stand H, with hose holder K, and s row K', and clamp with screw K'. 4th. The combination and arrangement of the stand H, socket I, hose holder K, in combination with the hose branch B, and spray distributor C: 5th. The application of one or more distributors C, to one machine, when so required.

No. 5088. THOMAS H. MARSH, Toronto, Ont., 24th August, 1875, for 5 years: "Clamp." (Crampon.)

*Claim.*—A clamping tool A, the adjustable jaw D, (with sliding wedge E, attached) and tooth F, in combination with the notched stem or bar C, attached to and projecting downwardly from the jaw B.

No. 5089. EDWARD A. CALAHAN, Brooklyn, N. Y., U. S., 24th August, 1875, for 5 years: "District Signal and Alarm Telegraph." (Télégraphe local à signaux et d'alarme.)

*Claim.*—1st. The circuit wheels in combination with levers n, insulated springs i, dog 3, circuit connections and revolving mechanism whereby the wheels are unlocked, and the circuit spring pressed to its wheel simultaneously; 2nd. The annular notched flange 4, upon the circuit wheel in combination with the pin 6, lever n, circuit springs, and electrical connections; 3rd. In a district signal and alarm telegraph, a movable cap applied to and combined with the alarm push button; 4th. The slide p, provided with diagonal slots, in combination with the levers n, and their projecting fingers n', whereby a second key cannot be depressed until the first is in its normal position.

No. 5090. WILLIAM JOHNSON, Shelby, N. Y., U. S., 24th August, 1875, for 5 years: "Barn Door Hanger." (Penture de porte d'étable.)

*Claim.*—1st. The movable double case or truck E, connected by saddle or bridge e, and carrying the single rollers D, or the double rollers D', in combination with the T-rail F, when the case is slotted to drop down upon the rail and clear the track of obstructions; 2nd. The hanger C, having hook c, in combination with and fitted to saddle e, of the movable double case or truck E, whereby a tilting movement is secured for the bottom of the barn door.

No. 5091. JOHN GERHARDT, and JAMES HUTCHISON, Montreal, Que., 24th August, 1875, for 5 years: "Portable re-sawing Gang Saws." (Scies multiples portatives pour refendre.)

*Claim.*—1st. The laterally and vertically adjustable hooked check plates K, in combination with the saws J, and saw frames E; 2nd. The adjusting screw h, and straining key g, combined with the hooked plates K; 3rd. The adjustable washers or saw-guides M, in combination with the adjustable tie-piece B, and spring D'; 4th. The adjustable upper and lower openers Et, and F', in combination with adjustable shaft or axle G, coil spring I, and J', and collar or block-wheels H; 5th. The combination of the hooked plates K, the openers Et, F', springs D', the adjustable washers and saw-guides M, with the saws J, saw-frames E, feeding rollers P, P', and driving wheels g, g', g''.

No. 5092. PERLEY M. THOMPSON, Derby, Vt., U. S., 24th August, 1875, for 5 years: "Pipe Wrench." (Clé à visser les tuyaux.)

*Claim.*—1st. In combination with a forked wrench having a prong B, provided on its inner edge or face with hardened metallic teeth or prong C having its inner edge or face polished and case hardened; 2nd. The combination of the polished and case hardened inner surface of the prong C, with the hardened metallic teeth of the prong B.

No. 5093. JAMES KLINCK, Keswick, Ont., 24th August, 1875, for 5 years: "Meat Preserving Process." (Procédé de conservation de la viande.)

*Claim.*—Enclosing meat D, within an air tight chamber A, and subjecting the same to sulphurous-fumes produced by burning brimstone within the said chamber A, either by sprinkling the same upon a bar of red-hot iron E, or otherwise.

No. 5094. JOHN J. CURRAN, and CARLOS WILCOX, Chicago, Ill., U. S., 24th August, 1875, for 5 years: "Lumber Dryer." (Sècherie à bois.)

*Claim.*—1st. In a kiln for drying lumber the inclined floor D, extending beyond the ends of the kiln to form the landing and unloading platforms and provided with openings e, and shoot up at part C. 2nd. The flexible self adjusting car for lumber driers, consisting of the independent beams D', provided with wheels e, and connected by means of hooks K. 3rd. In combination with the inlet and exit pipes, the steam chamber D, provided with the valves p, operated by means of the rods s, 4th. In a hot air lumber drier, the combination with the inclined bottom B, and steam pipes E, E', of the horizontal partition a', and the vertical partition a'', arranged alternately above and below the pipes: 5th. The combination in a hot air lumber drier of the steam chamber D, with valves p, and pipes E, pipes E', steam chamber G, and steam trap H: 6th. The combination of the kiln A, inclined bottom B, doors C, C', steam chambers D, G, pipes E, trap H, wide chimney J, and suction fan L.

No. 5095. PIERRE C. STE. MARIE, Montreal, Que., 26th August, 1875, for 5 years: "Screw-windlass for Steamers and Sailing-vessels." (Guindaux de vaisseaux à voile et à vapeur.)

*Claim.*—1st. The combination of the capstan E, having its drum head G, secured to the vertical spindle F, the endless screw I, and circular angling groove rim-plate (worm-wheel) J, in such a manner as to cause said capstan E, to work to the right hand; 2nd. The combination of the pawl lifter lever E', the shaft B, the cranks C, to which are linked the pawls D, with the capstan E, in such a manner as to disconnect the said pawls D, from the pawl wheels E', in order to reverse the motion of the windlass; 3rd. The combination of the two barrel wheels L, with the windlass to heave up masts or any other heavy weights. 4th. The combination of the dials K', the ratchet-wheels J', the stop clicks u, and springs, the clicks s, and springs S, the squares r, the pitman q, the beams p, the eccentrics H, with the wild-cat head wheels N, N', to measure the playing out of the anchor-chain T; 5th. The chain hawse pipe X, having a groove k, to protect the cross-link of the anchor-chain T, from twisting on said hawse-pipe barrel X; 6th. The combination of the notch j, at the farther end of the plate W, and cam-lever V, with the chain stopper W', to stop the playing of the anchor-chain T; 7th. The combination of the anchor hanger chain lever Z, having a catch I, to hold up the anchor U, with the davit Y.

No. 5096. JOHN J. STEWART, Sargentville, Me., U. S., 26th August, 1875, for 5 years: "Pegging Jack." (Banc à chevillé.)

*Claim.*—1st. The beds A, B, clamps E, screw-crank F, block C, stocks G, K, stud H, spring S, and staff Q, provided with the rest P; 2nd. The lever Q, stud H, and rod I, provided with the nut J, combined to operate as specified.

No. 5097. FRANCIS VAN DOREN, Adrian, Mich., U. S., 26th August, 1875, for 5 years: "Corn Planter." (Semoir à blé-d'inde.)

*Claim.*—1st. The reversible spring plate H, provided with the central notched block d, in combination with the planter A, shoe B, and rod e; 2nd. The reversible cut off consisting of the bar J, blocks h, h', at the ends thereof, and rubber pieces i, i', fastened to the blocks by central screws.

No. 5098. HARVEY SPRAGUE, Churchville, N. Y., U. S., 26th August, 1875, for 5 years: "Improvements on Carriages and Waggon's." (Perfectionnements des voitures à quatre roues et autres.)

*Claim.*—1st. The combination of the side springs C, C', spring-roach D, cross-strap E, body loop H, and the angular braces u, G, extending from the centre of the reach to the outer ends of the rear axle; 2nd. The combination with the spring C, C', and spring reach J, of the cross-strap E, and the angular-braces u, G; 3rd. The combination of the pivoted side springs C, C' of the rear axle and bolster, the reach D, attached on the bottom of the axle, and the body loop H, fastened to the centre of the reach to prevent longitudinal motion thereof, from turning the axles; 4th. The circle plate I, discs e, c', and the king-bolt g, in front of the axle.

No. 5099. DENNIS P. SHARP, Ithaca, N. Y., U. S., 26th August, 1875, for 5 years: "Horse-rake." (Rateau à cheval.)

*Claim.*—1st. The combination with the axle B, and wheel A, of a rim r', formed on the wheel, and the friction pad b, on the axle resting thereon, the connection being made by turning the pad against the inner periphery of the rim; 2nd. The combination of the rake teeth, formed at their upper ends with bends f, and hooks g, with the axle B, grooved as shown to receive the said bends, rod e, and bar H, arranged to permit the teeth to rise and fall without becoming detached.



No. 5100. JAMES BAILEY, and FREDERIC A. BAILEY, Farmington, Me., U. S., 26th August, 1875, for 5 years: "Fruit Picker." (Trieur de fruits.)

*Claim.*—1st. The combination with a loop *a*, of movable wire jaw C, hinged to the lower rail of a fixed wire jaw B, and adapted to be vibrated through and into the same. 2nd. The pole A, arranged within the tube E.

No. 5101. JOHN CLAY, and ALFRED SAWTELL, Montreal, Que., 26th August, 1875, for 5 years: "Fire-lighter." (Allumoir.)

*Claim.*—1st. A fire lighter consisting of longitudinals *a*, transverses *b*, end pieces *c*, having space *f*, fitted with shavings, &c.; 2nd. The fire lighter constructed as described in combination with the sheet of paper *g*.

No. 5102. JOHN B. FAYETTE, and LORENZO MEEKER, Oswego, N. Y., U. S., 25th August, 1875, for 5 years: "Lifting Jack." (Cric.)

*Claim.*—An improved lifting jack, formed by the combination of the tube A, provided with the base B, and the vertical and inclined slots *a*, *a*', the sliding tube C, provided with the cross-pin C', the sliding rod or tube D, provided with a head E, the pivoted connecting bar *f*, the lever G, and the pivot stop and guard H, I, J.

No. 5103. MICHAEL FITZGIBBONS, and WILLIAM FITZGIBBONS, Galt, Ont., 26th August, 1875, for 5 years: "Washing Machine." (Machine à laver.)

*Claim.*—1st. The fluted or grooved revolving cylinder C, constructed of solid wood or rubber or with a rubber facing F, or of any suitable material, in combination with the spring rubbing board D; 2nd. The rubbing board D, provided with the curved backing piece J, in combination with the beaver spring G, and spiral springs H; 3rd. The clamping-bar E, hinged to the spring K, in combination with the fluted cylinder C, provided with the spring ratchet rod K'; 4th. The cylinder C, rubbing board D, and attachments in combination with the water reservoir.

No. 5104. JOSEPH BENSON, South Boston, Mass., U. S., 26th August, 1875, for 5 years: "Vapour-burner." (Bec à gaz.)

*Claim.*—1st. The combination with the outer chamber F, having the vent holes O, of the tube *d*, having its lower portion provided with the jet holes or slots *f*; 2nd. The burner tube *a*, provided with the openings *f*, in combination with an inside contraction of the passage *l*, through said tube *a*; 3rd. The burner tube *d*, constructed with openings *f*, and inside contraction as described, in combination with the chamber F, surrounding the burner tube.

No. 5105. JAMES C. MOORE, and PATRICK HICKEY, Philadelphia, Pa., U. S., 26th August, 1875, for 5 years: "Shield Can for Shipping Oil." (Bidon-chemise pour le transport des huiles.)

*Claim.*—1st. The combination of an inner can, tank, bottle, or jar with an outer casing or shell, and an upper and lower or upper or lower flanged bands, flanged rings, or flanged hoops; 2nd. The combination of an inner can, tank, bottle, or jar, an outer casing upper and lower, or upper or lower bands, rings, or hoops, and bands or strips secured to the lower hoop diametrically across the bottom; 3rd. The combination with an inner tank, can, bottle, or jar, and its outer casing, of a flanged band, one flange of which is not continuous, but divided into cleats, or ears, and one flange of which clasps the outside of the lower or upper surface of the outer casing, and the other flange of which laps under the bottom or over the top of the inner contained tank, can, bottle, or jar; 4th. The combination of a can, bottle, or jar with an outer protective casing, and vertical bands or ties to hold said can, &c., and casing in their relative positions; 5th. An upper hinged cover detachable by being thrown back on its hinges in combination with the outer casing of an inner can, tank, bottle, or jar.

No. 5106. NEWMAN SILVERTHORN, Toronto, Ont., 26th August, 1875, for 5 years: "Machine for Removing the Hair, Scurf, Slime and Dampness from the Carcasses of Hogs after they are killed." (Machine à enlever le

poil, la crasse, le limon et l'humidité des carcasses de porceaux après l'abattage.)

*Claim.*—1st. In a machine for depilating or cleaning the carcasses of hogs, a series of rollers armed with spring scrapers revolving simultaneously about their respective axes, the scrapers forming an endless depilator or cleaner acting upon the hog in a direction opposite to that traversed by the carcass during the process of cleaning; 2nd. The revolving rollers B, having attached the flexible scrapers D, the shafts C, and levers *e*, in combination with the sliding bevel gears E, E, having sleeves E', the yoke E', sliding boxes E', the rods L, bell cranks I, lever I', and counter balance I'; 3rd. The frame of the machine, A, carrying the depilating or cleaning devices, the frame being pivoted at A', and adapted to be reversed or turned over bodily; 4th. The elastic scrapers D, provided with the sub-scrapers *d*.

No. 5107. WILLIAM R. ANDERSON, (Assignee of H. Lehmann), Cleveland, Ohio, U. S., 26th August, 1875, for 5 years: "Boiler Flue Cleaner." (Nettoyeur de bouilleurs de chaudières.)

*Claim.*—The bars A, A, united to the head B, and having the scrapers C, C, rod D, nuts E, E, washer F, and nuts G, G, all combined as described.

No. 5108. SAMUEL BELLACHEY, Elderslie, Ont., 26th August, 1875, for 5 years: "Improvements on Ploughs." (Perfectionnements aux charriues.)

*Claim.*—A plough arranged so that the heel C, of the landside slip C, can be lowered and raised.

No. 5109. SAMUEL MITCHELL, Lima, N. Y., U. S., 26th August, 1875, for 5 years: "Carriage-hub." (Moyeu de roue.)

*Claim.*—The combination of the spokes having tonons *a*, *a*, and the hub core, having mortices *c*, *c*, with the flat metallic band C, shrunk into place, and flanges D, D.

No. 5110. JAMES T. BURNS, Springfield, Ont., 26th August, 1875, for 5 years: "Root-cutter." (Coupe-racine.)

*Claim.*—1st. The horizontally reciprocating knife C, provided with a plain cutting edge C<sub>2</sub>, and a subdivided cutting edge C<sub>3</sub>, in combination with the hinged hopper E; 2nd. The hinged adjustable hopper ends G, G, provided with the groove G<sub>1</sub>, and inner grooved face in combination with the reciprocating double edged knife C; 3rd. The plate C<sub>4</sub>, with upright, subdividing knives C<sub>4</sub>, attached in combination with the knife C.

No. 5111. ROBERT SADLER, Owen Sound, Ont., 26th August, 1875, for 5 years: "Improvements on Railway Snow-Ploughs." (Perfectionnements aux charriues à neige de rail-roules.)

*Claim.*—1st. The combination of the shovel D, L, with the elevators G, H, I; 2nd. The combination of the elevators G, H, I, with the chutes K.

N 5112. JOHN W. GROVER, Westminster, Eng., 26th August, 1875, for 5 years: "Spring Washer." (Rondelle élastique.)

*Claim.*—1st. A spring washer A, made by bonding round between helical faces a piece of steel rod cut with oblique ends to the required length; 2nd. The combination of the two helical faces *m*, and *e*, the sliding mandrel M, and its lever L, acted on by the adjustable cone N, with the revolving disc K, whereby a piece of straight steel rod is clamped and bent into the form of the spring washer.

No. 5113. JOHN H. HUSSEY, Baltimore, Md., U. S., 26th August, 1875, for 5 years: "Improvements on Shoes." (Perfectionnements aux chaussures.)

*Claim.*—1st. The flange D, formed from the middle sole and making a part of the same, said flange being cut from the inside toward the edge of the sole around the toe, and projecting above the upper surface of the sole from which it is cut; 2nd. The flange D, formed from the sole C, and making a part of the same, said flange being cut from the inside toward the edge of the sole, and projecting above the upper surface of the sole, in combination with the insole B, and the upper E.



No. 5114. DANIEL MCPHERSON, Caledonia, N. Y., U. S., 26th August, 1875, for 5 years: "Self binding Harvester." (Moissonneuse-lieuse automatique.)

*Claim.*—1st. In combination with the intermittently rotating gavello arm or arms C, the vertically reciprocating wire carrier or needle N, operating conjointly as set forth. 2nd. In combination with the rotating gavello of self-binding harvester, the gear-wheels G, and J, so structured as described for the purpose of giving to said gavello an intermittent rotation; 3rd. In combination with the intermittently rotating gavello arms C, vertically reciprocating arm B, and wire carrier N, depressed section M, at the lower edge of the gavello concave, whereby the gavello-arms are permitted to pass over the bar B, in making their rotations; 4th. In combination with the wire twister of self-binding harvesters the compound bevel wheel G, composed of two segments of teeth, so arranged as to gear into the pinion on opposite sides of the twister shaft, for the purpose of rotating it alternately in opposite directions with an interval of rest. 5th. In combination with the compound bevel gear wheel G, and bevel-pinion A, the rectangular lug g, and bearings i, and it, and e, and c, for the purpose of insuring the register of the teeth of the pinion with those of the two segments of the gear wheels G, when the pinion is passing from one to the other, as the wheel G, revolves; 6th. In combination with the revolving wire clamping head d, with a cutting edge v, the revolving clamp b, acting conjointly to grasp, cut, and twist together the two ends of the wire forming the band. 7th. In combination with the head d, and clamp b, the former provided with the radial slot or groove g, or its equivalent the governing pawl p, and pin a; 8th. In combination with the loose head d, and latch or clamp b, fixed to the twister shaft S, the pawl p, hinged to the latter and provided with the adjusting pin a; 9th. In combination with the head d, clamping jaw b, and swing pawl p, the circular recess r, having an opening in its vertical wall between the points f, & s; 10th. In combination with the vertically-reciprocating wire-carrier or needle N, the compressor E, and spring cord K; 11th. In combination with the fixed jaw h, and pivoted or swinging jaw h, the spring t, and annular track u, provided with the cam-notch n.

No. 5115. JOSEPH ROY, St. Jean-Baptiste de Montreal, Que., 26th August, 1875, for 5 years: "Invalid Chair." (Chaise de malade.)

*Résumé.*—1o. La combinaison d'un brancard i, et d'un tiroir h, le premier appuyant par un bout sur les boulons g, et par l'autre bout sur la traverse t, qui le réunit aux côtés c, ou dossier de la chaise, et le second appuyé par le bas sur le prolongement du pivot f, et jouant dans la rainure u, au moyen de l'hélice l, que l'on met en mouvement par l'intermédiaire de l'engrenage m; 2o. L'emploi d'un tiroir k, jouant dans le brancard i, du siége de la chaise; 3o. L'emploi de pédales o, insérées dans le siége de la chaise et pouvant s'allonger au besoin.

*Claim.*—1st. The combination of a handle i, and of a bolt h, the first supported by one end on the bolts g, and by the other upon the cross piece t, which joins it to the sides c, or back of the chair, and the second supported below on the prolongation of the pivot f, and playing in the groove u, by means of the spiral l, set in motion by the intervention of the gearing m; 2nd. The employment of a bolt k, playing in the handle i, of the seat of the chair; 3rd. The employment of the treadles o, inserted in the seat of the chair and which may be prolonged at pleasure.

No. 5116. LOUIS PAYETTE, Montreal, Que., 27th August, 1875, (Extension of Patent No. 612), for 5 years: "Pontoon for Raising Sunken Vessels." (Ponton pour relever les vaisseaux coulés.)

*Claim.*—1st. The scow a, in its novel combination of divisions b, water compartment c, chain compartments d, chains e, beams f, supporting logs g, foundation beams h, valves or gates i, pumps k, and deck l; 2nd. The novel combination of chain compartments d, centrally located with pontoon deck l, chains e, beams or jacks f.

No. 5117. JAMES N. C. MCINTOSH and ELI G. BOYCE, Ypsilanti, Mich., U. S., 30th August, 1875, for 5 years: "Shaft Support." (Support de limonière.)

*Claim.*—1st. The combination with the spring bar D, and cross bar C, of the strap G, hook a, and eye b; 2nd. The loop d, attached to the cross-bar C, in combination with the strap G, and hook a.

No. 5118. ORRIN J. STICKLES, WILLIAM R. REMINGTON, and LUMAN BAILEY, Canton, N. Y., U. S., 30th August, 1875, for 5 years: "Milk Cooler." (Raffraichissoir à lait.)

*Claim.*—1st. The concentric tanks or pans A, G, central tube F, waste pipe H, discharge pipe I, pivoted base B, and pivoting pipe D, in combination with each other, and with the water pipe L, and the bench or support C. 2nd. The concentric pans or pans A, G, in combination with each other having a cover fitting within the pan A, and bearing on the tank G, the latter provided with an exhaust aperture or pipe H.

No. 5119. JOSIAH D. HEEBNER, Norritonville, and ANTHONY H. SEIPT, Skippackville, Pa., U. S., 30th August, 1875, for 5 years: "Governor for Horse-power." (Gouverneur de manège.)

*Claim.*—1st. The stationary circle or casing A, in combination with the revolving shoes E, E. 2nd. The combination of the weighted arms G, having cogged-hubs, the cross-bar I, having cogged-ends, and the regulating spring v. 3rd. The combination of the arms C, with tonsors b, shoes E, and springs d. 4th. The combination with the shoes E, of the inclined planes m, for taking up wear of the shoes. 5th. The combination of the stationary circle A, spider C, D, shoes E, weighted arms G, with cams e, connecting bar I, and regulating spring i.

No. 5120. EDWARD G. SCOVIL, Simonds, N. B., and ARMITAGE RHODES, Quebec, Que., 30th August, 1875, for 5 years: "Art of Piling Iron." (Art d'empiler le fer.)

*Claim.*—The combination of the two pieces of double head-rails A, and B, with one piece of U, or bridge rail C, or two pieces of double head-rails A, and B, with one piece of T-rail D.

No. 5121. GEORGE N. SANDERS, and GEORGE N. SANDERS, Jr., New York, U. S., 30th August, 1875, (Extension of Patent No. 2372,) for 5 years: "Improvement in Spikes, Pins, Bolts, &c." (Perfectionnements des clous, chevilles, boulons, &c.)

*Claim.*—1st. The combination of the shoulder, neck, peninsula, and bevel of all and any of them whether of curved or plane surfaces regulating the curvature point of inflexion and degree of tenacity rendering insertion and extraction non-destructive to the fibre, &c. 2nd. The shoulder cut out on the shank and other plane or curved so as to reduce the volume and weight to a minimum whilst retaining all the strength required to resist the transverse strain so as to force the hook of the head firmly against the base of the object to be fastened and to form a tighter joint; 3rd. The peninsula cut out of the shank and smaller than it is at the top and curved so as not to tear the fibre, to be easy of insertion, difficult of extraction and to form a tight chamber to itself. 4th. The curved bevel at the extremity of such curvature so as to exert a greater deflecting force and to make no angle with the side of the spike; 5th. The neck commencing below the reach of the transverse strain and tapered and bevelled so as to curve and hold.

No. 5122. GEORGE N. SANDERS, and GEORGE N. SANDERS, Jr., New-York, U. S., 30th August, 1875, (Extension of Patent No. 2372), for 5 years: "Improvement in Spikes, Pins, Bolts, &c." (Perfectionnement des clous, chevilles, boulons, &c.)

No. 5123. HENRY S. POMEROY, New Haven, Ct., U. S., (Assignee of A. Kiesling), 4th September, 1875, for 5 years: "Automatic Lid Prop." (Support automatique de couvercle.)

*Claim.*—The prop A, provided with the angular slot d, e, combined with the fulcrum a, bearings B, D, and spring C.

No. 5124. WILLIAM E. ANDREW, New-York, U. S., 4th September, 1875, for 5 years: "Process for Separating Oleomargarine and Stearine from Animal Fat." (Procédé pour séparer l'oléomargarine et la stéarine du gras animal.)

*Claim.*—1st. The process of dry rendering oleomargarine and stearine from animal fat; 2nd. The process of separating the oleomargarine and stearine from the membrane of animal fat by subjecting the fat to pressure when raised to a temperature sufficient to effect the separation, and conveying the oily product away from the heat, to a cooler place as rapidly as expressed without the use of water or chemicals.

No. 5125. ARTHUR W. RICHARDS, Indianola, Iowa, U. S., 4th September, 1875 for 5 years: "Perambulating Cot." (Lit ambulante.)

*Claim.*—The perambulating and adjustable cot formed by mounting the sections E, G, J, upon the carriage A, B, C, D.

No. 5126. GEORGE CAMPBELL, and THOMAS MCKAY, Toronto, Ont., 4th September, 1875, for 5 years: "Fire-proof Shutter." (Contrevent réfractaire.)

*Claim*—1st. A metal shutter constructed with one half of the inside space, fitted with moveable slats D, and the other half of the space fitted with a corrugated sheet, representing six slats C; 2nd. A metal shutter constructed with the inside space, fitted with a corrugated sheet C, as in Fig. 2; 3rd. A metal shutter constructed with the inside space, fitted with moveable slats D, as in Fig. 2; 4th. The moveable slats D, as constructed with a flange or each end, and revolving in corresponding sockets in frame B, and also formed with the cranks or lugs e all from one piece of sheet or otherwise for the purposes set forth; 5th. The connecting rod E, with rack F, as attached to the crank e, of the slats D, also the pinion G, with handle H, and spring H', for securing the slats in any required position; 6th. The bevel wheels L, L', with axle and crank handle I, and springs K, K'.

No. 5127. ALEXANDER WEIR, Wel esly, Ont., 4th September, 1875, for 5 years: "Improvements on Spinning Wheels." (Perfectionnements aux rouets.)

*Claim.*—1st. The pulley frame D, adjustable horizontally on the stool A; and in combination with the frame D, and stool A, the spindle head K, adjustable vertically by the screw stem L, and jamb nuts M, N.

No. 5128. GEORGE S. WALKER, Erie, Pa., U. S., 4th September, 1875, for 5 years: "Washing Machine." (Machine à laver.)

*Claim*—1st. The combination of base piece B, having projecting ends, extension fastening J, and tub cleats I for securing the washer in the tub; 2nd. The vertical base piece and single plain roller E, arranged in close proximity; 3rd. The screw plugs H, and spiral springs G, connected; 4th. The construction of the washer, composed in part of the two uprights A, the base and top pieces B, C, the grooved roller D, and smooth roller F.

No. 5129. WILLIAM BALL, New-Vienna, Ohio, U. S., 4th September, 1875, for 5 years: "Canal Boat." (Bateau pour les canaux.)

*Claim.*—The propeller jacket described, having the funnel shaped induction branches L, L', extending forward along the sides of the boat, beyond the point where said sides become parallel, the tops of said branches extending upward above the water line in front, and gradually descending to the propeller tube terminating in the deflecting hood b.

No. 5130. JAMES H. MYERS, Montreal, Que., 4th September, 1875, for 5 years: "Improvements on Shirts." (Perfectionnements aux chemises.)

*Claim.*—1st. A shirt bosom, front, yoke, neck-band and back; 2nd. In any part the bosom having its upper side extraneous a, a, formed of a less number of thicknesses of fabric than the main body of the bosom; 3rd. A y shirt the bosom having its lower end formed of a less number of thicknesses of fabric than the bosom itself.

No. 5131. JULIUS BUECHNER, St. Paul, Ma., U. S., 4th September, 1875, for 5 years: "Picture Exhibitor." (Montre-image.)

*Claim.*—1st. A picture case composed of an ordinary frame with hinged back part having inclosing flaps and tongue for folding entirely around the same or separately at the back for inclosing and exhibiting pictures; 2nd. The folding bottom flap of the back part provided with tongue locking straps at both sides, for securing the flaps of the case at front or at the back.

No. 5132. JOHN W. H. DOUBLER, Philadelphia, Pa., U. S., 4th September, 1875, for 5 years: "Improvements in Mechanical Motors." (Perfectionnements dans les moteurs mécaniques.)

*Claim*—1st. A mechanical motor receiving impulse from a series of spiral springs connected as a to produce motion corresponding in duration to their aggregate lengths; 2nd. The combination with the spiral springs A, sliding plates E, the pulleys G, attached to plates E, and the cord D, passing around said pulleys from the winding shaft and causing the plates to rise and descend alternately when the springs are compressed and allowed to expand; 3rd. The brake lever J, having a cushioned arm to impinge against the fly or belt wheel I; 4th. The combination of the cushioned brake J, fly wheel I, and spring M; 5th. In a motor the double fusée N.

No. 5133. OSWALD NOACK, Baltimore, Md., U. S., 4th September, 1875, for 5 years: "Crimping Machine." (Machine à cambrer.)

*Claim*—1st. The clamps G, pivoted to the frame A, and adapted to be raised when not in use by means of a reactionary spring I, combination with the plate C, and lower die plates B; 2nd. The clamps G, adjustably connected to the rods g, in combination with the treadle h, and spring bar k.

No. 5134. GEORGE J. SHIMER, Milton, Pa., U. S., 4th September, 1875, for 5 years: "Cutter-Head." (Porte-lames.)

*Claim.*—1st. A revolving cutter head A, provided with hubs or seats a, having their faces oblique to the plane of rotation, and alternately inclined inward and outward so as to cause the bits secured against said faces to cut to the right or left hand; 2nd. A circular cutter or bit B, combined with a revolving cutter head A, provided with seats a, having inclined faces; 3rd. The hub A', having a concave depression A2, in combination with circular bits B; 4th. The bit B, having a sunk head B; 5th. The gauge E; 6th. A bit formed of a circular plate or disc, sufficiently thick to form the required cutting edge, and thin in the central part or web, and transversely notched.

No. 5135. JOHN AMOR, Hamilton, Ont., 4th September, 1875, for 5 years: "Hose-Coupling." (Joint de tuyaux élastiques.)

*Claim.*—1st. The combination and arrangement of the bevelled collars B E, provided with the projections a, a, with the parts C, F, for a hose coupling; 2nd. The arrangement of the collars B, E, with the part C, as shown in Fig. 3, for repairing a burst-hose.

No. 5136. GEORGE H. STEADMAN, Hopewell-Cape, N. B., 7th September, 1875, for 5 years: "Machine for Removing Snow from Railways." (Machine à enlever la neige des voies ferrées.)

*Claim.*—The combination of cylinder C, and plates or blades D.

No. 5137. EDWARD MAY, Montreal, Que., 7th September, 1875, for 5 years: "Improvements on Motive Powers." (Perfectionnements aux pouvoirs moteurs.)

*Claim.*—In combination with any suitable frame a rubber band C, secured at one end thereto, passing over and under any desired number of pulleys, and having its other end secured to a drum so as to be wound up upon it.

No. 5138. JAMES S. WETHERELL, Newmarket, Ont., 7th September, 1875, for 5 years: "Improvements in Buggy-Seats." (Perfectionnements dans les caisses des voitures.)

*Claim.*—1st. The folding joints F, F'; 2nd. The sliding seat with the fillets L, K, and the spring and bar N, O, and the application of the whole to cutters as well as buggies.

No. 5139. GEORGE R. EAGER, Boston, Mass., U. S., 7th September, 1875, for 5 years: "Improvements on Blouses, Overalls and other Garments." (Perfectionnements aux habits, pardessus et autres vêtements.)

*Claim*—1st. A garment provided with a hollow waist band a combined with a strap b, or straps, and buckle c, or buckles; 2nd. A garment provided with a hollow waist-band a, combined with a strap b, or straps, buckle c, or buckles, and with a reeving loop o, or loops.

No. 5140. CHARLES J. ADDY, and ESSEX S. ABBOTT, Boston, Mass., U. S. 7th September, 1875, for 5 years: "Improvement in Sole Edge Trimming Machines." (Perfectionnement des machines à polir la tranche des semelles.)

*Claim.*—1st. The combination of the vibrating cutter E, with the cutting block and sand guide F, acting together; 2nd. The combination of the knife E, the cutting block F, and the movable guide H, K.

No. 5141. JOHN DILDINE, Limestoneville, Pa., U. S., 7th September, 1875, for 5 years: "Animal Trap." (Piège à vermine.)

*Claim.*—1st. The flanged apron pivoted within the compartment E, of the trap in an inclined position with its upper end against the end of such compartments and its lower end extending over the trap door; 2nd. The catch pivoted in and extending upward through the inclined partition, so that its upper end shall bear against the front of the latter, and its lower end engage with the trap door in rear of the apron; 3rd. The bait hook Q, and hook rod R, combined with the catch bar and inclined apron; 4th. The guide loop P, combined with the inclined apron and catch bar; 5th. The combination of the inclined pivoted apron, the pivoted spring catch the hinged bait strip and the connecting rod, with each other and with the trap door; 6th. The front wires of the partition terminating at their lower ends, a short distance above the bottom board of the trap.

No. 5142. STEPHEN STRUNZ, Pittsburgh, Pa., U. S., 7th September, 1875, for 5 years: "Manufacture of Soap." (Fabrication du savon.)

*Claim.*—1st. The employment of litmus in combination with ordinary soap compounds as specified, whereby under the influence of the alkali and oxygen of the air, the natural colour of the soap is rapidly changed upon its exposed surface; 2nd. The process of manufacturing ornamental soaps, with various designs embodied therein, by forming said designs of coloured soap compounds and casting or moulding a body of soap around the same; 3rd. The process of manufacturing ornamental soaps, by printing, transferring or otherwise producing ornamental designs within the body of transparent soaps; 4th. A transmission soap composed of the ordinary soap compounds, combined with litmus; 5th. A soap having an ornamental design or advertisement incorporated in the same.

No. 5143. JACOB RUSSELL, New-York, U. S., 7th September, 1875, for 5 years: "Horse Shoe Machine." (Machine à fers à cheval.)

*Claim.*—1st. The sliding former m, in combination with roller F constructed and arranged for operation in connection with expansible dies; 2nd. The expansible horse shoe die, actuated by devices giving it a positive movement, made in two halves, and arranged upon a rotary support; 3rd. The under bevel n, provided to the inner walls of the two halves of the positively moving expansible die; 4th. A horse shoe machine having the divided positively moving die, the combination of the toggle lever a, having the cam O, and operating the sliding former m, with the roller F, spring r, and stop M; 5th. The combination of the roller F, male die J, sliding former m, stop M, roller F, positively moving expansible dies S, roller P, die W, and side rollers h, h, or levers L, I, 6th. A horse shoe machine constructed with a positively operative expansible die, the combination of the cutting and swaging bearings J, A, with a suitably arranged feeding device; 7th. The combination of the plates D, and the friction rollers x with an expansible die.

No. 5144. PAUL K. DEALY, Saint John, N. B., 7th September, 1875, for 5 years: "Improvements on Locomotive Engines." (Perfectionnements aux machines locomotives.)

*Claim.*—1st. The combination and arrangement of the water pipe D, and steam pipe E, and attaching same together with the cross pipes on D, and E, respectively with the arranging of the nozzles on each cross pipe so as to allow the steam or water to escape; 2nd. The method of heating the ash-pan and dampers of locomotives so as to prevent snow and ice accumulating around the ash pan damper; 3rd. The mode of cleaning the ash-pan of locomotives of ashes; 4th. Preventing a too great accumulation of clinker on the furnace bars by the use of the steam to create a draft; 5th. Preventing fires along the line of railroad by the dampening of the ashes by steam and water as the ashes fall from the furnace bars.

No. 5145. LORRAIN C. WHITING, East-Saginaw, Mich., U. S., 7th September, 1875, for 5 years: "Piano Pedal Attachment." (Ajutage des pédales de pianos.)

*Claim.*—The combination of the base block C, with the foot rest D, pivoted thereto, to be fastened or adjusted to the piano by the modes indicated or other convenient mode.

No. 5146. JOHN D. SMEDLEY, Syracuse, N. Y., U. S., 7th September, 1875, for 10 years: "Improvements on Cooking Stoves." (Perfectionnements aux fourneaux de cuisines.)

*Claim.*—1st. The chamber B, C, D, furnished with hinged or sliding doors E, F, to adapt it to be applied to the top of a cooking stove; 2nd. The combination of the rack H, and doors G, with the top D of the chamber; 3rd. The combination of the shelves J, with the back and stationary side of the chamber; 4th. The combination of the shelf P, and brackets Q, with the top D, of the chamber; 5th. The combination of the pipe L, provided with a damper M, with the top D, of the chamber, and with the pipe K, of the stove; 6th. The combination of the branch pipe N, provided with a damper or register O, with the pipe L, leading from the top D, of the chamber to the stove pipe K.

No. 5147. JAMES HALL, Toronto, Ont., 8th September, 1875, for 5 years: "Improvements in Revolving Reel Baking Ovens." (Perfectionnements aux fours à cylindre roulant.)

*Claim.*—1st. The relative arrangement of reel driving wheel J, worm I, and floor B, 2nd. In combination with the pan G, and arms of the reel C, the stud bolt nuts g, g; 3rd. In combination with the grate bars D, the perforations d, and flues O, O; 4th. A baking oven having covered top a, and curved back a.

No. 5148. GEORGE H. JONES, Rose, N. Y., U. S., 8th September, 1875, for 5 years: "Mould for Casting Turbines." (Moule pour couler les Turbines.)

*Claim.*—1st. The water wheel pattern consisting of the sections D, provided with grooves d, the hub E, and ring c; 2nd. The partition plates F.

No. 5149. RUSSELL WHEELER, Belle Ewart, Ont., 8th September, 1875, for 5 years: "Improvements on Stove Legs." (Perfectionnements aux pieds de poeles.)

*Claim.*—A stove leg constructed of two parts A, and B, the upper portion A, having a socket B, with a screw or thread c, thereon and the lower portion D, with a stem E, on which is a screw or thread C, the stem E, and socket B, corresponding with each other, so that the stem E, will move freely in the socket B.

No. 5150. PHILIPPE ST. LAURENT, and ETIENNE BERUBÉ, Sherbrooke, Que., 8th September, 1875, for 5 years: "Improvement on Stove-Heaters." (Perfectionnement des poeles-sourds.)

*Claim.*—The outer cylinder A, and the second cylinder B, with the draught holes d, d, also the smoke pipe C, and the air-hole F, with the damper E.

No. 5151. WILLIAM A. McCLINTOCK, Pittsfield, Ill., U. S., 5th September, 1875, for 5 years: "Improvements on Seed Drills." (Perfectionnements aux semoirs-traceurs.)

*Claim.*—The combination of the hoes F, drag-bars G, guides I, I, sash K, and lever L.

No. 5152. CORNELIUS HOOD, Hartford, Ct., U. S., 8th September, 1875, for 5 years: "Combined Ladder and Wash Bench." (Echelle et banc de buanderie combinés.)

*Claim.*—The combination of the ladder frame a, a2, the supporting frame b, b1 b2, hinged thereto, and the sets of legs c, c1, d, d1, pivoted to the latter, and having tenoned ends shutting into mortises in the former.

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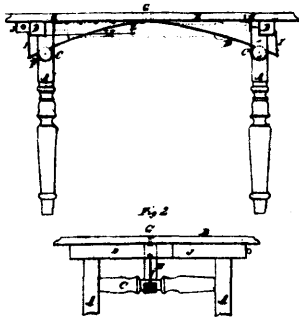
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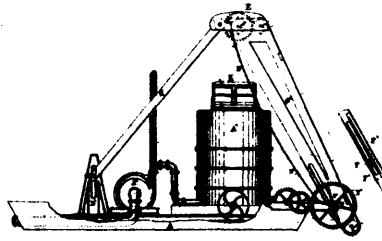
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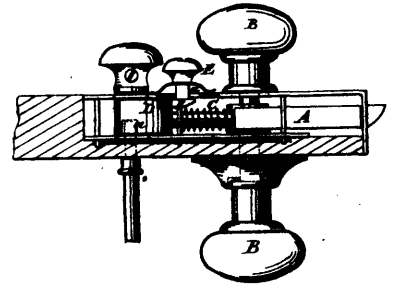
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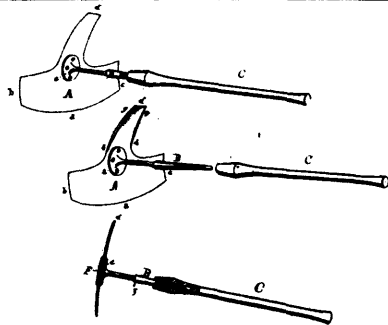
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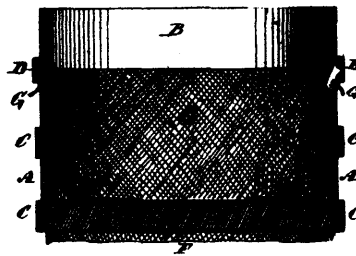
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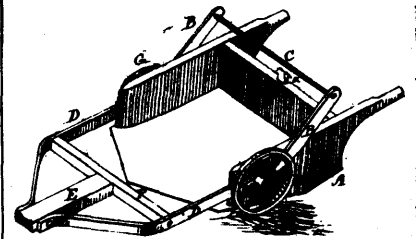
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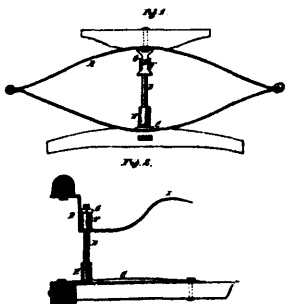
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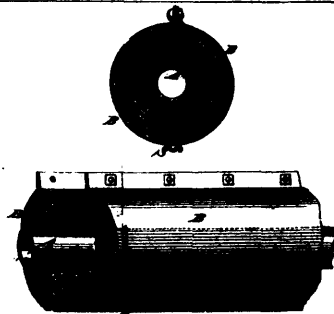
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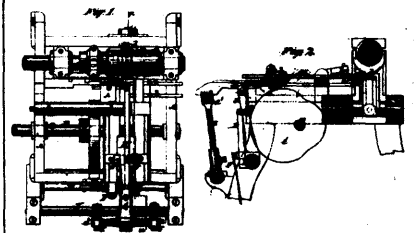
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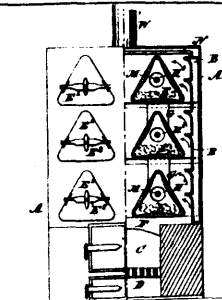
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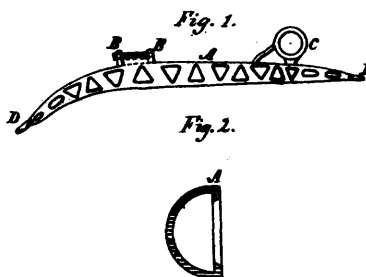
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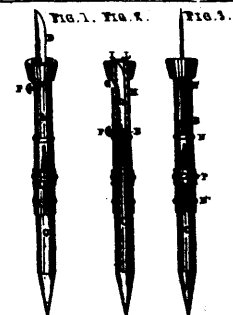
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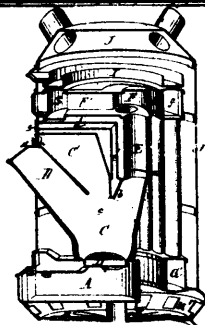
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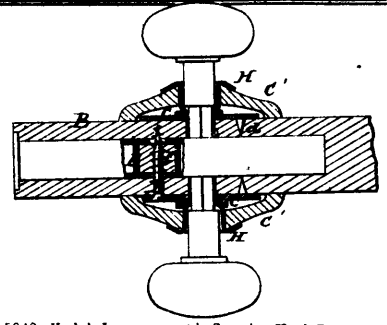
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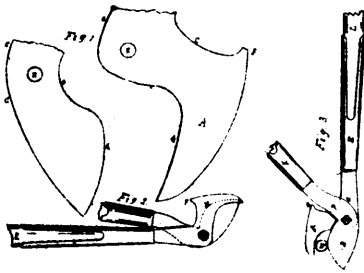
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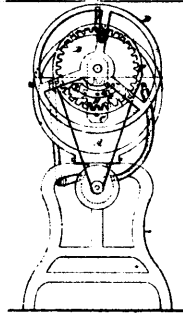
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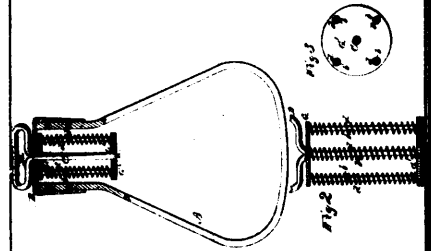
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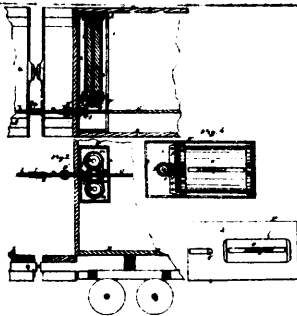
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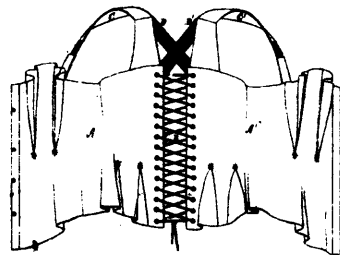
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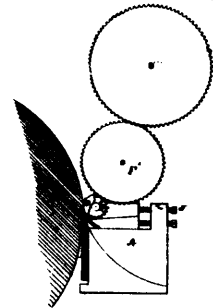
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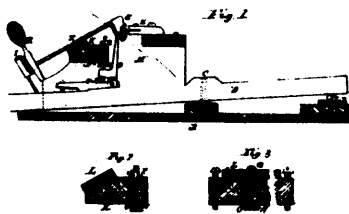
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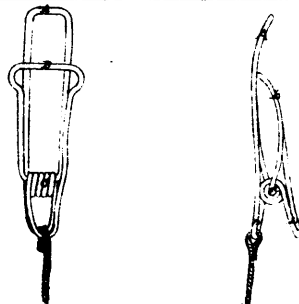
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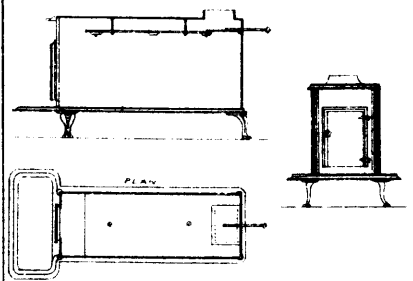
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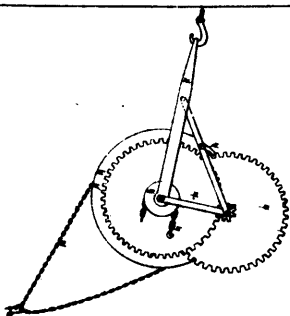
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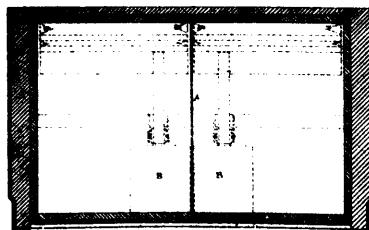
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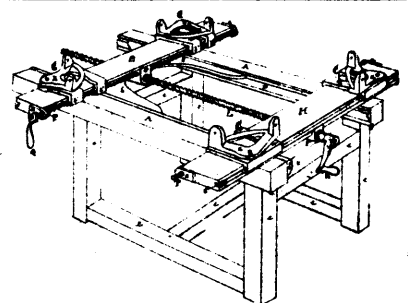
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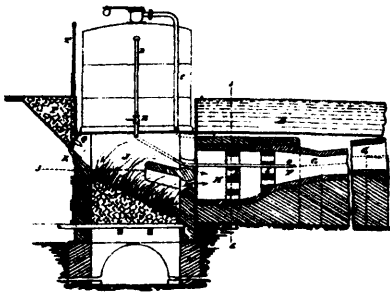


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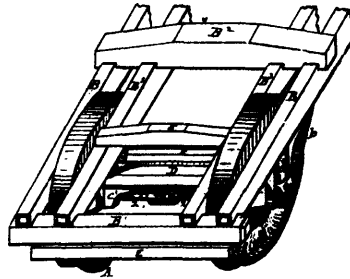


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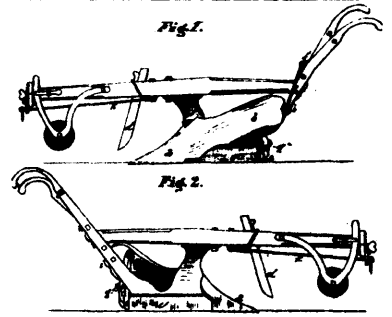




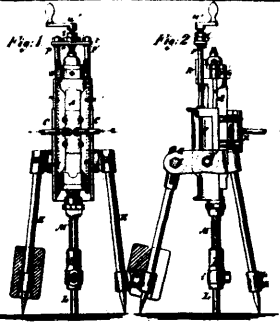
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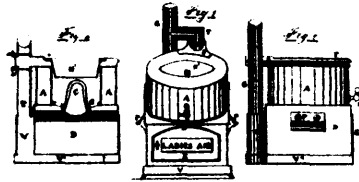
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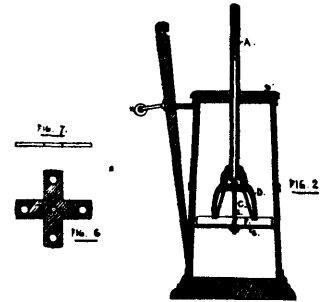
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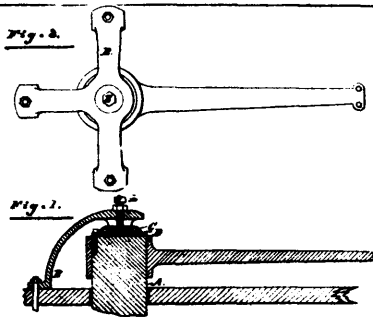
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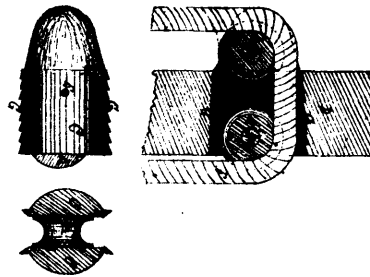
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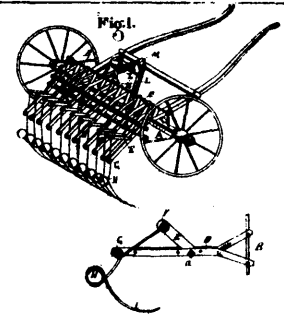
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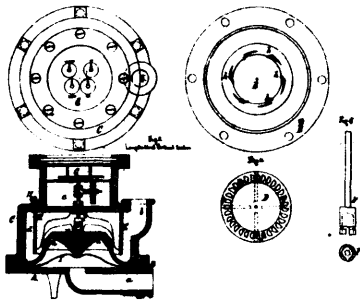
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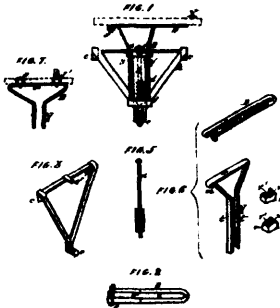
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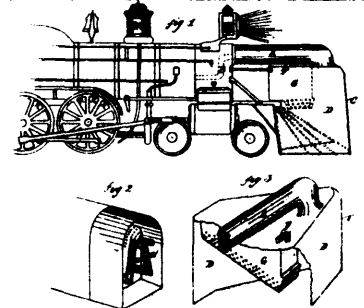
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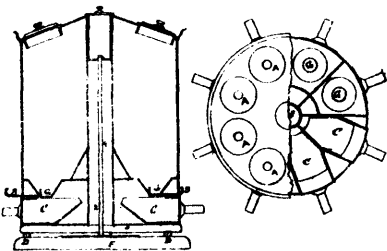
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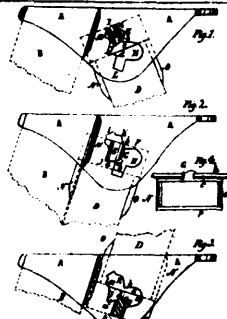
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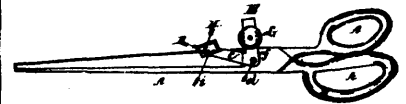
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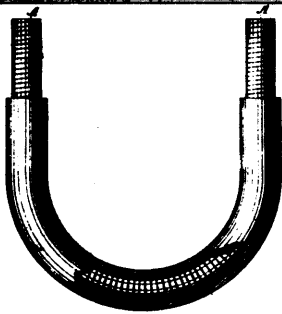
5071 Mainer's Rotary Tea Caddy.



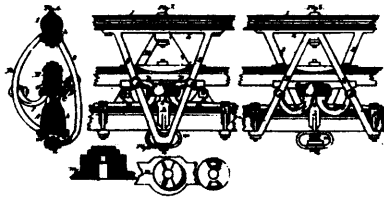
5072 Blauvett's Step Ladder.



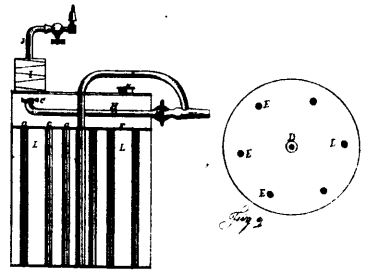
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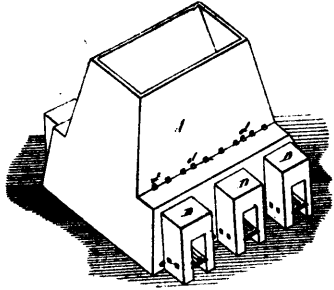
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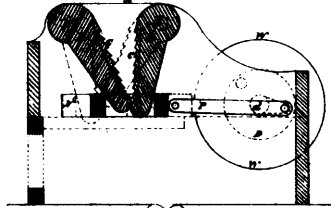
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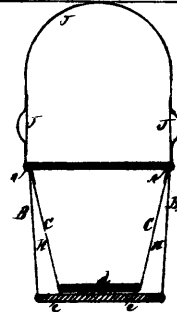
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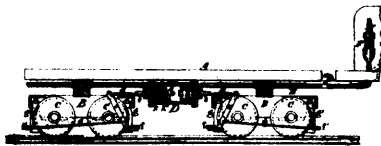
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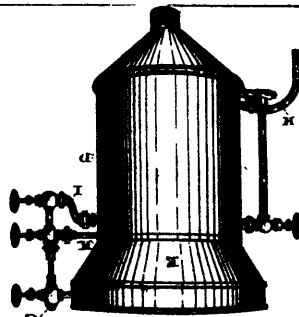
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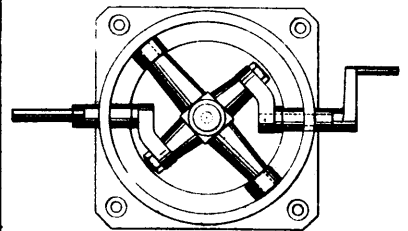
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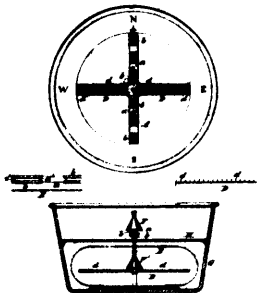
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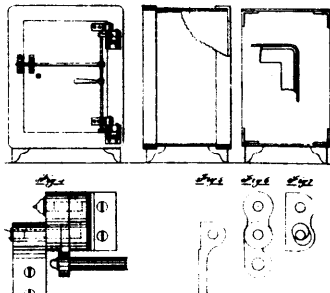
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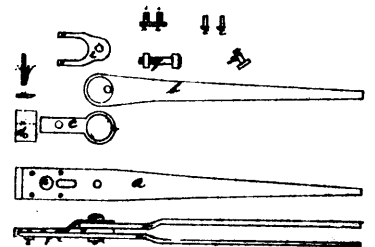
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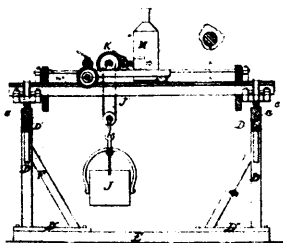
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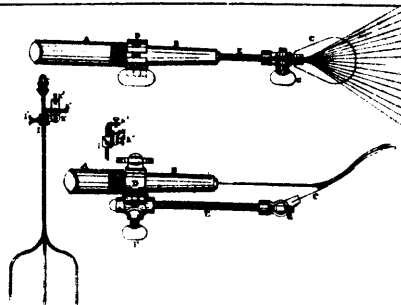
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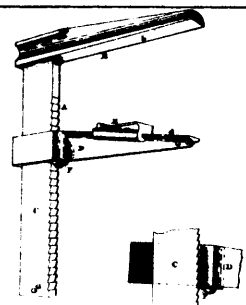
5085 Kelley's Machine for Trimming the Ends of Bolts and Rivets.



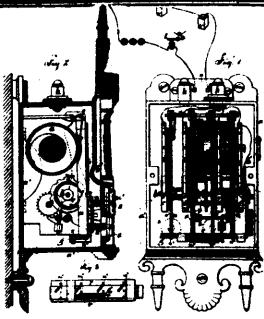
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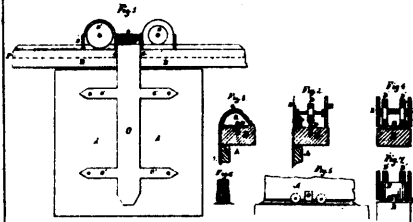
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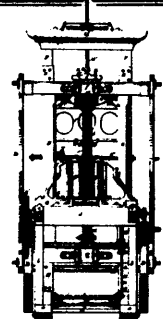
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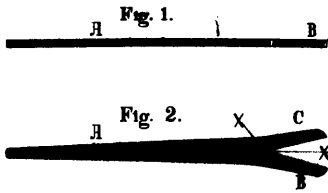
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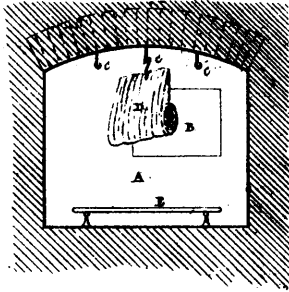
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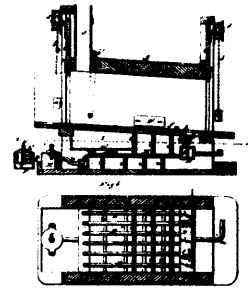
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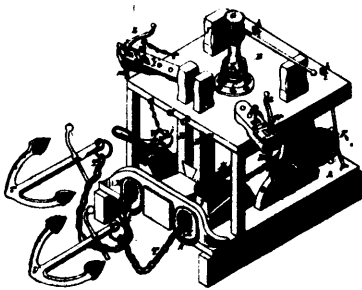
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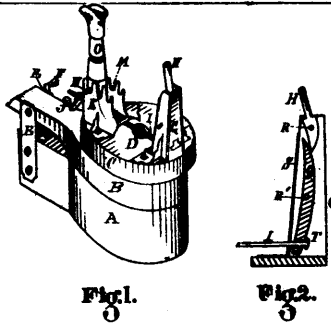
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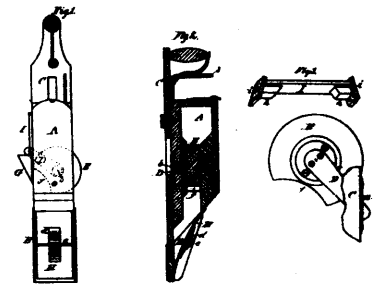
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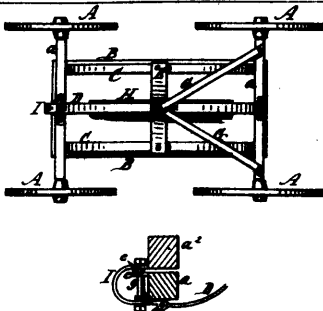
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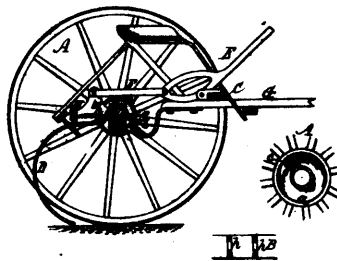
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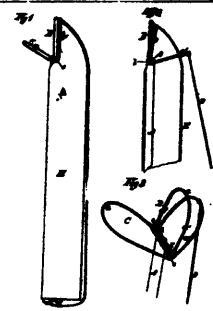
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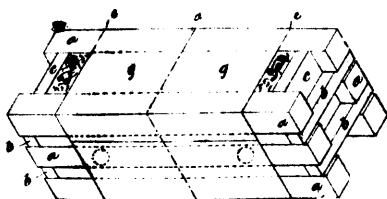
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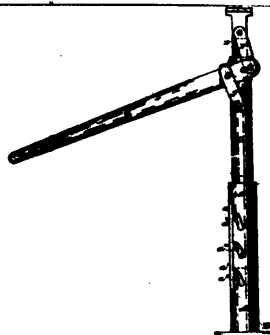
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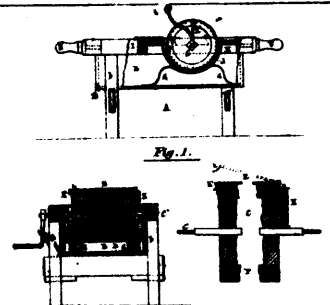
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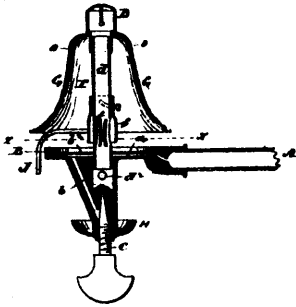
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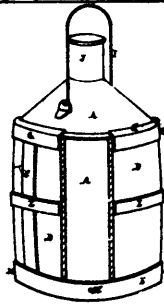
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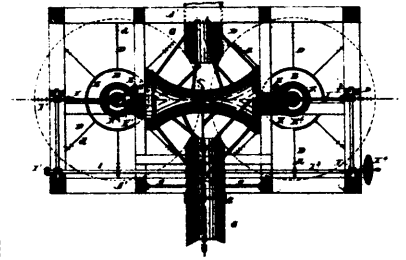
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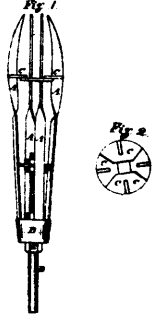
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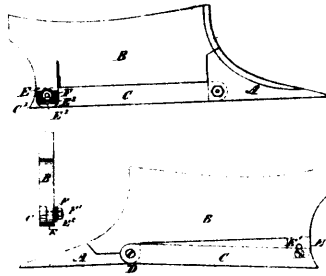
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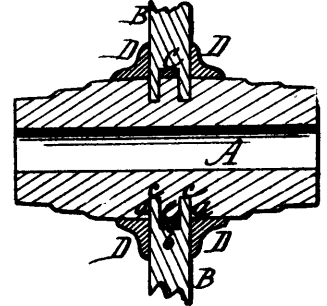
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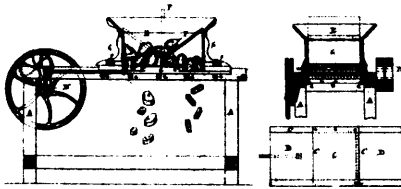
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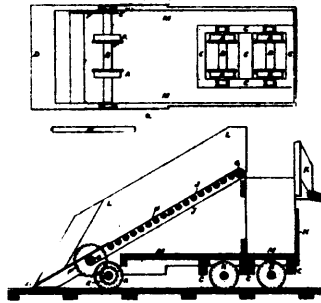
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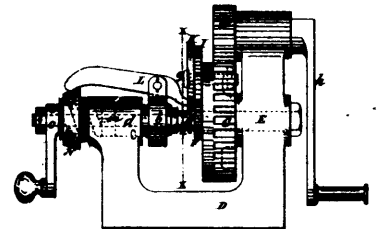
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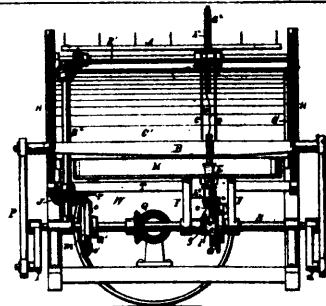
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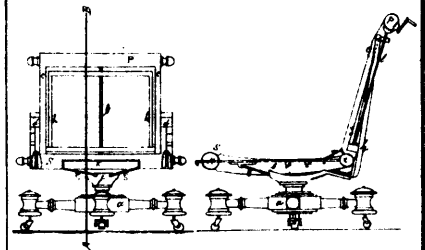
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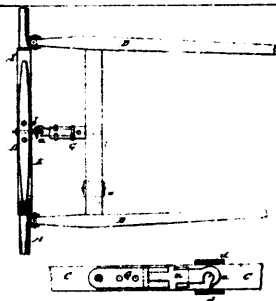
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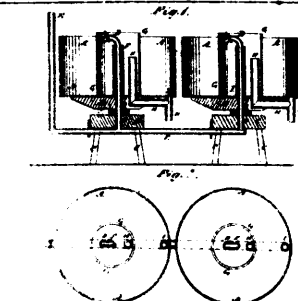
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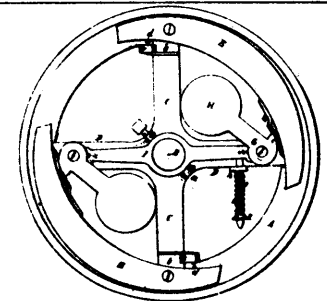
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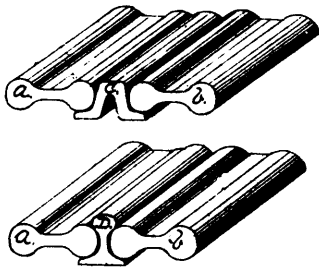
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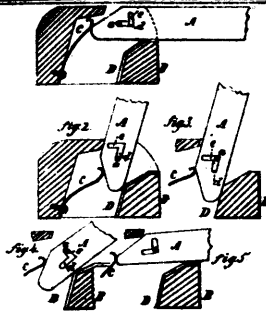
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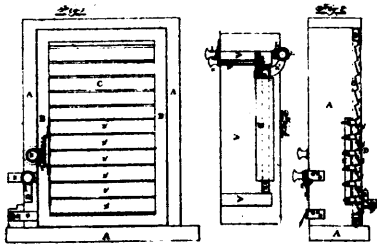
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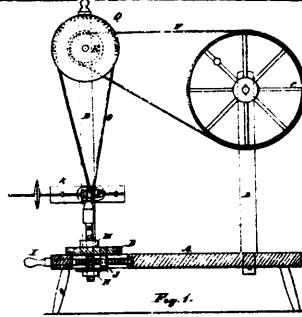
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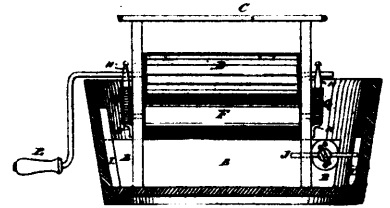
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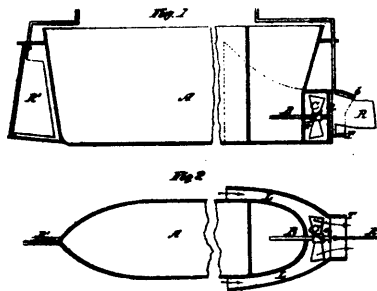
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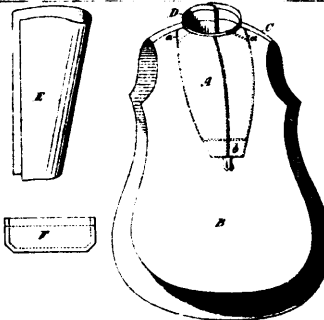
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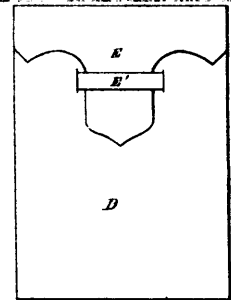
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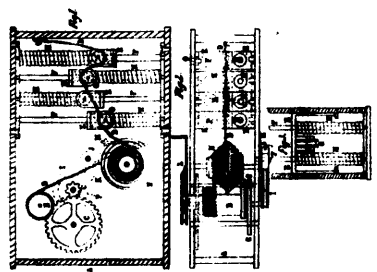
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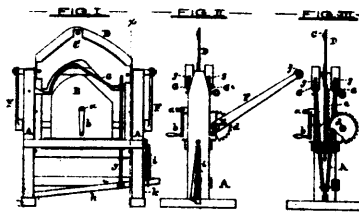
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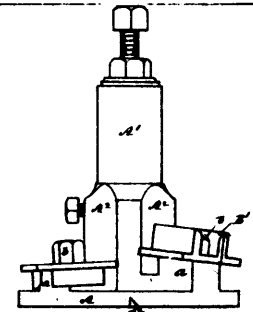
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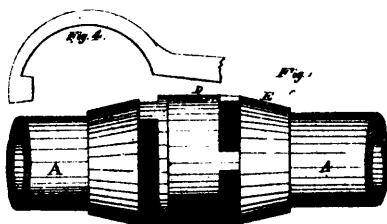
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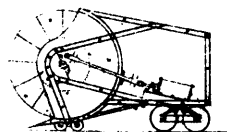
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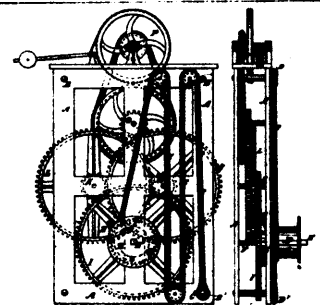
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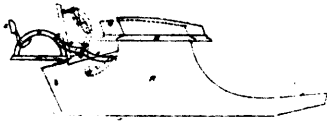
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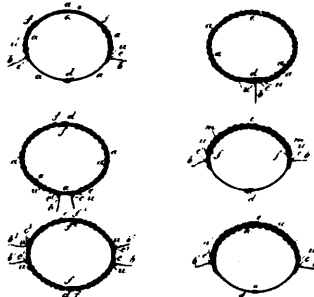
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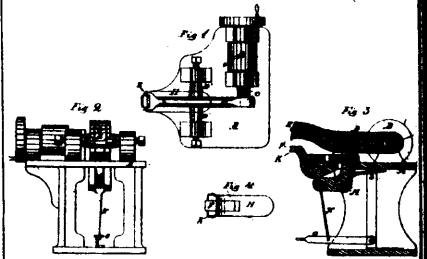
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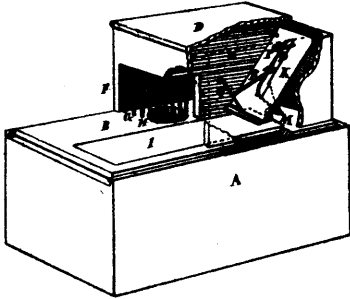
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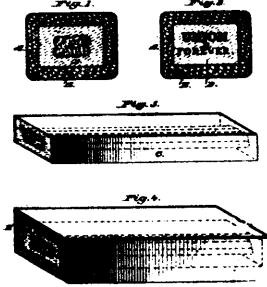
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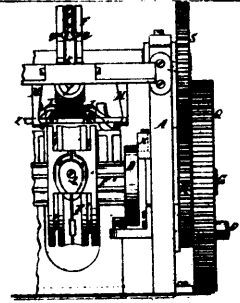
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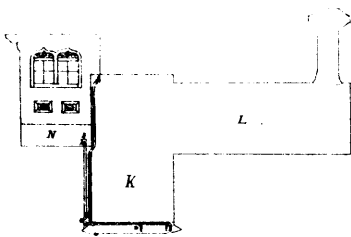
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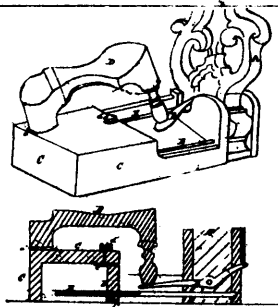
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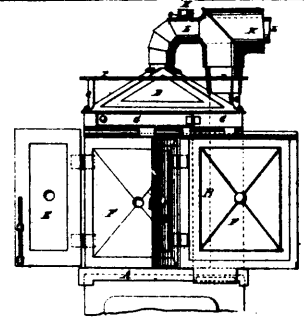
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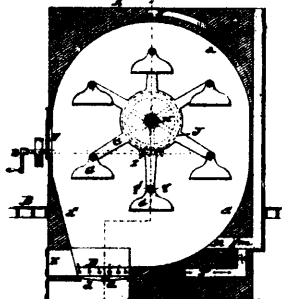
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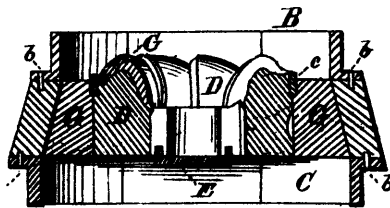
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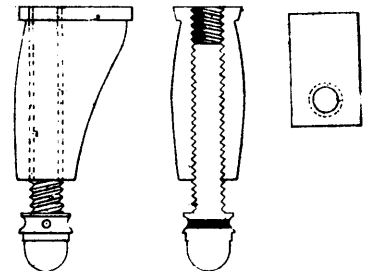
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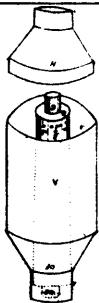
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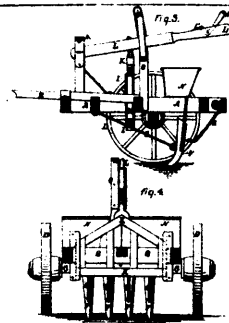
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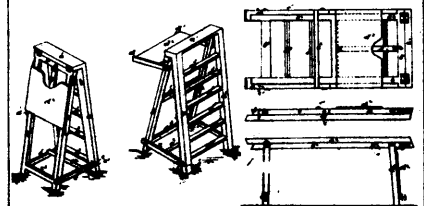
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