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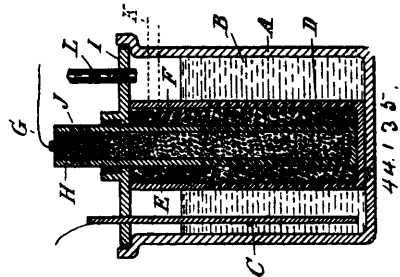
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breaking up the currents from the retort, substantially as described. 6th. In portable gas works, the combination of a pipe leading from a source of fluid to be vaporized, a cast integral retort into which the pipe leads provided with a primary set of connected channels in which the fluid is subjected to partial vaporization, and with a secondary set of connected channels communicating with the primary set, and in which the partially vaporized fluid is subjected to further vaporization, said retort having a partition chamber with a dished bottom forming a flame spreader located at the point of greatest heat and at the exhaust passage of the retort, and a delivery pipe for the gas, substantially as described. 7th. In portable gas works, the combination of a pipe leading from a source of fluid to be vaporized, a cast integral retort into which the pipe leads, provided with a primary set of channels in which the fluid is subjected to partial vaporization, and with a secondary set of channels communicating with the primary set, and in which the partially vaporized fluid is subjected to further vaporization, said retort having a chamber with a dished bottom forming a flame spreader located at the point of greatest heat and at the exhaust passage of the retort, and a delivery pipe for the gas, substantially as described. 8th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort and gas from the retort to the holder, and gas from the holder to the place of use, an air injector opening into the pipe between the retort and the holder, provided with an inlet and with a valve mounted on a rock shaft to move it from or toward its valve seat to open or close it, an automatic valve trip, and a rod connecting the valve shaft with the valve trip, the pipe from the retort to the holder being provided with a discharge nozzle entering the main injector pipe between the valve and the holder, substantially as described. 9th. In portable gas works, the combination of an oil supply pipe tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort and gas from the retort to the holder, and gas from the holder to the place of use, an air injector provided with an air inlet, and with a valve mounted on a rock shaft to move it from or toward its valve seat to open or close it, an automatic valve trip, and a rod connecting the valve shaft with the valve trip, and with an auxiliary pipe or pipes opening at the ends into the main injector pipe, the pipe from the retort to the holder being provided with a discharge nozzle opening into the main injector pipe between the point where the ends of the auxiliary pipe or pipes enter the main injector pipe, substantially as described. 10th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort, and gas from the retort to the holder, and gas from the holder to the place of use, an automatic valve trip comprising a pivoted member and a leverage bar connected to the pivoted member at the end furthest from the gas holder, and with a rod or link at the end nearest the gas holder movable up and down by the holder as it reaches the limits of its movements, substantially as described. 11th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort and gas from the retort to the holder, and gas from the holder to the place of use, an automatic valve trip comprising a pivoted member and a leverage bar connected to the pivoted member at the end furthest from the gas holder, and with a rod or link at the end nearest the gas holder movable up and down by the holder as it reaches the limits of its movements, and means shiftable by the tipping of the pivoted member and bars from one end of the trip to the other, substantially as described. 12th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort and gas from the retort to the holder and gas from the holder to the place of use, a valve comprising chambers separated by a valve seat and provided with a port, a valve disc fitted against the valve seat provided with a port and with a central projection on the valve disc, and a spring arranged in the hollow head of the valve stem and holding the valve disc constantly to its seat, substantially as described. 13th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the retort and gas from the retort to the holder and gas from the holder to the place of use, a valve comprising chambers separated by a valve seat provided with a port, a valve disc fitted against the valve seat provided with a port and with a central projection, a valve stem provided with a hollow head engaging the projection on the valve disc, a spring arranged in the hollow head of the valve stem and holding the valve disc constantly to its seat, and means for limiting the extent of movement of the valve disc, substantially as described. 14th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort and gas from the retort to the holder and gas from the holder to the place of use, the oil tank being provided with a hot air surrounding jacket, and a hood enclosing the retort and communicating with the interior of the oil tank jacket, substantially as described. 15th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort and gas from the retort to the holder and gas from the holder to the place of use, the oil tank being provided with a space above the surface of the oil for the reception of air under pressure, a pipe opening into the oil tank above the oil and leading

to the gas holder, and a valve or cock in such pipe to permit or prevent the passage of carburetted air from the oil tank to the gas holder, substantially as described. 16th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort and gas from the retort to the holder, and gas from the holder to the place of use, a gas pressure receptacle intermediate the retort and the gas holder, a pipe leading from the receptacle and entering the oil pipe intermediate the oil tank and the retort, and a valve in such pipe connected by a rod *g*, with the valve trip, whereby the valve is automatically operated to permit or prevent the passage of gas from the receptacle to the oil pipe to facilitate the flow of oil, substantially as described. 17th. The combination of a generator retort provided with vertical flues extending through the same through which heat and air may pass, a surrounding jacket inclosing the retort, and a pipe leading from the jacket for conveying heated air to the place of use, substantially as described. 18th. In portable gas works, the combination of an oil supply tank, a gas generating retort, a gas holder, pipes for conveying oil from the tank to the retort, and gas from the retort to the holder, and gas from the holder to the place of use, a gas pipe leading from the retort to a gas holder, an emergency valve in such pipe intermediate the retort and the holder, and means actuated by the holder when it rises above its normal limit for automatically operating the valve to close the gas pipe, substantially as described.

No. 44,135. Electrolytic Cell. (Cellule électrolytique.)



Thomas Craney, Bay City, Michigan, U.S.A., 1st September, 1893 : 6 years.

Claim.—1st. In an electrolytic cell, a combined anode and diaphragm, consisting of two perforated holders, one within the other, a porous non-decomposable material packed between the cells of the holder, and a carbon anode mainly composed of a filling of coarse particles of carbon contained in the inner holder, and forming open interstices for the passage of the liquid to be electrolyzed, substantially as described. 2nd. In an electrolytic cell, a combined carbon anode and diaphragm, consisting of two perforated holders, one within the other, a porous non-decomposable material packed between the cells of the holders, a filling of relatively coarse particles of carbon, and means for the escape of the gas from the inner holder. 3rd. In an electrolytic cell, the combination with the vessel A containing the cathode, of a combined anode and diaphragm, consisting of the perforated holders D and E, the filling of non-decomposable porous material F, between the holders, a filling of particles of carbon L in the inner holder, the perforations J, in the upper end of the holder E, and the terminal G, embedded in the carbon pencil described.

No. 44,136. Fire-lighter.

(Composition pour allumer le feu.)

The Southgate Manufacturing Company, assignees of James Chaumon, all of Bridgewater, Somersetshire, England, 1st September, 1893 ; 6 years.

Claim.—As a new article of manufacture, a fire-lighter composed of resin, petroleum, wood dust and tar mixed together in substantially the proportions specified.

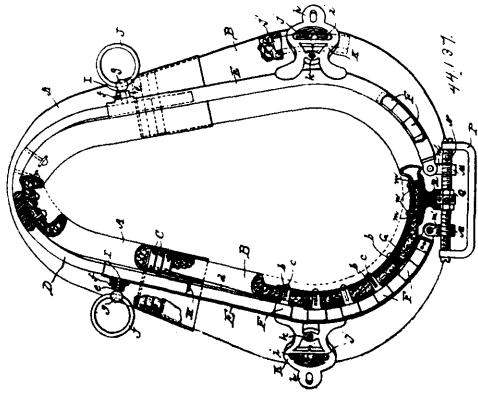
No. 44,137. Horse Collar and Hames.

(Collier et attelle de cheral.)

George Dietrich Ohl, Milwaukee, Wisconsin, U.S.A., 1st September, 1893 ; 6 years.

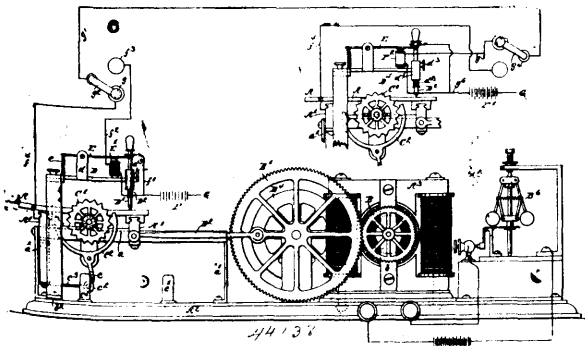
Claim.—A horse collar, comprising two sections vertically adjustable one upon the other, curved hame sections longitudinally adjustable on the lower collar section, and another hame section that is fast on the upper collar section, but adjustably engaged with the former hame sections. 2nd. A horse collar, comprising two sections, vertically adjustable one upon the other, detachable layers of filling intermediate of the opposing ends of the collar sections, curved hame sections longitudinally adjustable on the lower collar section, and another hame section that is fast on the upper collar section, but adjustably engaged with the former hame sections. 3rd. A horse collar, comprising two sections vertically adjustable one upon the other, a series of guide lugs radially disposed on the lower collar section, tubular hame sections loosely

engaged with the guide lugs, another hame section that is fast to the upper collar section, and has its ends adjustable in the upper



ends of the former hame sections, a bracket depending from the centre of said lower collar section, a right and left screw, having fixed bearings in the bracket, and nuts on the screw pivotally connected to the lower ends of the tubular hame sections. 4th. A horse collar comprising two sections vertically adjustable one upon the other, curved hame sections longitudinally adjustable on the lower collar section, and having tug plates provided with tapped openings, ring carrying screws for engagement with said openings, and another hame section that is fast on the upper collar section, but adjustably engaged with the former hame sections. 5th. A horse collar comprising two sections vertically adjustable one upon the other, curved hame sections longitudinally adjustable on the lower collar section, another hame section that is fast on the upper collar section, but adjustably engaged with the former hame sections, and rein rings provided with set screws that engage the lower hame section and impinge against the ends of the upper hame section. 6th. A horse collar, comprising two sections vertically adjustable one upon the other, curved and tubular hame sections longitudinally adjustable on the lower collar sections, another hame section that is fast on the upper collar section but adjustable in the former hame sections, and angle plates fast on said upper collar section, these angle plates being engaged with slots in the lower hame sections and impinging against the ends of the upper hame section.

No. 44,138. Apparatus for Reproducing Characters, Writings, etc. (*Appareil pour reproduire les caractères, l'écriture, etc.*)

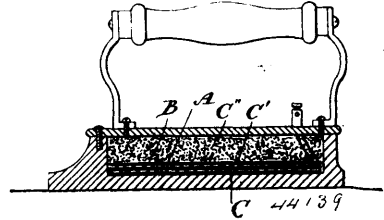


Henry Cullmore Bridger, Woodridge, New Jersey, U.S.A., 1st September, 1893; 6 years.

Claim.—1st. The combination of an electric circuit, a movable table upon which a message is supported, a message of metallic ink on an insulating material, and a transmitting point co-acting with the message to close the circuit, the said table having a continuous to and fro motion and a step by step lateral motion, substantially as specified. 2nd. The combination with the table having a to and fro lateral movement, and independent mechanism, substantially as described, for causing each of said movements, of a pen supporting arm adjustably mounted over said table, substantially as specified. 3rd. In combination with an electric circuit, of a pen and a table having a to and fro and a lateral movement beneath the pen, and independent mechanism, substantially as described, for causing each of said movements, substantially as specified. 4th. In combination with the pen, of a table, a motor for imparting a to and fro movement to said table, and a screw for imparting a lateral movement to said table, substantially as specified. 5th. In a device of the character designated, the combination of the pen, the table, a carriage upon which the table is movable laterally, a way upon

which the carriage is movable to carry the table to and fro, a motor for causing such movement, and a screw operated at the ends of the to and fro motion to impart a lateral movement to the table, substantially as specified.

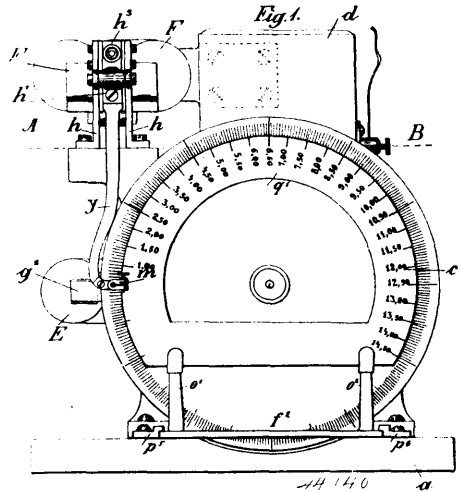
No. 44,139. Electric Heating Coil.
(*Serpentin pour chauffage électrique.*)



Edward Seybold and John Elliot Brown, both of Ottawa, Ontario, Canada, 1st September, 1893; 6 years.

Claim. 1st. An electric heating coil, consisting of sheet mica perforated along two opposite edges, and a resistance wire threaded through said perforations and passed from one perforation to another across one or both faces of the sheet, substantially as set forth. 2nd. The combination of a sheet of mica A, perforated along two opposite edges, resistance wire B drawn through said perforations and across the face or faces of said sheet, and having its terminals suitably connected, an insulating layer C, between said sheet and the face to be heated, and a thick layer of mineral wool C' on the other side, substantially as set forth.

No. 44,140. Time or Fare Indicator.
(*Indicateur du temps ou billets.*)



Abram Katzky and Jacob Gitkes, both of Moskau, Russia, 1st September, 1893; 6 years.

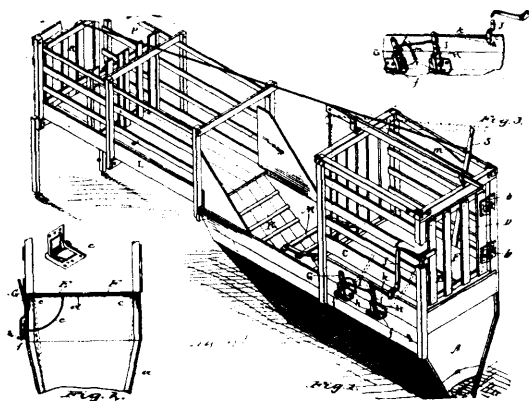
Claim.—1st. In a fare or time indicating device for use in cabs or other vehicles, the combination, with the seat or other convenient part of the vehicle of electrical contacts automatically operated by the passenger, constructed and arranged substantially as hereinbefore described and as illustrated by the accompanying drawing. 2nd. In a fare or time indicating device for use in cabs or other vehicles, the combination of a clock, a marking device two independently operated electro-magnets and their armatures and suitable levers, all constructed, arranged and operated substantially as hereinbefore described and as illustrated by the accompanying drawing.

No. 44,141. Animal Dipper.
(*Appareil d'immersion pour animaux.*)

Elmer A. Firestone and Jacob H. Firestone, both of Spencer, Ohio, U.S.A., 1st September, 1893; 6 years.

Claim.—1st. In an apparatus of the character described, a tank, a cage over the tank, trap doors at the bottom of the cage, a lock for said doors, a gate at one end of the cage, and a lock tripping mechanism, operated by the gate for unlocking the said trap doors, when the gate is closed, substantially as specified. 2nd. In an apparatus of the character described, a tank, a cage over the tank, trap doors at the bottom of the cage, a retaining gate projecting into the tank, a lever and a connection between said lever and the retaining gate, whereby said gate is raised or lowered, substantially as described. 3rd. The combination in the apparatus described, of the tank A, the cage C, and trap doors E and F, the supporting bar d,

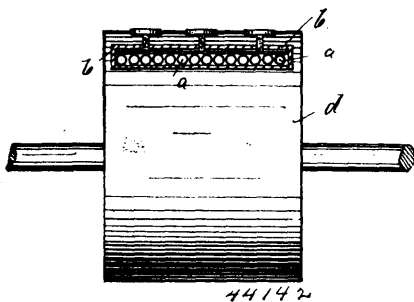
braces c, latches G, H, and lever J, substantially as described and for the purpose set forth. 4th. In an apparatus of the character



described, the combination of the tank, a cage over the tank, trap doors at the bottom of said cage, a locking mechanism to hold said doors in normal position, a releasing mechanism whereby said doors are tripped to fall in the tank, a retaining gate, an inclined way, a cage L to receive the dipped animals, having therein scrapers P and P', and exit door R, having a linked connection with a latch lever S, substantially as set forth. 5th. In an apparatus of the character described, comprising a tank, a cage over the tank, trap doors forming the bottom of the cage, a latch for locking the doors in a horizontal position, a gate for the cage and a lever connected with the said latch and in the path travelled by the gate to be engaged thereby for disengaging the latch from the trap doors when the gate is closed, substantially as described. 6th. The combination in an apparatus of the character herein described of an admission cage C, the tank A, exit cage L, and an intermediate inclined plane or walk leading from the tank to the cage L, substantially as described and for the purpose set forth.

No. 44,142. Commutator Brush.

(Brosse de commutateur.)

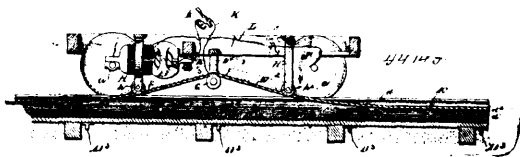


Karl Koch, Eelsey, near Hohenlimburg, Westphalia, Prussia, 1st September, 1893; 6 years.

Claim.—1st. As a sliding contact piece for commutator brushes, a metallic tube a, substantially as and for the purpose described. 2nd. A commutator brush consisting entirely of small metallic tubes a, substantially as and for the purpose described.

No. 44,143. Conduit for Electric Railways.

(Conduit pour chemins de fer électrique.)



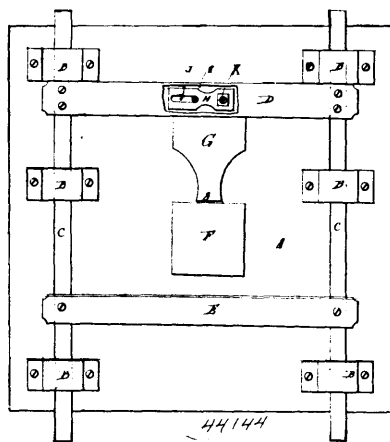
Henry P. Feltrow, Columbus, Ohio, U.S.A., 1st September, 1893; 6 years.

Claim.—1st. In an electric railway, the combination of a conduit formed of insulating material, and the opposite sides of which terminate at their upper ends in integral intumed slot rails d, metallic braces exteriorly embracing the conduit at intervals, transverse insulated supports arranged inside of the conduit, the motor car having a centrally suspended trolley wheel electrically connected with the car motor, and a flexible conductor supported inside of said conduit on the insulated supports therein and adapted to be lifted out of the conduit between the integral slot rails and to be sup-

ported on the centrally suspended trolley wheel, substantially as described. 2nd. In an electric railway, the combination of a conduit arranged between the track rails and having its sides and bottom formed of insulating material, cross pieces arranged transversely in the conduit and having upper insulated faces, the motor car, a central trolley wheel suspended beneath the car and in circuit with its motor, opposite depressing wheels suspended beneath the car near each end and in close proximity to the conduit, and a flexible conductor resting on the insulated cross pieces in the conduit, and adapted to be lifted out of the conduit on to the trolley wheel, and to bear under said opposite depressing wheels, substantially as set forth. 3rd. In an electric railway, a car having a motor, a bracket F, depending from the centre of the car, a shoulder f, upon the bracket F, a trolley wheel G, journaled upon the said bracket and electrically connected with the motor, brackets H depending from the car near the ends thereof, depressing wheels h, journaled in the lower ends of the brackets H, in combination with a flexible conductor arranged in a conduit of insulating material beneath the track and connected with a suitable source of electricity, and adapted to be raised out of the conduit by the trolley wheel G, through which electrical contact is made to the motor and be depressed by the depressing wheels h, h, and a suitable return circuit, substantially as and for the purpose described.

No. 44,144. Method of Rendering Safes Fireproof.

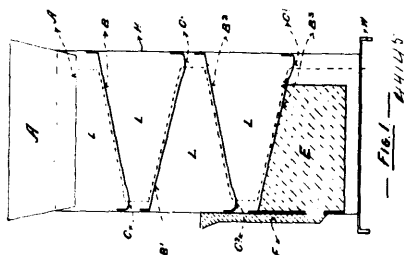
(Méthode de rendre les coffres-forts à l'épreuve du feu.)



Télesphore Frenette, Montreal, Quebec, Canada, 1st September, 1893; 6 years.

Résumé.—Un appareil de fermeture pour coffre-fort à l'épreuve du feu, pouvant être fixé à l'intérieur du coffre-fort, sur le dehors de la porte; cet appareil étant constitué par les soutiens B, les barres C, D, E, la poignée L, et les pièces G, H, I, J, K, et la serrure F, tel que décrit précédemment.

No. 44,145. Strainer for Milk. (Coulloir à lait.)



Cyrus Thibeault, Victoriaville, Quebec, Canada, 2nd September 1893; 6 years.

Claim.—A milk strainer, cooler and aeriator comprising dish A, having a strainer A', cooler H, having slides B', B' and B'', said slides having strainers C', C', C', for atomizing and airing the milk reservoir E, arranged and combined substantially as and for the purpose hereinbefore set forth.

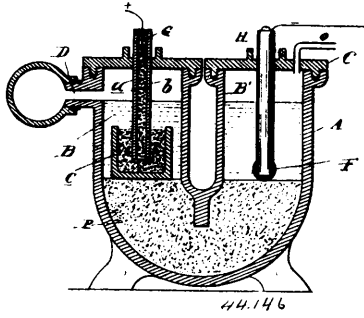
No. 44,146. Electrolytic Apparatus.

(Appareil électrolytique.)

Thomas Craney, Bay City, Michigan, U.S.A., 2nd September 1893; 6 years.

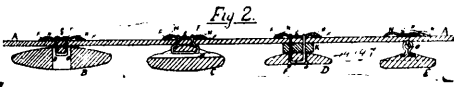
Claim.—1st. In an electrolytic apparatus, the combination of a series of electrolytic cells containing the liquid to be electrolyzed, and each divided into two compartments communicating with each other through a porous medium, an anode and cathode enclosed in said compartments respectively and feed and discharge connections

into and from the cathode compartments of the cells, connecting them in series to provide for a flow of the liquid through the com-



partments, substantially as described. 2nd. In an electrolytic apparatus, the combination, with an anode and cathode, contained in separate compartments, of a porous medium forming an electrolytic diaphragm between said compartments and composed wholly or partly of the solid body of the salt to be electrolyzed in the solution contained in the compartments, substantially as described.

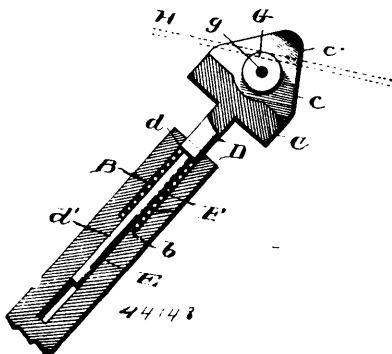
No. 44,147. Fastener for Buttons. (*Agrafe de boutons.*)



Salvanus Richards, Armprior, Ontario, Canada, 2nd September, 1893; 6 years.

Claim.—1st. In a button fastener, the combination of a slotted and buckled disc, plate or washer G, having two small eyes in the centre, and a long common wire staple with pointed ends, substantially as set forth. 2nd. In a button fastener, the combination of a slotted, buckled and pierced disc, plate or washer G, a button having two or more central holes, or eyed shank, and a common long staple F, having pointed ends passing through the eyes or shank of said button and the eyes of the washer G, and having the ends turned and bent under said washer, substantially as set forth. 3rd. In a button fastener, the combination of the wire staple F, the rubber washer K, and the metal disc G, having the holes L, and the slot M, substantially as and for the purpose hereinbefore set forth.

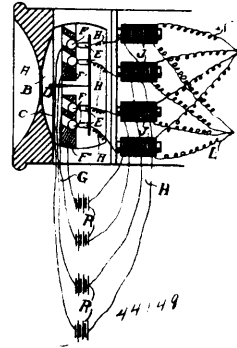
No. 44,148. Trolley for Electric Railways. (*Trollée de chemin de fer électrique.*)



Ernest H. Jenkins, Daniel, Maryland, U.S.A., 2nd September, 1893; 6 years.

Claim.—1st. The combination with the pole having a socket, of the bracket having a shank to fit the same, and slotted longitudinally, the transverse pin, the spring arranged in the socket, and the trolley wheel journalled in the bracket, substantially as described. 2nd. The combination with the pole having a socket provided with an annular shoulder, of a bracket having a shank provided with an annular shoulder and slotted longitudinally near its lower end, the transverse pin, the coiled spring arranged between the annular shoulders, and the trolley wheel, substantially as shown and described. 3rd. The combination with the bracket having tapering wings bevelled on their inner faces and carried by a longitudinally movable shank, of the trolley wheel journalled between the said wings, substantially as shown and described.

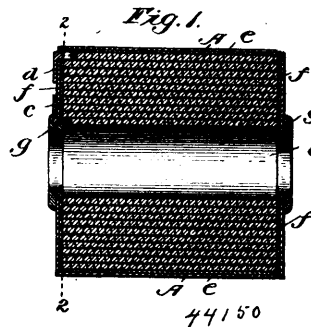
No. 44,149. Telephone Transmitter. (*Transmetteur téléphonique.*)



S. Lloyd Wiegand, Philadelphia, Pennsylvania, U.S.A., 2nd September, 1893; 6 years.

Claim.—1st. In a telephone transmitter, the combination, with a diaphragm having an electrode permanently connected so as to vibrate therewith, of a loosely mounted electrode resting normally against the first electrode and arranged to be propelled by vibrations of the diaphragm and its connected electrode toward the speaker and make variable contact during the ensuing reaction, substantially as set forth. 2nd. In a telephone transmitter, the combination, with a diaphragm and an electrode connected therewith, so as to vibrate with the diaphragm, of an electrode loosely mounted on an inclined supporting guide, said electrodes being constructed and arranged to diminish the contact by the movement of the diaphragm in a direction away from the speaker, substantially as set forth. 3rd. In a telephone transmitter, the combination, with a diaphragm and an electrode connected therewith, so as to vibrate with the diaphragm, of a spherical electrode loosely mounted and located between the diaphragm and the electrode connected therewith, substantially as set forth. 4th. In a telephone, the combination, with a diaphragm and an induction coil, of the two electrodes, one connected with the diaphragm and the other loosely mounted and acted by gravity, said electrodes being included in the primary circuit of the induction coil and arranged to be diminished in contact by the direct action of the diaphragm, and increased in contact after the reaction of the diaphragm, substantially as set forth.

No. 44,150. Electro-magnetic Coil. (*Serpentin électro-magnétique.*)



Charles E. Lipe, Syracuse, New York, U.S.A., 2nd September, 1893; 18 years.

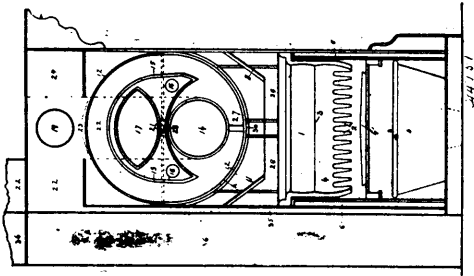
Claim.—1st. A practically solid coil of substantially rectangular naked wire having its individual convolutions and its layers of convolutions separated by layers of hard, insulating, fire-resisting material. 2nd. A practically solid coil of substantially rectangular wire, consisting of alternate layers of mica sheets and substantially rectangular wire wound one upon the other, and mica strips separating the individual convolutions. 3rd. The method of producing an electro-magnetic coil, whose convolutions shall be substantially rectangular in cross-section, which consists in making the wire from which the coil is wound of irregular quadri-lateral cross-section, as described, and coiling said wire upon the shorter side of said quadri-lateral, substantially as described.

No. 44,151. Furnace. (*Fournaise.*)

Robert H. Yeoman, Omaha, Nebraska, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. A furnace for heating air consisting of a crescent-shaped chamber holding heat, a heat passage below and located in the concave of the crescent of the said chamber, cold air inlets

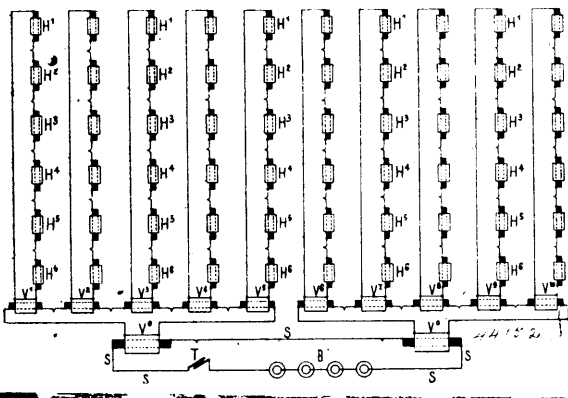
adapted to discharge cold air under and against the said crescent chamber and heat passage, and suitable air outlets, substantially as



set forth. 2nd. A furnace for heating air consisting of a crescent-shaped chamber holding heat, a second chamber located in said crescent-shaped chamber and having air inlets and outlets, a heat passage below and located in the concave of the crescent of the said chamber, and cold air inlets adapted to discharge cold air under and against the said crescent chamber and heat passage, substantially as described. 3rd. In an air heating furnace a horizontal cylinder, running nearly the entire length thereof and having in each end a head, and having suitable air outlets, a heat passage extending the entire length of the said cylinder and terminating at each end at perforations in the heads of said cylinders, a crescent-shaped chamber located in said cylinder just above the heat passage, said chamber having the points of the crescent extending downward, and suitable perforations in the cylinder heads leading into the said chambers, a passage located in said crescent chamber, and having connection with the interior of the cylinder, and a heat distributing chamber, cold air inlets leading into the cylinder under the crescent chamber, substantially as described.

No. 44.152. Telephonic News Dispenser.

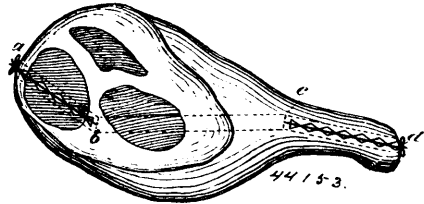
(Dispensateur de message téléphonique.)



Theodor Puskas, Budapest, Hungary, 5th September, 1893; 6 years.

Claim.—1st. A telephonic system for making communications from a central telephone station simultaneously to any desired number of receiver stations, in which, for the purpose of obtaining uniformity in the strength of sound at each receiver station, and protecting each receiver station against disturbances from all the other receiver stations, the receiver of each of the said receiver stations is operated by the currents of the secondary windings of an induction coil which supplies this receiver station exclusively with the currents of its secondary windings, substantially as described. 2nd. A constructional form of the system for making communications from a central telephone station simultaneously to any desired number of receiver stations as described in which several receivers are served by one induction coil, substantially as described. 3rd. A constructional form of the telephonic system for making communications from a central telephone station simultaneously to any desired number of receiver stations as described in which the secondary windings of the induction coils, the currents of which operate the receivers of each of the receiver stations are included in the earth conductors or between the outgoing and return conductors of a telephonic system serving for the intermediate service, substantially as described. 4th. A constructional form of the telephonic system for making communications from a central telephonic station simultaneously to any desired number of receiver stations as described in which the receiver coils are arranged at the subscriber's places or in their vicinity, substantially as described.

No. 44.153. Method of Boning and Preparing Hams.
(Méthode de désosser et préparer les jambons.)

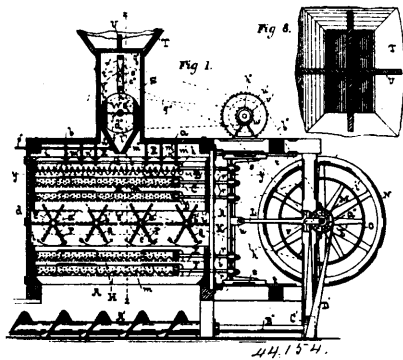


Wm. E. Brendon, Plymouth, Devon, England, 5th September 1893; 6 years.

Claim.—The new or improved method of boning and manufacturing hams which consists in first cutting two short opening adjacent to the bones at either end and removing same, then coring out and removing the central bone, and finally lacing up the two end cuts in the manner above described, whereby the original shape and configuration of the ham are unaltered, substantially as and with the objects herein set forth.

No. 44.154. Apparatus for Mixing Flour.

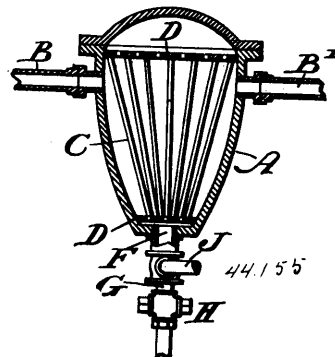
(Appareil pour mêler la fleur.)



John Durand Baugert, Baltimore, Maryland, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. In an apparatus for mixing substances, a hopper having a removable cross partition with hinged doors at the bottom, substantially as specified. 2nd. In an apparatus for mixing materials, a casing and sieving devices within said casing, combined with a feed hopper, a chute leading from the feed hopper to the interior of the casing, a rotary beater and an intermittent feed within the chute, the beater being located above the feed, and suitable mechanism to operate the beater and the feed, substantially as described. 3rd. In a machine for mixing materials, a casing and a chute for introducing the material thereto, a series of pendant vibratory beaters located in the casing immediately below the chute, a series of fixed sieves arranged one above the other in the casing below the said beaters, a series of reciprocating mixers above the sieves, a series of fans between two of said sieves, and suitable mechanism to operate the mixers and fans, all combined and co-operating, substantially as and for the purpose specified.

No. 44.155. Extractor for Grease, Grit, etc., from Exhaust Steam.
(Extracteur de graisse, gravier etc., de la vapeur d'épuisement.)

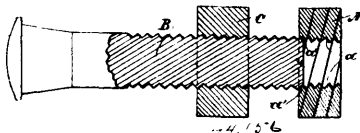


Warren Webster, Philadelphia, Pennsylvania, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. An extractor for the purpose set forth, having channelled baffle or trap plates, and a vessel provided with inlet and

outlet pipes, substantially as described. 2nd. An extractor for the purpose named, consisting of a steam receiver having inlet and outlet pipes on opposite sides, and a discharge opening in the lower end thereof, and a trap within said receiver formed of vertical plates connected at top and bottom with perforated diaphragms, said plates having a gutter or gutters, and the parts being combined, substantially as described. 3rd. A steam receiver with a skeleton trap formed of separated vertical plates having edges forming gutters, and perforated diaphragms, and inlet and outlet passages between said diaphragms, said parts being combined, substantially as described. 4th. In an extractor for the purpose set forth, channelled baffle or trap plate, in combination with a containing vessel provided with inlet and outlet pipes, and a discharge opening, said plates converging at said discharge opening, substantially as described.

No. 44,156. Nut Lock. (*Arrête-écrou.*)



George Clark Richards and Francis Marion Johnson, both of Anderson, California, U.S.A., 5th September, 1893; 6 years.

Claim.—A lock nut consisting of a coiled spring, the interior surface of which is formed with screw threads and adapted to enter readily upon a bolt, said nut having its normal interior diameter less than that of the bolt, whereby it is forcibly expanded in passing to its seat on the bolt, and on account of its springy character is tightened thereon, substantially as described.

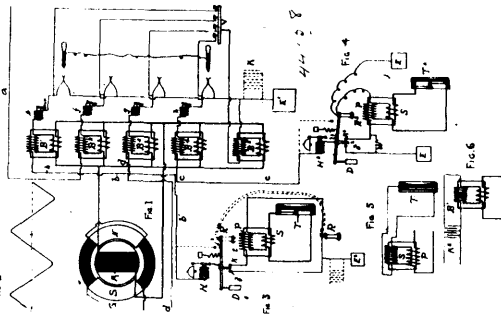
No. 44,157. Electro Magnetically Heated Receptacle and Article. (*Réceptacle chauffé électro-magnétiquement.*)



The American Electric Heating Company, Boston, assignee of Willis Mitchell, Malden, both in Massachusetts, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. A receptacle consisting of a hollow body of magnetic material provided with studs, and having electrical heaters applied thereto in such manner as to magnetize it, for the purpose set forth. 2nd. A receptacle or article consisting of a body having studs of magnetic material formed thereon, in combination with wire helices, which are in electric circuit and magnetize the said studs, for the purpose set forth. 3rd. In a receptacle or article, a body of magnetic material having studs of the same material, in combination with electric heaters fitted on the said studs, each heater consisting of a series of continuous wire helices and alternating cylindrical partitions, substantially as set forth. 4th. A hollow receptacle having its bottom formed of a plate or body of magnetic metal provided with studs of the same, in combination with a wire wound about the said studs, and forming a part of an electric circuit, the wire serving to magnetize the said studs and body or plate, and thereby heat the same beyond the heat due to resistance, substantially as set forth. 5th. A receptacle having its bottom composed of magnetic metal, concave and provided with studs of the same material, in combination with electrical heaters which include wire helices, and are fitted on the said studs, for the purpose set forth. 6th. A receptacle consisting of a hollow shell of magnetic material provided with cores, in combination with an electric conductor applied thereto, so as magnetize the said cores and an exterior shell or casing, substantially as set forth. 7th. A receptacle consisting of a hollow body provided with magnetic cores or studs, in combination with an electric conductor applied to the said cores or studs to magnetize the same, for the purpose set forth.

No. 44,158. System of Telephony. (*Système téléphonique.*)

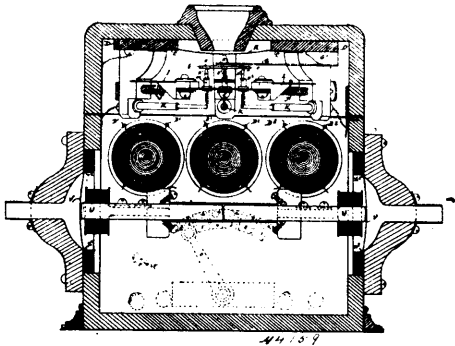


John W. Gibboney, Lynn, assignee of Elisha Thompson, Swampscott, both in Massachusetts, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. In a system of telephonic transmission, a generator of alternating or varying currents of little or no audible effect in the receiving instruments, inductive devices or induction coils operated by said currents whereby similar induced currents are applied to the separate lines, means, such as switches, for connecting said separate lines, receivers in the said lines and transmitters also in said lines having inductive coils, one in the line and one in a local circuit, including a resistance-varying or current-varying device responsive to sound waves. 2nd. In a system of telephonic transmission, a set of transformers or inductive devices the primaries of which are fed by alternating or varying currents of low period and the secondaries of which are connected into the circuit upon which speech is to be conveyed, receivers in said lines, devices or induction coils with primaries connected to line and secondaries connected to current-varying transmitters responsive to sound waves. 3rd. In a system of telephonic transmission, a set of transformers or inductive devices, the primaries of which are fed by alternating or varying currents of low period and the secondaries of which are to be connected into the circuit upon which speech is to be conveyed, condensers in shunt relation to such secondaries, receivers in said lines, devices or induction coils with primaries connected to line, and secondaries connected to current varying devices or transmitters responsive to sound waves. 4th. In a system of telephonic transmission comprising a number of lines, means for generating and transmitting alternating or varying current impulses of comparatively low period through the lines, and means for modifying such waves of current consisting of an induction coil one of the coils of which is in the line and the other of which is in a local circuit, including the transmitter, substantially as described. 5th. In a system of telephonic transmission, comprising a system of lines normally fed by alternating or varying impulses of currents, signalling devices in said lines responsive to calling currents and unresponsive to the normal pulsations or alternations, telephone receivers for said lines and transmitting mechanism consisting of a line coil in inductive relation to a local coil, in the circuit of which latter is placed a current varying device such as a variable resistance, said current varying device or transmitter, being responsive to vocal or other sounds. 6th. In a system of telephonic transmission, a system of lines normally fed by alternating or varying impulses of current, signalling devices in said lines responsive to calling currents, switch stations or exchanges, annunciators at said stations individually responsive to the opening of their respective lines, receivers adapted to be connected into said lines by the operation of suitable switch mechanism, and transmitters likewise adapted to be connected to such lines, said transmitters having a local circuit including a resistance or current-varying device responsive to sounds, said local circuit being in inductive relation to a coil in the line circuit while the transmitter is in use. 7th. In a telephone system, a line or circuit connecting the exchange with a subscriber's station and normally on closed circuit, a generator for feeding to said circuit alternating or varying impulses of current suitable for the operation of transmitters, a signal device at the subscriber's end of the line unresponsive to the alternating or varying current which operates the transmitters, but responsive to the special calling currents and an annunciator at the exchange operative upon the opening of said circuit. 8th. In a closed circuit system of telephonic transmission, lines on closed circuit or through condensers, means in each of said lines for generating or conveying to it alternating or varying impulses of current of low period, transmitters and mechanism for keeping said transmitters in circuit in said lines when in use, comprising a coil in the line with a local coil in inductive relation thereto, and resistance or current varying devices responsive to vocal or other sounds. 9th. A telephone exchange system, comprising a generator of alternating current impulses, means for conveying individually such impulses of varying current to the individual lines leading from the exchange, annunciators or signal devices in said lines, signal apparatus in said lines at the subscribers' or users' part of the line responsive to currents sent out from the exchange, switching devices for inter-connecting

the lines at the exchange, transmitters and receivers connected into the lines when in use, said transmitters consisting substantially of induction coils, one coil being in the line and another in inductive relation thereto when connected to mechanism for varying current or resistance in the circuit of said coil in correspondence with sound waves reaching the transmitter.

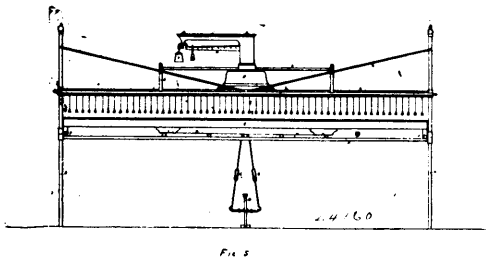
No. 44,159. Telephone. (Téléphone.)



Isidore Thérien, Sault Montmorency, Quebec, 5th September, 1893; 6 years.

Résumé.—1° Le diaphragme du transmetteur A, de forme bombée et en verre au lieu de métal. 2° La forme du diaphragme du récepteur V, en fer bombé également au lieu d'être de forme plane. 3° La combinaison des bobines inductrices reliées en séries et en même temps isolées les unes des autres, possédant chacune leur pile et pouvant fonctionner séparément ou simultanément, ce qui donne la facilité d'augmenter à volonté le potentiel du courant de ligne, sans augmenter le diamètre de ses fils tout en prolongeant la ligne, en mettant en série le fil induit d'un certain nombre de bobines inductrices. 4° La faculté de construire des instruments avec un nombre illimité de bobines inductrices et de contacts mis en séries.

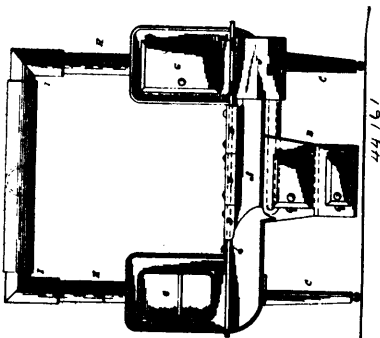
No. 44,160. Machine for Measuring Leather. (Machine pour mesurer le cuir.)



Joseph Pierre Roy and Edmond Paré, both of Quebec, Province of Quebec, Canada, 5th September, 1893; 6 years.

Résumé.—1° La charpente de la machine en tube de fer A, qui se termine par des œils à écrous, la pédale B, les régulateurs C, C', les leviers D, D', et la table mobile, tel que décrit pour les fins sus mentionnées. 2° La forme des petits poids I, pour reposer sur les lattes des carreaux, les tubes soutenant ces lattes et les dispositions de la balance sur la machine, le tout tel que décrit pour les fins mentionnées.

No. 44,161. Range or Stove. (Cuisinière ou poêle.)

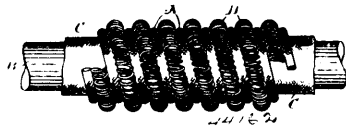


Alexander Heppie and James Spellen, both of Bradford, Pennsylvania, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. In a stove, the frame A, having flanged upper edge plates secured to the said flanges, ovens supported on the ends of the

No. 44,162. Electrical Heater.

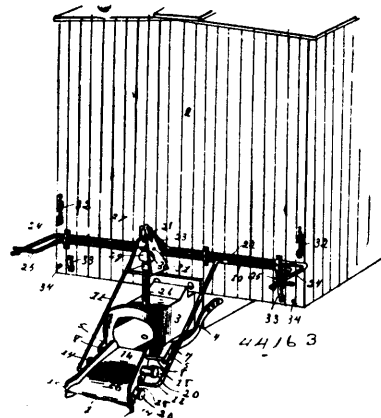
(Calorifère électrique.)



The Consolidated Car Heating Company, assignee of James F. McElroy, all of Albany, New York, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. In an electric heater, a wire wound in the form of a spiral spring, extending in a spiral path about a cylindrical formed non-conductor, in such a manner that each spiral shall come into contact with the non-conductor at one point only and the layer of spirals shall be separated from each other, substantially as described and for the purpose set forth. 2nd. In an electric heater, the combination of an insulating substance, a wire coiled in the form of spiral spring, extending in a spiral path about said insulating substance, a non-conducting material placed between the adjacent layers of the said spring, substantially as described and for the purpose set forth.

No. 44,163. Car Coupler. (Attelage de chars.)



George A. Norcross and Henry E. Vernor, both of San Antonio, Texas, U.S.A., 5th September, 1893; 6 years.

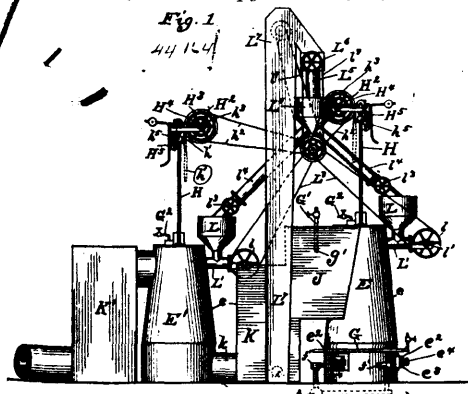
Claim.—1st. In a car coupling, the combination of a car, having a draw-head, a link guider hingedly connected with the car and located beneath the draw-head, and means for swinging the link guider outward to an inclined position in advance of the draw-head, substantially as described. 2nd. In a car coupling, the combination with a car, having a draw-head, of links having their upper ends hingedly connected with the car, a link guider located beneath the draw-head, and hinged to the lower ends of said links and adapted to be swung outward to an inclined position in advance of the draw-head, and a rock shaft journaled on the car and having an arm connected with the link guider to swing the latter outward and to return the same beneath the draw-head, substantially as described. 3rd. In a car coupling, the combination with a car, having a draw-head, of a link guider arranged beneath the draw-head and hingedly connected with the car and provided with yielding sides adapted to be forced outward, and means for swinging the link guider outward to an inclined position in advance of the draw-head and for returning the same beneath the draw-head, substantially as described. 4th. In a car coupling, the combination, with a car having a draw-head, of a link guider arranged beneath the draw-head and hingedly connected with the car and provided with converging sides, and means for swinging the link guider outward to an inclined position in advance of the draw-head and for returning the same beneath the draw-head, substantially as described. 5th. In a car coupling, with a car having a draw-head, of a link guider arranged beneath the draw-head and hingedly connected with the car and provided with converging yielding sides adapted to be forced outward, and means for swinging the link guider outward to an inclined position in advance of the draw-head and for returning the same beneath the draw-head, substantially as described. 6th. In a car coupling, the combination, with a car having a draw-head,

of a link guider comprising a body provided on its inner face with tubular portions having slotted lateral extensions, sides having openings receiving the lateral extensions and provided with cross pieces arranged in the slots of the extensions, and springs arranged in the tubular portions and attached to said cross pieces, and means for swinging the link guider outward to an inclined position in advance of the draw-head and for returning the same beneath the draw-head, substantially as described. 7th. In a car coupling, the combination, with a car having a draw-head, of a link guider comprising a body provided with lateral extensions, sides mounted on the extension, and springs connecting the sides, and means for swinging the link guider outward to an inclined position in advance of the draw-head at the same time raising the coupling pin and for returning the same beneath the draw-head, dropping the coupling-pin in its draw-head, substantially as described. 8th. In a car coupling, the combination, with a car having a draw-head, of a link guider comprising a body, yielding sides adapted to be forced outward, and springs connecting the sides, and means for swinging the link guider outward to an inclined position in advance of the draw-head and for returning the same beneath the draw-head, substantially as described. 9th. In a car coupling, the combination, with a car having a draw-head, of a link guider hingedly connected with the car and arranged below the draw-head and adapted to be swung outward in advance of the draw-head, a rock shaft journaled on the car and having an arm connected to the link guider, said rock shaft being provided at its ends with handles, a coupling pin, and a rock shaft journaled on the car and arranged above the first mentioned rock shaft and provided with a central arm connected to the coupling pin and at its ends with handles arranged for movement independent of the handles of the first mentioned rock shaft and arranged to be engaged by the handles of the first mentioned rock shaft, substantially as and for the purpose set forth. 10th. In a car coupling, the combination, with a car having a draw-head, of a link guider hingedly connected with the car and arranged below the draw-head and adapted to be swung outward in advance of the draw-head, a rock shaft journaled on the car and having an arm connected to the link guider, said rock shaft being provided at its ends with handles, a coupling pin, a rock shaft journaled on the car and arranged above the first mentioned rock shaft and provided with a central arm connected to the coupling pin, and at its ends with handles arranged for movement independent of the handles of the first mentioned rock shaft and arranged to be engaged by the handles of the first mentioned rock shaft, a chain arranged above the rock shafts for holding the coupling pin elevated, and a latch arranged below the rock shafts, and adapted to engage the last mentioned one to hold the link guider beneath the draw-head and to prevent the coupling pin from rising, substantially as described. 11th. In a car coupling, the combination of a car having a draw-head, a link guider hingedly connected with the car and located beneath the draw-head and having its upper end wedge-shaped, and means for swinging the link guider outward to an inclined position in advance of the draw-head, substantially as described. 12th. In a car coupling, the combination, with a car having a draw-head, of a coupling pin, a casing receiving the upper end of the coupling pin, an inverted cup suspended within the casing, and a rock shaft mounted on the car and having an arm connected with the top of the casing, substantially as described. 13th. In a car coupling, the combination, with a car having a draw-head, of a coupling pin, a casing having tapering sides receiving the upper end of the coupling pin, an inverted cup suspended within the casing and engaging the upper end of the coupling pin, a rock shaft having an arm, and a link connected to the upper end of the casing and to the arm of the rock shaft, substantially as described.

material of one electric polarity is not in contact with material of opposite electric polarity, and arranged so that fluids can be forced through the series of passages formed in the massing of the elements of the generator, substantially as described. 2nd. A pyro-electric generator, constructed of elements of opposite electric polarities separated from each other by porous insulating material arranged so that heated gaseous material can be forced through the series of passages formed by the interstices obtaining in the pyro-electric pile constituting such generator, substantially as described. 3rd. A pyro-electric generator, consisting of an insulating casing, a series of elements arranged therein to form a series of passage-ways therethrough, such elements consisting of materials of opposite electric polarity separated from each other by porous insulating material, and inlet and outlet pipes through such casing, substantially as described. 4th. An element of a pyro-electric generator consisting of a porous cup, and a second and smaller porous insulating cup contained in the first named cup in combination with material contained in one of said cups and material of opposite electric polarity contained in the other of said cups, substantially as described. 5th. A filling for the regenerating chamber of a gas machine, composed of material of opposite electric polarities, arranged so that material of opposite electric polarities will not come in contact with each other, substantially as described. 6th. In a gas machine, a regenerator consisting of a chamber having an inlet and an outlet, and a filling contained therein composed of materials of opposite electric polarities, the materials of opposite polarities not coming in electrical contact with each other, and so arranged as to form series of gas passages through the chamber, substantially as described. 7th. The combination in a gas apparatus of a converter having a combustion chamber and a regenerating chamber communicating therewith, such regenerating chamber having a filling therein of materials having opposite electric polarities arranged so that materials of opposite polarities will not come in contact with each other and such filling forming a series of gas passages, substantially as described. 8th. In a gas machine, a mixing chamber having an inlet and an outlet and series of gas passages therethrough, formed by a filling of refractory material, in combination with a regenerator consisting of a chamber having an inlet and an outlet, and a filling contained therein composed of materials of opposite electric polarities not coming in electrical contact with each other and so arranged as to form series of gas passages through the chamber, substantially as described. 9th. A gas generating apparatus consisting of a combustion chamber, a mixing chamber into which the heated products from the combustion chamber may be delivered, a regenerating chamber having a passage way extending there into from the mixing chamber, a filling of material of opposite electric polarities arranged in the regenerating chamber, so that material of one polarity will not come in contact with material of opposite polarity, and to form series of gas passage ways therethrough, an air supply extending into the combustion chamber at the base thereof, and steam supply extending through the walls of the apparatus, and adapted to discharge steam into the heated products obtained from the combustion of carbonaceous fuel, substantially as described. 10th. A gas generating apparatus consisting of a combustion chamber, an air supply extending into the combustion chamber at the base thereof, and a steam supply extending through the walls of the apparatus, and adapted to discharge steam into the heated products obtained from the combustion of carbonaceous fuel in the combustion chamber, a mixing chamber into which the products of the combustion with the steam delivered, a regenerating chamber connected with the mixing chamber, a carburetting chamber adapted to contain carbonaceous material into which regenerating chamber extends, and a second regenerating chamber having a passage way extending there into from the carburetting chamber, both of such regenerating chambers containing a filling composed of materials of opposite electric polarities, arranged so that materials of opposite electric polarities will not come in contact with each other, and so that series of gas passages will extend therethrough, substantially as described. 11th. A gas generating apparatus consisting of more than one combustion chamber, an air supply extending into each of the combustion chambers at the base thereof, and a steam supply extending through the walls of the apparatus and adapted to discharge steam into the heated products obtained from the combustion of carbonaceous fuel in the respective combustion chambers, mixing chambers into which the products of the combustion chambers with the steam are respectively delivered, regenerating chambers connected respectively with the mixing chambers, a carburetting chamber adapted to contain carbonaceous material into which the regenerating chamber extend, and an additional regenerating chamber having a passage way extending there into from the carburetting chamber, all of such regenerating chambers containing a filling composed of materials of opposite electric polarities, arranged so that materials of opposite polarities will not come in contact with each other, and so that series of gas passages will extend therethrough, substantially as described. 12th. In a gas apparatus, the combination of a closed combustion chamber with a stoker consisting of a rod extending through the top of the combustion chamber, a circular head on the lower end of the rod, and within the combustion chamber, the top of the head extending downward and outward from the rod to the periphery of the head, and means for hoisting and letting fall such rod and head, substantially as described. 13th. In a steam generating boiler and furnace, a steam supply pipe extending into the furnace, a number of elements consisting of materials of opposite electric polarities separated from each other,

No. 44,164. Pyro-Electric Generator and Gas.

(Générateur pyro-électrique.)



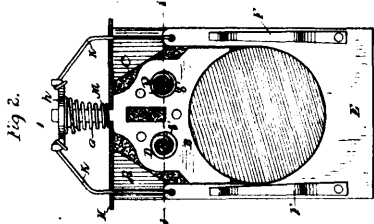
The International Chemical and Gas Company, assignee of Thurston Gordon Hall, all of Chicago, Illinois, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. A pyro-electric generator, constructed of elements of opposite electric polarities, separated from each other so that

so that material of one polarity does not come in contact with material of opposite electric polarity, forming series of passageways, and arranged underneath the boiler so that the products generated in the firebox of the furnace, together with the steam delivered thereto and mixed therewith, will pass through such series of passageways, in combination with an air conduit delivering into the gas obtained thereby, whereby combustion of such gas will be effected, substantially as described. 14th. The continuous process of making gas, which consists in burning carbonaceous fuel, supplying air to said fuel, forcing steam into the products of combustion, mixing the steam and products of combustion, and then conducting the mixture through a heated regenerator filled with materials of opposite electric polarities, such filling being so disposed as to leave passages for the gas therethrough, substantially as described. 15th. The continuous process of making gas, which consists in burning carbonaceous fuel, supplying air under pressure to said fuel, mechanically breaking down the arch or crust which forms in the combustion of such fuel, forcing steam into the products of combustion, mixing the steam and products of combustion, and then conducting the mixture through a heated regenerator filled with materials of opposite electric polarities, such filling being so disposed as to leave passages for the gas therethrough, substantially as described. 16th. The continuous process of making gas, which consists in burning carbonaceous fuel in one of a series of closed combustion chambers, supplying air under pressure to said fuel, forcing steam into the products of combustion, mixing the steam and products of combustion, and then conducting the mixture through a heated regenerator filled with materials of opposite electric polarities, such filling being so disposed as to leave passages for the gas therethrough, substantially as described. 17th. The continuous process of making gas, which consists in burning carbonaceous fuel, supplying air under pressure to said fuel, forcing steam into the products of combustion, mixing the steam and products of combustion, and then conducting the mixture through a heated regenerator filled with materials of opposite electric polarities, such filling being so disposed as to leave passages for the gas therethrough, in carbureting the heating compound gas thus obtained, and then conducting the mixture through an additional regenerator, having filling of opposite electric polarities, so disposed as to leave passages for the gas therethrough, substantially as described. 18th. The process of making and burning gas, which consists in the combustion of carbonaceous material in the firebox of a furnace underneath a receptacle, wherein material to be heated is contained, as a boiler containing water to be converted into steam, then supplying and mixing steam to and with the products of combustion, then conducting the mixture through a filling of materials of opposite electric polarities, so disposed as to leave passageways therethrough, and then supplying air to the gas obtained thereby, and so effecting combustion thereof underneath such receptacle, substantially as described. 19th. A fixed inflammable fuel or illuminating gas consisting of carbon, hydrogen, oxygen and nitrogen chemically combined, substantially as described. 20th. A fixed inflammable fuel or illuminating gas, consisting of carbon, hydrogen, oxygen and nitrogen chemically combined, and nitrogen in a gaseous form intermingled therewith, substantially as described.

No. 44,165. Dust Guard for Car Axles.

(*Garde-poussière pour boîtes à graisse.*)



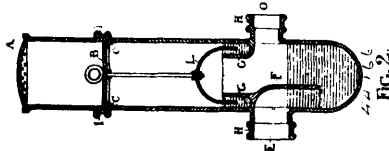
William A. Warnan, Moncton, New Brunswick, Canada, 5th September, 1893; 6 years.

Claim.—1st. The combination, with the outer plates, having central openings of a vertically adjustable central plate arranged between the outer plates, substantially as shown and described and for the purposes hereinbefore set forth. 2nd. The combination, with the outer plates, having central openings, of a vertical adjustable spring actuated, central plate arranged between the outer plate and adapted to partially envelope the axle, substantially as described, and for the purposes hereinbefore set forth. 3rd. The combination with the outer plates, one of which has a bearing block secured thereto, of the central adjustable plate, adapted to straddle the bearing block, and moved between the plates, substantially as described and for the purposes hereinbefore set forth. 4th. The combination with the outer plates of the bearing block, the central plates and the sheets of packing material, all arranged substantially as shown and described and for the purposes hereinbefore set forth. 5th. The combination with the outer plates of the bearing block, having a projection, the central plate, the rods connected thereto, the spiral spring and the plate bearing upon said spring, substantially as shown and described and for the purposes hereinbefore set

forth. 6th. The combination, with the outer plates, of the bearing block recessed, as described, the boss upon the opposite plate, the spiral spring in the recesses, the central plate provided with bow springs, the projection rods and spiral spring around the projection, all arranged, substantially as shown and described, and for the purposes hereinbefore set forth. 7th. The combination, with the outer plates, the bearing block, the sheet of packing, the central plate and packing and the rods and spring connections for operating the central plate, substantially as shown and described, and for the purposes hereinbefore set forth.

No. 44,166. Yard Shaft and Street Gully.

(*Puits et égouts de rue.*)

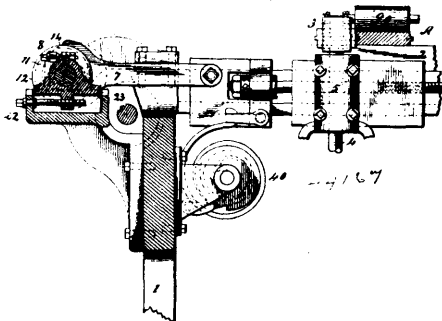


William McLea Walbank, Montreal, Quebec, Canada, 5th September, 1893; 6 years.

Claim.—1st. The combination, in one casting, of a yard shaft, trap, stable, drain or street gully, substantially as described. 2nd. The shape of bottom of said shaft and trap, substantially as described. 3rd. The combination of the bell trap and yard trap, substantially as described. 4th. The converting of a sealed shaft or street gully, into a ventilating shaft, by leverage or other mechanical contrivance, substantially as and for the purposes hereinbefore set forth.

No. 44,167. Machine for Ornamenting Wood.

(*Machine pour l'ornementation du bois.*)

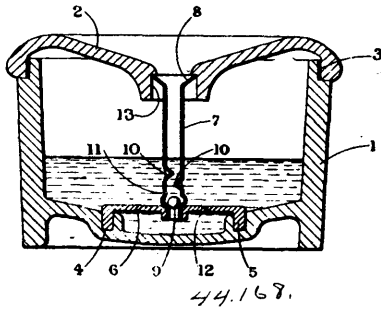


Charles Lewis Goehring, Allegheny, Pennsylvania, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. In a wood working machine, the combination with feeding mechanism for advancing the material, of a rotary cutter head, a rotary eccentric or crank for operating the cutter toward and from or over the material at an angle to the line of feed, and mechanism for varying the speed of the eccentric during its rotation, substantially as described. 2nd. In a wood working machine, the combination with feeding mechanism for advancing the material, of a rotary cutter head, a rotary eccentric or crank of determined throw for operating the cutter toward and from the centre line of the material at an angle to the line of feed, and mechanism for varying the speed of the eccentric during its rotation, substantially as described. 3rd. The combination with a movable frame a cutter head mounted thereon, and an eccentric cam reciprocating said frame, of a shaft, a crank pin thereon engaging with and rotating the eccentric, and means for adjusting the crank and cam relative to the rotary centre of the latter, substantially as described. 4th. The combination with a movable frame, a cutter head mounted thereon, and an eccentric cam for reciprocating said frame, of a shaft, a crank pin thereon engaging with and operating the eccentric, said eccentric and shaft being adjustable relative to each other in a place parallel with the movement of the movable frame, whereby the position of the pin relative to the centre of rotation of the cam may be changed, substantially as described. 5th. The combination with a movable frame, a cutter head mounted thereon, a movable block, and a rotary eccentric cam mounted upon the block and connected to the frame for reciprocating it, of a rotary shaft mounted in stationary bearings and having a crank pin for rotating the cam, substantially as described. 6th. The combination with a movable frame, a cutter head mounted thereon, a movable block, and a rotary eccentric cam mounted on it having the groove in its face and connected to the frame for reciprocating it, of a rotary shaft and a crank pin thereon operating in the groove in the cam, substantially as described. 7th. The combination with the movable frame, a cutter head thereon, an adjustable eccentric cam, of a rotary shaft having a crank pin co-operating with the cam and rotating it, said cam and

shaft being adjustable relative to each other, whereby the position of the pin relative to the centre of rotation of the cam can be adjusted, substantially as described. 8th. The combination with the rotary shaft having the two crank pins thereon, adjustable relative to each other, of two movable frames, each carrying a cutter head, two eccentric cams, one connected to each head and each cam, operated upon by one of the crank pins and adjustable relative to the shaft, whereby the position of the pins relative to the centre of rotation of the cams can be adjusted, substantially as described. 9th. The combination with the rotary shaft having the crank pin and sliding block thereon, of the cam having the slot or way for said block, the movable block in which the cam is mounted, the movable frame and the cutter head thereon, and connections between said frame and the cam for causing the reciprocation of the former by the rotation of the latter, substantially as described.

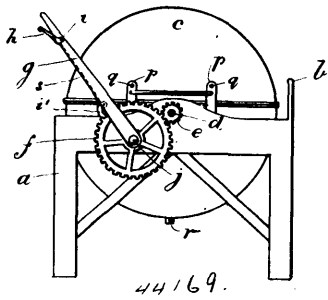
No. 44,168. Inkstand. (Encrier.)



Henry Selby Hele-Shaw, Liverpool, England, 5th September, 1893; 6 years.

Claim.—1st. In combination, with an ink container 1, a flexible diaphragm 6, provided with a non-return valve 12, and having a periphery adapted to fit against the inner surface of the container and to enclose a portion of the ink therein below its surface, a tube 7, having a hole 11, through the side thereof, the upper end of the tube forming a dipping cup 8, and the lower end having its bore constricted and being adapted to fit an opening in the centre of the diaphragm, and a ball valve 9, which normally closes the bore of the tube against the downward flow of the ink, substantially as described. 2nd. In combination, with an ink container and tube 7, a flexible diaphragm 6, having a non-return valve 12, and a depending peripheral flange adapted to fit in an annular groove formed in the bottom of the container, substantially as described and illustrated.

No. 44,169. Washing Machine. (Machine à blanchir.)



Thomas McCrossan, Winnipeg, Manitoba, Canada, 5th September, 1893; 6 years.

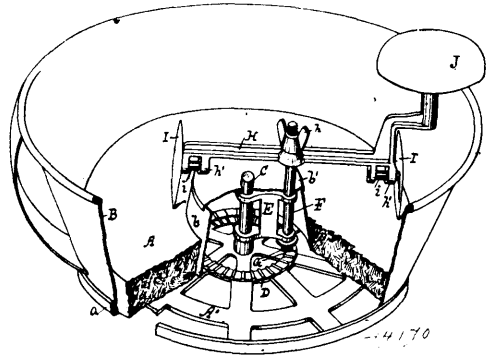
Claim.—1st. A rotary washing machine, consisting of a cylinder c, on frame or stand with one, two or more compartments, substantially as and for the purpose above set forth. 2nd. A rotary washing machine, consisting of a cylinder on frame or stand hinged at back k, k, with double spring catch p, p, pins q, q, having the interior surfaces corrugated as shown, and shelves as at m, n, n, and l, l, and in the case of the larger machines the shelves may be increased in number in one or more of the compartments, substantially as and for the purpose set forth. 3rd. A rotary washing machine, consisting of a cylinder on stand or frame in two parts hinged as shown and fitted with suitable catch, having compartments and interior surfaces, corrugated shelves, as shown, forked apron pieces l, l, hollow axles d, d, for the injection of hot water or steam, and apertures below for running off the water, substantially as and for the purpose above set forth. 4th. A rotary washing machine on stand, consisting of a cylinder in two parts, hinged as shown and fitted with suitable catch or fastening, having compartments and shelves, interior surfaces, corrugated hollow axles for the injection of steam or hot water, apertures for running off the water together with the wheel e, secured to the axle d, in combination with

the larger wheel f, lever g, ratchet lever h, working on the fulcrum i, connecting rod s, and ratchet t, substantially as and for the purpose above set forth. 5th. A rotary washing machine, consisting of the cylinder c, in two portions, hinged as shown, fitted with suitable fastenings having one or more compartments, shelves as shown, interior surfaces, corrugated hollow axles, plug holes with or without the ratchet lever, and wheel attachment shown, supplied with short pieces of hard twisted rope strongly bound at either end, substantially as and for the purpose above set forth.

No. 44,170. Meat and Vegetable Cutter.

(Machine à hacher la viande.)

Fig. 1.



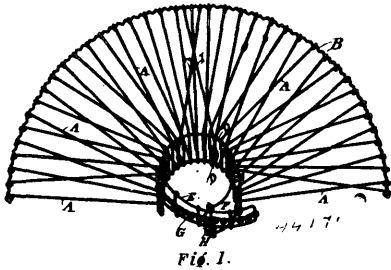
Wilson Ralph Ellis, Woodland, California, U.S.A., 5th September, 1893, 6 years.

Claim.—1st. In a meat and vegetable cutter, a cutter blade or disc having a revolution about an axis located eccentrically of the block over which the blade or disc travels, said axis, itself, having an independent movement in a circular path about the block centre, substantially as herein described. 2nd. In a meat and vegetable cutter, a cutter blade or disc having a revolution about an axis located eccentrically of the block over which the blade or disc travels, said axis, itself, moving intermittently in a circular path about the block centre, substantially as herein described. 3rd. In a meat and vegetable cutter, the combination of a block, a cutter blade or disc travelling over said block, an axis located eccentrically of the block and about which the cutter blade or disc revolves, and means for effecting the intermittent travel of said axis in a circular path about the block centre, substantially as herein described. 4th. In a meat and vegetable cutter, the combination of a block, a cutter blade or disc travelling over said block, a shaft located eccentrically of the block, and to which the cutter blade or disc is connected and about which it revolves, a pinion on the shaft, and a fixed gear in the block centre and with which the pinion engages whereby the shaft travels around said gear, substantially as herein described. 5th. In a meat and vegetable cutter, the combination of a block, a cutter blade or disc travelling over said block, a shaft located eccentrically of the block, and to which the cutter blade or disc is connected and about which it revolves, a mutilated pinion on the shaft, and a fixed gear in the block centre with which the mutilated pinion engages whereby the shaft travels intermittently around said gear, substantially as herein described. 6th. In a meat and vegetable cutter, the combination of a block, a cutter blade or disc travelling over the block, a shaft located eccentrically of the block, an arm connecting the shaft with the cutter blade or disc whereby the latter revolves with the shaft as a centre, a fixed gear in the block centre and a two-toothed pinion on the shaft engaging the gear, said pinion having its teeth extending in line with the arm connecting the cutter blade or disc with the shaft, substantially as herein described. 7th. In a meat and vegetable cutter, the combination of a block, a centrally fixed standard, a gear, a bracket pivoted on the standard, a shaft journaled in the bracket and having a pinion engaging the gear, a cutter blade or disc travelling over the block, and an arm connecting the blade or disc with the shaft, substantially as herein described. 8th. In a meat and vegetable cutter, the combination of a block, a centrally fixed standard, a gear, a bracket pivoted on said standard, a shaft journaled in the bracket, a cutter blade or disc, an arm connecting it with the shaft, and a two-toothed pinion on the shaft engaging the gear, said pinion having its teeth in line with the arm carrying the cutter blade or disc, substantially as herein described. 9th. In a meat and vegetable cutter, the combination of a block, a shaft located eccentrically of the block, a fixed gear in the block centre, a pinion on the shaft engaging the gear, an arm carried by the shaft, and a cutter blade or disc mounted in the end of the arm, and having its forward side at an acute angle to the longitudinal plane of the arm, whereby said side inclines inwardly, substantially as herein described. 10th. In a meat and vegetable cutter, the combination of a block, a shaft located eccentrically of the block, a fixed gear in the block centre, a pinion on the shaft engaging the gear, an arm carried by the

shaft, and a cutter blade or disc journaled in the arm, and having a free movement in its bearing in and out in the line of the length of said arm, substantially as herein described. 11th. In a meat and vegetable cutter, the combination of a block, a shaft located eccentrically of the block, a fixed gear in the block centre having an odd number of teeth, a pinion on the shaft engaging said gear, an arm carried by the shaft and extending on each side thereof, and a cutter blade or disc carried in each end of said arm, substantially as herein described. 12th. In a meat and vegetable cutter, the combination of a block, a shaft located eccentrically of the block, a fixed gear in the block centre having an odd number of teeth, a pinion on the shaft engaging said gear, an arm carried by the shaft and extending on each side thereof, and a cutter blade or disc carried at each end of said arm, one of said blades or discs being farther from the shaft than the other, substantially as herein described. 13th. In a meat and vegetable cutter, the combination of a block, a shaft located eccentrically of the block, a fixed gear in the block centre having an odd number of teeth, a pinion on the shaft engaging said gear, an arm carried by the shaft and extending on each side thereof, and a cutter blade or disc carried at each end of said arm, one of said blades or discs being farther from the shaft than the other, substantially as herein described. 14th. In a meat and vegetable cutter, the combination of the bottom casting having the central standard rising therefrom, and the fixed internal gear D, the block upon the casting having the hollow centre fitted with the cone b resting upon the casting, the rim B around the periphery of the block, the bracket pivoted upon the central standard, the shaft journaled in the bracket and eccentric to the block centre, said shaft having a pinion engaging the fixed gear, an arm carried by the shaft F, and a cutter disc or blade carried by the arm, substantially as herein described.

No. 44,171. Stove Pipe Shelf.

(*Tablette pour tuyaux de poêle.*)

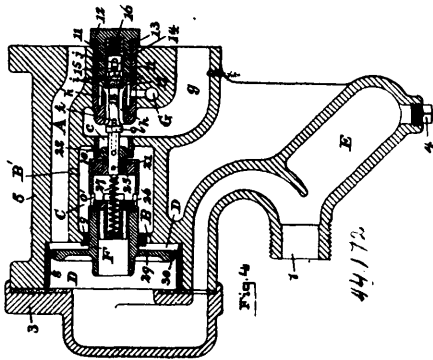


Ithamar Sursin Chamberlain, Victoria, British Columbia, Canada, 5th September, 1893; 6 years.

Claim.—The combination of wire brackets A, A, etc., with wire rims B and D, D, braces I, I, straps E, F, Catches G, H, and key J, substantially as and for the purpose herein set forth.

No. 44,172. Valve for Automatic Air Brakes.

(*Soupape pour freins atmosphériques.*)

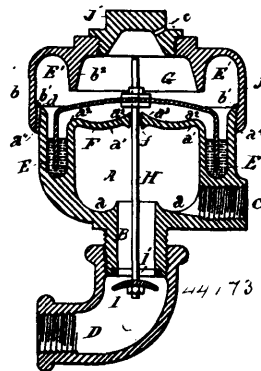


George A. Boyden, Baltimore, Maryland, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. In valve mechanism for automatic air brakes, the combination of a passage from the train pipe, a passage from the auxiliary reservoir which is smaller or more restricted than said train pipe passage, and a single valve co-acting with both of said passages and controlling communication between them and the brake cylinder, whereby when an emergency application of the brakes is desired, train pipe air and auxiliary reservoir air will both pass to the brake cylinder through the triple valve. 2nd. In valve mechanism for automatic air brakes, the combination of a communication with the brake cylinder from both the auxiliary reservoir and train pipe, a single valve controlling said communication, and

means to retard or restrict the flow thereto of the auxiliary reservoir air when applying the brakes, in comparison with the flow of train pipe air, whereby train pipe air at lower pressure than said auxiliary reservoir air will pass said valve when making an emergency application of the brakes. 3rd. In a valve mechanism, the combination with a suitable chamber, of a port therefrom to the brake cylinder, a valve controlling said port, and passages to the said chamber from the train pipe and from the auxiliary reservoir, the latter passage being of less capacity than the former. 4th. In a valve for automatic air brakes, the combination of a communication with the brake cylinder, a suitable controlling said communication, two air passages co-acting with said valve, and relatively proportioned as their capacity to allow the flow of both train pipe air and auxiliary reservoir air, each at a different pressure, to pass said valve when open, and a check valve to prevent the return of air to the train pipe. 5th. In a triple valve for automatic air brakes, the combination of a chamber having a port leading to a brake cylinder, a passage opening into said chamber and which supplies auxiliary reservoir air thereto, a piston chamber and piston, a valve controlling said port and operated by the piston, and a passage from the auxiliary reservoir direct to said piston chamber, and avoiding the chamber first mentioned, and which is larger or of a greater capacity than the said passage which supplies auxiliary reservoir air. 6th. In valve mechanism for automatic air brakes, the combination of a main port communicating with a brake cylinder from both the train pipe and the auxiliary reservoir, a suitable valve controlling said main port, a graduating valve which admits air pressure in small volume to the brake cylinder, and air passages co-acting with said main port and relatively proportioned as their capacity to allow both train pipe air and auxiliary reservoir air, each at a different pressure, to pass said main port when the latter is open. 7th. A triple valve for automatic air brakes, having in combination a valve to release the air from the brake cylinder, a piston actuated by air pressure, a main port c, leading to the brake cylinder and located between the said release valve and piston, a stem having one end suitably connected with the piston, and which passes through said port and imparts movement to said release valve, and a valve which is free to slide or float on said stem and open and close the said main port. 8th. A triple valve for automatic air brakes, having in combination a port c, leading to the brake cylinder, a piston actuated by air pressure, a stem having one end suitably connected with the piston and constructed to act as a graduating valve, a main valve 22, loose on said stem and which rides or floats lengthwise thereof, and is wholly supported thereby, and opens and closes the said port leading to the brake cylinder, and a stop shoulder on the stem to come in contact with the said main valve. 9th. A triple valve for automatic air brakes, having in combination a port communicating with the brake cylinder from both the auxiliary reservoir and the train pipe, means for restricting the flow to the said port of auxiliary reservoir air when applying the brakes for an emergency stop as compared with the flow of train pipe air, a piston actuated by air pressure, a stem having one end suitably connected with the piston and which is provided with a small passage for the flow of auxiliary reservoir air to apply the brakes by graduation, and a main valve 22, which rides or floats loosely on said stem, and is wholly supported thereby, and opens and closes the said port communicating with the brake cylinder, and also controls the said small graduation passage.

No. 44,173. Gas Governor. (*Régulateur du gaz.*)

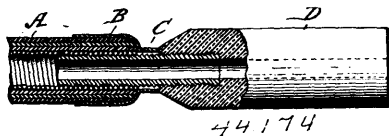


Archibald Ford, Golden Gate, California, U.S.A., 5th September, 1893; 6 years.

Claim.—The improved gas governor herein described and shown consisting of a casing having an inlet in its bottom and an outlet on its side, and provided with an annular trough at its upper end, a centrally perforated diaphragm extending over the casing and formed integral with the side walls of the same, said diaphragm having a slight annular concentric depression, sealing fluid partially filling the annular trough, an inverted cup-shaped float arranged above the diaphragm and having its edge playing in said fluid, a valve stem secured to the float and extending downward therefrom through the

diaphragm and into the inlet passage, a valve secured to the lower end of the said stem and adapted to close the lower end of the inlet, and a cap secured to the upper end of the casing and provided on its inner side with a depending annular flange of about the same diameter as the diaphragm.

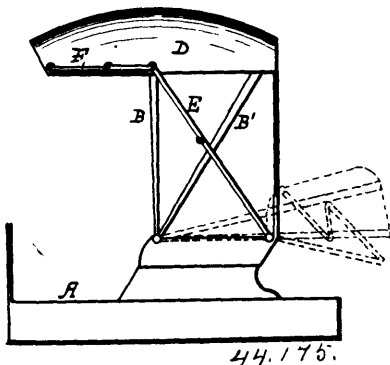
No. 44,174. Mode of Attaching Gas Tip.
(*Mode d'attacher les becs à gaz.*)



Alfred Caldwell, Providence, Rhode Island, U.S.A., 5th September, 1893; 6 years.

Claim.—1st. The combination, with a flexible tube having a coiled wire lining upon its interior, of a cap upon the end of the tube, the outer end of which is contracted and embraces the end of the tubing and has a hole opposite that of the tubing, but of a diameter slightly greater than the interior diameter of the lining of the tube, substantially as set forth. 2nd. The combination, with a flexible tube having a coiled wire lining upon its interior, of a cap upon the end of the tube, the outer end of which is contracted and provided with a short tubular portion of a diameter slightly greater than the interior diameter of the lining of the tube, substantially as set forth. 3rd. The combination, with a flexible tube having a coiled wire lining upon its interior, of a cap upon the end of the tube, the outer end of which is contracted and provided with a short tubular portion of a diameter slightly greater than the interior diameter of the lining of the tube and having a flaring mouth, substantially as set forth. 4th. The combination, with a tip or socket having a screw threaded shank, of a tube having a coiled wire lining upon its interior and a cap upon its exterior, the outer end of said cap being reduced and provided with a short cylindrical portion of a diameter slightly greater than the interior diameter of the lining and adapted to engage with the end of the wire lining at one end and with a shoulder upon the end of the tip at the other end, the exterior diameter of the shank of the tip being slightly greater than the interior diameter of the lining, substantially as set forth.

No. 44,175. Vehicle Top. (*Couverture de voiture.*)



Garland Brainard, St. John, Kalamazoo, Michigan, U.S.A., 6th September, 1893; 6 years.

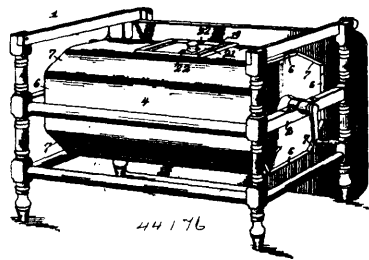
Claim.—1st. In a carriage top, the combination with the bows B, B', and their connecting braces, substantially as described, of an interposed spring bail rigidly secured to the bow B', and hinged to the bow B, substantially as and for the purpose set forth.

44,176. Washing Machine. (*Machine à blanchir.*)

William Hilton, Du Bois, Pennsylvania, U.S.A., 6th September, 1893; 6 years.

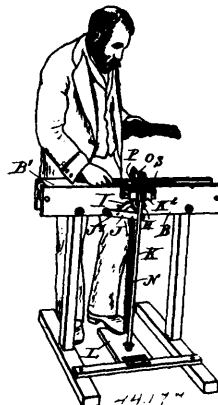
Claim.—1st. In a washing machine, the combination of a frame, a polygonal cylinder journaled in the frame, supporting cleats secured to the inner faces of the sides of the cylinder, an interior lining of wire netting arranged on the supporting cleats, longitudinally disposed, rubbing bars securing the lining of netting to the cleats, and longitudinally disposed strips arranged beneath the lining and forming buckets, substantially as described. 2nd. In a washing machine, the combination of a cylinder, a sheet metal plate arranged on an end of the cylinder parallel therewith and extending over the entire face of the same and forming a space between it and the end of the cylinder, and provided with a central opening, the diametrically disposed supporting cleats arranged beneath the plate and extending across the central opening and forming separate water buckets, substantially as described. 3rd. In a washing machine, the combination of a cylinder, a sheet

metal plate, arranged on an end of the cylinder and forming a space beneath it, and provided with a central rectangular opening,



diametrically disposed, supporting cleats arranged beneath the plate and extending across the opening and forming separate buckets, and the wire netting arranged on the exposed face of the plate, substantially as described.

No. 44,177. Addressing Machine. (*Machine à adresser.*)

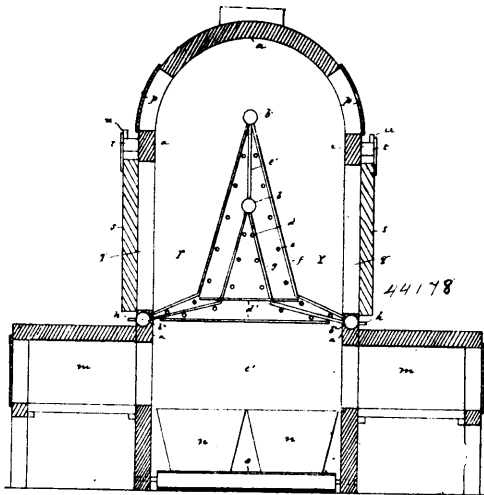


John P. O'Malley, Manistee, Michigan, U.S.A., 1893; 6 years.

Claim.—1st. An addressing machine, comprising a carriage mounted to slide, a type galley held on the said carriage, a rack arranged on the under side of the said carriage, an impression block mounted to slide toward and from the face of the said galley, a rod carrying the said impression block, a spring pressed treadle connected with the said rod, and a gear wheel in mesh with the said rack and operated from the said rod to impart a sliding motion to the said carriage on the upward motion of the said rod, substantially as shown and described. 2nd. In an addressing machine, the combination, with a carriage mounted to slide and adapted to support a type galley and a rack held on the under side of the said carriage, of a gear wheel in mesh with the said rack, a rod mounted to slide vertically, an intermediate mechanism, substantially as described, to connect the said rod with the said gear wheel to rotate the latter on the upward movement of the rod, and an impression block held on the upper end of the said rod and adapted to be moved toward the type galley on the downward stroke of the rod, as set forth. 3rd. In an addressing machine, the combination, with a carriage mounted to slide and adapted to support a type galley and a rack held on the under side of the said carriage, of a gear wheel in mesh with the said rack, a rod mounted to slide vertically, an intermediate mechanism, substantially as described, to connect the said rod with the said gear wheel to rotate the latter on the upward movement of the rod, an impression block held on the upper end of the said rod and adapted to be moved toward the type galley on the downward stroke of the rod, and a spring pressed treadle connected with the said rod, as set forth. 4th. In an addressing machine, the combination, with a carriage mounted to slide and adapted to support a type galley and a rack held on the under side of the said carriage, of a gear wheel in mesh with the said rack, a ratchet wheel held on the shaft of the said gear wheel, a pawl engaging the said ratchet wheel, a lever carrying the said pawl and having an upward and downward swinging motion, a rod having a pin engaging a slotted free end of the said lever to impart a swinging motion to the same, and a spring pressed treadle pivotally connected with the said rod, substantially as shown and described. 5th. In an addressing machine, the combination, with a carriage mounted to slide and adapted to support a type galley and a rack held on the under side of the said carriage, of a gear wheel in mesh with the said rack, a ratchet wheel held on the shaft of the said gear wheel, a pawl engaging the said ratchet wheel, a lever carrying the said pawl and having an upward and downward swinging motion, a rod having a pin engaging a slotted free end of the said lever to impart a swinging motion to the same, a spring pressed treadle pivotally connected with the said rod, and a dog engaging the said ratchet wheel to prevent a return movement, sub-

stantially as shown and described. 6th. In an addressing machine, the combination with a carriage mounted to slide, and adapted to support a type galley, and a rack held on the under side of the said carriage, of a gear wheel in mesh with the said rack, a ratchet wheel held on the shaft of the said gear wheel, a pawl engaging the said ratchet wheel, a lever carrying the said pawl and having an upward and downward swinging motion, a rod having a pin engaging a slotted free end of the said lever to impart a swinging motion to the same, a spring pressed treadle pivotally connected with the said rod, and an impression block held on the upper end of the said rod, and adapted to move toward and from the face of the galley supported on the carriage, substantially as shown and described. 7th. In an addressing machine, the combination with a guideway having part of its top covered by a cover plate, of a carriage mounted to slide longitudinally in the said guideway, a type galley supported on the said carriage, a rack secured to the under side of the said carriage, a gear wheel in mesh with the said rack, a rod mounted to slide vertically and connected with the said gear wheel to impart a rotary motion to the latter on the upward movement of the said rod, a spring pressed treadle connected with the said rod, and an impression block held on the upper end of the said rod, and adapted to move toward the said galley at the front end of the said cover plate, substantially as shown and described. 8th. In an addressing machine, the combination with a guideway having part of its top covered by a cover plate, of a carriage mounted to slide longitudinally in the said guideway, a type galley supported on the said carriage, a rack secured to the under side of the said carriage, a gear wheel in mesh with the said rack, a rod mounted to slide vertically and connected with the said gear wheel to impart a rotary motion to the latter on the upward movement of the said rod, a spring pressed treadle connected with the said rod, and an impression block held on the upper end of the said rod and adapted to move toward the said galley at the front end of the said cover plate, and a stop block for limiting the downward movement of the said rod and impression block, substantially as shown and described.

No. 44,178. Incinerator. (Incinérateur.)



Felix Louis Decarie, Montreal, Quebec, Canada, 6th September, 1893; 6 years.

Claim.—1st. The combination of the pipes *f*, with pipes *b*¹ and *b*², with pipes *c*, with pipes *e*, and furnace *c*¹, the whole substantially as and for the purpose set forth. 2nd. The combination of pipes *f*, and *g*, with pipes *b*, *b*¹, *b*², steam jacket or pipes *e*, and stop cock *a*¹, with pipes *d* and *c*, the whole substantially as and for the purposes set forth. 3rd. The combination of pipes *f* and *g*, with pipes *d* and *c*, steam jacket or pipes *e*, pipes *d* and *c*, and furnace or petroleum jets *m*, or furnace *c*¹, endless belt *o*, and trough or buckets *n*, the whole substantially as and for the purposes set forth. 4th. The combination of the pipes *f* and *g*, and pipes *b*, *b*¹ and *b*², supplied with steam or water pipes *d* and *c*, steam jacket or pipes *e*, safety valve *k*, the whole substantially as and for the purposes set forth.

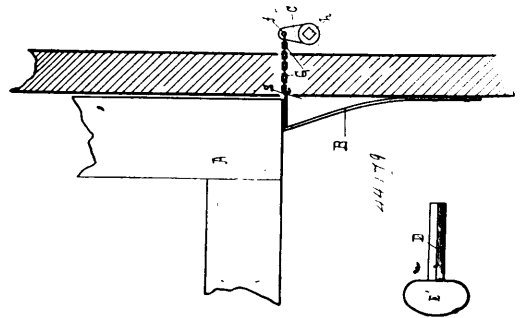
No. 44,179. Releaser for Car Window Springs.

(Déclancheur pour ressorts de croisées de chars.)

Henry Middleton Dinning, Montreal, Quebec, Canada, 6th September, 1893; 6 years.

Claim.—1st. The herein described device for releasing car window springs, consisting of the chain or link *G*, engaging with the spring *B*, and arranged to operate the same, substantially as set forth. 2nd. The tumbler *C*, combined with the shaft *D*, and the spring *B*, through the coupling *G*, substantially as and for the purposes set forth. 3rd. The shaft *D*, having the prongs or arms *C*, *C*¹, arranged

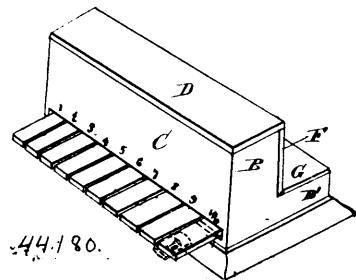
alternately to draw in or depress two springs *B*, substantially as set



forth. 4th. In a device for releasing window springs, the chain *G*, combined with the spring *B*, to release or depress the same, substantially as set forth. 5th. The handle *F*, combined with the chain *G*, attached to the spring *B*, to release the same, substantially as set forth.

No. 44,180. Holder for Needle Packets.

(Porte-paquet d'aiguilles.)



Robert Walter Kydd, Montreal, Quebec, Canada, 6th September, 1893; 6 years.

Claim.—1st. In a needle packet holder, the combination, with an enclosing casing containing a series of needle packet holding chambers and a corresponding series of delivery slides adapted to feed a single packet. 2nd. In a needle packet holder, the combination, with a base, of a superstructure containing a series of needle packet holding chambers and a corresponding series of delivery slides located at the bottoms of said chambers and adapted to support the pile of packets and feed a single packet, as described. 3rd. In a needle packet holder, the combination, with a base, of a superstructure containing a series of needle packet holding chambers, and a corresponding series of spring operated delivery slides located at the bottoms of said chambers and adapted to support the pile of packets and feed a single packet, as described. 4th. In a needle packet holder, the combination, with a base, of a superstructure containing a series of needle packet holding chambers, a corresponding series of spring operated delivery slides located at the bottoms of chambers and with one part supporting the packets in same and the other normally projecting beyond the face of the holder. 5th. In a needle packet holder, the combination, with a base, of a superstructure containing a series of needle packet holding chambers, a corresponding series of spring operated delivery slides with one half projecting beyond the face of the holder, the first named or inner half length being higher than the other and presenting a feeding shoulder, as set forth. 6th. In a needle packet holder, the combination, with a base, of a superstructure containing a series of needle packet holding chambers correspondingly numbered on their receiving and delivery sides, the former of which is movable, a corresponding series of spring operated delivery slides located at the bottoms of said chambers and with one part projecting beyond the face of the holder. 7th. In a needle packet holder, the combination, with a base, of a superstructure containing a series of needle packet holding chambers, a corresponding series of delivery slides double the length of said chambers, guides for said slides, operating springs and determining stops for normally locating said slides with half their length within and half without said chambers, as set forth.

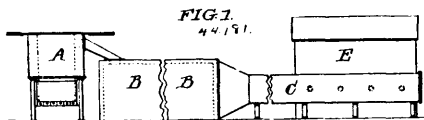
No. 44,181. Means of Saving Metallic Particles.

(Moyen de sauver les particules métalliques.)

Dennis Sheedy, Malvern W. Iles and Arthur Chamute, all of Denver, Colorado, U.S.A., 6th September, 1893; 6 years.

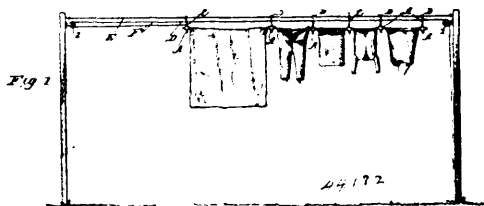
Claim.—1st. The method of saving the metallic particles driven off from high cupola shaft furnaces, consisting in conducting the smoke from said furnaces through a system of dust chambers to effect the separation of the metallic constituents in the form of dust

by subsidence therein, then conducting the fume, freed from dust, and after cooling it to a safe temperature, through a system of



screens, to separate the lead in the form of fume from the gaseous constituents of the smoke. 2nd. The method of saving the metallic particles driven off from high cupola shaft furnaces, consisting in conducting the smoke from said furnaces through a system of dust chambers to effect the separation of the metallic constituents in the form of dust by subsidence therein, then conducting the fume, freed from dust, and after cooling it to a safe temperature, through a system of screens, to separate the lead in the form of fume from the gaseous constituents of the smoke, then fusing the dust collected in the dust chambers to fit it to be recharged into the blast furnace, and igniting the fume separated by the screens to cause it to cinder and bring it to a condition to be recharged.

No. 44,182. Clothes Pin. (Epinglé à linge.)

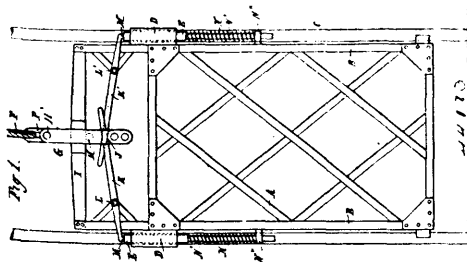


John Wesley Cook, Harrisburgh, Oregon, U.S.A., 6th September, 1893; 6 years.

Claim.—1st. A clothes pin, provided with a bearing to run upon the supporting line, a guide opening for the pulling cord and a plurality of clasps for holding the clothing, whereby the article of clothing being dried may be utilized to connect the adjacent pins, substantially as set forth. 2nd. A clothes pin, having at its upper end a bearing to run upon the supporting line and provided below such bearing with a guide opening for the pulling cord and below such opening with the clasps, substantially as shown and described. 3rd. The improved clothes pin, formed of wire bent and twisted to form the clasps A, and the guide opening C, and provided with a bearing to run upon the supporting wire, substantially as set forth. 4th. The combination of the supporting line and its supports, the guide pulleys, 1 and 2, the clothes pins, having bearings arranged to run on the supporting line, and also having guide openings for the pulling cord and provided below such opening with a plurality of clasps whereby the clothes being dried may be utilized to connect the adjacent pins, and the pulling cord passed over pulley 1, thence through the guide openings of the pins around the pulley 2, and then back and secured to the foremost pin, all substantially as and for the purpose set forth.

No. 44,183. Safety Appliances for Elevators.

(Appareil de sûreté pour élévateurs.)

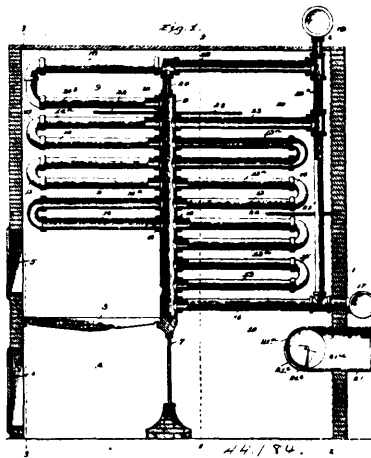


Jules Des Georges, Paris, France, 6th September, 1893; 6 years.

Claim.—1st. A safety appliance for elevators, consisting of a pair of wedges on each guide post held slidingly in a box secured to the cage, said wedges pressed upwards in engagement with said post and box by springs, and downwards by levers, supported in a frame held suspended by the cable or chain, and adapted to drop when said suspension ceases, substantially as set forth. 2nd. The com-

ination with the cage A, and posts C, of the boxes D, secured to the cage near and surrounding each post, wedges E, held slidingly in said boxes and bearing on said posts, springs N holding up such wedges, levers K and K', pressing down said wedges against the pressure of the springs, a frame G, having spaced cross bars H, H', and J, by which the cage is suspended from the cross beam, and which holds up the inner ends of the levers, substantially as set forth.

No. 44,184. Boiler. (Chaudière.)



Charles S. Hopkins, Arlington, New Jersey, U.S.A., 6th September, 1893; 6 years.

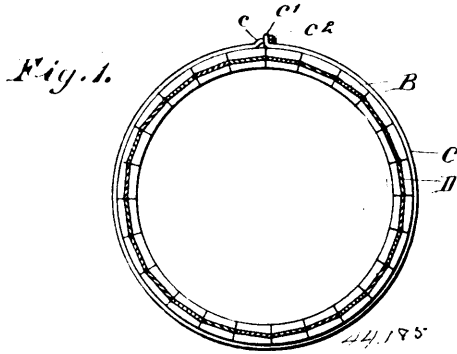
Claim.—1st. A sectional water tube boiler, comprising sections consisting of central stand pipes, and a separate vertical series of circulating pipes for such stand pipe, substantially as set forth. 2nd. A water tube boiler, the same comprising stand pipes, a single front series of circulating pipes, and a single rear series of circulating pipes to each stand pipe, and return bends connecting said pipes in pairs, so that the top pipes of the pairs on one side of each stand pipe will be opposite the bottom pipes of the pairs on the opposite side, and vice versa, substantially as set forth. 3rd. The combination with the fire box, stand pipes forming a water back for the fire box, a front series of circulating pipes connected with the stand pipes, and located above the fire box, a rear series of circulating pipes connected with the stand pipes, a supply pipe, a discharge pipe, and a smoke pipe, whereby the products of combustion are permitted to pass up through the spaces between the front circulating pipes over the stand pipes, down through the spaces between the rear circulating pipes, and out through the smoke pipe, substantially as set forth. 4th. The combination of stand pipes of a water tube boiler, circulating pipes, some of which are located above the fire box, and others at the rear, each stand pipe and its circulating pipes forming a section, eduction pipes located above the stand pipes, spaced pipes connecting the eduction pipes and stand pipes, and arranged to permit the passage of the products of combustion between them and over the stand pipes, substantially as set forth. 5th. In a water tube boiler, a group of sections, each section being separate and distinct from the other, and stand pipes provided with circulating pipes, said stand pipes being arranged closely together, and said circulating pipes being staggered, substantially as set forth. 6th. In a water tube boiler, the combination with a stand pipe, provided with screw threaded bosses, having flared extensions, of circulating pipes adapted to be screwed into said bosses, substantially as set forth. 7th. The herein described smoke pipe provided with a cylindrical head having a longitudinal mouth or slot, in combination with a swinging damper located inside of and curved concentrically with the head, substantially as set forth.

No. 44,185. Wooden Pipe. (Tuyau en bois.)

Archie McL. Hawks, Tacoma, Washington, U.S.A., 6th September, 1893; 6 years.

Claim.—1st. As a new article of manufacture, a pipe, tube or like article, formed of staves, the latter having transverse dove-tailed grooves in their ends, the opposing grooved ends being united by double dove-tailed blocks, substantially as described. 2nd. As a new article of manufacture, a pipe, tube or like article, formed of staves, the latter having transverse dove-tailed grooves in their ends, the opposing grooved ends being united by double dove-tailed blocks fitting said grooves and serving to maintain the ends of opposing staves in close contact, substantially as described. 3rd. The herein described impervious wooden pipe, the same being formed of staves

having bands encircling the same, the bands being means for tightening them on the pipe, and the staves being united together at the



ends by double dovetail blocks fitting corresponding grooves in the opposed ends of the staves, substantially as described.

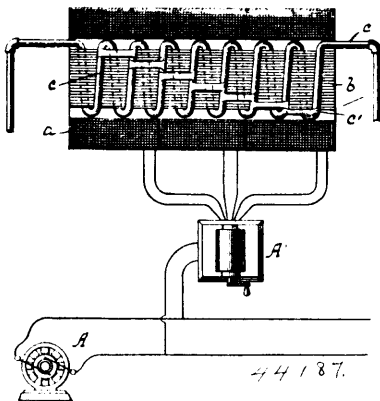
No. 44,186. Method of Producing Ornamentation.

(Méthode de production d'ornementation.)

Photo-Litho Transfer Co., assignee of Francois Schmalz, all of New York, State of New York, U.S.A., 6th September, 1893; 6 years.

Claim.—The herein described process of ornamentation, which consists in providing a sheet of paper or other suitable backing with a soluble coating or film, forming a design upon such soluble film, covering the design with a coating or film of rubber, coating the article to be ornamented with a solution of gelatine and chrome alum, affixing the rubber film to the coating of gelatine and chrome alum, saturating the backing with a liquid which will dissolve the soluble film and removing the backing, substantially as described.

No. 44,187. Electric Heater. (Calorifère électrique.)



Earl P. Wetmore, Helena, Montana, Sidney Z. Mitchell, Portland, Oregon, and Charles E. Roehl, Chicago, Illinois, all in the U.S.A., 7th September, 1893; 6 years.

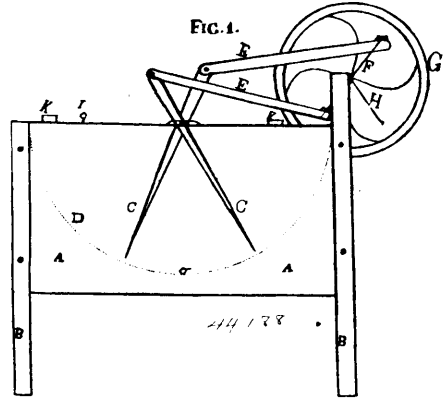
Claim.—1st. An electric heater consisting of a transformer, converter, or other inductorium having a tubular secondary coil closed electrically upon itself, substantially as described. 2nd. An electric heater consisting of a transformer, converter, or other inductorium, the secondary coil of which is a tube, the convolutions of which are bridged by strips of electric conducting material, for the purpose set forth. 3rd. An electric heating apparatus consisting of the combination of a generator of alternating or pulsating continuous currents, a primary coil through which such currents circulate, an iron core inside of said primary coil, a secondary coil in the form of a tube through which there is a continuous passage for fluids, said tube surrounding the iron core and its convolutions being bridged to divide the coil into a number of closed circuits, substantially as described.

No. 44,188. Churn. (Baratte.)

Norman A. Hicks, Township of Matawathan, Ontario, Canada, 7th September, 1893; 6 years.

Claim.—1st. In a churn, the combination of the crooked shaft F, and the two arms E E, connected to the paddle C C, substantially

as and for the purpose hereinbefore set forth. 2nd. In a churn, the



paddles C C, and the way in which they work, substantially as and for the purpose hereinbefore set forth.

No. 44,189. Postal Tube. (Tube postal.)

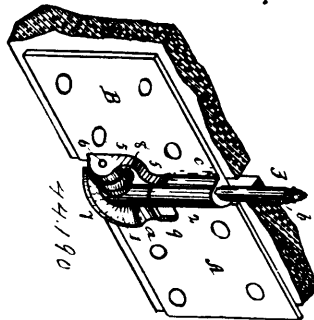


Peter Tyrer, Bexley Heath, Kent, England, 7th September, 1893; 6 years.

Claim.—As an improved article of manufacture, a tube for the transmission of papers, said tube having an aperture or apertures in the substance of said tube, substantially as described.

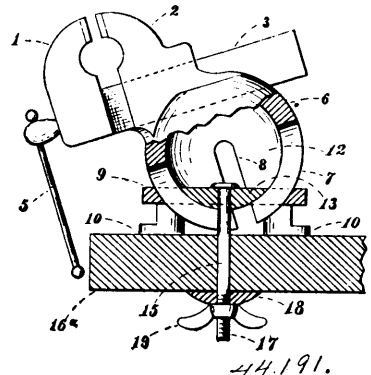
No. 44,190. Hinge. (Penture.)

James Grierson Smith, Covington, Kentucky, U.S.A., 7th September, 1893; 6 years.



Claim.—A butt hinge, consisting of the two leaves A and B, one provided with long pintle 3, the inclined way 7, having the recess a, at its highest point and the recess 9, through said leaf at a point opposite the inclined way, and the other leaf provided with a long eye 2, engaging the pintle and with the anti-friction roller 4, adapted to travel on the inclined way and partially enter the recess in the pintle carrying leaf, substantially as described.

No. 44,191. Vice. (Etau.)

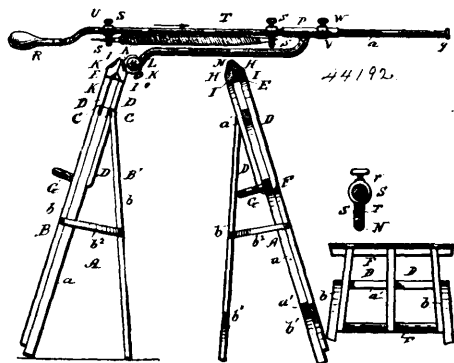


Albert Kane, Buffalo, New York, U.S.A., 7th September, 1893; 6 years.

Claim.—In a vice, the combination with the jaw 2, which carries and supports the jaw 1, its parallel guiding bar and operating parts, of a spherical portion having an interior spherical chamber provided with narrow cross openings in its lower half, a socket frame in

which the spherical portion rests, and a bolt having an enlarged head located within the spherical chamber, the bolt extending down through the cross openings and terminating in a screw portion adapted to pass through a bench, and provided with a thumb nut for securing it in position and to a bench, substantially as described.

No. 44,192. Saw Clamp. (*Crampon pour scies.*)

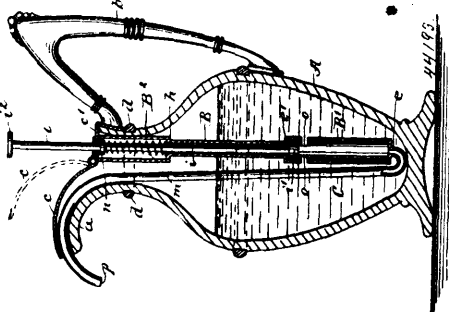


Marvel D. Miner, Leyden, and Charles C. Miner, Charlemont, all in Massachusetts, U.S.A., 7th September, 1893; 6 years.

Claim.—1st. In a saw clamp, the combination of the central main frame, levers arranged on opposite sides of said frame and carrying clamping jaws, a continuous cam shaft extending across the main frame from one leg to the opposite one and passing between the levers carrying the jaws, and said frames of less length than the central frame and pivotally connected thereto, substantially as described. 2nd. In a saw clamp, the combination with a suitable frame, of the jaws carried by said frame, and each provided in their outer face with a longitudinal groove, a bed arranged to move longitudinally in said groove, an arm carried by said bed and adapted to turn freely in all directions, a sleeve carried by the outer free end of the arm, a longitudinally movable rod fitted in said sleeve, and file carriers adjustably connected to said rod, substantially as described. 3rd. In a saw clamp, the combination with a supporting frame, of the jaws provided with the longitudinal grooves in their outer faces, means for moving said jaws laterally, a sliding bed fitted in the groove in one of the jaws, an arm having a ball and socket in connection, with the bed on the jaw and carrying a sleeve at its outer end, a rod extending through and movable longitudinally in said sleeve, and the file carriers adjustably connected to said rod, substantially as described. 4th. In a saw clamp, the combination with a supporting frame, of the laterally movable and longitudinally grooved jaws, the metallic plates secured to the outer faces of the jaws, and extending partially over the grooves therein, a bed provided on its under face with a rib which fits in the groove in one of the jaws, and is provided on opposite sides with grooves to receive the inner edges of the metallic plates, an arm connected to said bed so as to turn freely in all directions, a sleeve supported at the outer free end of said arm, an endwise movable rod fitted in said sleeve, and provided at one end with a handle and at its other end with an enlarged head, and file carriers adjustably connected to said rod, substantially as and for the purpose described.

No. 44,193. Safety Eucharistic Water Cruet.

(*Burette de sûreté à eau.*)



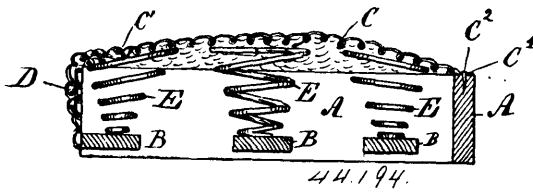
Leo. C. Beaudet, Mount Vernon, New York, U.S.A., 7th September, 1893; 6 years.

Claim.—1st. The combination, with a portable vessel, open at its top and sealed with a lid, of a liquid expelling device in said vessel, having a barrel, a plunger therein, and a tube adapted to discharge the liquid in drops, substantially as described. 2nd. The combination with a cruet, having a lip at one side of its top opening, of a liquid receiving and expelling device, and an exit pipe therefor, which will discharge a measured modicum of the liquid over the lip, substantially as described. 3rd. The combination with a cruet,

having a lip at one side of its top opening, a fixed cap piece covering a part of said opening, and a hinged lid covering the lip and the other part of said opening, of a liquid receiving and expelling device in the cruet, projected above its cap piece, and also over the lip, and adapted by manipulation to discharge a modicum of liquid from the cruet by a single expulsion or by successive drops, substantially as described. 4th. The combination with a cruet, having a lip at one side of its top aperture, a handle opposite said lip, a fixed cap piece covering part of the aperture, and a hinged lid over the lip, of a cylindrical barrel contracted in diameter intermediately of its ends, forming a liquid cylinder at its lower end and a spring casing at its upper end, and a rod guide between the cylinder and casing, a pusher rod in said barrel, a plunger head on the rod adapted to slide water tight in the liquid cylinder, the latter being of a predetermined capacity and laterally apertured near its upper end, a spring in the case adapted by expansion to elevate the rod and its head, and a push piece on the rod above the cruet, substantially as described.

No. 44,194. Woven Wire Cushion and Upholstery.

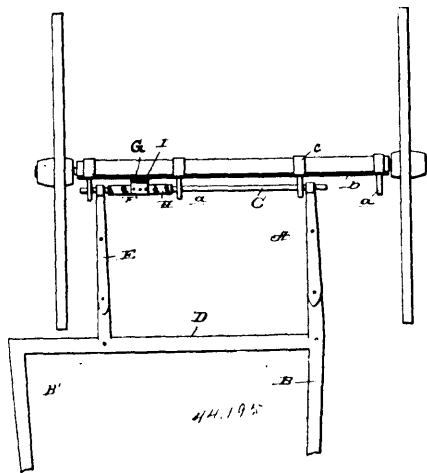
(*Coussinet en tissu de fil de fer et tapisserie.*)



James H. Munro and Alexander R. Munro, New Glasgow, Nova Scotia, Canada, 7th September, 1893; 6 years.

Claim.—1st. The combination together by the frame, composed of three rectangular walls connected together by slats B, B, of the wire cloth top C, secured to the top edge of said walls and spiral springs E, secured to said slats B, and supporting said top C, flexibly, as set forth. 2nd. A cushion having a woven wire top C, secured to side, and a back wall A, A, the front edge of said top H, having the ends of the wires flattened out and an additional piece D, woven thereto, and slats B, connecting said side walls, and spiral springs E, between said slats and top, as set forth.

No. 44,195. Thill Coupler. (*Arçon de limonière.*)

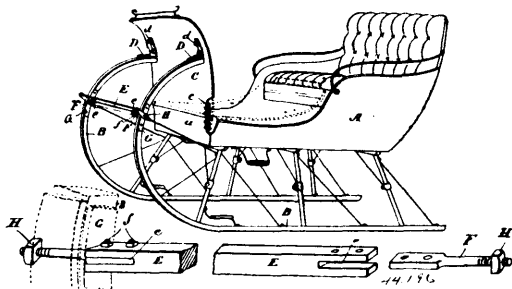


Louis De Cailly, Fort Madison, Iowa, U.S.A., 7th September, 1893; 6 years.

Claim.—1st. The shafts or thills, comprising the shaft B, and shaft B', of a less length than the shaft B, the transverse bar D, connected to the inner end of the shaft B', and also connected to the shaft B, at an intermediate point in the length thereof, in combination with the slidable rod, bearings for said rod adapted to be connected to a vehicle axle, and a pressure device adapted to adjustably fix the rod and comprising a hinge, one member of which is adapted to be connected to the vehicle axle, a bar or plate connected to the free member of the hinge, and a spring adapted to exert a pressure upon the free member of the said hinge, so as to hold the latter against the slidable rod, substantially as and for the purposes specified. 2nd. In a thill coupling, the combination of a bar b, adapted to be connected to a vehicle axle, and having a series of transversely disposed eyes upon its forward side, a slidable rod loosely mounted in the eyes of the bar b, and a suitable means for adjustably fixing the said slidable rod, substantially as and for the purpose set forth. 3rd. In a thill coupling, substantially as de-

scribed, the combination of a bar *b*, having the apertured blocks *c*¹, and also having a series of transversely disposed eyes upon its forward side, a slidable rod loosely mounted in the eyes of the bar *b*, and a suitable means for adjustably fixing the said slidable rod, substantially as and for the purpose set forth. 4th. In a thill coupling, the combination of a slidable rod, bearings for said rod adapted to be connected to a vehicle axle, and a pressure device adapted to adjustably fix the rod and comprising a hinge, one member of which is adapted to be connected to the vehicle axle, a bar or plate connected to the free member of the hinge, and a spring adapted to exert a pressure upon the free member of the hinge and the bar or plate, so as to hold the latter against the slidable rod, substantially as and for the purpose set forth.

No. 44,196. Sleigh. (Traineau.)

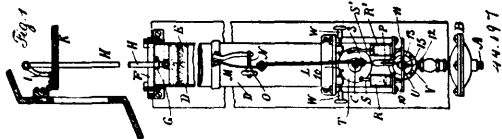


Robert McLaughlin, Oshawa, Ontario, Canada, 7th September, 1893; 6 years.

Claim.—1st. In a sleigh or cutter, the combination with the body, of a dashboard, hinged or otherwise attached to the front of the body *A*, and removably connected to the curved end of the runners by the brackets *D*, as and for the purpose specified. 2nd. In a sleigh or cutter, the combination with the body, of a dashboard, hinged or otherwise attached to the front of the body *A*, and removably connected to the curved ends of the runners by the brackets *D*, and a stiffening slotted bar *E*, the end bolts *F*, of which extend through the runners, as and for the purpose specified.

No. 44,197. Ventilator for Greenhouses.

(Ventilateur pour serre-chaude.)

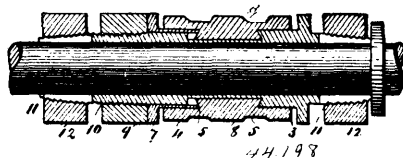


Frederick C. Chadborn, Newburg, New York, U.S.A., 7th September, 1893; 6 years.

Claim.—1st. The combination, with the ventilator, of a cylinder, piston and connections to the ventilator, a main cock by which liquid under pressure is admitted to the cylinder or allowed to escape, cylinders and pistons acting to turn the main cock in either one direction or the other, a thermostat and a three way cock actuated by the thermostat to admit liquid under pressure to either of the cylinders and pistons that move the main cock, and to allow the escape of liquid from the other of said cylinders, substantially as specified. 2nd. The combination, with the ventilating devices, of a motor cylinder and piston, a rod connected with the ventilator, a removable cross key at the end of the cylinder and through which the piston rod passes, and an adjustable collar on the piston rod for regulating the piston of the parts when the ventilator is opened and a cock or valve for admitting fluid pressure to act upon the piston, substantially as set forth. 3rd. The combination, with the thermostatic blade having one end held firmly and adjustably, of a fork at the moving end of the blade, a cock with a lever arm engaging with and turned by the fork of the thermostat, a ventilator, a cylinder and piston for moving the same, a supply pipe for liquid under pressure and a main cock for regulating the admission of liquid to and discharge from such cylinder, cylinders and pistons acting in opposite direction to turn said main cock, and supply pipes for liquid under pressure and regulated by the thermostatic cock, for admitting the liquid to either of the cylinders for moving the main cock, substantially as specified. 4th. The combination, with the thermostatic blade having one end held firmly and adjustably, of a fork at the moving end of the blade, a cock with a lever arm engaging and turned by the fork of the thermostat, a ventilator, a cylinder and piston for moving the same, a supply pipe for liquid under pressure and a main cock for regulating the admission of liquid to and discharge from such cylinder, stops for arresting the movement of

the main cock, cylinders and pistons acting in opposite directions to turn said main cock, and supply pipes for liquid under pressure and regulated by the thermostatic cock for admitting the liquid to either of the cylinders for moving the main cock, substantially as specified. 5th. The combination in thermostatic ventilating apparatus, of a thermostatic blade fastened at one end and provided with a fork at the other end, a cock having pipes for a fluid under pressure to act in regulating the ventilating apparatus, a turning plug for said cock and an adjustable crank arm to such plug and means for holding the same when adjusted to vary the leverage of the crank arm and the movement of the plug by given changes of temperature to regulate the speed of movement of the ventilating apparatus, substantially as specified. 6th. The combination, with a thermostat, a ventilating apparatus, a motor cylinder and a supply for liquid under pressure, of a delicate cock or valve, an adjustable crank arm between the thermostat and the cock for regulating the action of the thermostat in opening and closing said cock, and an adjusting screw to prevent the pressure of the fluid producing undue friction of the delicate thermostatic cock on the seat, substantially as set forth.

No. 44,198. Cutter Head. (Porte-outil.)



Charles Louis Goehring, Allegheny, Pennsylvania, U.S.A., 7th September, 1893; 6 years.

Claim.—1st. In a cutting mechanism, the combination with a live spindle or shaft, of a cutter head comprising bit holding devices and a supporting sleeve or tubular portion encircling the shaft, said sleeve being slotted at points on opposite sides of the cutters or bits, and provided with compressing or wedging devices, such as nuts 12, operating to compress the slotted sections of said sleeve and cause it to firmly bind upon the spindle, substantially as described. 2nd. The combination of the live spindle, the sleeve with split externally tapered ends, the conical nuts engaging the tapered sections, the bit clamping sections formed upon the sleeve, and the co-operating bit clamping section adjustably mounted upon the sleeve, substantially as described. 3rd. In a cutting mechanism, the combination with a live spindle or shaft, of a cutter head comprising bit holding devices, and a supporting sleeve or tubular portion encircling the shaft, said sleeve being slotted at points on opposite sides of the cutters or bits, and provided with compressing or wedging devices such as nuts 12, operating to compress the slotted sections of said sleeve and cause it to firmly bind upon the spindle, and co-operating projections and recesses between one of the slotted ends of the cutter head, and the spindle for preventing slipping, substantially as described.

No. 44,199. Clothes Washing Compound.

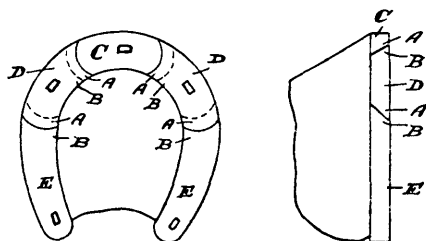
(Composition de matières pour laver le linge.)

Thomas Leonard, Montreal, Quebec, Canada, 7th September, 1893; 6 years.

Résumé.—Une composition de matières formée de chaux, de soda à laver et d'eau dans les proportions ci-dessus décrites et employée de la manière et pour les fins ci-dessus mentionnées.

No. 44,200. Shoe for Hoofed Animals.

(Fer pour sabots d'animaux.)



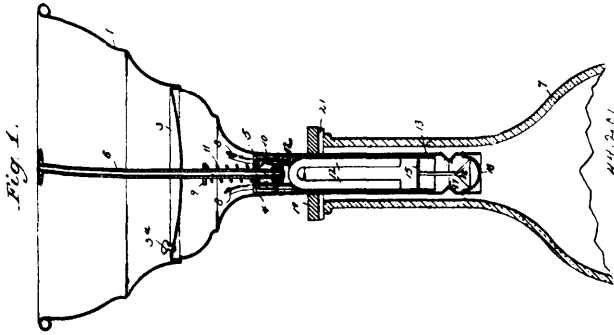
44,200. FIG 4.

Mary Emily Poupard, West Norwood, Surrey, England, 8th September, 1893; 6 years.

Claim.—1st. A sectional shoe for horses or other hoofed animals, comprising three or more sectional parts, abutting upon one another by contact faces without pins, adapted to admit of the radial movement of one section to another, and that one section may interlock with its adjoining section. 2nd. In a sectional shoe for horses

or other hoofed animals, the combination of a separate toe piece, two heel pieces and intermediate sections, all abutting upon one another by contact faces without pins, adapted to admit of radial movement of one section to another, and to interlock one section with its adjoining section. 3rd. In a sectional shoe for horses or other hoofed animals, the combination with a separate toe piece of an unequal number of sections on either side of toe piece, making radially moving and interlocking abutments with one another to form a three-quarter or other fractional shoe. 4th. The arrangement and combination of parts forming a sectional shoe for horses or other hoofed animals, substantially as described and illustrated or herewith.

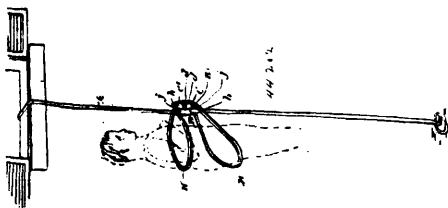
No. 44,201. Funnel. (Entonnoir.)



Edward Napoleon Gaudron, Brooklyn, New York, U.S.A., 8th September, 1893; 6 years.

Claim.—1st. A funnel provided with a magnet, and a float valve influenced thereby to close funnel, substantially as described. 2nd. A funnel provided with a yielding or elastically held magnet, and a float valve influenced thereby to close the funnel, substantially as described. 3rd. A funnel provided with a magnet having a casing guarding it from down flowing substances, and a float valve influenced by the magnet to close the funnel, substantially as described. 4th. A funnel provided with a magnet removable upward from the funnel body, and a valve influenced by magnet to close the funnel and removable downward from the funnel stem, substantially as described. 5th. A funnel provided with a magnet having a casing guarding it from down flowing substances, and removable upward from the funnel body, and a valve influenced by the magnet to close the funnel and removable downward from the funnel stem, substantially as described. 6th. A funnel provided with a magnet having casing guarding it from down flowing substances, a tubular venting rod connected to the magnet casing and opening thereto, and a valve influenced by the magnet to close the funnel, substantially as described. 7th. A funnel provided with a magnet, a valve influenced thereby to close the funnel, and a bail or part below the valve normally sustaining it but permitting its removal from the funnel stem, substantially as described. 8th. A funnel provided with a magnet, a valve influenced thereby to close the funnel, and an adjustable bridge or support on the funnel controlling the level of fluid within the filled vessel which closes the valve, substantially as described. 9th. A funnel provided with a magnet, a valve influenced thereby to close the funnel, and an adjustable bridge or support on the funnel controlling the level of fluid within the filled vessel which closes the valve, said bridge having vent passages, substantially as described. 10th. The combination in a funnel device of a magnet within the funnel, a rod sustaining the magnet and provided with two stationary collars or shoulders, and a loose supporting plate above the lower collar and adapted to a shoulder of the funnel body, and a spring on the rod between the upper collar and the loose plate, substantially as described.

No. 44,202. Fire Escape. (Sauveteur d'incendie.)

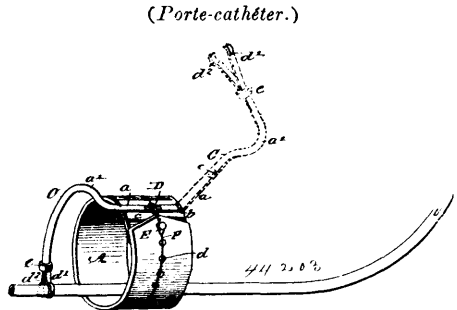


Cyrus Electus Harvey, Waterloo, Quebec, Canada, 8th September, 1893; 6 years.

Claim.—1st. A fire escape comprising a suspended rope, and a travelling friction block composed of an outer perforated frame or casing, and an inner cylinder or drum having a worm recess upon its

periphery in which portion of said rope is wound, as set forth. 2nd. In a fire escape, the combination of a suspended rope, a travelling friction block composed of an outer perforated frame or casing, an inner cylinder or drum around which a portion of said rope is wound, and a cleat bar or projection on the exterior of said casing, as set forth. 3rd. In a fire escape, the combination of a suspended rope, a travelling friction block composed of an outer perforated frame or casing formed of an outer cylinder and two sides having interlocking points, an inner cylinder or drum around which a portion of said rope is wound, a central bolt and a cleat shaped nut, as set forth. 4th. In a fire escape, the combination of a suspended rope, a travelling friction block composed of outer perforated frame or casing formed of an outer cylinder, and two sides having interlocking points, an inner cylinder or drum around which a portion of said rope is wound, a central screw bolt, a cleat shaped nut, and a body support secured to said frame or casing, as set forth. 5th. In a fire escape, the combination of a suspended rope, a travelling friction block composed of an outer perforated sectional frame or casing, an inner cylinder or drum around which a portion of said rope is wound, and a body support secured to said frame or casing, as set forth.

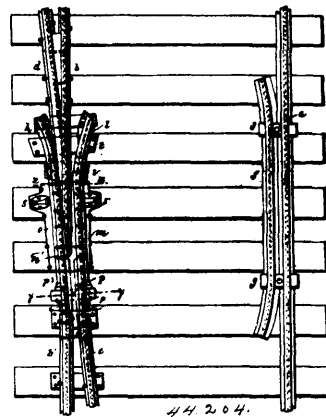
No. 44,203. Holder for Catheters. (Porte-cathéter.)



William W. Lovejoy, Cohetuate, Massachusetts, U.S.A., 8th September, 1893; 6 years.

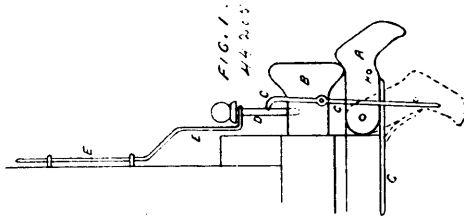
Claim.—1st. A catheter holder, substantially as herein shown and described. 2nd. A catheter holder, consisting of a collar, a clamping arm movably connected with the collar, and a locking device, adapted to hold the arm stationary upon the collar, substantially as shown and described. 3rd. A catheter holder, consisting of a collar, a clamping arm hinged upon the collar, adapted to extend downward below one end of a collar, the lower end of the clamping arm being provided with jaws, and a locking device adapted to hold the arm stationary upon the collar, as described.

No. 44,204. Frog for Railways. (Rail de croisement.)



Joseph Wood, Red Bank, New Jersey, U.S.A., 8th September, 1893; 6 years.

Claim.—1st. The combination, of the wing rails *h*, and *l*, the point *n*, fixed on plate *o*, the plate *t*, and the plate or bar *r*, fastened to said wing rails and adapted to move with them while abutting against the straight opposing edges of the plates *o* and *t*, to prevent "walking" of the wing rails, substantially as set forth. 2nd. The combination with ties or supports, and the point rails of a plain metallic plate secured to said supports and point rails, the wing rails, a metallic piece firmly secured to the latter and projecting below the said wing rails and adapted to engage the plate upon the supports, to prevent "walking" of said wing rails, substantially as described.

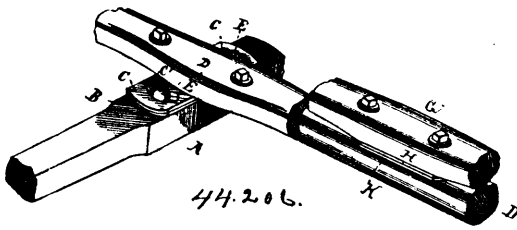
No. 44,205. Car Coupler. (Attelage de chars.)

Frank Peck, Peterboro, Ontario, Canada, 8th September, 1893; 6 years.

Claim.—The combination of the guide A, rod C, connecting rod E, lever handles F, F', substantially as and for the purpose hereinbefore set forth.

No. 44,206. Coupler for Whiffletrees. (Attelage de palonnier.)

(Attelage de palonnier.)

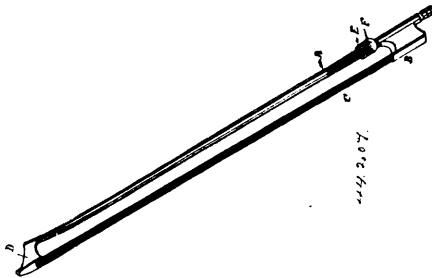


Alonzo Haggerty, Cambridgeboro, Pennsylvania, U.S.A., 8th September, 1893; 6 years.

Claim.—In connectors of single to double trees, the single tree plate constructed with a central stud and an arc slot on each side thereof, in combination with two headed and end threaded bolts passing through said arc slots and carrying end nuts below the double tree, whereby the plates are held at each end to one another and not at the centre, thereby dispensing with the ordinary central king bolt and preventing the ends of the single tree from rising up.

No. 44,207. Bow for Stringed Musical Instruments. (Archet pour instruments de musique à corde.)

(Archet pour instruments de musique à corde.)



Emil A. Kretschmer, Horicon, Wisconsin, U.S.A., 8th September, 1893; 6 years.

Claim.—1st. An attachment for bows for stringed instruments, comprising a slide and a screw extending through the slide to secure it in proper position on the bow and provided with a concave head forming a thumb piece, substantially as set forth. 2nd. The combination, with the bow, of the slide mounted on the bow staff and having a transverse threaded aperture and a screw extending through the aperture into contact with the bow staff and provided with a head having a concave outer face to receive the end of the thumb, substantially as set forth.

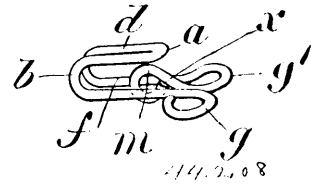
No. 44,208. Hook for Garments. (Agrafe pour vêtements.)

(Agrafe pour vêtements.)

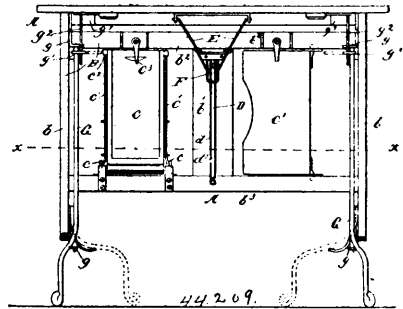
Cornelius James Brosnan, Springfield, Massachusetts, U.S.A., 8th September, 1893; 6 years.

Claim.—A hook member of a hook-and-eye constructed of wire doubled upon itself and formed into a hook, the free ends of the wire extended inwardly and approximately parallel with each other to form the shank and bent into attaching eyes, the wire forming one of said eyes being extended forwardly and formed into an additional

closed eye lying between the two parts of the shank in a median

Fig. 1.

line under the bill of the hook proper adjacent and at a right angle to the said attaching eye, substantially as described.

No. 44,209. Folding Table (Table pliante.)**Fig. 1.**

Nicholas Schumacher, La Motte, Iowa, U.S.A., 8th September, 1893; 6 years.

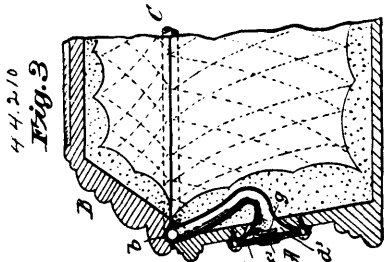
Claim.—1st. In a folding table, the combination of a suitable centrally located frame, a hinged leaf or leaves, legs journalled on said frame and provided at their lower ends with laterally projecting feet and at their upper ends with outwardly extending arms, whereby when a leaf or leaves are lowered they will strike the outwardly extending arms at the upper ends of the legs and force the feet connected to the legs inward, substantially as described. 2nd. In a folding table, the combination of a centrally arranged frame, hinged leaves, downwardly and outwardly projecting bars secured to the under side of the leaves of the table, legs journalled on the frame and provided at their lower ends with laterally projecting feet, and at their upper ends with outwardly extending arms which engage the bars depending from the under side of the table and are adapted to be struck by the leaves of the table in the act of lowering the same, whereby the feet are simultaneously and automatically turned inward, substantially as described. 3rd. In a table provided with a hinged leaf and folding feet, the combination of a centrally and vertically arranged stationary frame, a notched space guide vertically secured to said guide, a leaf support attached by one of its ends to the under side of the leaf while its free end engages said guide and is adapted to operate in the same, the guide being constructed of two flat spaced bars, one of which is provided with notches, and a spring for holding the support in engagement with a notch, substantially as for the the purpose described. 4th. In a folding table, the combination of a centrally arranged frame, hinged leaves provided on their under sides with supports, legs journalled on the frame and provided at their lower ends with laterally projecting feet and at their upper ends with outwardly extending arms, the feet being adapted to be turned inward and outward in the act of lowering and raising the leaves of the table, and a notched guide on the frame which is engaged by the support and adapted to operate in the same, substantially as described. 5th. A table provided with a centrally arranged frame to which a drawer compartment is journalled in such a manner as to be capable of being moved in and outward and access had to the same from either side of the table and to be drawn outward by means of rods extending along and attached to the side of the drawer and forming at their lower ends journals for the drawer to swing upon, substantially as described.

No. 44,210. Burial Casket. (Cercueil.)

James Alfred Lakin, Westfield, Massachusetts, U.S.A., 8th September, 1893; 6 years.

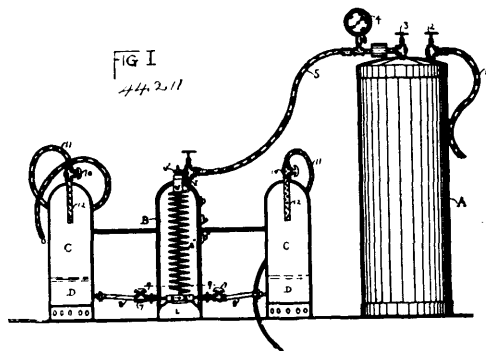
Claim.—1st. A burial case comprising the receptacle and the lid, the one or both having a groove along the line of closure, and an inflatable air tube in the groove constituted spaces, and an air conduit leading from the exterior of the case, and communicating with the air tube and having a check valve, substantially as described. 2nd. The combination with the burial case with the lid

grooved, substantially as described, and the air tube of the conduit *d*, having the flexible branches *d*¹, *d*², to which the terminals of the



air tube are connected, said conduit also having the flaring extremity terminating at the exterior of the case and the bushing plate *f*, having the opening and a check valve thereat, substantially as and for the purposes set forth.

No. 44,211. Apparatus for heating and administering Medicated Air. (*Appareil pour réchauffer et administrer de l'air imprégné de substances médicinales.*)



William S. McLean, Saginaw City, Michigan, U.S.A., 8th September, 1893; 6 years.

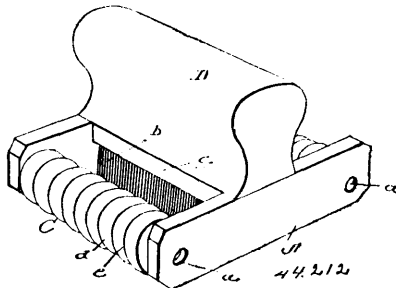
Claim.—1st. In an apparatus for heating medicated air, a heater *B* having walls *b*, *b*¹, *b*¹¹, the inner wall being asbestos or other non-heat conducting material, a chamber for receiving a lamp, coiled pipe *B*¹¹ within the heater adapted to be secured to a tube conducting air from an air compressor box *B*¹, connected to the other end of the coiled pipe within the heater, pipes *8*, *8*, leading from the pipe *B*¹, through the outside of the heater, and the ventilator *V* provided with a damper *I*, as and for the purpose set forth. 2nd. In a device for heating, medicating, and administering compressed air, the combination with an air compressor and gauge, of the heater *B*, provided with a coiled tube within the heater for receiving the compressed air, and a chamber below the tube for receiving a lamp or other heater, and provided with a vent *V*, the pipe *5* with its valve for conducting the air from the compressor to the coiled tube of the heater, the medicated chamber *C* containing medicated fluid, the pipe *8* with its valves for conveying the heated air from the side of the heater to the bottom or sides of the medicating chamber opening into the medicated fluids, the perforated tube *12*, valve *10*, and tube *11* for conveying the heated and medicated air to the air passages of the body, substantially as described, as and for the purpose set forth. 3rd. In a device for heating, medicating and administering compressed air, the combination with an air compressor and gauge, of a heater adapted to receive compressed air from the air compressor, and provided with a lamp or other means of heating whereby air may be heated, pipe *5* with its valves conducting the air from the air compressor to the heater, the medicating chamber *C* containing medicating fluids, and means for conveying the air from the air heater into the body of the medicating fluid, and the perforated tube *12*, valve *10*, and tube *11* for conveying the heated and medicated air to the lungs and air passages, substantially as and for the purpose set forth.

No. 44,212. Washing Machine. (*Machine à blanchir.*)

Gerhardus C. Carman, St. John City, New Brunswick, 8th September, 1893; 6 years.

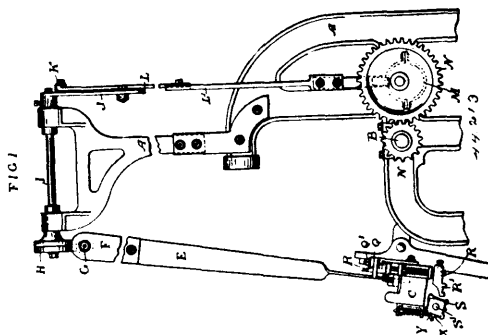
Claim.—As an improved article of manufacture, a hand scrubber, comprising the handle, the brush head carrying the bristles and arranged beneath the handle, the two parallel side bars fixed to opposite ends of the brush head, and having the journal apertures

near their opposite lower end, and the corrugated rollers arranged one on each side of the brush, and journalled in said apertures, the



rollers and brush being fixed with respect to each other, substantially as specified.

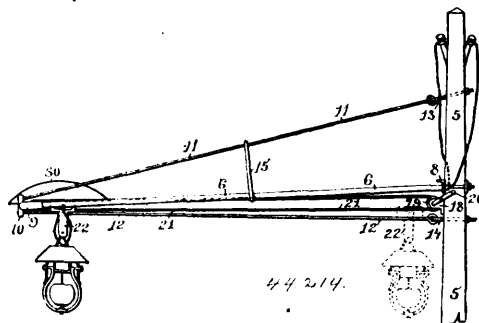
No. 44,213. Loom. (*Métier à tisser.*)



James Moss and Abraham Moss, Hebden Bridge, York, England, 8th September, 1893; 6 years.

Claim.—1st. In looms for weaving, the employment therein of spring steel picking arms, connected together through a reciprocating connecting rod and lever connection, for the purpose of moving backward and forward together in unison. 2nd. In looms for weaving, the employment therein of spring steel picking arms, connected together through a reciprocating connecting rod and lever connection, and operated substantially as herein shown and described. 3rd. In looms for weaving, the employment therein of spring steel picking arms, connected together through a reciprocating connecting rod and lever connection, in combination with holding and releasing triggers operated substantially as herein shown and described. 4th. In looms for weaving, having spring steel picking arms and holding and releasing triggers, the combination therewith of the horizontal rod *S*¹, operated in the manner and for the purpose shown and described herein. 5th. In looms for weaving, having spring steel picking arms, the combination therewith of a clutch such as *H*, for adjusting and regulating the force or strength of the pick, as described herein. 6th. The general arrangement, construction, and combination of parts forming our improved picking motion, all substantially as shown and described.

No. 44,214. Mast Arm. (*Bras de mâts.*)

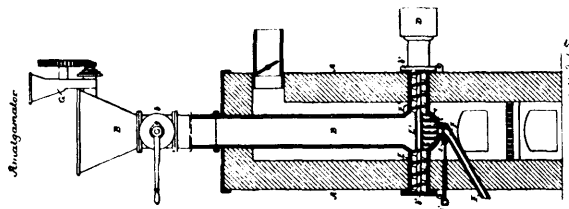


Augustus Wright, Providence, Rhode Island, U.S.A., 8th September, 1893; 6 years.

Claim.—1st. In a mast arm, the combination, with a tubular frame formed by the fitting *9*, and the side stays *6* and *7*, and a cross arm *8*, secured to the butt ends of said stays, of an upper stay

11, secured to the outer end of said frame and supporting the same, a tension trolley stay 12, for depressing the outer end of the mast arm, adapted to support, a lamp carriage, and means for operating said carriage, as described. 2nd. In a mast arm, the combination with a tubular frame formed by the fitting 9, and the side stays 6 and 7, a cross arm 8, secured to the butt ends of said stays, an upper stay 11, secured to the outer end of said frame and supporting the same, and a trolley stay 12, carrying the lamp support or carriage 22, and means for operating said carriage, of a switch, secured to the outer end of said tubular frame, adapted to be operated by said carriage, to cut the lamp into and out of circuit, as described. 3rd. In a mast arm, the combination with a tubular frame formed by the tubular stays 6 and 7, and the fitting 9, suitably supported and containing electrical conductors, the insulating blocks 25 and 26, secured to said stays and provided with spring contact plates connected with said conductors, and a spring operated circuit closing device also connected with said conductors, of a lamp carriage 22, moving on a trolley stay 12, and provided with the contact plates 24, 24, connected with opposite poles of the lamp, and a forwardly extending bent arm 23, adapted to operate said circuit closing device, as described.

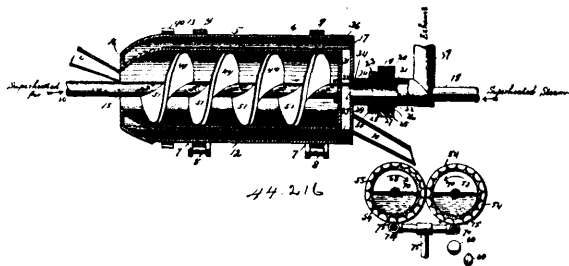
No. 44,215. Amalgamator. (Amalgamateur.)



Arthur Kitson, Philadelphia, Pennsylvania, U.S.A., and Alexander Keith, Toronto, Canada, assignees of Thomas Walker and John F. Carter, both of Philadelphia, Pennsylvania, U.S.A., 9th September, 1893; 6 years.

Claim. 1st. The combination, in an amalgamator, of the furnace, the upright retort therein, a pan forming the bottom of said retort with a valved passage communicating with the base of the pan and extending to a point outside of the furnace, substantially as described. 2nd. The combination in an amalgamator, of the furnace, the upright retort therein, a hopper for feeding the retort, chambers on each side of the retort and communicating therewith at the base, a pan extending below the chamber and forming the base of the retort, feeding mechanism in the chambers, and agitating mechanism in the base of the retort for agitating the amalgam in the pan, a tube communicating with the base of the pan and extending to a point outside of the furnace, with a valve for cutting off the flow of amalgam to the tube, substantially as described.

No. 44,216. Artificial Fuel. (Combustible artificiel.)

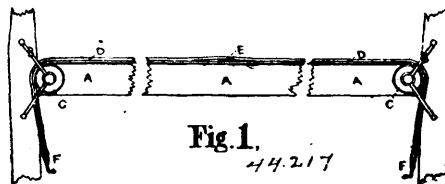


Herman S. Albrecht, St. Louis, Missouri, U.S.A., 9th September, 1893; 6 years.

Claim. 1st. The improved method of making artificial fuel, which consists in first disintegrating lignite or the like, passing the disintegrated material into a cylinder or hollow drier having an annular space surrounding it, simultaneously mixing and drying the material in said cylinder by revolving the cylinder in one direction and revolving a conveyor in said cylinder in the opposite direction, simultaneously subjecting the material in said cylinder to the action of escaping jets of hot air therein and passing superheated steam or hot air through the annular space surrounding said cylinder, thereby raising the temperature of said material in said cylinder and causing it to assume a semi-plastic condition, then passing said semi-plastic material in a highly heated condition between revolving hollow rolls having opposite lens-shaped recesses in their faces, thereby pressing said material into separate cakes while in said highly heated condition, and finally passing cooled water or other cooling material through said hollow rolls and thereby cooling the cakes while they are located in the recesses in said rolls, substantially as herein specified. 2nd. In an improved apparatus for making

artificial heat, the combined drier and conveyer, having an outer shell cylindrical in form and mounted upon a series of rolls so as to be revolved during the operation, provided with an inner shell also cylindrical in form, but of smaller diameter than the outer shell so as to form an annular space surrounding said inner shell, the ends of this annular space being closed, means for revolving the cylindrical drier in a given direction, means whereby superheated steam or hot air may be caused to circulate through the annular space surrounding said inner shell, a tubular shaft extending longitudinally in said drier, a conveyer mounted upon said shaft, said shaft having a series of jet openings communicating with its interior and arranged to discharge hot air in said drier, means for revolving said shaft and said conveyer in the direction opposite to that in which the shell of the drier revolves, and means for supplying hot air in said tubular shaft, and for discharging the same through said jet apertures while said shaft is revolving in said direction, substantially as herein specified. 3rd. The improved apparatus for making artificial fuel, consisting of a disintegrator into which the material is first introduced, a combined drier and conveyer constructed with an outer shell cylindrical in form and mounted to revolve and provided with an inner shell of smaller diameter than the outer shell so as to form an annular space surrounding said inner shell, the ends of this annular space being closed, means whereby superheated steam or hot air may be supplied to said annular space while it revolves, a conveyer shaft mounted within said inner shell in suitable bearings to revolve, a conveyer mounted upon said conveyer shaft, said conveyer shaft being tubular and having a passage therethrough and provided with a series of small apertures communicating with its passage to discharge small jets of hot air in said inner shell, means for revolving said shaft and said conveyer in a direction opposite to that in which the shells of the drier revolve, means for supplying hot air to said tubular shaft while it is revolving, and a chute connecting with said disintegrator to discharge the disintegrated material into the drier, substantially as herein specified. 4th. In an apparatus for making artificial fuel, the improved rolls for simultaneously pressing semi-plastic highly heated material in the form of cakes and cooling same, said rolls being hollow and constructed with means for passing cold water therethrough while they are revolving, and having opposite lens-shaped recesses in their faces, so that when said material is passed between the same will be compressed and formed into circular cakes having rounded edges, substantially as herein specified. 5th. In an apparatus for making artificial fuel, the rolls having cold water jets 75 beneath them, substantially as set forth.

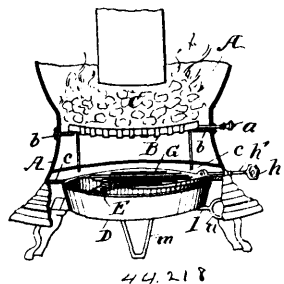
No. 44,217. Whiffetree. (Palonnier.)



Robert J. Neithercut, Wananesa, and Alonzo F. Kempton, Hilton, all in Manitoba, Canada, 9th September, 1893; 6 years.

Claim.—The combination of the strap D, D, and the pulleys C, C, with the clips or couplers F, F, and the stop E, in the manner shown, and substantially as and for the purpose hereinbefore set forth.

No. 44,218. Ash Sifter. (Crible à cendres.)

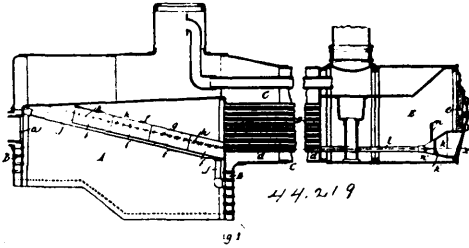


Albert Edwin Trentowsky, St. John, New Brunswick, Canada, 9th September, 1893; 6 years.

Claim. 1st. An ash sifter device, comprising a pan, a rocking prop bar thereon, transversely secured on the lower side having a leg to engage the floor, and a handle on the bar whereby it may be rocked, means for removably securing the pan below a hole in the base wall of a stove or similar heating device, and a sifter grate vibratile above the ash pan, substantially as described. 2nd. An ash sifting device, comprising a circular ash pan having opposite

lugs thereon, a cross bar extending diametrically from edge to edge of a circular aperture in the base wall of a stove or similar heating device and secured thereto, and adapted to be engaged by the lugs on the ash pan, a rocking prop bar on the bottom of the ash pan to normally rest on the floor, having a depending leg, and a handle on the prop bar adapted for a rocking vibration, a sifting grate pivoted to receive a rotatable motion on the cross bar, and an operating lever for the grate, substantially as described. 3rd. The combination with the apertured base plate of a stove, and a cross bar secured at its ends diametrically across said aperture, a circular ash pan, diametrically opposite lugs thereon, adapted to engage the ends of the cross bar, a prop rod rotatable beneath the ash pan, an integral bent leg thereon, a handle ring on one end of said prop rod, and a toe on the other end thereof, a circular sifting grate pivoted centrally on the cross bar, and a vibratile lever on the sifting grate, substantially as described.

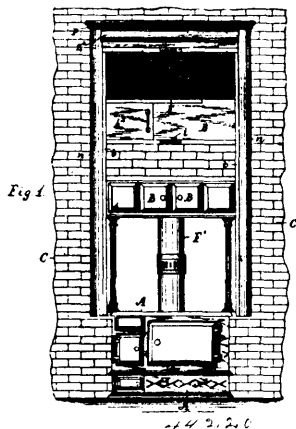
No. 44,219. Smoke Consumer. (Foyer fumivore.)



John Milton, Washington, Columbia, U.S.A., 9th September, 1893; 6 years.

Claim.—1st. A smoke consumer for furnaces consisting of a series of air tubes laterally perforated and located above the fuel at the plane of combustion. 2nd. A smoke consumer for furnaces, consisting of a series of air tubes of fire clay or other refractory material perforated on opposite sides, and resting on and supported by a series of water circulating pipes. 3rd. A smoke consumer for locomotive boiler furnaces, consisting of a series of air tubes laterally perforated and located above the fuel at the plane of combustion, air pipes or flues leading to said tubes and a funnel or funnels in said pipes. 4th. In a locomotive boiler furnace, a series of air tubes of fire clay or other refractory material perforated on opposite sides, and resting on and supported by a series of water circulating pipes, air pipes or flues leading to said tubes, and a funnel or funnels in said pipes or flues. 5th. In combination with a locomotive boiler furnace, a series of air tubes of fire clay or other refractory material, perforated on opposite sides, and resting on and supported by a series of water circulating pipes, air pipes or flues leading to said tubes, a funnel or funnels in the forward end of the locomotive connected to the flues, a steam pipe or pipes leading to the flues, a valve in said steam pipe and a wind vane in connection with said valve, for the purpose set forth.

No. 44,220. Movable Hood for Stoves. (Capuchon mobile pour poêle.)



The Heat and Odour Extinguisher Company, Elizabeth, assignee of Benjamin F. Carpenter, Roselle, all of New Jersey, U.S.A., 9th September, 1893; 6 years.

Claim.—1st. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, guides upon the front of such wall forming the sides of such passage, an outlet flue for such passage, a hood fitted movably to such guides with means to counterbalance and raise the hood, a spring curtain roll mounted at the top

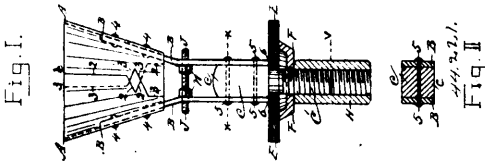
of the guides and a curtain fitted movably upon the guides and attached to the top of the hood, as set forth. 2nd. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, guides upon the front of such wall forming the sides of such passage, an outlet flue in such wall between the guides, a hood fitted movably to such guides with cords and weights to balance the same, a spring curtain roll mounted at the top of the guides and a curtain fitted movably upon the guides and provided at the bottom with a stiffening bar having a handle and means to engage the top of the hood, as set forth. 3rd. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, vertical guides upon the front of such wall, a hood movable to and from the top of the range upon such guides, and a top piece and flexible curtain for enclosing the passage between the guides, substantially as herein set forth. 4th. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, vertical guides upon the front of such wall, a hood movable to and from the top of the range upon such guides, a top piece and flexible curtain for enclosing the passage between the guides, and a damper in such outlet flue, as set forth. 5th. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, vertical guides upon the front of such wall, a hood movable to and from the top of the range upon such guides, a top piece and flexible curtain for enclosing the passage between the guides, and a damper in such outlet flue, as set forth. 6th. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, vertical guides upon the front of such wall, a hood movable to and from the top of the range upon such guides, a top piece and flexible curtain for enclosing the passage between the guides, and a damper in such outlet flue, as set forth. 7th. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, wooden plates *m*, provided with grooves *m*¹, and attached to the wall, as described, vertical pockets *n*, secured upon the plates, wooden guides attached to the outer edges of the pockets, a hood fitted to the outer guides and to the grooves *m*¹, and means for counterbalancing and raising the hood, substantially as set forth. 8th. The combination, with a range, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, wooden plates *m*, provided with grooves *m*¹, and attached to the wall as described, vertical pockets *n*, secured upon the plates, wooden guides attached to the outer edges of the pockets, a hook fitted to the outer guides, trolleys projected back from the opposite edges of the hood, the wheels *x*¹, *x*¹, pivoted upon the trolleys, the pulleys *o*², at the tops of the pockets, the cords *o*¹, attached to the trolleys and carried over the pulleys, and the weights *o*, for counterbalancing the hood, as herein set forth. 9th. The combination, with a range or stove, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, vertical guides *t* and *m*, of non-resonant material attached to the wall, a hood movable to and from the top of the stove with wheels fitted to such guides, and an extensible connection to the outlet flue, substantially as herein set forth. 10th. The combination, with a range or stove, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, guides upon the front of the wall, a hood fitted movably to such guides, a top piece and curtain for enclosing the chamber between the guides, and a packing inserted between the wall and the guides, substantially as set forth. 11th. The combination, with a range or stove, of a wall adapted to form the rear of a ventilating passage, an outlet flue in such wall, guides upon the front of the wall, a hood counterbalanced and fitted movably to such guides, a spring curtain roll mounted at the top of the guides, a curtain fitted movably upon the guides and detachably connected at the bottom of the hood, and chains or cords for limiting the separation of the curtain and hood, as set forth. 12th. The hood fixtures for a range or stove, consisting of the wooden plates *m*, adapted for attachment to a chimney breast, and provided with suitable guides and vertical pockets *n*, the top piece *P*, the curtain roller *r*, the curtain *g*, the hood movable upon the guides, and the means, as cords and weights, for balancing the hood, substantially as set forth. 13th. The hood fixtures for a range or stove, consisting of the wooden plates *m*, adapted for attachment to a chimney breast and provided with suitable guides and vertical pockets *n*, the top piece *P*, the curtain roller *r*, the curtain *g*, the hood movable upon the guides, and the cords and weights for balancing the hood, as set forth. 14th. The hood fixtures for a range or stove, consisting of the wooden plates *m*, adapted for attachment to a chimney breast and provided with suitable guides and vertical pockets *n*, the top piece *P*, the curtain roller *r*, the curtain *g*, the hood movable upon the guides, the cords and weights for balancing the hood, and the plates, guides, curtain and all combustible parts being chemically treated to render them incombustible, as set forth. 15th. The combination, with a range, of a supplemental wall supported by the range to form the rear of a ventilating passage, guides attached to the range and to the front side of such wall, a hood movable vertically upon the guides, and an outlet flue in the wall and an extensible connection from the hood to such outlet flue, as set forth.

No. 44,221. Cleaner for Boiler Tubes. (Nettoyeur de tubes de chaudières.)

Richard Thomas Brooke and Robert Gillies, both of Paris, Ontario, Canada, 9th September, 1893; 6 years.

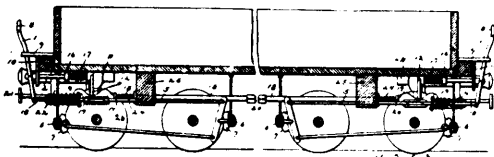
Claim.—1st. In a boiler tube cleaner, the combination of the bell-shaped blade *A*, secured to the bent side straps *B* at 4, the rod *C*,

to which said straps are secured at 5, forming shoulder 6, for flexible washer E, the concave washer F, the shank c', and the coupling



H, substantially as and for the purpose hereinbefore set forth. 2nd. The bent straps B, secured to blades A at 4, the square rod c, having threaded shank c', in combination with the through bolt J, provided with nuts n, to engage with the insides of said straps, substantially as described and set forth.

No. 44,222. Brake. (Frein.)

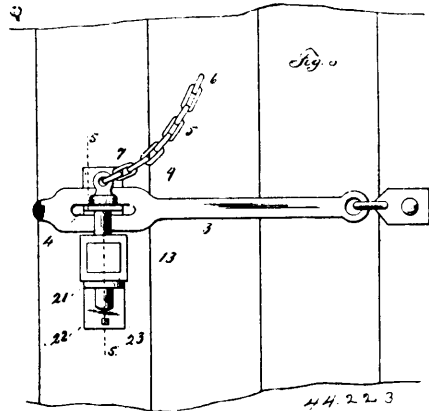


William B. Anderson, George L. Daugherty, Benjamin A. Hunter, William G. Cowley, and Robert P. Daugherty, all of Elizabethtown, Kentucky, U.S.A., 9th September, 1893; 6 years.

Claim.—1st. The combination of a car having a brake provided with a brake rod, an operating lever mounted on the car and having one end connected with said brake rod and extending upward and having its upper end arranged to engage a similar operating lever of another car, and means for shifting the fulcrum of the lever, whereby the brake will be released and the lever will be prevented from operating, substantially as described. 2nd. The combination of a car, a brake having a brake rod, a fulcrum bar mounted on the car, and having a longitudinal movement thereon, an operating lever fulcrumed on said bar and connected with the brake rod, a gravity latch lever arranged to engage the fulcrum bar to prevent the same moving inward, and means for disengaging the latch lever from the fulcrum bar, substantially as described. 3rd. The combination of a car, a brake having a brake rod, a longitudinally movable fulcrum bar mounted on the car, a latch lever arranged to engage the fulcrum bar to lock the same against longitudinal movement, an operating lever fulcrumed on said bar and connected with the brake rod, and a push rod having a bevelled lug arranged to engage the latch lever to lift the same out of engagement with the fulcrum bar, substantially as described. 4th. The combination of a car, a brake having a brake rod, a longitudinally movable fulcrum bar mounted on the car, a brake operating lever pivoted to the fulcrum bar and connected with the brake rod, a pivoted latch lever arranged to engage the fulcrum bar to lock the same against longitudinal movement, a push rod provided with oppositely disposed bevelled lugs arranged at each side of the latch lever, whereby when the push rod is moved in either direction the latch lever will be lifted out of engagement with the fulcrum bar, substantially as described. 5th. The combination of a car, a brake having a brake rod, a longitudinally movable fulcrum bar mounted on the car, an operating lever pivoted to the fulcrum bar and connected with the brake rod, a pivoted latch lever arranged to engage the fulcrum bar, a push rod extending beneath the car and provided with a head to engage the head of a similar push rod, and provided with bevelled lugs arranged at each side of the latch lever, substantially as described. 6th. The combination of a car, a brake having a brake rod, a movable fulcrum bar mounted on the car, an operating lever pivoted to the fulcrum bar and connected with the brake rod, a pivoted latch lever arranged to engage the fulcrum bar, and to hold the same against movement, and a push rod extending beneath the car, and provided at each end with a head to engage a similar head of another push rod, and provided with oppositely disposed bevelled lugs arranged on each side of the latch lever, and a spiral spring disposed on the push rod to return the same to its normal position, substantially as described. 7th. The combination of a car, a brake having a brake rod, a movable fulcrum bar mounted on the car, an operating lever pivoted to the fulcrum bar and connected with the brake rod, a casing having a way and receiving the inner end of the fulcrum bar, and provided with an opening communicating with said way, a pivoted latch lever having one end bent upward and arranged at said opening, and a push rod for lifting the latch lever out of engagement with the fulcrum bar, substantially as described. 8th. The combination with a train of cars, brakes arranged on the cars and having brake rods, fulcrum bars mounted for movement on the cars, operating levers pivoted to the fulcrum bars and connected with the brake rods and provided with engaging heads, latch levers for holding the fulcrum bars against movement, push rods extending beneath the cars and

provided at the ends of the same with engaging heads, and having oppositely bevelled lugs for engaging the latch levers, and means for actuating the push rods, substantially as described. 9th. The combination with a push rod section 30 having a head, a main push rod 28, a lever connecting the rear end of the main push rod 28 with the push rod section, and a cylinder having a piston connected with the main push rod, of a brake having a brake rod, a longitudinally movable fulcrum bar, an operating lever pivoted to the fulcrum bar and connected with the brake rod, a pivoted latch lever arranged to engage the fulcrum bar, and a push rod section adapted to disengage the latch lever, and arranged to be engaged by the push rod section 30, substantially as described.

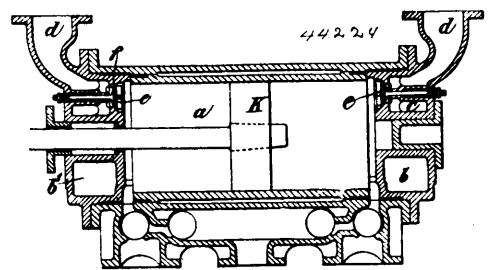
No. 44,223. Seal for Cars. (Scrau pour chars.)



James W. Dawson and George W. Allen, both of St. Louis, Missouri, U.S.A., 9th September, 1893; 6 years.

Claim.—1st. A car seal constructed with a pin, carrying a spring at its lower end, in combination with a frangible seal in the form of a hollow shell, having a shoulder to engage the spring on said pin, substantially as set forth. 2nd. A car seal, constructed with a pin, carrying springs on its lower end, said spring being on opposite sides, constructed to engage a shoulder on the inner surface of a frangible seal, substantially as set forth. 3rd. A car seal constructed with an opening or bore 24, throughout its entire length, an annular shoulder formed on the inner side of said seal, and a pin 8, constructed with springs 11, arranged to engage said annular flange, to prevent withdrawal of the seal from said pin, without fracture of the seal, substantially as set forth.

No. 44,224. Steam Engine. (Machine à vapeur.)

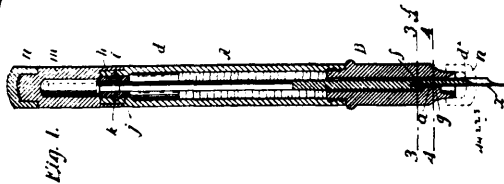


James Musgrave and George Dixon, both of Bolton in the county of Lancaster, and Edward Field and Francis Sanders Morris, both of Buckingham Street, Adelphi, London, England, 9th September, 1893; 6 years.

Claim.—1st. Causing heated air or gas to be introduced into a steam engine cylinder, during the period of exhaust at the same side of the piston, and in such a manner as to take the place of the escaping motive fluid that has just previously done work in the cylinder, such heated air or gas being when the piston is nearing the end of its stroke, and the exhaust port closes, compressed into the clearance space preparatory to the admission of steam for effecting the return stroke as set forth. 2nd. A compound steam engine, wherein steam is expanded in the usual way, in one or more cylinders and is afterwards expanded into a lower pressure cylinder, into which heated air or gas is introduced during the exhaustion of the motive fluid from such lower pressure cylinder, the heated air or gas, so introduced, being compressed within the clearance space, as hereinabove described. 3rd. In an engine of the kind referred to, admitting heated air or gas, in the manner set forth to the cylinder, for the purpose specified, through ports controlled by valves arranged at the side of the cylinder and supplied

mental to the steam admission ports, as described. 4th. In an engine of the kind referred to in claim 1st, admitting heated air or gas to the cylinder, for the purposes specified, through ports controlled by valves arranged in the cylinders, covers and supplemental to the steam admission ports as described. 5th. In an engine of the kind referred to, admitting heated air or gas through a hollow piston to the cylinder, for the purpose specified. 6th. In an engine of the kind referred to in claim 1st, admitting heated air or gas to the cylinder, for the purpose specified, through a hollow piston and rod from a reservoir, into which the hollow rod enters, as described. 7th. In an engine of the kind referred to, supplying heated air or gas to the engine cylinder by means of a pump, the piston of which is made hollow, is connected to the hollow piston rod and piston of the engine, and is provided with valves for admitting heated air or gas to the said hollow piston rod during the working of the pump, as described.

No. 44,225. Fountain Pen. (Plume-fontaine.)



Joseph E. Chase, assignee of Morris Woodbury Moore, all of Holyoke, Massachusetts, U.S.A., 9th September, 1893; 6 years.

Claim.—1st. A fountain pen having a barrel or reservoir provided with an opening in its upper end, a longitudinally movable rod located in said barrel having one end extending through the opening in the upper end of the barrel and a pen secured to the rod at its other end, a tip section secured to the barrel and provided with a longitudinal passage constituting a way for the movement of the pen in and out of said sections and a groove for the passage of the ink, a removable cap on the upper end of the reservoir having an opening for the reception of the rod, and another cap to close the lower end of the tip section and adapted to fit on the upper cap, all substantially as described. 2nd. In a fountain pen, the combination with the reservoir or barrel having in its forward end the tip with the pen endwise movable therein, and with a suitable inkway leading from the reservoir to the pen, of a rod located within the reservoir and having one end formed split to embrace the upper end of the pen and having the uniting rivet and the rod having an extension downwardly under the pen, and said rod having its upper end projected through a suitably packed opening therefor in the upper end of the barrel, substantially as described. 3rd. In a fountain pen, the combination with the barrel or reservoir having in its upper end a circular opening with a peripheral depression, the annular packing of soft rubber having an external circumferential bead and the rod movable through the packing, substantially as and for the purpose set forth.

No. 44,226. Fountain Pen. (Plume-fontaine.)

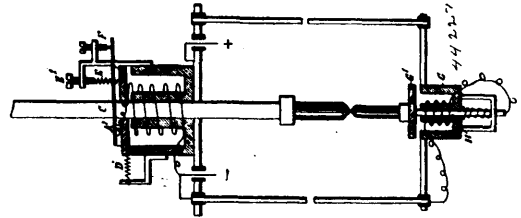


James J. Dowd, assignee of William Albert Leary, both of Holyoke, Massachusetts, U.S.A., 9th September, 1893; 6 years.

Claim.—1st. In a fountain pen of the class herein described in which the writing pen has a free longitudinal movement within the tip thereof, as described, the combination with said tip and the writing pen, of a cap fitting said tip and a supplementary base for said cap against which the point of the writing pen impinges, having a free swivelling movement within said cap, substantially as set forth. 2nd. In a fountain pen of the class herein described in which the writing pen has a free longitudinal movement within the tip thereof, as described, the combination with said tip and the writing pen, of a cap fitting said tip having a socket in the base thereof, a supplementary base for said cap against which the writing pen impinges, having a shank thereon in which is an annular groove, freely entering said socket, and a pin in said cap having one end entering said groove, substantially as set forth. 3rd. In a fountain pen, the combination with the barrel or reservoir, of the tip consisting of the upper section *a*, having the passage longitudinally through it and in communication with the reservoir chamber and having the seat *d*, the cylindrical section having its end portion jointed to the upper section, and having the pen way *f*, the ink channel and its lower end chambered, the pen movable endwise within said lower tip section, the spring and the closing plug with the rubber body in its inner end, substantially as de-

scribed. 4th. The combination with the barrel of the upper tip section screwing therewith the longitudinal passage, contracted at its upper end to form the seat, the lower tip section having the lower end chambered, and having the passage longitudinally through it which is transversely of arc form, and along which is also the duct *h*, and the groove *m*, the pen in said arc passage, the spring behind the pen resting on said seat, and having an extension thereof extended transversely through a rear portion of the pen shank and then angularly turned and forwardly extended within said groove, and the closing plug having the soft rubber body in its end, substantially as and for the purposes set forth. 5th. In a fountain pen the barrel having a tip connected therewith, which has a longitudinal chamber or passage in its upper portion, and its lower portion with a longitudinal way therethrough having a transverse contour approximately corresponding to the cross sectional form of the pen, an ink channel next to said pen way, and the pen having its shank within said longitudinal way and longitudinally movable therein, and a spring above the pen for forcing it forward, substantially as described. 6th. In a fountain pen the barrel having a tip connected therewith which has a longitudinal chamber or passage in its upper portion, and its lower portion with a longitudinal way therethrough, having a cross sectional contour corresponding to the cross sectional form of the pen, and an ink channel next to said pen way, and said lower portion having its lower extremity chambered, and the pen movable endwise through the lower tip section, a spring behind the pen for forcing it longitudinally forward, and a cap or plug adapted to enter the said chambered tip extremity to close same forcing the pen rearwardly, substantially as set forth.

No. 44,227. Cutter Head. (Porte-lames.)

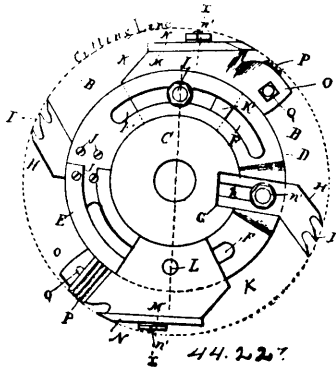


Kilburg Nelson and Okey J. Simons, both of West Duluth, Minnesota, U.S.A., 9th September, 1893; 6 years.

Claim.—1st. In a rotary cutter of the class described, the cutter wheel, having oppositely slanting or inclined rim sections, cutter heads circumferentially adjustable on said sections, and intermediate cutters adjustably secured to said wheel between said cutter heads, substantially as set forth. 2nd. In a rotary cutter, the cutter wheel having opposite seats arranged on opposite sides of the same, single saw toothed cutters mounted in said seats, and means for radially and laterally adjusting each cutter, substantially as set forth. 3rd. In a device of the class described, the cutter wheel having opposite notched seats arranged at opposite edges and at opposite sides of the same, interchangeable saw toothed cutters mounted for longitudinal adjustment in said seats, and a series of adjusting screws arranged to engage the inner sides of said cutters to adjust the same laterally in opposite directions away from the wheel, substantially as set forth. 4th. In a rotary cutter of the class described, the cutter wheel having opposite rim sections set at opposite inclinations to the vertical plane of the hub of the wheel and on both sides thereof, cutter heads circumferentially adjustable on each of said inclined sections at both sides of the wheel to secure a consequent simultaneous lateral adjustment, and cutters adjustably mounted on said heads, substantially as set forth. 5th. In a rotary cutter of the class described, the wheel having oppositely slanting or inclined rim sections in which are formed curved slots, sliding cutter heads moving against opposite faces of the opposite rim sections and having lugs projecting into said slots, bolts passing through said cutter heads and said slots, cutters adjustably mounted on said heads, and intermediate cutters arranged between said cutter heads, substantially as set forth. 6th. In a rotary cutter of the class described, the cutter wheel having opposite rim sections arranged at an angle to each other, opposite cutter heads circumferentially adjustable on said rim sections to secure a consequent lateral adjustment and provided with flattened edges and grooves in advance of said edges, plain cutters adjustably mounted on said flattened edges, and saw cutters adjustably mounted in said grooves, substantially as set forth. 7th. In a rotary cutter of the class described, the cutter wheel having opposite rim sections, opposite sliding cutter heads circumferentially and laterally adjustable on said rim sections and provided with slightly inclined flattened edges and arms having dove-tailed grooves in advance of said flattened edges, plain cutters adjustably mounted on said flattened edges, saw cutters radially adjustable in said grooves, and toothed cutters adjustably mounted on the wheel between the cutter heads, substantially as set forth.

No. 44,228. Electric Arc Lamp.

(*Lampe électrique à arc.*)

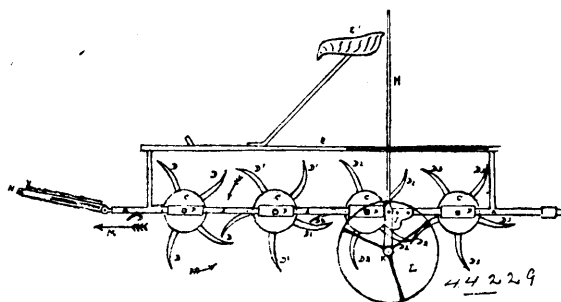


Henry Chapman and Louis Sterne, both of Westminster, England, assignees of Henry Wilbrant, Brussels, Belgium, 11th September, 1893; 6 years.

Claim.—1st. In an electric arc lamp, the combination with the upper carbon holder, of an electric magnet included in a shunt on the arc, an armature adapted to be attracted by said electro-magnet and directly connected with and controlling said carbon holder, and means for breaking the shunt circuit when the armature is attracted by its magnet, substantially as and for the purpose specified. 2nd. In an electric arc lamp, the combination with the upper carbon holder, of an electro-magnet included in a shunt on the arc, an armature adapted to be attracted by said electro-magnet, and formed with a bolt through which the upper carbon holder passes, regulating springs for controlling said armature, and means for breaking the shunt circuit when the armature is attracted by its magnet, substantially as and for the purpose specified.

No. 44,229. Clod Breaker and Soil Pulverizer.

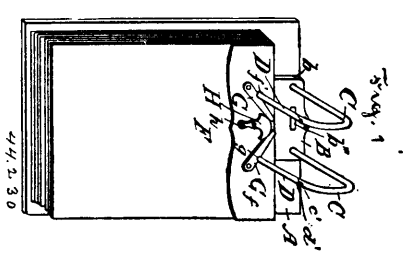
(*Broyeur.*)



Charles Christie, Morton, and John Williamson and William C. Robinson, both of Winchester, all in Manitoba, 11th September, 1893; 6 years.

Claim.—The combination, of the several teeth D, D¹, D², D³, and D⁴, and the method in which the teeth D and D¹, the teeth D¹ and D², the teeth D² and D³, are made to meet and pass each other in opposite directions, and in which the teeth D³ and D⁴, are made to pass each other, substantially as and for the purpose set forth.

No. 44,230. Letter and Bill Files. (*Ser-e-papier.*)



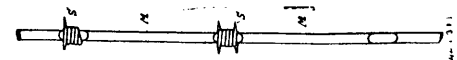
The Eclipse Office Furniture Company, assignee of William O. Gottwals, Edward Seybold and James Gibson, all of Ottawa, 11th September, 1893; 5 years.

Claim.—1st. in a letter and bill file, the bevelled, grooved and tongued joints c¹, d¹, of the arched transfer wires C, and receiving

wires D, substantially as set forth. 2nd. In a letter and bill file, the combination of a base, having two transverse bearings some distance apart, a pair of wires, each bent to form a transverse central portion fitting in one of said bearings, one adapted to be rigidly secured and the other to oscillate or turn, each wire having outwardly projecting portions and the ends of one arched to meet the straight ends of the other, the transverse portion of the movable wire provided with a bend or bit, and a spring E, secured to said base and having its free end bearing on said bit, substantially as set forth. 3rd. In a letter and bill file, the combination of a backing A, a metallic base B, secured to said backing, a pair of arched transverse wires C, made in one piece and secured rigidly to said base in an upwardly inclined position, a pair of straight receiving wires D, secured movably to said base, the points d¹, of said wires meeting the points c¹, of the arched wires, and being bevelled and grooved and tongued, a bit D¹, secured to the wire D, and a flat spring E, secured to the underside of said base and provided with notched end bearing on said bit D¹, substantially as set forth. 4th. In a letter and bill file, the combination of a compressor cover F, lined with a metallic plate f, and having eyes f¹, adapted to pass on the receiving wires of a file, levers G, pivoted on said plate f, and having notches g, adapted to engage said receiving wires, and a cam or eccentric H, pivoted to said plate f, and adapted to engage said levers, substantially as set forth. 5th. In a metallic base, of a letter and bill file, the combination, of two parallel transverse bearings b¹, having a perforation at each end and one in the centre, a wire C, bent to form a central transverse portion and two upright inclined portions, terminating in arched ends, said transverse portions fitting in one of the bearings b¹, a wire D, having a central transverse portion adapted to fit in the other bearing b¹, and having two upright straight ends meeting the ends of the arched wires, a bit D¹, secured to the central portion of one of the wires, and a spring E, secured to said base, and having a notched end bearing on the bit D¹, substantially as set forth. 6th. In a letter and bill file, the combination with the base, having a bearing b¹, of a wire D, bent to form a central transverse portion, adapted to fit and turn in said bearing, a bit D¹, on said transverse portion, a spring E, secured to said base and having notches c, in the end, adapted to engage said bit and hold the same in two different positions, substantially as set forth.

No. 44,231. Barbed Fencing Wire.

(*Fil de fer pour clôture.*)



Eward Schoneberg, Dusseldorf, Germany, 11th September, 1893; 6 years.

Claim.—Barbed fencing wire having a round main wire, which is flattened or ribbed at intervals corresponding to the distances of the barbs or spike coils, in order to prevent the accidental shifting or turning of the spikes, substantially as described.

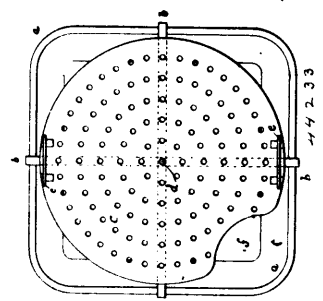
No. 44,232. Halter. (*Licou.*)



Edgar Shaw, Swampscott, Massachusetts, U.S.A., 11th September, 1893; 6 years.

Claim.—A tie rope comprising two parts, one part having suitable attaching means at one end, and a loose sliding connection with the other part at its end, and a spiral spring uniting said two parts and encircling a portion of the first mentioned, the whole constructed, arranged and operating in substantially the manner and for the purposes set forth.

No. 44,233. Cooking Apparatus. (*Ustensile de cuisine.*)

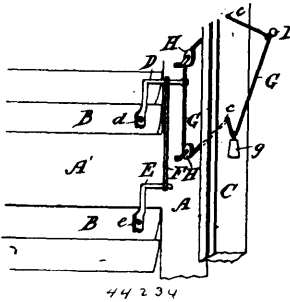


William Truswell Martin, Nottingham, England, 11th September, 1893; 6 years.

Claim.—In cooking apparatus as aforesaid, the combination with an ordinary dripping tin, of a revolving perforated plate or grid

pivoted to a central pillar or steed, or supported by a suitable stand or frame having radial bars resting upon the bottom or raised sides of the dripping tin or roasting pan, substantially as hereinbefore described.

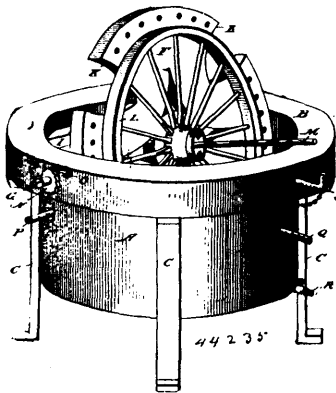
No. 44,234. Device for Opening and Closing the Slats of Window Blinds. (*Appareil pour ouvrir et fermer les barres de store de fenêtre.*)



Louis Jobin, Quebec, Canada, 11th September, 1893; 6 years.

Claim.—In a device for opening and closing the slats of window blinds, the combination with the two cranked arms secured on the slats adjacent to the middle rail, a connecting rod coupling the two arms of a cord passing over pulleys secured on the stile one above and one below the upper cranked arm, the ends of the cord being secured to this upper arm, and the said cord passing through so as to be operated on the inside of the window, substantially as set forth.

No. 44,235. Apparatus for Setting and Cooling Tires. (*Appareil pour poser et refroidir les bandages.*)



Patrick O'Brien, South Bend, Indiana, U.S.A., 11th September, 1893; 6 years.

Claim.—1st. The tank A surrounded by a curb B, supported as described, in combination with the wheel rack F mounted upon a rock shaft or journals G within the curb, and means as described for maintaining the rack when desired in a horizontal position, as hereinbefore set forth. 2nd. In combination, with a tank A, curb B and rack F, pivoted within the curb, the ratchet and pawl N, O, for supporting the wheel rack at any degree of obliquity, substantially as and for the purposes set forth. 3rd. The curb B and wheel rack F, in combination, with the tank A formed with compartments E, E', and provided with the inlet and outlet pipes P, Q, and emptying cock R, substantially as and for the purposes set forth.

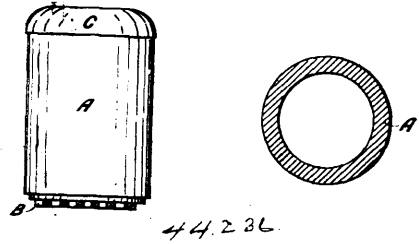
No. 44,236. Advertising Device.

(*Appareil de publicité.*)

James Livesey Scott, Adelaide, South Australia, 11th September, 1893; 6 years.

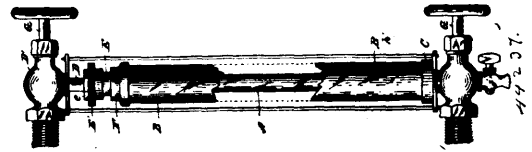
Claim.—1st. The herein described contrivance for displaying advertisements or other like matter upon the shells of eggs, consisting of hollow casing (such as A) provided with a flexible head or stamp (such as B), substantially as herein described and explained and as illustrated in the accompanying drawing. 2nd. In contri-

vances for displaying advertisements or other like matter upon the shells of eggs, the combination with a hollow casing (such as A)



provided with a flexible head or stamp (such as B) of a presser or button (such as C), substantially as herein described and explained for the purpose indicated, and as illustrated in the accompanying drawings.

No. 44,237. Water Gauge. (*Indicateur d'eau.*)

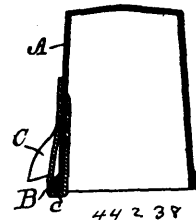


Frederick Henry Hansman, New York, State of New York, U.S.A., 11th September, 1893; 6 years.

Claim.—1st. An improved water gauge comprising an inner and an outer gauge glass, a seating plate having grooves and a gasket to receive the lower ends of said glasses, said grooves having each a nick or recess into which the gasket will become embedded, substantially as and for the purposes set forth. 2nd. An improved water gauge, comprising an inner an outer gauge glass, the valves of said gauge having an auxiliary chamber, said chamber having a recessed valve seat to receive a ball valve, and a check across the opening of said auxiliary chamber to prevent the ball valve from rolling out of said chamber, substantially as shown and described. 3rd. The combination with a water gauge, having an inner and an outer gauge glass, a steam pin screwed into the upper valve of said gauge, a loose collar over and around said steam pin adapted to be moved vertically to secure and release the outer gauge glass, of a lock nut to secure said loose collar in its normal position, substantially as and for the purposes shown and described. 4th. The improved gasket for water and other gauges, substantially as shown and described herein.

No. 44,238. Thimble Attachment.

(*Appareil pour dé à coudre.*)



Mary Fogg, Beaver Dam, Wisconsin, U.S.A., 11th September, 1893; 6 years.

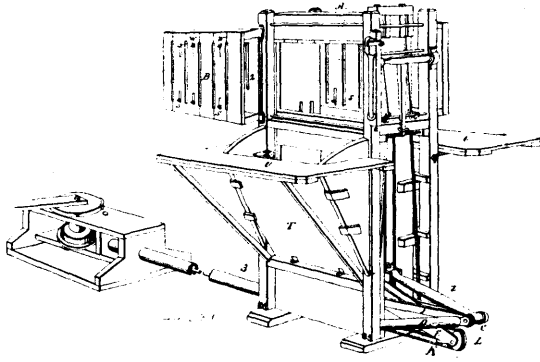
Claim.—An attachment for thimbles comprising a recurved spring plate having offset prongs of less length than itself, and a cutting blade projecting outward from the plate, substantially as set forth.

No. 44,239. Baling Press. (*Presse d'empaquetage.*)

Peter Kells Dederick, Londonville, New York, U.S.A., 11th September, 1893; 6 years.

Claim.—1st. The combination with the press case and traverser working therein, of the pair of power levers connected with the traverser, one located within and the other outside of the press case, as described. 2nd. The combination with the press case and traverser working therein, of the lever pivotally connected to the traverser located within the press and the lever pivotally connected to the traverser located outside of the press with means for operating said levers to reciprocate the traverser, substantially as described. 3rd. In a baling press, the combination with the press case and the traverser adapted to work within the same and having a support or plate projecting through the wall of the press case, of the power levers one connected to the traverser within the press case and the other connected with the support or plate projecting through the

wall of the case with means for operating said levers to reciprocate the traverser, substantially as described. 4th. In a baling press,

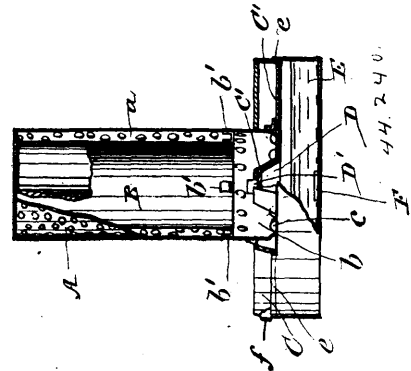


the combination with the press case and the traverser adapted to work within the same and having a support or plate projecting through the wall of the press case, of the extended power lever jointed to the traverser within the press, and the toggle lever jointed to the support or plate projecting through the press case and a link connecting the said power levers at an intermediate point to secure a simultaneous movement thereof, substantially as described. 5th. In a baling press, the combination with the press case having the two slots and intermediate tongue, the traverser adapted to work within the same and having the two supports or plates projecting through the slots, of the power lever jointed between the ends of said supports or plates, whereby the intermediate tongue is held against outward movement during the pressing operation, substantially as described. 6th. In a baling press, the combination with the reciprocating traverser, of a toggle lever having the joints formed at substantially the ends of its members and connected with the traverser, a second toggle connected with the traverser having one of its members extended for the attachment of the power and a link connecting said toggle levers at an intermediate point, substantially as described. 7th. In a baling press, the combination with the vertically arranged press case and reciprocatory traverser, of the head for closing the end of the case and the long sway bar or bars on which the head is mounted connected to the press case at the lower ends, and a fastening for holding the head in place, substantially as described. 8th. In a baling press, the combination with the vertically arranged press case and reciprocatory traverser of the long sway bars connected to the press case at their lower ends the head for closing the upper ends of the case pivotally connected to the upper ends of the sway bars, stops for preventing the head from swinging down on said bars while permitting it to swing up, and a fastening for the head, substantially as described. 9th. In a baling press, the combination with the vertically arranged press case, of the bale chamber door at the upper end of said case, and the feed door below the bale chamber door, and the removable head for closing the end of the case, substantially as described. 10th. The combination of the press box, feed opening and door K, and scaffold, for the purpose set forth. 11th. In a baling press, a pair of toggle joints formed by pivotally connecting the fulcrum arms, having their bearing at the base of the press, with arms connected to the follower or follower beams, the one joint being within the press box and the other outside, both vibrating in the same direction and connected together, substantially as and for the purpose set forth. 12th. In a baling press, the combination with the press case open at the upper end and having a repeating feed door opening at the bottom, the traverser and power levers for reciprocating the same, of the feed door hinged to the press case for closing the opening, substantially as described. 13th. In a baling press, the combination with the press case, having the open upper end and feed door opening at or near the bottom, the traverser and power levers for reciprocating the same, of the removable head for closing the upper end of the press case, with retainers for holding the same in place, and a feed door for closing the opening at the bottom of the press case, hinged at the lower edge to form a hopper, substantially as described. 14th. In a baling press, the combination with the press case open at the upper end and having a feed door opening at or near the bottom, a feed door hinged at the lower edge for closing said opening, and wings at each end of said door for forming a hopper when the door is open, of the traverser, power levers, the removable head and means for retaining the head in the open end of the press, substantially as described. 15th. In a baling press, the combination with the vertically arranged press case having the open upper end and the movable head for closing the same, the reciprocatory traverser working in the press case, and power levers for reciprocating

said traverser, of the capstan connected with said power levers, and a pipe connection between the capstan and press case, through which the connection between the capstan and power levers passes, substantially as described. 17th. In a baling press, the combination with the vertically arranged press case, having the open upper end with the removable head for closing said case, the reciprocatory traverser and a power lever for reciprocating the same, of the capstan, a pipe rigidly connected with capstan at one end, and the press case at the opposite end, and a connection passing through said pipe and connecting the capstan and power lever, substantially as described. 18th. In a baling press, the combination with the press case and traverser reciprocating therein, of a pneumatic check for arresting the backward movement of the traverser, substantially as described. 19th. In a baling press, the combination with the press case and traverser reciprocating therein, the power levers, the pipe connection and the connection passing through said pipe for operating the levers, of a head working in said pipe to form a pneumatic check and co-operating with the lever connection to arrest the rearward movement of the traverser, substantially as described.

No. 44,240. Apparatus for Sponging Fabrics.

(Appareil à éponger.)



Abraham Blumenthal, Montreal, Quebec, Canada, 11th September, 1893; 6 years.

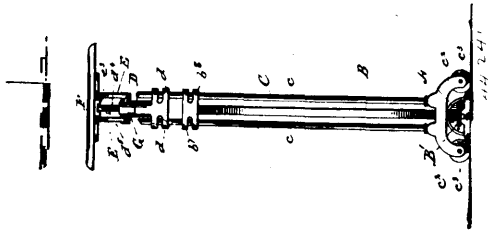
Claim.—1st. In a fabric sponging apparatus, the combination of a perforated holder for the fabric, a boiler section supporting same, and adapted to rest on any suitable heating device or medium, an intermediate steam space or chamber and communicating passage between said boiler and steam space, as set forth. 2nd. In a fabric sponging apparatus, the combination of a perforated holder for the fabric, a boiler section supporting same and adapted to rest on any suitable heating device or medium, an intermediate steam space or chamber, a communicating passage between said boiler and steam space, a drip pan and passages for the escape of the products of condensation from said holder to same, as set forth. 3rd. In a fabric sponging apparatus, the combination of a fabric holder in the form of a perforated cylinder with one end closed and the other open, a second and imperforate cylinder within the first named, closed at both ends, of smaller diameter and length and secured to the closed end of the other cylinder, and a boiler section beneath said holder, and with a steam outlet in its top side directing the steam against the bottom of said cylinder, as set forth. 4th. In a fabric sponging apparatus, the combination of a fabric holder in the form of a perforated cylinder with one end closed and the other open, a second and imperforate cylinder within the first named closed at both ends, of smaller diameter and length and secured to the closed end of the other cylinder, and a boiler section beneath said holder supporting same on end, and having a steam outlet in its top side encircled or enclosed by the open end of said perforated cylinder and directing the steam against the bottom of said inner cylinder, a drip pan encircling each open end of said perforated cylinder, and passage ways or openings to and from said drip for the products of condensation, as set forth. 5th. In a fabric sponging apparatus, the combination with the perforated holder, the steam space or chamber, the boiler sections and communicating passages, of a gas producing element such as the block of zinc F in the boiler, for the purposes set forth.

No. 44,241. Store Stool. (Siège de magasin.)

George F. Steese, Cleveland, Ohio, U.S.A., 12th September, 1893; 6 years.

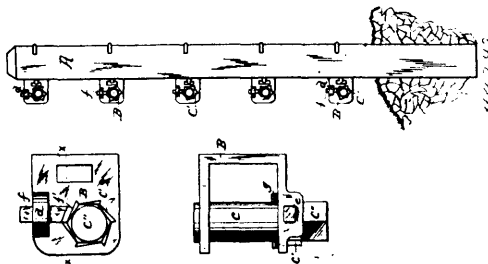
Claim.—1st. The combination with the shield A, of the seat bracket B, having laterally projecting lugs A, a spring catch B¹ holding said bracket adjustably, legs C, C, passing through said perforated lugs and connected by a foot C², provided with friction rollers C³, a head or bearing block D sliding on said legs, and held adjustably by binding screws, said block D having an upright pin engaging a hole or plate C² on the underside of the seat, a seat block G sleeved on said pin and supported by said head block or bearing

D, said seat block having trunnions, and brackets E, E, sleeved on said trunnions and secured to the underside of the seat F, as set



forth. 2nd. The combination in a store stool, of the seat bracket B pivotally secured to a shield or fastening plate A, and held in an adjusted position by a spring catch B¹, legs C, C, connecting with said bracket, a head block or bearing D, adjustably secured to said legs, a seat block G pivotally supported by said bearing block, and having trunnions and the seat F provided with bracket supports E, sleeved on said trunnions, and a stop plate e² having a hole engaging with the head block to keep the seat horizontal, and by lifting tilt the seat or permit the seat to be tilted, as set forth.

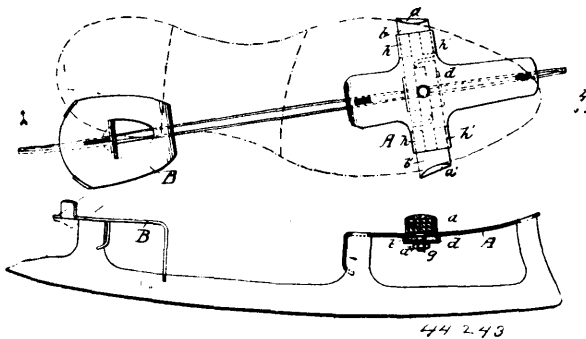
No. 44,242. Stretcher for Wire Fences.
(Tendeur pour clôtures en fil de fer.)



John Stauffer, Dayton, Ohio, U.S.A., 12th September, 1893; 6 years.

Claim.—In a wire stretcher, the combination of the frame having a vertical socket and openings as herein described, a winding spool, provided with ratchet teeth, and mounted in said frame, a pivotless gravity pawl adapted to fit in the vertical socket in said frame, substantially as herein described. 2nd. In a wire fence stretcher, the combination, with a rectangular frame having a ledge on one side thereof, a vertical socket extending through said ledge and partially through the side of the frame, and openings as herein described, of a winding spool, the winding and bearing surfaces thereof being of the same diameter, ratchet teeth near the end of said spool, a gravity pawl adapted to fit in the socket in the ledge and side of the frame, and to normally rest in a vertical position in said ratchet teeth, substantially as herein described.

No. 44,243. Skate. (Patin.)

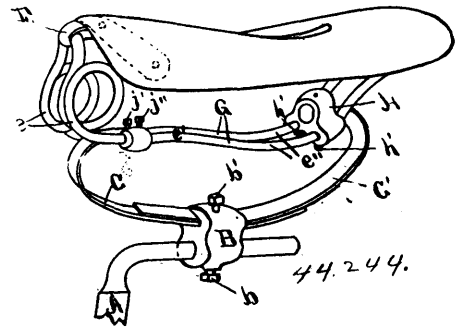


Oscar E. Wollert, Stockholm, Sweden, 12th September, 1893; 6 years.

Claim.—1st. In skates, provided near the toe end with two clamping jaws adapted to engage with the lateral edges of the sole, a special construction of the biting face of one of the jaws, consisting therein that said face is provided with teeth to prevent forward (and not only downward) motion of said jaw relatively to the sole, so that said jaw may act as a fulcrum for the skate, when the latter is applied to the sole in oblique position and then moved laterally to bring it in position for use. 2nd. The skates, provided near the toe end with two clamping jaws adapted to engage with the lateral edges of the sole, the arrangement that said jaws, or one of them

only, lie in planes intersecting the longitudinal plane of the runner in a forward direction, for the purpose set forth. 3rd. In skates provided near the toe end with two clamping jaws adapted to engage with the lateral edges of the sole, the arrangement that the biting face of the one or both jaws is convex, for the purpose set forth. 4th. In skates provided near the toe end with two clamping jaws, adapted to engage with the lateral edges of the sole and the biting face of one of the jaws provided with teeth, the arrangement that said teeth have a forward or forward and downward inclination for the purpose set forth. 5th. In skates, the combination, with clamping jaws, such as stated in claim 1, 4, of shanks or arms fitted and reciprocally movable in transverse guide ways on the underside of the sole plate, said shanks being recessed to form an abutment or shoulder at their inner end and a slot between them for the passage of a screw threaded bolt or pin, the nut of which is adapted to impinge, by means of an U-shaped rivet plate, upon both shanks, for the purpose set forth.

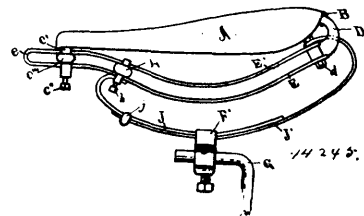
No. 44,244. Saddle for Velocipedes.
(Selle de vélocipèdes.)



Willard G. Rich. and James H. Sager, Rochester, New York, U.S.A., 12th September, 1893; 6 years.

Claim.—1st. A saddle of the class described, comprising a saddle leather provided with a front hook E, and with a rear stretcher F, having suitable sockets, a frame G, composed of wire bent in the middle and adapted thereat to engage with said hook, the two parts of said wire being parallel and having coils c, c, the parallel straight parts e¹, e¹, and the curved parts e¹¹, e¹¹, and by means of sockets f, f, and set screws f¹, f¹, attached to the rear stretcher whereby said wires may be rigidly fastened thereto, substantially as described. 2nd. A saddle of the class described, composed of a supporting frame G, attached to a saddle leather, clamps J, H, movable and independently adjustable on said frame, independent springs C, C¹, overlapping and fastened to said clamps and movable therewith and fastened by a single clamp B, to the saddle support of a bicycle, substantially as described.

No. 44,245. Saddle for Bicycles. (Selle de bicyclette.)



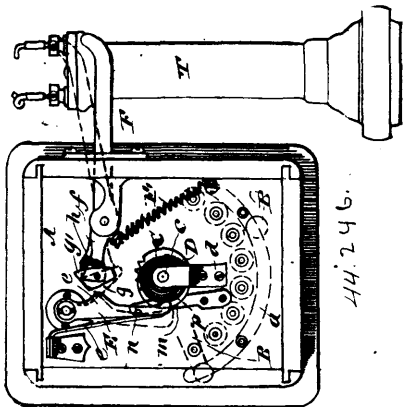
James H. Sager, Rochester, New York, U.S.A., 12th September, 1893; 6 years.

Claim.—1st. In a bicycle saddle, the combination of a saddle leather, a pair of springs vertically arranged with reference to each other, connected with the pommel and cantle of the saddle, and a clamp for attaching said springs to the saddle support of a bicycle, substantially as described. 2nd. A saddle spring for bicycle saddles, consisting of a pair of parallel flat springs arranged vertically one above the other, separated from each other and each connected with both ends of the saddle, substantially as described. 3rd. In a bicycle saddle, the combination of a saddle leather having a pommel hook and a cantle stretcher provided with a clamp, a pair of springs vertically arranged with reference to each other and extending the full length of the saddle and adjustably fastened in said clamp, an eye attached to the front ends of said springs, and a main clamp adapted to fasten said springs to the saddle post of a bicycle, substantially as described. 4th. In a bicycle saddle, the combination of a relatively rigid saddle supporting frame, a recurved spring rigidly attached to one end thereof, a recurved spring adjustably attached to the other end thereof, one of said springs overlapping and lying upon the other, and means of fastening said springs together and to a bicycle, substantially as described. 5th. In a

bicycle saddle, the combination of a saddle leather, a pommel hook, a cantle supporting bar having a clamp and eye adapted to engage the pommel hook, parallel springs fastened to said clamp and fixed to said eye, a leaf spring attached to said eye and passing rearwardly underneath said parallel spring, a clip fastened upon said parallel spring and movable backward and forward thereon, a leaf spring attached to said clip and passing forward and lapping over and lying upon the other leaf spring, and a clip adapted to fasten said two leaf springs together and to a bicycle, substantially as described.

No. 44,246. Telephone Switch Operating Mechanism.

(*Mécanisme pour actionner les aiguilles de téléphone.*)



Thomas Wood Ness, of Montreal, Quebec, Canada, 12th September, 1893; 6 years.

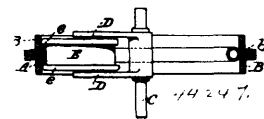
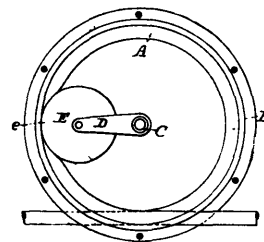
Claim.—1st. In combination with the key board, of a warehouse, or local telephone system, and the telephone hook mechanism thereof, of the switch key of said keyboard, adapted to be moved to the various points of such keyboard by hand and automatically returned to its normal position by said telephone hook mechanism. 2nd. In combination with the keyboard of a warehouse or local telephone system, the switch key thereof and telephone hook mechanism, an automatic return for such key or switch, under the control of said telephone hook mechanism, as set forth. 3rd. In combination with the keyboard, of a warehouse or local telephone system, the switch key thereof and the telephone hook mechanism, a yielding resistance device, acting to return said key or switch to its normal position after effecting a line connection, as set forth. 4th. In combination with the keyboard, of a warehouse or local telephone system, the switch key thereof and the telephone hook mechanism, a yielding resistance device tending to return said key to its normal position, after effecting a line connection, and detent mechanism acting to control such yielding resistance device, as set forth. 5th. In combination with the key board, of a warehouse or local telephone system, the switch key B, the rotatable axis or spindle c, thereof, and suitable bearings for same, the telephone hook mechanism, the spring C, ratchet wheel D, a yielding pressure pawl lever engaging said ratchet wheel, and a yielding pressure contact dog g, on the inner end of said telephone hook, all substantially as and for the purposes set forth. 6th. In combination with the keyboard, of a warehouse or local telephone system, the switch key B, the rotatable axis or spindle c, thereof, and suitable bearings for same, the telephone hook mechanism, the spring C, ratchet wheel D, a yielding pressure pawl lever engaging said ratchet wheel, and a yielding pressure contact dog g, on the inner end of said telephone hook, detent m, and means on said ratchet wheel for operating same, all substantially as and for the purposes set forth.

No. 44,247. Apparatus or Means for Obtaining Motive Power. (*Appareil et moyen pour obtenir la force motrice.*)

Henry Manning Fellows, Great Yarmouth, Norfolk, and Arthur Ramsden Whitham, Bramhope, near Leeds, York, both in England, 12th September, 1893; 6 years.

Claim.—1st. In a motive power engine, the combination of a flexible tube or passage with inlet and outlet for motive fluid, and a device which compresses or contracts the said tube or passage, and is caused to move by the motive fluid passing through the said tube or passage, substantially as hereinbefore described. 2nd. A motive power engine, consisting of a rigid ring or cylinder, carrying at its inner side a flexible ring or passage, and a device bearing upon the said tube or passage, so as to compress or contract it, and mounted upon an axis to which rotary motion is imparted by the action of motive fluid passing through the said tube or passage, and acting upon the said device, substantially as hereinbefore described and illustrated. 3rd. The arrangement and combination of parts con-

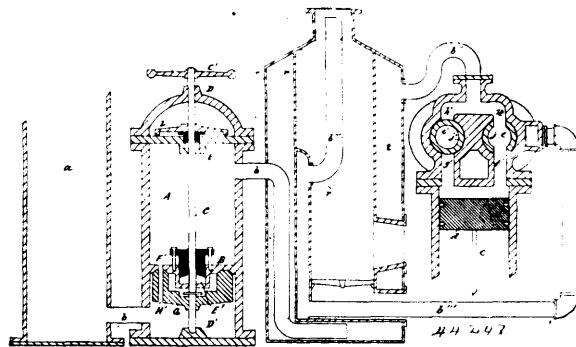
stituting a motive power engine, substantially as hereinbefore described and illustrated, that is to say: the annulus B, flexible or



compressible tube or passage A, suitably secured to same, a shaft C, suitably supported, arm D, and roller E.

No. 44,248. Compressed Air Motor System.

(*Système de moteur à air comprimé.*)



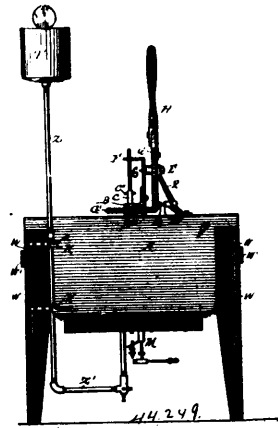
John Augustus Farlinger, Montreal, Quebec, Canada, 12th September, 1893; 6 years.

Claim.—1st. The compressed air motor system consisting of the combination of a source of compressed air, a motor connected therewith, a forward and a reverse valve for the motor, each provided with ports communicating with the engine cylinder, and means, such as a sleeve, for closing and opening the said ports in each of the valves. 2nd. In a compressed air motor system, the combination of a pressure reducer operated by hand, an engine connected therewith, a forward and a reverse valve for the engine and operated thereby, ports in each of the valves opening into the engine cylinder, and means, such as a sleeve, in each of the valves, for closing and opening said ports. 3rd. In a compressed air motor system, the combination of a pressure reducer, a boiler for heating the air connected therewith and with the engine, a forward and a reverse valve for the engine, each valve being operated by separate eccentrics on the engine shaft, ports in each valve cylinder opening into engine cylinder, a sleeve located in each valve cylinder and provided with openings corresponding with the said ports, each sleeve being shorter than the internal length of the cylinder in which it is located, and means for sliding the sleeves to and fro in their respective valves. 4th. The combination of the engine cylinders, a forward and a reverse valve therefor, ports in each of the valve cylinders opening into each of the engine cylinders, a sleeve located in each cylinder and provided with openings corresponding with said ports, each sleeve being shorter than the internal length of the cylinder in which it is located, and means for sliding the sleeves to and fro in their valve cylinders. 5th. The combination of an engine cylinder, two valve cylinders therefor, each provided with ports opening into the engine cylinder, a cylindrical sleeve located within each valve cylinder and having openings corresponding with the said ports, the sleeves being shorter than the internal length of the valve cylinders, means for sliding the sleeves to and fro in their respective valve cylinders, valve piston located within each sleeve and operated by separate eccentrics. 6th. The combination of an engine cylinder, two valve cylinders therefor, each connected with the engine cylinder by two ports, valves located in each of said valve cylinders and operated by independent eccentrics, and means, such as sleeves, in each valve cylinder for closing and opening at will the ports therein which communicate with engine cylinder. 7th. In a compressed air motor system, the combination of an engine

cylinder, two valve cylinders, each connected with the engine cylinder by two ports, and with the source of compressed air by a single port, a sleeve within each valve cylinder, having openings corresponding with the said ports, a valve located within each sleeve each of the valves being operated by separate eccentrics, and means for moving each sleeve to and fro in its cylinder so as to close and open the said ports therein. 8th. In a compressed air motor system the combination of a boiler partially filled with oil and water, a source of compressed air connected with the boiler by a pipe whose mouth is near the bottom thereof, and an engine connected with the upper part of the boiler above the level of the liquid. 9th. In a compressed air motor system, the combination of an engine, a boiler heated by a furnace and partially filled with a liquid, a pipe connecting the upper part of the boiler above the level of the liquid, with the engine and another pipe which is connected with the source of compressed air, entering the boiler above the level of the liquid and extending downwards so that its mouth is near the bottom of the boiler. 10th. In a compressed air motor system, the combination of a boiler partially filled with a liquid and heated by a furnace, a source of compressed air connected with the boiler by a pipe which enters the boiler above the level of the liquid and extends downwards so that its mouth is near the bottom of the boiler, an engine connected with the upper part of the boiler above the level of the liquid, a pipe connected with the exhaust ports of the engine and passing through the furnace, its mouth being in the smoke pipe thereof. 11th. In a compressed air motor system, the combination of a source of compressed air, a pressure reducer operated by hand connected therewith, a boiler partially filled with a liquid and heated by a furnace, the said boiler being connected with the pressure reducer by a pipe, which enters the boiler above the level of the liquid, but whose mouth is near the bottom thereof, an engine connected with the boiler above the level of the liquid, a pipe connected with the exhaust ports of the engine, passing through the combustion chamber of the furnace and opening into the smokestack thereof. 12th. In a compressed air motor system, the combination with the exhaust ports of the engine, of pipes connected therewith and opening into the outside air, and of means for heating said pipes. 13th. In a compressed air motor system, the combination of a pressure reducer connected with the source of compressed air, a boiler for heating the air connected with the pressure reducer and with the engine, pipes connected with the exhaust ports of the engine and opening into the outside air, and means for heating said pipes. 14th. In a compressed air motor system, the combination of an air tight vessel, a partition dividing the vessel into two compartments, one of which is connected with the source of compressed air and the other with the engine, openings in said partition affording communication between the two compartments, and means for closing and opening said openings. 15th. In a compressed air motor system, the combination of a boiler containing a liquid and heated by a furnace, a cylinder divided into two air tight compartments by a partition, one of the compartments being connected with a source of compressed air, and the other connected with the boiler by a pipe whose mouth in the boiler is near the bottom thereof, an opening in said partition affording communication between the two compartments, means for gradually closing and opening said opening, and an engine connected with the upper part of the boiler above the level of the liquid. 16th. In a compressed air motor system, the combination of an air tight cylinder divided into two compartments by a partition, a slot through the partition and affording communication between the two compartments, a spindle passing through the cylinder and the partition in an air tight manner, a disc located in one of the compartments and mounted upon the spindle so as to turn with it and to have some play up and down thereon, a slot through the disc which corresponds with the slot in the partition, a spring bearing against the disc and the end of the cylinder, a pipe connecting the compartment in which the disc is located with the source of compressed air, and another pipe connecting the other compartment with the engine. 17th. In a compressed air motor system, the combination of a cylinder divided into two air tight compartments by a partition, a spindle passing through the cylinder and the partition in an air tight manner, a circular groove in the partition having the spindle for its centre, a slot extending along the groove for a distance which is less than half the circle formed by the groove and affording communication between two compartments, a disc mounted upon the spindle in such a manner as to turn with it and to have some play up and down thereon, and provided with a protruding ring which corresponds with and fits into the groove in the partition, a slot in the ring corresponding in size with the slots in the partition, a spring bearing against the end of the cylinder and the disc, notches on the top of the cylinder in a circle around the spindle, an arm mounted upon the spindle in such a manner as to turn with it and to have some play up and down thereon, the arm being provided with projections which engage with the notches, a spring bearing against the arm and a bridge on the top of the cylinder, a source of compressed air connected with the compartment in which the disc is located, and an engine connected with the other compartment. 18th. In a compressed air motor system, the combination of a boiler partially filled with a liquid and heated by a furnace, a cylinder divided into two air tight compartments by a partition, one of the compartments being connected with a source of compressed air, and the other connected with the boiler by a pipe whose mouth in the boiler is near the bottom thereof, an opening in said partition affording communication between the two compart-

ments, means for gradually closing and opening said openings, two valve cylinders connected with the upper part of the boiler above the level of the liquid and each connected with the engine cylinders by two ports, valves located in each of said valve cylinders and operated by independent eccentrics, and means such as sleeves in each valve cylinder for closing and opening the ports in which communicate with the engine cylinder.

No. 44,249. Washing Machine. (*Machine à blanchir.*)



Walter Scott Werden, Wichita, Kansas, assignee of Paris Thomas Benbow, St. Louis, Missouri, all in the U.S.A., 12th September, 1893; 6 years.

Claim.—1st. The combination, with the body receptacle and lid thereof, the vertical ribs *c*, fixed to the receptacle sides, the corrugated and perforated false bottom *D*, placed upon the receptacle bottom, the standard *S*, fixed upon the lid, the gears *G*, *G*¹, supported by said standard, the lever *H*, for imparting motion to said gears, the shaft *C*, arranged to move vertically through the gear *G*¹, and the perforation of the standard bracket and be oscillated by said gear, and of the pin head fixed to the lower end of said shaft within the body receptacle, substantially as set forth. 2nd. In the washing machine described, the combination of the standard *S*, provided with the base gear support *S*², the gear stud *E*, the perforated bracket *F*, and the box bracket *B*, of the gear *G*¹, provided with the square hole through its hub, and stepped upon the bearing *S*², and held by the box bracket *B*, of the segment gear *G*, placed upon stud *E*, and in mesh with gear *G*¹, and provided with the handle *H*, of the brace *R*, placed connecting said gear stud and lid and provided with the screw *M*, and the lock nut *M*¹, for holding the gears in mesh, and of the shaft *C*, made square throughout its central and lower portion and round at its upper portion and placed through the hub of gear *G*¹, and bracket *F*, and provided with the cross key *C*¹, and with the pin head fixed to its lower end, substantially as set forth. 3rd. The combination, with the standard *S*, and gears *G*, *G*¹, of the brace *R*, the screw *M*, turned into said brace, and the lock nut *M*¹, placed upon said screw, substantially as and for the purpose set forth. 4th. The combination, with the pin head *L*, provided with the several pin sockets and the central shaft socket, as shown, of the shaft *C*, held seated in said socket by means of the nut *C*¹, and of the pins *O*, *O*¹, held fixed in their sockets by means of the wedge keys *d*, substantially as set forth. 5th. In the washing machine described, the combination, with the body receptacle, of the false bottom *D*, consisting of corrugated and perforated material placed upon the receptacle bottom, and the vertical ribs fixed to the receptacle side walls, substantially as set forth. 6th. In combination, with the body receptacle *A*, provided with the metal bottom described, the depending flame protector *P*, made with the side wall and bottom openings, substantially as set forth. 7th. In combination, with the body receptacle and standards thereof, the flame protector *P*, fixed to the receptacle bottom, the keepers *K*, fixed to the receptacle standard, the pipe *Z*, *Z*¹, held by said keepers and bearing at its upper end the tank *T*¹, and its lower end the burner *M*, substantially as set forth.

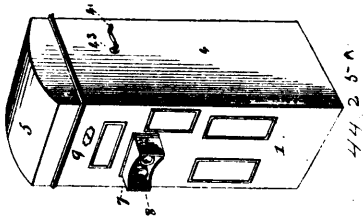
No. 44,250. Coin Controlled Machine.

(*Machine actionnée par une pièce de monnaie.*)

William Reeves and Eveline Jones Street, both of New Haven, Connecticut, U.S.A., 12th September, 1893; 6 years.

Claim.—1st. In a coin controlled apparatus, the combination, with the casing provided with a glazed window for admitting light, and lenses, of a movable band for holding pictures, and a reflector arranged between the laps of said band so as to transmit light from said window to the back of a picture immediately in view of the lenses, substantially as set forth. 2nd. In a coin controlled apparatus, the combination of a coin actuated lever, main winding shaft, a clutch adapted to connect with said shaft, a crank operated pinion, a movable pinion controlled by said clutch whereby said

pinions are adapted to be brought into engagement and mechanism released by the fall of a coin on said lever, whereby the clutch is



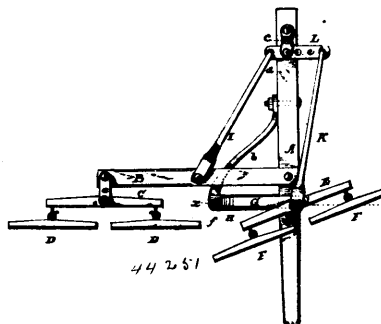
operated to connect with said shaft, substantially as set forth. 3rd. In a coin controlled apparatus, the combination of a coin actuated lever, main winding shaft, a clutch adapted to connect with said shaft, a crank operated pinion, a pinion carried by said clutch to bring it into engagement with the first mentioned pinion, and mechanism provided with an arm for operating said clutch, said mechanism having separable connection with said lever, substantially as set forth. 4th. In a coin controlled apparatus, the combination of a coin actuated lever, a main winding shaft, a movable pinion on said shaft adapted to be connected therewith, mechanism controlled by said lever for moving the pinion, and a crank operated pinion with which said movable pinion may intermesh, whereby the shaft is permitted to be wound only when a coin is deposited, substantially as set forth. 5th. In a coin controlled apparatus, the combination, with a main winding shaft, clock mechanism and its operating weight, of a coin actuated lever, mechanism released by the fall of a coin on said lever, to permit said shaft to be wound, and a slide connected with the latter mechanism, and adapted to be engaged by said weight so as to again connect said coin released mechanism with said lever, substantially as set forth. 6th. In a coin controlled apparatus, the combination, with a main winding shaft, clock mechanism and its operating weight, of a coin actuated lever, mechanism adapted to be released by said lever to permit the shaft to be wound, a slide connected with the latter mechanism, and adapted to be engaged by said weight so as to again connect said coin released lever, and an alarm mechanism actuated by said slide, substantially as set forth. 7th. In a coin controlled apparatus, the combination, with a coin actuated lever, a main winding shaft, a movable pinion on said shaft, adapted to be connected therewith, mechanism controlled by said lever for moving the pinion, and a crank-operated pinion with which said movable pinion may intermesh, of a clock mechanism and its operating weight, a pawl for engaging the movable pinion, and mechanism actuated by said weight for throwing said pawl and pinion out of engagement, substantially as set forth. 8th. In a coin controlled apparatus, the combination, with an endless band for carrying pictures, its supporting wheels and mechanism for actuating said band, of clock mechanism and a catch actuated by the latter for controlling the movement of said band, substantially as set forth. 9th. In a coin controlled apparatus, the combination, with an endless band for carrying pictures, its supporting wheels, stop pins on one of the wheels, and mechanism for actuating the band, of clock mechanism and a catch actuated by the latter for engaging said pins and controlling the movement of the band, substantially as set forth. 10th. In a coin controlled apparatus, the combination, with an endless band for carrying pictures, its supporting wheels, stop pins on one of the wheels and mechanism for actuating the band, of a clock mechanism having a wheel provided with a trip pan and a catch provided with a trigger adapted to be engaged by said trip pin for releasing the catch from said stop pins, substantially as set forth. 11th. In a coin controlled apparatus, the combination, with an endless band for carrying pictures, its supporting wheels, stop pins on one of the wheels and mechanism for actuating the band, of clock mechanism a catch actuated by the latter for engaging said pins and controlling the forward movement of the band, and a detent for engaging said pins to prevent backward movement of the band, substantially as set forth. 12th. In a coin controlled apparatus, the combination, with a band for carrying pictures and provided with a lug, of a shaft provided with a catch and an arm, and a device for engaging said arm so as to throw the catch in contact with said lug, substantially as and for the purpose described. 13th. In a coin controlled apparatus, provided with an observation opening and a chute, having an orifice, a movable stop adapted to project through said orifice into the chute, so as to support the coin in view, and means for releasing said stop from the coin, substantially as set forth. 14th. In a coin controlled apparatus, provided with an observation opening and a chute having an orifice, a detent the end of which is adapted to project through said orifice, a pivoted rod having suitable connection with said detent for actuating it and a device for engaging said rod, substantially as and for the purpose set forth.

No. 44,251. Draft Equalizer. (Régulateur du tirage.)

Harrison Dickey and George McGillivray, both of the Village of Pipestone, Minnesota, U.S.A., 13th September, 1893; 6 years.

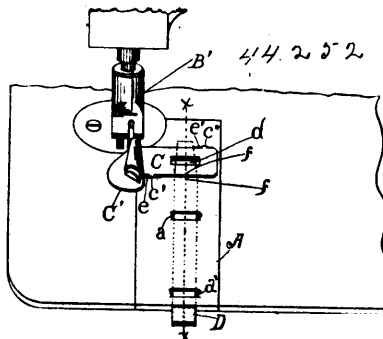
Claim.—In a draft equalizer, the combination with the tongue or pole and the double trees and single trees, of the evener bars, a bar pivotally and adjustably connected to the tongue or pole, rods

connecting it with the evener bars, a hook upon the end of one of



the evener bars and a supporting arm having holes with which said hook engages, substantially as and for the purpose set forth.

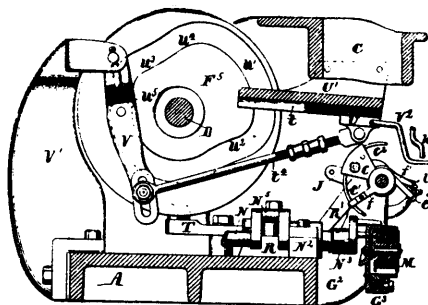
No. 44,252. Attachment Holder for Sewing Machines. (Porte-appareil pour machines à coudre.)



George Tucker and Almon Shoup, both of Los Angeles, California, U.S.A., 13th September, 1893; 6 years.

Claim.—1st. An attachment holder for sewing machines comprising a shuttle race slide having a transverse slot extending there-through, a bolt arranged in guides upon said slide and adapted to be reciprocated across the transverse slot, and a plate having an attachment secured therea. and provided on its under side with a loop which projects through the slot in the slide and is engaged by the bolt to secure the plate to the slide. 2nd. An attachment holder for sewing machines comprising a shuttle slide provided with bolt guides and with a transverse slot, an attachment plate provided with a loop arranged to project through the slot, and a flat bolt arranged in the bolt guides and formed of a spring metal strip having an inclined end and adapted to reciprocate across the slot and to engage the loop. 3rd. The combination of the shuttle slide provided with the bolt guides, the lug receiving slots and the transverse fastening slot adapted to receive a loop therein, the attachment plate provided with a loop adapted to enter the slot in the slide, and provided with the guide lugs arranged to enter the lug receiving slots and a bolt arranged in the bolt guides and adapted to reciprocate across the slot and to engage the loop.

No. 44,253. Sewing Machine for Boot Soles. (Machine à coudre pour semelles de chaussures.)

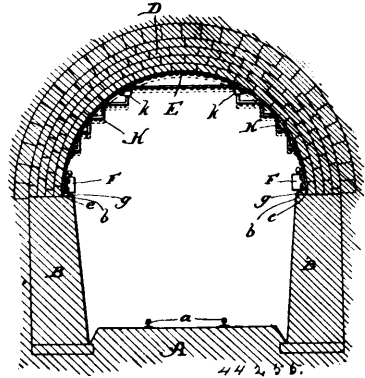


Joseph Eli Bertrand, of Boston, and Mellen Bray, of Newton, Massachusetts, U.S.A., 14th September, 1893; 6 years.

Claim.—1st. In a sewing machine, the combination, with a needle constructed and arranged to enter the work and then be moved laterally to feed the work, and mechanism for moving said needle laterally, of a guide on the side of the work that the needle enters the same, and a needle stay or support

upon the opposite side of the work said guide and stay both being movable laterally with the needle. 2nd. In a sewing machine, the combination, with a work support and a presser foot, of a needle constructed and arranged to enter the work from the side that rests upon the work support, and a needle stay or supporting arm upon the opposite side of the work and constructed and arranged to be moved laterally with said needle to feed the work. 3rd. The combination of a work support, a needle constructed and arranged to enter the work at the side thereof that rests upon said work support, a presser foot constructed and arranged to press upon the side of the work opposite to said work support, a needle stay or support upon the same side of the work as, and connected to, the presser foot, so as to be movable therewith when said presser foot is raised or depressed and adapted to be moved laterally independently of said presser foot and means having provision for moving said needle and stay laterally to feed the work. 4th. The combination in a sewing machine, of a needle and awl operating shaft mounted in bearings so as to be revoluble and movable endwise therein, a single radius arm or segment formed in one piece with or firmly secured to said shaft so as to be revoluble and movable endwise therewith, a curved needle mounted in and projecting from one side of said arm or segment, a curved awl mounted in and projecting from the opposite side of said arm or segment, a grooved collar fixed on said shaft, a loop spreader and two needle guides or supports mounted on said shaft and movable about its axis, said needle guides or supports being arranged upon opposite sides of the work, a shipper arm engaging said grooved collar, means having provision for reciprocating said shipper arm to move said shaft endwise and mechanism for oscillating said shaft to cause the needle and awl to alternately pierce the work. 5th. In a sewing machine, the combination, with a work support and presser foot, a needle and awl constructed and arranged to be reciprocated about a common axis, and a rotary shuttle, of a loop measuring and stitch tightening finger mounted in a reciprocating cross head, a pivoted lever, a link connecting said cross head to the movable end of said pivoted lever and a cam provided with a path having two outward and two inward throws adapted to impart to said looper finger, a long and short rearward and forward reciprocation. 6th. The combination, with a curved needle constructed and arranged to reciprocate in an arc of a circle, of a lever mounted upon and movable about the same shaft as said needle, a presser foot secured to said lever and movable therewith, a second lever fulcrumed upon a fixed part of the machine, a link connecting the rear ends of said two levers, a vertically movable bar pivoted at its lower end to said second lever, means for automatically lifting said bar and through it the presser foot, and means having provision for automatically locking said bar and passer foot in position to clamp the work. 7th. The combination, with a curved needle constructed and arranged to be reciprocated in an arc of a circle, of the levers J and C², the link C¹, the presser foot l, carried by the lever J, and movable in a plane concentric to the axis of motion of said needle, the bar l², provided with the lifting ratchets l¹ and l⁵, and the toothed locking block n, and connected at its lower end to the lever C², the lever L, the lifting pawls m and m¹, carried by said lever L, the cam F⁴ for operating said lever, the locking bolt n¹, and means having provision for automatically reciprocating said bolt to lock and unlock the presser foot. 8th. In combination, with a vertically reciprocating presser foot operating bar, a toothed surface formed upon or secured to said bar, the locking bolt n, the fixed collar n² the loose collar n⁴, and the spring n and n⁵, all mounted on said bolt, the elbow lever D¹, and the cam D², all constructed and arranged to operate substantially as described.

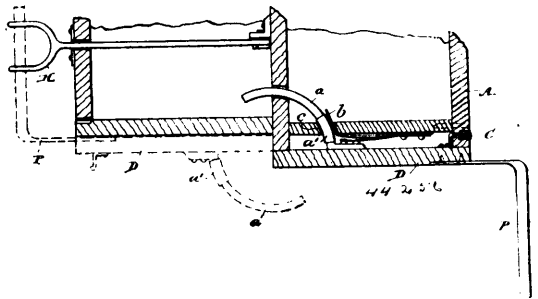
of an apparatus for accomplishing the lining of the arched portion of the same, consisting of an imperforate sheet metal centre supported



at each end from the side walls, and mechanism connected with said centre for raising and lowering it toward and from the lined arch, substantially as described. 2nd. The combination with the side walls of a railway tunnel, of a metallic centre for building the arch lining, consisting of a single strip of sheet metal extending from wall to wall, and provided on each end with lifting apparatus to move it toward or from the arch lining, substantially as described. 3rd. The combination with the walls of a railway tunnel, of a metallic centre for building the arch lining, consisting of a substantially imperforate metal centre extending from wall to wall, provided on each end with wheels whereby the centre may be moved easily longitudinally of the tunnel, and provided also on each end with lifting apparatus to raise the centre toward or from the arch lining, substantially as described. 4th. The combination with the imperforate sheet metal centre, of an auxiliary platform in the form of steps connected to said centre and adapted to support the workmen, substantially as described. 5th. The combination with the imperforate sheet metal centre, of a platform arranged in the form of steps, said platform attachable to and detachable from the main portion of the centre, substantially as described.

No. 44,256. Automatic Telephone System.

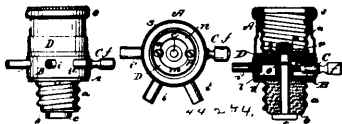
(Système automatique de téléphone.)



The Automatic Telephone and Electric Company of Canada, assignee of Louis Edward Simoneau, all of Montreal, Quebec, 13th September, 1893; 6 years.

Claim.—1st. In an automatic telephone system, an automatic "release" or make-and-break connection, with eccentrically operated circuit, controlled by the sub-station, and operating to return the central operating parts to their normal position, as set forth. 2nd. As part of a sub-station telephone outfit, or set a single box or casing, adapted to contain the several instrumentalities thereof, excepting the telephone, and a portion of the telephone hook, and a door, hinged to such box, normally closed to prevent the use of the instruments, and, when opened, allowing of their use, and a make-and-break electrical connection, parts of which are carried respectively by said box and door, the whole adapted to control an electrical circuit with terminals at said make-and-break connection. 3rd. The combination of a box A, with the several instrumentalities, of a telephone set arranged therein, door D, and spring actuating parts for automatically throwing same open, a locking device for holding same closed, contact bearing insulation a¹, spring contact b, and a battery circuit, for the purpose specified, with terminals at said contacts, as set forth. 4th. The combination, of a box or casing A, with the several instrumentalities, of a telephone set, arranged therein and the end of the telephone hook, projecting therethrough, door D, carrying an arm or projection adapted, when the telephone is removed from its hook and the door fully opened, to become located across said hook for the purpose specified, a make-and-break electrical connection, parts of which are carried respectively by said box and door, and the whole adapted to control an electrical circuit, with terminals at said make-and-break

No. 44,254. Current Adapted for Electric Light Circuits. (Circuit mobile pour courants de lumière électrique.)



J. C. Vetter & Co., New York, State of New York, U.S.A., 13th September 1893; 6 years.

Claim.—1st. In a current adapter for incandescent electric light circuits, the combination with a lamp holding device, of a pair of electrical contacts, a switch for closing the circuit between said contacts, and external electrical connections whereby an external translating device may be thrown into the circuit either in parallel or in series with the lamp, substantially as hereinbefore specified. 2nd. In an electric lamp socket and tap, the combination with the lamp socket of the contact springs k, r, the switch lever C, the posts i, i¹, i², and electrical connections, substantially as hereinbefore specified.

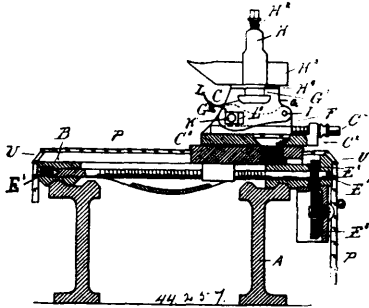
No. 44,255. Apparatus for Re-lining Railway Tunnels. (Appareil pour redoubler les tunnels de chemin de fer.)

Simeon I. Morris and Jason W. Waite, both of St. Paul, Minnesota, U.S.A., 13th September, 1893; 6 years.

Claim.—1st. The combination with the walls of a railway tunnel,

connection. 5th. The combination of box A, with the several instrumentalities, of a telephone set arranged therein and the end of the telephone hook projecting therethrough, door and spring actuating parts for automatically throwing same open, and a locking device for holding same closed, a projecting arm P, carried by said door, for the purpose specified, the contact, a bearing insulation a^1 , the spring contact b , and a battery circuit with terminals at said contacts, as set forth. 6th. In an automatic telephone system, the combination with an automatically movable part, of the sub-station outfit and the "release" circuit, acting when closed, to return the operating parts of the "central" to their normal position after establishing a connection, of a make-and-break connection for closing said release circuit, the same consisting of a pair of electrical contacts of varying length, one of which traverses the other for a protracted period to secure a prolonged electrical connection or closing of the circuit, and finally breaks or opens said circuit by disconnecting the one from the other.

No. 44,257. Lathe. (Tour.)



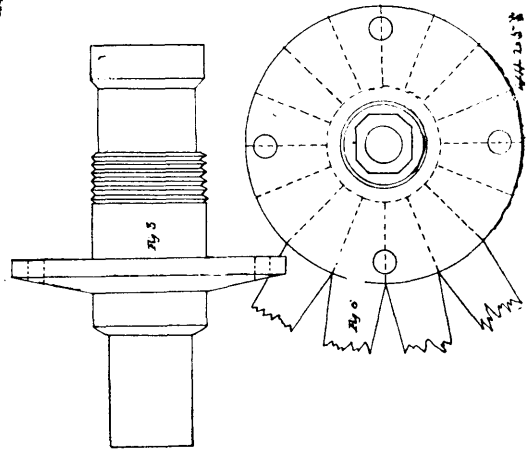
Simon Peter Graham and Josiah Horming, both of Detroit, Michigan, U.S.A., 13th September, 1893; 6 years.

Claim.—1st. In a carriage for lathes and other machines, a tool holder comprising a base, a head hinged thereto, side flanges depending from said head and embracing said base, a tool post secured to said head, and a raising and lowering device consisting of a shaft journaled transversely in the base, eccentric pins on the ends of said shaft engaging in slotted bearings in the side flanges of the head, and means for rotating said shaft, substantially as described. 2nd. In a carriage for lathes and other machines, a tool holder comprising a base, a head hinged thereto, side flanges depending from said head and embracing said base, a tool post secured to said head, and a raising and lowering device consisting of a shaft journaled transversely in the base, eccentric pins on the ends of said shaft engaging in slotted bearings in the side flanges of the head, and a worm gear connection for rotating said shaft, substantially as described. 3rd. In a carriage for lathes and other machines, a tool holder comprising a base, a head hinged thereto, a tool post secured to said head, side flanges G^1 , depending from said head and embracing the base, and a raising and lowering device consisting of the shaft J journaled transversely in the side flanges G^1 , the worm wheel M, the worm N^2 , and the worm shaft N, substantially as described. 4th. In a carriage for lathes and other machines, a tool holder comprising a base, a head hinged thereto, a tool post secured to said head, side flanges G^1 , depending from said head and embracing the base, and a raising and lowering device consisting of the shaft J journaled transversely in the base, the eccentric pins K, engaging in slotted bearings in the side flanges G^1 , the worm wheel M in the counter bored aperture M^1 , the bushing O^2 , the worm N^1 , and the worm shaft N, substantially as described. 5th. The combination with a carriage and ways in said carriage is adapted to move, of a flexible apron secured at one end to the carriage, and adapted to be drawn over the ways, substantially as described. 6th. The combination with the carriage and ways in which said carriage is adapted to move, of a flexible apron secured at one end to the carriage and adapted to be drawn over the ways, said apron consisting of sheet metal links pivotally connected to each other, substantially as described. 7th. The combination with the cross head and ways in which said carriage is adapted to move, of a flexible apron secured at one end to the carriage and adapted to be drawn over the ways, said apron consisting of sheet metal links Q, pivotally connected to each, and having depending flanges R, and curved lips T, substantially as described. 8th. The combination with the ways, the carriage moving thereon, and a flexible apron covering said ways and overhanging the ends thereof, of a feed screw for said carriage, adjustable centres for holding said feed screw, an offset crank handle and a gear connection between said crank handle and feed screw, substantially as described. 9th. In a carriage, the combination with the tool holder, the feed screw therefor, and the nut with which said feed screw engages, of means for moving the holder in relation to the nut, substantially as described. 10th. In a carriage, the combination with the tool holder, the feed screw therefor, and the nut with which said feed screw engages, of means for moving the holder in relation to the nut, consisting of the head W, the eccentric pins W^1 , engaging in a slotted bearing in the nut, and a lever for rotating said head to move the tool holder in

relation to the nut, substantially as described. 11th. The combination with ways, a carriage moving thereon, and a flexible metal apron covering said ways and overhanging the end thereof, of a feed mechanism for said carriage consisting of the feed screw, and an offset crank handle having a gear connection with the feed screw, substantially as described.

No. 44,258. Hub for Carriage Wheels.

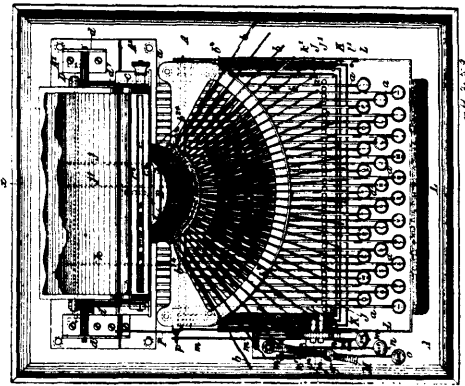
(*Moyeu pour roues de voiture.*)



M. Luther Killam, of Cocaigne, Chipman A. Steeves and Frederick C. Jones, both of Moncton, all in the Province of New Brunswick, Canada, 13th September, 1893; 6 years.

Claim.—The combination of flanges, cylinder, bolts and nuts, for the purpose hereinbefore set forth.

No. 44,259. Type Writer. (Clavigraphie.)

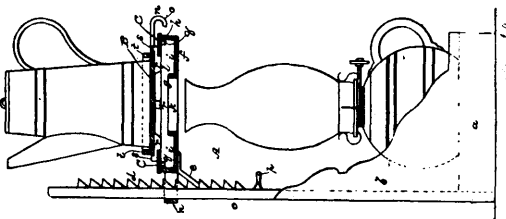


The Maskelyne Type Writer Company, of 101 Leadenhall Street and 41 Holborn Viaduct, assignee of John N. Maskelyne and John N. Maskelyne, junr., of the Egyptian Hall, Piccadilly, all in London, England, 13th September, 1893; 6 years.

Claim.—1st. In a type writer, the combination of operating keys, radially arranged type bars, and connecting link mechanisms for communicating movement to the latter, such link mechanisms consisting of a toppling elbow or bell crank lever jointed to the type bar, to a fixed point, and to a pendant link connected with a pull rod jointed to the operating key, substantially as described and shown. 2nd. The combination, in a type writer, of clock escapement mechanism for giving varying travel to the paper carriage, rocking frames with recesses, and projections thereon underlying the operating keys, and operating keys, which, on their depression, effect, through their contact with the underlying frames, the movement of the clock escapement, substantially as described, to permit the travel of the paper carriage according to the spacing required for each letter. 3rd. In a type writer, the combination of a rocking frame as L, arranged to be operated by hand, and rocking frames underlying the operating keys, and capable of being depressed, on the depression of the frame L, for the purpose of effecting the movement of the spacing mechanism to the full extent, without the intervention of the operating keys. 4th. In a typewriter, the combination of a paper carriage constantly drawn in one direction, a controlling pinion in gear with a rack upon the carriage, an escapement wheel in ratchet connection with the pinion, a pallet and spring pallet carried by the arms of a rocking frame, cam faced levers for limiting the

movement of the spring pallet, and frames rocking beneath the operating keys, with tails bearing upon the pallet frame, and cam faced levers, when rocked by the depression of the keys or hand frame. 5th. In a type writer, the combination of a pinion *f*, an escapement wheel *f*¹ in ratchet connection therewith, a rocking frame *G G*¹, with arms *g g*¹, having fixed and movable pallets thereon, the whole forming a clock escapement, capable of being automatically operated and controlled from the keys, substantially as shown and described. 6th. In a type writer, the combination of a rocking lever *m* pivotally connected with a bell crank, for giving to and fro movement to the paper carriage in the direction of the length of the machine, and other levers *n, o*, pivoted at the same point, and arranged to strike stops on the lever *m* for the purpose of operating the latter, as described with reference to the drawings. 7th. In a type writer, the combination of a series of keys *a*, actuating type rods peculiarly linked therewith, a travelling carriage *D*, controlled by a clock escapement device, and carrying the paper carriage *C*, capable of retiring and advancing lengthwise of the machine, a series of levers *m, n, o*, and a bell crank lever for advancing and retiring the carriage *C*, a set of frames, *J J*¹, *K* beneath the keys for automatically operating the escapement and a frame *L*, for operating the escapement by hand when required, all arranged and operating substantially as herein shown and described with reference to the drawings.

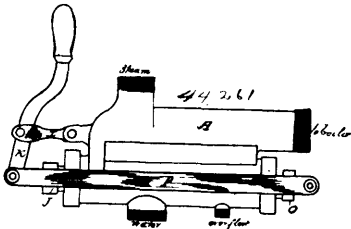
No. 44,260. Portable Safety Heater.
(*Chauffoir portatif de sûreté.*)



John House and Joseph A. Catlin, both of Annapolis, Maryland, U.S.A., 13th September, 1893; 6 years.

Claim.—1st. As an improvement in portable safety heaters, the combination with the standard, provided with the rack and base *a*, and the bracket having the central opening, the tooth and sliding loop, of the skeleton casting constructed with the raised arms *r*, having the lugs *s*, said casting having the lugs *q* on its underside, and the removable drip plate or receptacle *B*, provided with the handle, all combined and arranged as shown and for the purposes set forth. 2nd. In a portable heater, the within described heater consisting of the base having the standard provided with the rack, the bracket having the tooth and loop for engaging said standard, the skeleton frame having raised arms and lugs, and the overflow receptacle, all as shown and described. 3rd. In a portable safety heater, the combination with the shelf *C*, and standard *c*, of the shield or guard *b*, and base *a* formed integral, as shown and described.

No. 44,261. Injector. (*Injecteur.*)



Robert Harrison, Erie, Pennsylvania, U.S.A., 14th September, 1893; 6 years.

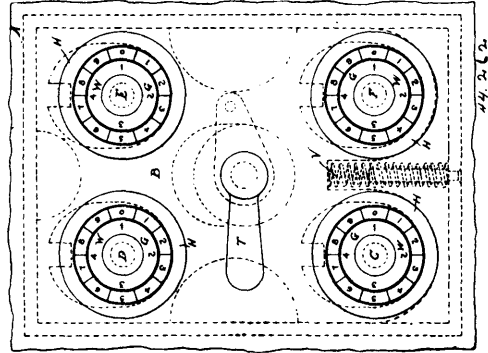
Claim.—1st. The combination in an injector, of a combined piston and disc steam inlet valve with a combined piston and disc overflow valve, a bar connecting said two valves together so that they will move in unison, and a lever pivoted thereto for operating said valves, substantially as and for the purposes set forth. 2nd. The combination in a combined ejector and injector, of a combined piston and disc steam inlet valve adapted to admit the steam into the ejector first and afterward into the injector, with a combined piston and disc overflow valve adapted to control the overflow of both the ejector and injector, a bar connecting said valve together, and an operating lever connected therewith, whereby both of said valves are moved simultaneously, substantially as and for the purpose set forth.

No. 44,262. Combination Lock. (*Serrure à combinaison*)

Felix Meloche, jr., and Clovis Méloche, both of Montreal, Quebec, Canada, 14th September, 1893; 6 years.

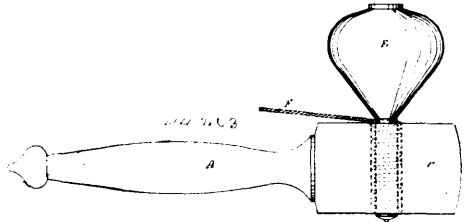
Claim.—The combination lock *B*, having four knobs *C, D, E* and *F*, provided each with a rim *W*, having thereon indicated numbers *G*, threaded stems *I*, circular pieces *H*, having also a series of num-

bers, flanged tubes *J*, having the small countersunk holes *J*, through which pass the screws *J*¹, the circular discs *K* having the threaded



holes *K* corresponding to the numbers on the pieces *H*, and slots *L*, bolt *O*, disc *R*, crank *S*, lever *T*, projections *M* and spring *V*, substantially as described and for the purposes set forth.

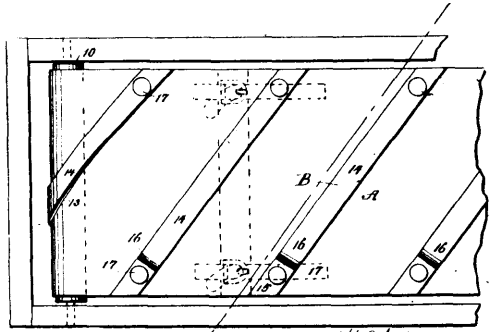
No. 44,263. Top. (*Toupie.*)



Joseph Desormiers, Cote, St. Louis, Quebec, Canada, 14th September 1893; 6 years.

Claim.—1st. A top *E*, having a long stem or point *D*, on which is wound the spring *F*, and handle *A*, with round hole *B*, substantially as described and for the purpose set forth.

No. 44,264. Conveyer Belt for Harvesters or Grain Binders. (*Courroie à transporter pour moissonneuse ou lieuse à grain.*)

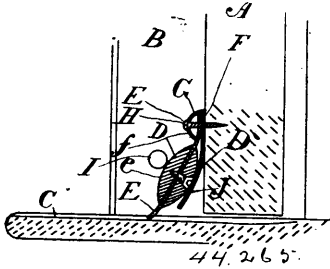


Delos Warren Storms, Western Nebraska, U.S.A., 14th September 1893; 6 years.

Claim.—1st. A conveyer belt for harvesters or grain binders, having flexible slats diagonally located thereon, substantially as shown and described. 2nd. A conveyer belt, for harvesters or grain binders, provided with flexible slats located diagonally thereon, and of greater thickness at the grain end than at any other point throughout their length, as and for the purpose set forth. 3rd. In a conveyer belt for harvesters or grain binders, the combination, with the belt, of slats located diagonally thereon, the said slats consisting of a body of leather and a capping of sheet metal, as and for the purpose set forth. 4th. In a conveyer belt for harvesters or grain binders, the combination, with a belt, of slats secured upon the belt, of greater thickness at their grain end than at any other point throughout their length, as and for the purpose specified. 5th. In a conveyer belt for harvesters or grain binders, the combination, with the belt, of slats located diagonally thereof, the said slats being of greater thickness at their grain ends than at any other point throughout their length, said slats being also constructed of a leather body and a capping or covering of sheet metal, as and for the purpose specified.

No. 44,265. Door Weather Strip.

(*Bourrelet de portes.*)

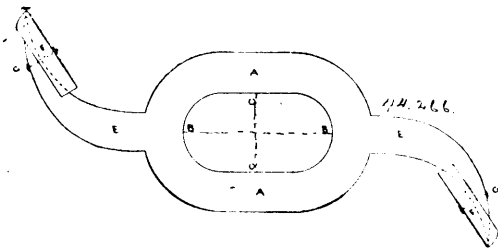


James McMath, Clinton, Ontario, Canada, 14th September, 1893
6 years.

Claim.—1st. A weather strip hung upon spring hangers having a normal tendency to force the strip from the ground, in combination with the tapered pressure buttons secured in the side posts of the door, and designed to gradually bring or remove the weather strip to or from the sill or floor, as and for the purpose specified. 2nd. The combination with the weather strip comprised of the central flexible strip E, stiffening strips D and D', and retaining strip G, all of which are secured together by means of the looped spring hanger J, and screws H, passing through the loop and retaining strip G, of the tapered buttons I, secured to the side posts of the frame, one button being designed to act for the other, substantially as and for the purpose specified. 3rd. The combination with the weather strip comprised of the central flexible strip E, stiffening strips D and D', and retaining strip G, all of which are secured together by means of the looped spring hanger J, and screws H, and the central strip B, of which is split at the centre at c, of the central set screw J, designed to clasp the split strip B, by means of the strips D and D', and thereby retain the bottom edge of the strip in any desired position, as and for the purpose specified.

No. 44,266. Machine for Cutting Dados.

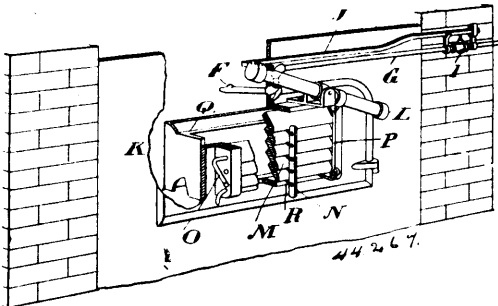
(*Machine pour couper les dados.*)



John Stuart, Windsor, Ontario, Canada, 14th September, 1893; 6 years.

Claim.—1st. The combination of my "Gooseneck Dado Head," with the shaft or arbour of an ordinary circular saw, table or other revolving machinery, substantially as and for the purpose described. 2nd. The combination of the respective parts A, E and F, with each other respectively, substantially as and for the purpose described. 3rd. The flat oval metal casting A, substantially as and for the purpose described. 4th. The arm or gooseneck E, substantially as and for the purpose described. 5th. The cutting tool F, substantially as and for the purpose described.

No. 44,267. Smoke Consumer. (*Appareil fumivore.*)

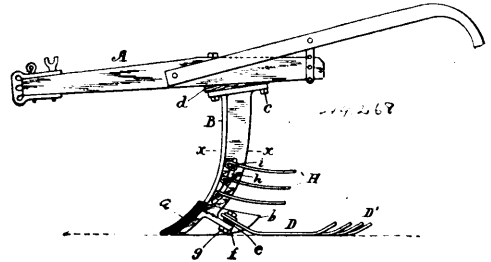


John Thomas Ellis, Toronto, Ontario, Canada, 14th September, 1893; 6 years.

Claim.—1st. A furnace door, having an opening through it protected by an inwardly projecting fender and provided with a series

of hinged shutters, substantially as and for the purpose specified. 2nd. A furnace door, having an opening through it, protected by an inwardly projecting fender and provided with a series of hinged shutters attached together and connected to the pivoted tube partially filled with quick silver or some material which will move in the tube, substantially as and for the purpose specified. 3rd. A steam pipe extending into a furnace, a valve controlling the passage of steam in said pipe and a lever controlling the movement of said valve, in combination, with a pivoted tube acting directly on said lever, substantially as described. 4th. A steam pipe extending into a furnace, a valve controlling the passage of steam in said pipe and a lever controlling the movement of said valve, in combination with a pivoted tube supporting one end of said pivoted lever, an opening in the wall of the furnace, a series of shutters for controlling the admission of air through said opening, and a connection between said pivoted tube and the shutters, substantially as described. 5th. A steam pipe extending into a furnace, in combination, with a suction chamber located so that the jet of steam issuing from the pipe will create a circulation of air or gases through the said chamber, substantially as and for the purpose specified. 6th. A furnace door, having an opening through it provided with a hinged shutter or shutters, in combination with mechanism which will admit of the rapid opening of said shutter or shutters but will only permit it to close at a relatively low speed, substantially as and for the purpose specified.

No. 44,268. Potato Digger. (*Arrache-patates.*)



Daniel Youngs Hallock, York, Pennsylvania, U.S.A., 4th September, 1893; 6 years.

Claim.—1st. In a potato digger, the combination, with a standard having a shovel secured detachably to its forward side, of the screen consisting in the parallel series of rods secured detachably to the transverse head c, the head being secured detachably to the lower part of the standard and the rods being extended backwardly, as described, and bent to form a wedge-shaped surface, as set forth. 2nd. In a potato digger, the combination, with a standard having a shovel attached to its forward side, of the slotted lug f, inclined downwardly from its rear side, the transverse head c, attached to the lug, and the screen d, consisting in the rods attached to the head and extended backward parallel to one another with their ends inclined upwardly, as described, to form a wedge-shaped surface, substantially as set forth. 3rd. In a potato digger, the combination, with the standard B, having the slot h, and having the shovel b, attached to its forward side, of fingers attached to the standard above the shovel by a bolt extended through the slot and thus adjustable toward the shovel and at various angles to the standard, as set forth. 4th. In a potato digger, the combination with the standard B, provided with the slot h, and having the shovel b, attached to its forward side, of the fingers H, attached to the standard by bolts i, within the slot and reflexed at their forward ends H', over the ends of the bolts, as and for the purpose set forth. 5th. In a potato digger, the combination, with a standard having a shovel attached to its forward side, of a screen adapted to drag upon the ground in the rear of the standard and finger H, attached adjustably to the standard above the screen, as set forth. 6th. In a potato digger, the combination, with a standard having a shovel attached to its forward side, and means for sifting the earth and potatoes projected backward from the standard, of the reversible and removable wedge d, and the beam A, secured by the bolts c', upon the top of the same, substantially as set forth.

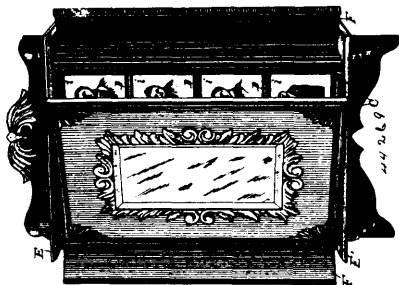
No. 44,269. Display Cabinet for Photographs.

(*Cabinet d'etalage pour photographies.*)

Thomas Everitt Wood, Kalamazoo, Michigan, U.S.A., 14th September, 1893; 6 years.

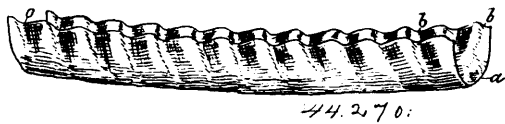
Claim.—1st. In a display cabinet, the combination of shelf like projections E E', attached to a suitable back, frame like sections C, hinged to each other successively and supported by pivots at the top and bottom of one of the sections between the shelf like projections, and swinging sides F, adapted to encase the frame like sections C when closed, for the purpose specified. 2nd. In a display cabinet, composed of hinged sections, the combination of shelf like projections above and below the sections, and swinging panels at each side adapted to encase the sections and retain them in place when the cabinet is closed, substantially as described. 3rd. In a display cabinet, the combination of frame like sections hinged by their

backs to each other successively a swinging panel adapted to encase the fronts of the sections and retain them in place when folded, and



a suitable support for the purpose specified. 4th. In a display cabinet, the combination of a frame like sections hinged to each other successively, swinging sides adapted to encase the frame like sections, and a suitable support for the purpose specified. 5th. In a display cabinet, the combination of frame like sections hinged by their backs to each other successively, pivots at the top and bottom of one of the sections, and brackets at the top and bottom containing bearings for the pivots, for the purpose specified. 6th. In a display cabinet, frame like sections hinged the one to the other successively in combination with pivots at the top and bottom of one of the sections, and suitable bearings for the pivots for the purpose specified.

No. 44,270. Protector for Pneumatic Tyres.
(*Protecteur pour bandages pneumatiques.*)



Alfred South Davy, of Sheffield, England, 14th September, 1893; 6 years.

Claim.—1st. The manufacture of a protector for pneumatic tyres, of a ribbon of metal, curved both transversely and longitudinally by corrugating it with transverse corrugations extending from the edges and gradually diminishing in depth to zero at the middle, as and for the purpose specified. 2nd. The combination, with a pneumatic tyre, of a ribbon of metal curved transversely and longitudinally by being corrugated with transverse corrugations of gradually diminishing depth from the edges inwards and applied to the inner surface of, or embedded in the thickness of the tyre, substantially as specified.

No. 44,271. Bale Tie. (*Cercle de ballot.*)



Peter Kells Dederick, Londonville, New York, U.S.A., 14th September, 1893; 6 years.

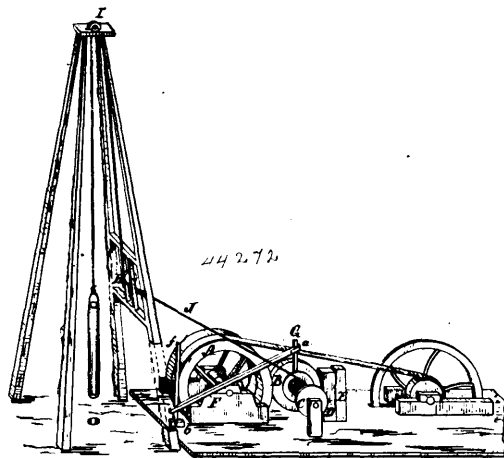
Claim.—1st. A wire bale band provided with a loop or eye in the firm twist at one end, and an adjustable locking end at the other, substantially as set forth. 2nd. The combination in a wire bale tie lock of the adjustable locking end with the loop or eye in the firm twist, whereby the former is drawn into the fork of the twist and gripped by the latter when subjected to strain in use, substantially as set forth. 3rd. As an improved article of manufacture, an adjustable wire bale tie having the end loop *b* with the firm loop or eye *D*, formed in the twisted part of the wire in continuation of the band at one end, combined with an adjustable wrap lock end at the other end, substantially as and for the purpose set forth. 4th. In other end, substantially as and for the purpose set forth. 4th. In an adjustable bale tie or band the wrap lock or fastening formed by the plain end passed through the loops *b* and *D*, and in combination with the same, folded back short in the fork of loop *D*, and again folded and drawn firm in the fork formed by the band and the loop *b*, substantially as and for the purpose set forth.

No. 44,272. Machinery for Operating Sand Pumps When Sinking Artesian Wells. (*Mécanisme pour le fonctionnement des pompes à sable dans le creusement des puits artésiens.*)

William Ashton Simpson, Petrolia, Ontario, Canada, 14th September, 1893; 6 years.

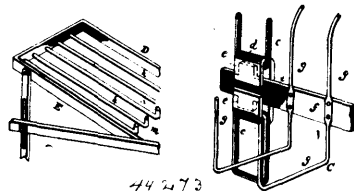
Claim. 1st. The combination of the friction wheel *A* hung on the main shaft with the friction wheel *B*, cable reel *C*, and break *D*.

2nd. The combination of the friction wheel *B*, cable reel *C*, with the



lever *F*, cable *J*, and travelling sheave wheel *H*, substantially as an for the purpose hereinbefore set forth.

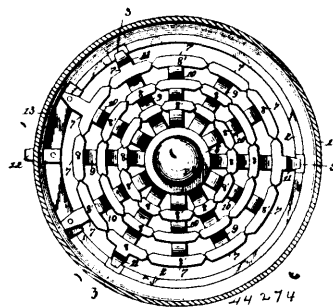
No. 44,273. Elevator. (*Élévateur.*)



J. R. Moss, Webster, Pennsylvania, U.S.A., 14th September, 1893; 6 years.

Claim.—An elevator having a double chain with connecting cross bars *f*, and oblong links at right angles to each other, the said cross bars *f* being provided with hook rods and end studs, substantially as shown and for the purpose described.

No. 44,274. Grate. (*Grille.*)

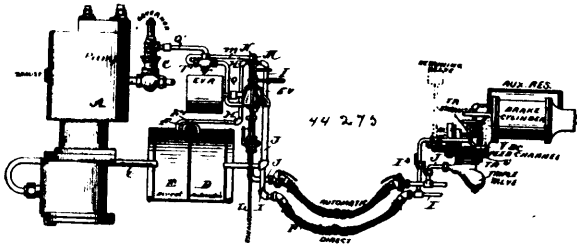


William W. Sweetland, Edwardsburg, Michigan, U.S.A., 14th September, 1893; 6 years.

Claim.—1st. In a grate, the combination with a lower member, consisting of a central body, radial arms having downward bends, and concentric projections secured at their centres to said arms, of an upper member comprising similar body and arms, the latter being provided with upward bends registering with the downward bends in the lower arms, concentric projections on the arms, secured to the latter slightly out of the centres of the projections, a pivot at the centres of said members, and means for oscillating the upper member and supporting the lower, substantially as described. 2nd. In a grate, the combination with a lower member, consisting of a central body and radial arms having downward bends and means for supporting said member, of an upper member consisting of a central body, and radial arms having upward bends registering with the bends in the lower arms, a pivot at the centres of said bodies, and means for operating the upper member, substantially as described. 3rd. In a grate, the combination with a lower member consisting of a central body and radial arms having downward bends and means for supporting said member, of an upper member consisting of similar body, arms and projections, the latter being secured to the arms slightly out of the centres of the lengths of said projections, a pivot at the centres of said bodies, and means for oscillating the upper member, substanti-

as described. 4th. In a grate, the combination with a lower member consisting of a central body, radial arms, and concentric projections secured at their centres to said arms, means for supporting this member, a step rising from its centre, and a fixed washer adjacent said step and provided with an arc shaped notch, of an upper member consisting of a similar body, arms and projections, the latter being secured to the arms slightly out of the centres of the length of said projections, a cavity in the upper member fitting said step and having a lug adjacent engaging said notch, the combined lengths of the projections in each member forming a half circle, and said notch being of a length to permit the movement of each upper projection from above the corresponding lower projection nearly but not quite off the same, and means for oscillating the upper member, substantially as described. 5th. In a grate, the combination with a lower member, consisting of a central body, radial arms, and projections, a step rising from said body and having a central perforation, and means for supporting this member, of an upper member comprising similar body, arms and projections, the body having a cavity turning on said step, and of a depth to hold the adjacent faces of the members out of contact, a pivot depending from the upper member and passing through the perforation of the lower member and secured thereto, and means for oscillating the latter, substantially as described. 6th. In a grate, the combination of the upper and lower members centrally pivoted and provided with radial arms, and having concentric projections, two of the arms of the upper member being extended, a curved bar secured to the extended arms, and a piece 12^b projecting from the curved bar, and designed to extend through a slot in a stove to be engaged by a shaker iron, substantially as described.

No. 44,275. Air Brake. (Frein atmosphérique.)

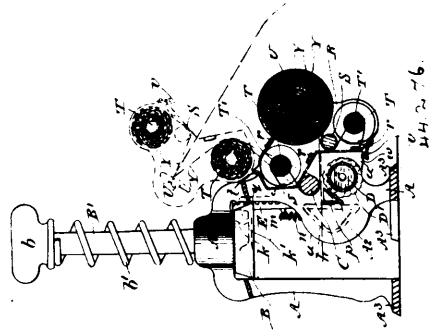


Lucien A. Pinkston, Corsicana, Texas, U.S.A., 14th September, 1893; 6 years.

Claim.—1st. A fluid pressure brake mechanism, comprising an automatic system, including the automatic reservoir compartment, automatic train pipe, the engineer's automatic valve, and a triple valve, a direct reservoir compartment, a direct train pipe arranged to discharge into the triple valve casing, an engineer's valve in the said direct pipe connected with the direct reservoir, the pump discharging into such direct reservoir, the pump governor and mechanism operated by the reduction of pressure in the direct system for holding the pressure in the automatic system to standard pressure during the application of the direct pressure, substantially as set forth. 2nd. A fluid brake mechanism, comprising the brake cylinder, the auxiliary reservoir, the triple valve, the automatic train pipe, the direct train pipe having laterals, one communicating with the brake cylinder feed channel, and the other with the exhaust of the triple valve, such laterals having oppositely moving valves, and means for varying the air pressure in the automatic or direct train pipe, whereby to apply the brakes either by automatic or direct system, all substantially as and for the purpose described. 3rd. The combination in a fluid pressure brake system, of the automatic and direct train pipes, an engineer's valve, the pump, the automatic and direct reservoir compartments, the direct compartment connected with the pump, a supply pipe connecting the direct with the automatic reservoir compartment, having a back pressure valve, a double acting governor valve connected with the engineer's automatic valve, and an engineer's valve connected with the direct pipe and direct reservoir compartment, and with the double acting governor valve, constructed to equalize the direct pressure against such valve to that of the automatic pressure thereagainst, and to provide for a reduction of such pressure when adjusted to apply, to lead the under standard pressure into the direct pipe, all substantially as and for the purpose described. 4th. In a fluid pressure brake system, the combination with the pump governor, the double acting governor valve, of the automatic and the direct train pipes, the main and direct reservoir compartments, the engineer's valves in said pipes connecting them with the said reservoir compartments, and with the double acting governor valve, the direct engineer's valve having a reducing mechanism adapted to equalize the direct air pressure against the said governor valve to that of the automatic pressure against it, and adapted when set to apply the brakes to allow such pressure to exhaust, whereby to admit of the adjustment of such governor valve to cut off the governor from the automatic pressure, all substantially as and for the purpose described. 5th. In a fluid pressure brake system, the combination with the brake cylinder, the auxiliary reservoir, the tripple valve, the automatic train pipe, the automatic and direct reservoirs, the engineer's automatic valve and the pump, of a direct train pipe connected with the tripple valve casing at its brake cylinder feed end,

and having a back pressure valve for preventing air under automatic pressure passing out of the tripple valve into the direct pipe, a brake pipe connecting the direct pipe with tripple valve exhaust, and having a direct pressure valve whereby to prevent the flow of air from the said direct pipe into the said exhaust, an engineer's valve in the direct pipe formed with a bleeding off channel normally in communication with the direct pipe and the atmosphere, whereby the exhaust from the tripple valve will be released through such direct pipe, and mechanism for holding the air under standard pressure in the automatic pipe, when the direct pressure is in the direct pipe, all substantially as shown and for the purpose described. 6th. An air brake system, comprising an automatic system and a direct system, the train pipe of the latter having a three way valve, and connected to the exhaust of the tripple valve of the automatic system, whereby to release the air through the three way valve when the brakes are released by the automatic system, the direct reservoir compartment adapted to hold air under standard pressure, connected with the direct train pipe and supplied from the pump, the automatic reservoir compartment, for supplying to the automatic pipe, said automatic reservoir compartment being supplied from the direct reservoir compartment, a check valve for holding the pressure in the said automatic reservoir compartment, when pressure is reduced in the direct reservoir compartment, a double acting valve in the pump governor pipe operated to hold the pressure in the automatic train pipe when the direct system is used, all arranged substantially as and for the purposes described.

No. 44,276. Hand Device for Affixing Postage Stamps. (Appareil à main pour apposer les estampilles.)



James P. Martin and William P. McFeat, both of Montreal, Quebec, Canada, 14th September, 1893; 6 years.

Claim.—1st. A hand device for affixing stamps and the like, embodying in a single structure the following instrumentalities, viz.: A guide or support, feed and dampening mechanism, a cutting edge, and a depressible plunger, having a yielding resistance and acting by a single depression to secure the feed, dampening, severance and attachment to the article receiving it, of the stamp or section detached from the strip operated upon. 2nd. In a device for the purpose set forth, the combination, of a suitable guide frame or support, a depressible plunger, having a yielding resistance and normally elevated, a roller and a dampener acting together as a feed for the strip to be operated upon, means intermediate of said plunger and the roller for securing the feeding of the strip during a portion of the descent of said plunger, and a stationary cutting edge, carried by said frame and acting together with said plunger to detach the required section from the strip. 3rd. In a device, for the purpose set forth, the combination with a structure, comprising a guide frame or support, feed and dampening mechanism in roller form, a stationary cutting edge, a spring operated gear and rack connection for operating the feed, and a depressible plunger, having a yielding resistance, of a carrier in the form of a pair of flexible bands adapted to be rolled, with the strip to be operated upon between them, and unwound by said feed mechanism, and means for taking up the unwound ends of said carrier. 4th. In a device for the purpose set forth, the combination, of a main guide frame or support, a depressible plunger, having a yielding resistance and normally elevated, feed and dampening mechanism in roller form, a stationary cutting edge and a spring operated gear and rack connection with an independent offsetting guideway for the rack to secure the operation of said feed during a period only of the depression of said plunger, as set forth. 5th. In a device for the purpose set forth, the combination of a main guide frame or support, a depressible plunger, having a yielding resistance and working therein, and being normally elevated, feed mechanism and a movable feed operating rack bar, having a reciprocal compound or indirect travel imparted to it by the combined action of said plunger, a spring connection between it and said frame and an irregular guideway.

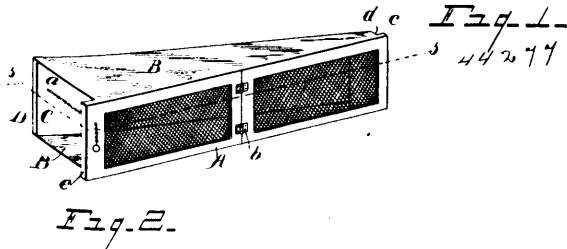
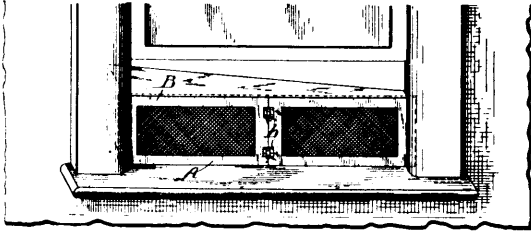
No. 44,277. Ventilator for Passenger Cars.

(Ventilateur pour chars à passagers.)

Alexander Black, Toledo, Ohio, U.S.A., 14th September, 1893; 6 years.

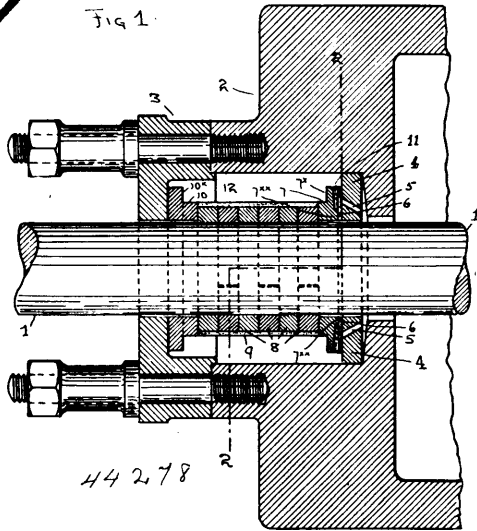
Claim.—1st. In a car window ventilator, the hinged screw sash having the projecting ends, the movable side, the flexible material

connecting said side and sash, and means for adjusting said side with respect to said sash, substantially as set forth. 2nd. The com-



ination of the screen sash, the movable connected thereto by flexible material so as to form an opening at each end between said side and sash, and the springs for forcing said side outward, substantially as specified. 3rd. The combination, with a car window, the screw sash, the rigid side movably attached thereto so as to form an opening between said sash and side, and the valve to close said opening at one end. 4th. In a car cooler and ventilator, the combination of the screen sash, the side hinged thereto, the material connecting said side and sash, and means for adjusting and locking said side so as to regulate the opening between its free end and said sash.

No. 44,278. Metallic Packing. (Garniture métallique)

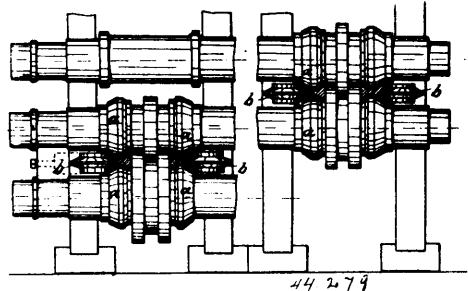


John L. Halyburton, Philadelphia, Pennsylvania, U.S.A., 14th September, 1893; 6 years.

Claim.—1st. A metallic packing for steam engines, pumps, etc., consisting of a ring seat provided with a series of port openings, a flexible disc or diaphragm on one side of said ring or seat adapted to cover said port openings, a second ring provided with a shoulder and an off-set or projection, the latter abutting against said flexible disc or diaphragm forming a space between said flexible disc and shoulder, one or more split rings and a split encasing ring for the latter arranged to break joint, and next said split rings, a ring provided with a shoulder, as described and for the purposes set forth. 2nd. In combination with a sliding or rotating rod or stem and its fixed box or bearing of the herein described self adjusting metallic packing ring consisting of a ring or seat placed within said box or bearing and provided with a series of ports having a source of pressure supply, a flexible disc or diaphragm next the frame of said seat adapted to cover the series of ports therein, a second ring provided with a shoulder and an off-set or projection, the latter abutting against said flexible disc or diaphragm and forming an annular space between said flexible disc or shoulder, a split packing ring next the second ring and a split bull ring surrounding the same and arranged to break joint therewith, and a ring provided with a shoulder next said split rings and abutting against the plate or cover

of the fixed box or bearing, the whole constructed, arranged and operating as described and for the purposes set forth. 3rd. In combination with a sliding or rotating rod or stem and its fixed box or bearing of the herein described self adjusting metallic packing ring consisting of a ring or seat placed within said box or bearing and provided with a series of ports having a source of pressure supply, a flexible disc or diaphragm next the face of said seat adapted to cover the series of ports therein, a second ring provided with a shoulder and an off-set or projection, the latter abutting against said flexible disc or diaphragm and forming an annular space between said flexible disc or diaphragm and shoulder, a series of split packing rings arranged end to end and to break joint with each other, a split bull or encasing ring surrounding said series of rings and arranged to break joint therewith, and next said split rings a ring provided with a shoulder abutting against the plate or cover of the fixed box or bearing, the whole constructed, arranged and operating as described and for the purposes set forth. 4th. In combination, with a sliding or rotating rod or stem and its fixed box or bearing of the herein described self adjusting metallic packing ring consisting of a ring or seat placed within said box or bearing and provided with a series of ports having a source of pressure supply, a flexible disc or diaphragm next the face of said seat adapted to cover the series of ports therein, a second ring provided with a shoulder and an off-set or projection, the latter abutting against said flexible disc or diaphragm and forming an annular space between said flexible disc or diaphragm and shoulder, a series of split packing rings arranged end to end and to break joint with each other, a split bull or encasing ring surrounding said series of rings and arranged to break joint therewith, next said split ring provided with a shoulder abutting against the plate or cover of the fixed box or bearing, and means for compactly holding the several parts, the whole constructed, arranged and operating as described and for the purposes set forth. 5th. In combination, with a sliding or rotating rod or stem and its fixed box or bearing of the herein described self adjusting metallic packing ring consisting of a ring or seat placed within said box or bearing provided as to its periphery with a groove or recess containing one or more split rings, and as to its body portion with a series of ports having a source of pressure supply, a flexible disc or diaphragm next said ring or seat opposite the source of pressure supply adapted to cover the series of ports therein, a second ring provided with a shoulder and an off-set or projection the latter abutting against said flexible disc or diaphragm and forming an annular space between said flexible disc and shoulder, a series of split packing rings arranged end to end and to break joint with each other, a split bull or encasing ring surrounding said series of rings and arranged to break joint therewith, a ring at the end of said split rings, provided with a shoulder and abutting against the plate or cover of the fixed box or bearing, and means for compactly holding the several parts, the whole constructed, arranged and operating as described and for the purposes set forth. 6th. In a metallic packing of the character herein described in combination with a ring or seat provided with a series of pressure admitting ports, a pressure regulating flexible disc or diaphragm next the opposite side of the pressure admitting ports, from the source of pressure supply, said disc or diaphragm adapted to normally cover said ports and under sufficient initial pressure admit such initial pressure to the area about the packing ring, and under sufficient pressure contained in said area close said ports, whereby sufficient pressure only is retained within said area, to cause the packing ring to uniformly bite or grip its rod or stem and to close or seal all joints as described. 7th. In a metallic packing, the combination, with a series of split packing rings of non-resilient split bull or encasing ring for the same as described. 8th. In a metallic packing, the combination, with a series of non-resilient split packing rings of a non-resilient split bull or encasing ring for the same as described. 9th. In a metallic packing, the combination, with a series of split packing rings of a split bull or encasing ring of annealed copper for the same as described.

No. 44,279. Method of and Apparatus for Manufacturing Rolled Articles. (Méthode de et appareil pour fabriquer des objets laminés.)

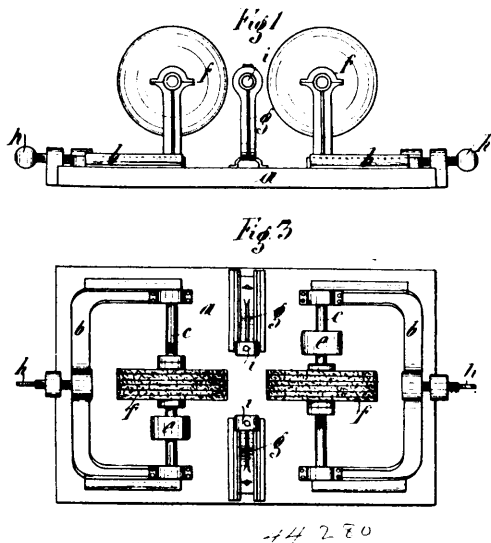


Toussaint Bicheroux, Dusseldorf, Prussia, Germany, 15th September, 1893; 6 years.

Claim.—1st. The method of rolling rails, girders and the like, consisting of the use of a blank cast with a groove or grooves the

sides of which form the flanges of the finished section and passing it through rolls provided with a lateral roller or rollers entering said groove or grooves and keeping said groove or grooves open during the elongation of the blank, substantially as set forth. 2nd. In a rolling mill for rolling rails, girders and the like, the combination with the rolls *a* of a lateral roller or rollers *b* of angular cross section disposed in a suitable groove or grooves in said rolls so as to be adapted to enter the blank, substantially as set forth.

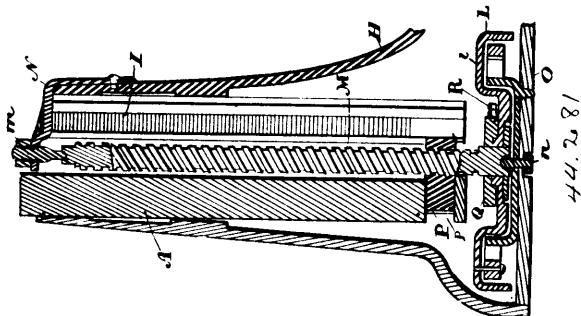
No. 44,280. Grinding and Polishing Apparatus for Wire Rods and Tubes. (*Appareil pour dresser et polir les tiges et tubes.*)



Eugen Post, Ehrenfeld, Köln, Prussia, German Empire, 15th September, 1893; 6 years.

Claim.—1st. A grinding and polishing apparatus for wire, metal rods, tubes and the like articles of any material, of any desired size and of any desired cross section, characterized by the arrangement of two or more grinding or polishing discs rotating towards each other, between which the article to be operated on is brought, said article being capable of movement in all directions even during the working of the apparatus. 2nd. In a grinding and polishing apparatus for wire, metal rods, tubes and the like, the combination of two polishing discs *f*, mounted face to face on parallel shafts, two parallel shafts *c*, carrying said discs and journaled in frames and provided with driving pulleys and frames *b*, in which said shafts are journaled and bedded on a base so as to be movable towards and from each other, substantially as set forth. 3rd. In a grinding and polishing apparatus for wire, rods, tubes and the like, the combination, with a pair of polishing discs set face to face, of two supports *g*, bedded opposite each other on a base at a right angle to and centrally between said discs in guides in which they are held movable towards and from each other and bearings or mandrils *i*, movably held in said supports, substantially as set forth. 4th. In grinding and polishing apparatus for wire, rods, tubes and the like, polishing discs consisting of two concentric rings *m* and *l*, the outer or larger one carrying the polishing material and the inner or smaller one mounted on the shaft, said discs connected by means of spiral springs *n*, substantially as set forth.

No. 44,281. Dental Chair. (*Chaise pour opérations dentaires.*)

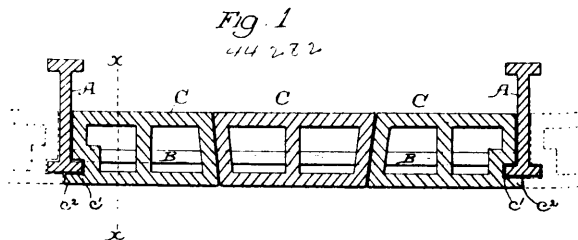


Theodore Nelson Clark, Toronto, Ontario, Canada, 15th September, 1893; 6 years.

Claim.—1st. In a dental chair, the combination, with the outer standard, the inner hollow standard and means for raising the same, of a screw spindle journaled at the top and bottom within the

inner standard, a nut loosely carried by said spindle and engaging the inner standard, means whereby the screw spindle is fractionally connected to the governor disc and a brake for normally preventing the rotation of the governor disc, as and for the purposes specified. 2nd. In a dental chair, the combination of the outer standard, the inner hollow standard vertically movable therein, carrying a rack, a dog for engaging the rack, a foot lever with connections to said dog, a vertical screw spindle journaled in the end walls of the outer standard, a supplemental disc rigidly carried on the lower end of said spindle, a nut loosely mounted on the spindle, and engaging a recess on the wall of the inner standard, a governor disc journaled upon the lower end of the rod, friction knuckles carried thereby adapted to engage the rigid disc and a brake normally in engagement with said governor disc, substantially as described. 3rd. In combination, the outer standard, the inner standard vertically movable therein carrying a rack, a manually operated dog engaging said rack to raise the standard, pins secured at either end of the outer standard, a screw spindle journaled upon said pins within the inner standard, a nut loosely carried by said spindle and engaging a recess in said standard, a supplemental disc rigidly connected to said spindle near the lower end, a governor disc rotating about the spindle, friction knuckles carried by the governor disc for engaging the supplemental disc, and a brake for normally preventing the rotation of the governor disc, substantially as described.

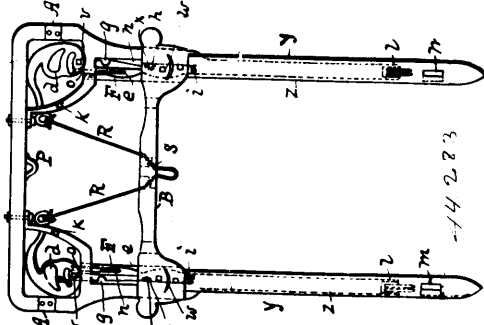
No. 44,282. Tile Construction for Walls, Arches, Partitions, Roofs, etc. (*Construction en tuiles pour murs, arches, divisions, etc.*)



Joseph A. Flint, San Francisco, California, U.S.A., 15th September, 1893; 6 years.

Claim.—1st. A tile formed with grooves in its ends to receive the bars upon which it is supported, and with a groove in its side to fit and overlap the supporting beam, substantially as herein described. 2nd. A tile construction consisting of supporting beams, supporting bars extending between said beams and tiles with end grooves which receive said bars, and with a side groove fitted to and overlapping said beams, substantially as herein described. 3rd. A tile construction consisting of supporting I-beams, supporting bars resting on and between the flanges of said beams, and tiles with end grooves receiving the bars, and with a side groove fitted to and overlapping the flanges of said beams, substantially as herein described.

No. 44,283. Hay Fork. (*Fourche à foin.*)



David Abram Shank, Elida, Ohio, U.S.A., 15th September, 1893; 6 years.

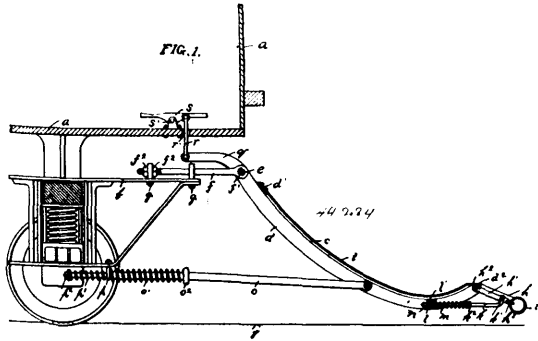
Claim.—A double harpoon or hay fork comprising the opposite prongs, the harpoons working therein, the shuttles, the springs connected with said shuttles, and the trip arms, substantially as described.

No. 44,284. Car Fender. (*Garde pour chars.*)

Robert A. Crawford, Allegheny, Pennsylvania, U.S.A., 15th September, 1893; 6 years.

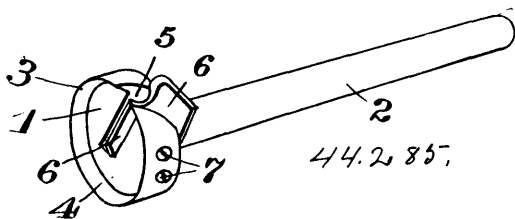
Claim.—1st. The combination, with a locomotive or car, of a pilot or guard pivoted thereto, rods pivoted at their forward ends to said pilot or guard, the rear ends of said rods resting in suitable supports, and springs encircling said rods, said spring being interposed between shoulders on said rods and said supports, substantially as and for the purposes set forth. 2nd. The combination, with a pilot

or guard, of a supplementary pilot or guard pivoted thereto, rods pivoted to said supplementary pilot or guard, and resting in a suit-



able supports on said main pilot or guard, and springs interposed between shoulders on said rods and said supports, and nuts engaging the inner ends of said rods, substantially as and for the purposes set forth. 3rd. A pilot or guard for locomotives or cars, consisting of a series of parallel bars having their inner ends pivoted to a suitable support, the outer ends of said bars engaging with a spiral coil extending across the front of said pilot, substantially as and for the purposes set forth. 4th. A pilot or guard for locomotives or cars, consisting of a series of parallel rods having their inner ends pivoted to a suitable support, the outer ends of said bars having notches formed therein adapted to engage a spiral coil extending across the front of said pilot or guard, substantially as and for the purposes set forth. 5th. The combination, with a locomotive or car, of a pilot pivoted thereto, rods pivoted to said pilot and extending rearwardly through suitable supports on the truck of the car or car body, and springs interposed between shoulders on said rods and the said supports, and also, between said supports and nuts engaging the inner ends of said rods, substantially as and for the purposes set forth. 6th. The combination, with a locomotive or car, of a pilot pivoted thereto, rods pivoted to said pilot and extending rearwardly through suitable supports on the truck or car body, springs interposed between shoulders on said rods and said supports, and also, between said supports and nuts engaging the inner ends of said rods, and lever connections between said pilot and a lever in the car for lowering and raising said pilot, substantially as and for the purposes set forth. 7th. In combination, with a locomotive or car, a main pilot pivoted thereto, rods pivoted to said pilot and extending back through shoulders on said rods and said supports, and also, between said supports and nuts engaging the inner ends of said rods, and a supplementary pilot or guard pivoted to said main pilot, said supplementary guard having rods pivoted thereto and said rods extending back through supports on said main pilot, and springs interposed between shoulders on said rods and said supports, and connections between said main pilot and a lever within the car for lowering and raising said main pilot and supplementary pilot, substantially as and for the purposes set forth.

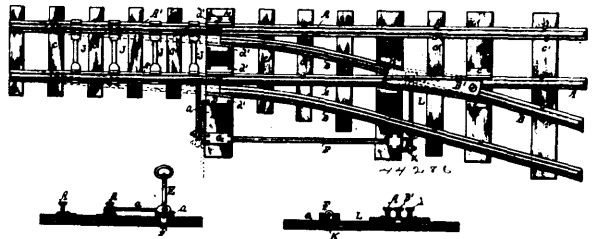
No. 44,285. Auger. (Tarière.)



Abraham L. Adams, Bridgeport, Connecticut, U.S.A., 15th September, 1893; 6 years.

Claim.—1st. In an auger bit, the combination of the head having therearound a scoring ring provided with a cutting edge, and having a gate extending through such ring to a point about midway of such head, and a cutter detachably secured within such gate to said head, and extending laterally outside said gate beyond the edge of said ring, substantially as set forth. 2nd. In a device of the character described, the combination of the bit head having a circumferentially disposing scoring ring, and provided with a gate extending through such ring, and head to a point about midway of the latter, and a cutter detachably secured to such head in a plane below the edge of said ring and extending on opposite sides of the latter, substantially as set forth.

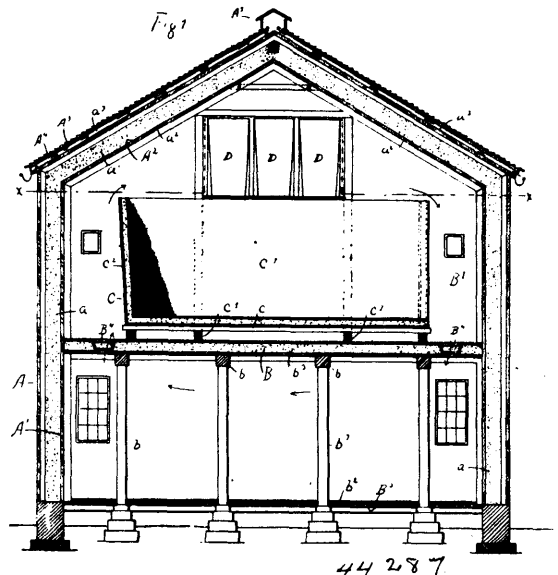
No. 44,286. Switch for Railways. (Aiguille de chemin de fer.)



Harrison Rich, Muskegon, Michigan, U.S.A., 15th September, 1893; 6 years.

Claim.—1st. In a railroad switch, the combination with the pivoted angular rail piece B¹, serving alternately as a portion of the main track and a portion of the switch track, of the supporting plate H for one end thereof, and the supporting plate C for the other end, upon and to which the same is pivoted, connecting the stationary rail of main track and stationary rail of switch track, and its other end being free to shift into proximity with the rail A or B, as described, substantially as herein shown and described. 2nd. In a railroad switch, the combination with the pivoted angular rail piece B¹, pivoted at its wide end to the plate C, and its narrow end resting on and being free to move upon the plate H, and to be shifted into proximity with the stationary rails A or B, of the swinging rails A¹, A¹, the bridles J connecting same, the mechanism for operating the pivoted rail piece B¹, and the swinging rails A¹, A¹, simultaneously, substantially as and for the purpose herein shown and described. 3rd. In a railroad switch, the combination of the pivoted rail piece B¹, of an arm connecting same to a crank or elbow K, which is attached to a rod F, journaled in the blocks G, G, secured to ties C¹, C¹, a lever E attached to opposite end of rod F, an arm a connecting the swinging rails A¹, A¹, to lever E, by means of which the swinging rails A¹, A¹, and the pivoted rail piece B¹ are operated simultaneously, substantially as shown and described.

No. 44,287. Room for Forming and Preserving Ice. (Chambre pour faire et conserver la glace.)

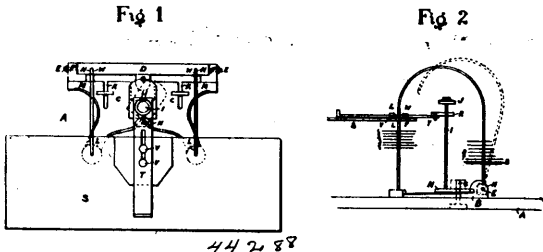


James Monroe Rosse, Nyack, New York, U.S.A., 15th September, 1893; 6 years.

Claim.—1st. A refrigerating and preserving building, comprising double side walls A, A¹, filled with insulating material, a roof having the inner portion A², and an outer portion A³, each supported on an independent series of rafters, insulating material a between said outer and inner portions, a layer a² of tarred material between the material a¹ and the inner roof portion, a similar layer a³ above the outer roof portion, a series of parallel contiguous air ducts above the outer roof portion A³, and covered by the roofing proper, said ducts running from each eave to the ridge and communicating with the atmosphere at both ends, a flooring B³, having a non-conducting surface, and an intermediate horizontal transverse partition B, dividing the interior into an upper and lower compartment, sub-

stantially as specified. 2nd. In an ice forming and preserving building, the combination with the upper chamber B¹, surrounded on all sides by double packed walls and roofing, said roofing having a series of air ducts therein, of an ice forming tank located in said chamber and having a less surface area than said chamber, the walls of said tank being flaring and one removable, a series of ducts or hoods D, communicating with the outer air through a wall of the building and extending over said tank; and an adjacent preserving chamber having openings communicating with the chamber B¹, and means for sealing said openings and the hoods or ducts D when desired, substantially as specified.

No. 44,288. File. (Serre-papier.)



Alexander Henry Costigan, Montreal, Quebec, Canada, 15th September, 1893; 6 years.

Claim.—1st. In an office file, the combination, of vertical tubes mounted on a plate, and a bar journaled in said plate and carrying the bent wires. 2nd. In an office file, the combination, with vertical tubes mounted on a plate, of a bar, journaled in said plate and carrying the bent wires, and means for holding such bar in place and releasing it all, as herein set forth. 3rd. In an office file, the combination with a bar, journaled in the base plate and carrying the bent wires, of an extension from such bar and a locking plate on such extension, and means for operating same, acting upon such extension, as and for the purposes set forth. 4th. In an office file, the combination, with wires and tubes mounted on the base plate, of the cover, attached to a pressure bar, detachably connected with a central spindle secured in such plate, as and for the purposes set forth.

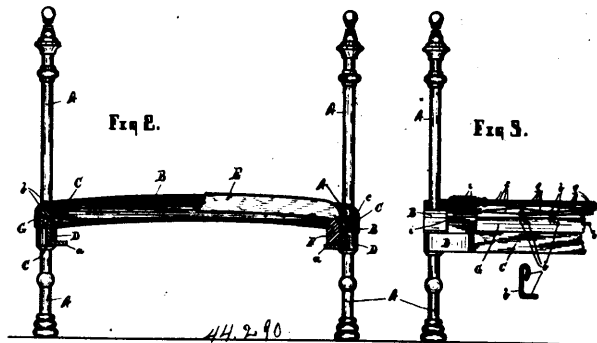
No. 44,289. Method of Making Wire Nails.

(Méthode de faire le clou de fil de fer.)

John James Gordon, St. John, New Brunswick, Canada, 15th September, 1893; 6 years.

Claim.—The method of increasing the tenacity of wire spikes, nails, tacks, brads or rivets, consisting in coating the finished spikes, nails, tacks, brads or rivets with copper, by placing them into a solution of sulphate of copper, said spikes, nails, tacks, brads or rivets, having previously been cleaned by means of an acid, both substantially as described.

No. 44,290. Bedstead. (Couchette.)

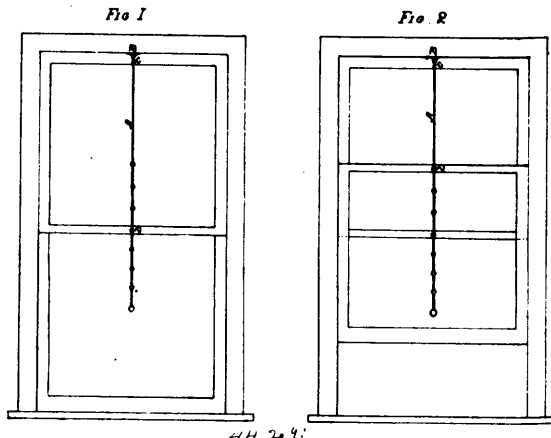


Adelbert Henry Gale, Waterville, Quebec, Canada, 15th September, 1893; 6 years.

Claim.—1st. The herein described bedstead, constructed substantially as set forth. 2nd. The herein described bedstead, having the post A, the end rail B, and the socket D, having the lateral recess d, to receive the tenon C, of the side rail, substantially as set forth. 3rd. The herein described bedstead, having the side rail C, with the tenon c and horizontal lip a, to receive the mattress frame, the socket D, having the lateral recess d, the post A, and the end rail B, all as set forth. 4th. The herein described bedstead, having the side rail G, the outer and upper edge thereof turned outward and downward, perforated with holes to receive the hooks b, to hold the fabric down on said side rail, the tenon c, to rest into the recess d, of the socket D, and the post A, having the end rail B, supported by said socket D, and provided with the holes e, to receive the hooks f, or the springs, to suspend the fabric of the mattress,

substantially as set forth. 5th. The lip a, combined with the side rail of a bedstead, to sustain and support a bed frame, substantially as set forth. 6th. The tenon c, combined with the side rail of a bedstead, substantially as and for the purposes set forth. 7th. The end rail having rounded ends extending outward beyond the post of a bedstead and secured thereto as described, and arched upward and outward, substantially as and for the purpose set forth. 8th. The end rail B, combined with the post of a bedstead and arched upward, substantially as described. 9th. The end rail B, combined with the post of a bedstead and arched outward, substantially as described. 10th. The end rail, extending outward beyond the post to the extreme width of the bed, secured thereto by resting around the post of the bedstead, perforated with holes to receive the fastenings of the end tension springs and resting upon and supported by the socket D, substantially as set forth. 11th. The end rail B, resting around the post A, and upon the socket D, having two horizontal flanges perforated to receive the wire mattress attachments and having rounded ends extending outward beyond the post, substantially as described.

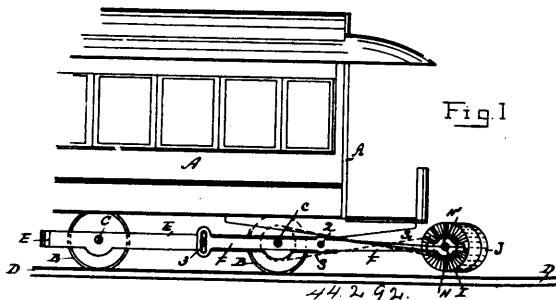
No. 44,291. Ventilator for Windows. (Ventilateur pour fenêtres.)



William Henry Hamilton and William A. Matherson, both of Fort William, Ontario, Canada, 15th September, 1893; 6 years.

Claim.—As a new and useful device for regulating windows for ventilating purposes, a fine rope or cord A, with rings or loops attached at intervals thereto, in the lower part of the same, the other end of the rope or cord secured or attached to a hook or fastening C, fixed at the centre of the top rail of the upper sash, which rope or cord is then passed over or through a rope pulley B, which is affixed or attached to the centre of the top part of the window frame, the rope or cord hanging over the hook or fastening D, in the centre of the meeting bar of the lower sash ready to be adjusted as desired, all formed and combined for the purpose hereinbefore set forth.

No. 44,292. Track Cleaner for Street Cars. (Nettoyeur de voie pour chars de rues.)

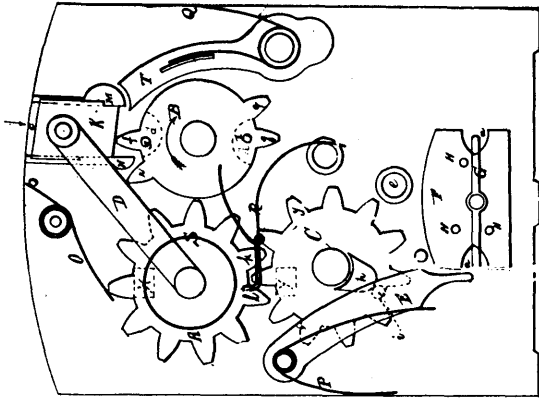


Alexander McKerlie, Hamilton, Ontario, Canada, 15th September 1893; 6 years.

Claim.—1st. The combination of the front projecting adjustable side arms F, pivoted and secured to the frame of car, and having front bearings H, the through shaft I in said bearings, at an angle, and provided with brush roller J, the chain wheel O, secured to axle or wheel, the chain wheel P, the chain belt S, and the guide roller T, in its support and bearing U, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with metallic frame of car, of the side arms F, pivoted and secured thereto, and having front bearings H, and caps H', the shaft I in said bearings, at an angle, and provided with the cleaner K, the chain wheels O and P, the belt cham S, and the guide roller T, in its bearings U, substantially as for the purpose hereinbefore set forth. 3rd. The

ront projecting and adjustable side arms F, provided with bearings to receive the angle shaft I with its caps, in combination with mechanism to drive said shaft from the wheels and axle of said car, substantially as and for the purpose hereinbefore set forth.

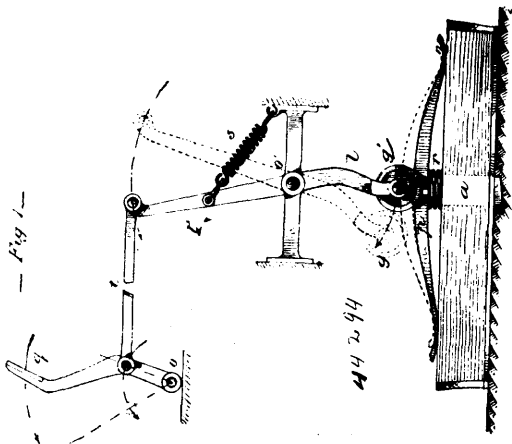
No. 44,293. Savings Bank. (Tronc.)



Jean Zotique Ratelle, Montréal, Québec, Canada, 15 septembre 1893, 6 ans.

Résumé.—Un tronc d'épargne, se fermant au dépôt d'une pièce de dix centins, et ne s'ouvrant que lorsque le montant de cinq piastres, ou un multiple, est complété; ce tronc se composant d'une boîte formée de deux ou plusieurs pièces, réunies au moyen d'un boulon, ou autre moyen apparent ou caché; le mécanisme du tronc se composant des roues dentées A, B, C, des pièces D, E, F, G, K, M, N, T, de la cloche S, et des ressorts O, P, Q, R, des ouvertures X, Y, tout ce mécanisme pouvant être couvert à l'intérieur, et une glissoire, pour guider les pièces de monnaie pouvant être manéagée au bas de la roue B. Le tout tel que décrit précédemment.

No. 44,294. Brake for Sleighs. (Frein pour traîneaux.)



Jean Naud Jeune, Montréal, Québec, Canada, 15 septembre, 1893; 6 ans.

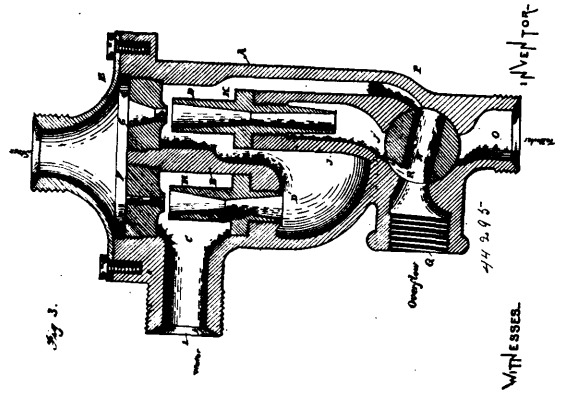
Résumé.—Dans un frein pour sleighs et autres voitures d'hiver, la combinaison avec le verrou a des ressorts r et p du galet g et des leviers et tringles de manœuvre l, t et q et du ressort s, tel que décrit et pour les fins indiquées.

No. 44,295. Injector. (Injecteur.)

Patrick Brownley and William Sterling, both of St. John, New Brunswick, Canada, 15th September, 1893; 6 years.

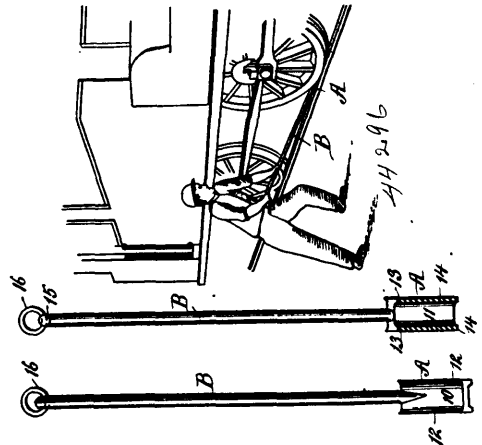
Claim.—1st. An injector comprising an elevating chamber, a discharge chamber, a cock for placing the latter in communication with an overflow or a boiler removable and vertically recessed heads F and G over said chambers and a steam supply over said heads, substantially as shown and described. 2nd. The combination of the communicating, elevating and discharge chambers, a steam supply leading thereto, and a water supply in communication with the elevating chamber a well projecting vertically in the discharge chamber to receive the steam, a junction at the base of the well formed by an overflow connection, a boiler connection and a passage from the dis-

charge chamber, and a cock at said junction having a transverse passage whereby the well and discharge may be in communication



with the overflow or the well may be placed in communication with the boiler to the exclusion of the other passages. 3rd. In an injector the combination of the communicating elevating and discharge chambers, a steam and water supply, a well projecting vertically in the discharge chamber to receive the steam, the last named chamber being formed with a passage leading to a junction formed by an overflow connection, a boiler connection and the lower end of the well, and a cock in said junction having passages N and R, for the purpose substantially as shown and described. 4th. The combination of the communicating, elevating and discharge chambers, a steam and water supply, a well projecting upward in the discharge chamber to receive the steam having the lower end of its base turned to one side of its longitudinal centre, overflow and boiler connections, and a cock for connecting the well and overflow of the well and the boiler, substantially as shown and described.

No. 44,296. Pinch Bar. (Pince à pied de biche.)



John McDonald, Tokio, Japan, 16th September, 1893; 6 years.

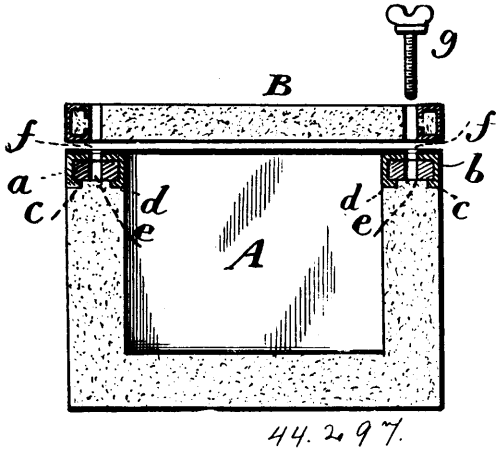
Claim.—1st. A pinch bar, provided with a foot, having knife-like longitudinal edges on its upper surfaces, substantially as described. 2nd. A pinch bar, comprising a foot and handle, the foot being provided with sharp upper side edges and longitudinal ribs upon its under face at the sides, substantially as and for the purpose specified. 3rd. A pinch bar, the foot of which is provided with pronounced knife-like upper side edges and ribs upon the under surface at its sides, substantially as shown and described. 4th. A pinch bar, the foot of which is provided with pronounced knife-like upper side edges, and side ribs upon its under surface parallel with the knife edges, substantially as and for the purpose specified. 5th. A pinch bar, the foot of which is provided with an inclined upper surface and knife-like side edges raised above the adjacent surfaces, the bottom of the foot being straight and provided with side ribs, as and for the purpose specified.

No. 44,297. Burial Casket. (Cercueil.)

John N. Pruser, Union Hill, New Jersey, U.S.A., 16th September, 1893; 6 years.

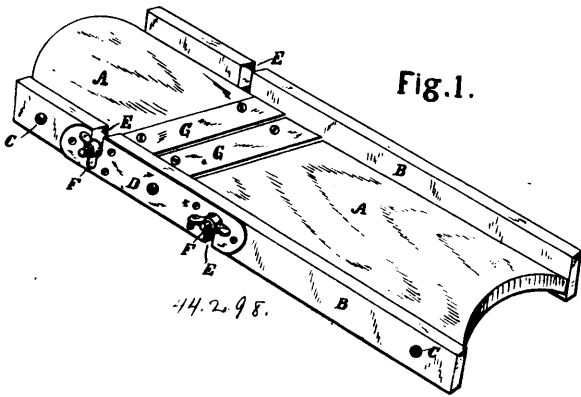
Claim.—A burial casket, of earthy material, constructed of the body A, having a continuous metallic rim embedded around its upper edge flush with the outer surface thereof, the edges of said

frame being bent or turned inwardly to enter the material, nuts also embedded in the material beneath the frame, and the lid having a



similar rim around its edge and provided with fastening screws for entering the nuts of the body, substantially as described.

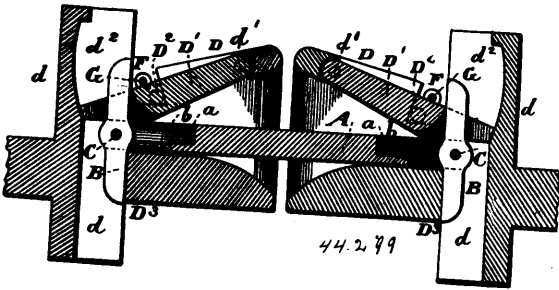
No. 44,298. Machine for Slicing Vegetables. (*Coupe-légumes.*)



Jacob G. Good, Berlin, Ontario, Canada, 16th September, 1893; 6 years.

Claim.—1st. A vegetable slicer, comprising side bars B, having slots E, in combination with adjustable bed A, and knife G, substantially as and for the purpose hereinbefore set forth. 2nd. A vegetable slicer, composed of slide bars B, having plates D, and slots E, adjustable beds A, A', bed A, pivoted at C, and having thumb nuts F, and bed A', having pivots C, thumb nuts F, and knife G, and knife G, secured to side bars B, all combined substantially as and for the purpose hereinbefore set forth.

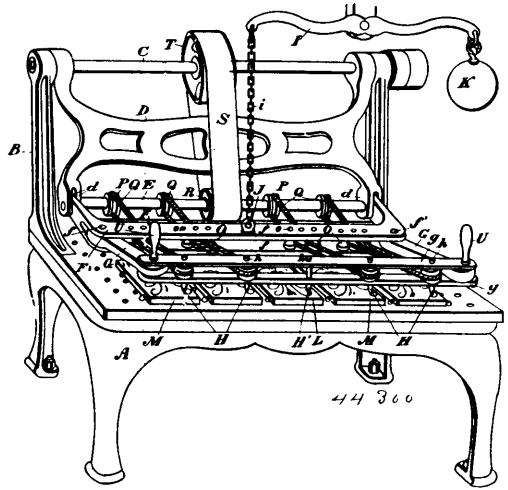
No. 44,299. Car Coupler. (*Attelage de chars.*)



James H. Scoggin, Petersburg, Virginia, U.S.A., 16th September, 1893; 6 years.

Claim.—1st. A car coupling link provided with a coupling pin at each end, the said pins being pivoted between prongs thereof at or near the middle, bevelled at each end on the same side, and adapted to rest with one end in a groove of the link, as shown and described. 2nd. The combination with a link having a pin pivoted at or near the middle of one end, of the abutment and a draw-head having the front pivoted cover, arms and rebates whereby two draw-heads may be coupled and uncoupled, as described.

No. 44,300. Carving Machine. (*Machine à sculpter.*)

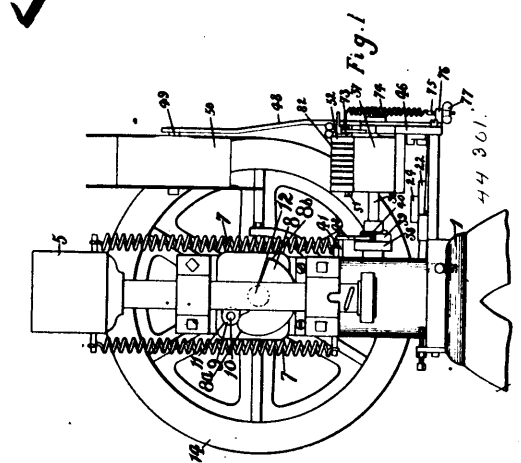


Aleck Saunders and John Story, Goderich, Ontario, Canada, 18th September, 1893; 6 years.

Claim.—1st. In combination with the frame, the driving shaft journalled therein, the swinging frame depending from the driving shaft, a supplemental shaft journalled in the lower part of the swinging frame, a second frame pivotally connected to the swinging frame by the supplemental shaft, arms pivotally connected to the second frame, bars mounted in the outer ends of the arms carrying a dummy cutter, and rotating cutters with operating connections to the supplemental and main shaft, substantially as described. 2nd. The combination with the dummy cutter H', secured in, and the cutters H journalled in the double bars g, g, pivotally attached on the ends of the arms G, pivoted in the ends of the double bar f, f, forming part of the swinging frame F, of the swinging frame D, supported on the shaft of the machine and pivotally connected to the swinging frame F, and means whereby the cutters are driven from the main shaft of the machine, as and for the purpose specified. 3rd. In combination with the frame having the main driving shaft journalled therein, the swinging frame depending from said shaft, a horizontal frame pivotally connected to the lower part of the swinging frame by means of a supplemental shaft, a bar carrying a dummy and rotating cutters having link connections to the horizontal frame, a lever supported above the horizontal frame having one end connected to the said frame and a weight upon its other end, substantially as described.

No. 44,301. Embossing Machine.

(*Machine à bosseler et orner.*)



Robert S. Andersen, Toronto, Ontario, 18th September, 1893; 6 years.

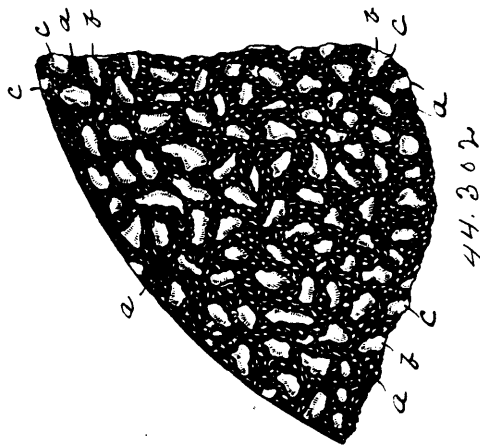
Claim.—1st. The combination with the die, the frame supporting the die, and a vertically movable plunger guided in said frame of a driving shaft, a lifting cam secured to said shaft and engaging with said plunger, whereby the plunger is raised and permitted to drop when released by the cam, a yielding buffer block arranged on the frame, and a buffer head attached to the plunger and adapted to engage with said buffer block upon the descent of the plunger, substantially as set forth. 2nd. The combination with the main frame, the die and the vertically movable plunger guided in said frame, of

a lifting cam whereby the plunger is raised and permitted to drop on the die, and a buffer mechanism which resists the downward movement of the plunger and which can be shifted out of engagement with the plunger, substantially as set forth. 3rd. The combination with the main frame, the die and the vertically movable plunger guided in said frame, of a lifting cam whereby the plunger is raised and permitted to drop on the die, a buffer block arranged on the main frame, a buffer head arranged on the plunger over the buffer block, and adapted to strike the same, and a carrying plate supporting the buffer block and pivoted in the main frame whereby the buffer block can be moved from underneath the buffer head, substantially as set forth. 4th. The combination with the vertically movable plunger, the driving shaft and mechanism for actuating the plunger from the driving shaft, a die, a rock shaft arranged below the driving shaft, and provided with an oscillating arm carrying said die, a cam secured to the driving shaft, and an actuating arm secured to the rock shaft and engaging with said cam, substantially as set forth. 5th. The combination with the vertically movable plunger, the driving shaft and mechanism for actuating the plunger from the driving shaft, of a die, a vertical rock shaft arranged below the driving shaft and provided with an oscillating arm carrying the die, a cam secured to the driving shaft, and engaging with an actuating arm on the rock shaft, and a spring whereby the actuating arm of the rock shaft is held in engagement with said cam, substantially as set forth. 6th. The combination with the vertically movable plunger, the driving shaft, and mechanism whereby the plunger is actuated from the driving shaft, of a die, a wiper, a rock shaft arranged below the driving shaft, and provided with an arm carrying the die, a cam secured to the driving shaft, and an actuating arm secured to the rock shaft and engaging with said cam, whereby the die is oscillated back and forth beneath the plunger and wiper, substantially as set forth. 7th. The combination with the vertically movable plunger, and the driving shaft provided with a lifting cam whereby the plunger is actuated, of a movable die, a rock shaft provided with an arm carrying said die, an actuating arm secured to said rock shaft, and a cam secured to the driving shaft, and engaging with the actuating arm of the rock shaft, substantially as set forth. 8th. The combination with the vertically movable plunger, the driving shaft, and mechanism for actuating the plunger from the driving shaft, of a movable die, a rock shaft provided with an arm carrying said die, a head secured to the driving shaft and provided with a cam face and a concentric face, an actuating arm secured to the rock shaft, and provided with a roller engaging with the cam face and concentric face of the head, substantially as set forth. 9th. The combination with the vertically movable plunger, the driving shaft, and mechanism for actuating the plunger from the driving shaft, of a movable die, a rock shaft provided with an arm carrying said die, a head secured to the driving shaft and provided with a cam face and a concentric face, an actuating arm secured to the rock shaft and provided with a roller, and a spring whereby the roller is held against the cam and concentric faces of the head, substantially as set forth. 10th. The combination with the vertically movable plunger, the driving shaft, and mechanism for actuating the plunger from the driving shaft, of a movable die, a wiper, a rock shaft provided with an arm carrying the die, an actuating arm secured to the rock shaft, a cam arranged on the driving shaft and engaging with said actuating arm, whereby the die is oscillated below the wiper and the plunger, and mechanism for moving the wiper toward and from the die, substantially as set forth. 11th. The combination with the plunger, the movable die and the wiping pad, of a wiping tape arranged on the pad, a feed roller whereby the tape is fed across the pad, a shaft supporting the feed roller and provided with a ratchet wheel, a disc mounted loosely on said shaft and provided with a pawl adapted to engage with the ratchet wheel, and an adjustable trip cam whereby the pawl is disengaged from the ratchet wheel, substantially as set forth. 12th. The combination with the plunger, the movable die, and the wiping pad, of the wiping pad arranged on the pad, a feed roller whereby the tape is fed across the face of the pad, a shaft supporting the feed roller and provided with a ratchet wheel, a disc mounted loosely on said shaft and provided with a pawl adapted to engage with the ratchet wheel, a carrying arm adjustably mounted on the shaft, and a trip cam secured to the carrying arm and adapted to disengage the pawl from the ratchet wheel, substantially as set forth. 13th. The combination with the main frame, the movable plunger, the movable die, and the wiping pad, of a wiping tape arranged on the under side of the pad, a feed roller whereby said tape is shifted, a shaft supporting the feed roller and provided with a ratchet wheel, an oscillating disk mounted loosely on the shaft and provided with a pawl engaging with said ratchet wheel, a carrying arm mounted loosely on said shaft and provided with a trip cam whereby the pawl is disengaged from the ratchet wheel, and a rod pivoted with one end to the carrying arm and adjustably connected with the opposite end to the main frame, substantially as set forth. 14th. The combination with the plunger, the movable die, and the wiping pad, of a tape arranged on the under side of the pad, a feed roller whereby the tape is shifted on the pad, a pressure roller pressing against the feed roller and provided with grooves in its periphery, and stripping fingers extending into the said grooves, substantially as set forth. 15th. The combination with the plunger, the movable die, and the wiping pad, a wiping tape arranged on the under side of the pad, a spool carrying the supply of tape, a feed roller whereby

the tape is shifted, a tension roller supporting the tape between the spool and the pad, and a spring yieldingly supporting the tension roller, substantially as set forth. 16th. The combination with the driving shaft, the driving wheel and the clutch adapted to couple the driving shaft and wheel, of a movable die, a plunger, a lifting cam which is secured to the driving shaft and which raises the plunger and permits the same to drop on the die, a main cam whereby the clutch can be disengaged when the plunger is raised and an auxiliary cam whereby the clutch can be disengaged when the plunger has dropped, substantially as set forth..

No. 44,302. Process of Enamelling Metal Ware.

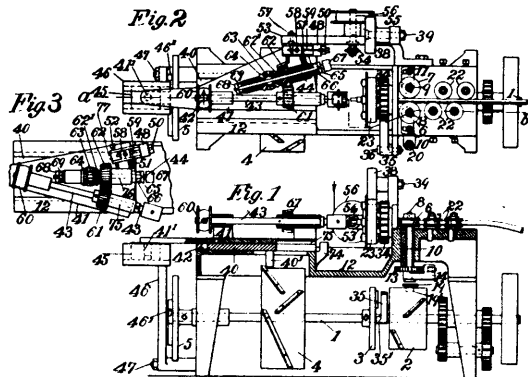
(*Procédé pour émailler les marchandises.*)



Hubert Claus, Thale-am-Harz, Germany, 18th September, 1893; 6 years.

Claim.—1st. The process herein described of enamelling metallic vessels, which process consists in first applying a ground enamel containing sulphate of ammonia, and in thereupon, while said ground enamel is still moist, throwing upon it in spots an alkaline enamel, substantially as described. 2nd. The process described of enamelling metallic articles, which consists in first coating the vessel with a ground enamel containing sulphate of ammonia, and in thereupon applying to the ground coat while still moist an alkaline enamel consisting of feldspar, quartz, cryolite, soda, oxide of tin and saltpetre, substantially as described. 3rd. As a new article of manufacture, enamelled metal ware presenting on a plain ground *a*, the spots *b*, having the shading *c*, substantially as specified.

No. 44,303. Screw Machine. (Machine à vis.)



Edward Emil Claussen, Hartford, Connecticut, U.S.A., 18th September, 1893; 6 years.

Claim.—1st. In combination, with means for holding a wire rod from rotating, and which allow it to move only in the direction of its length, a series of revolving tool spindles and an intermittently oscillating bed on which those spindles are journaled, arranged and operating to present those tool spindles successively to that wire rod, substantially as described. 2nd. In combination, with means for holding a wire rod from rotating, and which allow it to move only in the direction of its length, a series of revolving tool spindles journaled on an intermittently oscillating bed, and a slide on which that bed is mounted, arranged and operating to advance and retract those spindles toward and from the rod as they are presented to it, all substantially as described. 3rd. In combination, with means for holding a wire rod from rotating, and which allow it to move only

in the direction of its length, a series of revolving tool spindles journaled on an intermittently oscillating head, a slide on which that head is mounted, and a cam wheel, arranged and operating to reciprocate that slide to the extent and at the rate required by the respective spindles when in their operative position, all substantially as described. 4th. In combination, with means for holding a wire rod from rotating, and which allow it only to move in the direction of its length, a slide carrying a pivot located and reciprocating in the plane of the wire rod, a tool head adapted to oscillate upon that pivot, and a series of revolving tool spindles journaled upon that head with their axes radial to that pivot, whereby those axes may successively be brought into line with the centre of the wire rod and reciprocated in the direction of that line, substantially as described. 5th. The combination of a series of revolving spindles journaled on an intermittently oscillating head which is provided with radial slots corresponding in position with the respective spindles, a reciprocating slide on which that head is pivoted, and a guide piece 73, adapted to enter the slots corresponding to the respective spindles as they are brought into operative position and carried forward by the reciprocation slide, all substantially as described. 6th. In a machine for making screws, the combination of means for holding a wire rod from rotating and for feeding it in the direction of its length, a revolving tool carrier journaled concentrically with that wire rod and provided with cutting tools, with means for feeding those tools to the wire rod consisting of the cam plate 34, the sector 35 and the cam 3, all substantially as described. 7th. The combination of a revolving carrier having oppositely disposed radially sliding tool blocks thereon with a threaded cam plate adjacent to that carrier, and mechanism for rotating that cam plate upon its thread whereby it is advanced against the engaging ends of the tool blocks, substantially as described. 8th. In combination, with means for holding a wire rod from rotating, a revolving carrier having oppositely disposed radially sliding tool blocks and a threaded cam plate having an annular rib which is adapted to engage those blocks and carry them toward the centre of revolution when that cam plate is rotated and advanced upon its thread, substantially as described. 9th. A revolving carrier, having oppositely disposed tool holders mounted thereon, provided with the bevelled rollers 32, and a cam plate 34, having a bevelled internal annular rib adapted to engage those rollers and carry them towards the centre of revolution and to release them again, substantially as described. 10th. In combination, with means for holding a wire rod from rotating and which allow it to move only in the direction of its length, a threading device mounted on a head which is adapted to carry it into operative relation to the rod, the said device of the bevel gears 62 and 64, adapted to revolve in opposite directions, the die carrying spindle 44, and the clutches 65 and 68, arranged and operating to alternately engage with one and the other of those gears, substantially as described.

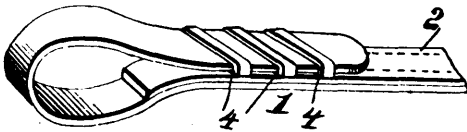
No. 44,304. Medicinal Compound.

(Composition medicinale.)

Pierre Soete, Montreal, Quebec, Canada, 18th September, 1893; 6 years.

Résumé.—Une composition formée de térébenthine, de fiel, d'alcool concentré, d'aloès et de camphre, dans les proportions et pour les fins décrites.

No. 44,305. Loop for Harnesses. (Ganse de harnais.)



44.305

Charles W. James, Quincy, Ohio, U.S.A., 18th September, 1893; 6 years.

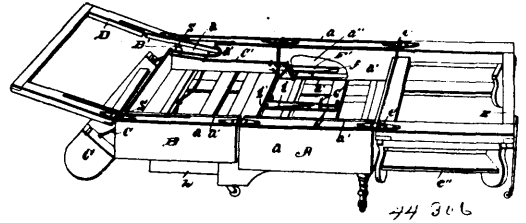
Claim.—In combination with a strap composed of layers or plies, of the herein described billet loop, consisting of a flat helical loop formed from a flat leather strip extending diagonally across and away from the said strap, and fastenings passed through the layers or plies of the strap and the inner bars of the strip to simultaneously secure the said inner bars and strap, substantially as described.

No. 44,306. Bed Chair. (Lit-fauteuil.)

James C. Wood, Los Angeles, California, U.S.A., 18th September, 1893; 6 years.

Claim.—1st. In a folding bed chair having its back hinged to the base, the combination set forth of the main and supplemental back sections hinged together at the top, and the head rest roll hinged to the rear edge of the top of the back and adapted and arranged to fold upon the top of the back and cover the joint between the main and supplemental sections when the back is erect, and to be swung out of the way to allow the two sections of the back to be unfolded. 2nd. A folding bed chair comprising the combination of the base section, the seat section pivoted or hinged to the front of such base section, and adapted to fold upon such base section, and provided

with the upwardly projecting arms fixed to such seat section, and adapted to be reversed when the seat section is unfolded from the base



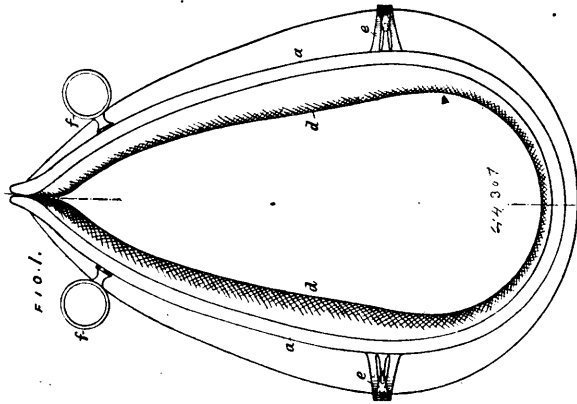
section to form the bed, the back section hinged to the rear of the base section, the supplemental back section hinged to the top of the front of the main back section, the chair head rest roll section pivoted or hinged to the rear of the top of the back section, and adapted and arranged to cover the joint between the main and supplemental sections, and to form the head rest roll for the chair when the back is raised, and to swing backward and downward when the back of the chair is lowered, whereby the roll may be moved out of the way of the supplemental section when the supplemental section is unfolded from the main back section to form the head rest for the bed. 3rd. A folding chair comprising the combination of the base section, the seat section hinged to the front of such base section and arranged to fold upon such base section, the main back section hinged to the rear of the base section, the supplemental back section hinged to the top of the front of the main back section, the chair head rest roll section pivoted or hinged to the main back section, and adapted to cover the joint between the main and supplemental sections, and to form the head rest roll for the chair when the chair is in its folded position, and to swing downward and to the rear when the chair is unfolded to form a bed, whereby the roll is removed out of the way of the supplemental section when the supplemental section is unfolded from the main back section to form the bed. 4th. A bed couch provided with a base section, a base section hinged to the rear of such base section, a supplemental section hinged to the top of the front of such back section, and a seat section hinged to the front of the base section, and arranged to project over the sides and front of such base section when such seat section is folded upon the base section, whereby the projection covers the joint between the seat section and the base section at the sides of the chair when the seat section is folded upon the base section, and the hinges connecting the seat section to the front of the base section may be set back flush with the edge of such seat section, as and for the purpose set forth. 5th. In a folding bed, the combination of the base section, the back section hinged to the rear of the base section, the guide rod fixed to the bottom of the base section, the push lever having one end arranged to slide along such guide rod, and having its other end pivotally attached to the back section below the pivotal point of attachment between the base section and the back section, a pulley attached to the rear of the base section, a drawer arranged to slide beneath said base section, and the cord attached to the push lever at one side of the guide rod, and running thence over the pulley and thence forward and attached to the front of the drawer. 6th. A folding bed chair, comprising the combination of the base section, the back section hinged to the rear of such base section, the head roll section hinged to the rear of the back section and arranged upon the top of such back section to cover the joint between the main and supplemental sections, and to form the head rest roll of the chair, the cord attached at one end to the head rest roll section near the front edge of such roll section, and passing thence through suitable guides arranged upon the back section downward and forward to the main or base section, and having its other end attached to the rear of the bottom of the main section below the point at which the back section is hinged to the main section, all so arranged that when the back is in its elevated position, the cord will be drawn taut and will firmly hold the roll section upon the top of the back section to form the head rest for the chair, and that when the back is lowered the cord will be loosened and allow the roll to swing outward and downward away from the back section. 7th. A bed chair comprising the combination of the base section, the seat section pivoted to the front of the base section, the main back section pivoted or hinged to the rear of such base section, the supplemental back section pivoted or hinged to the top of the front of such main back section, the head rest roll arranged upon the top of such main back section to cover the joint between the main and supplemental sections and to form the head rest for the chair, and suitable means arranged and adapted to connect the head rest roll with the main back section to hold the roll firmly in position upon the top of such main section when the chair is in its folded position, and to allow the roll to be moved to the rear or downward when the chair is unfolded to form the bed, whereby the roll is removed out of the way of the supplemental back section when such section is unfolded from the main back section to form the head rest for the bed.

No. 44,307. Horse Collar. (Collier de cheval.)

William Thomas Fell, Camberwell, Surrey, England, 18th September, 1893; 6 years.

Claim.—An open topped horse collar, having a steel spring

located within the forewall, substantially as and for the purpose



specified, in combination with a locking device, uniting the upper ends of the spring and closing the top of the collar, as described.

No. 44,308. Vacuum Pan. (*Chaudière à vide.*)

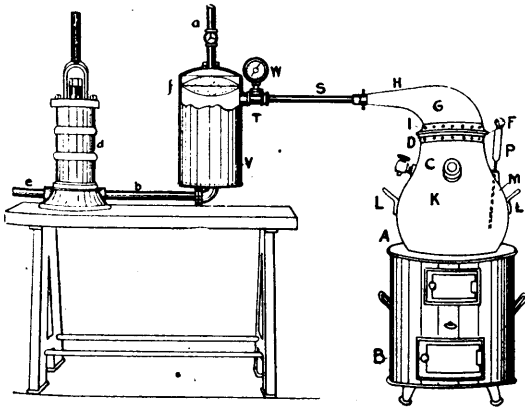
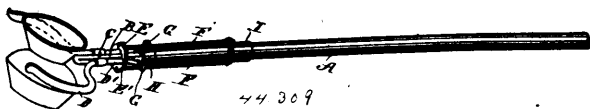


Fig. 1

William Walter, New York, State of New York, U.S.A., 18th September, 1893; 6 years.

Claim.—1st. The vacuum pan or kettle, having the rounded body and base and a contracted neck, and being adapted to be removably seated upon the open top of a stove, and the removable cover or lid for said pan, terminating in the elongated tapered collecting nozzle, combined with the condenser, the pump connecting therewith, and the flexible tube extending from said nozzle to the condenser, substantially as set forth. 2nd. The vacuum pan or kettle, having the rounded body and base and a contracted neck, and being adapted to be removably seated upon the open top of the ordinary candy maker's stove, and the removable lid for said pan, terminating in the elongated tapered collecting nozzle, combined with the flexible tube extending from said nozzle, and means communicating with said tube for maintaining a vacuum in said pan, substantially as set forth.

No. 44,309. Spittoon Carrier. (*Porte-crachoir.*)

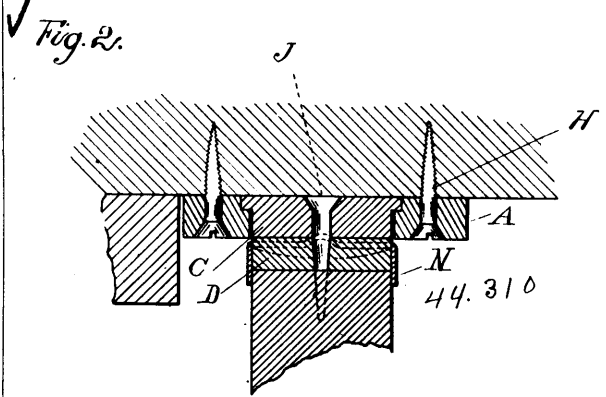


Gerard B. Nagle, Revelstoke, British Columbia, Canada, 18th September, 1893; 6 years.

Claim.—1st. The combination with a handle of a pair of tongs, pivoted between their ends to the handle, the shanks of the tongs in rear of their pivots, being curved or inclined outwardly from each other, and a slide movable along the tongs across the pivotal point thereof, whereby when the slide is in front of the pivot the tongs will be locked in their closed position, and when in rear of the pivot on the rear extensions the tongs will be held open, substantially as set forth. 2nd. In a device of the class described, the combination with a handle, of a pair of tongs pivoted thereon and provided with a rearwardly extending shank, an apertured plate engaging the said shanks of the said tongs, rods connected with the said plate and mounted to slide in bearings on the said handle, and

a sleeve fitted to slide on the said handle, and connected with the said rods, substantially as shown and described. 3rd. In a device of the class described, the combination with a handle, provided at one end with a projecting rod, of a pair of tongs pivoted on the said projecting rod and adapted to engage the neck of the spittoon, the said pair of tongs being provided with rearwardly extending curved shanks, an apertured plate fitted to slide on the said projecting rod and engaging the shanks of the pair of tongs, rods rigidly connected with the said plate, and fitted to a slide in bearings on the said handle, and a sleeve fitted to slide on the handle and connected with the said rods, substantially as shown and described.

No. 44,310. Transom Pivot. (*Pivot de dormant.*)



The Howarth Reversible Sash and Sash Center Co., assignees of Henry Howarth, all of Detroit, Michigan, U.S.A., 18th September, 1893; 6 years.

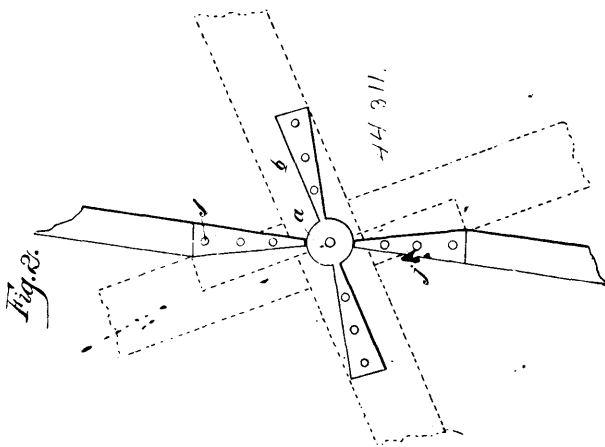
Claim.—1st. In a sash centre, the combination of a ring adapted to be secured to the sash frame between the ends of the rabbets, said ring being of a diameter greater than the thickness of the sash, a plate secured to the sash of a width substantially the width of the sash, and a stud on said plate entering the ring, substantially as described. 2nd. In a sash centre, the combination of a ring adapted to be secured to the frame and formed with indentations in its outer face, a plate adapted to be secured on the sash, a pivotal connection between the plate and ring and a spring washer between the ring and plate, formed with projections engaging on the indentations of the plate, substantially as described. 3rd. In a sash centre, the combination of the sash member, and a frame member pivoted together and provided with interlocking flanges adapted to prevent the two from separating, and a spring washer between the two, formed with corrugations on its face, substantially as described. 4th. In a sash centre, the combination of the sash member and the frame member formed with a pivotal stud having a flange adapted to hold the two from separating, of radially arranged grooves on the frame member, a plate embracing the pivotal stud and secured to the sash to turn therewith, radially arranged elastic corrugations on said plate adapted to enter said groove and hold the sash in its adjusted position, substantially as described. 5th. In a sash centre, the combination of the sash member comprising a plate D, having the central stud F formed thereon, the complementary portions C, of the stud having the annular flange K, of the ring A, forming the frame member and having the interior gain in which the flange K is adapted to engage, of the screw H, for securing the two parts of the stud together, and for securing the sash member to the sash, the plate M, having the ears N, engaging the sides of the sash, the corrugations O, the ring having corresponding grooves for said corrugations, and the plate provided with cut-away portions Q, the parts being arranged, substantially as and for the purpose described.

No. 44,311. Transom Pivot. (*Pivot de dormant.*)

The Howarth Reversible Sash and Sash Center Co., assignees of Henry Howarth, all of Detroit, Michigan, U.S.A., 18th September, 1893; 6 years.

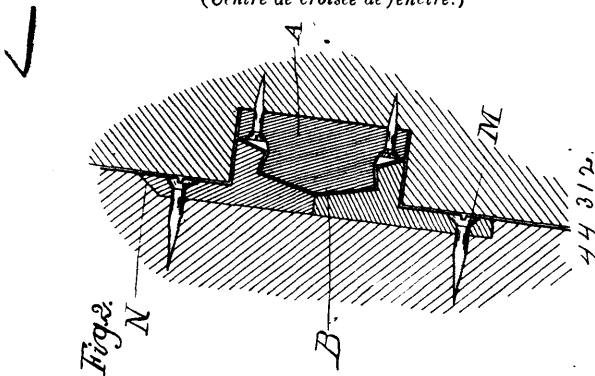
Claim.—1st. In a sash centre, the combination of a sash member and a frame member, each comprising a hub, and opposite radially extending arms formed tapering from their outer ends, outwardly to the hubs, substantially as described. 2nd. In a sash centre, the combination of a sash member and a frame member, each comprising a central circular hub apertured to receive a pivot screw, and opposite extending radial arms extending from said hub, the sides of said arms being tapered inwardly from the outer ends and substantially bounded by the radii of the hub, substantially as described. 3rd. In a sash centre, the combination of the frame member and the sash member, each comprising a central hub and inward tapering radial arms extending on opposite sides thereof, of over-lapping off-sets g on said arms, substantially as described. 4th. In a sash centre, the combination of the parts A and B, comprising a hub a having a convex inner face and the opposite radial extending arms, and the part b comprising the hub having a corresponding concave face and corresponding oppositely arranged radial arms,

substantially as described. 5th. The combination, with a window frame and sash, of stops secured to the frame at opposite sides of the



sash at top and bottom, a sash centre consisting of two parts, having complementary hubs, and tapering securing arms, the sash member being secured longitudinally upon the sash, and the frame member arranged diagonally thereon between the ends of the stops, substantially as described.

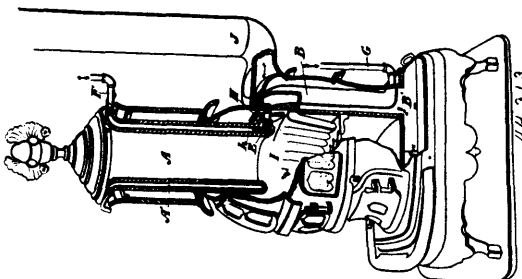
No. 44,312. Centre for Window Sashes.
(Centre de croisée de fenêtre.)



The Howarth Reversible Sash and Sash Center Co., assignees of Henry Howarth, all of Detroit, Michigan, U.S.A., 18th September, 1893; 6 years.

Claim.—1st. In a sash centre, the combination of pivot members secured to the sash, having circular pins with enlarged heads of socket pieces adapted to be secured to the frame consisting of complementary sections adapted to embrace the pins, substantially as described. 2nd. In a sash centre, the combination of pivot members secured to the sash, having circular pins with enlarged heads, with inclined outer faces, of socket pieces adapted to be secured to the frame and composed of two complementary plates, having semi-circular flanges with inclined faces, corresponding to the inclined faces on the pins, substantially as described.

No. 44,313. Hot Water Generator for Stoves.
(Générateur à eau pour poêles.)

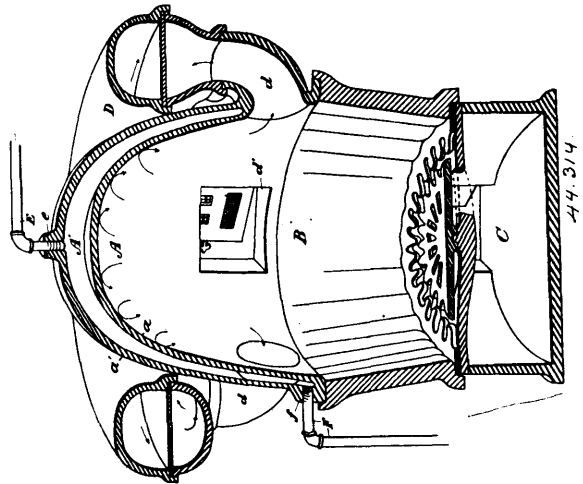


Aleck Saunders, Goderich, Ontario, Canada, 19th September, 1893; 6 years.

Claim.—1st. In a self-feeding base burner, the combination with the fire pot, of a magazine surrounded by a water jacket as and for the purpose specified. 2nd. In a self-feeding base burner, the combination, with the fire pot and magazine, of a water jacket surround-

ing such magazine and flow and return pipes connected to the top and bottom of the water jacket, and leading to and from a coil as and for the purpose specified. 3rd. The combination, with the water jacket A¹, formed around the magazine A, of the water leg B, formed in the partition B¹, and connected by the pipe E, to the water jacket A¹, the flow pipe F, connected to the top of the water jacket, and the return pipe G, connected to the bottom of the water leg, and means whereby the heat from the fire is directed against both sides of the water leg, as and for the purpose specified. 4th. The combination, with the water jacket A¹, formed around the magazine A, of the water leg B, formed in the partition B¹, and connected by the pipe E, to the water jacket A¹, the damper H, designed to close the opening H¹, so as to direct the heat from the fire down through the opening K, on the opposite side of the water leg through the flue C, down around the partition B¹, and up through the flue D, to the smoke pipe, and the flow pipe F, connected to the top of the water jacket and the return pipe G, connected to the bottom of the water leg, as and for the purpose specified.

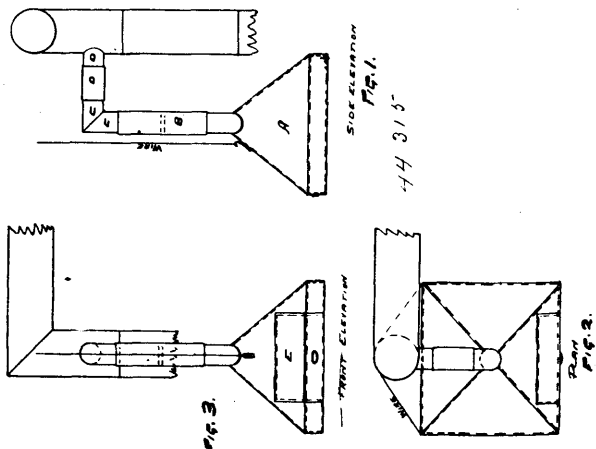
No. 44,314. Hot Water Generator for Furnaces.
(Générateur à eau pour poêles.)



Aleck Saunders, Goderich, Ontario, Canada, 19th September, 1893; 6 years.

Claim.—In a hot air furnace, the combination, with the fire pot and radiator, of the dome A, having a hollow chamber A¹, formed around the same, and provided with a flow pipe leading from the crown of the furnace to a coil or radiator, and a return pipe leading from such coils to the base of the chamber, as and for the purpose specified.

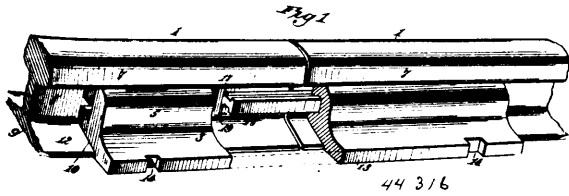
No. 44,315. Hood for Stoves.
(Appareil pour enlever les odeurs provenant des poêles.)



Thomas Graham, Montreal, Quebec, Canada, 19th September, 1893; 6 years.

Claim.—The combination of the canopy A, and the pipes B, C and D, and the door E, in the canopy, substantially as and for the purposes hereinbefore set forth.

No. 44,316. Railway Joint. (*Eclisse de rail*)

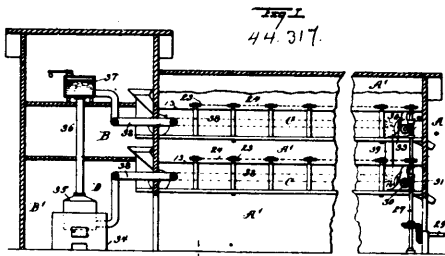


John Stoddart Brown, Galveston, Texas, U.S.A., 20th September, 1893; 6 years.

Claim.—The combination with the rails having longitudinal slots 19 in their webs, and chair 3, having dove-tailed channels in their inner faces, of an adjustable head block 17, fitting the slots in the rail webs, and formed with dove-tailed projections 18, which engage the dove-tailed channels, and are of such dimensions as to pass laterally through the slots in the rail webs, whereby the head block with its dove-tailed projections can be removed and replaced laterally with respect to the rails by detaching either one of the chairs, substantially as described.

No. 44,317. Drier for Cocoa and other Grains.

(*Séchoir pour le cacao et autres grains.*)



Juan Gamarra Elizondo, Guayaquil, Ecuador, S.A., 20th September, 1893; 18 years.

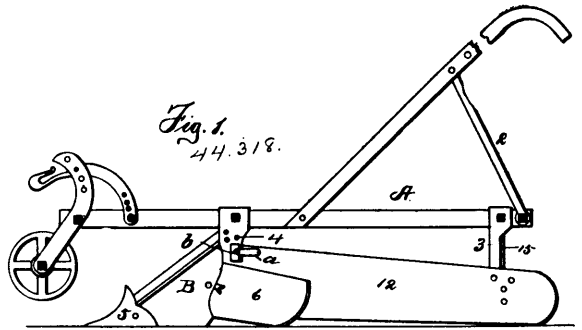
Claim.—1st. In a drier, the combination with the drying chamber, and means for heating the air therein, of stationary grain receptacles located in the chamber, each receptacle containing a carrier, and agitating devices, substantially as shown and described. 2nd. In a drier, a box like compartment having suitable inlets and outlets, a drying belt located within the drier, agitators located in close proximity to the upper stretch of the drying belt, a driving mechanism connected with the belt supports and agitators, and means, substantially as shown and described, for heating the air in the said box like compartment by hot water, substantially as and for the purpose set forth. 3rd. In a grain drier, the combination with a box like compartment provided with an inlet and an outlet located near opposite ends, drums held to revolve within the said compartment, and a drying belt carried by the drums, of agitators held to revolve in close proximity to the upper stretch of the drying belt, a drive shaft connected with one of the drums and with the agitators, a shifting device carried by one of the drums, whereby it may be disconnected from the drive shaft, and means, substantially as shown and described, for heating the interior of the box like compartment, as and for the purpose set forth. 4th. In a drier, the combination with a box like compartment provided with a hopper at one end and an exit at the opposite end, and drums located within the said compartment, one near each end, one of the drums being loosely mounted upon a supporting shaft and provided with a pawl, said shaft being provided with a ratchet wheel for engagement with the pawl and with the pinion, of a series of agitators held to revolve in close proximity to the drying belt, a drive shaft, a connection between the drive shaft and the agitators, and a connection between the drive shaft and the pinion of the drum shaft, and a means, substantially as shown and described, for heating the box like compartment by hot water, substantially as and for the purpose set forth.

No. 44,318. Hiller. (*Appareil à chausser.*)

Charles Edwin Parks, Locke, New York, U.S.A., 20th September, 1893; 6 years.

Claim.—1st. In a hiller, the combination with the runners, and beam mounted thereon, of the plow-head, the point secured thereto and the wings secured to said head and adapted to be adjusted vertically, as set forth. 2nd. In a hiller, the combination with the runner and beam mounted thereon, of the plow-head and point secured thereto, wings loosely secured to the plow-head, and mold boards secured to the runner, and adapted to have their rear ends adjusted vertically and laterally, as set forth. 3rd. In a hiller, the combination with the runners and the beam mounted thereon, of the plow-head, the point secured thereto, forward wings secured adjustably to the plow-head and rear wings secured loosely to the forward knee of the runner and adapted to be adjusted at their rear ends

laterally and vertically, as set forth. 4th. In a four wing hiller, the combination with the runners and beams mounted thereon, of the



plow-head, the point secured thereto and the wings secured to said head and adapted to be adjusted vertically, as set forth.

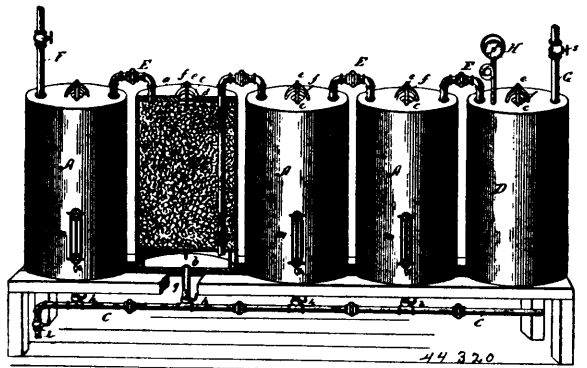
No. 44,319. Roofing Cement. (*Ciment à toiture.*)

Samuel D. Chatterton, Pembroke, Ontario, Canada, 20th September, 1893; 6 years.

Claim.—A roofing cement or compound, consisting of Stockholm tar, coal tar, salt, alum, colouring earth, Portland cement, ground mica and asbestos, in about the proportions set forth.

No. 44,320. Method of Making Gas.

(*Méthode de fabriquer le gaz.*)



Robert M. Bidelman, Adrian, Michigan, U.S.A., 20th September, 1893; 6 years.

Claim.—1st. The method of generating a fixed gas, which consists in first substantially removing from a liquid hydrocarbon the constituent parts which would furnish condensable vapours, and subsequently taking up and removing the fixed gases by passing through the residue an aeriform fluid under pressure, substantially as described. 2nd. The method of generating a fixed gas, which consists in first substantially removing from a liquid hydrocarbon the constituent parts which would furnish condensable vapours, submerging a body of absorbent porous solid material within the residue, and subsequently taking up and removing the fixed gases by passing through said porous material and residue an aeriform fluid under pressure, substantially as described. 3rd. The method of generating a fixed gas, which consists in forcing an aeriform fluid under pressure through a petroleum hydrocarbon, which has been deprived of those vapours which condense at the ordinary temperature of a gas main, substantially as described. 4th. The method of generating a fixed gas, which consists in forcing an aeriform fluid under pressure through a lima oil distillate of substantially 0.698 specific gravity, substantially as described.

No. 44,321. Electrolytic Apparatus.

(*Appareil Electrolytique.*)

Cornelius Hanbury, Bethnel Green Junction, London, England, 20th September, 1893; 6 years.

Claim.—1st. In a tank or vessel for electrolysis divided into anode and cathode compartments, the use of transverse channels or chambers crossing each end of such anode or cathode compartments, substantially as hereinbefore described and for the purposes stated. 2nd. In a tank or vessel for electrolysis divided into anode and cathode compartments, the combination of an upper transverse chamber communicating with one end of the anode compartments, with a lower transverse chamber at the opposite end of the vessel communicating with the other end of the same compartments. 3rd.

In a tank or vessel for electrolysis, divided into anode and cathode compartments, the combination of an upper transverse chamber

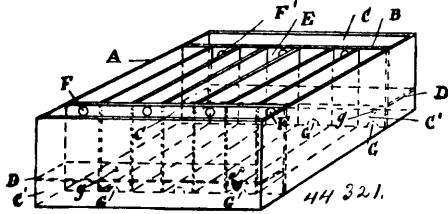
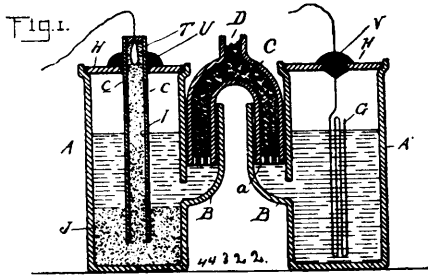


FIG. 1.

communicating with one end of the cathode compartments, with a lower transverse chamber at the opposite end of the vessel communicating with the other end of the same compartments.

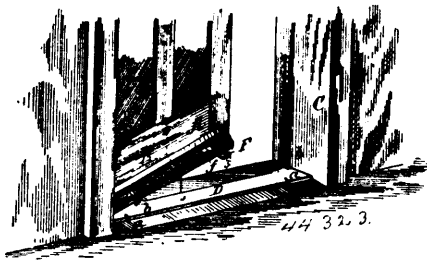
No. 44,322. Electrolytic Cell. (Pile électrolytique.)



Thomas Craney, Bay City, Michigan, U.S.A., 20th September, 1893; 6 years.

Claim.—The combination, in an electrolytic cell having separate anode and cathode compartments united by an electrolytic diaphragm, of an anode composed of carbon compacted into a protective tube or casing extending through the liquid of the compartment and carbon compacted into the bottom portion of the compartment itself and around the lower end of said tube or casing and extending to the walls thereof, substantially as described.

No. 44,323. Weather Strip. (Bourrelet de porte.)



William H. Nixon, Teagarden, Indiana, U.S.A., 20th September, 1893; 6 years.

Claim.—1st. The combination, with the door and moulding strip, having a groove upon its under face and a vertical groove upon its inner face, of the hinged strip the inner edge of which is designed to be held between the feet and the groove of the under face of the moulding strip, and the vertical adjustable feet on the door beneath the moulding strip, with the vertical portion in the groove of the inner face of the moulding strip, substantially as and for the purposes specified.

No. 44,324. Method of Making Linoleum Oil Cloth. (Méthode de fabriquer les toiles cirées linoleum.)

James Crawford Lyon, Baltimore, Maryland, U.S.A., 20th September, 1893; 6 years

Claim.—1st. The herein described method of manufacturing floor coverings of the linoleum oil cloth type, the same consisting, first, in

applying to both sides of a base fabric of fibre layers of linoleum or oil cloth composition; second, in subjecting both of said layers to an equal extent to exposure or to heat to dry them, and, third, in applying to each of the said composition layers an outer ornamental wearing surface of paint or pigment. 2nd. In a floor covering of the linoleum oil cloth type, the combination of the base fabric and two composition wearing surfaces thereto, one on each side thereof,



Fig. 1.

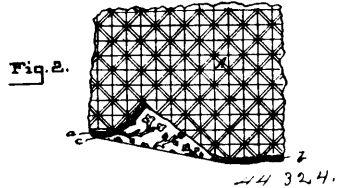


Fig. 2.

substantially as described. 3rd. In a floor covering of the linoleum oil cloth type, the combination of the base fabric, a linoleum composition layer applied to one side thereof, an oil cloth composition layer applied to the other side thereof, an ornamental wearing surface applied to each of said composition layers. 4th. The combination of a roll of floor covering of the linoleum or oil cloth type, having a wearing surface on each side of the base fabric, and a lining of suitable material interposed between the successive convolutions thereof and separating the adjoining surfaces, substantially as described.

No. 44,325. Method of Making Images. (Méthode de faire des images.)

(Méthode de faire des images.)

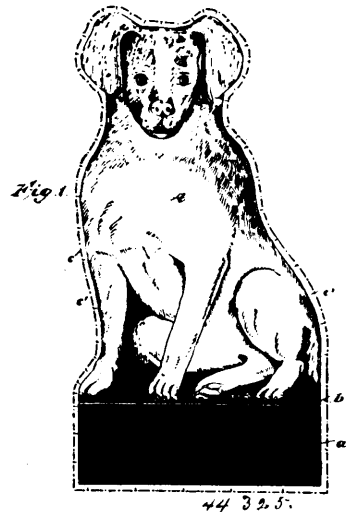


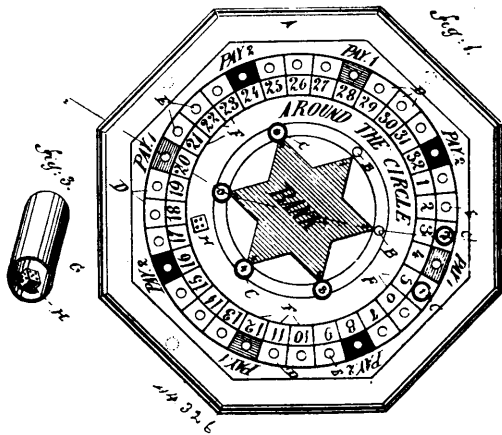
Fig. 1

Samuel Michael Schwab, jr., New York, State of New York, U.S.A., 20th September, 1893; 6 years.

Claim.—1st. As an improved article of manufacture, an image constructed of two pieces, a back and a front, each piece comprising a body and a lower extension thereof, the extensions being carried over one upon the other beneath the body, forming a bottom for the image, as and for the purpose set forth. 2nd. An image constructed in two parts or sections, a front and a back, the sections or parts being connected at their margins, and the sections or parts comprising a body portion adapted to represent respectively the front and rear of an animal, and a lower extension, which is folded over upon the bottom of the body after the latter has been filled or stuffed, the extensions of the body portions of the sections being carried over one to an engagement with the other and connected, thereby forming a bottom for the figure, as and for the purpose specified. 3rd. As an improved article of manufacture, an image, the same being constructed of two sections representing respectively one side of an image, each part or section comprising a body section, or that upon which the impression of the figure is made,

and a continuation or extension formed at the lower edge of each section, each section being further provided with a marginal score line, indicating a seam, and transverse score lines, indicating cuts for the seam, whereby an image may be made of but two parts, and the lower extensions of the two parts carried beneath the body of the image, forming a rest or bottom therefor, as and for the purpose specified.

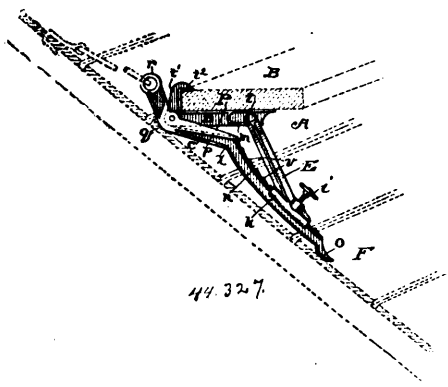
No. 44,326. Game Board. (Table de jeu.)



George William Seeback, New York, State of New York, U.S.A., 20th September, 1893; 6 years.

Claim.—A game board, comprising a base, provided with a series of consecutively numbered apertures arranged in a circle, and forming resting places for the pegs, a series of consecutively numbered and marked fields arranged on the base in a circle larger than and concentric to the said first named circle, each field having an aperture, and some of the fields being marked with different distinguishing colours to indicate pay fields and pegs, normally seated in the said apertures forming resting places, and adapted to be inserted into the said field apertures, substantially as shown and described.

No. 44,327. Bracket for Roof Scaffolds. (Boulin pour échafauds de toiture.)



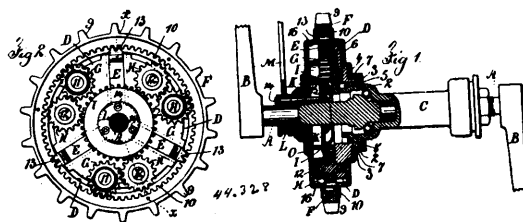
Herbert McCormack, McQueen, Illinois, U.S.A., 20th September, 1893; 6 years.

Claim.—1st. A roof scaffold bracket having a runner, a platform support hinged to the runner, and a brace extending between the free end of the platform support and the runner, and movable at both ends to different points along the said support and runner to adjust the angle of the support with relation to the pitch of a roof, substantially as described. 2nd. A roof scaffold bracket having a runner concave on its upper side toward its rear end, a platform support hinged to the runner, and a brace extending between the free end of the platform support and the said concave portion of the runner, and movable at both ends to different points along the said support and runner to adjust the angle of the support with relation to the pitch of a roof, substantially as described. 3rd. A roof scaffold bracket having a runner concave on its upper side towards its rear end, a platform support pivoted to the runner, and a brace having a socket at one end confined upon the concave portion of the runner, and loosely engaging at its opposite end, the platform support toward its free end substantially as and for the purposes set forth. 4th. A roof scaffold bracket having a runner, a bell crank-

shaped platform support pivoted at its angle to the runner, and provided with a clip on its upper arm to overlap the platform, and a brace extending between the free end of the platform support and the runner, and movable to adjust the angle of the said support with relation to the pitch of a roof, substantially as described. 5th. A roof scaffold bracket having a runner formed with a convex bearing *q* near its forward end, a convex bearing *o* near its rear end, and a straight seat *p* on its upper side, a platform support pivoted to the runner near the bearing *q*, to extend lengthwise of and coincide with the seat *p*, and a brace extending between and engaging at opposite ends the free end of the platform support and the runner, and movable simultaneously at both ends to different points along the said support and runner to adjust the angle of the said support with relation to the pitch of a roof, substantially as described. 6th. A roof scaffold bracket having a runner formed with a convex bearing *q* near its forward end, a convex bearing *o* near its rear end, a straight longitudinally recessed seat *p* on its upper side, and lateral flanges *n* extending between the said seat and bearing *o*, a platform support pivoted to the runner near the bearing *q*, to extend lengthwise of and coincide with the seat *p*, and a brace loosely engaging at one end the platform support near its free end, and provided at its opposite end with a socket embracing the said flanged portion of the runner, substantially as and for the purposes set forth. 7th. A roof scaffold bracket *A*, comprising in combination the runner *C*, formed with the convex bearings *q* and *o*, and seat *p*, and concave on its upper side, and flanged laterally lengthwise between the seat *p*, and bearing *o*, a platform support *D*, pivoted to the runner near the bearing *o*, to extend lengthwise of and coincide with the seat *p*, a brace *E*, bifurcated at one end and embracing and having limited movement at that end upon the free end of the platform support, and provided at its opposite end with a socket *K*, embracing the said concave portion of the runner, and a set screw *i* on the socket for securing the brace in its adjusted position on the runner, the whole being constructed and arranged to operate, substantially as described.

No. 44,328. Speed Gear for Velocipedes. (Engrenage à vitesse pour vélocipèdes.)

(Engrenage à vitesse pour vélocipèdes.)



Charles Vogel, Fort Lee, New Jersey, U.S.A., 20th September, 1893; 6 years.

Claim.—1st. The combination, with the stationary cylindrical bearing *C*, the crank arms and shaft *A*, of the chain wheel and its internal gear, the carrier plate within the chain wheel, a gear upon the crank shaft and intermediate gears between the said gear and the internal gear, the studs of which intermediate gears are upon the carrier plate, radial clutch slides and teeth thereon for connecting the carrier plate with the internal gear and chain wheel, and lugs for engaging the cylindrical bearing, and means for moving the clutch slides inwardly or outwardly, substantially as set forth. 2nd. The carrier plate *D*, and the radial clutch slides therein provided with teeth 13, and studs 4, in combination with the chain wheel and internal gear, the stationary cylindrical bearing 2, with the notches 5, the conical clutch *K*, grooved collar and connecting rods, and mechanism for actuating the same, the gear wheel *I*, upon the crank shaft and the intermediate gears upon the carrier plate, substantially as set forth. 3rd. The carrier plate *D*, and the radial clutch slides therein provided with teeth 13, and studs 4, in combination with the chain wheel and internal gear, the stationary cylindrical bearing 2, with the notches 5, the conical clutch *K*, grooved collar and connecting rods, and mechanism for actuating the same, the gear wheel *I*, upon the crank shaft and the intermediate gears in pairs upon the carrier plate, whereby the crank shaft is rotated in the same direction for propelling the velocipedes whether the speed gears are in use or not, substantially as set forth.

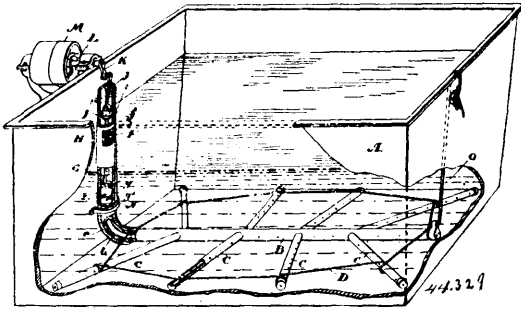
No. 44,329. Agitator for Paint. (Agitateur pour peinture.)

(Agitateur pour peinture.)

Charles John McLennan, Toronto, Ontario, Canada, 20th September, 1893; 6 years.

Claim.—In combination, with a receptacle for mixed paints adapted for use for dipping articles therein, means for agitating and keeping the contents stirred consisting of perforated distributing tubes arranged on the bottom thereof, and a pump for forcing the material through the distributing pipes, located near one side of the

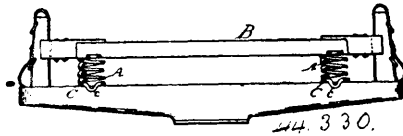
tank, whereby the interior of the said tank is practically unobstructed



and free for the dipping of articles in the paint contained therein, substantially as described.

No. 44,330. Bolster Spring. (*Ressort de traversin.*)

Fig. I.

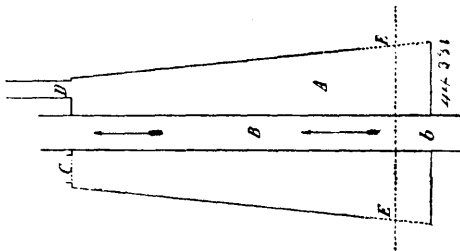


Albert Garland North, Pontiac, Michigan, U.S.A., 20th September, 1893; 6 years.

Claim.—1st. In combination, with a bolster and bolster stakes, a cross-bar provided with end slots, a coiled spring terminating at its upper end with a central eye, and having its lower coil provided with two diametrically opposite depending loops formed integral with the spring, a bolt adapted to pass through the eye and secure the spring to the cross-bar, the said depending loops being adapted to embrace the sides of the bolster, substantially as and for the purposes described. 2nd. In combination, with a bolster and bolster stakes, a cross-bar provided with slotted ends, a spring terminating at its lower end with a long tapering point, and provided on its lower coil, with two diametrically opposite depending loops, and having a central eye at the termination of its upper coil, a bolt securing the coil to the cross-bar, substantially as and for the purpose specified.

No. 44,331. Method of Making Coke.

Méthode de faire le coke.)



John Bowing, Tilbury, Essex, England, 21st September, 1893; 6 years.

Claim.—1st. Coking in retorts in which no combustion takes place in such a manner as to cause the heat to travel gradually through the mass substantially radially as described so that a mass of coal shall be kept in a comparatively cool state for a considerable time in contact with or adjacent to the hot zone or layer of coal which is actually coking. 2nd. In coking in closed retorts retaining the products of distillation within the mass by means of a comparatively cool mass of the material being coked. 3rd. In coking in retorts in which no combustion takes place causing the heat to be communicated to the mass at practically speaking one point or line so as to travel outwards through the mass, gradually and radially as described.

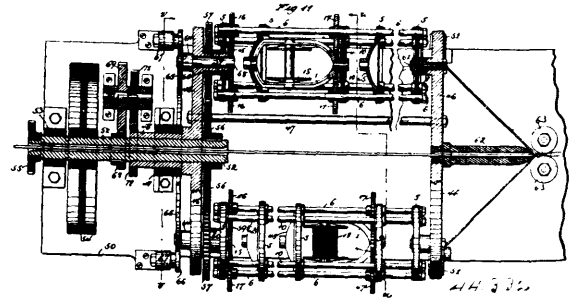
No. 44,332. Machine for Making Cords and Cables.

(Machine pour faire de la corde et du câble.)

William H. H. Sisum, Belleville, New Jersey, U.S.A., 21st September, 1893; 6 years.

Claim.—1st. The combination of a frame rotating on its axis, a number of spool frames arranged in line within the rotating frame,

a shaft carried by said rotating frame, a single gear on each of the spool supporting frames, gears on said shaft engaging with the gears on the spool supporting frames, another gear on the outer end of said



shaft, and a non-rotary gear arranged opposite the centre of the rotating frame to engage with the last named gear, substantially as specified. 2nd. The combination of a frame rotating on its axis, a number of spool frames arranged in line within the rotating frame, shafts arranged at opposite points on the rotating frame and extending the entire length of the spool frames, a single gear on each of the spool supporting frames and gears on said shafts engaging therewith, substantially as specified. 3rd. The combination of a frame rotating on its axis, a number of spool frames arranged in line within the rotating frame, shafts extending the entire length of and carried by said rotating frame, a single gear on each of the spool supporting frames, gears on said shafts engaging therewith, other gears on the outer ends of said shafts, and a non-rotary gear arranged central with the rotating frame to engage with the last named gears, substantially as specified. 4th. The combination with a number of spool frames, of a rotary frame, take-up rollers 30, 31, a shaft 12, connected with said frame, gearing, substantially such as described, between said shaft 12, and the rollers 30, 31, and means for shifting the bearing of certain of said gearing, substantially as specified. 5th. The combination of a main frame rotating on its axis, a number of smaller frames carried by said main frame and rotating independently on their own axis, frames for supporting spools and connected with said smaller, independent frames so that there may be a relative movement between the latter and them, shafts arranged in and extending the entire length of the smaller independent frames, gears carried by said shafts in the smaller independent frames and engaging gears on the spool frames supporting shafts, non-rotary wheels with which said gears on the smaller independent frames are engaged, eyes or guides in said smaller independent frames, receiving wires, threads or like material from said spools and tubular studs arranged forwards of the foremost spools within said smaller independent frames, substantially as specified. 6th. The combination of a main frame rotating on its axis, a number of smaller frames carried by said main frame and rotating independently on their own axis, spool supporting frames arranged within the smaller independent frames, shafts arranged in and extending the entire length of the smaller independent frames, and geared to the spool supporting frames, wheels 15, gear wheels on said shafts engaging with the wheels 15, shafts 58, cranks 64, on these shafts, and a ring 65, substantially as specified. 7th. The combination of a main frame rotating on its axis, a number of frames carried by said main frame, and rotating independently on their own axis, spool supporting frames arranged in the smaller independent frame and geared to the spool supporting frames, wheels 15, gear wheels on said shafts engaging with said wheels 15, shafts 58, cranks 64, on these shafts, a ring 65, and stops or rollers 66, substantially as specified. 8th. In a rope machine, the combination of a rotary outer frame, the spool frames having spools arranged with their axis transverse to the axis of said frames, and gearing for rotating the spool frames in a direction opposite to that of the outer frame and at a greater speed, substantially as specified. 9th. In a rope machine, the combination, with the rotary outer frame, of spool frames carried around the axis of the outer frame, gearing for rotating the spool frames on their own axis, in a direction reverse to the rotation of the outer frame, and spools arranged within the spool frames, whereby the independent fibres or strands are freely delivered from the spools and receive a twist from the point of leaving the spools up to the point of being twisted together, substantially as specified. 10th. In a rope machine, the combination of a rotary outer frame and spool frames carried by the outer frame and having a rotary motion on their own axis at a greater speed than the outer frame, whereby the strands formed from the spool frames will have a tighter twist imparted to them than the twist of the rope formed by said strands, substantially as specified.

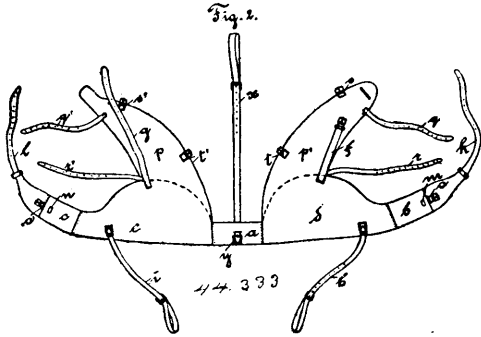
No. 44,333. Attachment for Harnesses.

(Harnais pour chevaux.)

Max Huth, Pasewalk, Prussia, 21st September, 1893; 6 years.

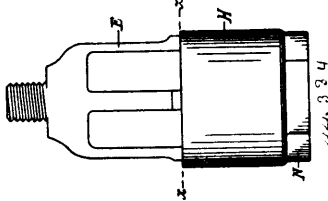
Claim.—The within described curative appliances for sores on

animals, consisting of flexible breast pieces with or without ex-



tension pieces and provided with suitable straps, substantially as and for the purpose hereinbefore described.

No. 44,334. Pump. (Pompe.)

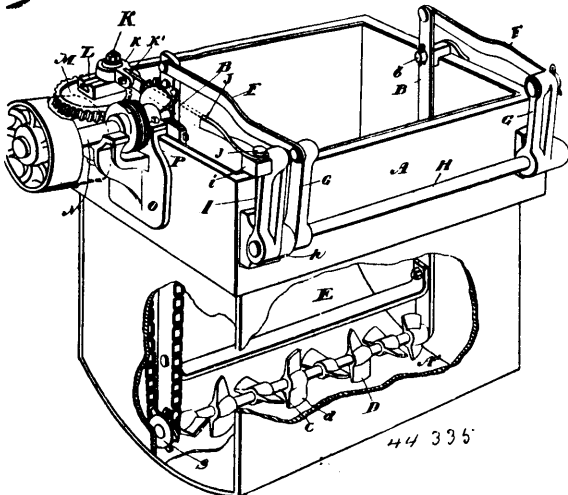


Thomas Parker, Wingham, Ontario, Canada, 21st September, 1893; 6 years.

Claim.—1st. In a pump bucket or plunger, the application of a resilient spring lining to a cup H, substantially as set forth. 2nd. As a new article of manufacture, a pump bucket or plunger, having a cup H, provided with a resilient spring lining, substantially as set forth. 3rd. In a pump bucket or plunger, a cup H, provided with a resilient spring lining L, in combination with the cylinder C, substantially as set forth. 4th. A cup H, provided with a resilient spring lining L, in combination with a cage E, a tubular nut N, a detachable valve seat K, and valve M, substantially as set forth. 5th. A cup H, provided with a resilient spring lining L, the cage E, the nut N, the valve seat K, and the valve M, in combination with the cylinder C, detachable valve seat S, and valve V, substantially as set forth. 6th. A coupling D, provided with a vent or opening O, in combination with the plunger P, provided with the spring d, pin b, and cover J, guides I, and wire or rod R, substantially as set forth.

No. 44,335. Agitator for Paint.

(*Agitateur pour peinture.*)

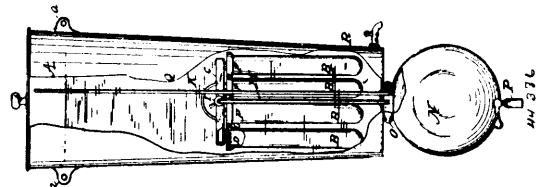


Charles John McLennan, Toronto, Ontario, Canada, 21st September, 1893; 6 years.

Claim.—1st. In combination with a receptacle for containing mixed paint for dipping purposes, having an arc-shaped bottom,

swing bars having their upper portions pivotally connected to the upper edges of the walls of the receptacle and depending within the same in proximity to said walls, a shaft carrying beaters or stirrers journaled in the lower ends of said bars in close proximity to the bottom of the receptacle, and operating connections to the swinging shaft, substantially as described. 2nd. In combination with a receptacle, having an arc-shaped bottom, bars pivotally supported from the edges of the receptacle and depending within the same in proximity to the bottom, the upper ends of said bars extending above their pivots, a shaft carrying heaters journaled in the lower ends of the bars, an operating shaft located above the edge of the receptacle, connections from said driving shaft to the swing shaft for operating the same, and connections to the upper ends of the bars for swinging said shaft, substantially as described. 3rd. The combination with the beaters D, secured on the shaft C, journaled in the lower end of the swinging bars B, means for imparting an arc-shaped lateral movement to the beaters and for rotating the same, of the guards E, arranged as and for the purpose specified. 4th. The combination with the receptacle A, of the swinging bars B, the shaft C, journaled therein, carrying the beaters D, the bars F, connected to the upper ends of said bars B, the rock shaft having arms G, connected to the other ends of the bars F, the arm I, also connected to the rock shaft, the bar J, the wheel H, provided with crank pin K, for engaging bar J, and the worm P, for driving the worm wheel, substantially as described. 5th. The combination, with the receptacle A, of the swinging bars B, the shaft C, journaled therein, carrying beaters D, the bars F, connected to the swinging bars, the rock shaft H, having the arms G, connected to bars F, the arm I, the bar J, the crank pin K, the worm gear wheel M, the worm P, the sprocket-wheel Q, on the driving shaft, the sprocket-wheel S, on shaft C, and the chain R, connecting said sprockets, substantially as and for the purpose specified. 6th. The combination with a receptacle, having an arc-shaped bottom and a swinging shaft carrying agitators, located in proximity to said bottom, of the hinged flaps T, adapted to form a partition above said swinging shaft, the bar W, connecting said flaps, an arm on one of the pivot pins of the flaps and the operating rods connected to said arm, substantially as described.

No. 44,336. Filter. (Filtre.)

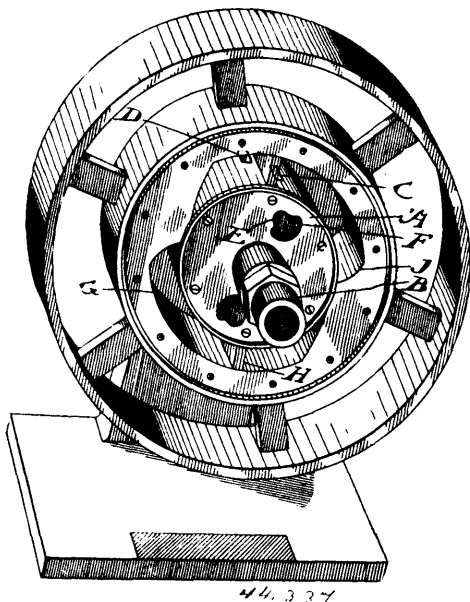


The Boston Filter Company, assignee of Frank K. Way, all of Chelsea, Massachusetts, U.S.A., 21st September, 1893; 6 years.

Claim.—1st. In a filtering apparatus, the combination with a supply tank of a greater vertical depth than lateral dimensions, and a filtering device located interiorly near the bottom thereof, of a transparent reservoir located below and outside of said tank and communicating with the filtering device inside of the tank, and provided with an outlet opening, and a vent tube extending from said reservoir above the highest level of the water in the supply tank, whereby the discharge of water from the reservoir will admit air directly thereto through said vent tube, and the filtering device will operate to fill said reservoir and drive out the air until the water in the tube and the supply tank arrive at the same level. 2nd. In a filtering apparatus, the combination with a portable supply tank adapted to be hung to the wall and of largest dimension vertically, of a filtering device contained within and near the bottom of said tank, and consisting of a series of chambers arranged side by side and detachably connected to form a communicating, ramified chamber, a series of porous filtering tubes mounted side by side on each collector and delivering the filtered water thereto, a reservoir supported from the bottom of said tank and having a discharge cock, a pipe from said reservoir to said combined collectors, and a vent tube from said reservoir to the top of said supply tank, whereby the opening of the discharge cock will draw off water from the reservoir and draw air into the reservoir, and on closing the cock the filtering device will operate to expel the air from the reservoir by admitting filtered water thereto, and rise in the vent tube to the level of the supply water when the filtering action will cease for the time. 3rd. In a filtering apparatus, the combination with a supply tank, of a series of straight, horizontal chambered pieces arranged side by side, and each provided with a series of perforated tits on their lower sides, porous filtering tubes supported by said tits to deliver water into said chambered pieces, detachable couplings between said chambered pieces to constitute a communicating chamber, a reservoir carried by said tank below said filtering device, a pipe connecting said reservoir with one of said chambered pieces, and means to effect the discharge of water from said reservoir. 4th. In a filtering apparatus, the herein described collectors adapted to be combined in a series and form a battery, the same consisting of a chambered piece having perforated tits to connect with filtering

tubes and receive filtered water therefrom, lateral coupling connections forming a communicating passage from one collector to another, the first of the series having an outlet opening, and the last of the series adapted to deliver the water from said collectors, whereby any number of collectors may be combined according to the supply of filtered water desired.

No. 44,337. Rotary Engine. (Machine rotatoire.)

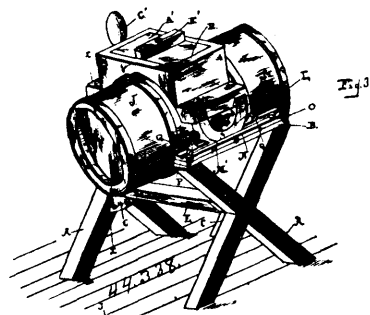


Richard Dowling, Harriston; John Waldron Scott, Listowel; Samuel S. Fuller, Stratford, assignees of David Wells Carter, Woodstock, all in Ontario, Canada, 22nd September, 1893; 6 years.

Claim.—1st. A rotary engine, in which the cylinder revolves on a stationary piston, steam entering the centre of the piston and passing to a space formed around the piston in the cylinder, in combination with means for admitting and cutting off the steam at pre-determined periods, substantially as and for the purpose specified. 2nd. A stationary piston fitting between projections formed on the interior surface of the cylinder, a movable wing extending from the piston across the space between the periphery of the said piston and the cylinder, a steam passage way extending from the centre of the piston to the periphery of the piston on one side of the wing, in combination with a passage way extending from the periphery of the piston on the opposite side of the wing and forming an exhaust port, substantially as and for the purpose specified. 3rd. A stationary piston, fitting between projections formed on the interior surface of the cylinder, a movable wing extending from the piston across the space between the periphery of the said piston and the cylinder, a steam passage way extending from the centre of the piston to the periphery of the piston on one side of the wing, a passage way extending from the periphery of the piston on the opposite side of the wing and forming an exhaust port, a revolvable cylinder having projections on its interior periphery and enclosing the stationary piston, in combination with a valve admitting and cutting off the steam at pre-determined periods, substantially as and for the purpose specified. 4th. A stationary piston A, fixed to pipe E, having a partition substantially in the centre of the piston, the interior of the pipe E, being supplied with steam on one side of the partition, the other side of the piston being connected to the atmosphere of a condenser, a revolvable cylinder C, being made steam tight and surrounding the stationary piston, a movable wing extending from the periphery of the piston and extending to the interior periphery of the cylinder, a passage way C, extending from one side of the wing to the steam side of the pipe, a passage way D, extending from the opposite side of the wing to the exhaust side of the pipe D, in combination with the valve E, operated by the revolving cylinder, substantially as and for the purpose specified. 5th. In a rotary engine, a piston provided with a wing sliding therein, in combination with a bolt extending into a steam space in the centre of the piston and adapted to force outwardly the said movable wing, substantially as and for the purpose specified. 6th. In a rotary engine, the piston A, having a wing H, sliding therein, in combination with the spring N, bolt O, and steam passage P, substantially as and for the purpose specified. 7th. In a rotary engine, the piston A, having exhaust ports D, formed therein, in combination, with the pipe D, having a partition formed therein to separate the mouths of the exhaust ports, substantially as and for the purpose specified. 8th. In a rotary engine, a piston provided with a wing sliding therein, in combination with a passage way connecting the bottom

of slot in which the wing slides with the exhaust pipe of the engine, and a passage way connecting the bottom of the said slot with the exhaust side of the cylinder in a line with the edge of the wing, substantially as and for the purpose specified.

No. 44,338. Churn. (Baratte.)

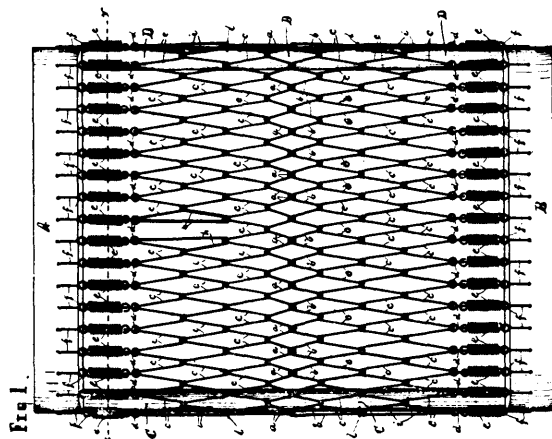


Eli F. Beard, Republic, Ohio, U.S.A., 22nd September, 1893; 6 years.

Claim.—The combination of a supporting frame formed of the X-shaped end pieces, the track bars secured upon the same and formed with longitudinal grooves, and the series of projections which are adapted to be engaged by the rockers of a churn, which rockers are provided with a downwardly projecting flange and a series of notches, the slotted plates, the centre bar formed with the longitudinal groove, and having the end screws and the strengthening rod having the end retaining nuts, substantially as set forth.

No. 44,339. Wire Spring Mattress. (Sommier élastique.)

(Sommier élastique.)



Adelbert Henry Gale, Waterville, Quebec, and Allen Gardiner Ingalls, Ottawa, Ontario, both in Canada, 22nd September, 1893; 6 years.

Claim.—1st. The mattress frame composed of end rails and side rails combined with a mattress secured to the top of said end rails, and extended down over the rounded ends thereof, and secured to the said ends by means of a flange, substantially as and for the purposes set forth. 2nd. The mattress frame composed of side rails and end rails, combined with a mattress having an unbroken foot portion and independent head portions, secured to the top of said end rails, as set forth. 3rd. The mattress frame consisting of the side rails and two end rails, the latter having flanges provided with a series of perforations, substantially as and for the purposes set forth. 4th. The mattress frame comprising side rails and two end rails arched upwards and outwards to sustain and support the fabric, substantially as set forth. 5th. The mattress frame comprising side rails and end rails of suitable material, the latter arched upward and outward, and having rounded ends, substantially as set forth. 6th. The mattress frame comprising end rails and two side rails, arched upward to resist the vertical pressure upon the fabric and tension pressure of the springs, and arched outward to resist the inward tension of the fabric when attached to the said side rails, substantially as set forth. 7th. The mattress frame consisting of two side and two end rails, the latter rounded over at their ends to give greater fabric surface, substantially as set forth. 8th. The mattress frame consisting of two ends rails secured to two side rails, the latter arched upward and outward and convex on top as described, said side rails arched upward to resist the end tension pressure of the fabric, arched outward to resist the lateral pressure of the fabric

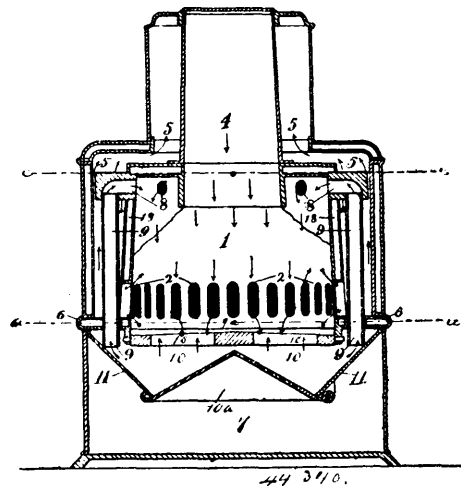
when attached to the side rails, substantially as set forth. 9th. The mattress frame consisting of two end rails and two side rails, the latter arched upward and outward, substantially as and for the purposes set forth. 10th. The mattress frame comprising end rails and side rails arched upward and outward, the ends of the end rails round over to give greater bed surface and strength, and arched upward and outward to give greater tension strength, the side rails arched upward and outward to give greater tension strength and resistance to pressure applied internally, and convexed on top, substantially as and for the purposes set forth. 11th. The mattress fabric consisting of V-shaped sections of looped wire, the central sections made in pairs and of heavier wire than those nearer the ends of the fabric and shorter than the other sections, said central sections looped into each other to give increased elevation, and central support, and to spread the fabric apart in the manner, substantially as set forth. 12th. The mattress fabric secured on the end rails of the frame, the sides of the said fabric being secured above the convex surfaces of the side rails, and links or hooks to engage with the heavier side wire forming the edge of the said fabric, substantially as set forth. 13th. The mattress fabric consisting of V-shaped sections of looped wire *a, b*, across the centre of the said fabric combined with longer sections of V-shaped links across the fabric between the said centre sections *a, b*, and the end and still longer V-shaped links joining the fabric to the tension springs *c*, substantially as set forth. 14th. The mattress fabric consisting of V-shaped sections of looped wire with two or more tiers of shorter central sections, combined with sections of uniform length extending towards each end to engage with links or chains which join them with tension springs, substantially as set forth. 15th. The mattress fabric consisting of V-shaped sections of looped wire with two or more tiers of shorter central sections, combined with uniformly lengthening sections extending towards each end to engage with links or chains which join the same to the end tension springs, substantially as set forth. 16th. The tension attachment consisting of the parts *G, H*, secured to the end and side rails and arranged at right angles to slide upon the bolt *r*, one lug of the part *G*, having the lip *t*, to hold the nut *s* of the bolt and the corresponding lug of the part *H*, having a socket *u*, to receive the point of the bolt, all substantially as set forth. 17th. The herein described frame attachment to join the end rail to the side rail consisting of a dove-tailed tension sliding into and retained in the corresponding socket with the dove-tail socket downward to prevent the accumulation of dust, thickened at the back to prevent its sliding through the socket, and to hold the end rails firmly down upon the side rails and acted upon by the tension attachment, substantially as set forth. 18th. The herein described hold fast and tension attachments of the end rail to the side rail of the frame consisting of the dove-tailed hold fast attachment thickened at the back end to prevent its sliding through the socket, combined with and functionally acting through the dove-tailed attachment at the other end uniform in dimensions with the socket and holding the other end rail down upon the side rail by means of its dove-tailed-shaped, and made also a tension attachment by means of the tension screw, substantially as set forth. 19th. A mattress frame, comprising end rails and side rails, said end rails arched upward to sustain and support the mattress fabric suspended between said end rails and to give a rotundity to the surface of the said fabric and the bed, substantially as set forth. 20th. A mattress, having a divisional space *h*, from the head towards the centre of the fabric, as and for the purpose set forth. 21st. A mattress frame, comprising end rails and side rails, said rails arched outward to sustain the mattress fabric suspended between said end rails and to give greater strength to said end rails, substantially as set forth.

No. 44,340. Machine for Making Gas.
(*Machine pour faire le gaz.*)

George G. Watson, Toronto, Ontario, Canada, and William Henry Laird, New York, State of New York, U.S.A., 23rd September, 1893; 6 years.

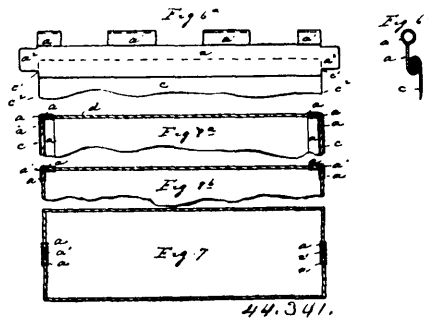
Claim.—1st. In the herein described apparatus for producing gas and utilizing the produced gas for heating purposes, the combination of a combustion chamber, a series of tubes surrounding the outer side of the combustion chamber and extending from the lower extremity to the upper extremity thereof, the combustion chamber having formed through its wall at or near the upper extremity a series of apertures to connect with the passages through the said tubes, means for connecting the lower extremity of the tubes with the atmosphere, said tubes adapted to convey a current of air to the upper portion of the combustion chamber, a gas chamber and means for forming an outlet to the chimney, the combustion chamber having formed at or near its lower extremity a series of openings to the gas chamber, the gases and air in the upper portion of the combustion chamber adapted to be drawn downwardly through the burning fuel and pass through the openings at the lower extremity of the combustion chamber to the outlet to the chimney, substantially as described. 2nd. In the herein described apparatus for producing gas and utilizing the produced gas for heating purposes, the combination of a combustion chamber, a series of tubes surrounding the outer side of the combustion chamber, and extending from the lower extremity to the upper extremity thereof, a gas chamber on the outer side of the combustion chamber, an outlet from the gas chamber to the chimney, a series of openings formed at the upper extremity

of the combustion chamber to connect with the passages in the said tubes, a series of openings at the lower extremity of the com-



ustion chamber to connect with the gas chamber, a mixing chamber below the combustion chamber, means for connecting the mixing chamber with the lower extremity of the said tubes, means for feeding the mixing chamber with atmospheric air, said tubes adapted to feed a current of atmospheric air from the mixing chamber to the upper extremity of the combustion chamber to combine with the gases thereat, the combined gases and atmospheric air adapted to be drawn downwardly through the burning fuel and pass through the openings at the lower extremity of the combustion chamber to the gas chamber, substantially as described.

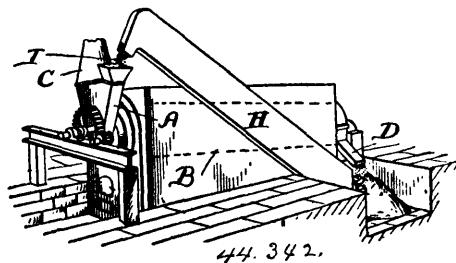
No. 44,341. Hinged Joint Link.
(*Charnière à tige d'assemblage.*)



Oswald Heinrich, Mittenwalde, Silesia, Michael Goldschmidt, Philipp Goldschmidt and Siegfried Goldschmidt, of Breslau, all in the Empire of Germany, 23rd September, 1893; 6 years.

Claim.—A hinged joint link for joining walls of boxes and castings, consisting of two plates fastened by any means to the edges of the walls to be joined, and provided with sockets held together like the eyes of a hinge by means of a removable pin passed through the said sockets, substantially as described.

No. 44,342. Process of Drying and Disintegrating Clay.
(*Procédé de sécher et désagérer l'argile.*)

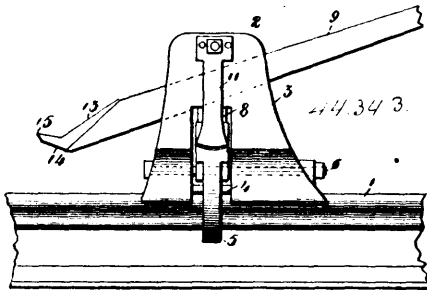


Franklin D. Cummer, Cleveland, Ohio, U.S.A., 23rd September, 1893; 6 years.

Claim.—1st. The process herein described of drying clay and similar material, and consisting, essentially, first, in heating and

stirring the material until it is partially dried, and second, piling the heated and partially dried material, whereby the drying process is completed by means of the aggregate heat in the pile of material, substantially as set forth. 2nd. The process herein described of drying clay and similar materials, comprising, first, heating, stirring and partially drying the material in any suitable mechanical drier; second, returning a portion of the heated material and mixing it with the green material to be heated, and third, piling the heated and partially dried material to evaporate the same to dryness by means of the accumulated heat in such pile of material, substantially as set forth.

No. 44,343. Car Mover. (*Moteur de chars.*)

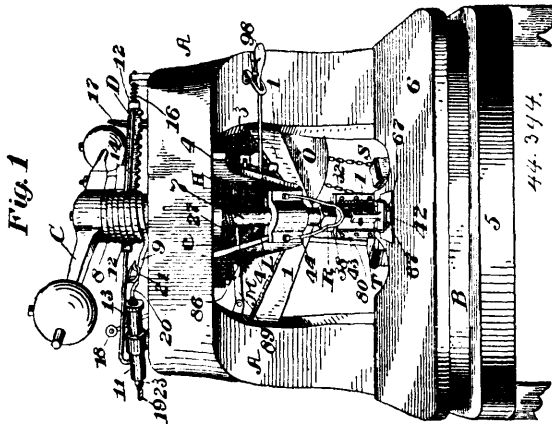


Peter H. Jacobs, Millstadt, Illinois, U.S.A., 23rd September, 1893; 6 years.

Claim.—A car mover consisting of a saddle, grappling hooks movably secured within the same, cam surfaces formed on said hooks, a bifurcated wedge-shaped block movable within the saddle and resting upon said cam surfaces, a lever movably secured between said bifurcations, and springs attached to the outside of said saddle, the free ends of which bear against the curved outer surfaces of said hooks, substantially as set forth.

No. 44,344. Press for Embossing and Printing.

(*Presse pour bosseler et imprimer.*)



Joseph Yardley Johnston, New York, State of New York, U.S.A., 23rd September, 1893; 6 years.

Claim.—1st. The combination of an operating lever 98, friction clutch 31, loose pulley O, pinion N, on driving shaft F, gear wheel M, main shaft E, and mutilated bevel wheel K, with bevel pinion L, shaft G, and die carrier I, substantially as and for the purposes described. 2nd. The combination of main shaft E, and mutilated bevel wheel K, with bevel pinion L, shaft G, and die carrier I, substantially as and for the purposes described. 3rd. The combination of main shaft E, mutilated bevel wheel H, pinion 25, rack bar D, connecting block 14, and lever C, with a spring actuated screw plunger, substantially as and for the purposes described. 4th. The combination of spring actuated screw plunger 7, lever C, connecting block 14, rack bar D, spur pinion 25, mutilated spur wheel H, shaft E, mutilated bevel pinion L, shaft G, die carrier I, die plunger R, and die 42, with a die inking device, substantially as and for the purposes described. 5th. The combination of the die of an embossing and printing press with die carrier I, shaft G, pinion L, mutilated gear K, shaft E, cam 27, locking pin 28, and check spring 44, substantially as and for the purposes described. 6th. The combination of a revolving die carrier with a cam actuated locking pin, substantially as and for the purposes described. 7th. The combination of a revolving fir carrier with a die plunger, a die, a die inking device and a die wiping device, substantially as and for the purposes

described. 8th. The combination of a revolving die with an inking device, a wiping device and a spring actuated screw plunger, substantially as and for the purposes described. 9th. A revolving die carrier, provided with a die plunger and a locking mechanism, in combination with a spring actuated screw plunger, substantially as and for the purposes described. 10th. The revolving die plunger R, carrier I, and adjustable cams 67, in combination with die 42, discs 95, and inking roller 48, supported on rocking arms 62, and held in position by springs 63, substantially as and for the purposes described. 11th. The combination of a die plunger with a spring actuated screw plunger, substantially as and for the purposes described. 12th. In an embossing and printing press, provided with a screw plunger, the combination of a ball lever C, connecting blocks 14, rack bar D, guide rod 13, and stop 15, with dog 29, and cam J, substantially as and for the purposes described. 13th. The combination of coil springs 8, actuating screw plunger 7, with a tension adjusting auxiliary spring, substantially as and for the purposes described. 14th. The combination of die plunger R, and spring actuated screw plunger 7, with ball lever C, and rebounding spring 17, substantially as and for the purposes described. 15th. In an embossing and printing press, an inking device consisting of an ink reservoir, a collecting and an evening roller, an ink agitator, and a die inking roller mounted on a rocking frame and provided with adjusting springs, substantially as and for the purposes described. 16th. In the inking device of an embossed and printing press, an ink agitator 57, in combination with a connecting rod 58, crank 56, shaft 55, and gear wheels 54, 81 and 53, substantially as and for the purposes described. 17th. The combination of a shaft F, pulley O, clutch and sprocket-wheel P, chain 32, sprocket-wheels 34 and 35, on shaft 33, chain 36, and sprocket-wheel 37, on stud 100, with the fountain and the rollers of an inking device, substantially as and for the purposes described. 18th. A die and a die inking device, in combination with a cam and spring actuated die wiper, substantially as and for the purposes described. 19th. The combination of a revolving die with an adjustable wiper T, provided with springs 68, base plate 69, arm 76, rock shaft 74, sliding bar 82, an adjustable cam 87, substantially as and for the purposes described. 20th. The combination of a travelling die with a stationary die wiping device, consisting of a wiper and mechanism adapted to move its wiping surface instantly against the entire lettered surface of the die, and hold the die together, substantially as and for the purposes described. 21st. The combination of a die with a die wiping device, consisting of a wiper and mechanism adapted to move its wiping surface instantly against the entire lettered surface of the die and to hold the two together while the one moves across the other, substantially as and for the purposes described. 22nd. A revolving die, a die inker and a die wiper, in combination with a paper feeding device consisting of cam actuated lever 89, connecting rod 92, pawl lever 93, ratchet a, feeding roller m, adjustable tension roller p, connecting rod 97, provided with slot x, weighted pawl lever 96, detent ratchet y, and waste paper roller z, substantially as and for the purposes described.

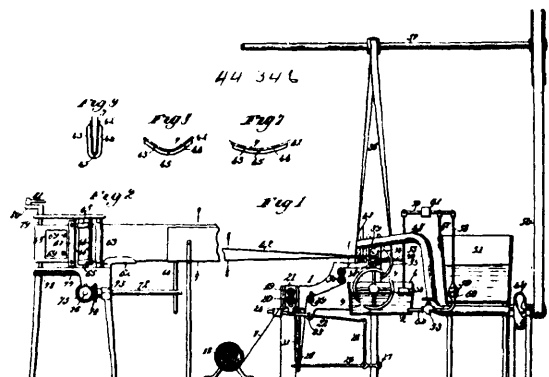
No. 44,345. Fuel. (*Combustible.*)

Sarah Garth Wicking, Dalworth Road, and David W. Nightingale, Peckham Rye, all in Surrey, England, 23rd September, 1893; 6 years.

Claim.—An improved fuel comprising refuse or waste materials mixed with petroleum and oil or other fatty matters, gas, tar or pitch, substantially in the manner and proportions described.

No. 44,346. Machine for Making Fly Paper.

(*Machine pour faire le papier attrape-mouche.*)



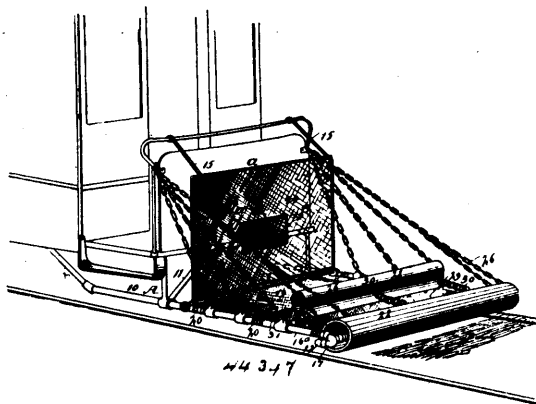
Jay H. Smith and Mark D. Knowlton, both of Rochester, New York, U.S.A., 23rd September, 1893; 6 years.

Claim.—1st. In a machine for making sticky fly paper, the combination of a tank divided into two compartments for containing adhesive material, a shaft journaled on the tank, a pair of drums both mounted on said shaft in line with each other and arranged,

respectively, into the two compartments, one drum serving to apply the sticky field to the paper at one side of the median line thereof and the other drum having annular ribs 13 and transverse ribs 14 to apply an adhesive border to the paper at the opposite side of the median line thereof and across the width of the same, and a folding device for folding the paper longitudinally, substantially as described. 2nd. In a machine for making sticky fly paper, the combination with a tank divided into two compartments for containing adhesive material, of a pair of drums arranged respectively in the two compartments, one drum serving to apply the sticky field to the paper at one side of the median line thereof and the other drum having annular ribs 13 and transverse ribs 14 to apply an adhesive border to the paper at the opposite side of the median line thereof and across the width of the same, substantially as described. 3rd. In a machine for making sticky fly paper, the combination with a coating tank having two parallel separated compartments for containing sticky coating materials of different degrees of consistency or adhesiveness, of two rigidly connected rotary drums, one of which is mounted to revolve in each of said compartments, one of said drums having its operating surface adapted to apply coating material to a continuous strip of paper in the form of a series of sticky fields on one side of the longitudinal median line of said strip and the other drum provided with ribs or projections adapted to apply a series of borders and centre pieces to the strip of paper on the other side of the median line thereof to register with said fields when the paper strip is folded longitudinally, substantially as described. 4th. In a machine for making sticky fly paper, the combination with a tank for the sticky coating material, and a rotary drum mounted in said tank and adapted to apply the sticky coating to a continuous strip of paper, of a supply tank, a pipe connecting said tanks and having one end turned upward within the supply tank, a lever having suspended from one end a valve to control the flow of sticky material from the supply tank, and a float suspended from its other end to operate in the material contained in said coating tank, and an adjustable weight attached to said lever to control the reciprocal movements of said float and valve according to the required depth of material in the coating tank, substantially as described. 5th. In a machine for making sticky fly paper, the combination with a rotary drum for applying sticky coating material to a continuous strip of paper, a reel for supporting the roll of paper, and feed rollers located intermediate said reel and rotary drum, of vertically movable yokes in which one of the upper feed rollers is journaled, weighted levers to which the lower ends of said yokes are pivotally attached, levers pivoted to the frame of the machine below the weighted levers and connected therewith by intermediate links, and a vertically movable sag roller normally supported in the slack of the moving paper strip and adapted to drop on to said lower levers, and thereby through the link connection actuate the weighted levers to raise the yokes and attached upper feed roller to stop the feed when too rapid, substantially as described. 6th. In a machine for making sticky fly paper, the combination, with a reel for supporting a roll of paper, a rotary drum for applying sticky coating material to a moving strip of paper, and feed and guide rollers located intermediate said wheel and rotary drum, of an automatically controlled feed and tension mechanism for governing the slack of the paper, substantially as described. 7th. In a machine for making sticky fly paper, the combination, with two rigidly connected rotary drums one of which is adapted to apply coating material to a continuous strip of paper in the form of a series of sticky fields on one side of the longitudinal median line of said paper and the other drum adapted to apply a more sticky coating material to the other side of said median line in the form of a series of borders to register with said fields, of a roller located above said drums in position to coat therewith in coating said paper strip, and a perforating wheel located above said roller in contact with the coated paper strip to provide the same with a series of perforations in its median line, substantially as described. 8th. In a machine for making sticky fly paper, the combination, with the coating mechanism, of a concave cooling trough adapted to receive the coated strip of paper, said trough being gradually increased in depth and decreased in width from its receiving end to its exit end, substantially as described. 9th. In a machine for making sticky fly paper, the combination, with the coating mechanism, of a concave cooling trough constructed with double walls to form a water jacket that is divided into two compartments by a longitudinal partition at its bottom, said trough being gradually increased in depth and decreased in width from its receiving end to its exit, substantially as described. 10th. In a machine for making sticky fly paper, the combination, with the coating mechanism, of a cooling trough constructed with double walls to form a water jacket and provided with an inlet at one end and an outlet at its other end, substantially as described. 11th. In a machine for making sticky fly paper, the combination, with a cooling trough through which a continuous strip of coated and longitudinally perforated paper is passed from a coating and perforating mechanism, of creasing plates to fold the said strip of paper longitudinally in the line of its said perforations, substantially as described. 12th. In a machine for making sticky fly paper, the combination with a cooling trough that is gradually increased in depth and decreased in width from its receiving end to its exit end, said trough adapted to receive a continuous strip of coated and longitudinally perforated paper from a coating and perforating mechanism, of creasing plates that receive and fold the paper in its line of perforations as it leaves the exit end of said

trough, and vertical transfer rollers between which the folded strip of paper is passed to mat the opposite sides together and effect a mutual transfer of their respective coatings of sticky material, substantially as described. 13th. In a machine for making sticky fly paper, the combination with the transfer rollers, of a pair of feed rollers adapted to receive the folded strip of paper from said transfer rollers, and provided with enlarged ends to grasp said paper along its uncoated margins, stationary plates or cutters between which the folded strip of coated paper is passed from said feed rollers, and a rotary cut off knife to sever said folded strip into proper lengths, substantially as described. 14th. In a machine for making sticky fly paper, the combination with two rotary drums rigidly connected and adapted to rotate together for the purpose of applying sticky coating material to a continuous strip of paper on opposite sides of the median line thereof, so that when said paper is folded longitudinally the coatings applied by the respective drums will register with each other, of a folding mechanism, a feeding and cutting mechanism comprising two vertical rollers and a rotary cutter, and gearing for actuating said feeding and cutting mechanism from the rotary coating drums, whereby the continuous paper strip is severed into suitable lengths through the uncoated spaces or intervals between the coated surfaces, substantially as described. 15th. In a machine for making sticky fly paper, the combination with a rotary coating drum having annular grooves at or near its ends, and provided at intervals with flattened or reduced portions corresponding with the uncoated separating margins to be left on the coated paper strip between the several prints or sheets, said grooves being deepened at said flattened or reduced portions of the drum, of a scraper extended lengthwise of said drum, arms to which said scraper is attached by means of set screws that are adjustably engaged in the grooves of the drum, whereby the scraper is adapted to control the thickness of the coating material on the drum, and springs bearing on said arms to hold the scraper in operative position, substantially as described. 16th. In a machine for making sticky fly paper, the combination with a coating drum and a roller and perforating wheel arranged above said drum, of a vertically movable box or frame in which said roller and perforating wheel are supported, and a lever attached to said box or frame for lifting the roller and perforating wheel away from the coating drum, substantially as described.

No. 44,347. Fender for Tram, Electric and Cable Cars. (*Défense pour chars électriques, etc.*)

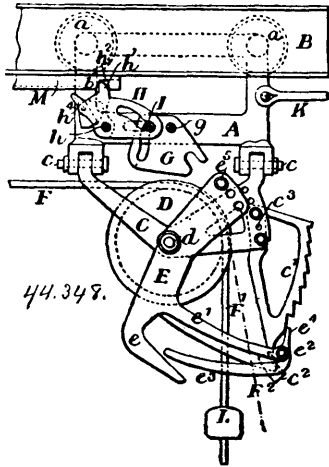


Henry Stuart Robins, Philadelphia, Pennsylvania, U.S.A., 23rd September, 1893; 6 years.

Claim.—1st. A fender for cars, comprising a frame, a body carried by the frame, and transverse guards or partitions, substantially as shown and described. 2nd. A fender for cars, comprising a frame, a pliable bed carried by the frame, and transverse yielding partitions of a tubular character, substantially as shown, and described. 3rd. A fender for cars, comprising a frame, a yielding bed carried by the frame, and a tubular or yielding guard or partition located at the forward portion of the bed, and spring supported, substantially as shown and described. 4th. A fender for cars, comprising a frame, a yielding bed carried by the frame, and a guard or partition located at the forward portion of the bed, the same consisting of a tube of yielding material, a spring located within the tube, and springs connected with the tube frame and with the fender frame, substantially as shown and described. 5th. A fender for cars, the same consisting of a frame provided with a yielding bed, a tubular spring support, a yielding guard or partition located at the forward portion of the bed, and a second yielding partition or guard located upon the bed at the rear of the forward guard, the rear partition or guard being capable of a rearward movement only, substantially as shown and described. 6th. A fender for cars, the same consisting of a frame provided with a yielding bed, a tubular spring support, a yielding guard or partition located at the forward portion of the bed, a second yielding or guard located upon the bed at the rear of the forward guard, a spring connection between the forward surface of the rear partition or guard and the frame of the

wire bed portion of the fender, and pliable braces connecting the rear portion of the rear partition with the frame of the fender, whereby the rear partition is capable of a spring controlled rear movement, but not a forward movement, substantially as described. 7th. In a car fender, a vertical and a horizontal section, the vertical section being provided with a gated opening, whereby access may be had to the draw-head of the car, substantially as shown and described. 8th. A car fender, the same consisting of a vertical screen section fixedly located in front of the dashboard of the car, and a movable horizontal bed section connected with the screen section, the screen section being provided with a gated opening whereby access may be obtained to the coupling of the car, and supports for the bed section, substantially as shown and described.

No. 44,348. Pulley Carriage for Raising, Lowering and Traversing Loads. (Monte-charge.)

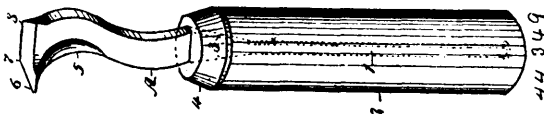


Joseph Temperley, of Reigate, Surrey, England, 25th September, 1893; 6 years.

Claim.—1st. In a pulley carriage travelling along an overhead track for the raising, lowering and traversing of loads, the combination of a block fixed on the hauling rope, a double lever frame pivoted on the pulley axis and carrying a cross bolt, a cam having a gap to receive the said bolt and a curved slot, a second cam having also a curved slot, a bolt engaged in both curved slots and in horizontal slots of the carriage frame, a horn on the second cam and a pawl pivoted thereon, and a stationary notched and shouldered piece presented to the horn and pawl, arranged and operating substantially as and for the purpose set forth. 2nd. In a travelling pulley carriage, in combination with a pair of cheeks between which the pulley is mounted, a toothed segment fixed to the said cheeks, a lever frame pivoted on the pulley axis, a double pawl lever pivoted on the said frame and ends of the frame shaped as a fork engaging over them, a block on the hauling rope, substantially as described. 3rd. The combination, with a travelling pulley carriage of pulley carrying cheeks *c* having a series of holes *c*² to receive bolts to fix to it, the segment *c*¹, a cam *G* and a lever frame *E* having a series of holes for a bolt *e*² to engage the cam, substantially as described.

No. 44,349. Hoof Cleaning Tool.

(Outil pour nettoyer les sabots.)



Robert C. Jenner, San Antonio, Texas, U.S.A., 25th September, 1893; 6 years.

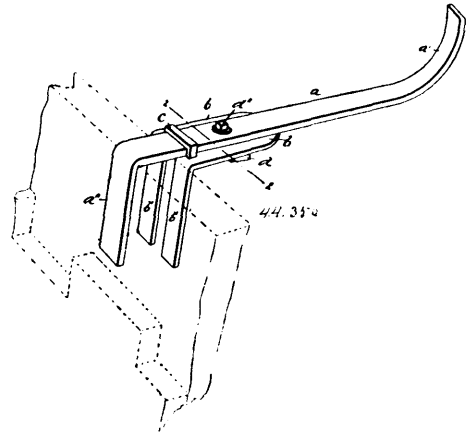
Claim.—A tool for removing obstructions from and cleaning horses' hoofs, formed with a shank provided with a handle, and a double curved blade having a sickle shaped and sharpened portion 5, an outwardly flaring sharp portion 6 forming a tapering point at the juncture with the portion 5, and the straight chisel edge 8, arranged at right angles to the axis of the handle and shank, substantially as and for the purpose specified.

No. 44,350. Obstetrical Stirrup. (Etrier obstétrique.)

Joseph Morgan Maurer, Washington, Pennsylvania, U.S.A., 25th September, 1893; 6 years.

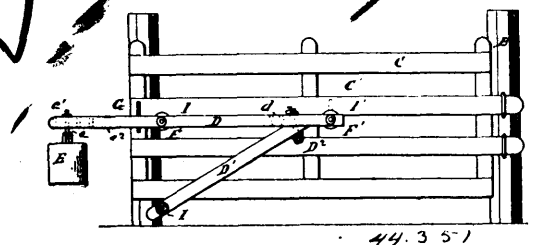
Claim.—1st. The combination of a bar provided with a stirrup at its forward end and a depending arm at its rear end, a slotted plate

b secured to the bar near its rear end and provided with a depending clamping arm, a loop connecting the forward end of the plate to the



bar, a bolt passed down through the bar and the slot in plate *b*, and a clamping plate on the lower end of the bolt, substantially as described. 2nd. The combination of a bar provided with a stirrup and a depending arm, a plate *b* provided with a slot open at its rear end, said plate being provided with a depending clamping arm, a bolt passing down through the bar and the slot in plate *b*, and a transverse clamping plate carried on the lower end of the bolt, substantially as described. 3rd. The combination of the bar provided with a stirrup at one end and a clamping arm at its other end, a slotted plate clamped to the underside of said bar and provided with a depending clamping arm, said plate tapering towards one end, a clamping bolt passed down through said bar and plate, and a transverse clamping plate on the lower end of said bolt, said plate tapering in the opposite direction, from said slotted plate, substantially as described.

No. 44,351. Gate. (Barrière.)



Floyd Hopkins, Bevidere, Illinois, U.S.A., 25th September, 1893; 6 years.

Claim.—1st. A gate, a supporting post therefor, a bar having a pivotal connection with the post, rollers on the bar, upon which the gate rests, a counterbalance weight for the gate, and an adjustable diagonal brace for supporting the outer end of the bar. 2nd. A gate, a supporting post therefor, a pintle offset from the post, an arm having an eye for said pintle, the arm bearing a flanged roller and a bar, a like roller on the bar, one of the bars of the gate resting upon the rollers, and a counterbalance for the gate. 3rd. A gate, a supporting post therefor, a bar pivoted to the post, two rollers secured to said bar, upon which rollers the gate rests, a counterbalance for the gate secured to the bar, and a diagonal brace pivoted to the supporting post and adjustably connected to the bar. 4th. A gate, a supporting post therefor, a horizontal bar having an eyebolt extending therefrom, a flanged roller on the eyebolt, said eyebolt extending over a pintle on the supporting post, a second roller on the horizontal bar, upon which rollers a bar of the gate rests, a brace bar having an eye bolt engaging a pintle on the post near its lower end, an adjustable connection between the horizontal bar and the brace bar, and a movable counterbalance weight on the horizontal bar. 5th. The combination of a gate, a hanger and a hanger post, the hanger being provided with anti-friction bearings for a part of the gate to slide upon and extended to the rearward of its hinges, said extension being provided with a counterbalance weight, substantially as and for the purpose described.

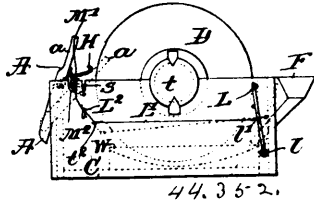
No. 44,352. Ice Cream Freezer.

(Machine à congélation pour la crème à la glace.)

John Clark, Hoxie, Albany, New York, U.S.A., 25th September, 1893; 6 years.

Claim.—1st. In an ice cream freezer having a casing, a drum mounted to rotate therein and to contain a freezing substance, a

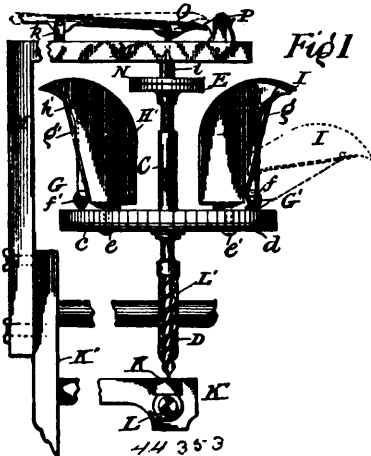
liquid containing receptacle, in which said drum rotates, a funnel leading thereto from the exterior of the casing, and a pivoted



scraper, the handle L, and connecting devices between the same and said scraper, whereby the latter may be moved by the former into contact with the periphery of the drum, substantially as described. 2nd. In an ice cream freezer, having a casing, a drum mounted to rotate therein and to contain a freezing mixture or substance, a liquid containing pan, a funnel leading thereto from the exterior of the casing, and a scraper, the shaft M, on which it is pivoted, the handle M¹, and slots S, S, all to operate, substantially as described. 3rd. In an ice cream freezer, having a casing, a drum mounted to rotate therein and to contain a freezing mixture or substance, a liquid containing pan and a funnel leading thereto from the exterior of the casing, combined with a scraper provided with a rod M, having eyes M², M³, by which it is pivoted to the said casing, handle M¹, slots S, S, and springs H, H, all to operate substantially as described.

No. 44,353. Governor for Clock Work.

(Gouverneur pour mécanisme d'horloge.)

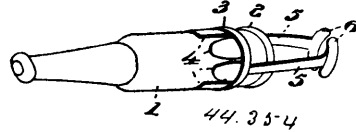


Joseph Exall Greenhill, 116 Downs Park Road, Hackney, London, England, 26th September, 1893; 6 years.

Claim.—1st. In combination with a clock or other train of wheels, or an electric motor, employed for rotating the spindle of a phonograph, gramophone or other sound recording and reproducing instrument, the employment therewith of the herein described apparatus for controlling and regulating the speed of same, substantially as set forth and shown by the accompanying drawing. 2nd. In combination, the improved speed governing apparatus, consisting of a horizontal circular disc or wheel A, with weighted rim B, web F, and slots *a* and *b* mounted and fixed upon a vertical spindle C, provided with a worm or screw D, and disc E, and borne by a bracket G and an adjustable bearing K upon the bracket K¹, the carriers G and G¹ carrying fixed vanes or wings H and H¹, and pivoted vanes I and I¹, the latter retained in a vertical position by the tension of springs *g* and *g*¹, the discs B¹ and B¹¹, provided with lugs *c*, *c*¹, *d* and *d*¹, and loosely mounted upon C, and having therein angular slots *a*¹, *a*¹¹, *b*¹, *b*¹¹, through which the slots *a*, *b* pass screws *e*, *e*¹, engaging with G and G¹, for regulating the position of H, H¹, I and I¹ upon the web F, the disc N connected by rods *i* to a lever O, pivotally mounted upon M, and operating in combination with E, for braking the mechanism, accelerated by the spring catch P, the whole connected and operating in combination with a train of wheels K¹¹, or an electric motor S for driving and governing the speed of the spindle of a phonograph, gramophone or other sound recording and reproducing instrument R, substantially as herein described and shown by the accompanying drawings. 3rd. In combination, the improved speed governing apparatus, consisting of the disc or wheel A, with weighted rim B, web F, and slots *a* and *b*, mounted and fixed upon a vertical spindle C, provided with a worm D, and disc E, and borne by a bracket M, and bearing K, the carrier G, G¹, with vanes H, H¹, I and I¹, the latter provided with

springs *g* and *g*¹, the disc B¹¹ beneath A, provided with lugs *n* and *n*¹, and having therein crescented slots T and T¹, for passing screws *e*, *e*¹, connected to G, G¹ for regulating the position of H, H¹, I and I¹ upon the web F, the disc N connected by rods *i* to the lever O upon N, and operating in combination with the disc E, and spring catch P for braking the mechanism, the whole connected and operating in combination with a train of wheels K¹¹, or an electric motor S, an instrument R, substantially as and for the purposes herein described and shown by the appended drawing.

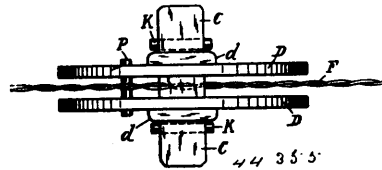
No. 44,354. Holder for Cigars. (Porte-cigares.)



Edward L. Gaylord, Bridgeport, Connecticut, U.S.A., 26th September, 1893; 6 years.

Claim.—1st. An extension holder for cigars, comprising a body, and a pair of resilient grasping lips supported by said body and capable of sliding adjustment, substantially as set forth. 2nd. In a cigar holder, the combination of the body or holder proper, with an extensible resilient clasp supported by said body, substantially as set forth. 3rd. The combination of the body of the holder, the friction collar around said body and capable of sliding thereon, and the spring arms projected from said collar and carrying at their extremities clasping lips, substantially as set forth. 4th. The combination of the body of the holder, the collar around the same, and having spring tongues which bear against said body, the resilient arms projected from said collar, and the clasping lips carried by the extremities of said arms, substantially as set forth.

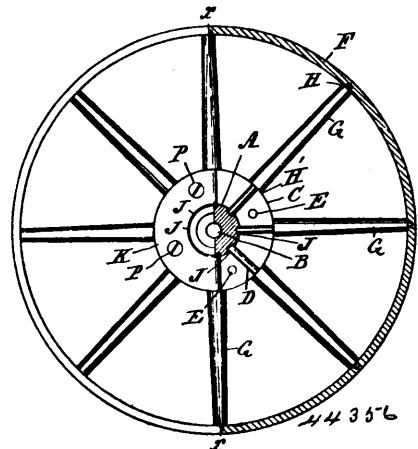
No. 44,355. Wire Tightener. (Tendeur de fil de fer.)



Alfred E. Cody, Sweaborg, Ontario, Canada, 26th September, 1893; 6 years.

Claim.—1st. A wire tightener consisting of the clamps C, C, in combination with the plates or discs D, in which the pin holes H, and opening O, are formed, and the locking pin P, substantially as set forth. 2nd. A wire tightener consisting of the clamps C, C, and keys K, K, in combination with the plates or discs D, D, in which the pin holes H, and opening O, are formed, and the locking pin P, substantially as set forth.

No. 44,356. Wheel for Vehicles. (Roue de voitures.)



Jessie Devine, West Bolton, Quebec, Canada, 26th September, 1893; 6 years.

Claim.—A vehicle wheel having a tyreless metallic rim F, provided with holes to receive spokes, a metallic hub A, provided with an axle box B, and between the ends, a circumferential flange C, integral therewith, said flange provided with radial grooves D, and

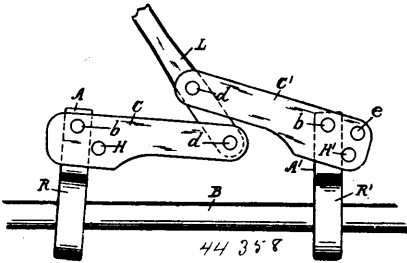
bolt holes E, a correspondingly grooved and perforated washer K, fitting on said hub and against the flange, spokes G, having reduced ends fitting into said holes and grooves and bolts P, fastening said washer and flange together to retain the spokes, substantially as set forth.

No. 44,357. Artificial Fuel. (*Combustible artificiel.*)

Gustav Spiecker, Bonn, Germany, and Gottfried Huettebaum, Wiklitz, Bohemia, Austria, 26th September, 1893; 6 years.

Claim.—The manufacture of blocks or briquettes of fuel from small coal, slack, coal dust or coke dust by mixing the same with a binding agent consisting of from 5 to 6 per cent of resinous pitch obtained as a residue in the distillation or boiling of the resins extracted from the coniferae, and then compressing the mixture thus obtained.

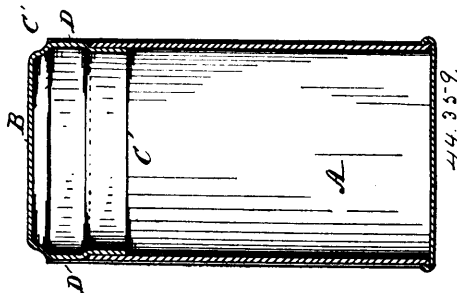
No. 44,358. Wire Tightener. (*Tendeur de fil de fer.*)



William J. Hall, Varna, Ontario, Canada, 26th September, 1893; 6 years.

Claim.—1st. The supporting bar B, and the grip rings or collars, R, R', provided with the arms A, A', respectively, in combination with the couplings C, C', stops H, H', and lever L, substantially as set forth. 2nd. The supporting bar B, and means for securing it to a suitable support, and the grip rings or collars R, R', provided with the arms A, A', respectively, in combination with the couplings C, C', and means for securing the latter to the wire or other strand, stops H, H', and lever L, substantially as set forth. 3rd. The supporting bar B, chain D, and the grip rings or collars R, R', provided with the arms A, A', respectively, in combination with the couplings C, C', stops H, H', lever L, bolt e, chain G, and clamp E, substantially as set forth.

No. 44,359. Vessel or Can. (*Vase ou bidon.*)



George Brinton and James B. Bailey, both of Harrisburg, Pennsylvania, U.S.A., 26th September, 1893; 6 years.

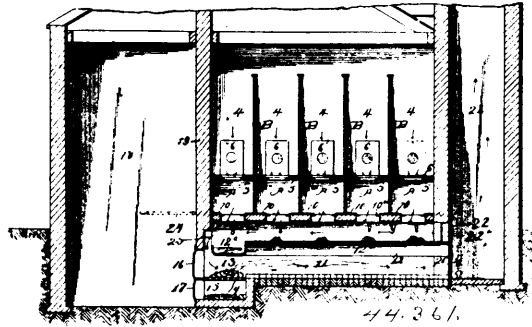
Claim.—As an improved article of manufacture, the herein described vessel or can for baking powder, spices, etc., the same consisting of the vessel or can proper, the cover of one integral piece and having a bolt or portion bulged outwardly to extend over the upper end of the vessel or can and be flush with the outside of the vessel or can, and the remaining lower portion preserved in its original diameter, such diameter admitting it snugly within the vessel or can, and a wrapping or label upon the outside of the vessel or can extending up to and about said upwardly bulged portion, and secured to the vessel or can and such portion by some adhesive material, whereby such vessel or can and cover are united and connected together.

No. 44,360. Sulpho Acid and Process of Producing Same. (*Acide sulfurique et procédé de fabrication.*)

The Grasselli Chemical Company, assignee of Hans A. Frasch, both of Cleveland, Ohio, U.S.A., 27th September, 1893; 6 years.

Claim.—1st. The process of manufacturing from mineral oil or petroleum or derivatives or distillates thereof, an acid whose calcium salt is insoluble in water, which consists in sulphomating the substance under treatment, removing the free sulphuric acid, separat-

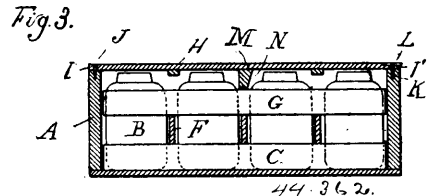
ing the soluble and the insoluble and oily matters from the remainder, converting the soluble matter into a soluble and an insoluble



ing the soluble and the insoluble and oily matters from the remainder, converting the soluble matter into a soluble and an insoluble salt by, for example, the addition of carbonate of lime or its described equivalent, separating the insoluble salt and rendering it soluble by the addition thereto of a suitable reagent such as carbonate of sodium, caustic soda or other substance that will displace the base represented in the solution, and precipitating from such solution the sulpho acid by means of hydrochloric or equivalent acid, substantially as described. 2nd. The process of manufacturing from mineral oil or petroleum or derivatives or distillates thereof, an acid whose calcium salt is insoluble in water, which consists in sulphomating the substance under treatment, removing the free sulphuric acid, separating the soluble and the insoluble and oily matters from the remainder, converting the soluble matter into a soluble and an insoluble salt by, for example, the addition of carbonate of lime or its described equivalent, separating the insoluble salt, and finally treating it with hydrochloric acid or its described equivalent, substantially as described. 3rd. As an article of manufacture, a sulpho acid or bark colour, soluble in water, fluorescent in solution, emitting when highly heated the characteristic odour of petroleum, and whose calcium salt is insoluble in water, substantially as described. 4th. As an article of manufacture, a sulpho acid emitting when highly heated the characteristic odour of petroleum, and whose calcium salt is insoluble in water, substantially as described.

No. 44,361. Dry Closet System.

(*Système de latrines sèches.*)



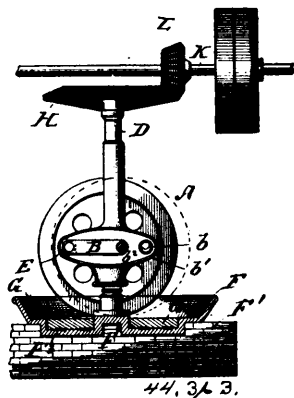
Frederick G. Ward, Alleghany City, Pennsylvania, U.S.A., 27th September, 1893; 6 years.

Claim.—1st. In a dry closet system, the combination of a series of closets, a deposit chamber common to said closets, a tray or caldron located at one end of the deposit chamber to receive the liquid excrement, a heating chamber subjacent to the deposit chamber and communicating at one end with an exit flue, a fire place arranged at the opposite end of the heating chamber subjacent to the said tray or caldron, and an air passage connecting the deposit and heating chamber adjacent to the said tray or caldron, whereby the vapours arising from the excrement are introduced into the heating chamber above the fire-place, substantially as specified. 2nd. In a dry closet system, the combination with a series of closets, and a deposit chamber common thereto, of an imperforate plate, forming the floor of the deposit chamber, and having a central longitudinal draining rib, 12^a, to receive the solid excrement, and parallel gutters or troughs upon opposite sides of the rib to receive the liquid excrement, a tray or caldron located at one end of the deposit chamber to receive the liquid excrement from said gutters or troughs, a heating chamber subjacent to the deposit chamber, and communicating at one end with an exit flue, a fire place arranged in the heating chamber subjacent to the tray or caldron, and an air passage connecting the heating and deposit chambers adjacent to the tray or caldron and fire place, substantially as specified. 3rd. In a dry closet system, the combination with a series of closets, a deposit chamber common thereto and cremating appliances connected with said chamber, of a horizontal partition arranged between the seats and the subjacent connected plates 10, engaged at their side edges by upstruck guides upon the plate 10^b, anti-friction balls interposed between the ad-

adjacent surfaces of said plates, and means for operating the slidable plates, substantially as specified.

No. 44,362. Packing Box.

(Boîte d'emballage.)

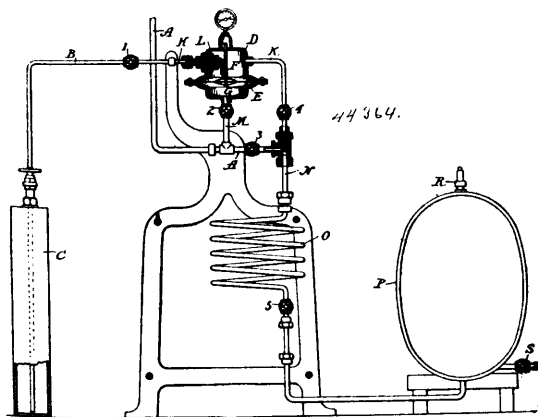


Stephen E. Parish, Lansing, Aron Linton and Charles E. Linton, both of Saginaw, all in Michigan, U.S.A., 27th September, 1893; 6 years.

Claim.—1st. In a packing box, the combination with a box, of a series of detached longitudinal strips therein, near the bottom, a series of detached lateral strips resting on the longitudinal strips, a series of detached longitudinal strips resting on the lateral strips, a cover and a depending cleat pivotally secured on its under side midway its ends, arranged to engage the upper tier of longitudinal strips when the cover is placed, substantially as described. 2nd. In a packing box, the combination with a box, of a series of detached longitudinal and lateral cross strips, the upper members resting on the lower members, and a cover having a depending cleat pivotally secured to and arranged between its ends, contacting with the uppermost strips when the cover is in place, substantially as described.

No. 44,363. Vertical Mill Stones.

(Meules de moulin verticales.)



Henry Mantey, Orizaba, Vera Cruz, Mexico, 27th September, 1893; 6 years.

Claim.—1st. The combination of the vertical mill stones, the axle or axles upon which said mill stones are journaled, and means for revolving said mill stones around a common centre, said axle or axles extending horizontally from the centre of rotation and inclining forward with relation to the radius of revolution, substantially as set forth. 2nd. The combination of a vertical driving shaft, a cross beam secured to said shaft and having bearings on its opposite ends, and crank axles supported in said bearing at their inner journal ends, and having outer journal ends upon which vertical mill stones are supported, said outer journal ends being inclined forward with relation to the radius of revolution, substantially as set forth. 3rd. The combination of the vertical mill stones, the axle or axles upon which said mill stones are journaled, means for revolving said mill stones around a common centre, and means for adjusting the angle of inclination of the axles to the radius of the circle of rotation, substantially as set forth. 4th. The combination

of the central operating shaft, the cross beam or boxing keyed to said shaft, axles adjustably secured to said cross beam or boxing, and vertical mill stones mounted on said axles, whereby the angle of inclination of the axles with relation to the radius of revolution can be adjusted, substantially as set forth. 5th. The combination of the vertical mill stones, the crank axles upon which the stones are journaled, the vertical operating shaft, a cross beam or boxing secured to the shaft, and journal boxes in which the inner journal ends of the crank axles are journaled, adjustably secured to the cross beam or boxing, whereby the angle of inclination of the axles can be adjusted with relation to the radius of revolution, as set forth. 6th. The combination of the vertical shaft, the cross beam or boxing keyed to said shaft and having curved faces or edges, journal boxes having curved faces fitting against the curved faces of the cross beam and adjustably secured thereto, and crank axles having inner and outer journal ends, the inner journal ends being journaled in the adjustable boxes, and the outer journal ends supporting the mill stones, substantially as and for the purpose set forth. 7th. The combination of the vertical shaft, the cross beam or boxing keyed to said shaft, and having opposite faces or edges curved, and the ends horizontally slotted, journal boxes fitting against the slotted ends of the cross beam, and having curved flanges which fit against the curved portions of the cross beam, screw bolts projecting from the curved faces of the cross beam, and engaging slots in the curved flanges of the journal boxes, crank axles journaled in the adjustable boxes, and mill stones mounted on the crank axles, substantially as herein set forth.

No. 44,364. Process of Carbonating Liquids.

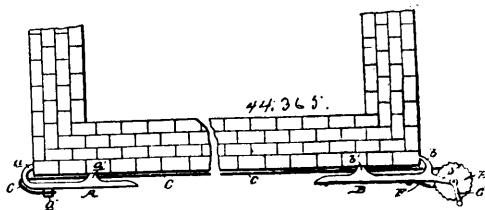
(Procédé pour carboniser les liquides.)

Joseph Schneible, Brooklyn, and Carl Anton Schneible, New York City, both of New York, U.S.A., 27th September, 1893; 6 years.

Claim.—The improvement in the art of aerating or charging liquids with gas which consists in producing a smooth and steady flow of the liquid under a uniform pressure, producing a smooth and steady flow of the gas under a uniform pressure, mingling the gas and liquid quietly and without agitation, and maintaining pressure upon the liquid after the mingling of the gas therewith.

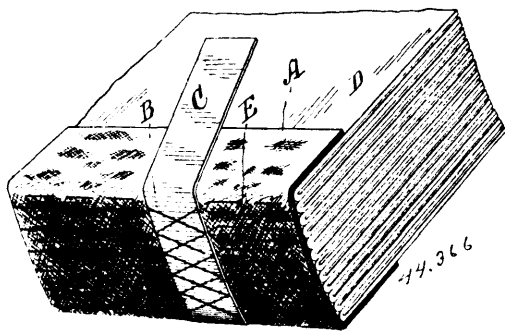
No. 44,365. Gage Line Holder.

(Porte-ligne de jauge.)



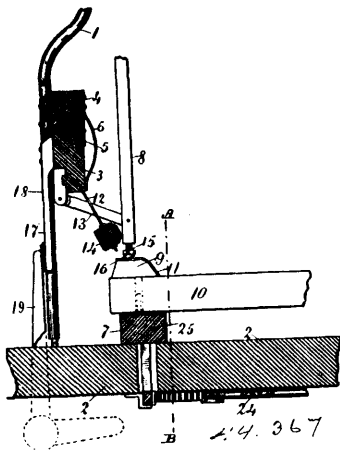
Andrew S. Snyder, Homestead, Pennsylvania, U.S.A., 27th September, 1893; 6 years.

Claim.—1st. In a gage line holder, the combination of two plates, each constructed to span a corner of a wall and except at each of its ends to be out of contact therewith, a means upon one of said plates to which an end of the guide line is fastened, and a winding means upon the other of said plates for drawing said line taut. 2nd. In a gage line holder, the combination of two plates, each having a flange at one end, and a lug at its other end, which engage the sides of a wall at an angle to each other and hold the intermediate part of the plate away from said wall, said lugs being constructed to permit the passage therethrough of the guide line, means upon one of said plates for tightening the line, and a means on said intermediate portion of the other plate to which an end of the line is secured, substantially as described, whereby the guide line will be held out of contact with the mortar joint of the wall. 3rd. The combination, with the plate A, having the flange a, lug a', and post a'', with the plate B, also having a lug and a flange, the guide line secured at one end to said post, and extending through openings in said flanges and lugs, and a tightening means for said guide line mounted upon said plate B, substantially as shown and described. 4th. The combination with the plate B, having flange b, lug b', and arms b'', with the drum journaled in said arms, a ratchet beside said drum, a pawl engaging said ratchet, the guide line engaging said drum, and extending through openings in said flange and lug, and a means to which the other end of said guide line is secured. 5th. The combination, with the plate A, having the flange a, lug a', and post a'', with the plate B, having a flange b, lug b', and arms b'', a drum journaled in said arms, a ratchet mounted beside said drum, a pawl engaging said ratchet, the guide line engaging said drum at one end and extending through openings in said flanges and lugs to said post, and means for rotating said drum.

No. 44,366. Blank Book. (Agendas)

Charles Johnson, Toronto, Ontario, Canada, 27th September, 1893; 6 years.

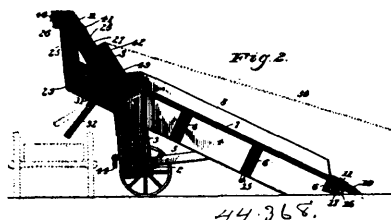
Claim.—1st. A blank book composed of a series of sections independently connected to a piece of webbing, substantially as and for the purpose specified. 2nd. A blank book composed of a series of sections independently connected to a piece of webbing, transverse strips of vellum or other suitable material being loosely connected to the said webbing, substantially as and for the purpose specified. 3rd. A blank book composed of a series of sections independently sewn to a piece of webbing, the stitches of the binding threads of one section breaking joint with the stitches of another, substantially as and for the purpose specified. 4th. A blank book composed of a series of sections independently sewn to a piece of webbing, the stitches of the binding threads of one section breaking joint with the stitches of another section, transverse strips of vellum being slipped through thread loops on said webbing, substantially as and for the purpose specified.

No. 44,367. Piano Action. (Action de pianos.)

Alexander Marcy, Toronto, Ontario, Canada, 27th September, 1893; 6 years.

Claim.—1st. In piano actions, the combination of a swinging flange rail and a movable transposing key board, for the purposes set forth. 2nd. In piano actions, the combination of an adjustable retaining bar beneath the swings and a movable transposing key board, for the purposes set forth. 3rd. In piano actions, the combination of a swinging flange rail jointed to a stationary rail and an adjustable retaining bar beneath the swings and secured to the swinging flange rail, and the springs secured to the stationary rail, for the purposes set forth. 4th. In a piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the springs secured to the stationary rail and the flanges secured to the said swinging flange rail, for the purposes set forth. 5th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the springs secured to the stationary rail, the flanges secured to the said swinging flange rail and the swings connecting the said flanges with the lifts or action stems, for the purpose set forth. 6th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swings and secured to the swinging flange rail, the springs secured to the stationary rail, the flanges secured to the said swinging flange

rail, the swings connecting the said flanges with the lifts or action stems and the lifts or action stems with the lower ends where they connect with the keys about equally spaced from centre to centre, for the purpose set forth. 7th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the springs secured to the stationary rail, the flanges secured to the said swinging flange rail, the swings connecting the said flanges with the lifts or action stems, the lifts or action stems with the lower ends where they connect with the keys about equally spaced from centre to centre, and the regulating screws on the lower ends of the said lifts or action stems, for the purpose set forth. 8th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the springs secured to the stationary rail, the flanges secured to the said swinging flange rail, the swings connecting the said flanges with the lifts or action stems, the lifts or action stems with the lower ends where they connect with the keys about equally spaced from centre to centre, the regulating screws on the lower ends of the said lifts or action stems, and a movable transposing key board, for the purpose set forth. 9th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the springs secured to the stationary rail, and a jack secured to the casing, for the purposes set forth. 10th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the springs secured to the stationary rail, a jack secured to the casing, and the jack rod leading to the foot pedal, for the purposes set forth. 11th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the springs secured to the stationary rail, a jack secured to the casing, the jack rod leading to the foot pedal, and a movable transposing key board, for the purposes set forth. 12th. In piano actions, the combination of a swinging flange rail jointed to a stationary rail, an adjustable retaining bar beneath the swings and secured to the swinging flange rail, the action brackets resting the casing back of the keys, and back of the said stationary and swinging flange rail, and a movable transposing key board, for the purposes set forth. 13th. In piano actions, the combination of a swinging flange rail, an adjustable retaining bar, the springs, the flanges, the swings, the lifts or action stems, the deflections of the lifts or action stems, the regulating screws, the jack, the jack rod, the action brackets resting on the casing back of the keys and back of the stationary and swinging flange rail, and a movable transposing key board, for the purposes set forth. 14th. In pianos, the combination of a swinging flange rail, an adjustable retaining bar beneath the swings, the deflections of the lifts or action stems, so the lower ends of the lifts or action stems will be about evenly spaced from centre to centre, and a movable transposing key board, for the purposes set forth. 15th. In piano actions, the combination of a stop rod with one end secured in a flexible manner to the jack, and the other end having an adjustable connection with a movable transposing key board, for the purposes set forth. 16th. In pianos, the combination of a swinging flange rail, an adjustable bar beneath the swings and secured to the swinging flange rail, the springs pressing against the said swinging flange rail, a jack secured to the casing, a stop rod with one end secured to the jack in a flexible manner, and the other end having an adjustable connection with the key board frame, and a movable transposing key board for the purposes set forth.

No. 44,368. Wagon Loader. (Charge-wagon.)

James Edwin Eveleth, Salix, Iowa, U.S.A., 27th September, 1893; 6 years.

Claim.—1st. In a wagon leader, the combination with the axle having the supporting wheels, the risers on said axles, the converging beams carried by said rise, and the flooring supported by the beams, of a receiving board hinged to the lower edge of the flooring, a scoop, and means for moving the latter over the flooring and receiving board, as and for the purpose set forth. 2nd. In a wagon loader, the combination with the inclined beams mounted on a wheeled truck, the flooring supported by said beams and terminating above the truck so as to leave an opening between the beams, the removable side boards, the scoop, and means for drawing the latter up the flooring, of a step on the flooring adjacent its upper end, an inclined rigid chute board depending from said opening, and a delivery board hinged to the lower end of the chute board, as and

for the purpose set forth. 3rd. In a wagon loader, the combination with the inclined beams, a flooring supported thereby and terminating short of their upper ends so as to form an opening, uprights at the upper ends, a cross bar connecting said uprights, braces for the latter, and a rod connecting the braces, of a block carried by said bar, a rope leading over the block to the bail of a scoop, a receiving board hinged to the lower end of said flooring, a stationary chute board in said opening, a directing board hinged to the chute board, and a stop on the flooring adjacent the opening, as and for the purpose set forth. 4th. In a wagon loader, the combination with the inclined flooring mounted on a wheeled truck, a scoop and

means for moving the latter, of a receiving board hinged to the lower end of the flooring, and a ring secured to the lower joist of the flooring under and adapted to be covered by said board when lowered, as and for the purpose set forth. 5th. In a wagon loader, the combination with the inclined flooring mounted on a wheeled truck, a scoop, and means for moving the latter, of a receiving board hinged to the lower end of the flooring, a staple under the flooring, a ring secured to the lower joist of the flooring under and adapted to be covered by said board when lowered, and a tongue adapted for detachable connection with said staple and ring when the board is raised, as and for the purpose set forth.

CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO THE FOLLOWING PATENTS.

3087. THE E. B. EDDY COMPANY (assignees) 2nd five years of No. 29,811, from the 2nd day of September, 1893. Improvements in Toilet and Wrapping Paper, 2nd September, 1893.
3088. WILLIAM H. HORNBY and LUCAS M. LENT, 2nd five years of No. 29,833, from the 7th day of September, 1893. Improvements in Washing Machines, 4th September, 1893.
3089. FRANCIS J. DRAKE, 2nd five years of No. 29,820, from the 5th day of September, 1893. Improvements in Shingle Cutting Machines. 5th September, 1893.
3090. THE E. B. EDDY COMPANY (assignees) 2nd five years of No. 29,853, from the 12th day of September, 1893. Improvements in Wooden Pails, Tubs, etc., 5th September, 1893.
3091. DAVID PLEWS, 2nd five years of No. 29,843, from the 11th day of September, 1893. Improvements in Pump Handles, 7th September, 1893.
3092. WILLIAM GADD, 2nd five years of No. 30,001, from the 18th day of October, 1893. Improvements relating to the construction of Gas Holders, 7th September, 1893.
3093. JAMES GORDON, 3rd five years of No. 17,642, from the 11th day of September, 1893. Improvements in Detachable Book Covers, 9th September, 1893.
3094. JOHN SAUNDERS, 2nd five years of No. 30,277, from the 24th day of November, 1893. Improvements in Medical Compounds for Rheumatic and other pains, 12th September, 1893.
3095. THE STARR BRASS MANUFACTURING COMPANY (assignees) 3rd five years of No. 17,781, from the 29th day of September, 1893. Improvements on Lubricators, 14th September, 1893.
3096. ALEXANDER M. KERR, and THE FULTON IRON & ENGINE WORKS, 2nd five years of No. 29,958, from the 6th day of October, 1893. Improvements in Lock for Hoisting Tackle, 14th September, 1893.
3097. JOHN KOLB and J. R. DROZESKI, 2nd five years of No. 29,857, from the 14th day of September, 1893. Improvements in Steam Traps, 14th September, 1893.
3098. FREDERICK O. TARBOX and UBERT P. TARBOX, 2nd five years of No. 29,896, from the 18th day of September, 1893. Improvement in Clothes Lines, 15th September, 1893.
3099. THE BRANTFORD SPRING TOOTH CULTIVATOR AND IMPLEMENT COMPANY, (assignees) 2nd five years of No. 29,885, from the 17th day of September, 1893. Improvements on Sulky Harrows, 16th September, 1893.
3100. THE J. F. PEASE FURNACE CO. (assignees) 2nd five years of No. 29,900, from the 19th day of September, 1893. Improvements in Combination Steam and Hot Air Heaters, 18th September, 1893.
3101. NICHOLAS WEBER, 2nd five years of No. 29,877, from the 17th day of September, 1893. Improvements in machines for stretching, scraping and finishing hides or skins, 18th September, 1893.
3102. DANIEL WOODBURY, 2nd five years of No. 29,978, from the 12th day of October, 1893. Improvements in Brick Machines, 22nd September, 1893.
3103. GUSTAVE L. ROBERT, 2nd five years of No. 29,997, from the 18th day of October, 1893. Improvements in or relating to the conversion of crude or Pig Iron into Malleable Iron or Steel, and apparatus therefor, 23rd September, 1893.
3104. THE UNITED GAS IMPROVEMENT COMPANY, (assignees) 2nd five years of No. 30,468, from the 24th day of December, 1893. Improvements in Incandescent Electric Lamp Holders and Cut-outs, 27th September, 1893.
3105. THE UNITED GAS IMPROVEMENT COMPANY (assignees) 2nd five years of No. 30,469, from the 24th day of December, 1893. Improvements in Incandescent Electric Lamp Holders and Cut-outs, 27th September, 1893.
3106. THE UNITED GAS IMPROVEMENT COMPANY (assignees), 2nd five years of No. 30,470, from the 24th day of December, 1893. Improvements in Regulators for Dynamo Electric Machines, 27th September, 1893.
3107. THE UNITED GAS IMPROVEMENT COMPANY (assignees) 2nd five years of No. 30,471, from the 24th day of December, 1893. Improvements in Dynamo Machines, 27th September, 1893.
3108. THE BALL ELECTRIC LIGHT COMPANY (assignees) 3rd five years of No. 18,020, from the 3rd day of November, 1893. Improvements on Dynamo Electric Machines, 29th September, 1893.
3109. FREDERICK LEADBEATER, 2nd five years of No. 29,947, from the 3rd day of October, 1893. Improvements on Air Feeding Devices, 29th September, 1893.

TRADE MARKS

Registered during the month of September, 1893, at the Department of Agriculture—
Copyright and Trade Mark Branch.

4731. DANIEL SHAW and WALTER ARMSTRONG McLEOD, of Almonte, Ont., trading as SHAW & McLEOD. Files and Rasps, 5th September, 1893.
4732. FREDERICK STEARNS & CO., of Detroit, Michigan, U.S.A. Pills, 5th September, 1893.
4733. JOHN C. OLAND and GEORGE W. C. OLAND, of Dartmouth, N.S. A Stimulative and Curative Bitters, 5th September, 1893.
4734. CANTRELL & COCHRANE, of Dublin and Belfast, Ireland. Soda Water, 5th September, 1893.
4735. CANTRELL & COCHRANE, of Dublin and Belfast, Ireland. Ginger Ale, 5th September, 1893.
4736. JOHN C. GRAY, of Toronto, Ont., trading as JOHN C. GRAY & CO. Worm Medicine, 11th September, 1893.
4737. LESLIE P. CLEMENT, of Woodstock, Ont. A Proprietary Medicine, 12th September, 1893.
4738. FREDERICK STEARNS & CO., of Detroit, Michigan, U.S.A. Medicine, 15th September, 1893.
4739. LOUIS SACKS, of Newark, N. J., U.S.A. Heel plates for Boots and Shoes, 18th September, 1893.
4740. EDMUND FREDERICK WAILES and EDWARD JOHN DOVE, trading as WAILES, DOVE & CO., of Newcastle-on-Tyne, County Northumberland, England. Asphaltic and Composite Paints and Compositions for protecting from corrosion the interior parts of Iron or Steel Ships, and similar vessels, Bridges and other structures of Iron or Steel, 18th September, 1893.
4741. DOMINION SANITARY POTTERY COMPANY, of St. John, Que. Sanitary and Plumbers Earthenware, 19th September, 1893.
4742. W. MAXWELL SMITH, of Toronto, Ont. Teas and Coffees, 19th September, 1893.
4743. HENRY SAUNDERS NUNN, of London, England, trading as DUNN & HEWETT. Cocoas, Chocolates, Coffees, Chicory and Essences, and manufactures of the same, 20th September, 1893.
4744. GEORGE E. DIXON, of St. Paul, Minnesota, U.S.A. A Drug, 20th September, 1893.
4745. THE BUSHNELL CO., Ltd., of Montreal, Que. High Test Burning Oil, 22nd September, 1893.
4746. GUSTAV FISCHER, of Montreal, Que. Cigars, 23rd September, 1893.
4747. THE ROYAL CANADIAN PACKING CO., of Claxton, on the Skeena River, B.C. Canned Salmon, and all other canned fish, 26th September, 1893.
4748. THE ROYAL CANADIAN PACKING CO., of Claxton, on the Skeena River, B.C. Canned Venison, and all other Canned Meats, 26th September, 1893.
4749. FREDERICK THOMAS BURGESS, of Toronto, Ont. A Cough Medicine. 26th September, 1893.
4750. AUGUSTE SICRE, 8 quai de Gesvres, Paris, France. Thé Purgatif, 27 septembre 1893.
4751. PH. VRAU & CIE, de Lille, Département du Nord, France. Fils à Coudre, 27 septembre 1893.
4752. AMOS S. HIGGINS, of Moncton, N.B. A Liniment, 28th September, 1893.
4753. THE OWEN SOUND PORTLAND CEMENT CO., Ltd., of Owen Sound, Ont. Portland Cement, 29th September, 1893.
4754. CHAS. G. P. CONNELL, of Woodstock, N.B. A Medicinal Ointment, 30th September, 1893.
4755. McCASKILL, DOUGALL & CO., of Montreal, Que. Varnishes, 30th September, 1893.
4756. THE WM. J. MATHESON & CO., Ltd., of New York, U.S.A. Dyes and Dye Stuffs, 30th September, 1893.

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7030. RAPPORTS JUDICIAIRES REVISES DE LA PROVINCE DE QUÉBEC, par l'Hon. M. Mathieu, Tome VI. Wilfrid John Wilson, Montreal, Que., 1 septembre, 1893.
7031. CATRIONA; or, ADVENTURES OF DAVID BALFOUR (A Sequel to Kidnapped), by Robert Louis Stevenson. William Bryce, Toronto, Ont., 1st September, 1893.
7032. HEALTH READER, NO. 1. Progressive School Series. Thomas C. Allen, Halifax, N.S., 5th September, 1893.
7033. HEALTH READER, NO. 2. Progressive School Series. Thomas C. Allen, Halifax, N.S., 5th September, 1893.
7034. BLONDINA WALTZ, by Chas. Bohner, Toronto, Ont., 5th September, 1893.
7035. PRIMARY EXAMINATION BOOK-KEEPING BLANK, NO. 6. The Copp Clark Co., Ltd., Toronto, Ont., 6th September, 1893.
7036. DAILY MEMORANDA AND EXPENSE RECORD. John A. Culverwell, Toronto, Ont., 6th September, 1893.
7037. TRAVELLERS' REPORT. John A. Culverwell, Toronto, Ont., 6th September, 1893.
7038. PHYSICIAN'S MEMORANDA AND CASH RECORD. John A. Culverwell, Toronto, Ont., 6th September, 1893.
7039. LESSONS IN LITERATURE FOR ENTRANCE EXAMINATIONS, 1894. Edited by F. H. Sykes, M.A. The Copp, Clark Co., Ltd., Toronto, Ont., 8th September, 1893.
7040. THE MONTREAL BOARD OF TRADE SOUVENIR. (Book). The Sabiston Lithographic and Publishing Co., Montreal, Que., 8th September, 1893.
7041. LABOUR DIRECTORY, 1893. Redmond Keys, Montreal, Que., 11th September, 1893.
7042. ORAL LESSONS IN FRENCH FOR JUNIOR CLASSES, PART II., by H. H. Curtis and L. R. Gregor, Montreal, Que., 11th September, 1893.
7043. TABLE FOR THE PAYMENT OF BONDS BY A DIVIDEND SYSTEM. A. S. Palmer and A. J. Rheubottom, Winnipeg, Man., 11th September, 1893.
7044. TABLE FOR THE PAYMENT OF BONDS BY A MULTIPLE SYSTEM. A. S. Palmer and A. J. Rheubottom, Winnipeg, Man., 11th September, 1893.
7045. LAKE ST. LOUIS: OLD AND NEW: ILLUSTRATED, AND CAVALIER DE LA SALLE, by Désiré Girouard, Dorval, Qué., 11 septembre, 1893.
7046. BERCEUSE. For Violin and Piano, by W. R. Spence. Timms & Co., Toronto, Ont., 15th September, 1893.
7047. MELODY. For Violin and Piano, by W. R. Spence. Timms & Co., Toronto, Ont., 15th September, 1893.
7048. THE BELL TELEPHONE COMPANY OF CANADA, LIMITED, LONDON AND ST. THOMAS EXCHANGES, SUBSCRIBERS' DIRECTORY, ONTARIO DEPARTMENT, AUGUST, 1893. The Bell Telephone Company of Canada, Limited, Montreal, Que., 13th September, 1893.
7049. GLIMPSES OF THE WHITE CITY. (Photographic medley). Stephen J. Thompson, New Westminster, B.C., 13th September, 1893.
7050. BILL AND POLLY, by D. V. Lucas, D.D. William Briggs (Book Steward of the Methodist Book and Publishing House), Toronto, Ont., 15th September, 1893.
7051. OFFICIAL RECORD OF THE LIBERAL CONVENTION HELD IN OTTAWA, JUNE 20TH AND 21ST, 1893. The Budget Printing and Publishing Company, Toronto, Ontario, 16th September, 1893.

7052. TUXEDO. Caprice by E. Emile Farringer. The Anglo-Canadian Music Publishers' Association, Limited, London, England, 18th September, 1893.
7053. TRUST HER NOT. Duet. Words by Longfellow. Music by M. W. Balfe. Boosey & Co., London, England, 19th September, 1893.
7054. MOYA TOWN. Words by Clifton Bingham. Music by Lionel Elliot. I. Suckling & Sons, Toronto, Ont., 19th September, 1893.
7055. MURRAY'S ILLUSTRATED GUIDE AND POCKET BUSINESS DIRECTORY TO MONTREAL AND OTTAWA, 1893. Norman Murray, Montreal, Que., 20th September, 1893.
7056. LOVELL'S MONTREAL CLASSIFIED BUSINESS DIRECTORY FOR 1893-94. John Lovell & Son, Montreal, Que., 20th September, 1893.
7057. PUBLIC SCHOOL LEAVING EXAMINATION BOOK-KEEPING BLANKS, WITH HINTS ON BOOK-KEEPING, by J. A. Wismer, M.A. The Copp, Clark Co., Ltd., Toronto, Ont., 21st September, 1893.
7058. HEAD MANIKIN (to be published in connection with "Le Médecin de la Famille"). (Lithograph). James Walter Lyon, Guelph, Ont., 21st September, 1893.
7059. PORT COCKBURN BABIES LISTENING TO THE BIRD. (Photo). The Sheppard Publishing Co., Ltd., Toronto, Ont., 26th September, 1893.
7060. MATS AND RUGS: ART WORK, FANCY WORK. The Wells & Richardson Co., Montreal, Que., 26th September, 1893.
7061. LES CANADIENS DES ETATS-UNIS, CE QU'ON PERD À EMIGRER, par T. St. Pierre. Telesphore St. Pierre, Montreal, Que., 26th September, 1893.
7062. WELCOME WALTZES, by Chas. G. Spross. Dedicated to Their Excellencies Lord and Lady Aberdeen. I. Suckling & Sons, Toronto, Ont., 27th September, 1893.
7063. PROGRESSIVE FRENCH READER, PART II. Edited by H. H. Curtis and L. R. Gregor, B.A. W. Drysdale & Co., Montreal, Que., 27th September, 1893.
7064. FORM OF CONTRACT *RE* THE CYCLE REPAIR CO. OF TORONTO. John Hamilton Ewart, Toronto, Ont., 27th September, 1893.
7065. LE MÉDECIN DE LA FAMILLE (exclusive of such portions as are written by American authors). James Walter Lyon, Guelph, Ont., 28th September, 1893.
7066. HOUSE OF BISHOPS OF THE GENERAL SYNOD OF THE DOMINION OF CANADA, held in Toronto, September, 1893 (photo). Frank Wootten, Toronto, Ont., 30th September, 1893.
7067. HOW I ONCE FELT. Songs of Love and Travel. By George E. Curtis, Montreal, Quebec, 30th September, 1893.

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