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# The Canadian Patent Office

## RECORD




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#### No. 6466. Improvements in Covers for Pots and Kettles.

(*Perfectionnements aux couvercles de marmites et de bouillottes.*)

George Clements, New Milford, Pa., U. S., 24th August, 1876, for 5 years

*Claim.*—1st. The combination with the pot lid B, of the non conductive ball supporting knob *b* perforations *c* and lip or shield C 2nd. The adjustable hinged clasp *d* with pinching screw *e*, in combination with the lip or shield C.

#### No. 6467. Improvements in Whiffletrees.

(*Perfectionnements aux palonniers.*)

Stephen White, Belleville, Ont., 24th August, 1876, for 5 years

*Claim.*—The combination of the whiffletrees C and D with the bar E, bolt holes F, girths H, slots I and pins J.

#### No. 6468. Improvements on Winnowing Machines.

(*Perfectionnements aux tarirrs.*)

Calixte Ehler, St. Eustache, Que., 24th August, 1876 (extension of patent No. 1114), for 5 years.

*Résumé.*—1o. L'arrangement et la construction de la roue dentée C et sa combinaison avec la poulie E; 2o. L'arrangement de la poulie H et sa combinaison avec le mécanisme du sas et de l'éventail, et avec un pouvoir moteur quelconque indépendant et. 3o. L'arrangement des tiges euf-ri leur forme particulière et leur emploi comme attachés au lieu du tambour et comme poignées.

*Claim.*—1st. The arrangement and construction of toothed wheel C and its combination with block E. 2nd. The arrangement of block H and its combination with the mechanism of the sieve and fan and with an independent motive power of any description. 3rd. The arrangement of the iron rods I their particular shape and their use as attached to the chift of the drum and as handles.

#### No. 6469. Improvements in Tool Handle Sockets.

(*Perfectionnements dans les douilles des manches d'outils.*)

Edward C. Jones and William Chaplin, (Assignees of William H. Rodden), Toronto, Ont., 24th August, 1876 (extension of patent No. 616), for 5 years.

*Claim.*—An improved wrought metallic capped ferrule or socket drawn in or compressed at the end to form a solid cap (and made of one piece), and to be used with or without a strap or straps finished in every case with a suitable opening for the shank of the tool or implement to the handle of which it is to be applied, also the pad and the combination of the capped ferrule and the pad with or without straps.

#### No. 6470. Process of Tanning and Dyeing Skins.

(*Procédé de tannage et de teinture des peaux.*)

John Smith and Clara Smith, Westville, N. S., 24th August, 1876, for 5 years.

*Claim.*—1st. The process of tanning hides and skins without removing the hair or wool by the use of water, wheat bran soap, borax and sulphuric acid in which to soak the hide or skin and by the use of the tanning liquors composed of water, wheat bran, salt, sulphuric acid and melted terra Japonica; 2nd. The process of removing the hair or wool from hides and skins during the tanning process by the use of water, slaked lime and wood

ashes; 3rd. The process of freeing hides and skins from lime by the use of liquor composed of cold soft water, wheat bran and sulphuric acid; 4th. The process of softening and tightening leather by the use of borax, saleratus and soap and by the use of glycer leather liquid composed of soap, tanners oil (or neats foot oil) and alcohol. 5th. The process of finishing heavy hides for boot leather, &c. by the use of water proof stuffing composed of wheat flour paste, bees wax, pine pitch and barbery gum, beef tallow, tanners oil (or neats foot oil) and boiled linseed oil; 6th. The process of polishing boot and harness leather by the use of gum tragacanth, water and lampblack; 7th. The process of blackening the grain side of hides by the use of terra Japonica, extract of logwood, copperas and zeig; 8th. The process of blackening the flesh side of hides by the use of soap, lampblack and pulverized copperas; 9th. The compound in which to soak hides and skins composed of water, wheat bran soap, borax and sulphuric acid; 10th. The compound for removing the hair or wool from hides and skins composed of water, slaked lime and wood ashes; 11th. The compound for freeing hides and skins from lime composed of water, wheat bran and sulphuric acid; 12th. The tanning compounds composed of water, wheat bran, salt sulphuric acid and terra Japonica; 13th. The compound for softening and tightening leather composed of borax saleratus and soap; 14th. The compound called Glare Leather liq. 3d composed of soap, tanners oil (or neats foot oil) and alcohol; 15th. The compound called water proof stuffing composed of wheat flour paste, bees wax, pine pitch and barbery gum, beef tallow, tanners oil (or neats foot oil) and boiled linseed oil; 16th. The compound for polishing boot and harness leather composed of gum tragacanth and lampblack stirred into the foregoing water proof stuffings; 17th. The compound for blackening the grain side of hide composed of terra Japonica, extract of logwood, copperas and zeig; 18th. The compound for blackening the flesh side of hides composed of soft soap lampblack and pulverized copperas; 19th. The compounds for coloring furs composed of pulverized unslacked lime, letharge and water, and ammonia and nitrate of silver.

#### No. 6471. Machine for Screening Coal Ashes.

(*Machine à sasser les cendres de charbon de terre.*)

Joseph Chailfour, Montreal, Que., 24th August, 1876, for 5 years.

*Résumé.*—1o. La porte à chaudière A A du tambour sasseur les barreaux sasseurs A<sub>1</sub> qui la composent ils sont longitudinaux et ronds, les barreaux d'axes de la gâsière ainsi que la poignée y; 2o. Le système de tambour sasseur B B à plateaux B et à barreaux B également ronds et longitudinaux ainsi que les barreaux b femelles des gâsières dentées et la larrette d'arrêt; 3o. De pouvoir au besoin construire la porte A et le tambour B B en bois ou en métal. 4o. Le trou ad hoc q pratiqué dans le couvercle D pour le passage de la porte à chaudière, sa planchette de recouvrement F avec son fermoir k k et charnière n, ainsi que le fermoir f, son couvercle mété; 5o. Les distributeurs X; 6o. Le tiroir au charbon sasseur k k qui s'enlève pendant l'opération du passage. sa contre-planchette E de h mètre, charnières V et fermoir h k y compris; 7o. Le fond de la boîte à sas M Mo qui se démonte, et ses tasseaux a ainsi que les poignées T et Y; 8o. De pouvoir employer la force motrice pour faire mouvoir le sasseur en adaptant sur l'arbre l'une poulie folle et une poulie fixe.

*Claim.*—1st. The cut hole door A A of the screen drum, composed of the screening bars A<sub>1</sub> which are longitudinal and round, the male guide bars d and the handle y. 2nd. The system of screen drum B B with platform B and bars B also round and longitudinal and the ferrule bars b of the entrance guides and the small top bar z. 3rd. The making of the door A A and the drum B B of wood or metal at will. 4th. The hole ad hoc q cut in the cover D for the passage of the overlapping cut hole door F with its bolt k k and hinges a as well as the bolt f of the cover itself. 5th. The distributors X; 6th. The receptacle for the screened coals k k which is carried off during the operation of screening its fastening counter board E, hinges V and bolt h k included. 7th. The screen box bottom M Mo which may be taken apart, and its ledges, as well as the handles T and Y. 8th. The employment of motive power to move the screen by adapting on the arbour l a loose pulley and a fixed pulley.

#### No. 6472. Improvements on Ploughs.

(*Perfectionnements aux charrues.*)

Joseph Shickel Bridgewater Va., U. S., 24th August, 1876, for 5 years.

*Claim.*—The combination with a clamping bolt, of a plough point having counter-sinks on both sides, and the mould board having corresponding projections to fit said counter-sinks.

**No. 6473. Improvements in Lifting Jacks.***(Perfectionnements aux crics.)*

Lewis O'Hara and Henry Cooper, Oswego, N. Y., U. S., 24th August, 1876 for 5 years.

*Claim.*—The combination of the hollow standard S with its male screw b, the rod R, the lever L with its bifurcated short arm a, the connecting rods C C and the screw slide S.

**No. 6474. Improvements in the Mariners' Compass.***(Perfectionnements dans le compas de marine.)*

Silas Best, St. Louis, Mo., U. S., 24th August, 1876, for 5 years.

*Claim.*—1st. The combination of the magnetic needle A provided with the pointer N, the card B and the nut C; 2nd. The combination of the magnetic needle A provided with the north and south pointers N and S, the card B and the nut C; 3rd. The combination of a suitable securing device with a card and needle, the card and needle being relatively adjustable as specified.

**No. 6475. Gas Apparatus. (Appareil à gaz.)**

Thaddeus S. C. Lowe, Morristown, Pa., U. S., 24th August, 1876, for 5 years.

*Claim.*—1st. Dropping or otherwise admitting in limited quantities continuously or intermittently hydro carbon oils or other carbonaceous substances, liquid or solid, upon the top of a thick mass of coal or other carbonaceous substances in a state of incandescence in a close chamber previously heated by direct internal combustion, with or without the introduction of steam, and then for the purpose of superheating and fixing the gases of said chamber passing them from said chamber into and through a second chamber which also has been previously heated by direct internal combustion; 2nd. Superheating steam by passing it through a chamber previously heated by direct internal combustion then causing said steam to pass through a mass of coal or other carbonaceous substances, in a state of incandescence, in a close generating chamber to decompose the steam, and afterward for the purpose of still further heating the gases of said generating chamber, and thereby producing a more fixed gas passing the gases from said generating chamber into and through another superheating chamber which has been previously heated by direct internal combustion; 3rd. In utilizing the heat contained in the gases evolved in generator a the process which consists in passing said gases directly through the boiler r or through the resuperheater, and thence through said boiler r for the generation of steam, the superheating of steam or the heating of air in said boiler r; 4th. In the generation of steam, the process which consists in applying heated gases to the top portion of a boiler constructed with upright tubes and causing such gases to pass down through said tubes and out at the bottom of the boiler; 5th. The wash box U constructed with an inclined diaphragm i in combination with the entrance and exit pipes for gas; 6th. The combination of the generator a, superheater d, the heat restorer i and means for forcing air through pipe k around the tubes of the heat restorer i through pipes l, m, and n, into the chamber g for generating and securing intense combustion in said chamber g; 7th. The combination of the generator a, superheater d, heat restorer i, elevated oil tank m, the upright tubular boiler r, with their several connecting pipes and other appurtenant parts constituting apparatus for rapidly evolving illuminating gas and fixing the same in its gaseous condition; 8th. The combination of the generator a, superheater d, heat restorer i, elevated tank m, upright tubular boiler r, wash box U, scrubber y, with their several connecting pipes and other appurtenant parts for rapidly evolving illuminating and heating gas, fixing the same in its gaseous condition and purifying the same preparatory to storage or immediate use.

**No. 6476. Improvements on Organs, &c.***(Perfectionnements aux orgues, &c.)*

Raphael E. Letton, Quincy, Ill., U. S., 24th August, 1876, for 5 years.

*Claim.*—1st. A means of sounding a reed, the hands being free to play any other note or notes while the reed is still speaking; 2nd. A knee pedal or swell for prolonging or silencing a note; 3rd. An organ or other analogous instrument in which one note may be sounded as desired, while the hands are free to play any other note or notes; 4th. An action frame having an elastic pressure; 5th. An action frame having an elastic pressure in combination with a means of operating a pitman of an organ; 6th. An action frame which being depressed permits and being released determines the operation of the sound producing element of an organ; 7th. A jack pivoted to an elastic action frame; 8th. The pedal R and arm crank T in combination with the action frame H and spring L; 9th. The coupler E in combination with the jack F; 10th. The combination of the lever z and jack F.

**No. 6477. Improvements on Locks.***(Perfectionnements aux serrures.)*

George A. Shaw (Assignee of Robert W. Semple), Toronto, Ont., 24th August, 1876, for 5 years.

*Claim.*—1st. The latch D placed within the car B and operated by the handle H, in combination with the catch O placed on the inside of the door A; 2nd. The quadrant plate E keyed or otherwise fastened to the latch stud C and having a slot e in combination with the latch pin F; 3rd. The pivoted latch handle G in combination with and secured to the eye H by means of the seal B or its equivalent; 4th. The pivoted latch D, provided with a tail piece I fitting in or resting upon the locking bolt G, in combination with the discs R or their equivalent; 5th. A detachable index knob M in combination with the stud L for operating a combination lock.

**No. 6478. Glove Fastener. (Agrafe de gant.)**

William F. Foster, Chicago, Ill., U. S., 27th August, 1876, for 5 years.

*Claim.*—The glove with the wrist opening provided with studs on each side of the frame, and a lacing cord or cords secured by one end to one of the studs and having a ring or ball on the other end, whereby said opening may be laced without the use of eyelets.

**No. 6479. Gas Motor Engine.***(Machine à moteur à gaz.)*

Nicolaus A. Otto, Dautz, Germ., 24th August, 1876, for 5 years.

*Claim.*—1st. A gas motor engine wherein a combustible gas mixture is admitted to the cylinder separate from a charge of air or incombustible gas at atmospheric or higher pressure and in such manner that the combus- tible gas is more diluted the farther it is from the point of ignition, whereby the development of heat and the expansion or increase of pressure produced by the combustion are rendered gradual; 2nd. A gas motor engine wherein by one instroke of the piston a charge of combustible and incombustible gas drawn into the cylinder by its previous instroke is compressed so that the compressed charge when ignited propels the piston during the next out- stroke and the products of combustion are expelled by the next instroke of the piston; 3rd. In a gas motor engine the method of regulating the admission of the combustible gas to the cylinder by means of a slide P worked by a cam R, the position of the said cam on its shaft being determined by a governor Q so that when the speed of the engine increases the combustible charge is reduced; 4th. In gas motor engines the method of working the admission and emission slide valves D P and S of the cylinder A from a shaft K revolving at half the speed of the crank shaft I so that the piston has to make two strokes for each stroke of the said valves; 5th. The construction of the slide D and slide cover L, with ports and passages so arranged as to establish communication consecutively between the port C and the outer air a supply of combustible gas and an igniting flame; 6th. In gas motor engines the combination of the cylinder A, piston B, engine shaft I, counter shaft K, crank R, slide D, gas slide P, cam R, escape valve F, lever F' and cam F''.

**No. 6480. Improvements in Bank Checks, &c. (Perfectionnements aux mandats de banques, &c.)**

William A. Smith, Clifton, Ont., 24th August, 1876, for 5 years.

*Claim.*—1st. The employment of a check, draft, &c., upon which a scale or table is printed from which a character or characters may be chosen to indicate a point upon which a character or characters, written with an invisible fluid, will appear upon the application of an element that shall be understood by the maker of such check, draft, &c., and the banker to whom it is addressed; 2nd. The employment of a check, draft, &c., upon which is printed, stamped or written a character or characters that will indicate a point where the amount intended to be represented of such paper, written with invisible fluid, will appear by the application of an element that shall be understood by the maker of such check, draft, &c., and the banker to whom it is addressed; 3rd. The employment of a check, draft, &c., upon which is printed a scale from which a character or characters may be chosen or indicated by a card held by a banker that will indicate a point upon such check, draft, &c., when the card is written with invisible fluid and a character or characters will appear by the application of an element that shall be understood by the maker of such check, draft, &c., and the banker to whom it is addressed; 4th. The employment of a card upon which is printed a scale by which a number, letter or character on a check, draft, &c., may be indicated (of which the card is an associate detective) that indicates a point where a number, letter or character will appear on the check, draft, &c., by which it is an associate, by the application of an element that shall be understood by the maker of such check, draft, &c., and the banker to whom it is addressed; 5th. The combination or association of a check, draft, bonds, notes, bills of exchange and other negotiable paper and a scale that shall assist or enable a banker to detect fraud by the employment of a character or characters written, stamped or printed with a fluid that shall remain invisible until subjected to an element that will make it appear; 6th. The employment of a fluid for printing, stamping or writing characters on negotiable paper that remain invisible until subjected to an element that will make such printing, stamping or writing visible and remain so.

**No. 6481. Improvement in Fork Tines.***(Perfectionnement des fourchons de fourches.)*

Edward C. Jones and William Chapin (Assignees of William H. Rodden), Toronto, Ont., 5th February, 1876 (extension of Patent No. 725), for 5 years.

*Claim.*—Making the tines or prongs of hay, straw, barley or manure forks full or rounded on the upper or lifting side and tapering them off to an oval or eel tail-shaped edge on the other or under sides, also in the combination of the full or rounded upper side with the oval or eel tail-shaped under side in the tines of hay or other fork.

**No. 6482. Fog Alarm. (Alarme en cas de brume.)**

Lewis Smith and Robert Booth, Sherbrooke, Que., 30th August, 1876 for 5 years.

*Claim.*—1st. A compound fog alarm consisting of a boiler E, steam cylinder S with its piston A, so constructed that the piston C being raised by the pressure of steam shall cause the piston A to rise until the pressure is removed when the descent of the piston A forces the air contained in the cylinder T through a horn or whistle and at the same time draws air through another horn or whistle to fill up the vacuum formed by the descent of the piston; 2nd. In combination with the compound fog alarm described in the above claim a controlling mechanism whereby a valve in connection with the boiler is opened on the completion of the upward stroke of the piston C and A and closed on the completion or partially and momentarily closed at intervals variable at will during the downward stroke of said pistons, whereby the time occupied by the formation of the steam used for raising the pistons causes the intervals between the blasts or signals and the varied escape of steam when formed causes corresponding momentary interruptions of the said signals; 3rd. In combination with the air passage N of the air cylinder T a vacuum or reversed reed.

**No. 6483. Improvements on Rotary Pressure Blower.***(Perfectionnements aux soufflets rotatoires à pression.)*

Thomas S. Diston, Philadelphia, Pa., U. S., 30th August, 1876, for 5 years.

*Claim.*—1st. A rotary blower in which are combined the following elements namely: a cylinder H with two vanes I P; a cylinder G with two co-

cava recesses *f, f* and two segments *e, e*, a chest within which the two cylinders are caused to revolve in contrary directions at the same speed and suitable inlets and outlets in the said chest; 2nd. The chest and its varied cylinder H arranged concentrically in respect to the arched top of the said chest in combination with the recessed cylinder arranged nearer to the outlet than to the inlet side of the chest; 3rd. The combination of the chest and its two cylinders with an outlet opening *h* the upper edge of which is below a horizontal line X drawn through the centre of the vane cylinder; 4th. The combination of the recessed cylinder G and its two segments with the adjustable plates *m* and *n* on the casing of the chest; 5th. The combination of the hollow vanes I H and their openings *q* with the recesses *f, f* of the cylinder G, and the openings *p* in the end of the chest.

**No. 6484. Improvements in the Manufacture of Tubes, &c.**

(*Perfectionnements dans la fabrication des curettes, &c.*)

Mark V. Dodsworth, Parrsborough, N. S. 30th August, 1876, for 5 years.  
 Claim.—A tub nail or other similar vessel made with but one stave and one lateral joint, such staves being cut from the inside of those next larger.

**No. 6485. Paint Brush Handle.**

(*Manche de pinceau.*)

George W. Schermerhorn, East Limington, Me., U. S., 30th August, 1876, for 5 years.

Claim.—In combination with an ordinary paint brush having the tapering stock or handle *b* the perforated removable handle *a*.

**No. 6486. Method of Fastening Clothes Lines.**

(*Manière d'assujeter les lignes d'étendage.*)

Jesse L. Cain, Newcastle, Ont., 30th August, 1876, for 5 years.

Claim.—The clutch A in combination with the plate B.

**No. 6487. Improvements on Tire Tighteners.**

(*Perfectionnements aux serre-bandages de roues.*)

Henry A. B. Horton and Amos P. Hayes, McKinney, Texas, U. S., 30th August, 1876, for 5 years.

Claim.—The combination with the right and left screw D of a tire having tongue J and notch I the nuts C rigidly attached to the ends of the tire, and the felles having wedge-shaped ends provided with metallic thumbies which fit into corresponding recesses in the nuts.

**No. 6488. Fog Alarm. (Alarme en cas de brume.)**

George Swenor Sherbrooke, and Horace R. Sewell, Quebec, Que., 30th August, 1876, for 5 years.

Claim.—The combination of the cylinder A, piston B with chamber F, reed I, horn E, projection C, valve L, pipe G, stop cock M, chamber D, lamp N, tank H and stops T.

**No. 6489. Meat Hook. (Crochet de boucher.)**

Lewington R. Howse (Assignee of Benjamin F. Clark), Philadelphia, Pa., U. S., 31st August, 1876, for 5 years.

Claim.—1st. The hook D, springing from a base E and adapted to fit and be held in bracket A; 2nd. The combination of bracket A having slot B and groove C, hook D, springing from base E, and retaining pin F fastened by chain *f*.

**No. 6490. Riving and Racking Machine.**

(*Machine à refendre et crocher.*)

Sillman Parker, Atona Pa., U. S., 4th September, 1876, for 15 years.

Claim.—1st. The combination of the riving rolls and the adjustable bed or bar, 2nd. In a machine for riving and racking hoop billets the combination of two riving rolls and a bed or bar, one of the riving rolls being adjustable, 3rd. The combination of the lateral knives with the riving and racking rolls; 4th. The combination of the equalizing knife with the riving and racking rolls; 5th. In combination with the bed or bar C of a riving machine, the movable incline *f* for adjusting the same, 6th. In combination with the roll K of a riving and racking machine, the adjustable bearing and the movable incline *n*, 7th. In a riving and racking machine the combination of the adjustable bed *h*, the incline *i*, the roll K with its adjustable bearing and incline *n* and the adjustable bed block *o*.

**No. 6491. Improvements on Stoves.**

(*Perfectionnements aux poeles.*)

Charles Dion, Chambly Basin and James Baylis, Montreal, Que., 4th Sep.ember, 1876, for 5 years.

Claim.—1st. In combination with the upper part of any stove a spiral coil arranged around such upper part having its lower end in the fire chamber and carrying off the products of combustion, 2nd. In combination with the shoot B and coil C one or more supplementary coils of pipe having their lower ends terminating below the fire grate and their upper passing through the top of the stove.

**No. 6492. Improvements on Fruit Augers.**

(*Perfectionnements aux elevateurs à fruits.*)

William McCormick, Blair, Neb., U. S., 4th September, 1876, for 5 years.

Claim.—The fruit auger having its prongs C nearly straight for about half their length and then twisted or curved sidewise about one-half turn.

**No. 6493. Improvements on Overshoes.**

(*Perfectionnements aux souliers pardessus.*)

John H. McMechan, London, Ont., 4th September, 1876, for 5 years.

Claim.—An overshoe consisting of the knitted or woven upper A and vulcanized rubber foxing " and sole B welded together.

**No. 6494. Car-coupling. (Attelage de wagon.)**

Joseph A. Richard, Columbiaville, Mich. U. S., 4th September, 1876, for 5 years.

Claim.—1st. The spring D and chain C, provided with the toggle *e* in combination with the latch B pivoted in the slot *b* of the draw head A, 2nd. The lug *g* on the face of the latch B.

**No. 6495. Washing Machine. (Machine à laver.)**

Thomas M. Wilson, Venice, Pa., U. S., 4th September, 1876, for 10 years.

Claim.—1st. The combination of the binged upright L, the pivoted cross head M the sliding bars N and the grooved standards O with the movable rubber I J K and the suds box A H C; 2nd. The combination of the shaft Q, the cords P R, the crank T and the ratchet wheel and pawl U V with the standards O, the sliding bars N and the movable rubber I J K.

**No. 6496. Process of Hardening Glass.**

(*Procédé pour tremper le verre.*)

John N. Tarbox, Hamilton, Ont., 4th September, 1876, for 5 years.

Claim.—1st. The art or process of tempering and hardening glass by dipping it when at or about a low red heat into melted bees wax; 2nd. The art or process of tempering and hardening glass by dipping it when at a low red heat into melted bees wax into which a quantity, say about four times its quantity of beef tallow or its kindred substance, has been mixed; 3rd. The art or process of tempering and hardening glass by dipping it when at a low red heat into a preparation of bees wax tallow and salt soda or other kindred saline substances.

**No. 6497. Steam, Water and Gas Pipe Connection.**

(*Raccordement des tuyaux de vapeur, d'eau et de gaz.*)

Caleb C. Walworth, Boston, Mass., U. S., 4th September, 1876, for 5 years.

Claim.—1st. In a steam heating radiator the return bend *a* formed with the chambers *c*, the pipes B and expander D; 2nd. The improved method of connecting steam, gas or water pipes, the same consisting in making one or both of the connecting surfaces grooved or threaded, and swaging or driving together the parts thus formed to upset the grooved or threaded portion of portions.

**No. 6498. Self-lighting Gas Burner.**

(*Be à gaz à allumage automatique.*)

Bennett Palmer, St. John N. B., 4th September, 1876, for 5 years.

Claim.—The arrangement of A and B, the valve C and D and the mode of working and of construction, the arrangement and construction of the small tube or stem and burner H to I with the main tube or stem and burner G and L and with each of their respective combinations, fittings and connections therein.

**No. 6499. Beam and Knee for Carriages.**

(*Somnier-courbe de voiture.*)

Janus B. Lazier, Port Perry, Ont., 4th September, 1876, for 5 years.

Claim.—The combination of the beam and knees on one piece of timber.

**No. 6500. Improvements on Cultivators.**

(*Perfectionnements aux cultivateurs.*)

Robert W. Magee, Woodstock, Ont., 4th September, 1876, for 5 years.

Claim.—1st. The combination of pole B and the centre bar N; 2nd. The combination of frame C and the hinges D; 3rd. The combination of levers H I and K and hook O.

**No. 6501. Washing Machine. (Machine à laver.)**

Muritz Schmidt, Hanover, Ont., 4th September, 1876, for 5 years

Claim.—1st. The combination, in a washing machine constructed with internal corrugations and bottom of a close fitting cover B and a vertical operating shaft D provided with a head E from which projects downwardly pins F for manipulating the clothes, 2nd. The attachment to the washing tub A of a boiler G heated by a lamp H, and having a connecting pipe I for supplying steam.

**No. 6502. Improvements in Washing Machines. (Perfectionnements aux machines à laver.)**

Ferdinand Vézina, Verchères, Que., 4th September, 1876, (extension of Patent No. 1125) for 5 years.

Résumé.—La construction d'une blanchisseuse mécanique étanche, au moyen de la combinaison du fond extérieur en zinc D, des liens ou cerceles en fer B B maintenus et serrés par les écrous C et de la barre E.

Claim.—The construction of a water-tight automatic washer by means of the combination of a zinc exterior bottom D iron binders or hoops B B held and tightened by screws C C, and of the bar E.

**No. 6503. Improvements in Hollow Augers.**

(*Perfectionnements aux tarières-cuillers.*)

Albert A. Wood, Manlius, N. Y., U. S., 6th September, 1876, for 5 years.

Claim.—1st. The combination of a hollow auger with the cutting knife *b* and strap S provided with the slot *f*. 2nd. The cutter carrying jaw F and gaging jaw E, provided with graduated scales and holding devices, in combination with the body A and shank B. 3rd. The adjustable stop G constructed in two pieces clamped to each other and the body A by the screw *p*.

**No. 6504. Improvements on Anchors.***(Perfectionnements aux ancres.)*

Joseph Williams, Jurettown, Pa., U. S. (Assignee of Joseph S. Williams), 6th September, 1876, for 5 years.

*Claim.*—1st. Limiting the motions of swivelled or pivoted flukes by means of a rigid connection or connections secured to the flukes and adapted to bear against the shank of the anchor. 2nd. The flukes B B swivelled or pivoted to the shank of the anchor and having a transverse rigid connection E.

**No. 6505. Fence Post. (Pieu de clôture.)**

Edward J. Major (Assignee of Frank O. Wood), Montreal, Que., 6th September, 1876, for 5 years.

*Claim.*—A fence post of sheet, wrought or cast metal, the section of which is a line having a single double, triple or multiple curve or bent to one or more angles and having its ends apart.

**No. 6506. Stench Trap. (Puisard.)**

John M. Reid, New-York, U. S., 6th September, 1876, for 5 years.

*Claim.*—1st. The trap shown east in lead or other analogous easily fusible metal with a single partition wall between the pipes A and C forming the inverted dam and being common to both pipes. 2nd. The trap east in lead or other easily fusible metal in which the intermediate pipe C is made straight from its upper open end to the half circle bend at the bottom that communicate with the pipe A and communicating with the discharge pipe B by a quarter circle bend near its upper end. 3rd. A stench trap in which the discharge pipe B is so placed, in relation to the inlet pipes A and intermediate pipe C that a vertical plane projected through the centre of B to the centre of C will form an angle with the plane that passes through the centre of A and C. 4th. The cores c and d in combination with the blocks f f and g introduced at the bend of the pipes. 5th. The combination of the blocks f and g provided with the dovetail grooves z and the key 1. 6th. The swinging loop o and key or pin n in combination with the cores c and e.

**No. 6507. Twine Waxing Compound.***(Composé pour cirer la ficelle.)*

Raymond Blakiston and William C. Blakiston, Quebec, Que., 6th September, 1876, for 5 years.

*Claim.*—A compound consisting of bees wax, rosin and palm oil.

**No. 6508. Improvements on Autographic Printing.***(Perfectionnements dans l'impression autographique.)*

Thomas A. Edison, Menlo Park, N. J., U. S., 6th September, 1876, for 5 years.

*Claim.*—1st. The tube u with a tapering end, in combination with a puncturing needle and mechanism for reciprocating the same; 2nd. The portable perforating instrument for writing or drawing composed of a tube or stock with a small end similar to a pen and perforating needle and means for reciprocating such needle rapidly. 3rd. The method of printing in permanent semi-fluid ink by puncturing a sheet of paper or similar material with numerous small holes, filling such holes with a semi-fluid ink and pressing the same upon the surface to be printed; 4th. The swinging frame u and paper holding clamps l in combination with the bed l for receiving and holding the sheet of perforated paper and the sheet to be printed; 5th. The combination with the revolving magnetic motor pen holder a and puncturing needle c of the cam d, having three or more points; 6th. The combination with the portable hand perforating instrument having an electro-magnetic motor of a flexible conductor and a battery; 7th. The portable galvanic battery composed of cells in a stand with a pole supporting rod latch and cross-head, in combination with flexible conductors, a magnetic motor and a perforating pen. 8th. The ink for autographic printing used of printers ink thinned out with castor oil. 9th. The pen tube a provided with the handle a' in combination with the perforating needle and electro or other motor for actuating the same. 10th. The needle c guided in the short tube b' and connected to the rod C by the lever a' in combination with the tube and motor for actuating the needle. 11th. The letter or characters for a type writing machine made of needle points for puncturing paper or other material for printing.

**No. 6509. Fare Register.***(Régistre de billets de passage.)*

George Beadle, Syracuse, N. Y., U. S., 6th September, 1876, for 5 years.

*Claim.*—1st. The ratchet registering wheels C D E and F made with the flanges c' and c, with gaps or openings e' e' and e' therein, and with the spring devices v for preventing their movement backward; 2nd. The actuating mechanism composed of lever H having pivots k m n and o, located thereon and operated thereby, connections s and s', screw f and spring t; 3rd. The combination of the ratchet registering wheels C D E and F, flanges c' and c, gaps or openings e' e' and e' with the lever H, the pivots k m n and o, connections s and s', screw f and spring t; 4th. The combination of the bell I, with the striking mechanism composed of the yoke located over lever H, shoulder z, cam z' on the end of lever H with its bell hammer p and springs y and b; 5th. The combination of the registering wheels C D E and F, flanges c' and c, gaps or openings e' e' and e' and the springs for preventing any movement of the wheels backward with the bottom B, rims a' a' and hub f.

**No. 6510. Broad-cast Sower Attachment to Seed Drills.***(Ajustage de semoir à la volée aux labourers.)*

Wareham S. Wisner, Brantford, Ont., 6th September, 1876, for 5 years.

*Claim.*—1st. The dovetail sockets G fastened on axle, the dovetail I on metal tubes H, the branch tube K on tube H to receive the grain from distributors on seed box. 2nd. The bar M which carries bars N and cultivator teeth O, bar M being fastened to drill frame by bolts so as to be easily detached.

**No. 6511. Process and Apparatus for Tanning. (Procédé et appareil de tannage.)**

Philippe J. Dussand and Joseph Duchez, Bordeaux, Fec., 6th September, 1876, for 15 years.

*Claim.*—An apparatus employed in tanning under pressure composed of a closed vat or cylinder having arranged with a false bottom to receive the hides, &c., together with perforated pipes and provided with inlet outlet, pressure and air pipes.

**No. 6512. Grindstone Frame.***(Bâti de meule à aiguiser.)*

George A. Whitney, LaGrange, Ohio, U. S., 6th September, 1876 for 5 years.

*Claim.*—The arches A A bent from one piece of wood united with the cross bars B B, bolt C and rails D D.

**No. 6513. Ear Muffler. (Oreilles.)**

Hermin G. Creveling (Assignee of Butler Edgar), Espy, Pa., U. S., 6th September, 1876, for 5 years.

*Claim.*—The ear muffler A having the frames C C and tube B combined.

**No. 6514. Invalid Bedstead. (Couchette de malade.)**

Walter Spauner, Toronto, Ont., 7th September, 1876, for 5 years.

*Claim.*—1st. An invalid bedstead A constructed with an adjustable movable extension bolster board B' and bottom C, the combination thereof with the fold over table D with book rest d'. 2nd. An invalid bedstead A constructed with an adjustable movable extension bolster board B' and bottom C, the combination thereof with the hinged racks K K back guide-K', sliding catch K', axle K', arms K', links b' b' b', axle L, pintons L', L', wheel f, endless screw e, bevel wheels g h and axle m with handle M; 3rd. An invalid bedstead A constructed with an adjustable movable extension bolster board B', bottom C and part F' with holder z, the combination thereof with the mattress E with aperture Em, pad E' and slide ways w w.

**No. 6515. Preserving Animal and Vegetable Matters.***(Conservation des substances animales et végétales.)*

Frederick S. Barff, Kildura, Eng., 7th September, 1876, for 5 years.

*Claim.*—1st. The employment for effecting the preservation of animal and of vegetable matters of the lower oxides of manganese, such oxide or oxides being capable of absorbing oxygen and becoming converted into higher oxides; 2nd. The employment for effecting the preservation of animal and of vegetable substances of the lower oxides of manganese and of iron in conjunction with a diluent; 3rd. The employment for effecting the preservation of animal or of vegetable matters of organic salts or compounds which are capable of absorbing oxygen such for example as the tannats, gallates, pyrogallates, or analogous bodies, either employed alone or when contained in vegetable or other matter.

**No. 6516. Four Wheeled Vehicle.***(Voiture à quatre roues.)*

William Buckeridge, Port Huron, Mich., U. S., 7th September, 1876 for 5 years.

*Claim.*—1st. The friction rollers F journaled on the rear axle L, and supporting the wagon box M. 2nd. The bars I fixed to the under side of the wagon box and vertical rollers K journaled to the rear axle by brackets c or ribs e, for retaining the wagon box from lateral motion; 3rd. The web formed of two parts A B jointed contiguous to the front hounds and rigidly connected to the front and rear axles respectively, the wagon body M pivoted to the front axle supported at its rear end by friction rollers F. 4th. The wagon body M, constructed with bent sills and bottom at d, 5th. The square catch king bolt a and guides N.

**No. 6517. Water Tube Steam Boiler.***(Chaudière à vapeur tubulaire.)*

William R. Parks and Robert L. Goddard, Palmer, Mass., U. S., 7th September, 1876, for 5 years.

*Claim.*—The combination of the furnace A having flues E F G therein, the pipe coil a extending through said flues, the water and the steam chamber B located between the grate e and the coil a and wholly below the coil and the pipe o, connecting said coil with the lower part of the water and steam chamber B.

**No. 6518. Improvements on Steam Generators. (Perfectionnements aux générateurs de vapeur.)**

Joseph Firminich, George Firminich and Frank Firminich, Buffalo, N. Y., U. S., 7th September, 1876, for 5 years.

*Claim.*—1st. The combination with a series of mud drums A of a series of steam and water drums D connected by the heating tubes C and the fire grate or full surface S arranged between the mud drums; 2nd. The circulating tubes connecting the steam and water drums with the mud drums outside of the combination chamber; 3rd. The combination of the front communicating chamber or its equivalent and rear chamber. 4th. The combination with the mud drums A having the fluo sheet B of the series of heating tubes C, steam and water drums D with the connections E steam drum F, and the setting of the steam generator consisting of the front and rear walls L and partition M.

**No. 6519. Corn-sheller. (*Egrenoir à blé d'inde.*)**

Calvin D. Read, Ellis D. Read and James A. Read, Ayer, Mass., U. S., 7th September, 1876, for 5 years.

*Claim.*—1st. The frame A formed with a hollow projecting bearing e for the driving wheel stops z z for the arms U U' pivot studs for the springs z z and ring projection C having an internal ledge s as bearing for the ring pinion carrying the shelling devices. 2nd. The loose ring plate E bearing the shelling arms G G G pivoted thereto and mounted in a cylindrical projection of the ring gear D. 3rd. The arms G G G pivoted to the loose ring plate E and pressed toward each other by springs m m m and provided with slotted ends g g g or sectorial gear in combination with the ring gear D provided with upward projecting studs r r r r, or with interior sectorial gear. 4th. The hopper I formed with a short upright cylinder with guide lugs j j j cast on its outer circumference, and a circular bottom flange arranged for the support of ring J and wing plates K K K K. 5th. The movable ring J with its upward projecting studs r r r r connecting with the slotted ends g g g of the wing plates K K K in combination with the coiled springs s s. 6th. The wing plates K K K K pivoted to the upper I and connected by their slotted ends with the movable ring J and provided with upward inward and downward projections with inclined V on their inner surfaces; 7th. The combination of the feed roller U mounted on one of the two swinging arms U U and geared to the driving wheel shaft through a cog wheel S mounted on said arm with the roller V mounted on the other arm U

**No. 6520. Washing Machine. (*Machin à laver.*)**

Johnson M. Grover, Winnipeg, Man., 7th September, 1876, for 5 years.

*Claim.*—1st. The oscillating frame D constructed with a long, adnal corrugated concave face in combination with the corrugated roller C; 2nd. The adjustable board F having a central slot and a bolt and nut fastening C H in combination with the base board A. 3rd. The double tee cleat I and single tee cleat J in combination with the board A and adjustable board F.

**No. 6521. Emery Wheel Dresser.**

*(Rhabilleur de tambour à emeri.)*

Joseph D. Huntington, Chicago, Ill., U. S., 7th September, 1876, for 5 years.

*Claim.*—The combination with the shank B of a series of wheels D provided with spurs d adapted to consecutively engage the face of the emery wheel and loosely journaled upon one and the same shaft.

**No. 6522. Process of Deodorizing and Purifying Petroleum and other Oils.**

*(Procédé de désinfection et d'épuration du pétrole et autres huiles.)*

Daniel M. Lamb, London, Ont., 7th September, 1876, for 5 years.

*Claim.*—The process of deodorizing and purifying petroleum and other oils by applying thereto chlorine gas in the presence of, or in conjunction with, water.

**No. 6523. Improvements on Rotary Steam Boilers.**

*(Perfectionnements aux chaudières à vapeur rotatoires.)*

Charles W. Pierce, New York, U. S., 8th September, 1876, for 5 years.

*Claim.*—1st. The combination with a rotary boiler of buckets or other devices whereby water is maintained in contact with the shell of the boiler and with the flues or a portion of them during part or the whole of their passage above the water line in the rotation of the boiler; 2nd. In a rotary boiler having two sets of tubes, the extension X containing the inner set of tubes and being of less diameter than the outer set of tubes forming the annular fire chamber h or an equivalent arrangement thereof as a flange g at one end of the boiler, either on the end thereof or on the furnace wall together with the recess h in the wall at the other end of the boiler or its equivalent; 3rd. A rotary boiler in which the feed water steam and other pipes are arranged in the hollow trunnions of the boiler the said feed water pipe extended downward from the hollow trunnion to or below the water level and the steam pipe extended upward from the same into the steam space; 4th. In combination with the boiler shell D, trunnions T, flues G and H, buckets b, damper E, doors d and p, annular chamber h h' and tubes f.

**No. 6524. Organ Stop Action. (*Jeu d'orgue.*)**

Henry Smith, Gananoque, Joseph George and Charles Mee, Kingston, Ont., 13th September, 1876, for 5 years.

*Claim.*—1st. The cam lever A pivoted in the key board at B; 2nd. The valve or mute D; 3rd. The stop handle E.

**No. 6525. Improvements on Combustion of Fuel and on Furnaces for Effecting the same.**

*(Perfectionnements dans la combustion du combustible et aux fourneaux pour cet objet.)*

John E. Wotten, Reading, Pa., U. S., 13th September, 1876, for 5 years.

*Claim.*—1st. The mode of burning waste or refuse coal in steam boiler furnaces, that is to say by repeatedly stirring or breaking up the ignited fuel from above while it is subject from below to numerous jets of air under pressure. 2nd. The combination, in a steam boiler furnace, of a perforated fuel bed E, a closed ash pan F and a pipe or pipes through which air under pressure can be introduced into the said pan below the perforated bed. 3rd. The fire bed composed of perforated flanged plates or channel bars of wrought iron connected together. 4th. The combination of a pipe M for the admission of air for supporting combustion in a steam boiler furnace with a steam nozzle b adapted to a valve c which is controlled partly by the pressure of steam in the boiler and partly by a spring. 5th. The combination of the tube G its branch f and nozzle b with the valve c, spring f and adjusting screw

h, 6th. The mode of burning fuel in and preventing the emission of sparks from locomotive boilers, that is to say by forcing, by means of a jet or jets of live steam, a continuous blast of atmospheric air into a closed ash pan and by introducing into the chimney a continuous jet or jets of live steam sufficient, in force or volume, to prevent the escape of the products of combustion through the door of the furnace when open, but insufficient to cause the emission of sparks from the chimney. 7th. The combination of the closed ash pan and air pipe with a nozzle b communicating with a steam pipe of the engine at a point between the steam chest and throttle valve, so that the introduction of air under pressure into the ash pan shall cease simultaneously with the cutting off of steam from the engine; 8th. The combination of the chimney with a pipe communicating at one end with a main steam pipe of the engine at a point between the throttle valve and steam chest and terminating at the upper end in a nozzle, nozzles or other devices for discharging a jet or jets of live steam into the said chimney when the throttle valve is open. 9th. The combination with a steam boiler chimney of a series of induction pipes and a device by which a jet of steam is injected into each pipe.

**No. 6526. Machines for Forming Collars on Carriage Axles.**

*(Machin à former les collets des essieux de voitures.)*

Jacob Kritch, Cleveland, Ohio, U. S., 13th September, 1876, for 5 years.

*Claim.*—1st. The adjusting center screws C D in combination with the guide blocks a a', stay J, guide standards F, dies e e' and carriage B, whereby the axle blank is held at its extreme ends upon points or centres and pressure applied thereto, thereby upsetting said blank and at the same time preventing deflection of the bar. 2nd. The combination of two centres in line with each other or nearly so by and through which to apply the power required to upset the bar and adjusting guides or supporting devices intermediate between said centre to prevent deflection of the bar while being upset. 3rd. The combination of two centres upon which to pivot and hold the axle blank while being upset. 4th. In adjusting guides or supporting devices arranged intermediately between the centre to prevent deflection of the bar while being upset without clamping or clamping between said guides or supports. 5th. Upsetting and forming a collar and swell on axle blanks at one operation by applying longitudinal pressure at a point distant from the heated part of the bar to be upset, &c., and returned in a right line between centres for holding the bar, and intermediate guides for directing the same while subject to said operation by mechanism.

**No. 6527. Improvements in Attachments to Envelopes.**

*(Perfectionnements aux dispositions des enveloppes.)*

James Collins, Central City, Col., U. S., 13th September, 1876, for 5 years.

*Claim.*—An envelope opener made of parchment stiff paper or similar material with the one end marked and the other end fastened under the lip of an envelope.

**No. 6528. Clothes Horse. (*Séchoir à linge.*)**

James A. Moody and Caroline Hill, Toronto, Ont., 13th September, 1876, for 5 years.

*Claim.*—The vertical parts E provided with extending arms or bars F, in combination with vertical posts G arranged in a circle around the standard G.

**No. 6529. Treating Cupreous Solutions to purify the Copper and utilize separated substances.**

*(Mode de traitement des solutions cupreuses pour épurer le cuivre et utiliser les substances séparées.)*

Henry Chadwick, Cayleton, Que., and William Jardine Irvine, Scot., 13th September, 1876, for 5 years.

*Claim.*—1st. The purifying of cupreous solutions containing salts of other metals besides copper by treating them with acetate or other suitable salt of lead. 2nd. The separating and utilizing of silver contained in cupreous solutions by treating them with acetate or other suitable salt of lead; 3rd. The separating of arsenic, antimony and bismuth, or any of them, from cupreous solutions by treating them with acetate or other suitable salt of lead.

**No. 6530. Railroad Tie. (*Traverse de railroute.*)**

George D. Blaisdell, Cambridge, Vt., U. S., 13th September, 1876, for 5 years.

*Claim.*—The metal tie A having raised and boxed ends B, chairs D, clamp plates G and the rod F.

**No. 6531. Process of Restoring Crape and Laces. (*Procédé pour rafraîchir le crêpe et la dentelle.*)**

Aaron J. Shriver, Baltimore, Md., U. S., 13th September, 1876, for 5 years.

*Claim.*—The process of restoring the color and texture of crape, laces, etc., by first immersing them in a solution consisting of alcohol, a dye stuff and a stiffening gum, and then subjecting them to the action of steam.

**No. 6532. Machine for Cutting Curd.**

*(Machin à trancher le grumeau.)*

Jacob P. Bellinger, Minden, N. Y., U. S., 13th September, 1876, for 5 years.

*Claim.*—Within a bottomless hopper P a series of knives A radially and spirally placed upon a revolving spindle B in combination with the blades O.

**No. 6533. Improvements in Cooking Stoves.***(Perfectionnements dans les fourneaux de cuisine.)*

James Norris, St. Catharines, Ont. (Assignee of Sherman S. Jewett), 13th September, 1876, for 5 years.

*Claim.*—In figures I II III, 1st The arrangement with the baking oven A and rear extension A' of the lower portion thereof of the flues F H G G, damper m and exit passage i in front of the extension A'; 2nd. In combination with the baking oven A, provided with a lower rear extension A', the extension of the outer top rear and side plates f h and g y till they intersect each other so as to inclose the space over the extension A'; 3rd. The arrangement of the warming oven L under the fire chamber B and in front of the oven A arranged wholly in rear of such fire chamber and separated from the warming oven, and in Figs. IV V VI VII VIII IX X XI and XII, 1st. Constructing and arranging the baking oven of a cooking stove so that the lower part of the rear portion of the baking oven or that furthest from the fire chamber shall extend backward beyond the upper portion; 2nd. The combination and arrangement of a water reservoir over the backwardly extended lower portion of a baking oven. 3rd. The arrangement of a water reservoir supported over the rearwardly extended lower portion of a baking oven so that the rear plate of the reservoir will be flush with or in substantially the same plane as the outer vertical rear plate of the stove; 4th. The arrangement with the rearward extension C and water reservoir E of the extension boiler flue O, diving flues P P, up cast flue S, damper U and exit passage T.

**No. 6534. Shutter Worker and Blind Slat Adjuster.***(Fermeture des contre-lames et serres-lames de persier nes.)*

George M. Robinson, Chicago, Ill., U. S. (Assignee of Henry J. Dickerson), 13th September, 1876, for 10 years.

*Claim.*—1st The dock or wheel B applied to the shutter hinge in combination with the chain friction strap or spring h and the sliding bar or rod H applied and operating to open and close and fasten the shutter from the inside; 2nd. The combination with the sliding bar H of the forked lever k for operating the pivoted slats of the blinds.

**No. 6535. Type Casting and Setting Machine.***(Machine a fonder et poser les caracteres.)*

Charles S. Westcott, Elizabeth, N. J., U. S., 13th September, 1876, for 5 years.

*Claim.*—1st. The matrix stock c and matrix 3 connected together by the screws 2, which also form pins for retaining the matrix and stock on the frame e. 2nd. The carrier B having gripe d, sliding block 1 and swinging block 5, in combination with the pins and slots 6 7 and 8; 3rd. The frames e carrying the matrix stock c and sliding in grooves between the bar b<sub>1</sub> in combination with the transversely grooved bar s and mechanism for raising and lowering the same; 4th. The range of frames e carrying the matrix stocks c and sliding endwise between the bars b<sub>1</sub> in combination with the bars l, plus u and a range of finger keys moving such pins and mechanism for acting upon such pins to move the frames and bring the selected matrix stock into the path of the carrier; 5th. The notched stationary grating k in combination with the slide bars l and pins n; 6th. The bars h and i actuated in opposite directions by the racks A<sub>1</sub> and pinion in combination with the slide bars l plus u and frames e; 7th. The cross bar o in combination with the slide bars l, plus u and grating k; 8th. The lifting pins t<sub>1</sub>, levers b<sub>1</sub> and keys l in combination with the slide bars l, plus u and bars h and i; 9th. The claw r<sub>1</sub> and frame r in combination with the range of finger key levers b<sub>1</sub> and the slide bar 7; 10th. The bar o<sub>1</sub> and lifter o<sub>2</sub> in combination with the range of finger keys l and mechanism actuated by such keys; 11th. The bath of type metal provided with a casting nipple in combination with attaching supporting screws that are in line r nearly so with such nipple so that the nipple is not displaced by expansion; 12th. The segment of a globe at the back of the nipple 3 entering a similar recess at the end of the nose upon the bath, in combination with the device 28 for holding the nipple to place but allowing such nipple to accommodate itself to the type mould; 13th. In combination with the bath of melted metal and the conduit 30, a plunger p<sub>1</sub> actuated by yielding mechanism and the valve and rod 16 that are removable from the rear without disturbing any of the parts of the bath; 14th. The mould frame u<sub>3</sub> suspended from the centers 36 in combination with the removable plate u and the type mold, 15th. The two part type mold v v<sub>1</sub> in combination with the regulating plate r<sub>2</sub>, that is adjustable to vary the width of type; 16th. The combination with the moulds v v<sub>1</sub> and regulating plate, of the matrix stock and a connection 38 between the matrix stock and the plates v<sub>1</sub> for varying the thickness of the type according to the letter to be cast; 17th. The plunger 40 and lever 42 in combination with the moulds v v<sub>1</sub> for pressing such moulds together previous to casting; 18th. The bar 44, hook 51 and means for actuating the same, in combination with the mould and the matrix and its carrier; 19th. The combination with the moulds v v<sub>1</sub> and regulating plate r<sub>2</sub> of the delivery hook r<sub>3</sub> and mechanism for giving the motions to the respective parts; 20th. The combination with the moulds v v<sub>1</sub> of the regulating plate r<sub>2</sub> and mechanism for moving said regulating plate between the successive casting operations; 21st. In a type casting machine the moulds v v<sub>1</sub> and their supporting frame in combination with the mechanism for opening such moulds and moving them laterally, and the delivering device r<sub>2</sub> that receives and withdraws the type. 22nd. The trough 57, spring and hook r<sub>1</sub> in combination with the type moulds and mechanism for moving the hook; 23rd. The grippers 58 and 59 in combination with the pusher 61 and cutters to dress the type. 24th. The cutters 63 64 65 applied to and combined with the movable block 66 and pusher 69; 25th. The composing table 77 and pusher 78 in combination with the trough 79 upon the slide 71; 26th. The bell 80 attached to the quid that moves with the types upon the composition table in combination with the adjustable tappets 81.

**No. 6536. Improvements on Brooms.***(Perfectionnements aux balais.)*

Smith M. Kellogg, Alameda and George C. Wetherbee, Detroit, Mich., U. S. 13th September 1876, for 5 years

*Claim.*—1st. The handle A, head block or form B and broom brush C; 2nd. The parts A B C and D

**No. 6537. Electric Railway Signal.***(Signal électrique de railroute.)*

David Rousseau and William C. Smith, New York, U. S., 15th September, 1876, for 5 years.

*Claim.*—1st. The combined index and clapper E arranged between two gongs or sounders F and G. 2nd. The lever H pivoted to the index clapper E and combined with the armature lever to transmit the motion of the armature to the index clapper. 3rd. The plus or projections h and f applied to the vibrating index clapper E and combined with the springs j and k; 4th. The annunciator I combined with the vibrating index clapper E and with the gongs or sounders F G; 5th. In combination with the vibrating index clapper E the insulated plate J and conductor prongs or springs r s u t, &c., &c. 6th. The combination of the tube H<sub>2</sub> formed on the circuit closer with the inner rings or plates h<sub>2</sub> k<sub>2</sub> and the sliding sleeve or plate k<sub>2</sub>; 7th. The rod l<sub>2</sub> placed within the cushion C<sub>2</sub> and through the rings r<sub>2</sub> h<sub>2</sub> and combined with the sleeve k<sub>2</sub> and plate B<sub>2</sub>. 8th. The cushion C<sub>2</sub> tinged on the top and bottom and combined with the plates B<sub>2</sub> and D<sub>2</sub> and screw rings E<sub>2</sub> and G<sub>2</sub>; 9th. The conductor F<sub>2</sub> carrying the plate a<sub>2</sub> combined with the conductor F<sub>2</sub> carrying the plate p<sub>2</sub> and with the cushion r<sub>2</sub> and screw s<sub>2</sub>. 10th. The combination of the upper and lower movable plate h<sub>2</sub> k<sub>2</sub> with the intermediate plate or sleeve l<sub>2</sub> which is capable of motion, all arranged to constitute a circuit closer; 11th. The trigger f<sub>2</sub> pivoted to the armature lever F<sub>2</sub> and combined with the lug d<sub>2</sub> that projects from said armature lever; 12th. The projecting hook w<sub>2</sub> attached to the armature lever F<sub>2</sub> in combination with the projecting stop X<sub>2</sub> on the arm b<sub>2</sub> of the signal; 13th. The friction rollers u<sub>2</sub> v<sub>2</sub> combined with the projecting arms g<sub>2</sub> h<sub>2</sub> of the signal shaft and with the springs p<sub>2</sub> q<sub>2</sub> r<sub>2</sub> s<sub>2</sub> t<sub>2</sub>, &c.; 14th. The slide H<sub>2</sub> carrying the slotted arm q<sub>2</sub> and combined with the rope E<sub>2</sub> which has the knot 3<sub>2</sub> for the purpose of raising said slide.

**No. 6538. Fanning Mill. (Tarrare.)**

Andrew W. Kendrick, Brooklyn, N. Y., U. S., 15th September 1876, for 7 years.

*Claim.*—1st. The combination with driving wheel N and crank pulley J operating the shoe F of the pinion H and pulley H rigidly secured together and detachably secured to the fan shaft R for the purpose of allowing the separator to be used at will, either with or without the blast. 2nd. The combination of pulley J having the cam projection J with the adjustable jarring lever I and separator of shoe F; 3rd. The combination of the shoe F, bracket p, duplicated levers K k<sub>1</sub>, with adjusting holes by which an oscillatory motion is communicated to the shoe, which motion may be so directed as to produce greater velocity at one end of the shoe than at the other; 4th. The combination of slides B<sub>1</sub> having delivery orifices in its lower edge pivoted slats or gates C and adjusting bar D to which said slats are pivotally connected; 5th. The sieve or screen made of zinc or other suitable material filled with perforations.

**No. 6539. Improvements in Reed Organs.***(Perfectionnements aux orgues à anches.)*

Richard McMillan, Kingston, Ont., 15th September, 1876, for 5 years

*Claim.*—The action a b c d and so constructed as to operate the valve c in the position described also the independent draw stop h and rod i for the forte swell.

**No. 6540. Life Preserver in case of Fire.***(Appareil de sauvetage en cas d'incendie.)*

Joseph Roch and Jules Colas, Montréal, Que., 15th September, 1876, for 5 years.

*Résumé.*—1o La combinaison avec une corde passant autour d'une poutre d'une spirale traversée par la corde et portant les moyens de sauvetage. 2o La combinaison de la poutre E, contenue dans la boîte A avec extension A<sub>1</sub>, corde D, spirale F et pinçons E.

*Claim.*—1st. The combination with a rope passing around a pulley of a spiral crossed by the rope and carrying the means of escape; 2nd. The combination of the pulley C placed in the box A with extension A<sub>1</sub>, rope D, spiral F and pinches E.

**No. 6541. Cooking Vessel. (Ustensil de cuisine.)**

William Y. Johnson, Oyster Bay, N. Y., U. S., 15th September, 1876, for 5 years.

*Claim.*—The back part of the vessel A<sub>2</sub> formed lower than the front A<sub>1</sub> to allow the cover to pass horizontally between the flange a<sub>1</sub> and stops a<sub>2</sub>.

**No. 6542. Mail Bag Catcher.***(Accroche-valise de poste.)*

Alfred B. Whipple, Auburn, N. Y., U. S., 15th September, 1876, for 5 years

*Claim.* 1st. The combination of fixed bar A, movable bar F and swinging link C; 2nd. The boxes or keepers X X holding the bar A and provided with V-shaped inside faces; 3rd. In combination with the mail bag catcher the post G mounted on platform H and having pivoted arms K and L, provided with laterally moving pieces k and l

**No. 6543. Coin Package.***(Empaquetage de monnaie.)*

Charles F. Trout, Boston, Mass., U. S., 15th September 1876 for 5 years.

*Claim.*—The tongue d, the piece a and its extensions b, said tongue being provided with a fastening band or elastic loop, also the body part of the package as made of the piece a and its extensions b, arranged, applied and secured together.

**No. 6544. Machine for Baking Bread and Cooking Cattle Feed.***(Machine à cuire le pain et les aliments des bestiaux.)*

John Carroll, Strathroy, Ont., 15th September, 1876, for 5 years.

*Claim.*—The concentric cylinders A and B placed within the other A being a fire chamber and B a receptacle for water, a door at fire chamber. G ventilator or draught, smoke stack D, guage E, pipe K, steam box I, feeder L, cooking chamber O, pipe M for heated steam and movable bottom P.

**No. 6545. Device for Stretching Curtains.***(Appareil pour étendre les rideaux.)*

John S. Patterson, Toronto, Ont., 15th September, 1876, for 5 years.

*Claim.*—The stretcher frame E constructed with jointed bars A and B chamfered on the inner edge of face and cross bars C and D plain, and the combination therewith of the screws e hinges f clasps f, headless pins d, adjusting holes v and marks r.

**No. 6546. Air Heating Stove Pipes.***(Tuyaux de poêles chauffant l'air.)*

George Taylor, Smith's Falls, Ont., 16th September, 1876, for 5 years.

*Claim.*—1st. The partition B dividing the stove pipe into an air chamber C and a smoke chamber D, in combination with the stove pipe A. 2nd. The air chamber B having the entrance opening I with a damper G and the exit opening F, in combination with the smoke chamber D.

**No. 6547. Manufacture of Gas for Burning.***(Fabrication du gaz de chauffage)*

Thomas B. Redwood, London, Eng., 16th September, 1876, for 5 years.

*Claim.*—1st. Causing gas distilled from coal, after it has been passed through the hydraulic main, to come in contact with copper or an alloy of copper kept in a highly heated state and arranged so as to expose a large extent of surface; 2nd. The use of tubes of copper or an alloy of copper in the converter arranged so as to subdivide the current of gas and expose a large extent of highly heated surface.

**No. 6548. Improvements on Sewing Machines.***(Perfectionnements aux machines à coudre.)*

Charles Schunoff, Chicago, Ill., U. S., 16th September, 1876, for 5 years.

*Claim.*—1st. The friction feed wheel B, the cog wheel B<sub>1</sub> and I, the friction wheel L and its slide I<sub>1</sub>, the connecting rod H, lever D<sub>1</sub> and the operating cam C<sub>1</sub>. 2nd. The cam C, lever D<sub>1</sub>, link d and lever E. 3rd. The levers D<sub>1</sub> and G, rod F, pin G<sub>1</sub>, bar I<sub>1</sub> and spring i<sub>1</sub>, arranged so as to control the contact of the friction bar I with the wheel L. 4th. The ways I, friction slide I<sub>1</sub>, spring i, rod H, levers D<sub>1</sub> and cam C<sub>1</sub>; 5th. The adjustable stop K in connection with the sliding friction bar I for regulating and adjusting the length of stroke of the slide I and consequently the length of the stitches made by the machine. 6th. The automatic indicator M N O O K<sub>1</sub> K<sub>1</sub>.

**No. 6549. Water Forcing Elevator.***(Élévateur à eau foulant.)*

Daniel Conrod, Toronto, Ont., 16th September, 1876, for 5 years.

*Claim.*—The utilization or application of compressed air for forcing and elevating water and all liquids from low to high levels and from any one place or position to any other place or position; 2nd. The combination for such purpose of A B B<sub>1</sub> C D D<sub>1</sub> E F G H K with or without a wooden piston I J.

**No. 6550. Improvements in Quartz Mill.***(Perfectionnements aux moulins à quartz.)*

David D. Mallory, Mystic Bridge, Ct., U. S., 16th September, 1876, for 5 years.

*Claim.*—1st. The combination with a suitable casing A of two or more wheels or beaters B B<sub>2</sub> &c., revolving in the same direction and projecting their particles against each other at the point m; 2nd. In combination with the two or more wheels or beaters B B<sub>2</sub> &c., enclosing casing A and suitable feeding and discharge passages, the lining c of h<sub>1</sub> and c<sub>1</sub> to that being treated accumulated within the casing A; 3rd. In combination with the casing A and two or more revolving wheels or beaters B B<sub>2</sub>, the discharge passages c, separating chamber E and return passage e, adapted to assort the particles and carry the coarser particles into the feed passage G. 4th. Two or more wheels or beaters in combination with each other and with an enclosing case so operated that the particles are thrown from the beaters of one wheel against the beaters of another wheel, or against particles thrown from the latter moving in an opposite direction with an increased effect.

**No. 6551. Hay Rake.***(Râteau à foin.)*

Charles I. Corbin, East-Oxford, Ont., 16th September, 1876, for 5 years.

*Claim.*—1st. The combination of the iron bands c c with the hooked braces F F and the application thereto of the slide G and the tightening screw M. 2nd. The combination of the more simple form of the iron frames D D with the more simply formed springs E E.

**No. 6552. Improvements on Coal Stoves.***(Perfectionnements aux poêles à charbon.)*

George Binglemann (Assignee of Harmon Gillmore), Simcoe, Ont., 16th September, 1876, for 5 years.

*Claim.*—1st. The combination of the central pipes A A in sections and the branch pipes B B. 2nd. The combination with the central pipes A A and B B of the horizontally arranged shaker in sections D D.

**No. 6553. Improvements on Construction of Railways.***(Perfectionnements dans la construction des railroads.)*

Charles Hughes, William Angus, John Macfarlane and James Macfarlane, Montreal, Que. 16th September 1876, for 5 years.

*Claim.*—1st. The combination of the switches d g with rails a b c and r. 2nd. The combination of the bar n links o and q with switches g and k. 3rd. The combination of the bar n link o and arm r with switches d and l. 4th. The chair s having bridge piece v and flared or bevelled end. 5th. The chair u flared or bevelled at both ends having bridge piece v. 6th. The rail t, having flange w.

**No. 6554. Bench Vice.***(Étau d'établi.)*

Auseim Vailleur, New Richmond, Wis., U. S., 16th September, 1876, for 5 years.

*Claim.*—The perforated sliding bar D provided with a slot at its outer end for the reception of the wedge B and the stationary jaw B having the dog a, in combination with the movable spring jaw B, toggies G G and sliding bar F.

**No. 6555. Improvements in Piston Packings.***(Perfectionnements des botes d'étoupe.)*

Jackson Richards, George W. Waitt, John Haldeman and William H. Malin, Philadelphia, Pa., U. S., 16th September, 1876, for 5 years.

*Claim.*—1st. The combination of the clips F fillings h and spring H, with the arms or lugs and packing rings C C and D for setting out the packing. 2nd. The combination of a spring H with the inner packing ring D having a pin j and a clip F having a steady pin f whereby to prevent the turning around of said ring D.

**No. 6556. Spring Motor.***(Moteur a ressort.)*

Edwin Lambkin, Sebawang, Ont., 16th September, 1876, for 10 years.

*Claim.*—1st. The combination of the drum F, combined end cap and bevel wheel X, spring G, rings H and interposed disk or disks I with the shaft E to be driven. 2nd. The combination of the pulley or drum T, the strap U, the pivoted bar W and the bent lever X, with the shaft P, and the gear wheels N O Q R that connect the spring drum G H F with the axle or shaft D to be driven. 3rd. The combination of the fork Z, the arms A C, the sliding bar B, and the sliding sleeve S, with the gear wheel R of the axle or shaft D and with the lever X that operates the brake T U W.

**No. 6557. Improvements in Planing Machines.***(Perfectionnements aux machines à raboter.)*

Ira F. Thompson, Boston, and John E. Wheeler, Lynn, Mass. U. S., 16th September, 1876, for 5 years.

*Claim.*—1st. The combination of one or more knives A with one or more yielding pressure bars B; 2nd. Two or more knives and two or more yielding pressure bars, each knife being provided with its respective pressure bar. 3rd. The combination of the yielding supports D and slots a with the set screw b.

**No. 6558. Potato Crull Machine.***(Machine à trancher les patates.)*

Anaxamander Herring, Crown Point, N. Y., U. S., 16th September, 1876, for 5 years.

*Claim.*—1st. The combination of the fork B and a slicing knife back I, turning upon a pivot K. 2nd. The process of making crulls of continuous strips cut or shaved from the periphery or sides of a potato; 3rd. A crull formed of a continuous strip or ribbon shaved off from the body of the potato previous to cooking.

**No. 6559. Car Axle.***(Essieu de wagon.)*

George W. Miltimore, Jamesville, Wis., U. S., 16th September, 1876, for 5 years.

*Claim.*—1st. The outer axle or sleeve made of a lateral wrought iron section and cast iron end section. 2nd. The inner stationary axle having a horizontal and vertical oil duct or channel with a rotating feed pin, in combination with an air tight reservoir of the pedestal box and with the revolving journal box of the outer sleeve or axle. 3rd. The combination with the pedestal box of the stationary axle having a cork disk washer and hollow screw plug to form the oil tight joint between the pedestal box and axle. 4th. The combination of the closing screw nut or cap of the outer axle or sleeve, said cap having an outer rim or lid with a drip oil chamber below the stationary axle; 5th. The combination of the revolving journal box having a convex annular part and tapering ends with the annularly concaved and inclined revolving sleeve and intermediate ring to provide for the oscillating motion of the journal box. 6th. The combination of the outer closing nut or cap of the revolving sleeve and wheel with the fixed pedestal box and a loose intermediate washer or ring to take up the lateral motion between the pedestal block and end of screw nut so as to remove it from the journal box.



**No. 6560. Portable Engine. (Machine portative.)**

John Abell, Woodbridge, Ont., 18th of September, 1876 (extension of patent No. 1173), for 5 years.

*Claim.*—The combination of the (exhaust) steam chamber A and water pipes or tubes b arranged in the frame of a portable engine and forming a heater.

**No. 6561. Improvements in Water Conductors. (Perfectionnements dans les tuyaux d'eau.)**

Joseph Archer, Quebec, Que., 19th September, 1876 (extension of patent No. 1153), for 5 years.

*Claim.*—The opening in conductors which prevents them from bursting by ice.

**No. 6562. Soap Boiling Apparatus.**

(Appareil à cuire le savon.)

Archibald O. Glass, Detroit, Mich., U. S., 19th September, 1876 (extension of patent No. 6412), for 5 years.

**No. 6563. Soap Boiling Apparatus.**

(Appareil à cuire le savon.)

Archibald O. Glass, Detroit, Mich., U. S., 20th September, 1876 (extension of patent No. 6412), for 5 years.

**No. 6564. Improvements on Baker's Combined Hand Scoop and Sifter.**

(Perfectionnements à l'écoupe tamis dit "de Baker.")

Joseph Baker, Trenton, Ont., 21st September, 1876 (extension of Patent No. 1154), for 5 years.

*Claim.*—1st. The sifter B and its combination with scoop A and the power of replacing it as required; 2nd. The combination and arrangement of the detachable spring F and thumb knob G with agitator H, and the power to remove and replace said spring at will.

**No. 6565. Process for making Manure or Compost. (Procédé pour faire de l'engrais ou des composts.)**

George A. Kay, Sussex, N. B., 25th September, 1876, for 5 years.

*Claim.*—1st. The process of making manure or compost by mixing of lime, potash, vegetable matter and water.

**No. 6566. Art of Pressing and Bundling Cigars. (Méthode de pressage et de mise en botte des cigares.)**

Mona Lesser and Esther Jacobs, Montreal, Que., 25th September, 1876, for 5 years.

*Claim.*—1st. A package or bundle of cigars enveloped in a sheet of wood veneer; 2nd. The process of pressing cigars, while in a green state, by binding them together in a sheet of wood veneer.

**No. 6567. Improvements in Tool Holders and Cutting Tools. (Perfectionnements aux porte-outils et instruments tranchants.)**

Alfred J. New, Reuben A. Matthews and William H. Berry, Nottingham, Eng., 25th September, 1876, for 5 years.

*Claim.*—1st. The construction of the tool holder; 2nd. The three special sections of steel particularly adapted for the rectangular tapered slot of the tool holder.

**No. 6568. Combination for Scraping and Brushing Boots. (Appareil à décoller et cirer les chaussures.)**

(Appareil à décoller et cirer les chaussures.)

Charles L. Minskowsky, Breslau, Ont., 25th September, 1876, for 5 years.

*Claim.*—The combination of the scrapers with the brush box.

**No. 6569. Door Spring. (Ressort de porte.)**

Charles T. Sabin, Montpelier, Vt., U. S., 25th September, 1876, for 5 years.

*Claim.*—The detent or pin D provided with the retracting spring b in combination with the case B, disc A having perforations and lever C.

**No. 6570. Improvements in Lamps. (Perfectionnements dans les lampes.)**

(Perfectionnements dans les lampes.)

George D. Burton, New Ipswich, N. H., U. S., 25th September, 1876, for 5 years.

*Claim.*—1st. The combination with the frame lantern and lamp suspended by means of a chain D in the post A B N. of the grooved weight K and pin or bolt L. 2nd. The combination of the weight K, chain or chains D, curved arm or curved arms C, sliding frame E and pin or bolt L.

**No. 6571. Ditching Plough. (Charrue à fossoyer.)**

(Charrue à fossoyer.)

Hugh Derby, Templeton, Que 25th September, 1876, for 5 years.

*Claim.*—1st. A ditching plough with double mould boards G in combination with the double cutting point D; 2nd. The double cutting point D with round curved centre D3, the bars S, slot T, standard S2, pin S3 and bar O. 3rd. The mould boards with curves C, straight portions G2 and upward and outward curved projection G3.

**No. 6572. Improvements in Harvesters. (Perfectionnements aux moissonnettes.)**

(Perfectionnements aux moissonnettes.)

Christopher G. Bradley (Assignee of Robert D. Warner), Syracuse, N. Y., U. S., 25th September, 1876, for 5 years.

*Claim.*—1st. The method of automatically opening and closing the gate of a harvester rake cam way by means of the rake arms; 2nd. Harvester rake arms provided with lugs in combination with, and adapted to, rotate the ratchet wheel I. 3rd. The ratchet wheel I provided with lift teeth a in combination with the weight lever K, the link piece M, angle arm N and the outlet gate F; 4th. The angle spring O in combination with the angle arm N and cam way E to keep the outlet gate F open; 5th. The link piece M provided with a hole f in combination with the weight lever K provided with the hole E, so arranged that when the holes are made to coincide and a pin passed through both the free extremity of the lever K will be out of contact with the lift teeth a to the end that all the arms may rake; 6th. The pins C on the weight lever K in combination with a right angular slot R in the link piece M. 7th. The combination of the balance weight P controlled by a cord or chain, the slotted link Q and the pin d upon the link piece M.

**No. 6573. Improvements on Horse Rakes. (Perfectionnements aux rateaux à cheval.)**

(Perfectionnements aux rateaux à cheval.)

James Henderson, Williamburgh, and Thomas Campbell, Morrisburgh, Ont., 25th September, 1876, for 5 years.

*Claim.*—The combination of the levers C B E G and F with the lever A and with the rake head and bracket H secured to the frame of the rake

**No. 6574. Improvements on Salt Evaporators. (Perfectionnements aux évaporateurs de saunerie.)**

(Perfectionnements aux évaporateurs de saunerie.)

Herbert Harrison, Godenoh, Ont., and Natt Stickney, Draut, Mass., U. S. 25th September, 1876, for 5 years

*Claim.*—1st. The salt evaporator A consisting of a vertical brine cylinder A' encircling steam chamber A2, pocket D, valve I, trap door H and agitators D3; 2nd. The combination of the evaporators A, pipe K, evaporator L, pipes M and brine receiving tank M' all arranged for the purpose of utilizing the heat of the steam from the evaporator A; 3rd. The hinged trap door H, consisting of the metallic disc H1 with packing piece H2, hinged bar H3 and lever cam I.

**No. 6575. Vehicle Spring. (Ressort de voiture.)**

Abel A. Crosby (Assignee of Sebastian Günzger) Rondant N Y U S 25th September, 1876, for 5 years.

*Claim.*—1st. A coiled vehicle spring secured to the vehicle by a yielding fastening device, 2nd. The combination of a coiled vehicle spring with a yielding joint interposed between said spring and the body or axle of the vehicle.

**No. 6576. Machine for Turning Shafting and Screws. (Machine à tourner les axes et les vis.)**

(Machine à tourner les axes et les vis.)

Alexander Stewart, Dundas, Ont., 25th September, 1876, for 5 years.

*Claim.*—1st. The combination of the head piece A and the three sliding tool holders B B B; 2nd. The combination of the disc D with the tool holders B B B and the steady head A.

**No. 6577. Fanning Mill. (Tarrare.)**

(Tarrare.)

Hector Munn, Arran, Ont., 25th September, 1876, for 5 years.

*Claim.*—1st. The fan wheel constructed of the hub a spokes b peripheral ring B and fans C combined; 2nd. The combination of the rack E, pinion F and shaft C with the hopper D for operating its slide; 3rd. The sieve G secured to bar e, hinged to the shoe and covering a spout H; 4th. The provision to the hopper D of the removable frame K composed of vertical slides fitting rectangularly and supported by the elongated posts L of the mill

**No. 6578. Improvements on Wheels. (Perfectionnements aux roues.)**

(Perfectionnements aux roues.)

George H. Stevens, Ionia, Mich., U.S., 25th September, 1876, for 5 years.

*Claim.*—1st. The hub having a lubricant chamber H surrounding the box and communicating with the interior thereof; 2nd. The same box J in combination with the cap F, core D and box G, and with the mortises A and flanges B; 3rd. The felly plate K with tenon socket L; 4th. The felly with shoulders opening P and spoke with short tenon; 5th. The mortises A and plate B, in combination with the core D and wedge E and cap F and with the shell C which, with the core, surrounds the box with an intervening chamber.

**No. 6579. Rotary Gang Plough.**

*(Charrue rotatoire à socs multiples.)*

John K Underwood, Sank Centre, Min., U. S., 28th September, 1876, for 5 years.

*Claim.*—1st. The horizontal arm E rigidly attached at its forward end to the truck, the diagonal brace F attached to the rear part of the arm E and to the forward part of the implement the bent vertical part of the said brace forming the plough beam, guards or keepers and the pivoted and diagonally arranged plough beam having its free end arranged in the said keepers; 2nd. The combination of the bent arm E, pivoted plough beam I, beam guide F, lever H, ratchet G, pawl a, connecting rod b and dish-shaped plough wheels J set diagonally to the line of draft; 3rd. The combination of the plough beam I having a broad or flat central part, the separate axes c c, elongated loops d d, nuts e e and wheels J J journalled adjustably on the single beam.

**No. 6580. Process of Refining Petroleum and other Oils.**

*(Procédé de purification du pétrole et autres huiles.)*

John S Robinson, London Ont 28th September 1876, for 5 years.

*Claim.*—The process of refining petroleum, &c., by mixing therewith chloride of sodium dissolved in water before treating it by any of the known methods.

**No. 6581. Process and Apparatus for the Manufacture of Carbonates of Soda.**

*(Procédé et app. l de fabrication des carbonates de soude.)*

Ernest Solvay, Brussels, Belg., 28th September, 1876, for 5 years

*Claim.*—1st. With reference to the decanters in the combination of parts of decanting apparatus, that is to say: the combination of the body A and central tube B and cone K, actuated by the lever M and rod N, and the inlet and outlet pipes C E and the scraper G actuated from the hand wheel H and the draw off cock L; 2nd. The combination of a second pump barrel placed between the carbonic acid gas forcing machine and the absorber; 3rd. With reference to the absorber the combination of the guides G G with the false bottoms F in the absorbing column a, also the combination of a central rod A with the false bottoms F in the absorber a, also the combination of valves opening inwards at K and E with the absorbing column a; 4th. With reference to the apparatus for filtering liquids containing bicarbonate of soda, the combination of the vacuum filters a of a revolving pipe z perforated with holes or grooved for the purpose of spreading the liquid to be filtered, or the liquid for washing uniformly upon the filter, also the combination of the pump A and water piston B<sub>1</sub> to create a vacuum by the interposition of a reservoir Q into which the filtered liquid passes; 5th. With reference to reducing the alkaline strength or purity of the soda in the process of introducing into the filter a solution of soda; 6th. With reference to the scraping apparatus used in the treatment of bicarbonate and carbonate of soda, the combination of a rotary shaft B, arm C and scrapers D; 7th. With reference to the apparatus for the two fold purpose of drying the bicarbonate or converting it into carbonate, the combination of the distributor A, scraper M, shaft N aperture c, cylinder C, shaft S, wings U, chest E and chimney H, also the combination of the chest A, screen B and tubes T T; 8th. With reference to the apparatus for reducing the density of the brine, the combination of the reservoir A, tube T, pipe T<sub>1</sub>, float F, lever L, tank S, pipe V, elastic joint y, funnel E, tubes M N and pipe z; 9th. With reference to the self-acting forcing apparatus the combination of the reservoir R, valve boxes c<sub>1</sub>, float z, washers or stops r r<sub>1</sub>, rods t, valves s, aperture u, lever l and valves x; 10th. With reference to the self-acting weighing machine, the combination of the plate or table P, counterpoise Q, plane table P<sub>1</sub>, support s, joint y, catch e and fixed bar F.

**No. 6582. Improvements in Postage and other Stamps.**

*(Perfectionnements aux timbres-poste et autres.)*

Louis H. G. Ehrhardt, Joseph R. Carpenter, and Robert E. Peterson, Philadelphia, Pa., U.S., 28th September, 1876, for 5 years.

*Claim.*—A postage or revenue stamp or other monetary paper printed upon paper previously treated with a soluble non-adhesive size composed of gum tragacanth, dissolved starch and acetate of albumine or their equivalents and mixed.

**No 6583. Improvements on Sulay Harrows and Hay Rakes.**

*(Perfectionnements aux herses à siege et aux râteliers à foin.)*

Solomon Frank, Strathroy, Ont., 28th September, 1876, for 5 years.

*Claim.*—1st. The segment F and lever G, in combination with coupling rods J, dog K and bridge I; 2nd. The chains M M<sub>1</sub> M<sub>2</sub>, in combination with segment F and axle A; 3rd. The bolt N and collar and thumb screw P, in combination with throat I, tongue O and double tree Q.

**No. 6584. Process for Treating Grain.**

*(Procédé de traitement du grain.)*

Rudolph d'Heur, New York, U. S. (Assignee of Julius d'Heureux), 28th September, 1876, for 5 years.

*Claim.*—1st. The process for disintegrating or reducing grain seeds and similar products to a pulpy mass consisting in treating the entire grains or seeds, whole or broken in a close vessel by high pressure steam or by heat and an equivalent pressure; 2nd. The process of mashing and extracting malt and of saccharifying unmaltd material by subjecting the malt or other

material in a close vessel to pressure by direct steam from above by compressed air or other gases or to an equivalent pressure; 3rd. The process of preparing pulp or paste from cereals, grains, seeds &c. consisting in softening the substance of the articles so as to loosen the pulp from the hull, and then forcing the mass against a sieve or filter to separate the hard from the soft portions; 4th. The process for producing wort or sweet mash from malt either alone or mixed, with starchy substances consisting in treating the material with water under pressure, at a temperature less than 212° Fahr., so as not to destroy the diastase and to more effectually digest and saccharify the material.

**No. 6585. Manufacture of Gas from Liquid Hydrocarbons and Apparatus for the same.**

*(Fabrication du gaz d'hydrocarbures liquides et appareil pour cet objet.)*

Silas C. Salisbury, New York, U. S., 28th September, 1876, for 5 years.

*Claim.*—1st. A continuous process for converting liquid hydrocarbon into gas, to wit injecting by means of superheated steam at high pressure a spray or atomized jet of liquid hydrocarbon into a blast of hot air whereby it is conveyed into and through a series of hot retorts wherein its conversion into inflammable gas is completed. 2nd. An apparatus to produce a hot blast consisting essentially in the combination of a hot blast oven a steam generator and a hot blast injector taking steam from said generator at a high pressure; 3rd. A hot blast oven and a blast injector taking steam from said steam generator combined with a hot feed pipe F laid in the waste heat space of said oven; 4th. In combination of a hot blast oven and a blast injector taking steam from a steam generator through a superheater pipe I, laid in the waste space of said oven; 5th. The retorts B B arranged in parallel rows to economise space and fuel; 6th. A hot feed pipe F and retorts B B combined with a blast injector G and a jet of high pressure superheated steam; 7th. The injector G and retorts B B combined with the feed pipe F and gate f for the purpose of regulating and controlling the flow of air to the blast pipe; 8th. A superheater composed of a wrought iron steam pipe encased within and protected by a cast iron jacket; 9th. An injector G provided with two steam jet pipes within it; 10th. In combination, to form an apparatus for the continuous manufacture of gas from liquid hydrocarbon consisting essentially of a series of retorts in a hot oven, a blast injector operated by a jet of high pressure superheated steam and a supply pipe to deliver liquid hydrocarbon; 11th. The combination of a series of retorts B B set in a hot oven, a steam injector G, a hot feed pipe F and a supply pipe M entering the supplemental hot blast chamber p within the steam nozzle of said injector and delivering liquid hydrocarbon; 12th. A blast of hot air to receive and warm a jet of liquid hydrocarbon combined with a jet of superheated steam at a high pressure to vaporize said hydrocarbon and force the same with the hot air into and through the fixing retorts; 13th. In combination with the injector G steam pipe I and hot air pipe P, the hydrocarbon pipe M provided with a check valve m to check back pressure from the injector.

**No. 6586. Improvements on Freezing Apparatus.**

*(Perfectionnements aux appareils de congélation.)*

Joseph C. Ayer, Amherst, N. S., 28th September, 1876, for 5 years.

*Claim.*—1st. The construction of the freezing apparatus with an interior lining of plaster D; 2nd. The mode of securing the plaster coating to the wall B by contact with nails or pins F having flanged heads inserted in and projecting from the wall; 3rd. The freezing tubes G H I of rhomboid or diamond form in cross sections and acid tube L, and their arrangement and combination with each other and with the acid pipe M; 4th. The acid tank N in combination with the freezing chamber F; 5th. The acid tank N and pipe M having connection with the horizontal pipe L in combination with the freezing pipes G H I; 6th. The combination and arrangement, within the freezing chamber, of the cleats Y and rods X X provided with sliding hook Z.

**No. 6587. Meat Machine. (Hache-vande.)**

Theodore Willi and William Hinnerwadel, Quincy, Ill. U. S., 28th September, 1876, for 5 years.

*Claim.*—1st. The circular and rotary concavo-convex knives P, in combination with the block E; 2nd. The combination of two or more groups of knives P; 3rd. The spring M in combination with cone V having knives P; 4th. The stripper R; 5th. The stripper R in combination with the knives P and block E.

**No. 6588. Washing Machine. (Machine à laver.)**

John J. Shotwell, Wells, Ont., 28th September, 1876, for 5 years.

*Claim.*—1st. A series of alternately swinging plungers B operated by a revolving crank shaft C, in combination with a swinging and spring actuated roller rack D; 2nd. The combination of the swinging roller rack D having lateral brace pieces e with the sliding rods f and springs of a pivoted top piece of the tub, to produce constant spring action on rack D; 3rd. The combination of the swinging spring rack D with a cord and outer pivot lever g and fastening hook for locking the spring rack to wall the tub and facilitating the handling of the clothes in the same.

**No. 6589. Improvements on Coffins.**

*(Perfectionnements aux cercueils.)*

James Richey and Laebhan H. McDougall, Cincinnati, Ohio, U. S., 28th September, 1876, for 5 years.

*Claim.*—A sectional coffin whose component members are securely united together by a system of dovetail grooves and correspondingly shaped tenons. 2nd. A sectional coffin whose body consists of tongued bottom A B, grooved and tenoned ends C C D D E E and corner pieces E E<sub>1</sub> E<sub>2</sub> E<sub>3</sub> E<sub>4</sub> E<sub>5</sub> E<sub>6</sub> E<sub>7</sub> E<sub>8</sub> E<sub>9</sub> E<sub>10</sub> E<sub>11</sub> E<sub>12</sub> E<sub>13</sub> E<sub>14</sub> E<sub>15</sub> E<sub>16</sub> E<sub>17</sub> E<sub>18</sub> E<sub>19</sub> E<sub>20</sub> E<sub>21</sub> E<sub>22</sub> E<sub>23</sub> E<sub>24</sub> E<sub>25</sub> E<sub>26</sub> E<sub>27</sub> E<sub>28</sub> E<sub>29</sub> E<sub>30</sub> E<sub>31</sub> E<sub>32</sub> E<sub>33</sub> E<sub>34</sub> E<sub>35</sub> E<sub>36</sub> E<sub>37</sub> E<sub>38</sub> E<sub>39</sub> E<sub>40</sub> E<sub>41</sub> E<sub>42</sub> E<sub>43</sub> E<sub>44</sub> E<sub>45</sub> E<sub>46</sub> E<sub>47</sub> E<sub>48</sub> E<sub>49</sub> E<sub>50</sub> E<sub>51</sub> E<sub>52</sub> E<sub>53</sub> E<sub>54</sub> E<sub>55</sub> E<sub>56</sub> E<sub>57</sub> E<sub>58</sub> E<sub>59</sub> 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together by the application of the filling N which unites the bottom with one of said corners piece; 4th. The metallic corner piece E e F G G for application to a sectional collar; 5th. The wooden rib H located at the upper inner end of a metallic corner piece E and serving as a means of attachment for the huling of the collar; 6th. The gasket L fitted in a groove on the under side of lid K and adapted to form an air tight joint when said lid is secured to the body.

### No. 6590. Improvement in Steam Traps.

(*Perfectionnement des trappes de vapeur.*)

John J. Royle, Manchester, Eng., 28th September, 1876, for 5 years.

*Claim.*—1st. Discharging air and water of condensation from vessels containing steam, the employment of an open bottomed condensing chamber for actuating a plug cock or valve; 2nd. The method of working the air valve of steam traps.

### No. 6591. Navigator's Protractor.

(*Rapporteur de marine.*)

Joseph D. Leach and Sewall Leach, Penobscot, Me., U. S., 28th September, 1876, for 5 years.

*Claim.*—The card a subdivided and marked as a compass card, the rotary holder c and rule b, the holder c being so pivoted to the centre of card a at f as that one edge of rule b shall bisect pivot f, and the rule and holder being so constructed and arranged as to allow a linear adjustment of the holder and card relatively to the rule as well as a rotary adjustment of the card relatively thereto.

### No. 6592. Ballot Box. (*Urne de scrutin.*)

Willoughby H. Nicolls, Barton, Ont., 28th September, 1876, for 5 years.

*Claim.*—The wheels A and B, the box frame C, the metal frame D, the ball E so enclosed as no other ball can work the machine, the tumbler F, the plunger H, the keeper I, the trap J, the bell L and bell lift M, the main lock N and the locks O O O that secure the wheels.

### No. 6593. Improvements in Fallow Cultivators. (*Perfectionnements aux cultivateurs de jachères.*)

John Richardson, Ancaster, Ont., 28th September, 1876, for 5 years.

*Claim.*—1st. In combination with a cultivator the movable and adjustable lower frame D for attaching the teeth thereto; 2nd. Adjusting the lower frame D by means of rock P and nuts R in front and bar O with pin e in the rear; 3rd. The ratchet wheel M and jaw N with chain Q for raising and lowering the lower frame D; 4th. The draught bar G bolted to the tongue and passing through the link H attached to hook I, and also through the bar J arranged for a light draught; 5th. The form and construction of the teeth S and with or without cutters e.

### No. 6594. Navigator's Bearing Indicator.

(*Compass de repère pour les navigateurs.*)

Joseph D. Leach, Penobscot, Me., U. S., 28th September, 1876, for 5 years.

*Claim.*—1st. The bed d provided with the ears e e or their equivalents, the lubber mark c, revolving card h, locking screw f, standard j with its pointer m and locking screw l and the pivoted sighting tuben.

### No. 6595. Sub-Aqueous Drilling Apparatus.

(*Appareil de forage sous-marin.*)

Ebenezer E. Gilbert, Montreal, Que., 28th September, 1876, for 5 years.

*Claim.*—1st. The boat, scow, other vessel or raft a in combination with the post whereby the vessel a may be either held in position on the water or raised above. 2nd. The vessel a, post c and drilling machine g whereby the post c serving as a guard against the action of the current or waves to the tools for boring, clearing and charging; 3rd. The combination of the post c and drilling machine g sliding thereon; 4th. The combination of the post c, drilling, clearing or loading tool k and guide i.

### No. 6596. Device for Elevating and Weighing on Board of Vessels.

(*Appareil à élever et peser à bord des vaisseaux.*)

George Milson, Buffalo, N. Y., U. S., 28th September, 1876, for 5 years.

*Claim.*—1st. The combination in a steam or sailing vessel of the shores J J with the drums K K, said drums working on a loose shaft h and the beads and clutches formed into a series of V-shaped friction rings; 2nd. The combination with a cargo carrying vessel of the stationary elevator or elevators constructed to telescope down and up; 3rd. A grain carrying vessel and in combination therewith the telescopic elevators and the portable telescopic weighing hoppers, spouts, &c.

### No. 6597. Improvements on Atomizers.

(*Perfectionnements aux pulvérisateurs.*)

Thomas J. Holmes, Boston, Mass., U. S., 28th September 1876, for 5 years.

*Claim.*—The arrangement of the air valve l on the opposite side of the central portion d to that in which the discharge orifice is located; the hollow screw shank b in combination with the central portion d, bulb support e and valve support r, all cast in the same piece, and the central portion d provided with a screw thread for the reception of the upper end of the liquid tube m, in combination with the hollow screw shank b.

## List of Patents issued up to 19th Oct., 1876, but not yet Officially published in the Patent Office Record.

No. 6598. E. F. Goodman, Clinton, Iowa, U. S. A., "Goodman's Movable Copy Book," 28th September, 1876.

No. 6599. J. Varney, Montreal, Que., "Varney's Improved Dold Machine," 28th September, 1876.

No. 6600. A. W. Gifford, Worcester, Mass., U. S. A., "Machine for making Metal Screws," 28th September, 1876.

No. 6601. C. H. Thompson, St. Petersburg, Pa., U. S. A., "Safety Valve," 28th September, 1876.

No. 6602. W. Porter, Ottawa, Ont., "Wood Pavement," 28th September, 1876.

No. 6603. G. H. Stansbury, Milwaukee, U. S. A., A. S. Hulbell and H. S. Hubbell, Buffalo, U. S. A., "Stove Grate," 28th September, 1876.

No. 6604. Chas. Dion, Chambly Basin, Que., and Jas. Haylis, Montreal, Que., "Tempering Furnace," 28th September, 1876.

No. 6605. C. C. Bradley, Syracuse, N. Y., U. S. A., "Harvester," 28th September, 1876.

No. 6606. C. M. Warren, Brookline, Mass., U. S. A., "Anchor Roof," 28th September, 1876.

No. 6607. J. S. Gishorne, Buckingham, Eng., "Apparatus for Transmitting Signals," 28th September, 1876.

No. 6608. J. R. Cross, New York, U. S. A., "Process of Transferring the Grain Marks of Wood," 28th September, 1876.

No. 6609. R. Menary, Orangeville, Ont., "Sleigh Brake," 2nd October, 1876.

No. 6610. O. G. Howes, W. R. Norris, J. Hall and O. W. Sheldon, Fort Anne, N. Y., U. S. A., "Diagonal Door Planing Machine," 2nd October, 1876.

No. 6611. Geo. Campbell and J. Oakey, Toronto, Ont., "Safety Sleigh," 2nd October, 1876.

No. 6612. F. Behr, Frankfurt, U. S. A., and E. W. Lippert, Cincinnati, U. S. A., "Self-Closing Valve," 2nd October, 1876.

No. 6613. D. A. Sutherland, Lynn, Mass., U. S. A., "Grooved Stay," 2nd October, 1876.

No. 6614. J. Filion, St. Eustache, Que., "Le Chariot Epierreur," 2nd October, 1876.

No. 6615. R. S. Koll, Pittsburgh, Pa., U. S. A., "Circulating Device for Steam Boiler," 2nd October, 1876.

No. 6616. J. R. Reynolds Essex Centre, Vt., U. S. A., "The Lightning Corn Dropper," 2nd October, 1876.

No. 6617. D. Aikman, Montreal, Que., "Curing Treat Facel," 2nd October, 1876.

No. 6618. J. Briggs, Toronto, Ont., "Flue Ventilator for Apartments," 2nd October, 1876.

No. 6619. S. Martin, Hart, Ont., "Potato Digger," 2nd October, 1876.

No. 6620. J. M. Ayer, Chicago, Ill., U. S. A., "Rubber Refrigerator Car," 2nd October, 1876.

No. 6621. R. Barter, Toronto, Ont., "Steam Exhaust and Mill Stone Curbs," 2nd October, 1876.

No. 6622. J. Beaudry, Montreal, Que., "Polygonal Lathe," 2nd October, 1876.

No. 6623. C. D. Swanson and J. Meanie, Downie, Ont., "Portable Fence," 2nd October, 1876.

No. 6624. J. Hegeland, Indianapolis, Ind., "One-Stroke Bucket Machine," 2nd October, 1876.

No. 6625. S. F. Gold, Englewood, New Jersey, U. S. A., "Automatic Dampers," 2nd October, 1876.

No. 6626. W. Warren, Hull, Que., "Pail and Tub's Ears," 2nd October, 1876.

No. 6627. J. S. McMurray, Toronto, Ont., "Pails and Tubs," 2nd October, 1876.

No. 6628. John Mather, Ottawa, Ont., "Wood Pavements," 2nd October, 1876.

No. 6629. Jacob Kessler, London, Ont., "Gates," 2nd October, 1876.

No. 6630. Wm. Jones, Oshawa, Ont., "Self-Locking Blind Hinge," 2nd October, 1876.

- No. 6631. D. M. Laeb, London, Ont., "Oil Process," 2nd October, 1876.
- No. 6632. Clara C. S. Franks, Toronto, Ont., "Giving Color to Photographs," 7th October, 1876.
- No. 6633. A. J. Stewart, St. John, New Brunswick, "Cold Water Soap," 7th October, 1876.
- No. 6634. E. Farnsworth, Pauxertawney, Pa., U. S. A., "Car Brakes," 9th October, 1876.
- No. 6635. F. O. Tucker, Hartford, Conn., U. S. A., "Weft-Stop Machines," 9th October, 1876.
- No. 6636. J. J. Schaires, Saline, Michigan, U. S. A., "Whip Sockets," 11th October, 1876.
- No. 6637. J. W. Boulden, Township Durham, Ont., "Harness Pad," 11th October, 1876.
- No. 6638. L. Beaugard, Township of Ely, Que., "Milk Cooler," 11th October, 1876.
- No. 6639. T. F. Guy, Port Dover, Ont., "Prepared Pumpkin Meal," 11th October, 1876.
- No. 6640. P. C. Ste Marie, Montreal, Que., "Travelling Spitoon," 11th October, 1876.
- No. 6641. L. B. McDonald, Wytheville, Va., U. S. A., "Grinding Mill," 11th October, 1876.
- No. 6642. G. W. Laraway, Port Byron, N. Y., U. S. A., "Barrel Machine," 11th October, 1876.
- No. 6643. Sidney Smith the Elder, Acton, (Assignee of W. Sepsenson of same place), "Plows," 11th October, 1876.
- No. 6644. A. Fleck, Ottawa, Ont., "Polygonal Lathie," 11th October, 1876.
- No. 6645. J. McPhail, Mitchell, Ont., "Elastic Gearing," 11th October, 1876.
- No. 6646. J. M. Lamb South-Hampstead, Eng. "Self-securing Skate," 11th October, 1876.
- No. 6647. A. E. Ames, Montreal Que. "Can Openers," 11th October, 1876.
- No. 6648. P. W. Peckham, New York, U. S. A., "Coal Sifters," 11th October, 1876.
- No. 6649. P. W. Peckham, New York, U. S. A., "Ash Sifter," 11th October, 1876.
- No. 6650. Peter W. Peckham, New York, U. S. A., "Combined Coal Scuttle and Sifter," 11th October, 1876.
- No. 6651. Roswell S. Judson & Frank H. Van Houten, Matteawan, N. Y., U. S. A., "Machines for Turning Bars," 11th October, 1876.
- No. 6652. Callender J. Calvert, Philadelphia, Pa., U. S. A., "Thill Couplings," 11th October, 1876.
- No. 6653. Callender J. Calvert, Philadelphia, Pa., U. S. A., "Cow Milkery," 11th October, 1876.
- No. 6654. Henry M. Pierce, Detroit, Mich., U. S. A., "Apparatus for Treating Wood for the Production of Charcoal, Acetic Acid, Wood Spirits and other Pyroigneous Products," 11th October, 1876.
- No. 6655. David Ewart, Ottawa, Ont., "Combined Asphalt and Wood Pavement or Roadway," 11th October, 1876.
- No. 6656. Charles J. Ferguson, Philadelphia, Pa., U. S. A., "Door and Shutter Fasteners," 11th October, 1876.
- No. 6657. Asa J. Slott and John Fletcher, Philadelphia, Pa., U. S. A., "Turbine Water Wheels," 11th October, 1876.
- No. 6658. Frederick J. Cleaver, London, Eng., "Soaps, Pomades, Cosmetics and the like," 11th October, 1876.
- No. 6659. John W. Lufkin and Richard H. Lufkin, Chelsea, Mass., U. S. A., "Machine for Folding the Edge of Shoe Vamps and other Analogous Purposes," 11th October, 1876.
- No. 6660. Herman Funke, New York, U. S. A., Assignee of Joseph W. Gardner, Shelburne, Mass., U. S. A., "Handle for Pocket and other Knives," 11th October, 1876.
- No. 6661. Joseph Van Norman, Tilsburg, Ont., "Machine for Holding Saw Logs on Mill Carriages while being Sawn," 11th October, 1876.
- No. 6662. James E. Bryan, Humboldt, Kansas, U. S. A., "Wardrobe Hooks," 11th October, 1876.
- No. 6663. Nathan P. Chaney, Potsdam, N. Y., U. S. A., "Feather Renovators," 12th October, 1876.
- No. 6664. Philip P. Josef, Buffalo, N. Y., U. S. A., "Machine for Manufacturing Tongued and Grooved Lumber," 19th October, 1876.
- No. 6665. Ransom C. Luce and George S. Woodruff, Grand Rapids, Mich., U. S. A., (Assignees of Elijah McCoy, Ionia, Mich.), "Steam Cylinder Lubricators," 19th October, 1876.
- No. 6666. Benjamin F. Smith and William K. Bowman, Philadelphia, Pa., U. S. A., "Hooks for Catching Fish and Game," 19th October, 1876.
- No. 6667. George Wells, Montreal, Que., "Water Engines and Pumps," 19th October, 1876.
- No. 6668. Augustus L. Bricknell, London, Eng., and Alexander A. Hall, Nashville, Tenn., U. S. A., "Improvement on the Manufacture of Cast Metal Bell Pelties," 19th October, 1876.
- No. 6669. Joseph W. Bates, Minneapolis, Minn., Joseph W. Bates, Jr., of the same place, Rudolph Bergerstrode, Philadelphia, Pa., and Charles O. Bergerstrode, of the same place, "Car Couplings," 19th October, 1876.
- No. 6670. Newton S. Otis, New York, U. S. A., "Letter Files and Binders," 19th October, 1876.
- No. 6671. George Thompson, Kingston, Ont., "Life Raft," 19th October, 1876.
- No. 6672. James Foley, Montreal, Que., "Art of Preparation and Preserving Tanning Solutions," 19th October, 1876.
- No. 6673. Henry Roush Siam, Iowa, U. S. A., "Bee Hives," 19th October, 1876.
- No. 6674. Albert G. Kerr, Chatham, Que., "Churn Dashers," 19th October, 1876.
- No. 6675. Florence A. Beckwith, Berlin, Wis., and Hiram W. Webster, of the same place, (Administrators of Nelson Franklin Beckwith, Oniro, Wis., U. S. A.), "Head Blocks for Saw Mill Carriages," 19th October, 1876.
- No. 6676. F. Crompton, Chatham, Ont., "Adjustable Corset," 19th October, 1876.
- No. 6677. J. R. Lomas, New-Haven, Conn., U. S. A., "Cigarettes," 19th October, 1876.
- No. 6678. T. G. Palmer, Shultzville, N. Y., U. S. A., and H. F. Clark, Poughkeepsie, N. Y., "Stamp Chancellor and Post Marking Machine," 19th October, 1876.
- No. 6679. J. E. Wheeler, Lynn, Mass., U. S. A., and F. W. Coy, Boston, Mass., "Crimping and Folding Machine," 19th October, 1876.
- No. 6680. C. Bondy, New York, U. S. A., "Cigar Pouch," 19th October, 1876.
- No. 6681. W. H. McElcheran, Hamilton, Ont., "Street Lamps Lettering Attachment," 19th October, 1876.
- No. 6682. C. W. Gauthier, Sandwich, Ont., "Freezing Pan," 19th October, 1876.
- No. 6683. A. W. Eldridge, Big Rapids, Mich., U. S. A., "Steam Engine," 19th October, 1876.
- No. 6684. S. S. Jewett, F. H. Root, and J. Jewett, Buffalo, N. Y., U. S. A., (Assignees of G. S. Stauard, Buffalo, N. Y.), "Base Burning Stoves," 19th October, 1876.
- No. 6685. O. L. G. Noble, Chelsea, Mich., U. S. A., and T. T. Passer, Chicago, Ill., "Boot and Shoe Pegging Machine," 19th October, 1876.
- No. 6686. V. H. Tisdale, Hamilton, Ont., "Churn Power," 19th October, 1876.
- No. 6687. C. E. Vaughan, St. John, N. B., "Ladies' and Gentlemen's Boots and Shoes Manufacture," 19th October, 1876.
- No. 6688. E. D. Westgate and J. G. Davie, Montreal, Que., "Waterproof Prunella," 19th October, 1876.
- No. 6689. T. M. Clark, Ottawa, Ont., "Composition of Matter to be used in the Manufacture of White Bricks, &c.," 19th October, 1876.



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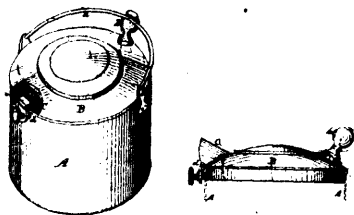
# CANADIAN PATENT OFFICE RECORD.

## ILLUSTRATIONS.

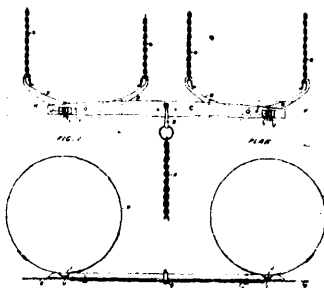
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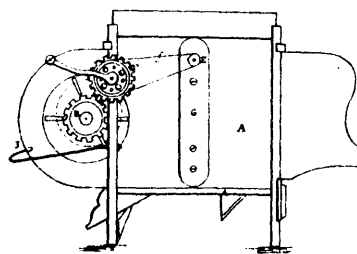
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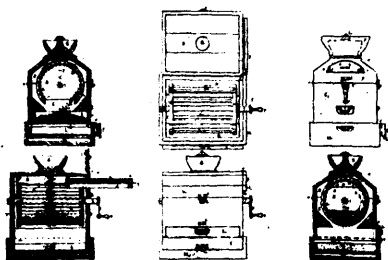
6466 Clements' Improvements in Covers for Pots and Kettles.



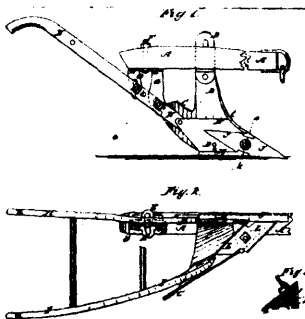
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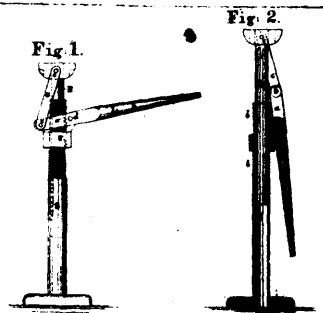
6468 Ethier's Improvements on Winnowing Machines.



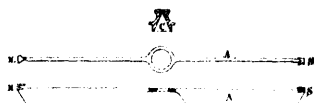
6471 Chalifour's Machine for Screening Coal Ashes.



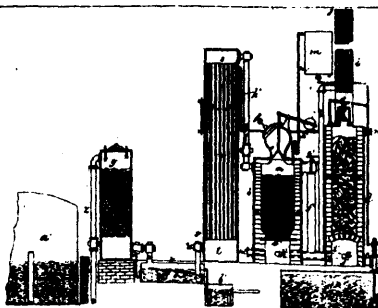
6472 Shickel's Improvements on Ploughs.



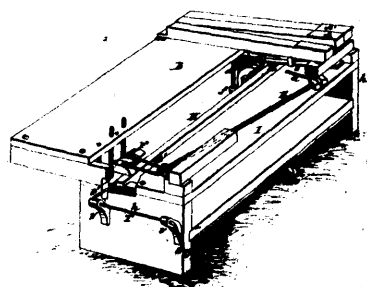
6473 O'Hara and Cooper's Improvements in Lifting Jacks.



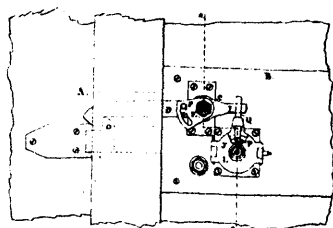
6474 Bent's Improvements in the Mariners' Compass



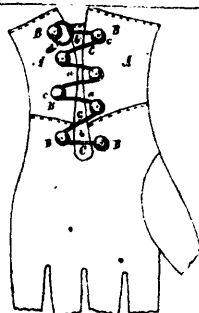
6475 Lowe's Gas Apparatus.



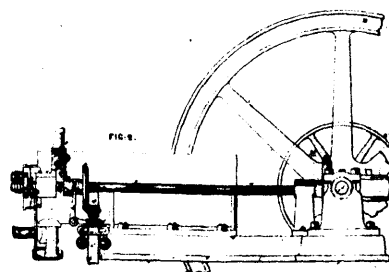
6476 Letton's Improvements on Organs, &c.



6477 Semple's Improvements on Locks.



6478 Foster's Glove Fastener.



6479 Otto's Gas Motor Engine.



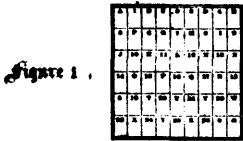
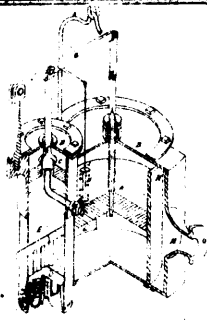


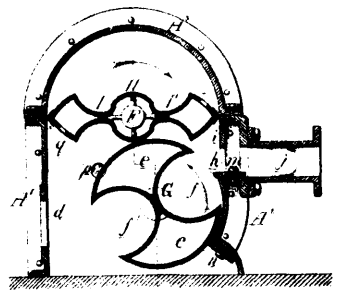
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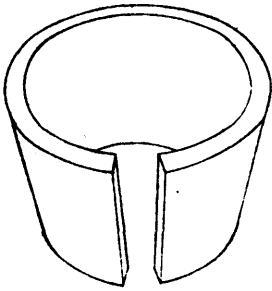
6480 Smith's Improvements in Bank Checks, &c.



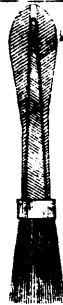
6482 Smith and Booth's Fog Alarm.



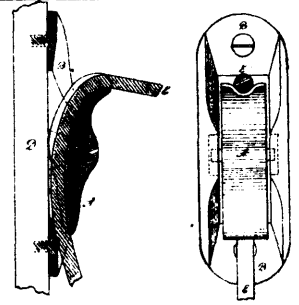
6483 Disston's Improvements on Rotary Pressure Blower.



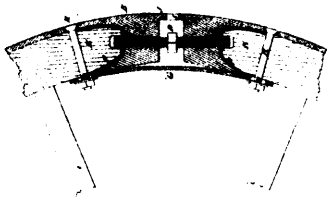
6484 Dodsworth's Improvements in the Manufacture of Tub's, &c.



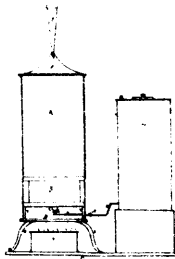
6485 Schermerhorn's Paint Brush Handle.



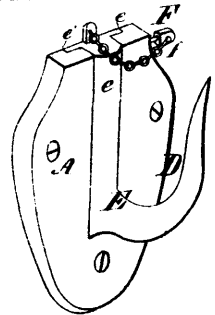
6486 Cain's Method of Fastening Clothes Lines.



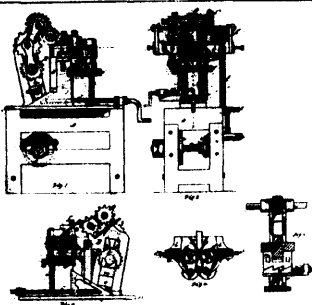
6487 Horton and Hayes' Improvements on Tire Tighteners.



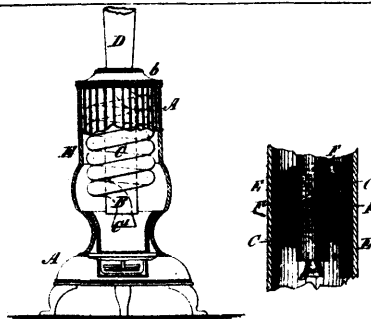
6488 Sweanor and Sewell's Fog Alarm.



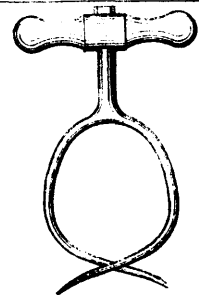
6489 Clark's Meat Hook.



6490 Parker's Riving and Racking Machine.



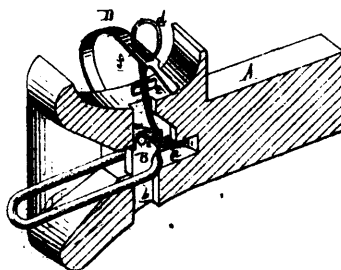
6491 Dion and Baylis' Improvements on Stoves.



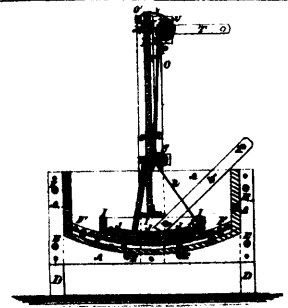
6492 McCormick's Improvements on Fruit Augers.



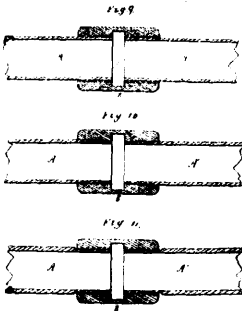
6493 McMechan's Improvements on Overshoes.



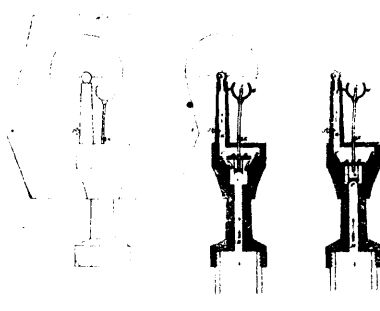
6494 Richard's Car-Coupling.



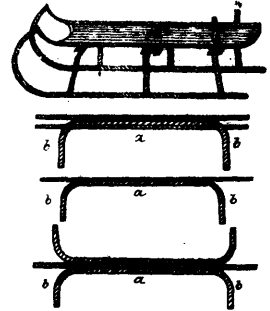
6495 Wilson's Washing Machine.



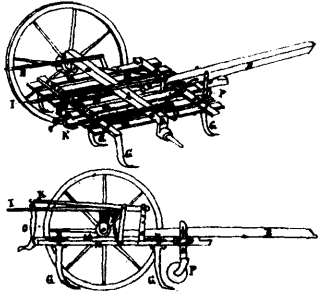
6487 Waworth's Steam, Water and Gas Pipe Connection.



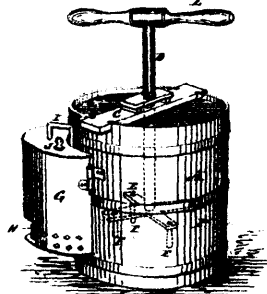
6488 Palmer's Self-lighting Gas Burner.



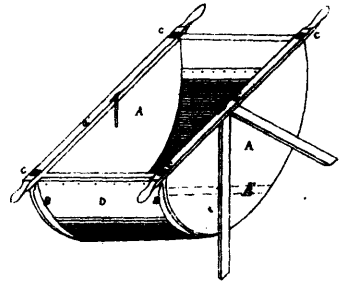
6490 Lazier's Beam and Knee for Carriages.



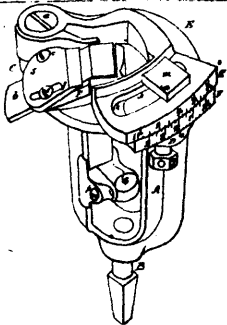
6500 Magee's Improvements on Cultivators.



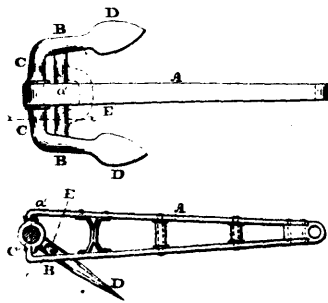
6501 Schmidt's Washing Machine.



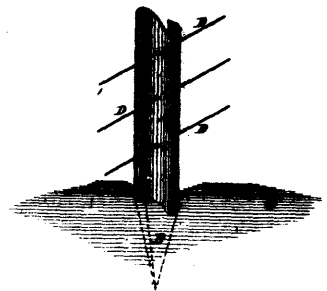
6502 Vezina's Improvements in Washing Machines



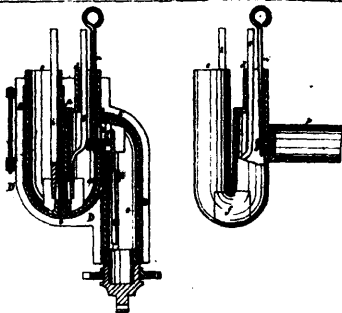
6503 Wood's Improvements in Hollow Augers.



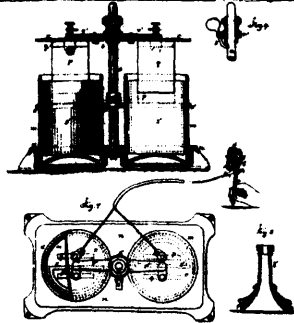
6504 Williams' Improvements on Anchors.



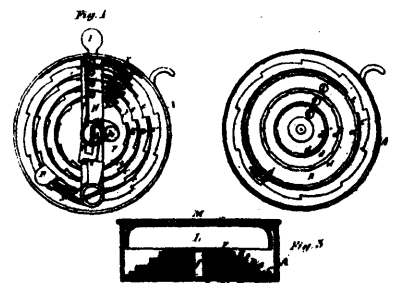
6505 Wood's Fence Post.



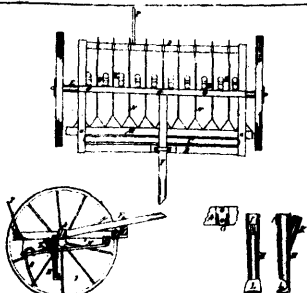
6508 Reid's Stench Trap.



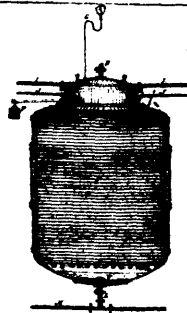
6508 Edison's Improvements on Autographic Printing.



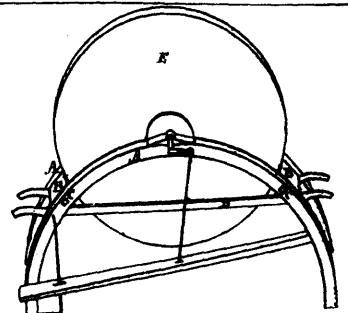
6509 Beadle's Fare Register.



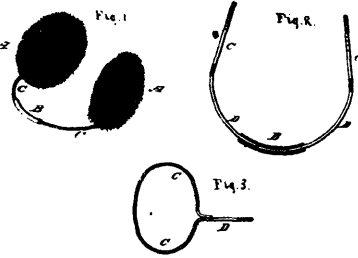
6510 Wisner's Broad-cast Sower Attachment to Seed Drills.



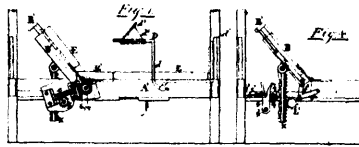
6511 Dussaud and Duchez's Process and Apparatus for Tanning.



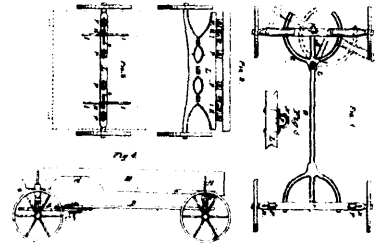
6512 Whitney's Grindstone Frame.



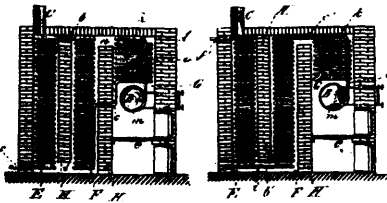
6513 Edgar's Ear Muffler.



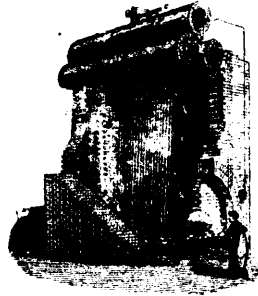
6514 Spanner's Invalid Bedstead.



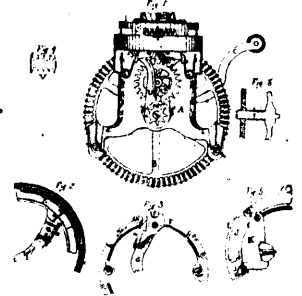
6516 Buckeridge's Four-Wheeled Vehicle.



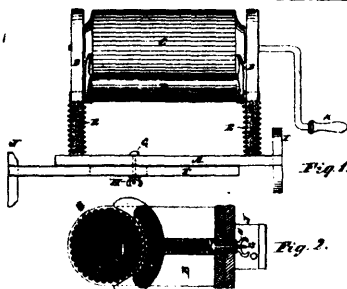
6517 Parks and Goddard's Water Tube Steam Boiler.



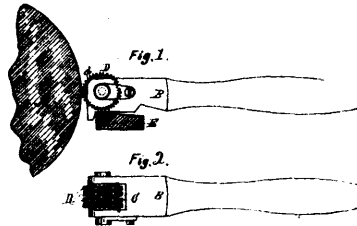
6518 Firmenich's Improvements on Steam Generators.



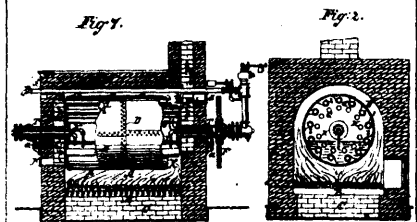
6519 Read's Corn-sheller.



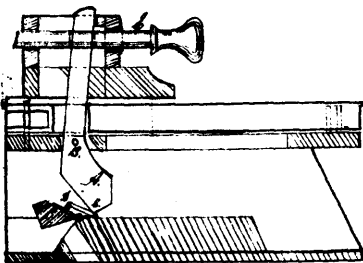
6520 Grover's Washing Machine.



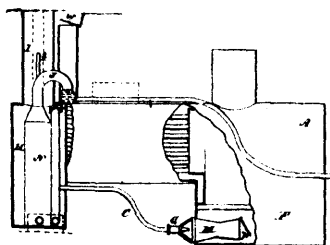
6521 Huntington's Emery Wheel Dresser.



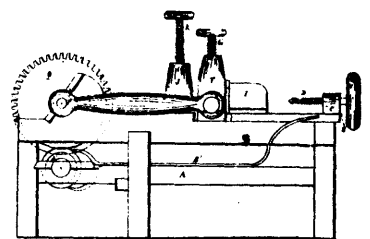
6523 Pierce's Improvements on Rotary Steam Boilers.



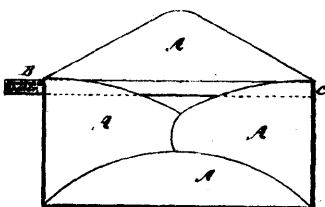
6524 Smith and Mee's Organ Stop Action.



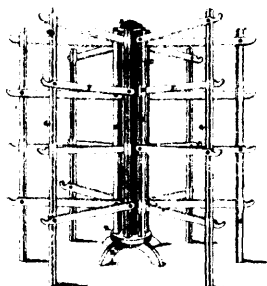
6525 Wotten's Improvements on Combustion of Fuel and on Furnaces for Effecting the same.



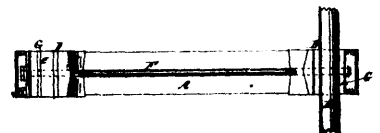
6526 Kritch's Machines for Forming Collars on Carriage Axles.



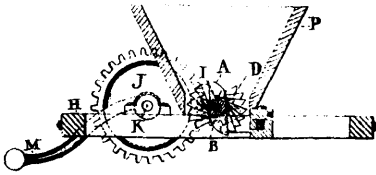
6527 Collins' Improvements in Attachments to Envelopes.



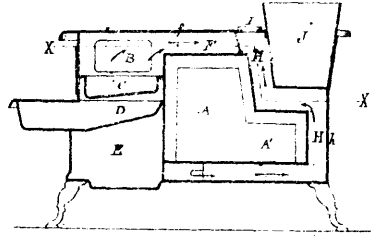
6528 Moody and Hill's Clothes Horse.



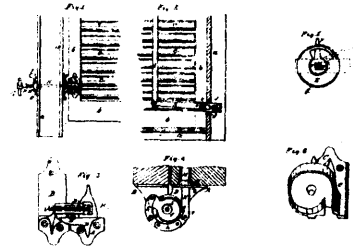
6530 Blaisdell's Railroad Tie.



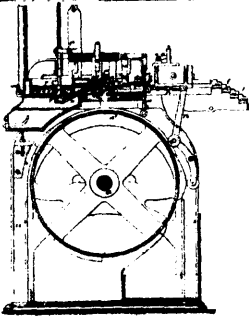
6532 Bellinger's Machine for Cutting Curd.



6533 Jewett's Improvements in Cooking Stoves.



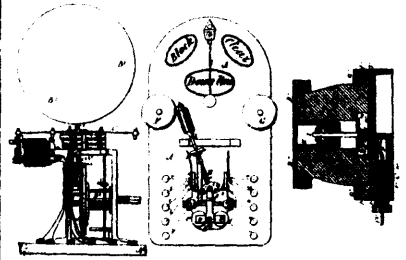
6534 Dickerson's Shutter Worker and Blind Slat Adjuster.



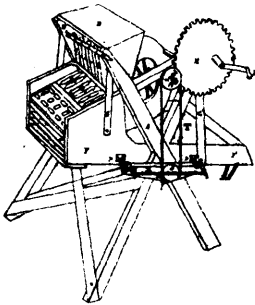
6535 Westcott's Type Casting and Setting Machine.



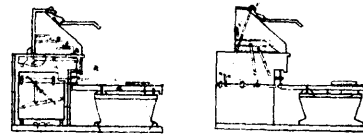
6536 Kellogg and Wetherbee's Improvements on Brooms.



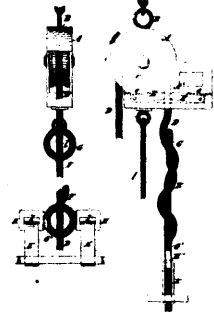
6537 Rousseau and Smith's Electric Railway Signal.



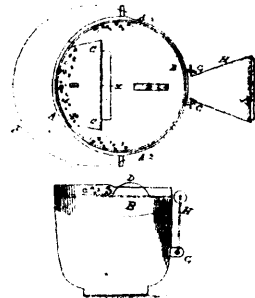
6538 Kendrick's Fanning Mill.



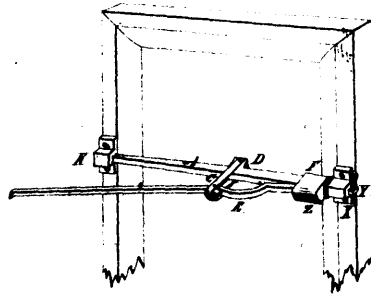
6539 McMillan's Improvements in Reed Organs.



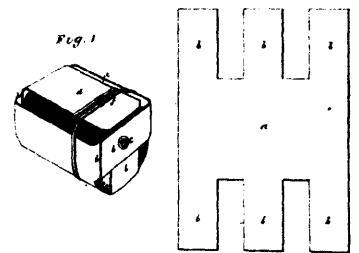
6540 Roch and Colas' Life Preserver in case of Fire.



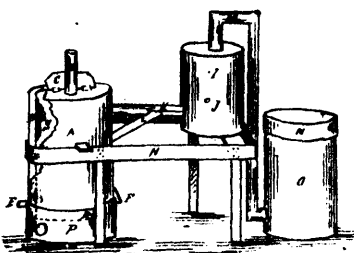
6541 Thomson's Cooking Vessel.



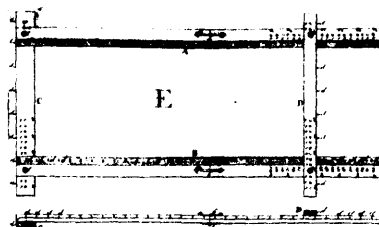
6542 Whipple's Mail Bag Catcher.



6543 Trout's Coin Package.



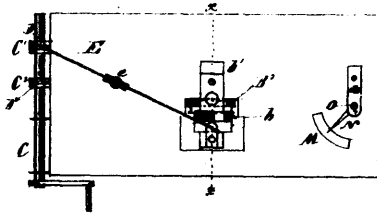
6544 Carroll's Machine for Baking Bread and Cooking Cattle Feed.



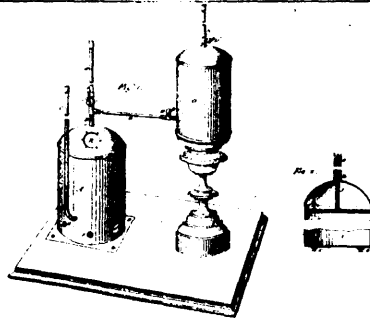
6545 Patterson's Device for Stretching Curtains.



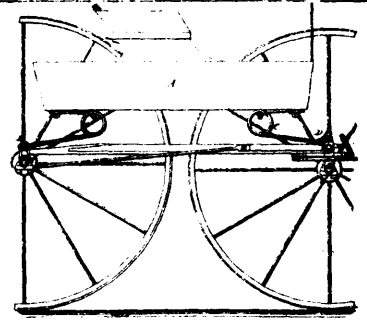
6546 Taylor's Air Heating Stove Pipes.



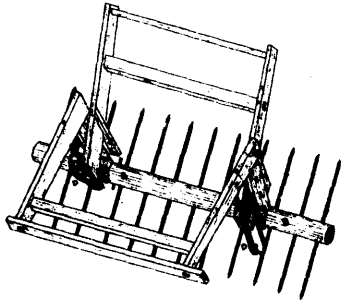
6548 Schunoff's Improvements on Sewing Machines.



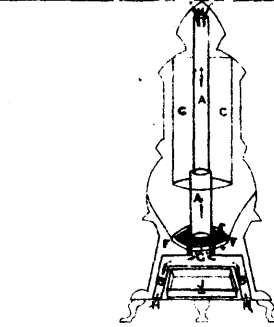
6549 Conrad's Water Forcing Elevator.



6550 Mallory's Improvements in Quartz Mill.



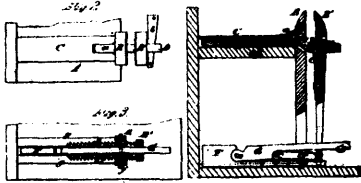
6561 Corbin's Hay Rake.



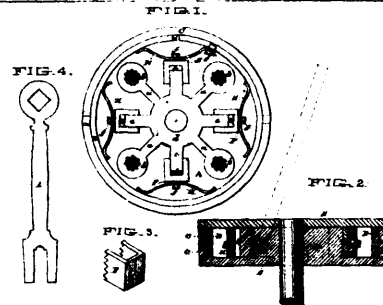
6562 Gilmore's Improvements on Coal Stoves.



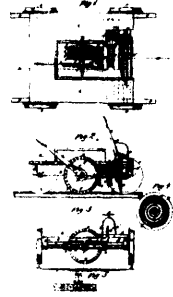
6553 Hughes, Angus and Macfarlane's Improvements on Construction of Railways.



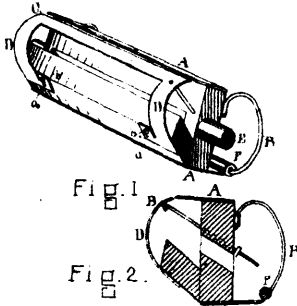
6554 Veilleux's Bench Vice.



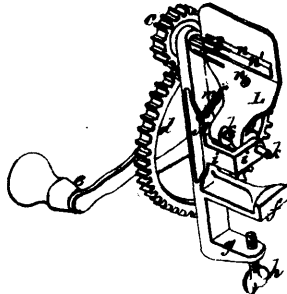
6555 Richards, Waitt, Haldeman and Malin's Improvements in Piston Packings.



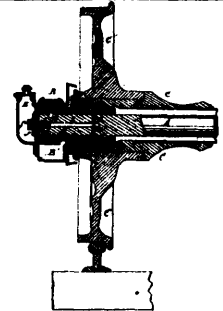
6556 Lambkin's Spring Motor.



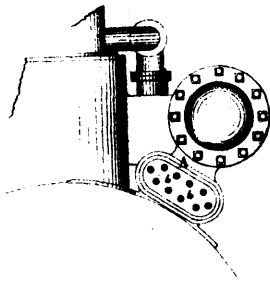
6557 Thompson and Wheeler's Improvements in Planing Machines.



6558 Herring's Potato Crull Machine.



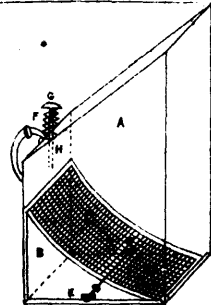
6559 Miltimore's Car Axle.



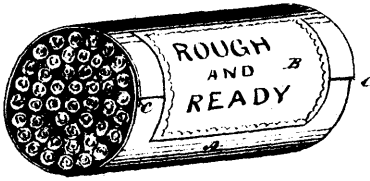
6560 Abell's Portable Engine.



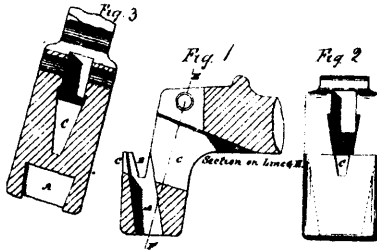
6561 Archer's Improvements in Water Conductors.



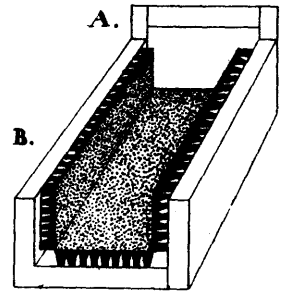
6564 Baker's Improvements on Baker's Combined Hand Scoop and Sifter.



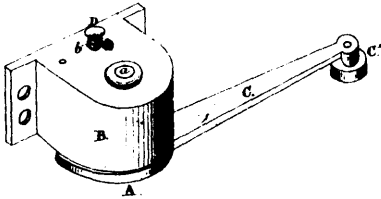
6566 Lesser and Jacobs' Art of Pressing and Bundling Cigars.



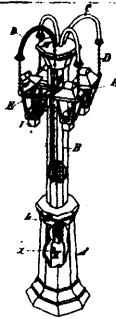
6567 New, Matthews and Berry's Improvements in Tool Holders and Cutting Tools.



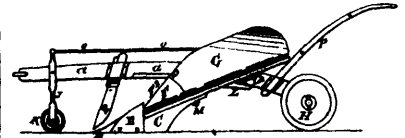
6568 Minskowski's Combination for Scraping and Brushing Boots.



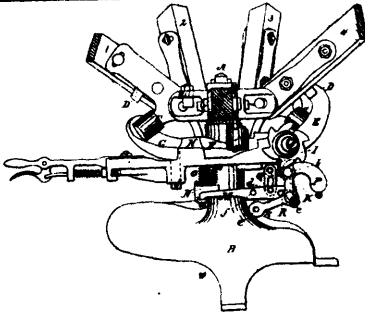
6569 Sabin's Door Spring.



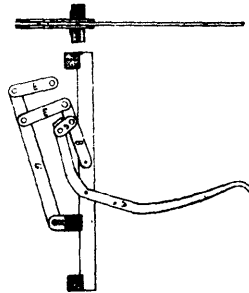
6570 Burton's Improvements in Lamps.



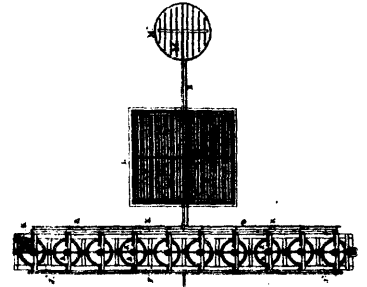
6571 Derby's Ditching Plough.



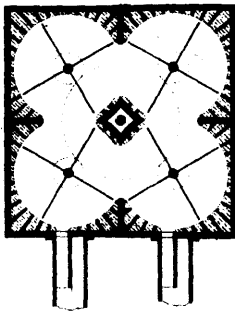
6572 Warner's Improvements in Harvesters.



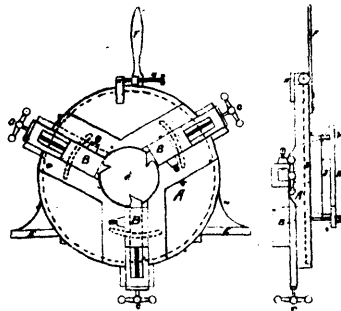
6573 Henderson and Campbell's Improvements on Horse Rakes.



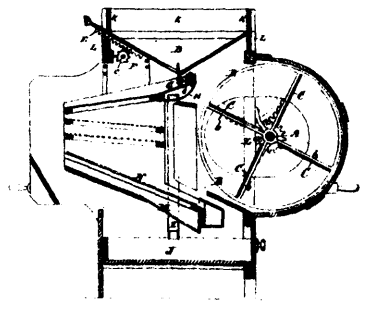
6574 Harrison and Stickney's Improvements on Salt Evaporators.



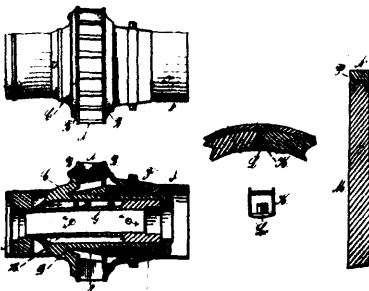
6575 Glizinger's Vehicle Spring.



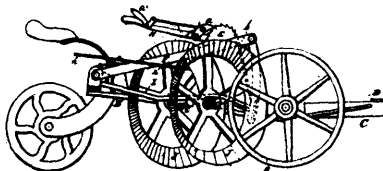
6576 Stewart's Machine for Turning Shafting and Screws.



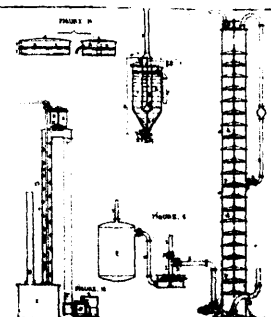
6577 Muon's Fanning Mill



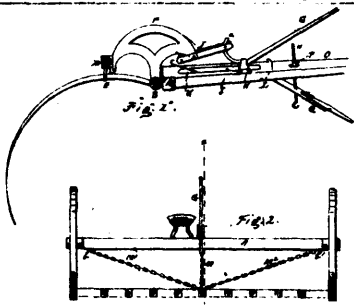
6578 Stevens' Improvements on Wheels.



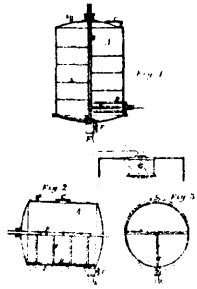
6579 Underwood's Rotary Gang Plough.



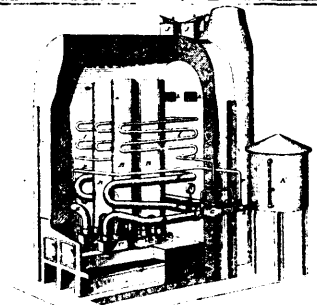
6581 Solvay's Process and Apparatus for the Manufacture of Carbonates of Soda.



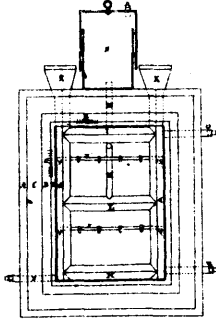
6583 Frank's Improvements on Sulky Harrows and Hay Rakes.



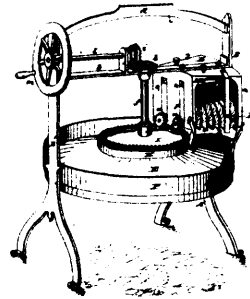
6584 D'Heureux's Process for Treating Grain.



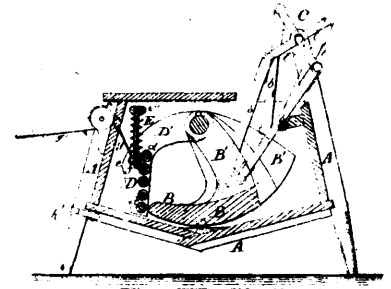
6585 Salisbury's Manufacture of Gas from Liquid Hydrocarbons and Apparatus for the same.



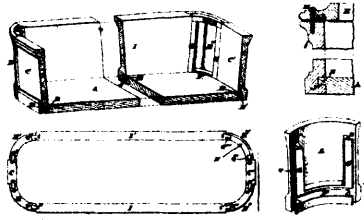
6586 Ayer's Improvements on Freezing Apparatus.



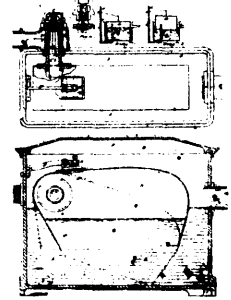
6587 Willi and Hunerwadel's Meat Machine.



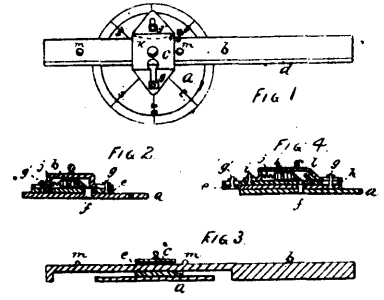
6588 Shotwell's Washing Machine.



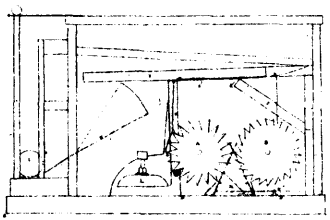
6589 Richey and McDougall's Improvements on Coffins.



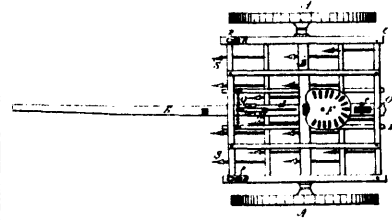
6590 Royle's Improvement in Steam Traps.



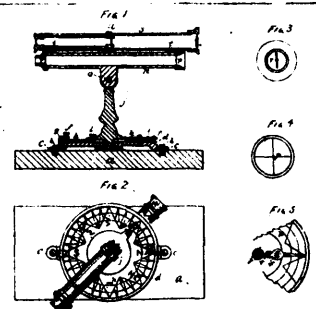
6591 Leach's Navigator's Protractor.



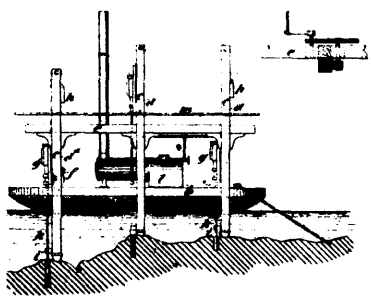
6592 Nicolls' Ballot Box.



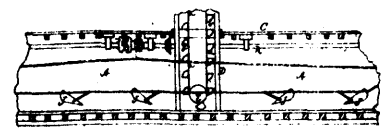
6593 Richardson's Improvements in Fallow Cultivators.



6594 Leach's Navigator's Bearing Indicator.



6595 Gilbert's Sub-Aqueous Drilling Apparatus.



6596 Milsom's Device for Elevating and Weighing on Board of Vessels.



6597 Holmes' Improvements on Atomizers.