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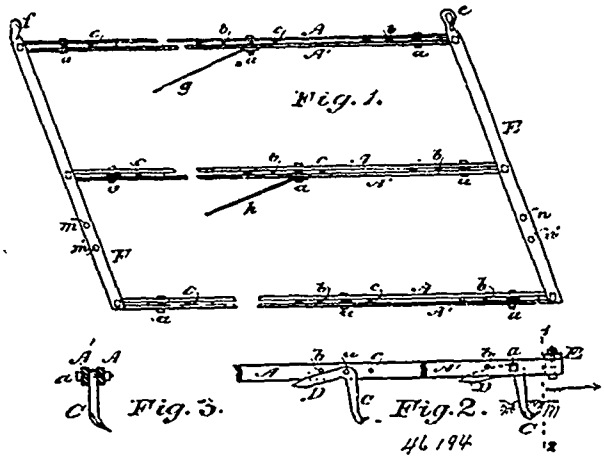
No. 46,194. Combined Harrow and Scarifier.
(*Herse et scarificateur combinés.*)



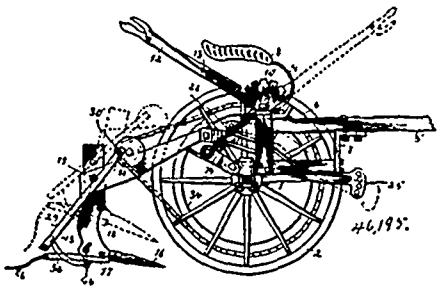
C. A. E. W. Clark, Welland, Ontario, Canada, 1st June, 1894; 6 years.

Claim.—1st. In a harrow or scarifier, the combined pivoted teeth C, D, the portion C, of the tooth being shaped to act for the purpose of scarifying, and the portion D, to act for the purpose of harrowing, substantially as herein described. 2nd. In a harrow or scarifier, the combined pivoted teeth C, D, in combination with the bolts or stops *b* and *c*, substantially as described and for the purposes set forth.

No. 46,195. Potato Digger.
(*Scarificateur à patates.*)

Alfred Olmsted, Byron, New York, U.S.A., 1st June, 1894; 6 years.

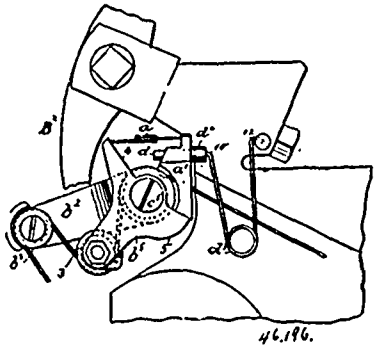
Claim.—1st. The combination with the main frame and the supporting wheels, the share, its frame and the connected draft bar, having means for the direct attachment of the horses, loosely engaging the under side of the main frame, of the links pivoted to the main frame for moving the share on the links, substantially as described. 2nd. The combination with the main frame, the supporting wheels, the links pivoted on the frame and the bar connecting them, of the share frame pivoted on said bar and laterally adjustable thereon, substantially as described. 3rd. The combination with the main frame, the supporting wheels, the links pivoted thereon, the bar connecting the links, of the plate journalled on the bar, the share frame mounted thereon, having the share and the draft bar, having means for the direct attachment of the horses extending forward and loosely engaging the under side of the main frame and lifting devices for the share frame, substantially as described. 4th. The combination with the axle, the wheels, the main frame composed of the parts 3 and 4, arranged in front of the axle, and the tongue connected thereto, of the share, and share frame pivoted in rear of the axle on links connected to the main frame, the draft bar extending beneath the frame forward of the axle and having means for the direct attachment of the horses and lifting devices on the main frame for adjusting the share frame, substantially as described. 5th. In a potato-digger, the combination with the wheels, the share or shovel, having a series of stationary rearwardly projecting fingers thereon, of an oscillating shaft arranged beneath the share, having a series of movable separating fingers projecting and movable upwardly between the stationary fingers on the share, and means for oscillating said shaft, substantially as described. 6th. In a potato digger, the combination with the wheels and the share or shovel, having the rearwardly projecting stationary fingers, of the two oscillating shafts arranged beneath the share, each having fingers projecting in rear thereof, and extending between those on the share and connections between said shafts and the wheels for causing their independent oscillation, substantially as described. 7th. In a potato-digger, the combination with the axle, the supporting wheels, having the sprocket wheels thereon, of the share frame, embodying the standards cross-bar and share, the two oscillating shafts on the cross-bar having rearwardly projecting fingers, the sprocket wheels on the share frame, having the wrist pins, the pitmen connected to the wrist-pins and to the oscillating shafts, and the chains connecting the sprockets on the supporting wheels with those on the share frame, substantially as described. 8th. The combination with the axle, the wheels, the main frame extending forward of the axle, and the tongue connected thereto, of the draft bar extending over the axle and beneath the forward portion of the main frame, the share, the share frame connected to the bar, the links pivoted to the main frame in rear of the axle, and below the connection with the share frame whereby the thrust on the links will be longitudinal, and lifting devices on the main frame for adjusting the share frame, substantially as described. 9th. In a potato digger, the combination with the share, having the stationary fingers projecting to the rear and the trailing rods



thereon, of the oscillatory shaft on the share provided with fingers extending between those on the share and having the loose trailing rods, substantially as described. 10th. In a potato digger, the combination with the share, having the stationary rearwardly projecting fingers provided with loose trailing rods, of the oscillatory shafts on the share having fingers projecting between those on the bare and each provided with the trailing rods connected thereto, ubstantially as described.

No. 46,196. Take-Up for Shoe-Sewing Machines.

(*Accroche-fil pour machines à coudre.*)



46,196.

he Goodyear Shoe Machinery Company, Portland, Maine, assignee of Henry Briggs, Hasbrouck Heights, New Jersey, all in the U.S.A., 1st June, 1894; 6 years.

Claim.—1st. In a shoe-sewing machine, the combination with a main take-up, an auxiliary take-up, and a stop to arrest or limit the movement of the said take-up, of a cushioning device normally extended beyond the stop into the path of movement of the auxiliary take-up and resisting the movement of the auxiliary take-up before the engagement of the latter with its stop, substantially as described. 2nd. In a shoe-sewing machine, the combination with a main take-up, an auxiliary take-up, and a stop to arrest or limit the movement of the said take-up, of a cushioning device consisting of a spring actuated plunger or rod normally extended beyond the said stop, but moved backward by the auxiliary take-up to permit the latter to be gradually arrested in its movement, substantially as described. 3rd. In a shoe-sewing machine, the combination with the main take-up b^2, and the auxiliary take-up b^5, of the stop a^1, for the said auxiliary take-up provided with a hole or cylinder, the rod or plunger d, normally extended through said hole or cylinder into the path of movement of the auxiliary take-up, and means to act on the said rod or plunger to resist the movement of the piston by the auxiliary take-up, substantially as described.

No. 46,197. Steam Engine. (*Machine à vapeur.*)

Fredric Candee Weir, assignee of Edward Wilson, Harden, both of Cincinnati, Ohio, U.S.A. 1st June, 1894; 6 years.

Claim.—1st. The skeleton main valve provided with a through steam passage between the cut-off sections, substantially as specified. 2nd. The skeleton main valve provided with a through steam passage upon each side of the central cut-off sections, substantially as described. 3rd. In combination with an exhaust chest located between the live steam chest and cylinder, the skeleton main valve with a through passage admitting live steam to the cylinder ports and exhausting from the same ports outside the ends of the valve, substantially as specified. 4th. In combination with an auxiliary valve located in a live steam chest, the skeleton main valve A, provided with a through passage between the cut-off section, substantially as specified. 5th. In combination with an auxiliary valve located in a live steam chest, the skeleton main valve provided with a through passage each side of the central cut-off section located in the exhaust chamber, substantially as specified. 6th. The combination of the live steam chamber and an auxiliary valve with the exhaust chamber, and a main valve with ports and passages leading from the auxiliary valve and its seat through the openings of the duplex main valve located in the exhaust chest, substantially as specified. 7th. In combination with the piston P, P^1, the valves L, L, with passages connecting through the valve chamber each side of the partition K, and mechanism for operating said valves to convert the engine from a simple to a compound and vice versa, substantially as specified. 8th. In combination with the valve L, L, the ports and passages connecting said valves chambers with the divided cylinder, the cam levers N, provided with a slot n, and incline n^1, at either end whereby the valves are operated each near the end of the stroke of said valve, substantially as specified. 9th. The ballenced shell auxiliary valve C, located in the live steam chest D, provided with entrance ports, a series of cut-offs on the bottom face of said valve, a discharge port E, in combination with the valve

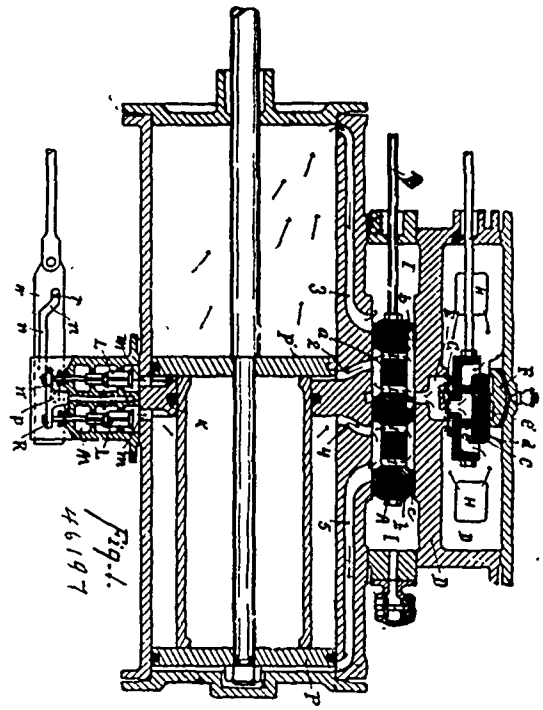


Fig. 1.
46197

seat having a series of ports coincident with the cut-offs of said valve, substantially as specified.

No. 46,198. Track-Sanding Apparatus.

(*Appareil à sabler les rails.*)

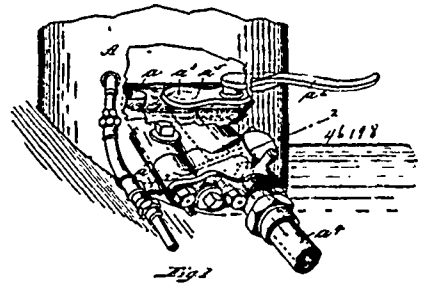


Fig 1

46,198

Henry L. Leach, Cambridge, Mass., U.S.A., 1st June, 1894; 6 years.

Claim.—1st. In track-sanding apparatus, the combination of a sand-passage having a blast-nozzle, with an emergency sand-passage auxiliary to that passage which is provided with a blast-nozzle, all substantially as and for the purpose set forth. 2nd. In track-sanding apparatus, the combination of a blast-passage with an auxiliary emergency sand passage, the two passages communicating one with the other, all substantially as and for the purpose set forth. 3rd. In track-sanding apparatus, the combination of a sand-box and a sand delivery pipe with a sand-blast passage from the sand-box, a blast-nozzle therefor, an auxiliary emergency sand-passage from the sand-box, and a cover for said auxiliary passage, all substantially as and for the purpose set forth. 4th. In track-sanding apparatus, the herein described combination of a sand-box, a sand-blast passage, an air-nozzle therefor, an auxiliary sand passage from the sand-box a cover for said passage, and a delivery pipe common to the sand-blast and auxiliary passages, all substantially as and for the purpose set forth.

No. 46,199. Friction Clutch Pulley.

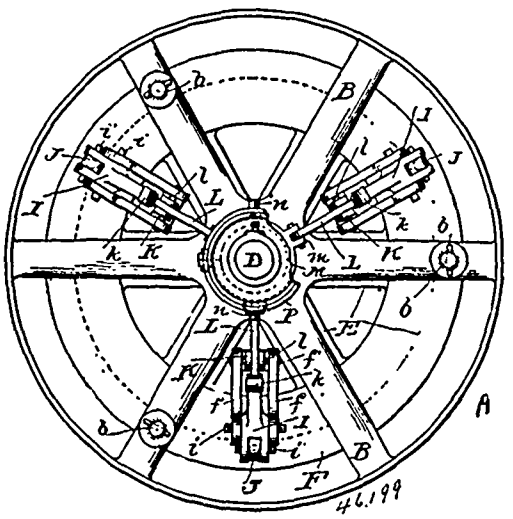
(*Poulie à embrayage à friction.*)

William W. Wallace, Willoughby, Ohio, U.S.A., 1st June, 1894; 6 years.

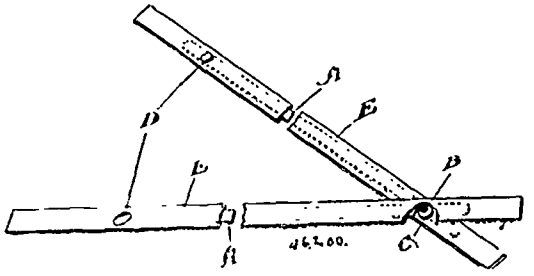
Claim.—1st. In combination with a loose pulley having pins projecting laterally from the arms of said pulley, friction-rings mounted

on said pins, a friction disc rigidly mounted on the shaft and located between such friction-rings, and mechanism for causing the friction-rings to grasp or release the disc, substantially as and for the purpose set forth. 2nd. In combination with a loose pulley having pins projecting laterally from the arms of said pulley, friction-rings mounted on the pins, bolts between said rings and coiled springs on said bolts and adapted to force the rings apart, levers for drawing the rings towards each other, such levers being mounted on one of the friction-rings and located inside the pulley, and a friction-disc rigidly mounted on the shaft and located between the friction-rings, substantially as set forth. 3rd. The combination with a loose pulley having pins projecting laterally from the arms of said pulley, friction-rings mounted on such pins, the outer friction-ring having a peripheral ring projecting beyond and outside of the said pins, a friction-disc rigid on the shaft and operating between the friction ring, and mechanism for operating the rings in grasping or releasing the friction-disc, substantially as and for the purpose set forth. 4th. In combination, a friction-clutch-pulley having pins projecting laterally from the arms of the same, friction-rings connected by said pins to the pulley, a friction-disc secured rigidly to the shaft and operating between the said rings for driving purposes, and mechanism for causing the friction-rings to grasp or release the disc, substantially as set forth.

Fig 9



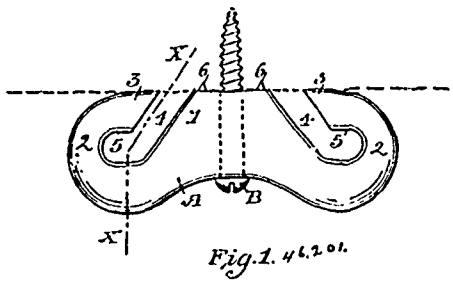
No. 46,200. Dress Plaquet Fastener. (*Ferme-robe.*)



George M. Treat, Hamilton, Ontario, Canada, 1st June, 1894; 6 years.

Claim.—1st. As a new article of manufacture a dress plaquet fastener consisting of two stiffening blades A A¹ pivotally connected together at one end and having the opposite end free and so arranged as to be readily stitched, sewn or otherwise secured to the sides of the plaquet hole, substantially as specified. 2nd. As a new article of manufacture a dress plaquet fastener consisting of two stiffening blades A A¹ pivotally connected together at one end by means of a pivot pin B, a washer C mounted on the pivot pin B between the blades A A¹ the stiffening blades so arranged as to admit of being stitched or otherwise secured to the dress material at the sides of the plaquet hole, substantially as specified. 3rd. As a new article of manufacture a dress plaquet fastener consisting of two stiffening blades A A¹ pivotally connected together at one end and having the opposite end free, and a spring catch or fastener arranged to lock together the opposite or free ends of the stiffening blades, substantially as specified. 4th. As a new article of manufacture a dress plaquet fastener consisting of two stiffening blades A A¹ pivotally connected together at one end by means of a pivot pin B, a washer C mounted on the pivot pin B between the stiffening blades A A¹, and a spring catch or fastener arranged to lock together the opposite or free ends of the stiffening blades, substantially as specified. 5th. As a new article of manufacture, a dress plaquet fastener consisting of two stiffening blades A A¹ pivotally connected together at one end by means of a pivot pin B, a washer C mounted on the pivot pin B between the stiffening blades A A¹, a fabric covering for each of the stiffening blades A A¹, and a spring catch or fastener to lock together the opposite or free ends of the stiffening blades A A¹, substantially as specified.

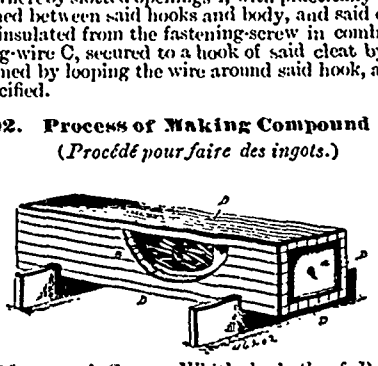
No. 46,201. Cleats for Supporting Conducting Wires for Electrical Circuits. (*Taquet pour supporter les fils conducteurs pour circuits électriques.*)



Horace Bartlett Wyman, Slingerlands, and Albert Clark Goodwin, Albany, all of New York, U.S.A., 1st June, 1894; 6 years.

Claim.—1st. A cleat for conducting wires, composed of non-electric material and consisting of a central body 1, whose upper face will bear directly against a plain and is perforated to receive a fastening-screw B, that will be surrounded by the insulating material to the point of contact of the cleat with said plane, said central body having at each end a hook 2, which is integral with said body and is provided with a terminal 3, which ranges, either positively or approximately, with the upper face of said central body, whereby slotted openings 4, with practically parallel sides are formed between said body and hooks in such manner that said openings will be entirely insulated from the fastening screws and no lodgement for moisture afforded therein, as and for the purpose specified. 2nd. A cleat for conducting-wires, composed of non-electric material and consisting of a central body 1, having its upper face fitted to bear directly against a plane to which the cleat is attached, said body being perforated to receive a fastening-screws B, which secures said cleat to its place and which will be surrounded by the insulating material of the cleat to the point of junction of the central body with said plane, each end of said central body having a hook 2, that is integral therewith and is provided with a terminal 3, ranging, either positively or approximately, with the upper face of said body, whereby slotted openings 4, are formed to extend, first inclined downwardly and then horizontally, from said central body so as to form shoulders 5, in said openings, the latter being formed with practically parallel sides and being entirely insulated from the fastening-screw, as and for the purpose specified. 3rd. A cleat for conducting-wires, composed of non-electric material and consisting of a central body 1, whose upper face will bear directly against a plane whereto said cleat is fastened, said central body being perforated to receive a fastening-screw B, that will be surrounded by the insulating material of said cleat to the point of junction of said central body with said plane, said central body having at each end a hook 2, whose terminal ranges, either positively or approximately, with the upper face of said body, whereby slotted openings 4, with practically parallel sides will be formed between said hooks and body, and said openings will be entirely insulated from the fastening-screw in combination with a conducting-wire C, secured to a hook of said cleat by means of a hitch 7, formed by looping the wire around said hook, as and for the purpose specified.

No. 46,202. Process of Making Compound Ingots.
(*Procédé pour faire des ingots.*)

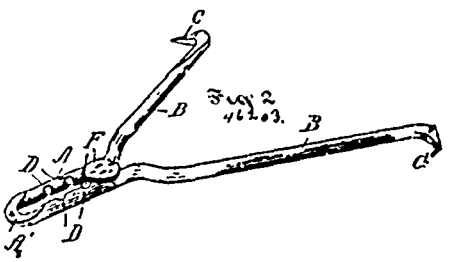


Alfred H. Moore and George Whitlock, both of Brooklyn, New York, U.S.A., 1st June, 1894; 6 years.

Claim.—1st. The herein described process of making a compound bar of iron and steel, which consists in enclosing steel in a sheet

metal case, and then surrounding the case with bars of iron providing additional thickness at the ends, and then heating the pile to the proper temperature for rolling, and lastly rolling the pile into the required form, substantially as described. 2nd. The herein described box pile, consisting of a sheet-metal case, scrap steel enclosed within said case, and an outer case of metal bars, substantially as described. 3rd. The herein described box-pile, consisting of a sheet-metal case composed of bottom with end flaps, sides with flaps and a top of two parts with end flaps, scrap steel enclosed within said case, and an outer case of metal bars.

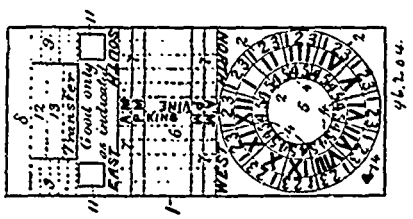
No. 46,203. Hoof Expander. (*Appareil pour élargir les sabots des animaux.*)



Ezra B. Chadwick, Bristol, Rhode Island, U.S.A., 1st June, 1894; 6 years.

Claim.—1st. A spreader comprising an expansible shank, spring arms projecting from opposite sides thereof, and a stud adjustable longitudinally in the shank for expanding the same, substantially as shown and described. 2nd. A spreader comprising an expansible shank which is formed with notches on its inner faces, spring arms diverging from the respective sides of the shank, and a stud adjustable in the shank which is held in the desired position by the notches thereof, substantially as described. 3rd. A spreader formed wholly of wire and comprising a U-shaped shank, spring arms extending therefrom, and a stud adjustable in the shank for expanding the same, substantially as shown and described. 4th. A spreader formed wholly of spring wire and comprising a U-shaped shank having notches on its inner faces, spur-carrying arms diverging therefrom, and a stud adjustable in the shank and which is held in position by the notches thereof, substantially as shown and described.

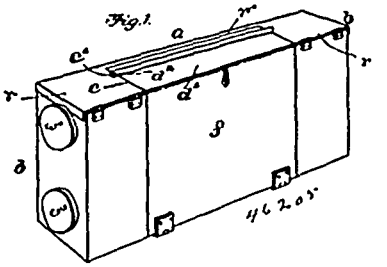
No. 46,204. Transfer Ticket. (*Billet de correspondance.*)



John H. Cairncross, Toronto, Ontario, Canada, 1st June, 1894; 6 years.

Claim.—1st. A transfer ticket having the numerals of a time piece indicated thereon and preferably arranged in circular form, and having around each of said numerals another set of numerals to indicate the divisions of the hour, thereby providing for a single mark indicating the hour and a particular portion thereof, substantially as specified. 2nd. A transfer ticket having the numerals of a time piece indicated thereon, preferably in circular form, in combination with a second set of numerals arranged round each of said time piece numerals, to indicate the divisions of the hour for the purpose specified, and spaces on which names of connecting lines of railways are indicated and classified according to the directions in which they extend, substantially for the purpose specified. 3rd. In a transfer ticket, the combination, of the numerals of a time piece indicated thereon as specified, a second set of numerals disposed round each of the said numerals of a time piece, spaces on which names of connecting lines of railways are indicated and classified according to the directions of their extension, and a double row of squares or spaces at each end of said spaces, by which to indicate the former or latter half of the day and the particular lines transferred to, by a single mark, substantially as specified. 4th. In a transfer ticket, the combination, of a series of spaces on which to indicate the names of connecting lines of railway, and a double row of squares or spaces on which to indicate at each end of said series of spaces the former or latter half of the day and the particular line of road transferred to, by a single mark or indication, substantially as shown and described. 5th. In a transfer ticket, the combination, of the numerals of a time piece indicated thereon, a second set of numerals disposed round each of the said time piece numerals, spaces on which connecting lines of railways are indicated and classified according to their direction of extension, double rows of squares or spaces at each end of said spaces for names of lines, enabling the former or latter half of the day to be indicated opposite the name of the day to be indicated opposite the name of line of railway transferred to, and spaces provided for initials to be indicated thereon to designate the direction of the car from which the transfer was granted, substantially as specified. 6th. In a transfer ticket, the combination, of the numerals of a time piece indicated thereon, a second set of numerals disposed round each of the said time piece numerals, spaces on which connecting lines of railways are indicated and classified according to their direction of extension, double rows of squares at each end of said spaces for names of lines, to enable the former or latter half of the day to be indicated opposite the name of the line of railway transferred to, spaces for initials to indicate the direction of the car from which transfer was granted, and the spaces for abbreviated names of transfer stations arranged over said initials, to indicate the points between which the transfer was given, substantially as specified. 7th. A transfer ticket, having in combination, with the numerals of a time piece arranged thereon, a particular distinguishing mark to indicate the particular car from which the transfer was granted, substantially as specified.

No. 46,205. Camera. (*Camera.*)



Theodore M. Clark, Newton, Massachusetts, U.S.A., 1st June, 1894; 6 years.

Claim.—1st. A camera comprising in its construction a roll-holder, having a compartment at each end for film-rolls and a central compartment for the bellows and its case, and a bellows and case therefor fitted removably into said central space, said case having a hinged side adapted when let down to form a platform on which the bellows may be extended. 2nd. A camera comprising in its construction a horizontal platform for the bellows, a sliding extension of said platform, a bellows secured at one end to a stationary support, a sliding support on the platform-extension for the lens-front, lazy-tongs connected with a stationary support at one end and with the sliding lens-front support at the opposite end, and connection between the lazy-tongs and sliding platform-extension. 3rd. A camera comprising in its construction a horizontal platform for the bellows, a sliding extension of said platform, a bellows secured at one end to a stationary support, a sliding support on the platform extension for the lens-front, lazy-tongs connected with a stationary support at one end and with the sliding lens-front support at the opposite end, rods connected with the central portion of the lazy-tongs, a yoke jointing said rods, and adjusting-screw connecting said yoke with the platform-extension. 4th. In a camera, a finder consisting of a prism supported with its thick end uppermost and concaved on opposite sides, substantially as and for the purpose described. 5th. In a roll-holder for cameras, the combination of enclosed end-compartments, a central compartment open at one side and adapted to receive and contain the camera, rollers in the end-compartments and carrying the film with a stretch thereof extending across the centre compartment, rollers in said end-compartments carrying a curtain-shutter with a stretch thereof extending across the central compartment in close proximity to the film, an operating drum or pulley having a knob, and a cord engaging said drum or pulley and having its ends attached to the curtain rollers.

No. 46,206. Apparatus for the Manufacture of Carbon Brushes. (*Appareil pour la fabrication de brosses pour carbones.*)

John Wright, Taylor, Peterborough, Ontario, Canada, 1st June, 1894; 6 years.

Claim.—1st. In an apparatus for the manufacture of carbon brushes, the combination of a die barrel, a casing provided with a steam chamber surrounding the die barrel, a lower die, an upper die, and means for applying pressure to the said upper die, substantially as and for the purpose specified. 2nd. In an apparatus for the manufacture of carbon brushes, the combination of a die barrel, a casing provided with a steam chamber surrounding the die barrel, a lower die, means for raising the said lower die, an upper die, and means for applying pressure to the said upper die, substantially as and for the purpose specified. 3rd. In an apparatus for the manufacture of carbon brushes, the combination of a die

barrel, a casing provided with a steam chamber surrounding the die barrel, a lower die, means for raising the said lower die, an upper die provided with a steam chamber and means for applying

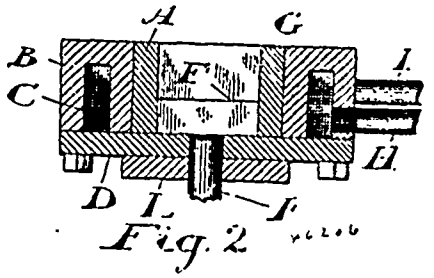
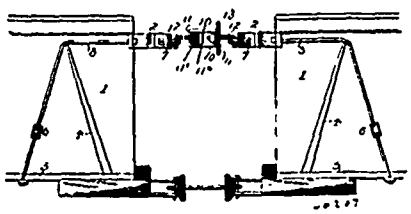


Fig. 2

pressure to the said upper die, substantially as and for the purpose specified. 4th. In an apparatus for the manufacture of carbon brushes, the combination of a die barrel, a casing provided with a steam chamber surrounding the die barrel, a lower die, an upper die provided with a steam chamber and means for applying pressure to the said upper die, substantially as and for the purpose specified. 5th. In an apparatus for the manufacture of carbon brushes, a die barrel in combination with a surrounding casing provided with a steam chamber divided by a partition, and provided with a steam inlet on one side of the partition and a steam outlet on the other, substantially as and for the purpose specified. 6th. In an apparatus for the manufacture of carbon brushes, the upper die O, having holes Q, S, T, U, drilled therein, in combination with plugs R, steam inlet *a*, and steam outlet *b*, substantially as and for the purpose specified. 7th. In an apparatus for the manufacture of carbon brushes, the combination of the die barrel A, casing B, enclosing a steam chamber C, surrounding the die barrel and provided with steam inlet and outlet pipes H and I, the lower die F, connected to the treadle M, by the rod E, the upper die O, provided with a steam chamber and steam inlets and outlets *a* and *b*, for the same, and a press J, to the spindle of which the said upper die O, is connected, substantially as and for the purpose specified. 8th. In an apparatus for the manufacture of carbon brushes, the combination with a die barrel surrounded by a steam jacket, of a lower die and an upper die, substantially as and for the purpose described.

No. 46,207. Car Coupling. (*Attelage de chars*)



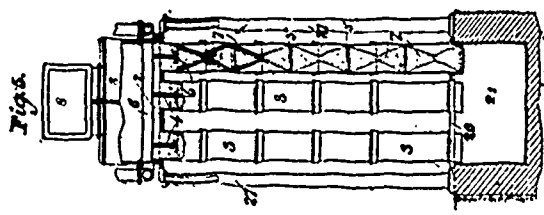
Henry Kern Knox, Vevay, Indiana, U.S.A., 1st June, 1894; 6 years.

Claim.—1st. The combination, with a railway car of the curved transverse draft-bars located below and projecting from the roof of the car, and provided with movable eye-bolts adapted to engage a hooked coupling, substantially as described. 2nd. The combination, with a railway car of the curved transverse draft bars, having central movable coupling-bolts and provided with side rods, passing along opposite sides of the car, across diagonal braces stepped in the bottom sills, and fastened in the said sills on the farther side of the brace, substantially as described. 3rd. The combination, with the transverse draft-bars having central reinforcing-plates provided with rotatable eye-bolts, of the coupling comprising the side pieces 10, screw-threaded heads 11, hand wheel 13, and adjustable screw-threaded hooks 12, substantially as described.

No. 46,208. Smoke Purifier and Draught Increaser.
(*Appareil pour purifier la fumée et augmenter le tirage.*)

Edwin Wardle, of the Boyne Engine Works and Joseph Henry Evers, of 14 Middleton Crescent, Deusbury Road, both in Leeds, England, 1st June, 1894; 6 years.

Claim.—1st. In apparatus for washing smoke and gaseous products, a washing tube provided with inclined perforated baffles arranged to form a zig-zag passage and over which water can be caused to flow substantially as herein described for the purpose specified. 2nd. In apparatus for washing smoke and gaseous products, a washing tube provided with perforated hollow bodies or decreasing cross sectional areas from one end to the other, said bodies being arranged one above the other so that washing water will flow over the inner surface of one and over the outer surface of the next and so on in a zig-zag manner, substantially as herein described for the purpose specified. 3rd. In apparatus for washing smoke and gaseous



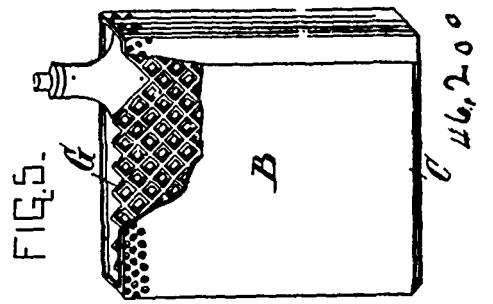
products, a washing tube provided with internal guide ribs and fitted with perforated hollow bodies having inclined surfaces and arranged one above another with the upper open end of each alternate one located beneath one of said ribs, substantially as herein described for the purpose specified. 4th. In apparatus for washing smoke and gaseous products, a washing tube through which the smoke and gaseous products are to flow, one or more water nozzles arranged within said tube, and a baffle or baffles arranged opposite said nozzle or nozzles so that water will issue therefrom in the form of a sheet or sheets that will extend to the inner surface of said tube, substantially as herein described for the purpose specified. 5th, Apparatus for washing smoke and gaseous products, comprising one or more tubes each adapted to be placed in communication at one end with a furnace flue and at the other end with a chimney or with the external atmosphere, perforated bodies of hollow conical form in axial section arranged one above another within said tube or tubes so as to form a zig-zag passage therein, and water supply apparatus for discharging water into the upper end or ends of said tube or tubes, substantially as herein described. 6th. Apparatus for washing smoke and gaseous products, comprising a plurality of vertical washing tubes each fitted with perforated bodies of hollow conical form in axial section arranged one above another so as to form a zig-zag passage, an inlet chamber adapted to be placed in communication with a furnace flue and common to the inlet ends of said tubes, an outlet chamber common to the outlet ends of said tubes and provided with an outlet branch, and means for supplying water to the upper ends of said tubes, substantially as herein described. 7th. In apparatus for washing smoke and gaseous products, the combination with one or more vertical washing tubes, and an inlet chamber with which said tube or tubes communicate, of a second chamber adapted to be placed in communication with a furnace flue, a plurality of horizontal tubes connecting said chambers, and a plurality of water nozzles carried by a water supply vessel and arranged to project water into said horizontal tubes, substantially as herein described for the purpose specified. 8th. Apparatus for washing smoke and gaseous products from furnaces, comprising a plurality of vertical washing tubes, each fitted with perforated bodies of hollow conical form in axial section arranged one above another so as to form a zig-zag passage, inlet and outlet chambers common to said tubes, means for supplying water to the upper ends of said washing tubes, a third chamber adapted to be placed in communication with a furnace flue, a plurality of horizontal tubes connecting said inlet and third chambers, and a plurality of nozzles carried by a water supply vessel, and arranged to project water into said horizontal tubes, substantially as herein described for the purposes specified. 9th. Apparatus for washing smoke and gaseous products from furnaces, comprising one or more washing tubes provided or each provided with inner horizontal guide ribs, a water nozzle and baffle, and perforated hollow truncated cones arranged one above the other in pairs with the upper open end of one of the cones of each pair below one of said guide ribs, and inlet and outlet chambers in communication with the respective ends of said tube or tubes, substantially as herein described for the purpose specified. 10th. Apparatus for washing smoke and gaseous products, comprising washing tubes 3, provided with internal ribs 3ˣ, and fitted with superimposed pairs of hollow truncated cones 7, having closed smaller ends, upper and lower chambers 8 and 21 common to said tubes and provided with with branches 8ª and 2 respectively, water supply pipes 6 located in said chamber 8, and provided with nozzles 4, and baffles 5 arranged in the upper ends of said tubes, and a receptacle 24 connected with said chamber 21, substantially as herein described for the purpose specified. 11th. In apparatus for washing smoke and gaseous products, a washing tube provided with a compound water nozzle, comprising several tubes fixed one within the other with water passages between them and each projecting beyond the tube that carries it, and annular baffle plates fixed opposite the water passages between said tubes, substantially as herein described for the purpose specified.

No. 46,209. Storage Electric Battery.
(*Accumulateur électrique.*)

Alfred Oblasser, Paris, and Charles Theryc, Marseilles, all in France, 1st June, 1894; 6 years.

Claim.—The process of making a secondary battery element, by forming an envelope with perforated sides, from sheets of celluloid

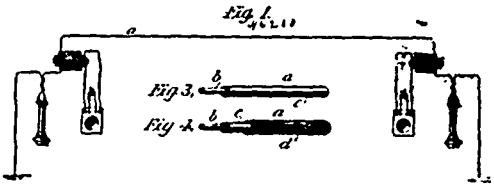
or similar material in a plastic or pliable condition, filling the envelope with active material and a conductor, closing the opening



through which the receptacle was filled, and subjecting the entire element to heavy pressure, substantially as described.

No. 46,210. Telephone Transmitter,

(*Transmetteur téléphonique.*)

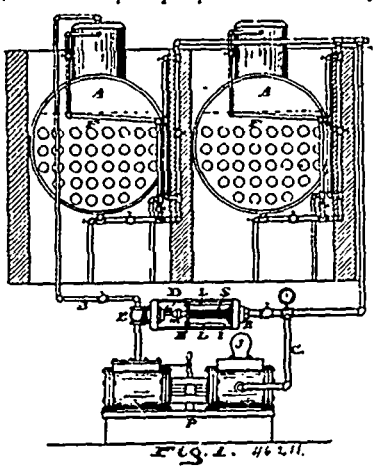


William H. Eckert, New York, State of New York, U.S.A., 1st June, 1894; 6 years.

Claim. 1st. The improved art or method of transmitting telephonic messages, which consists in developing a series of alternating electrical pulses representing said messages, and in transmitting said alternating pulses over a conductor of bi metallic wire consisting of iron or steel combined with copper or other dissimilar metals of specifically different resistances, as and for the purpose set forth. 2nd. The improved art or method of transmitting electric currents to a distance, which consists in the generation or development of a series of rapidly alternating electrical pulses and in the transmission of said pulses over a bi metalic conductor consisting of dissimilar metals, as and for the purpose set forth. 3rd. The improved art or method of transmitting electric currents to a distance, which consists in generating a series of rapidly alternating electric pulses, and in the transmission of said pulses over a bi-metallic conductor consisting of iron or steel combined with copper, as and for the purpose set forth. 4th. The improved art or method of transmitting electrical pulses to a distance and of isolating them from neighbouring objects, which consists in generating a series of rapidly alternating currents, and in the transmission of such pulses over a bi metallic conductor consisting of dissimilar metals, covered with an insulating coating as and for the purpose set forth.

No. 46,211. Governor for Feed Pumps.

(*Gouverneur pour pompes d'alimentation.*)

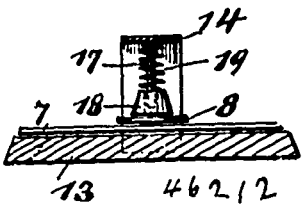


Joshua Thomas, Cleveland, Ohio, U.S.A., 1st June, 1894; 6 years.

Claim.—In combination with pump P, of the frame D, valve E, of steam pipe B, connected to one end of said frame, cylinder H, in opposite end of said frame D, and connected by pipe with the water pipe C, piston I, in said cylinder having its rod joined to the valve stem G, cross-bar K on said piston rod connected by rods L, L, with the frame P, and the spring S, on the piston rod between the cross-bar and piston, all constructed to operate, substantially as described.

No. 46,212. Histological Case.

(*Caisse histologique.*)

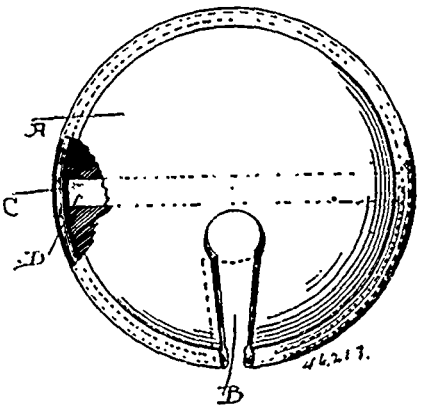


William Autenrieth, Cincinnati, Ohio, U.S.A., 1st June, 1894; 6 years.

Claim.—1st. A device to hold the glass-plates used for the preservation of microscopical specimens in position while the substance connecting them is hardening, consisting substantially of a base 13, a member or bridge 14 secured thereto, a series of stationary pins connecting to this latter and projecting to within a fixed distance toward base 13, and spring-actuated perforated blocks or followers 18 adjustably held on these pins. 2nd. The combination with a histological storage case for microscopical specimens, of the means required to prepare such specimens, such combinaton consisting of the lid 13 and bail 14 of the storage case, of a series of stationary pins secured to the bail and projecting to within a fixed distance toward lid 13, and spring-actuated blocks or followers 18, adjustably held on these pins. 3rd. In a case of the kind described, the combination of a box 9, a lid for it, a member 14, secured to the lid, a number of pins secured to member 14, and a series of spring-actuated blocks 18, supported on said pins, all as substantially shown and described. 4th. In a case of the kind described, the combination of a box 9, a lid for it, a member 14 secured to said lid and a series of spring-actuated blocks 18, supported on member 14, all as substantially shown and described. 5th. In a case for the purpose described, the combination of a box 9, provided with vertical notches 12, on its inside, a lid 13, a member 14, secured to said lid and a series of spring actuated blocks 18, secured and supported on member 14, all as substantially shown and described. 6th. A device to hold the glass plates used for the preservation of microscopical specimens in position while the substance connecting them is hardening, consisting of a base 13, having a member 14, and a series of spring-actuated blocks 18, supported on said member 14, all as substantially shown and described. 7th. A device to hold the glass-plates used for preservation of microscopical specimens in position while the substance connecting them is hardening, consisting of a base 13, having a member 14, a series of pins secured to said member 14, and a spring-actuated block 18, for each pin and guided by the latter, all as substantially as shown and described. 8th. In a case for the purpose described, the combination of a box 9, dove-tailed at 10 and 11, and having vertical notches 12, a lid 13, and a box 20, all as substantially shown and described. 9th. In a case for the purpose described, the combination of a box 9, having vertical notches 12, and dove-tailed at 10, 11, a box 20, a lid 13, provided with member 14, and a number of spring-actuated blocks 18, supported on member 14, all as substantially shown and described.

No. 46,213. Anti-Spattering Guards.

(*Garde pour bondons de tonneau.*)



Caleb Swayze, Welland, Ontario, Canada, 1st June, 1894; 6 years.

Claim. 1st. As a new article of manufacture, an anti-spattering guard comprising a disc of flexible material having a slot terminat-

ing in a round hole near the centre, substantially as described. 2nd. As a new article of manufacture, an anti-spattering guard comprising a disc of flexible material provided with a slot running from the edge towards the centre, and having a spring around the edge, substantially as described. 3rd. The anti-spattering guard herein described, comprising the disc of rubber A, having a hole B beginning at the edge and running towards the centre, and provided with the springs C, D embedded in the same, all substantially as described and shown.

No. 46,214. Paper Pulp Refining Engine.

(*Machine de raffinage pour la pâte à papier.*)

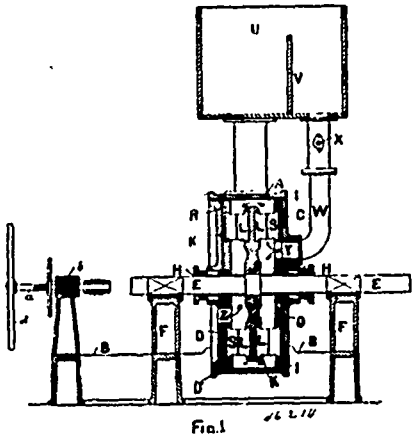


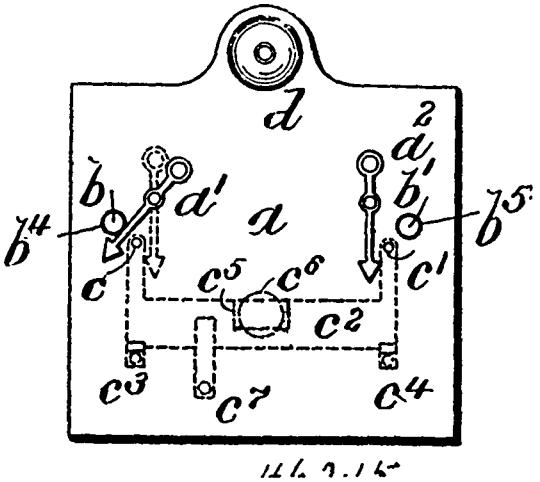
Fig. 1

David Pearson Redcliffe, England, and David N. Bertram, Edinburgh, Scotland, 1st June, 1894; 6 years.

Claim.- 1st. In an engine for refining paper pulp, the combination of a casing A, with closed and piston ends C and D, revolving disc J, shaft E, stationary discs R and Q, grooves or recesses K, cutter bars L and S, and packing strips T and O mounted and operating, substantially as set forth and illustrated. 2nd. In combination with the casing A before mentioned enclosing the arrangement of discs and cutter bars, and with closed end C and piston end D, a screw *a*, bracket *b*, and cross-head *c* for effecting the adjustment of the cutter bars when worn mounted, and operating substantially as herembefore describe , and illustrated on the accompanying drawing. 3rd. The combination of a screw *a*, bracket *b*, cross head *c*, piston end *d*, with our improved engine or with existing engines, substantially as set forth. 4th. The modified arrangement of driving shaft E, inlet opening Y, and modified forms of cutter bars and cutter grooves or recesses in the several discs, substantially as herembefore described and illustrated on the accompanying drawing. 5th. The general arrangement and construction of our improved paper pulp refining engine including the supply tank U, with partition V, also pipe W, inlet and outlet orifice in casing ends and discs, substantially as set forth and illustrated.

No. 46,215. Electrical Annunciator.

(*Indicateur électrique.*)

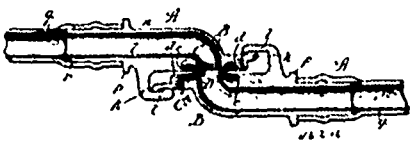


Franklin S. Carter, Burlington, New Jersey, U.S.A., 1st June, 1894; 6 years.

Claim. 1st. In an annunciator, the combination of a bar or plate carrying pins or projections which are in the path of the pointers, and an electro-magnet to actuate the bar to move the pins collectively out of the path of said pointers, substantially as set forth. 2nd. In an annunciator, the combination of a bar or other mechanism carrying pins or projections, said pins or projections being in the path of the pointers to intercept and hold them to indicate a call, and an electro-magnet to actuate said bar to withdraw said pins or projections collectively from the path of the pointers to allow them to be attracted and return to their normal position, said electro-magnet being in circuit with the indicating magnets, substantially as shown. 3rd. In an annunciator, the combination of a dial, pointers pivotally attached to said dial, and intercepting pins arranged to be collectively moved by an electro-magnet, substantially as set forth.

No. 46,216. Air-Brake Hose Coupling.

(*Joint de boyau pour freins atmosphériques.*)



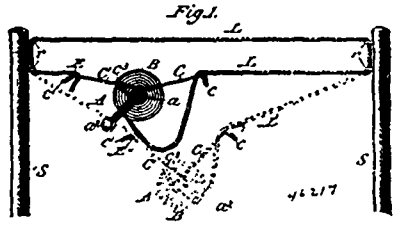
Beery Valve Company, assignee of Samuel M. Beery, Chicago, Illinois, U.S.A., 2nd June, 1894; 6 years.

Claim.- 1st. In a hose-coupling, the combination of the hollow head B having its face provided with the opening *m*, locking means adapted to interlock with the locking means on the head of a companion-coupler, when the two heads are coupled at the hanging ends of adjacent hose-sections, and a nipple *r* having the passage *i* leading straight through it and through the head nearly to the opening *m*, said passage leading entirely in the plane to the rear of the said face, whereby obstruction in the passage by any offset is avoided between the nipple and head, said passage curving from the termination of its straight course to the opening *m*, in an inward direction throughout the curve, substantially as and for the purpose set forth. 2nd. In an air-brake hose-coupling, the combination, with the coupler head having an opening *m*, of an annular flange *h* on the face of the head about the said opening, an annular recess *n* in the said face about the flange *h*, a gasket-ring C having an annular gasket-seat in its under side and movably fastened in the said recess, and a gasket D clasped between the ring and annular flange in said recess, substantially as described. 3rd. In an air-brake hose-coupling, the combination, with the head B having the opening *m*, of an annular flange *h* on the face of the head about the said opening, an annular shoulder g^1, on the said face and forming thereon with the flange *h* an annular recess g^2, a gasket-ring C, having an annular gasket seat in its under side and removably fastened against the face of the head about the flange *h*, and a gasket D seated at its flange in the recess g^2, and annular gasket-seat, and clamped between the ring and said flange *h*, substantially as described. 4th. In an air-brake hose-coupling, the combination, with the head B having the opening *m*, of a recess c^1 in one side of the face of the head, a gasket-ring C having a lip *c* to enter the said recess and a screw-fastening opposite the lip, and a gasket D seated at its flange against the under side of the ring and protruding through the opening thereof, substantially as described.

No. 46,217. Line Reel Fastener and Tightener.

(*Attache pour dévidoir.*)

Fig. 1.



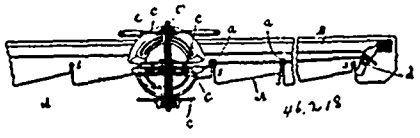
Charles Wagoner and Melvin H. Nichols, both of Worcester, New York, U.S.A., 2nd June, 1894; 6 years.

Claim.—1st. In a device of the class described, the combination of the clips substantially V-shaped in form and so connected as to have their apexes extending in opposite directions, and the springs connecting the inner ends of the limbs of one clip with the inner ends of the limbs of the other clip, substantially as described. 2nd. In a device of the class described, the combination of the clips substantially V-shaped in form and so connected as to have their apexes extending in opposite directions, and the springs connecting the inner ends of the limbs of one clip with the inner ends of the other, the said clips and connecting springs being made of a single piece of wire, substantially as described. 3rd. In a device of the class described, the combination of the reel and the clips adapted to

secure the ends of a line to the reel the said reel being so mounted as to be rotatable independently of the clips, substantially as described. 4th. In a device of the class described, the combination of the reel, and the clips elastically connected with the said reel adapted to secure the ends of a line to the same, substantially as described. 5th. In a device of the class described, the combination of the reel, and the clips substantially V-shaped in form having the inner ends of the limbs of each attached to the reel, substantially as described. 6th. In a device of the class described, the combination of the springs coiled in the form of discs, the clips connected by the said springs, and the reel journalled between the said springs, substantially as described. 7th. In a device of the class described, the combination of the clips substantially V-shaped in form, the springs connecting the inner ends of the limbs of one clip with the inner ends of the limbs of the other clip, the said springs being so wound as to form bearings, and the reel mounted between the said springs with the ends of its axle journalled in the bearings formed by the springs, substantially as described.

No. 46,218. Wire Fence Machine.

(*Machine à clôture de fil de fer.*)

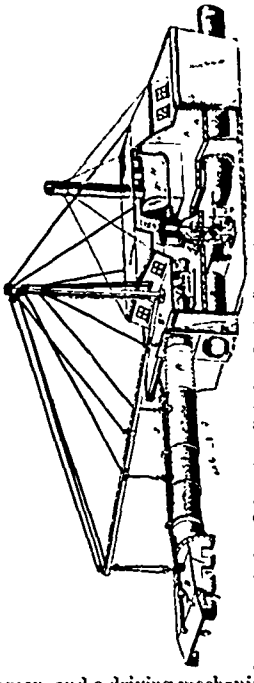


William N. Parrish and Charles F. Peelle, both of Richmond, Indiana, U.S.A., 2nd June, 1894; 6 years.

Claim.—1st. In a fence machine, a movable frame composed of the parts A A and B B arranged to permit a spool frame *c c* to traverse its sides carrying spools upon which wires *b b* are coiled, said spool frame adapted to revolve on the rib *g* working in the recess *h*, in the manner and for the purpose as herein described. 2nd. In a spool frame for a fence machine, the circular head plate provided with recesses *h h*, bevel gear *n*, friction pulleys *j j*, and a slotted opening from centre to circumference one way of its diameter, as herein set forth.

No. 46,219. Hydraulic Dredging Machine.

(*Machine de dragage hydraulique.*)



John M. Robbins and Hattie M. Pendery, both of Fort Worth, Texas, U.S.A., 2nd June, 1894; 6 years.

Claim.—1st. A suction pipe provided with a receiving box having an inclined open end, and a hydraulically and pneumatically operated gate for the said open end, substantially as set forth. 2nd. A suction pipe provided with a receiving box open at its outer end and a hinged gate for said open end and provided with a float having water and air pipes leading to it, substantially as set forth. 3rd. The combination, with a hull adapted to float or sink by water ballast, a longitudinal conduit in the base of the hull, a shaft rotatable longitudinally in the conduit, a screw blade thereon, and a driving mechanism for the shaft, of a flexing discharge pipe at one end of the conduit, a flexing extension at the other end of said conduit, a receiver box on said extension, and a water jet device supported on said extension, substantially as described. 4th. The combination, with a hull composed of two compartments and adapted to float or sink by water ballast, a longitudinally extended conduit within the lower compartment of the hull, an axially supported rotatable shaft within the conduit and having a screw blade thereon, and a driving mechanism for the shaft, of a water pump in the upper compartment of the hull, means to drive the pump, a jet pipe extended forwardly from the pump, a forward extension on the conduit, adapted to flex laterally and vertically, a receiver box on said extension and penetrated by the jet pipe, and means to float and sink the box, substantially as described. 5th. The combination, with a hull divided into two compartments by a floor, of a bent conduit below the floor, an axially supported rotatable shaft in the conduit and a screw blade on the shaft, an engine adapted to rotate the shaft, and a steam generator supplying said engine, of a flexibly jointed discharge pipe on the conduit, a forward extension on the conduit, a receiver box on said extension, a water pump within the hull, means to drive the pump, and a jet pipe extending from the pump into the box and through the latter, substantially as described. 6th. In a hydraulic dredging machine, a floating structure that may be sunk by water ballast, a cylindrical conduit arranged longitudinally within the hull, a bellows-jointed discharge pipe on one end of the conduit, and means to flex the discharge pipe, an extension at the front end of the conduit, a water jet device on a box on said extension, a hinged gate on the box, and floats on the box and gate adapted to receive air or water, substantially as shown and described. 7th. A suction pipe having a receiving box provided with floats and a float actuated gate for the box and water and air pipes leading to said box and gate floats, substantially as set forth. 8th. In a hydraulic dredger, a conduit longitudinally located in a hull and extended at one end, and adapted to flex in all directions, a receiving box on the conduit, a cylindrical float on each side of the box, a gate on the front end of said box, inclined forwardly and downwardly, a cylindrical float on the gate, an air and water supplying device in the hull, substantially as described. 9th. A suction pipe having a flexible section permitting it to be swung in all directions, a receiving box at its outer end provided with floats, a float-actuated gate for the box, and water and air pipes leading to the box, and gate floats, substantially as set forth. 10th. In a hydraulic dredger, a flexible joint for an extension of the conduit, comprising a corrugated flexible shell, a series of rings secured at intervals within the shell, a series of chains longitudinally extended within the shell and attached to the rings, and means to clamp the shell on to the ends of the conduit, substantially as described. 11th. In a hydraulic dredging machine, a submergible hull having a through conduit below the water line, and means for inducing a current through said conduit, substantially as and for the purpose specified. 12th. In a hydraulic dredging machine, a submergible hull having a through conduit below the water line, a propeller blade arranged in said conduit for inducing a current therethrough, and an induction pipe leading to the conduit within the hull, said induction pipe provided with means for disintegrating the material to be dredged, substantially as and for the purposes specified. 13th. In a hydraulic dredging machine, the combination with a sinkable hull having a through conduit below the water line, of a rotatable shaft arranged in said conduit and provided with propeller blades for inducing a current through said conduit, and an engine mounted in the hull and directly connected with the rotatable shaft in the conduit, substantially as and for the purposes specified. 14th. In a hydraulic dredging machine, a sinkable hull, having a floor which divides it into two compartments, a through conduit in the lower compartment, the area of said conduit being preserved throughout, a rotatable shaft arranged in said conduit and provided with a propeller blade, said shaft projecting from the conduit, and an engine coupled directly to the propeller shaft, substantially as and for the purposes specified. 15th. In a hydraulic dredging machine, the combination with a hull having a through conduit and means for inducing a current therethrough, of an intake having a detachable connection with the conduit of the hull, substantially as and for the purposes specified. 16th. In a hydraulic dredging machine, the combination with a hull having a through conduit, of an intake having a detachable slide connection with the conduit of the hull, substantially as and for the purposes specified. 17th. In a hydraulic dredging machine, the combination of a hull having a conduit, an intake connected with the conduit of the hull, means for inducing a current through said intake and conduit, and means for disintegrating and stirring up the material to be operated on by the dredge, substantially as and for the purposes specified. 18th. In a hydraulic dredging machine, the combination with means for inducing a substantially horizontally flowing current, of an open bottom intake box having a substantially horizontal intake leading therefrom to the dredge proper, substantially as and for the purposes specified. 19th. In a hydraulic dredging machine, a submergible hull, having a laterally curved through conduit, and means for inducing a current through said conduit, substantially as and for the purposes specified. 20th. In a hydraulic dredging machine, the combination with a submergible hull having a through conduit below the water line, of an intake having means for stirring the material operated upon, and mean for inducing a current through said intake and conduit, substantially as and for the purposes specified. 21st. In a hydraulic dredging machine, the combination with a submergible hull, of a curved or bent through conduit below the water line, a propeller blade arranged in said conduit and having a shaft which projects through the walls of the bend or curve of the conduit, and means for actuating the propeller shaft, substantially as and for the purposes specified.

No. 46,220. Vehicle Hub. (*Moyeu de roue.*)

Henry W. Broesquin, St. Louis, Missouri, U.S.A., 2nd June, 1891; 6 years.

Claim. 1st. A combined vehicle step and axle nut adapted to embrace and cover the outer end of a vehicle hub, the same adapted to answer the function of an axle nut and guard for the hub and axle, and also a vehicle step, substantially as set forth 2nd. In a new article of manufacture, a combined vehicle step and axle nut,

circular in cross-section, bell-shaped in longitudinal section, the same being provided with an internally screw threaded socket for

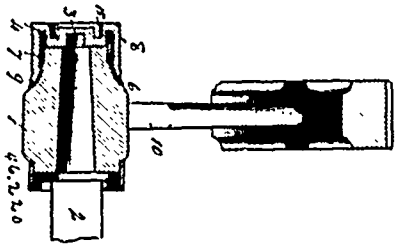


Fig. 1

the reception of the screw threaded end of the vehicle axle, substantially as set forth.

No. 46,221. Cover for Cans.

(*Couvercle de boîte métallique.*)

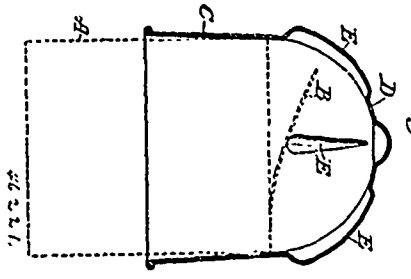


Fig. 2

Alfred A. Ainsworth, assignee of Joseph Wippler, both of New York State, New York, U.S.A., 2nd June, 1891; 6 years.

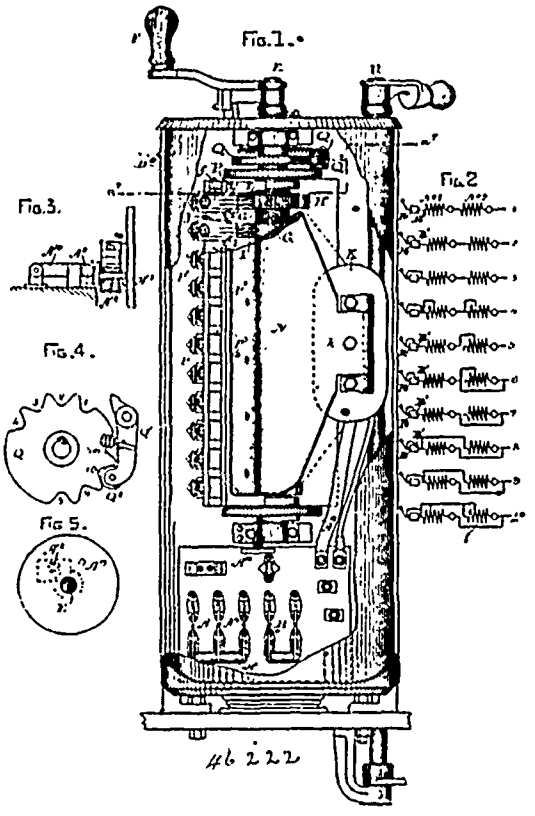
Claim.—1st. The combination with a cylindrical can having its top cut partly out and bent up, of a removable cover for said can having a substantially cylindrical portion to fit over the can and a semi-spherical top to form a space for the reception of the up-bent top of the can, substantially as shown and described. 2nd. A cover for condensed milk or other cans struck up in one piece and having a substantially cylindrical portion to fit over the can, a semi-spherical top to form a space for the reception of the up-bent top of the can and lugs formed on said semi-spherical top, substantially as shown and described.

No. 46,222. Controller for Electric Motors.

(*Contrôleur pour moteurs électriques.*)

The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of William B. Potter, Lynn, Massachusetts, U.S.A., 2nd June, 1891; 6 years.

Claim.—1st. The combination in an electric controller, of a switch, having a multiplicity of contacts, a blow-out magnet having a common pole-piece extending from a common core to points adjacent to the several circuit-breaking points of the switch. 2nd. The combination in an electric controller, of a cylindrical switch having a series of insulated contact plates adapted to engage with a corresponding series of stationary contact fingers and magnet having an extended pole-piece reaching to points adjacent to the several circuit breaking points between the said fingers and the said plates. 3rd. The combination in an electric controller, of a switch having a series of contacts, and a blow-out magnet provided with a pivoted pole-piece reaching to points adjacent to the point of contact between the respective parts of the switch. 4th. The combination in an electric controller, of a switch for changing two motors from series to parallel by a succession of steps and a stop for the switch in such of its several positions only as correspond to permanent combinations in motor circuits. 5th. The combination in an electric controller, of a switch for connecting two motors, either in series or in parallel by a series of successive steps, and a stop for the switch consisting of a disc having notches in its periphery corresponding to switch positions, producing permanent combinations of motor circuit, the remaining part of its periphery being without notches, and a spring-pressed lever bearing on the periphery of the disc, so as to engage with the notches therein. 6th. The combination in an electric controller, of a switch for connecting two motors, either in series or in parallel, a switch for reversing the motors, and an intermediate locking mechanism between the two switches, permitting the operation of one switch at a time only when the other is in proper condition. 7th. The combination in an electric controller, of a switch for connecting two motors, either in series or in parallel, a reversing switch for the motors, and a lock for each switch controlled by the remaining switch. 8th. The combination in an electric controller, of a switch for connecting two motors, either in series or in parallel, a switch for reversing the



motors, a lock for the former switch, and a connection between the said lock and the latter switch by which the former is held from moving while the latter is in its middle position. 9th. The combination in an electric controller, of a switch for connecting two motors, either in series or in parallel, of a reversing switch, a lock for the latter switch, and a connection with the former switch whereby the latter is held against movement except when the former is in a position to put the two motors in series. 10th. The combination of a reversing switch, with a removable handle for operating the same, and a lock preventing the removal of the handle in its extreme positions. 11th. The combination in an electric controller, of a switch for putting two motors either in series or in parallel, a reversing switch, an intermediate lock for the two switches, and a removable handle for the reversing switch provided with a lock preventing its removal when in either of its extreme positions. 12th. The combination with a switch, of a magnet having its poles adjacent to the contact breaking points of the switch. 13th. The combination with a switch, of a magnet having its poles adjacent to contact breaking points of the switch, and an arc deflector consisting of a chute or chimney also adjacent to the contact-breaking points of the switch. 14th. The combination with a switch having a multiplicity of contact-breaking points, of a magnet having its poles adjacent to said point, and an arc deflector consisting of a series of chutes or chimneys adjacent to the respective circuit-breaking points. 15th. The combination in an electric controller, of a switch for connecting two motors, either in series or in parallel, as cut-out switch for connecting one terminal of the respective motors to the opposite line, and a stop for the series parallel switch controlled by the cut-out switch. 16th. The combination in an electric controller, of a switch for regulating two motors in series, and then changing them to parallel, a cut-out switch for each of the two motors, and a switch controlled by the cut-out switch for limiting the main switch to its regulating positions. 17th. The combination in an electric controller, of a switch for regulating two electric motors in series by means of resistance, and subsequently putting them in parallel, of a cut-out switch for each motor having contacts arranged to leave the remaining motor in series with the said resistance. 18th. The combination in an electric controller, of a switch for regulating two electric motors by means of a resistance, and then changing them from series to parallel, with a cut-out switch for each motor, a stop controlled by each of the two cut-out switches, limiting the movement of the main switch to those points at which the regulation by means of said resistance is effected.

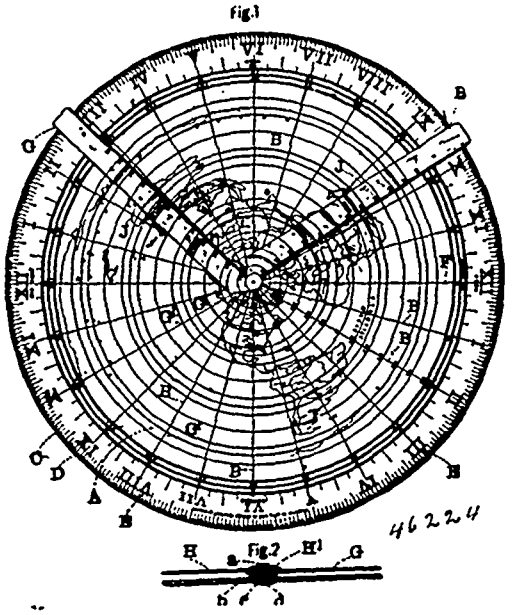
No. 46,223. Manufacture of Sugar.

(*Fabrication de sucre.*)

Caleb H. Jackson, assignee of Orazio Lugo, both of New York, State of New York, U.S.A., 2nd June, 1894: 6 years.

Claim.—The improvement in the manufacture of sugar which consists of producing oxyhydrates of aluminum in a bath of sugar solution by the action of an electric current, rendering the soluble oxyhydrate insoluble by a salt of phosphorous, and separating the insoluble compounds from the sugar solution, substantially as and for the purpose described.

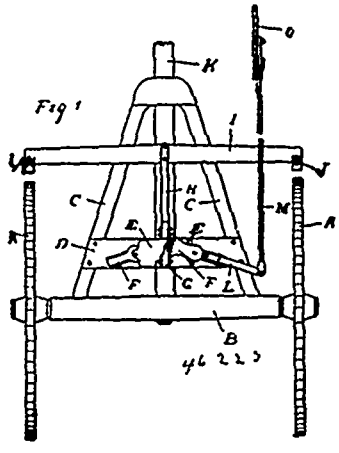
No. 46,224. Time Chart. (*Carte géographique horaire*)



Alexander Gleason, Buffalo, New York, U.S.A., 2nd June, 1894; 6 years.

Claim.—The combination with a time chart, of a circular time dial encompassing the circular map, a disc or dial graduated and divided to indicate longitude and sun time on any meridian line or intervening lines, two indicating arms loosely pivoted to the centre of the circular map, numerals indicating degrees of longitude on each of said arms, and a pivoted joint for holding said arms together so the friction between them will be sufficient to hold them one to the other at any point to which one may be moved on the other and permit both to be moved together by turning one substantially as and for the purposes described.

No. 46,225. Brake. (*Frein*)

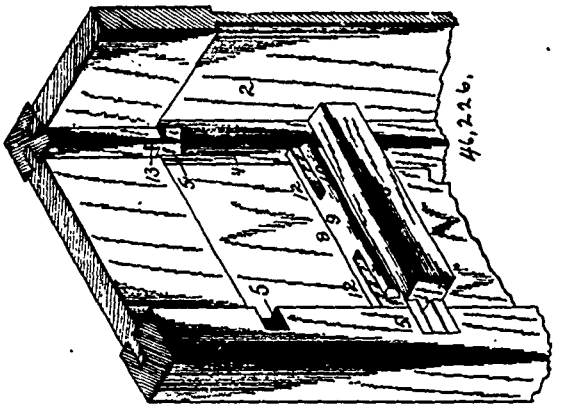


John F. Shepard, Coryell Bartholomew and Stephen H. Carroll, all of Jackson, Michigan, U.S.A., 2nd June, 1894; 6 years.

Claim.—In a wagon brake, the combination with a fixed portion of a vehicle, of a brake beam extending across the vehicle and carrying shoes on its ends, a draw-bar centrally secured to the beam and extending back, its rear end being provided with a rack-bar having side racks of a width less than the bar, a top and bottom plate E, having grooves therein in which the rack-bar is closely fitted, brake levers pivoted to the outer ends of the plates and extending in between the same and having segmental racks on their inner ends meshing with the racks on the rack-bar, and the actuating-rod and lever for the brakes, substantially as described.

No. 46,226. Drawer Guide.

(*Guide pour tiroirs.*)

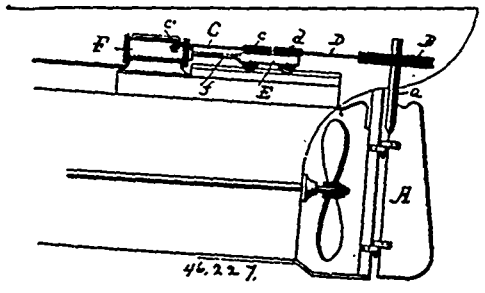


David M. Estey, Dwight C. Clapp and the Estey Manufacturing Company, all of Owosso, Michigan, U.S.A., 2nd June, 1894; 6 years.

Claim.—1st. A drawer guide for bureaus and other similar articles, consisting of a body portion, two oppositely projecting spring arms, and two similarly projecting rear spring arms, the ends of which extend beyond the ends of said first-named arms, substantially as and for the purpose specified. 2nd. In a bureau or other similar article, the combination with the pilasters having recesses therein, and the side walls, of the drawer guides consisting of the body portion, having oppositely projecting spring arms, the ends of which extend beyond the ends of said first-named arms and seated in the pilasters, the construction being such that the guides will not come in contact with the said walls of the bureau, substantially as described. 3rd. In a bureau or other similar article, the combination with the pilasters, having slots or recesses therein for the reception of the drawer bearers and intersecting recesses for the drawer guides, and the side walls, of the drawer guides, consisting of the body portion, the front and rear oppositely projecting spring arms, said rear spring arms extending beyond the front arms and seated in the recesses in the pilasters and the drawer bearers, upon which said guides rest and are supported, seated in the slots in said pilasters, substantially as described.

No. 46,227. Steering Gear for Vessels.

(*Appareil de gouvernail pour vaisseaux.*)

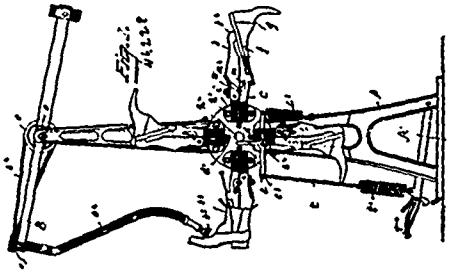


Ralph H. Chase and John J. Daly, both of Jacksonville, Florida, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In a power steering apparatus for vessels, the combination, of a disc carried by the rudder head, flexible connections attached to said disc and guided around pulleys carried by a carriage, said carriage being connected to the power actuating piston-rod, substantially as shown. 2nd. In a power steering apparatus for vessels, the combination, of a piston-rod, a carriage connected thereto, a guide roller to one side of the cylinder in which the piston carried by the piston-rod moves, a flexible connection attached to the carriage and passed over the guide roller, said flexible connection being attached to a disc or cross-bar, secured to the rudder head, substantially as shown. 3rd. The combination with the piston-rod carrying pulleys or guides, flexible connections C and D, attached to the rudder-head substantially as shown, one of the connections passing directly over one of the guides actuated by the piston-

rod and the other indirectly over the same, the opposite ends of the flexible connections being secured on opposite sides of the carriage, so that when the piston rod is moved the power thereof will only be exerted upon one of the flexible connections, substantially as shown. 4th. In a power steering apparatus for vessels, the combination, of a disc or cross-bar attached to the rudder-head, a piston-rod, said carriage having rollers or guides c and *d*, a roller or guide C^1, over which one of the flexible connections passes, and flexible connections C and D, passed over the rollers *c* and *d*, in opposite directions, substantially as shown, and for the purpose set forth. 5th. In a power steering apparatus for vessels, the combination, of the rudder having a cross-bar B, attached to the rudder head, a power actuated piston and carriage arranged in line with the rudder-head, said carriage having pulleys or guides c and *d*, a fixed guide or roller C^1, and flexible connections C and D, secured to the disc or yoke carried by the rudder, the connection C, leading therefrom around the roller C^1, and back around the roller *c*, the connection D, passing in an opposite direction around the roller *d*, the ends of the flexible connections being removably secured at points on opposite sides of the carriage, substantially as shown.

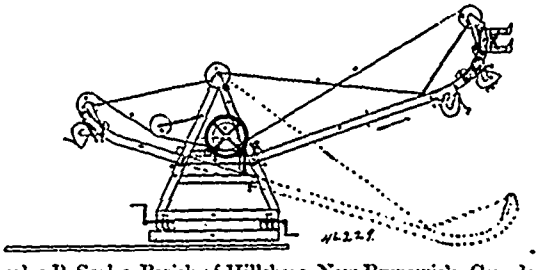
No. 46,228. Machine for holding Boots and Shoes while being operated upon. (*Porte-chaussure.*)



George H. Clark, Boston, Massachusetts, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In a machine for holding boots and shoes while being operated upon, the combination of several separable rotatable holders or trees, a rotatable hub supporting them, a separating wedge for the parts of each tree, a treadle, and means operated by it for moving anyone of the wedges that may be brought into engagement therewith, substantially as described. 2nd. In a machine for holding boots and shoes while being operated upon, the combination of several separable rotatable holders for trees, a rotatable hub supporting them, a separating wedge for the parts of each tree, a treadle, and means operated by it for moving anyone of the wedges that may be brought into engagement therewith, and a locking device for holding the parts of the trees separated when they are moved out of co-operative relation with the treadle mechanical, substantially as described. 3rd. In a machine for holding boots and shoe while being operated upon, the combination of several separable rotatable holders or trees, a rotatable hub supporting them, a separating wedge for the parts of each tree, a treadle, and means operated by it for moving anyone of the wedges that may be brought into engagement therewith, and a locking device upon each tree, for retaining the parts thereof separated when moved out of co-operative relation with the treadle mechanism, said locking devices each consisting of a spring actuated cam having a hand piece, substantially as described. 4th. In a machine for holding boots and shoes while being operated upon, the combination of a rotatable hub, several separable holders or trees supported by it, and rotating on axes radial to the axis of the hub, and a manually operable independent locking device for each tree, supported by the hub, whereby any tree may be secured in any different axial position that it may be set, substantially as described. 5th. In a machine for holding boots and shoes while being operated upon, the combination of several rotatable holders or trees, a rotatable hub supporting them, a wedge block for each tree for separating the parts thereof, a pin connected to each block and projecting through and beyond the inner end of the tree, a bell-crank lever adapted to act upon any pin that may be brought into engagement therewith, a treadle, and treadle-rod connected with said bell-crank lever, substantially as described. 6th. In a machine for holding boots and shoes while being operated upon, the combination of several separable rotatable holders or trees, a rotatable hub supporting them, means for separating the parts of said trees, and for holding them separated, a locking device for the hub, and means for operating it by hand to release the hub that it may be turned to bring the next into postition before the operator, substantially as described. 7th. In a machine for holding boots and shoes while being operated upon, the combination of a tree comprising two separable members, movable one with relation to the other, one of which has a heel piece, a slide-block supported upon the other member, a removable fore part adapted to be connected with and supported by said slide-block, and a spring-actuated locking device, for said slide-block, substantially as described. 8th. In a machine for holding boots and shoes while being operated upon, the combination of a tree comprising two separable members, movable one with relation to the other, one of which has a heel piece, a slide-block supported upon the other member, a removable fore-part adapted to be connected with and supported by said slide-block, and a spring-actuated locking device for said slide-block, operated by the means employed for separating the members of the holder, substantially as described. 9th. In a machine for holding boots and shoes while being operated upon, the combination of a tree comprising two separable members, movable one with relation to the other, one of which has a heel piece, a slide-block supported upon the other member, a removable fore-part, and a spring-actuated locking device connecting it with the slide-block, substantially as described. 10th. In a machine for holding boots and shoes while being operated upon, the combination of a tree comprising two separable members, movable one with relation to the other, one of which has an inclined face, a heel piece upon the other member having an inclined face in continuation of the inclined face of the aforesaid member, a slide-block extending over said inclined faces, a guide therefor, and a pin connected thereto passing through a projection on one of the members for limiting its withdrawal, and a removable fore-part likewise having an inclined face adapted to be connected with and supported by said slide-block, substantially as described. 11th. In a machine for holding boots and shoes while being operated upon, the combination of a tree comprising two separable members, movable one with relation to the other, one of which has an inclined face, a heel piece upon the other member likewise having an inclined face in continuation of the inclined face of the aforesaid member, a slide-block extending over both of said inclined faces, a guide therefor, and a removable fore-part likewise having an inclined face and adapted to be connected with and supported solely by and therefore movable with said slide-blocks, substantially as described. 12th. The combination, with a jack for holding boots and shoes while being operated upon, of the counter-balanced arm B, supports B^1 therefor, erected upon the upright supporting frame of the jack, shaft *o*, belt pulleys thereon, belt o^2, and belt pulley o^3, short shaft to which it is secured, the flexible shaft o^4, and rotary brush o^6 connected therewith, substantially as described. 13th. The tree herein described comprising two separable parts, a block mounted upon one of said parts and movable longitudinally in a diagonal direction, a spring acting tongue having a perforated end, a removable fore-part having a headed stud to engage said spring acting tongue, substantially as described. 14th. The removable fore-part herein described having projecting rearwardly from its rearmost end a heated stud, which serves as a means of attaching the fore-part, substantially as described. 15th. The removable fore-part *g* herein described having attached thereto the top piece g^{10}, shaped substantially as described, and having the headed stud g^1 at its rear end. 16th. The removable fore-part *g* herein described, having attached thereto the top piece g^{10}, shaped substantially as described, and having the headed stud g^1 at its rear end, combined with the shouldered slide-block *f*, substantially as described.

No. 46,229. Machine for Excavating.
(*Machine à fossoyer et déblayer.*)



Charles R. Scoles, Parish of Hillsboro, New Brunswick, Canada, 4th June, 1894; 6 years.

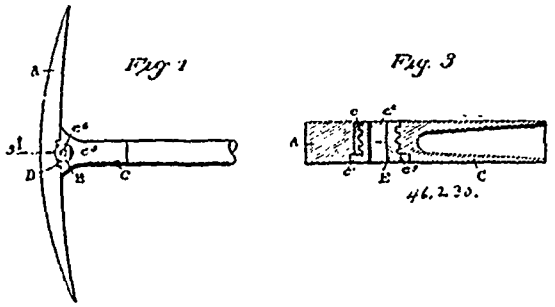
Claim.—1st. The combination of ploughs J, J, J, and shovel K acting together, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of adjustable arms, and tracks F, G, H carrying shovel and ploughs, substantially as and for the purpose hereinbefore set forth. 3rd. The automatic filling and dumping device of shovel, in combination with adjustable arms carrying ploughs and shovel, substantially as and for the purpose hereinbefore set forth.

No. 46,230. Mining Tool. (*Outil pour miner.*)

Martin Hardsocg, Ottumwa, Iowa, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In mining tools, the combination of a main portion forming the axe or hammer head, and a ferrule adapted to receive a handle, one portion provided with a wedge-shaped, dove-tailed recess, and the other with a wedge-shaped dove-tailed slide adapted to fit the same, and mechanism to securely hold both portions together, substantially as described. 2nd. In mining tools, the combination of a main portion forming the axe or hammer head, and a ferrule adapted to receive a handle, one portion provided with a

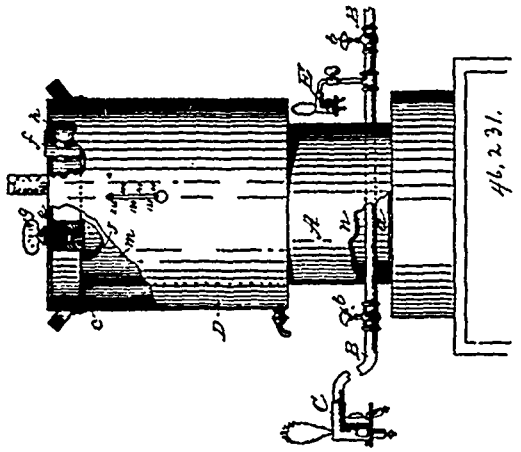
wedge-shaped, dove-tailed slide adapted to fit the same, and a locking bolt to securely hold both portions together, substantially as described. 3rd. In mining tools, the combination of a main portion



forming the axe or hammer head, and a ferrule adapted to receive a handle, one portion being provided with a wedge-shaped, dove-tailed recess, and the other with a slide adapted to fit the same, and a locking bolt having a threaded portion adapted to fit a threaded opening in the ferrule, and provided with a flanged head adapted to impinge against a shoulder on the axe and securely lock the ferrule and axe together, substantially as described.

No. 46,231. Tank for Hydrocarbon Burners.

(*Réservoir pour foyer à hydro-carbures.*)

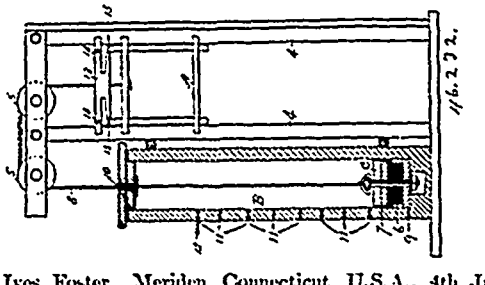


Joseph H. Matthews, Canton, Ohio, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. The combination with a hydrocarbon tank of a water jacket surrounding the upper portion of said tank, and having its base projecting laterally beyond the sides of the tank, a burner in communication with said tank and burners, one of which is located beneath the said laterally projecting base of the water jacket to heat the water contained therein. 2nd. The combination with a hydrocarbon tank, a water jacket surrounding the same, a supplying pipe projecting from the top of said tank, a valve to close said pipe, an air or gas escape pipe, a cock for closing it, a pipe a in communication with said tank and burners B, C, the latter of which is arranged to direct its flame against the water jacket.

No. 46,232. Apparatus for Lowering Ice.

(*Appareil pour descendre la glace.*)

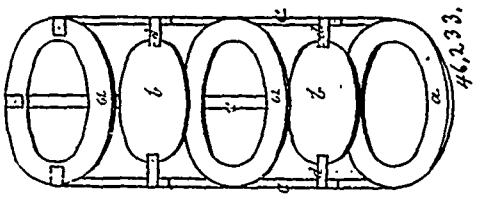


Charles Ives Foster, Meriden, Connecticut, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. The herein described lowering apparatus consisting of the vertically moving carriage mounted on a suitable frame, the air cylinder or box in connection therewith, the piston fitted practically air tight within said cylinder, and the cord or cable connecting said piston and carriage, all combined for forming an air cushion within the cylinder to check the movement of the piston and carriage as the carriage descends, and to permit said piston and carriage to move freely in opposite direction, substantially as described and for the purpose specified. 2nd. The combination of the lowering carriage A, mounted to move vertically on a suitable frame, the air cylinder or box B, the piston fitted practically air tight within said cylinder and having a weight for overbalancing the carriage, the cord or cable connecting said piston and carriage, and means for forming an air cushion when said cylinder is moved under the influence of the load on the carriage, while said carriage is free to be moved in its return by the weight of said piston, substantially as described and for the purpose specified. 3rd. In a lowering apparatus of the class described, the combination of the carriage and frame with the cord and weighted piston for raising said carriage, and the stop-bar 13, adjustably mounted upon said carriage frame, substantially as described and for the purpose specified. 4th. The combination of the lowering carriage mounted to move vertically upon a suitable frame, the air cylinder or box having a series of openings along its middle portion adapted to be closed with suitable stoppers, the piston fitted within said cylinder and having a weight for overbalancing the carriage and the cord or cable connecting said piston and carriage, all combined for regulating the points for checking the carriage by opening or closing said holes in the cylinder, substantially as described and for the purpose specified.

No. 46,233. Apparatus for Effecting Combustion.

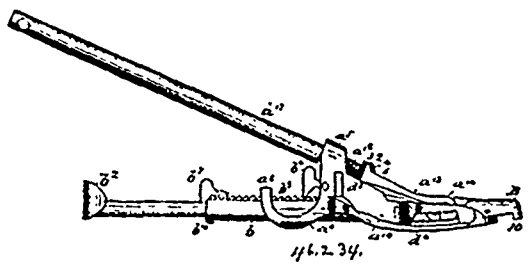
(*Appareil pour ménager le combustible.*)



William Smith and Benjamin Frigon, both of Montreal, Quebec, Canada, 4th June, 1894; 6 years.

Claim.—The combination of alternate rings *a*, and plates *b*, joined together by the support *c*, and squares or stays *d*, substantially as and for the purpose hereinbefore set forth.

No. 46,234. Last. (*Forme.*)



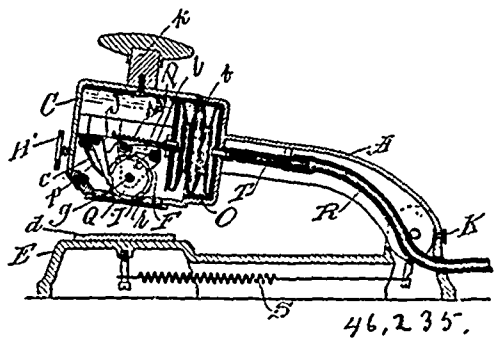
Edward J. Howard, Boston, Massachusetts, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In a last for shaping boots and shoes, the combination with a last frame, of a shaping piece or attachment carried by said frame, an actuating device to operate said shaping piece or attachment, and an extensible portion attached to the last frame and automatically operated independent of the said actuating device, substantially as described. 2nd. In a last for shaping boots and shoes, the combination with a last frame constructed to receive a plurality of pieces or attachments for shaping different parts of the boot or shoe, of a single attachment actuating device or piece carried by said frame and co-operating with each of said attachments, and an extensible heel portion attached to the last frame and automatically operated independent of the said actuating device, substantially as described. 3rd. In a last for shaping boots and shoes, the combination with a last frame, of a toe attachment or piece and an actuating device to operate said toe attachment, and an extensible heel portion attached to the last frame and automatically operated independent of the said toe actuating device, substantially as described. 4th. In a last for shaping boots and shoes, the combination with a last frame, of a combined toe extending and lifting piece consisting of a toe piece, and a pawl pivoted to the underside of the said toe piece, and normally inactive when the toe piece is moved to lengthen without raising the toe of the shoe, and adapted to engage the last frame to cause the toe piece to move in the arc of a circle to both lengthen and raise the toe of the shoe, and an actuating device operative upon the toe piece in both directions, substantially as described. 5th. In a last for shaping boots and shoes, the combination with a last frame provided with a plurality of attachments, of an actuating device to operate all the said attachments, and a detachable instep

raising piece forming one of said attachments, and normally inactive when the said device is operating one of the other attachments, and provided with a pawl adapted to co-operate with the actuating device to render the instep piece active, substantially as described. 6th. In a last for shaping boots and shoes, the combination with a last frame provided with side slots d^2, d^2, of side attachments having fingers at one end to engage said slots, and provided with arms adapted to extend across the last frame, and an actuating device to operate on said arms to turn the said attachments on their fingers as pivots, substantially as described. 7th. In a last for shaping boots and shoes, the combination with a last frame, of an automatically extensible portion consisting of a sleeve b, and a bar b^1 movable in said sleeve, rack teeth on said sleeve and bars, and pawls co-operating with said rack teeth, substantially as described. 8th. In a last for shaping boots and shoes, the combination with a last frame provided with side openings d^6, of side pieces provided with arms normally extended through said openings, and means to act on said arms to operate said side pieces, substantially as described. 9th. In a last for shaping boots and shoes, the combination with a last frame, of a plurality of shaping pieces or attachments carried by said frame, a single actuating device operating each of said attachments, and an extensible heel portion attached to said last frame, and automatically operated independent of the said actuating device, substantially as described.

No. 46,235. Automatic Time Dating Stamp.

(*Timbre horaire à dater automatique.*)



Warren B. Martindale, and Lyman M. Brackett, both of Rochester, Indianna, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In a time stamp, the combination, with the time printing mechanism, of a pressure chamber, adapted to be actuated by fluid impulses, and means for transmitting the movements thereof to said printing mechanism. 2nd. In a time stam, the combination, with the time printing mechanism, of a pressure chamber, adapted to be actuated by fluid impulses, means for transmitting motion from said pressure chamber to the time printing mechanism, a time regulator and time transmitter, consisting of a tube through which fluid is forced at intervals governed by the time regulator, substantially as described. 3rd. In a time stamp, the combination, with the time printing mechanism, of a pressure chamber adapted to be actuated by fluid impulses, means for transmitting motion from said pressure chamber to the time printing mechanism, and a prime motor, consisting of an electric battery, time mechanism in circuit with said battery, an electro-magnet, also in said circuit, an armature for said magnet, a compressing device, suitably connected with said armature, and a tube connecting said compressing device with the pressure chamber, substantially as described. 4th. In a time stamp, the combination with the casing D, enclosing a time mechanism a compressing device actuated by an electro-magnet in circuit with an electric battery, said circuit being controlled by said time mechanism, of a time printing mechanism adapted to be operated by a pressure chamber communicating with said compressing device and actuated by fluid impulses transmitted therethrough, substantially as described. 5th. In a printing stamp, a stamp frame E, a pivoted arm A, and a key K located at the juncture of said stamp frame and arm having a long body portion 1, an inner projection 2, and a finger piece or handle 3, substantially as and for the purpose set forth.

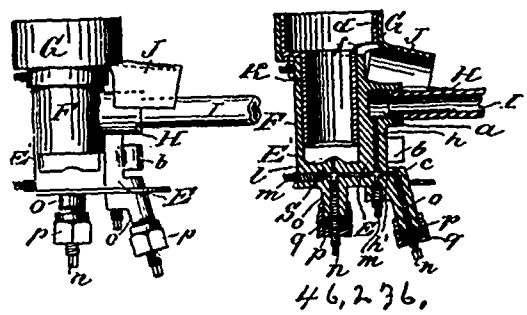
No. 46,236. Hydrocarbon Vaporizer and Burner.

(*Foyer à hydrocarbures.*)

Joseph H. Mathews, Canton, Ohio, U.S.A., 4th June, 1894; 6 years.

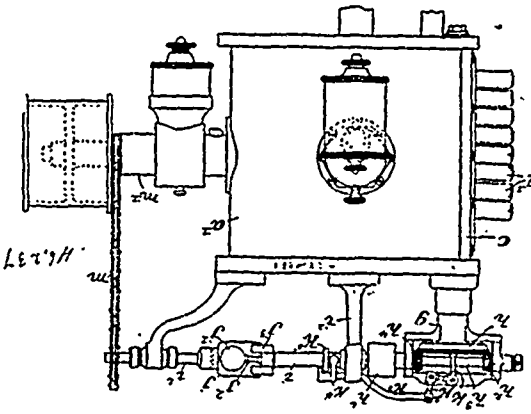
Claim.—1st. The combination in a hydrocarbon atomizer and burner of the vaporizer, and tubes to convey the vapour to the sub-jet and mixing chamber, the deflecting hood by which the sub-jet is impinged on the vaporizer, pin valves and packing boxes or glands the mixing chamber F, having at its upper end portion, an outwardly projected flange or shoulder c, the vertical cylinder portion d, the deflecting hood J, and aperture f through which the sub-jet may pass into the burner, substantially as described and for the purpose set forth. 2nd. The combination of the atomizer jet l, and sub-jet c, of the mixing chamber and burner, the deflector J, and aperture f, by which the flame of the sub-jet may pass into the burner, substantially as described and for the purpose set forth.

Fig. 1 Fig. 2.



3rd. The combination with the burner G, of one or more reducers as K K¹, having apertures f, to coincide with a similar aperture in the burner G, through which the flame of the sub-jet may pass to the inside of the burner, substantially as described and for the purpose set forth. 4th. In a hydrocarbon burner, the combination of the supply pipe and vaporizer, of the mixing chamber having at its upper end portion a burner formed by the projected shoulder c, and vertical cylinder d, of the outwardly and downwardly projected hood J, and aperture f, by which the sub-jet is held about the vaporizer and deflected into the burner, substantially as described and for the purpose set forth.

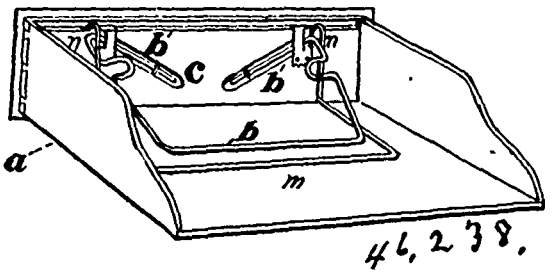
No. 46,237. Governor. (*Gouverneur.*)



George John Altham, Swansea, Massachusetts, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In a fluid motor having a plurality of admission ports, a plurality of separate and independent valves, one for each port, and means controlled by the speed of the motor for separately actuating said valves. 2nd. In a fluid motor having a plurality of admission ports, a plurality of separate and independent valves, one for each port, a reciprocal bar adapted to separately actuate said valves, and means for governing the bar by the speed of the motor. 3rd. In a fluid motor having a plurality of admission ports, a spring pressed valve for each port, having an inclined shoulder, said valves being staggered, a double bar having inclines to engage said shoulders, each portion of the bar engaging alternate valves, and means for governing said bar by the speed of the motor. 4th. A governor for fluid motors, comprising in its construction a reciprocal bar controlling the admission valve or valves, a screw carried by said bar, a rotary screw-threaded sleeve engaging said screw, a crown-wheel fast with said sleeve, a shaft carrying a pinion in mesh with said wheel and a clutch-member, a sleeve rotatable on said shaft and carrying a pinion in mesh with the crown-wheel and a clutch-member, a governor-shaft driven by the motor, a longitudinally-movable sleeve on said shaft and carying a clutch-member between the two first-named clutch-members and adapted to interlock with either, the sleeve being out of alignment with the first-named shaft and sleeve, and governor-balls on the governor-shaft and controlling the longitudinally movable sleeve. 5th. A governor for fluid motors, comprising in its construction a reciprocal bar controlling the admission valve or valves, a screw carried by said bar, a rotary screw-threaded sleeve engaging said screw, a governor-shaft driven by the motor, reversible means for connecting said shaft with the screw-threaded sleeve and governed by the speed of the motor, and auxiliary governing means comprising a tappet-rod in engagement with the screw, and suitable connections between said tappet-rod and the governor-shaft, substantially as described.

No. 46,238. Letter-File. (*Serre-papier.*)

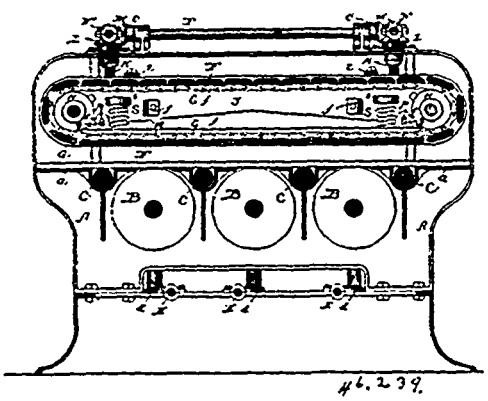


Ezra H. Stafford and Frank Field, both of Grand Rapids, Michigan, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In a letter file, the combination with a case *a*, of a vertical removable head piece c fitting into the case, an upper spring clasp *b* connected to said head piece, a lower spring clasp *m* also connected to said head piece, and a series of retaining sheets *d* located between said upper and lower clasps and engaged with vertical supports, said head piece, clasps and sheets being all removable together, substantially as described. 2nd. In a letter-file, the combination with a case *a*, of a vertical removable head piece *c* fitting in the case against the inner side of the front wall thereof and provided with attached upper and lower spring clasps *b* and *m* between which a series of retaining sheets *d* are located so that the head piece, the upper and lower clasps and the retaining sheets are all removable together, substantially as described. 3rd. In combination, with a case, a head piece adapted to slip within the case, a wire or suitable support for the latter sheets beneath the same, and a wire spring, having its ends bent inward and downward and secured to the head piece by staples or other suitable means, substantially as described. 4th. The combination of a case, a head piece having suitable support as *m*, a wire spring as *b*, provided with loops, and having its ends bent obliquely downward and attached to the head piece, and a series of retaining sheets as *d*, all constructed substantially as and for the purpose described. 5th. The combination of the narrow strip and the folding cover, fastened together by strips of cloth, one on each side, so as to form a double cloth hinge, and the whole fastened to the top of the case, substantially as described. 6th. The spring catch for a letter-file, or similar box, comprised of the metal plate with the depending ears on each side, attached to the lid, and the plate, inserted in a slot in the side, and having free edges to receive and lock the ears on the upper plate, substantially as described.

No. 46,239. Wood Polishing Machine.

(*Machine pour polir le bois.*)

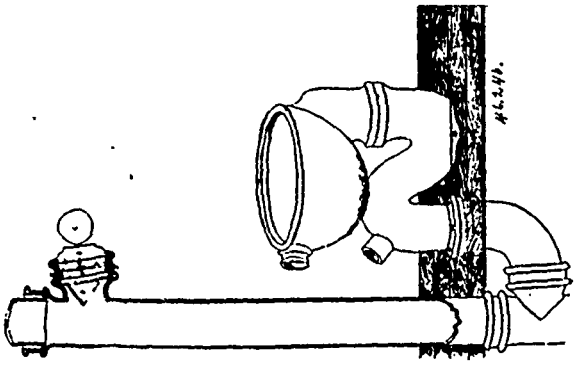


James L. Perry, Chicago, Illinois, U.S.A., 4th June, 1894; 6 years

Claim.—1st. The wood polishing machine having an endless pressure and feeding bed composed of a series of bars linked together and located above the path of the material, and guides for holding the lower course of the bed down to its work, substantially as specified. 2nd. In a wood polishing machine, an endless pressure bed composed of a series of bars linked together and located above the path of the material and guides for holding the lower course of the bed down to its work, in combination with polishing cylinders located below the path of the material, substantially as specified. 3rd. In a wood polishing machine, an endless pressure bed composed of a series of bars linked together and located above the path of the material and rigid guides for holding the lower course of the bed down to its work, in combination with polishing cylinders and feed rolls located below the path of the material, substantially as specified. 4th. In a wood polishing machine, an endless pressure and feeding bed located above the path of the material and provided with means for preventing the sagging of its lower course and with guides for holding the lower course down to its work, in combination with polishing cylinders located below the path of the material, substantially as specified. 5th. In a wood polishing machine, an endless series of bars linked together and located above the material, means for causing said bars to press upon the material, yielding supports for said bars, and means for preventing the sagging of the lower course of the bars, substantially as specified.

No. 46,240. Water Closet Ventilator.

(*Ventilateur pour cabinets d'aisances.*)

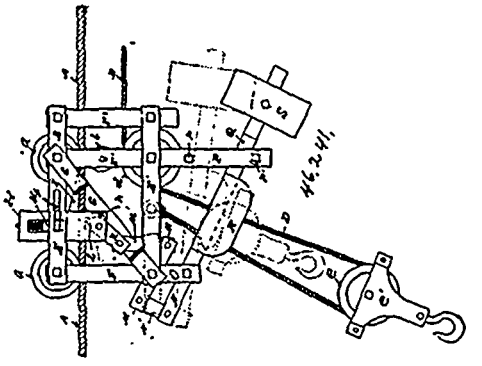


Arthur Turgeon, Québec, Province de Québec, Canada, 4 juin 1894; 6 ans.

Résumé—1° La combinaison du ventilateur avec le tuyau de chute par le branchement dans lequel est placé l'appareil tel que ci-dessus décrit. 2° La combinaison de la pièce E avec la pièce D tel que ci-dessus décrit et pour les fins indiquées.

No. 46,241. Elevated Trolley Carrier.

(*Porte-trollée aérienne.*)



Owen O. Jones, Poultney, Vermont, U.S.A., 4th June, 1894; 6 years.

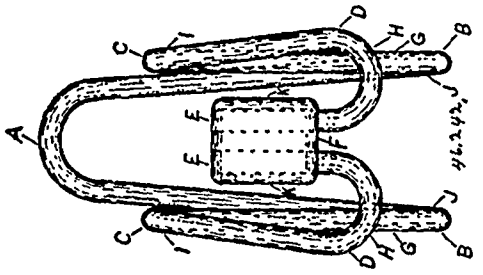
Claim.—1st. The combination in an elevated trolley carrier for hoisting and conveying apparatus, of a trolley frame having wheels therein, adapted to traverse an inclined cable or track, and a movable gripping shoe, a supporting block, a cam lever mounted in said block under the cable or track, and lever mechanism for operating said cam lever, substantially as and for the purpose set forth. 2nd. The combination in an elevated trolley carrier for hoisting and conveying apparatus, of a trolley frame, wheels mounted in said trolley frame, adapted to traverse an inclined cable or track, a gripping shoe frame, movably mounted in the trolley frame over the cable or track, and a cam lever connected with said gripping shoe frame, so as to operate on the under side of the cable or track, and lever mechanism connected therewith, adapted to be engaged by the hoisting pulley, and thereby disengage the cam lever and gripping shoe from the track or cable, substantially as and for the purpose set forth. 3rd. The combination in an elevated trolley carrier for hoisting and conveying apparatus, of a trolley frame having wheels therein, adapted to traverse an inclined cable or track, a gripping block H^1 having a gripping shoe I thereon, mounted on the longitudinally sliding block H, with a cam lever K mounted in the gripping block H^1 under the cable or track, the link M^1, the lever M, the link N^1 and lever N, having a weight S on the arm Q thereof, substantially as and for the purpose set forth.

No. 46,242. Tie Holder. (*Attache de traverse*)

Henry Malcolm O'Reilly, Almonte, Ontario, Canada, 4th June, 1894; 6 years.

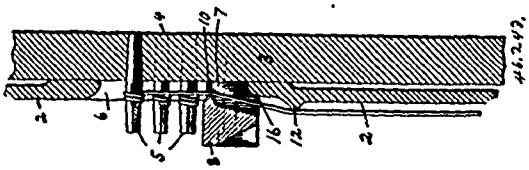
Claim.—1st. The combination of springs J, J, H, H, and G, G, contained in the said invention and for the purpose hereinbefore set

forth. 2nd. The combination of bends A, B, B, C, C, and D, D, in



a wire fastened by a plate, substantially as and for the purpose hereinbefore set forth.

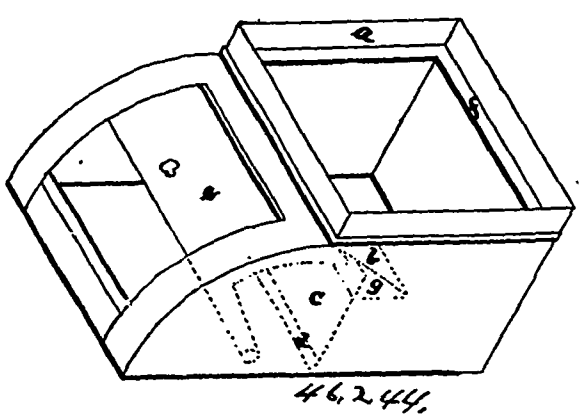
No. 46,243. Agraffe. (*Agrafe.*)



Fridolin Schillmel, and Searick F. Nelson, both of Faribault, Minnesota, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. The combination, with the metal piano frame or board, of the pins and strings, agraffe bar arranged on said frame, and a bridge arranged angularly with respect to said agraffe bar, being farthest away therefrom at the point where the shortened strings cross the same, substantially as described. 2nd. The combination, with the piano frame, of the single cast metal agraffe bar, provided with the continuous rib on its under side, the strings, and the bridge 12 departing from said bar as described, and both being curved, substantially as described and for the purpose set forth. 3rd. The combination, with the metal frame, and the pin-block, of a bridge, the pins, the strings extending therefrom over said bridge, the seats 7 arranged on said metal frame and an agraffe consisting of a single inflexible metal bar, having a broad and substantially flat back provided with an integral sharp rib 10 to engage the strings, and said bar having the shoulders or projections 16 to rest upon said seats, and screw extending therethrough into the seat portions, substantially as and for the purpose set forth. 4th. The combination, with the piano frame, of the pins, the strings, the bridge over which the strings pass and an agraffe arranged between the bridge and strings and consisting of a single inflexible bar having a broad and substantially flat back provided with an integral sharp rib which alone engages the strings, as and for the purpose set forth. 5th. The combination with the metal piano frame and the bridge, of the pins and strings, and a single solid graffe bar, arranged on said frame and provided on its back with a continuous sharp rib to engage the strings, substantially as described.

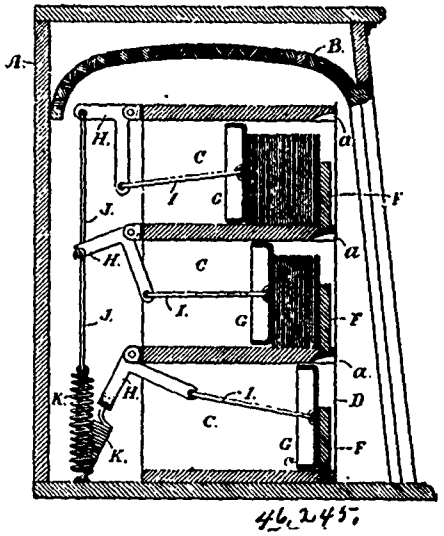
No. 46,244. Device for Preserving Tea from Air and Moisture. (*Appareil pour préserver le thé contre l'air et l'humidité.*)



Charles Wesley Lutes, Winnipeg, Manitoba, Canada, 4th June, 1894; 6 years.

Claim.—1st. The lip X and the lid being all in one piece. 2nd. The combination of the chest with the base as hereinbefore set forth.

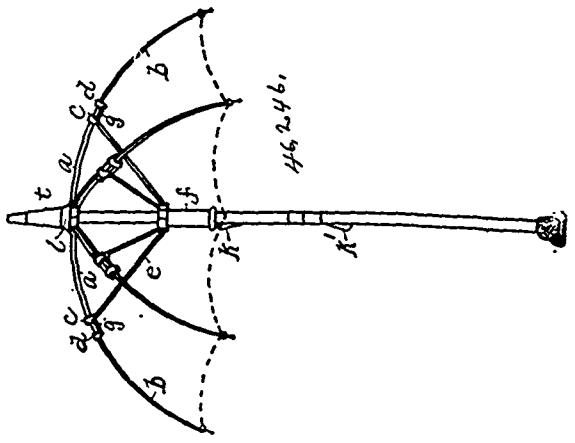
No. 46,245. Label Holding Cabinet.
(*Cabinet pour étiquettes.*)



Thomas McCabe, Ottawa, Ontario, Canada, 4th June, 1894; 6 years.

Claim.—1st. A label holding case provided with a series of compartments, each partially closed at the front end by a glass panel F extending from side to side and from the bottom nearly to the top, a follower mounted in each compartment, and means for urging the follower forward towards the glass panel. 2nd. In a label holding a case, a series of compartments each partially closed at the front end, in combination with a follower in each compartment, the elbow levers pivoted in the case and connected with the follower, and a coiled spring connected with each elbow, as shown and described. 3rd. In a label holding case a series of compartments, in combination with a follower made of a single piece of metal, with its arms bent backward as described, and means for actuating the follower, as shown and described for the purpose set forth. 4th. In a label case the use of bent leaves to which are attached coiled springs and rods to actuate the followers, as shown and described.

No. 46,246. Umbrella. (*Parapluie.*)

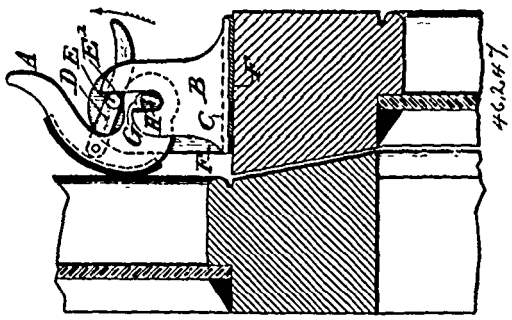


Robert Edmund Johnston, Detroit, Michigan, U.S.A., 4th June, 1894; 6 years.

Claim.—1st. In an umbrella, a rib formed of two parts slidingly secured together, a supporting brace connecting the inner end of the outermost of said sliding parts, and a runner and a ring secured to the outer end of the innermost part of said ribs, and embracing the brace. 2nd. In an umbrella, a rib formed of two parts slidingly secured together, a supporting brace connecting the runner and the inner end of the outermost of said sliding parts, mechanism for locking the two parts in their extended position adapted to be actuated in locking and unlocking said two parts by the movement of the brace, substantially as described. 3rd. In an umbrella, a rib formed in two parts slidingly secured together, a supporting brace connecting the runner and the inner end of the outermost of said parts, a curved spring secured to the innermost of the said two parts extending in an outward bearing to and engaging under the sliding guide, uniting the two parts of said rib, substantially as and for the

purpose specified. 4th. In an umbrella, the combination with the staff and rib of a spring interposed between the staff and the ribs and adapted to give them an initial opening movement, substantially as described.

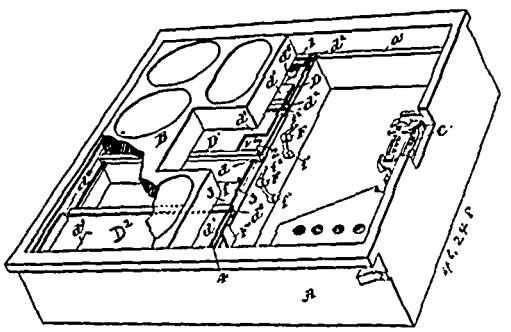
No. 46,247. Sash Fastener. (*Arrête-croisée.*)



John Smiley Coey, Newark, New Jersey, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. A sash fastener consisting of a dog, ears in which said dog is journalled, the said ears having shoulders above the journal bearings of said dog, and a locking arm pivoted to said dog and having laterally-projecting lugs adapted to engage said shoulders, said parts being combined substantially as described. 2nd. A sash fastener having ears, a dog journalled therein, and a sheath embracing said ears having inwardly projecting lips overlaying the journal of said, said parts being combined substantially as described. 3rd. A pivotal dog and bearing therefor, in combination with a sheath having a lip which overhangs the journal of said dog, substantially as described.

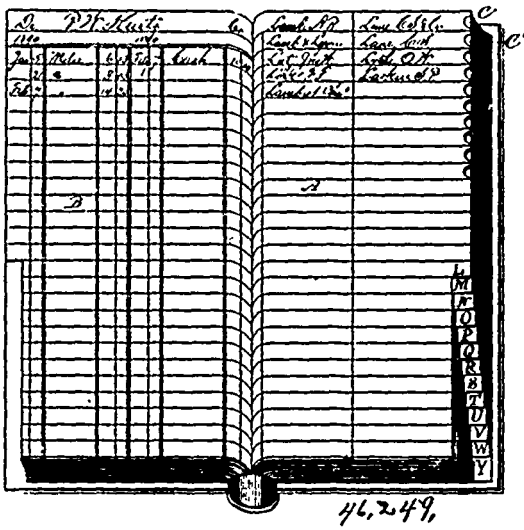
No. 46,248. Safety Money Drawer.
(*Tiroir à monnaie.*)



Michael Richard Daley, Fall River, Massachusetts, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. The combination with a money till provided with compartments, of separate movable covers therefor, one less in number than said compartments, substantially as described. 2nd. The combination with a money till provided with compartments, of separate covers therefor, movable both laterally and longitudinally to uncover said compartments, substantially as described. 3rd. The combination with a money till provided with compartments, arranged side by side, of a separate cover for each compartment save one, said covers being laterally and longitudinally movable over said compartments, substantially as described. 4th. The combination with a money till provided with compartments arranged side by side, of a separate covers therefor, one less in number than said compartments, and one or more guides for directing the lateral movement of said covers, substantially as described. 5th. The combination with a money till provided with compartments, of a series of covers therefor, one less in number than said compartments, and laterally movable over the same, and suitable locking devices adapted to prevent said covers from being opened when moved to the right, and to permit their free opening when moved to the left, substantially as described. 6th. The combination with a money till provided with compartments, of a series of laterally movable covers therefor, and a lid in each cover, substantially as described. 7th. The combination with a money till provided with compartments, of a series of laterally movable covers therefor, and a slide in each cover adapted to move lengthwise of the compartments, substantially as described. 8th. The combination with a money till provided with compartments, of laterally movable covers for all but one of said compartments, each consisting of a grooved frame, and a lid sliding in the grooves lengthwise of the compartment, substantially as described. 9th. The combination with a money till provided with compartments, of laterally movable covers for all but one of said compartments, a movable lid in each cover, and means for locking all the lids on one side of the open compartment, and unlocking all the lids on the other side thereof, substantially as described. 10th. The combination with a money till provided with compartments, of laterally movable covers for all but one of said compartments, a longitudinally movable lid in each cover, and a locking device at the rear of one or more compartments consisting of a rock shaft having two oppositely disposed arms, and an intermediate arm, substantially as described. 11th. The combination with a money till provided with compartments, and a sliding change tray above the same, of laterally movable covers for the compartments, a longitudinally sliding lid in each cover, and a lip on each lid to be engaged by the tray when it is pulled forward, substantially as described.

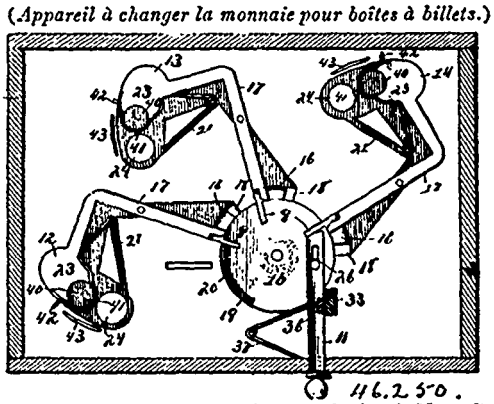
No. 46,249. System of Indexing Books.
(*Système d'index pour livres.*)



Emil Lefebvre, Fairfax, Iowa, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. A system of indexing blank books and the like, combining the following elements, a book suitably divided into groups of leaves, as by alphabetical division, and containing the general subject matter, an index page at the beginning of each group or general division, suitable index names or symbols written thereon, and nicks in the margin of the leaf opposite such names or symbols, which nicks terminate with the leaf on which the subject matter referred to by the respective index names or signs is written. 2nd. A system of indexing blank books and the like, combining the following elements, a general alphabetical division of the book as described, index pages at the beginning of each group index names written in two columns on such pages, those in the left hand column referring to matter written on the left hand pages, and those in the right hand column to matter on right hand pages, and nicks in the margins of the leaves opposite the index names, terminating in each case at the page referred to by the respective index names.

No. 46,250. Money Changer for Fare Boxes.
(*Appareil à changer la monnaie pour boîtes à billets.*)



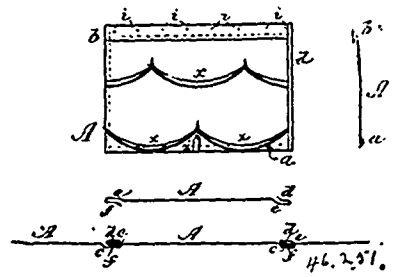
Charles W. Muth and Henry Martin, both of New Coryden, Indiana, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. In a money changer, the combination of a casing, a coin chute, a disc arranged to receive a coin to be changed, a coin-

holding tube, a coin carrier, and a lever actuating the coin carrier and arranged adjacent to said disc and adapted to be engaged by a coin thereof, substantially as described. 2nd. In a money changer, the combination of a coin chute provided with a series of depending branches, a disc arranged adjacent to the lower ends of the branches of the coin chute and adapted to receive coins therefrom, coin holding tubes, and a series of levers having their inner ends arranged adjacent to the disc and adapted to be engaged by a coin thereof, and having their outer ends provided with coin carriers arranged beneath the coin tubes, substantially as and for the purpose described. 3rd. In a money changer, the combination of a casing, a coin chute, a partially rotating disc provided at its periphery with a slot arranged to receive a coin from the chute, a coin tube, a lever fulcrumed in the casing and provided at its outer end adjacent to the coin tube with a coin carrier, and having its inner end arranged adjacent to the disc and adapted to be engaged by a coin thereof, substantially as described. 4th. In a money changer, the combination of a casing, a coin chute, a disc provided at its periphery with a slot adapted to receive a coin from the coin chute, and a spring-actuated bell-crank lever having its inner end adjacent to the disc and provided at its outer end with a coin carrier, substantially as described. 5th. In a money changer, the combination of a casing, provided with an annular series of semi-cylindrical coin-receiving recesses and provided with adjacent discharge openings, a disc arranged adjacent to said recesses, and openings provided with peripheral coin-receiving slots, a coin chute provided with branch tubes adapted to deliver coins to the slots of the disc, coin tubes, coin carriers arranged adjacent to the coin tubes, and levers fulcrumed in the casing, and having their inner ends arranged adjacent to the recesses of the casing, and adapted to be engaged by coins of the disc, and having their outer ends actuating the coin carriers, substantially as described. 6th. In a money changer, the combination of a casing, a disc provided at its periphery with coin receiving slots, and a series of levers arranged adjacent to the slots of the disc and adapted to be actuated by coins thereof and provided with coin carriers, substantially as described. 7th. In a money changer, the combination of a casing, a disc mounted therein, a coin chute provided with a series of branches terminating adjacent to the periphery of the disc and adapted to deliver coins to the same, and a series of levers arranged adjacent to the periphery of the disc and provided with coin carriers, substantially as described. 8th. In a money changer, the combination of a casing, a reciprocating coin carrier, and an annular series of removable coin holding tubes arranged adjacent to the coin carrier and rotatively mounted, whereby any one of the series of tubes may be brought into operative position over and adjacent to the coin carrier, all of the tubes of the series being of the same diameter, substantially as and for the purpose described. 9th. In a money changer, the combination of a casing, a coin chute provided with a series of branches, a disc arranged adjacent to the terminals of the branches of the coin chute and adapted to receive coins thereof and provided with a curved opening, a stop arranged in the opening and limiting the movement of the disc, means for actuating the disc, and a spring for returning the disc to its initial position, substantially as described. 10th. In a money changer, the combination of a casing, an inclined coin chute provided with depending branch tubes and having openings in its bottom communicating with said tubes, a series of sliding cutoffs normally closing the openings of the bottom of the coin chute, and means for simultaneously operating the cut offs, substantially as described. 11th. In a money changer, the combination of a casing, a coin chute having depending branch tubes and provided in its bottom with openings communicating with the branch tubes, a series of cut offs closing the openings of the chute, a disc arranged adjacent to the lower terminals of the branch tubes and adapted to receive coins therefrom, levers fulcrumed in the casing and located adjacent to the disc and provided with coin carriers, an operating bar connected with and actuating the disc, and means for connecting the cut offs with the operating bar for simultaneously actuating the cut offs, substantially as described. 12th. In a money changer, the combination of a casing, a coin chute provided with branch tubes and having openings in its bottom communicating with the same, cut offs slidingly mounted on the chute and closing the openings in the bottom thereof, a rod connecting the cut offs, a slide 30 having one end connected to said rod, a wheel connected with the other end of the slide and adapted to actuate the same, and an operating bar arranged to engage and actuate the disc, substantially as described. 13th. In a money changer, the combination of a casing, a coin chute provided with branch tubes, and having openings communicating with the same, a series of cut offs normally closing said openings, a slide connected with and adapted to actuate simultaneously the cutoffs, a wheel connected with the slide and provided with a notch, and an operating bar having a tooth arranged to engage the notch of the wheel, substantially as and for the purpose described. 14th. In a money changer, the combination of a casing, a coin chute having depending branch chutes and provided in its bottom with openings communicating with the branch tubes, a series of cutoffs closing the openings, a disc arranged adjacent to the lower terminals of the branch tubes and receiving therefrom, coin carriers adapted to be operated by said disc, an operating bar loosely connected with the disc, and having a limited movement independent thereof and provided with a tooth, a slide connected with the cutoffs, and a wheel connected with the slide and provided with a notch arranged to be engaged by the tooth of the operating bar, substantially as described. 15th. In a money changer, the combination with a casing having a discharge opening, of a coin tube, a coin carrier arranged beneath the tube and having a semi-circular recess, a curved frame pivoted to the coin carrier and arranged adjacent to the recess thereof and forming a circular opening with the same, and a trip arranged to lift the frame when the coin carrier is arranged at the discharge opening, substantially as described. 16th. In a money changer, the combination of a casing provided with a discharge opening, a coin tube, a coin carrier arranged beneath the coin tube and comprising a head having a curved recess and a frame pivoted to the head and provided with a projection and having a curved portion arranged adjacent to said recess and forming a circular opening, and a trip provided with an inclined upper edge to engage said projection, substantially as and for the purpose described.

No. 46,251. Lock for Metallic Shingles.

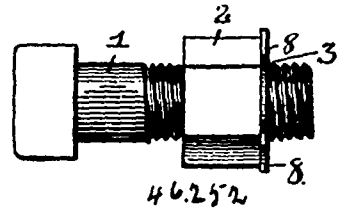
(*Fermeture pour bardeaux métalliques.*)



Hugh David Walker, Smithville, Ontario, Canada, 5th June, 1894; 6 years.

Claim.—1st. In a metallic shingle having a double lap or bend along its upper portion, a single under lap along its lower portion, a groove and an upward bend or turn on its right side, and a groove and downward bend on its left side, the whole when laid on a roof to be locked together, breaking joints, and forming a metallic lock roof covering, substantially as described. 2nd. A lock for a metallic shingle formed by the double bend *b* at the top, the under bend *a* at the bottom, the groove or channel *c*, and upward bend *d* on the right side, and the channel and upward bend *e*, and downward bend *e* on the left side, all formed to lock with one another for a metal roof covering, substantially as specified.

No. 46,252. Nut Lock. (*Arrête-écrou.*)



Julius Schirra, Pittsburg, Christian Thiers and William Sang, both of Braddock, all in Pennsylvania, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. The combination with a threaded bolt of a nut lock consisting of a thin metallic plate having an aperture therein, a recess in the side of said aparture, the corners formed by the recess and aperture being bent laterally from the plate upon opposite sides thereof to cause the inner edge of the lock to conform to the spiral of the threads, substantially as set forth. 2nd. The combination with a threaded bolt and nut, of a thin metallic plate having an aperture therein of a smaller diameter, than the diameter of the bolt through the threads, a recess in the side of said aperture, the corners formed by the recess and aperture being bent laterally in opposite directions to give the inner edge a spiral form, and lugs upon the outer periphery of the plate adapted to be bent upon the nut when the lock and nut shall have been screwed upon the bolt, substantially as set forth.

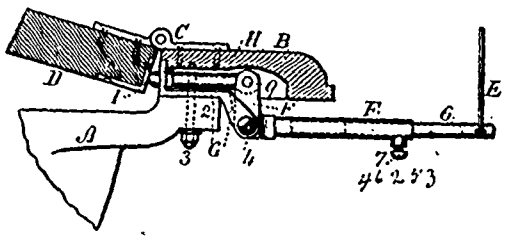
No. 46,253. Closet Flushing Attachments.

(*Appareil pour laver les latrines.*)

Louis M. Hooper, Rutherford, New Jersey, U.S.A., 5th June, 1894; 6 years.

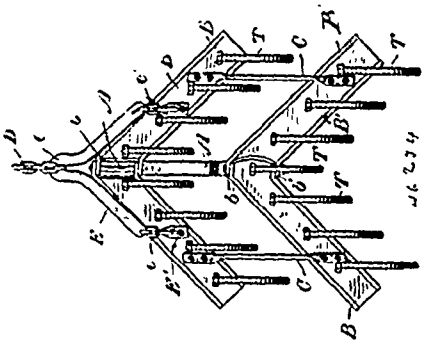
Claim.—1st. The combination with the closet and hinged seat therefor, of a lever mechanism intervening between the back edge of the seat and the valve connection, and a pivot for such lever mechanism supported by the closet, whereby the downward movement of the seat moves the back end of the lever to actuate the cistern valve, substantially as set forth. 2nd. The combination with the water closet, the seat and a hinge for connecting the seat to the closet, of a lever, a pivot for the lever permanently connected

with the closet, and mechanism intervening between the end of the lever and the back edge of the seat, whereby the backward movement of the back edge of the seat as the seat is forced downwardly



actuates the valve connection, substantially as set forth. 3rd. The combination with the closet and seat, of a seat plate fastened to the closet, hinges connecting the seat and seat-plate, a lever, a pivotal support for the lever connected with the seat-plate, a connection for the cistern valve at the rear end of the lever, and a lever intervening between the pivot and the rear edge of the seat, whereby the backward movement of the rear edge of the seat as the seat is forced down upon the closet actuates the valve connection, substantially as set forth. 4th. The combination with the closet and seat, of a hinge for the seat, a lever and its pivot supported by the closet, a plate upon the back edge of the seat, and a lever intervening between the plate and the lever, whereby the backward movement of the seat and its plate actuates the valve of the cistern, substantially as set forth 5th. The combination with the closet and a hinged seat that is free to be swung up, of a connection for the valve, of the flushing cistern and a lever mechanism intervening between the rear edge of the seat and the said valve connection for actuating the valve by the rear edge of the seat when moved downwardly from its normal position, substantially as specified.

No. 46,254. Harrow. (*Herse.*)



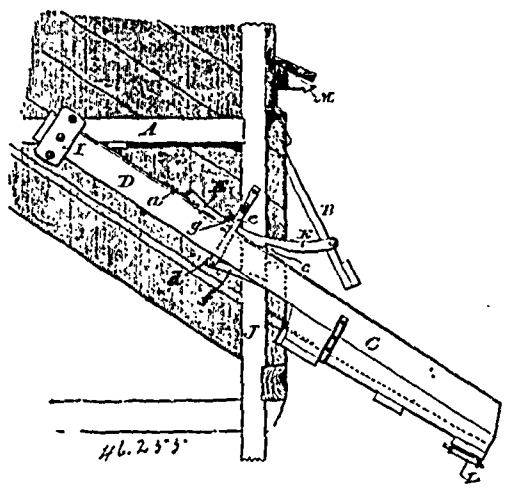
Andrew Lefleur, North Bay, Ontario, Canada, 5th June, 1894; 6 years.

Claim.—1st. A harrow composed of bars, to which the teeth are secured hinged together in pairs forming a V, the centre of the V being the centre of the hinge joint, facings on the edges of said bars the ends of which form the hinge joints, arched bails rigidly connecting said sections near the ends of the bars, a central bail engaging and holding the hinge pins and having the draft chain attached at the front end and a draft bail hooked to the front V, and provided with a narrow neck, through which the draft chain may pass, substantially as set forth. 2nd. In a harrow, the combination of bars B, adapted to carry teeth and mitred and hinged hinged together in pairs to form V's, facings B^1, on said bars, the ends of which at the mitre joint overlap each other and are provided with eyes, hinge pins A^1, passing through said eyes and through the limb .. a bail, a central bail A, engaging said pins and arched between said sections and having the draft chain attached at the front and arched bails C, connecting the parallel limbs of the V sections rigidly near their outer ends, substantially as set forth.

No. 46,255. Coal Chute. (*Auget à charbon.*)

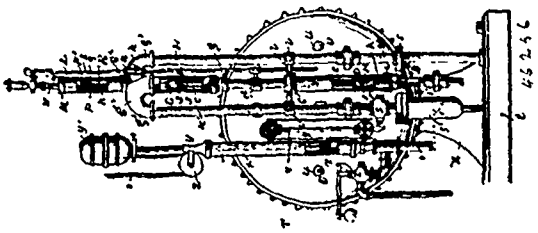
Henry A. Ainsworth, Moline, Illinois, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. In combination with a coal chute, a hinged door B covering the opening thereof, and provided with a latch E having notch *e*, a stop *d*, and a hinged apron C provided with the rearward extending arm D having notch *a*, said latch being arranged in the path of the said arm, all substantially as shown and described. 2nd. In combination with a coal chute and a hinged door therefor, a latch carried by the door to hold the door closed, an apron provided with an arm to act directly upon the latch to release it and allow the door to open, and means upon the arms to be engaged by the latch to assist the latch in holding the door open, substantially as shown and described. 3rd. In combination with a coal chute and a hinged door therefor, a curved latch E carried by the door, and means for releasing the latch, substantially as shown and described. 4th. In combination with a coal chute and a hinged door B therefor, a latch



E carried by the door, and having stop *g* for limiting the outward swing of the door and independent means for holding the door in its open position, substantially as shown and described. 5th. In combination with a coal chute and a hinged door B therefor, a latch E carried by the door, an adjustable stop *g* for limiting the outward swing of the door, and means for releasing the latch and also for holding the door in its open position, substantially as shown and described. 6th. In combination with a chute and a hinged door therefor, a latch for the door, the hinged apron provided with arms D, and a divided weight applied to the arms, substantially as shown as described. 7th. In combination with a chute and a hinged door therefor, a latch E for the door, and a guide comprising the separated bars *e e* and stop bar *f*, the said bars *e e* and *f* being secured together at their inner ends, and connected at their outer ends to the framework, substantially as shown and described.

No. 46,256. Pump. (*Pompe.*)

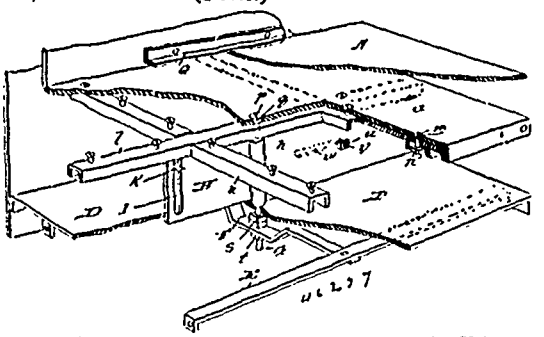


Elijah Neff, Milford, Indiana, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. In an apparatus of the class described, the combination with a storage tank, having a lower off-standing supply pipe provided with a laterally extended horizontal flange at its outer upper end, of a suitably arranged hollow coupling-head, a lower valved pumping cylinder arranged below said coupling-head at one side of the tank supply pipe, separate aligned top air and intermediate discharge cylinders threaded respectively into the top and bottom of said hollow coupling-head, valved plungers in each of the cylinders, intermediate connections between the several plungers, a single pumping rod guided to move through the coupling-head and connected with one of the plunger connections, and an oppositely arranged single discharge pipe and a supporting rod connected at their upper ends to opposite ends of the hollow coupling head, respectively, the lower end of the discharge pipe being coupled to the flange of the tank supply pipe, and said supporting rod being embraced by the lateral extension of said flange, substantially as set forth. 2nd. In an apparatus of the class described, a valved pumping cylinder having a guide bar extended laterally from its upper end, an approximately T-shaped coupling-head, having a diaphragm or partition at one side of its centre and a guide near such diaphragm, an air cylinder threaded into the top of the coupling-head, an intermediate discharging or delivery cylinder threaded into the bottom of the coupling-head in a direct line with the air cylinder and above the pumping cylinder, a supporting rod threaded into one end of the coupling-head, a single discharge pipe threaded into opposite end of the coupling-head, valved plungers in each of the cylinders, a tube connecting the plungers in the pumping and discharging cylinders, a rod connecting the plungers in the latter cylinder and the air cylinder, a reciprocating pump rod moving in the guide of the coupling-head and the guide bar, a clamp attached to the pump rod and to the

plunger tube intermediate of the pumping and discharging cylinders, and the storage tank, substantially as set forth.

No. 46,257. Stove. (*Poêle.*)



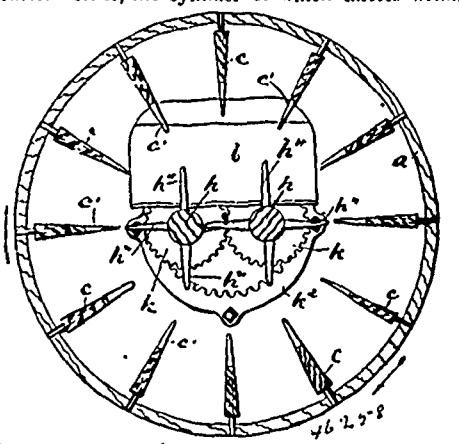
The H. Frank Steel Range Company, assignee of John Erben and Max M. Koch, all of Cleveland, Ohio, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. A stove or range having a permanently or regularly constructed oven therein, and the inner walls of the permanent oven having top and bottom guides, in combination with metallic plates adapted to be inserted in said guides, and removed therefrom when the oven door has been opened without disturbing the form or construction of the oven, whereby the heat in the oven may be regulated by the cook or attendant, and the usefulness of the main oven prolonged, substantially as specified. 2nd. The combination with an oven, of an internal, removable or supplemental top or bottom wall adapted to protect such parts of the main oven and regulate the heat therein, substantially as specified. 3rd. A sheet metal oven, having guides on its inner sides, in combination with a removable bottom wall arranged in said guides, and fitting snugly against the main wall so as to increase the thickness of the latter, as distinguishable from a flue strip, substantially as specified. 4th. A sheet metal oven bottom having ribs or braces, and also having a removable or supplemental wall in its bottom, placed upon the main wall and adapted to be removed and replaced when the door has been opened without disturbing the main oven, substantially as specified. 5th. The combination with a sheet metal oven, having ribs or braces on its under side, and an adjusting bolt for preventing and removing warp in the bottom, substantially as specified. 6th. A sheet metal oven having the ribs or braces secured to the underside of the bottom wall, in combination with the vertically disposed bolt, taking through said bottom wall and one of the braces, and having a bearing at its opposite end whereby said bolt may be manipulated to take out the warp of the bottom wall and also prevent the warp, substantially as specified. 7th. In a stove or furnace, the combination with a fire box, of a sheet metal oven having a top flue as *d*, a vertical flue as *e*, a horizontal flue as *i*, and a pipe or uptake provided with a suitable damper, substantially as specified. 8th. The sheet metal oven, in combination with the flanged strips secured to the side walls in the corners thereof, and the removable plates interposed between said strips and the top and bottom walls of the oven, respectively, on the inner side thereof, substantially as specified. 9th. The combination with a suitable casing, of an oven arranged therein, the bracket secured to the bottom of the casing, the vertically disposed adjusting bolt arranged at one end in the bracket, and its opposite end engaging the bottom wall of the oven *d* and nuts or the like for adjusting the bolt and bottom wall of the oven, substantially as specified. 10th. An oven having a flue or chamber below its bottom, in combination with the fixed strip or partition arranged therein so as to divide the same into two compartments, the adjustable slide slotted as described, and held to said partition or strip, and the rock shaft having its inner cranked end taking through a vertical slot in the side and adapted to move the same, substantially as specified.

No. 46,258. Combined Churn and Butter Worker.
(*Baratte et batte à beurre combinés.*)

John Smith Elliott, Cornwall, Ontario, and Thomas Fraser, Montreal, Quebec, all in Canada 5th June, 1894; 6 years.

Claim.—1st. A combined churn and butter worker comprising a cylinder, rolls and internal supports for said rolls within the cylinder, external supports and connections between said intrenal and external supports, the cylinder heads being centrally perforated to allow of the passage therethrough of said connections and being axially mounted in said external supports, with means for rotating said cylinder and rolls. 2nd. In a churn or butter worker, a working roll projecting pins or fingers for the purpose set forth. 3rd. In a churn or butter worker, the combination of the cylinder, one or more working rolls within said cylinder having projecting pins or fingers, supports for said roll or rolls within said cylinder, and means for rotating the cylinder. 4th. A churn the cylinder of which carries a series of flights or carries in such proximity to the inner surface or periphery thereof as to leave intervening open spaces for the purpose set forth. 5th. A combined churn and butter worker having removable working rolls for the purpose set forth. 6th. A churn or butter worker, the cylinder of which carries within it a



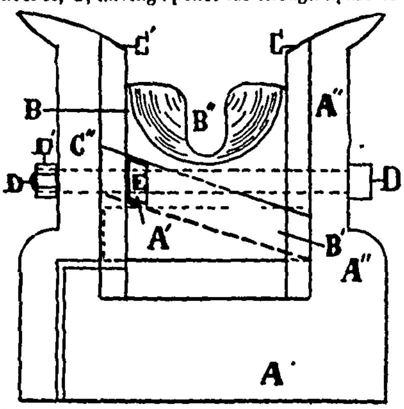
series of flights or carriers having projecting pins or fingers along their innermost edges, for the purpose set forth. 7th. In a churn or butter worker, the combination of the cylinder carrying within it adjacent to its inner surfaces a series of flights or carriers having projecting pins or fingers along their innermost edges and one or more working rolls for the purpose set forth. 8th. In a churn or butter worker, the combination of the cylinder carrying within it adjacent to its inner surface a series of flights or carriers having projecting pins or fingers along their innermost edges, and one or more working rolls, also having projecting pins or fingers for the purpose set forth. 9th. In a churn or butter worker, the combination of the cylinder, one or more working rolls within said cylinder, a fixed support at one end for the roll or rolls, and a movable support at the other end for same, with means for retaining said movable support in place and for rotating said cylinder and rolls. 10th. In a combined churn and butter worker, the combination of the cylinder having its head provided with hollow axles and being centrally perforated in line there with, external supports or standards to receive said axles, one or more working rolls and supports therefor within the cylinder and journal bars passing through said hollow axles and the central perforations in the cylinder heads to effect a connection between said internal and external supports, with means for rotating said cylinder and rolls. 11th. In a combined churn and butter worker, the combination of the cylinder having its heads provided with hollow axles and being centrally perforated in line there with, external supports or standards to receive said axles, one or more working rolls and supports therefor within the cylinder and journal bars passing through said hollow axles and the central perforations in the cylinder heads and having squared outer ends to effect a connection between said internal and external supports bearing plates secured to said standards and having squared apertures to receive the squared ends of said journal bars with means for rotating said cylinder and rolls. 12th. In a combined churn and butter worker, the combination of the cylinder having its heads provided with hollow axles and being centrally perforated in line therewith, external support or standards to receive said axles, one or more working rolls and supports therefor within the cylinder, short shafts mounted in the internal supports at one end and having transverse projections or dowel pins on their sides and the rolls being provided at one end with spindle ends to fit in socket bearings in the support therefor, and being at the opposite end bored and slitted to fit the inner ends of said shafts and the transverse projections on their sides, and journal bars passing through said hollow axles and the central perforations in the cylinder heads to effect a connection between said internal and external supports with means for rotating said cylinder and rolls, as set forth.

No. 46,259. Conveyor. (*Appareil de transport.*)

Daniel M. Maxon and James Griffin, both of Bay City, Michigan, U.S.A., 5th June, 1894; 6 years.

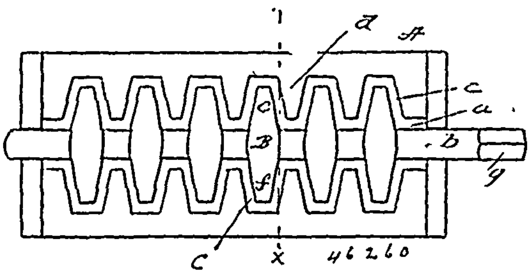
Claim.—1st. In a conveyor, the method of clamping the conveyor to the link of a chain by bevelled surfaces on the parts of the conveyor meeting between the bows of the links, and adapted when under pressure from the clamping bolt to slide upon each other and draw the parts together, substantially as described. 2nd. A conveyor of the class described consisting of two parts adapted to be clamped around the link of a chain, the cut and curved and bevelled surfaces of each part adapted to receive corresponding cut and curved and bevelled surfaces of the other, the bevelled surfaces uniting between the bows of the link and adapted when clamped or pressed together by a bolt passing through them to be drawn one upon the other, thereby clamping the link and each other more tightly, substantially as described. 3rd. In a conveyor, the combination with the box and the chain H, of the conveyor L, clamped to the horizontal link of the chain H, substantially as and for the purpose set forth. 4th. In a conveyor of the class described, the combination

with the chain H, and the conveyor L made as described, of the sprocket wheel A, C, having spokes far enough apart to permit the



conveyor L to hang between them as the chain turns over the wheel, and the adjustable sprocket B fitting into guides in the spokes of the wheel, substantially as and for the purpose set forth. 5th. In a conveyor, the combination with the chain H, and the conveyor L, secured to the horizontal link of the chain, of a sprocket wheel A, C, having spokes far enough apart to allow the conveyor L, to hang between them, each spoke having an adjustable sprocket B, adapted to engage the vertical link of the chain and hold it as it passes over the wheel, and means for adjusting the sprocket, substantially as described. 6th. In a sprocket wheel for conveyors of the class described, consisting of a hub having spokes upon one end thereof, said spokes having guides C¹, and a narrow portion A¹, extending across the hub in the line with the centre of each spoke, all integral with the hub, and a secondary hub C, fitting over the end of the hub A, having spokes parallel with the spokes on the hub A, and having similar guides C¹, and a sprocket B, fitting into guides¹ C, C¹, and held there by bolt D, passing underneath the body of the sprocket, and through spokes A¹¹ and C¹¹, substantially as described. 7th. In a sprocket wheel, the combination with the hub A, having spokes A¹¹, on one end of the hub and rib A¹, across the hub in line with the centre of the spokes, and both integral therewith, and the secondary hub C, fitting on the end of the hub A, and having spokes C¹¹, integral therewith, guides C¹, C¹, in the spokes C¹¹ and A¹¹, of the sprocket B, fitting into the guides C¹, and over rib A¹, and having a diagonal groove across it and having within the groove a square nut on the screw threaded bolt D, clamping the spokes to the sprocket, and adapted when the bolt D, is turned to travel through the diagonal groove, forcing the sprocket in or out as the case may be, substantially as described. 8th. An adjustable sprocket, consisting of a sprocket adapted to fit into guides in the spokes of a wheel and to be held there by a bolt D, adapted to draw the spokes against the sides, and provided with a diagonal groove through the sprocket, and having in the diagonal groove a nut E, on the bolt D, adapted to travel through the diagonal groove on the screw-threaded bolt D, as the bolt is turned, thereby moving the sprocket up or down as the case may be, substantially as described. 9th. In a conveyor, the combination with the conveyor chain, of the conveyor provided with a transverse recess adapted to receive the horizontal link of the chain, and having a rib in the centre of the recess fitting into the link, a washer above the link adapted to be secured to the rib, thereby holding the link in the recess, substantially as described. 10th. In a conveyor, the combination with a wheel having spokes, each spoke adapted to receive and hold the vertical link of the chain, of the chain, and the conveyor adapted to be secured to the horizontal link of the chain, and means for securing the conveyor to the chain, substantially as described.

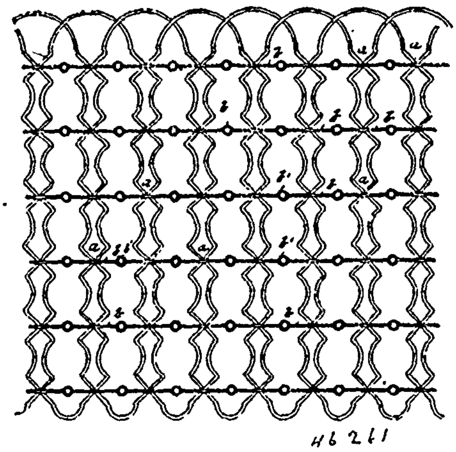
No. 46,260. Grate. (*Grille.*)



The H. Franke Steel Range Company, assignee of Hermann J. Schneider, both of Cleveland, Ohio, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. The improved grate described, comprising the stationary section having the central, longitudinal slot or opening, and the lateral recesses c arranged oppositely to each other, and having tapering walls, and also having the alternating inward projections d, in combination with the movable section comprising a central shaft d, and the lateral teeth tapering from their inner to their outer ends, substantially as and for the purpose specified. 2nd. The combination with the stationary section, slotted as described, of the movable section having the lateral teeth tapering from their inner to their outer ends and formed on the central shaft, and also having the curvilinear depending portions to operate, substantially as specified.

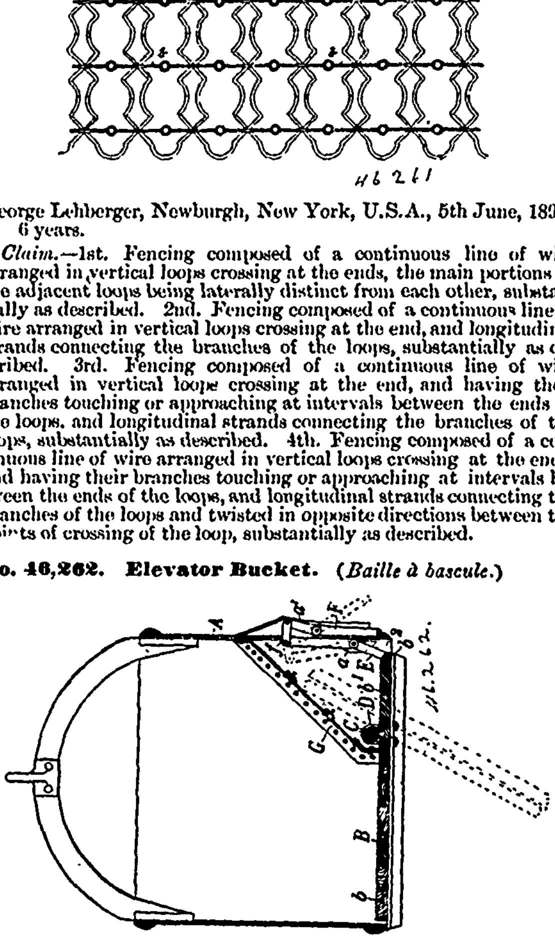
No. 46,261. Wire Fence. (*Clôture de fil de fer.*)



George Lehberger, Newburgh, New York, U.S.A., 5th June, 1894; 6 years.

Claim.—1st. Fencing composed of a continuous line of wire arranged in vertical loops crossing at the ends, the main portions of the adjacent loops being laterally distinct from each other, substantially as described. 2nd. Fencing composed of a continuous line of wire arranged in vertical loops crossing at the end, and longitudinal strands connecting the branches of the loops, substantially as described. 3rd. Fencing composed of a continuous line of wire arranged in vertical loops crossing at the end, and having their branches touching or approaching at intervals between the ends of the loops, and longitudinal strands connecting the branches of the loops, substantially as described. 4th. Fencing composed of a continuous line of wire arranged in vertical loops crossing at the ends, and having their branches touching or approaching at intervals between the ends of the loops, and longitudinal strands connecting the branches of the loops and twisted in opposite directions between the points of crossing of the loop, substantially as described.

No. 46,262. Elevator Bucket. (*Baille à bascule.*)

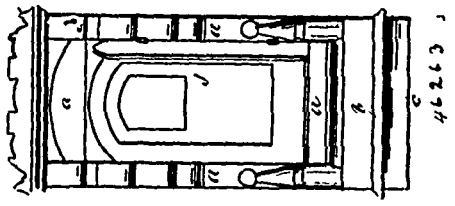


Timothy Long and the Excelsior Iron Works Company, all of Cleveland, Ohio, U.S.A., 6th June, 1894; 6 years.

Claim.—1st. In combination with an elevator bucket, of a bottom hinged thereto on an axis which divides the bottom into two parts, the part of said bottom on one side of the hinge axis being the heavier, the part on the other side presenting the greater area for contact with the load, and a latch adapted to engage with the bottom and hold it closed, substantially as set forth. 2nd. In combination with an elevator bucket, of a bottom hinged thereto on an axis which divides the bottom into two parts, the part of the bottom on one side of said hinge axis being heavier than the other, an inclined false bottom which lies over said heavier part and protects it from contact with the load, and a latch adapted to engage with said bottom, substantially as set forth. 3rd. The combination with an elevator bucket, of a cylindrical bar C secured to the sides of the bucket, and a bottom having a series of U-bolts arranged in

line at one side of the centre of said bottom, which U-bolts loosely embrace said bar, the smaller division of said bottom being the heavier, with a latch mounted on the side of the bucket and adapted to engage with the bottom and hold it closed, substantially as and for the purpose specified. 4th. The combination with an elevator bucket, of a bottom hinged thereto on an axis which divides the bottom into two unequal divisions, of which the smaller is counterweighted to make it the heavier, a latch lever pivoted to said bucket and adapted to engage at its lower end with the upper edge of the heavier side of the bottom, an operating lever also pivoted to the side of said bucket, and a link connecting the upper ends of said two levers, substantially as and for the purposes specified.

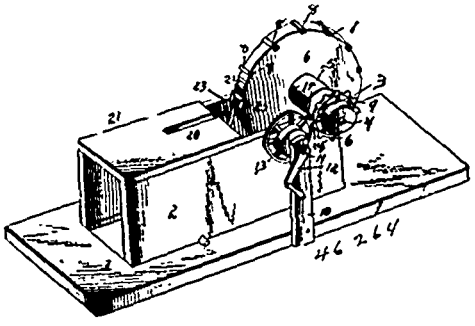
No. 46,263. Monument. (*Monument.*)



Alonzo Russell, Atkins, Arkansas, U.S.A., 6th June, 1894; 6 years.

Claim.—1st. A monument, consisting of the frame *a*, provided with proper base and ornamentations, front openings and rear recess, glass *f*, fitting in the recess of said frame, likeness-holder *g*, having the opening g^1, and secured to its rear face flanges *h*, h^1, and likeness-plate *i*, stuffing pads i^1, i^2, and sliding door *e* fitting in the grooves e^1, and e^2, substantially as shown and described and for the purposes set forth. 2nd A monument consisting of the frame *a*, provided with front opening and rear recess, projection *c*, and opening *k*, glass *f*, fitting in the recess of said frame, likeness-holder *g*, having the opening g^1, and secured to its rear face flanges *h*, h^1, likeness-plate *i*, fitted between the flanges *h*, h^1, and likeness-plate *g*, and stuffing-pads i^1, i^2, and sliding door *e*, fitting in the grooves e^1, e^2, substantially as shown and described and for the purposes set forth.

No. 46,264. Addressing Machine.
(*Machine à adresser.*)



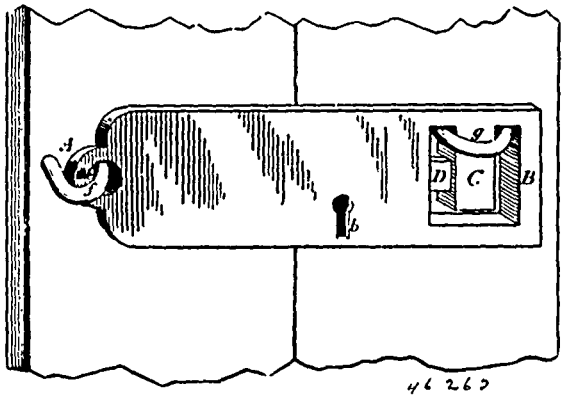
Eldridge David Hanna, Clifton, West Virginia, U.S.A., 6th June, 1894; 6 years.

Claim.—1st. In an addressing machine, the combination with the opposite frames, the transverse shaft, the printing-wheel, loose collar, and spur-gear arranged upon the shaft of the power-shaft, the disc arranged thereon and having a lug engaging the spur-gear, a crank at the inner end of the power-shaft, a rock-shaft, an arm carried by the rock-shaft, a tympan supporting-frame arranged upon the arm, a rock-arm arranged upon the rock-shaft, a connecting rod, between the rock-arm and the crank-arm of the power-shaft, an ink-table below the printing-wheel, a rock-arm depending from the loose collar of the printing wheel supporting-shaft, an ink-roller carried by said arm, and a connecting-rod between said arm and the rock-arm of the rock-shaft, substantially as specified. 2nd. In an addressing machine, the combination with a frame-work having a superimposed slotted table, a rock-shaft arranged below the table, means for oscillating the rock-shaft, a rock-arm arranged upon the rock-shaft, and a tympan supporting-frame at the upper end of the rock-arm, of a printing-wheel arranged in the path of the rock-arm, and means for intermittently rotating the latter, substantially as specified.

No. 46,265. Hasp for Doors, &c.
(*Moraillon pour portes, etc.*)

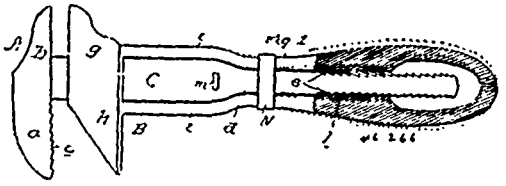
Thomas Mounce, Toronto, Ontario, Canada, 6th June, 1894; 6 years.

Claim.—1st. The use of the bolt D, shot by the key or other mechanism into the notch E, to complete the fastening by securing the tongue C, after the tongue has entered the staple. 2nd. The combination of the said hasp and the fastening of the tongue C, in



the staple *g*, by means of the bolt D, shot into the notch in the tongue by the key or other mechanism as shewn in figure 2.

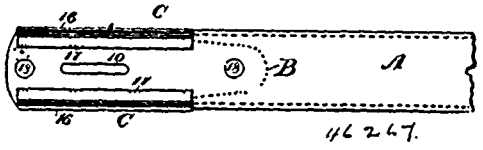
No. 46,266. Wrench. (*Clé à écrou.*)



Christian Black, Green Co Springs, Florida, U. S. A., 6th June, 1894; 6 years.

Claim.—1st. A wrench comprising a slidable head, having a hollow internally-toothed, and resilent handle, and a head having a stem or shank passing into the slidable head and handle and having a plain portion to furnish a bearing for the slidable head and prevent a rocking movement thereon and also having teeth to engage those of the handle, substantially as specified. 2nd. As an improved article of manufacture, a pipe and nut wrench, comprising a head having a stem or shank provided with teeth on opposite sides, a head slidable on said shank or stem and having two yielding branches, provided with teeth on their inner sides and adapted to engage the teeth on said stem, substantially as specified. 3rd. The improved wrench having the head A, provided with the jaws *a* and *b*, and the stem or shank *c*, having a stop, and also having the reduced portion provided with teeth on opposite sides, and the head B, slidable on said stem and provided with the jaws *g* and *h*, and also provided with two yielding branches *i*, having the teeth on their inner sides to engage the teeth on said stem, substantially as specified. 4th. A wrench comprising two slidable sections, one of which is provided with a shank or stem having teeth, and the other a split or sectional handle to receive said shank and having the teeth to engage the teeth of the shank, and a slidable band on said handle for forcing the teeth of the handle into engagement with the teeth of the shank, substantially as specified.

No. 46,267. Trace. (*Trait.*)



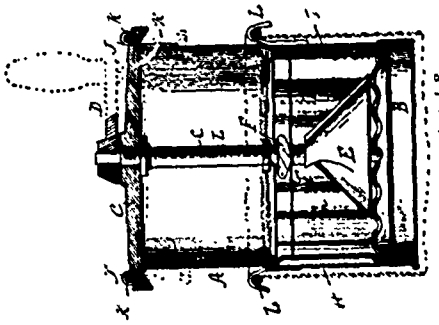
Ernest Samuel Saettler, Giddings, Texas, U.S.A., 6th June, 1894; 6 years.

Claim.—1st. As an improved article of manufacture, a trace provided with a reinforcing plate located between the straps at the eye portion and provided with a slot registering with the eye of the trace, and slides receiving the edges of the reinforcing plate and extending over the edges of the trace at the eye, and secured to the side surfaces of the trace, as and for the purpose specified. 2nd. The combination, with the straps of a trace at the eye portion thereof, of a reinforcing plate introduced between the straps, the said plate being provided with a slot registering with the eye of the trace, and with marginal flanges extending beyond the side edges of the straps, and slides fitted over the flanges of the plate, the said slides clamping the side surfaces of the traces, as set forth. 3rd. A reinforcing device for the eye portions of traces and other straps, the same consisting of a body plate provided with side flanges, and a slot located between the flanges, and slides having channelled sur-

faces to receive the flanges of the body plate, said slides being provided with fastening devices near their edges, as and for the purpose specified.

No. 46,268. Masher for Vegetables, &c.

(*Machine à laver pour légumes. etc.*)



George Hamel Zane, Philadelphia, Pennsylvania, U.S.A., 6th June, 1894; 6 years.

Claim.—1st. A masher for the purpose set forth, consisting of a vessel having a corrugated side and a perforate corrugated bottom, a detachable securing device at the top of the said vessel, a rotatable shaft resting on said bottom and journalled in said securing device, a spiral head on the lower end of said shaft, beaters on the inner side of the said vessel, and beaters on the shaft passing between said beaters on the side, said parts being combined, substantially as described. 2nd. A masher comprising a vessel, a shaft carrying a mashing head, a securing device supporting said shaft, and ears and spring catches for engaging the opposite ends of said securing device, and means for operating the shaft, substantially as described. 3rd. A masher comprising a vessel, a shaft carrying a mashing head, a cross-bar supporting said shaft, and ears and spring catches on said vessel, the ends of said bar being between said ears, and the latter being engaged by said catches, said catches being pivoted to said vessel below said ears, substantially as described.

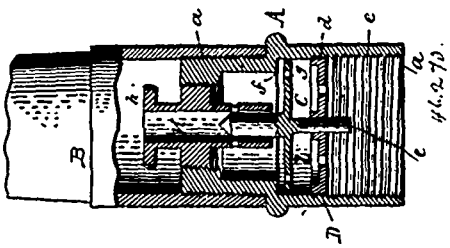
No. 46,269. Liquid Glue. (*Colle.*)

Gustav Emil Wiese, Hambourgh, German Empire, 6th June, 1894; 6 years.

Claim.—A liquid glue consisting of a mixture in a cold state of water glue, chloral-hydrate, sulphocyanide of ammonium, boracic acid, chloride of zinc and sulphate of zinc, arranged substantially as hereinbefore described.

No. 46,270. Governor for Gas Burners.

(*Gouverneur pour becs à gaz.*)

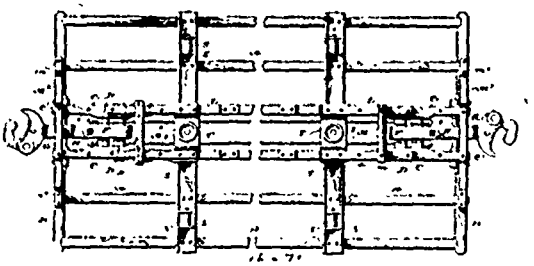


The Buffalo Gas Saving Company, assignee of Alfred Hall, both of Buffalo, New York, U.S.A., 6th June, 1894; 6 years.

Claim.—1st. In a governor for gas burners, the combination with the casing, of a diaphragm arranged in the casing and having gas passages, a governor float arranged above said diaphragm and having a gas port, a shoulder arranged above said float, opposite said gas port and forming a valve seat, a stem depending from the underside of said float and guided in an opening in said diaphragm, a vertically adjustable sleeve arranged above the float and a valve or stem projecting upward from the float and entering said sleeve, substantially as set forth 2nd. In a governor for gas burners, the combination with the casing, closed at its upper end by a head, having a screw-threaded opening, of a diaphragm arranged on the casing and having gas passages, a governor float arranged above said diaphragm, and having a gas port, a shoulder arranged above the diaphragm and having a gas port, a shoulder arranged above said float opposite said gas port and forming a valve seat for said port, a guide stem depending from the underside of said float and guided in an opening in said diaphragm, a screw-threaded, open-ended sleeve, arranged in the threaded opening in the top of the casing, and having a lateral gas port, and a valve or stem projecting upward from the float and arranged in said sleeve, substantially as set forth. 3rd. In a governor for gas burners, the combination with the casing, of a diaphragm arranged in the casing and having gas passages, a governor float fitting loosely in said casing above said diaphragm, a vertically adjustable sleeve open at its ends, and arranged above the float, and a valve or stem projecting upward from the float and entering said sleeve, substantially as set forth. 4th. In a governor for gas burners, the combination with the casing, of a diaphragm arranged in the casing and having gas passages, a governor float arranged above said diaphragm and having a gas port, a shoulder arranged above said float opposite said gas port and forming a valve seat for said port, and a guide stem depending from the underside of said float and guided in an opening in said diaphragm, substantially as set forth.

No. 46,271. Draw-Bar Mechanism.

(*Mécanisme de barre d'attelage.*)



Perry Brown, Wilmington, Delaware, U.S.A., 6th June, 1894; 6 years.

Claim.—1st. In a draw-bar mechanism, the combination, with two draw-bars, corresponding follower blocks and connections between said blocks, of two sets of draw-irons constructed with recesses to receive the ends of the follower blocks and allow of their free motion toward the ends of the cars, substantially as described. 2nd. In a draw-bar mechanism, the combination, with two draw-bars, corresponding follower blocks, and connections between said blocks, of two sets of draw-irons, having receptacles for the ends of the follower blocks formed therein, and the end walls of said receptacles forming stops to limit the motion of said blocks toward the centre of the car, and constructed to allow free motion toward the end of said car, substantially as described. 3rd. In a draw-bar mechanism, the combination, with two draw bars, corresponding sets of follower blocks, springs acting between said follower blocks, and connections between said follower blocks, of two sets of draw-irons having receptacles for the ends of the follower blocks formed therein, and the end walls of said receptacles forming stops to limit the motion of said blocks toward the centre of the car and constructed to allow free motion of the blocks toward the end of the car, substantially as described. 4th. In a draw-bar mechanism, the combination, with two draw-bars, corresponding follower blocks, and connections between said blocks, of draw-irons provided with supplementary springs arranged between the inner blocks and the rear of the draw-irons, and acting against said inner follower blocks as they move toward the centre of the car, substantially as described. 5th. In a draw-bar mechanism, the combination, with two draw-bars, corresponding sets of follower blocks, springs acting between each set, and connections between said follower blocks, of two sets of draw-irons constructed to allow free motion of said follower blocks toward the end of the car, and supplementary springs arranged between the inner follower blocks and the inner ends of the draw-irons and acting against said inner follower blocks as they move toward the centre of the car, substantially as described. 6th. In a draw-bar mechanism, the combination, with two draw-bars, corresponding follower blocks, and connections between said follower blocks, of draw-irons having springs set in recesses therein and arranged to act against the inner follower block as it moves toward the centre of the car, substantially as described. 7th. In a draw-bar mechanism, the combination of two draw-bars, recessed follower blocks for the same, springs between said follower blocks, substantially fitting the recesses in said blocks, and connections between said follower blocks constructed and arranged to bring the draft upon the rear draw-bar, substantially as described. 8th. In a draw-bar mechanism, the combination of a draw-bar, a pair of recessed follower blocks, a spring between said blocks substantially fitting the recesses in said blocks, with a pair of draw-irons having recesses constructed to allow of free motion of the follower blocks towards the outer end, and having a stop to limit the motion in the opposite direction, substantially as described. 9th. The combination of recessed draw-irons, recessed follower blocks having their ends in the recess in the draw-irons, a spring set in and substantially fitting the recesses in the follower blocks, a draw-bar, a yoke connecting said draw-bar and follower block, and draft rods connected to said follower blocks for connecting said follower blocks with a follower block on the opposite end of the car, substantially as described. 10th. The combination of the draw-irons C having recesses *c*, the follower blocks D having recesses *d*, the spring E set in said recesses *d*, the draw-bar G, the yoke F connecting the draw-bar and follower blocks, and the draw-rods I passing through the follower blocks between the draft irons and spring, all substantially as described and shown. 11th. In a draft mechanism, a follower block D, provided with the ribs d^1, d^2, substantially as described. 12th. In a draft

mechanism, a follower block D having ribs d^1, d^2, apertures d^3 to receive the draft rods, and recesses d^6 above and below the same, substantially as described and shown and for the purpose specified. 13th. A bolster iron formed of channel iron provided with anti-friction rollers s^1, having their axes parallel with the length of the iron, and plates s set transversely of the iron and forming hangers for said rollers s^1, substantially as described. 14th. A bolster formed of channel iron provided with the bolster-plate T, having bearing pieces t rising upward into the channel iron, substantially as described.

No. 46,272. Hay Fork. (*Fourche à foin.*)

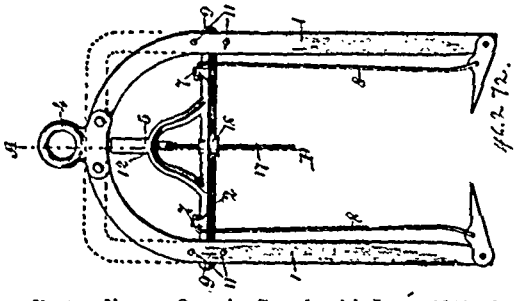


Fig. 2.72.

George Beatty, Fergus, Ontario, Canada, 6th June, 1894; 6 years

Claim.—1st. In a hay fork, the rocker-shaft having lifter-arms as specified, a bifurcated-arm at right angles to the centre thereof and adapted to carry a spring actuated bolt, and heads on the ends of said shaft to rest against caps securing said shaft to said fork frame, substantially as and for the purpose specified. 2nd. The combination in a hay fork, of the rocker-shaft having a bifurcated arm at right angles to the centre of the shaft, and adapted to carry a spring-actuated bolt to latch with the fork frame, said shaft having heads on its ends, and wrists and lifter-arms near said ends, with the caps secured to the fork frame and engaging the wrists of said rocker-shaft, substantially as and for the purpose specified. 3rd. The combination in a hay fork, of the rocker-shaft having a bifurcated-arm at centre as specified, lifter-arms and wrists near the ends of said shaft, heads on the ends as specified, the caps to engage said wrists and secure the shaft in position, the eye on the fork frame and adapted to operate the bolt in said arm, and the U shaped fork frame as provided, substantially as and for the purpose specified.

No. 46,273. Knob or Button for Marking Animals.
(*Bouton pour marquer les bestiaux.*)

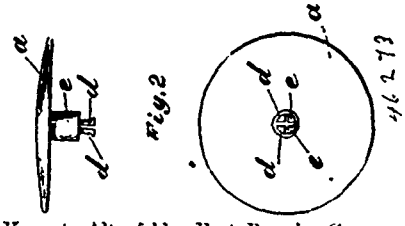


Fig. 2.73.

Walther Kowert, Altenfelde, East Prussia, Germany, 6th June, 1894; 6 years.

Claim.—A double knob or button, as a mark for animals, consisting of two celluloid discs a, b, designed to receive an inscription, one of which has a shank c, and spring-heel piece d, which fits into a recess e in the other part, both parts being joined together and the joint luted with a mixture composed of alcohol and ether, constructed and arranged, substantially as described.

No. 46,274. Buffer. (*Tampon de choc pour chars.*)

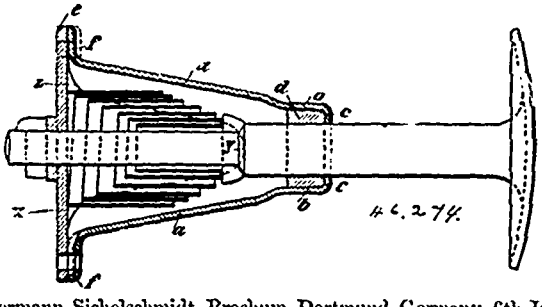
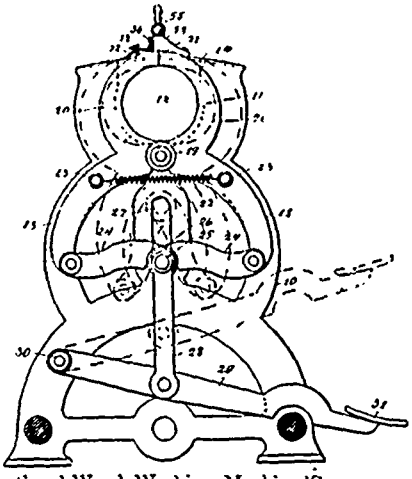


Fig. 2.74.

Hermann Sichelschmidt, Brochum, Dortmund, Germany, 6th June, 1894; 6 years.

Claim.—A buffer casing constructed from sheet metal and having its head strengthened by the insertion of a ring, constructed and arranged substantially as hereinbefore described.

No. 46,275. Bundling Machine. (*Machine à lier.*)



The International Wood Working Machine Company, assignee of William F. Hutchison and Aron J. Tyler, all of Passaic, New Jersey, U.S.A., 6th June, 1894; 6 years.

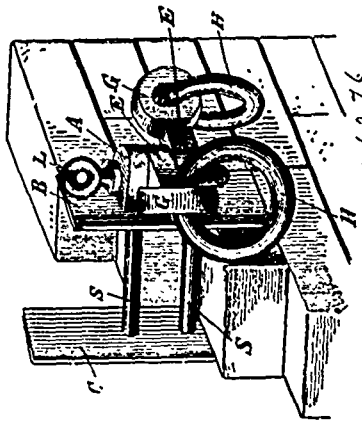
Claim.—1st. The combination with the oppositely moving jaws adapted to form a bundle between them, of a wire holding device near the free end of one jaw, a wire-holding device near the free end of the opposite jaw, nippers carried by one of the jaws and adapted to engage the ends of a binding wire, and mechanism for twisting the wire ends together, substantially as described. 2nd. In a bundling machine, the combination of the oppositely arranged jaws movable towards and away from each other, wire holders on the free ends of the jaws, a twisting device to unite the ends of the wire, and knives actuated by the jaws and arranged to cut the wire, substantially as described. 3rd. A bundling machine, comprising oppositely arranged jaws having curved adjacent faces to form a bundle, a lever mechanism for forcing the jaws together, and an abutment plate arranged opposite the opening in the jaws and provided with a top flange to overlap a bundle formed between the jaws, substantially as described. 4th. A bundling machine, comprising a supporting frame having an opening in its top, a back plate arranged opposite one side of the opening and provided with a top flange projecting above the opening, a hinged plate secured to the frame and adapted to close the opposite side of the opening at the top, and a pair of oppositely arranged swinging jaws provided with curved inner faces and held to move through the opening adjacent to the back plate, substantially as described. 5th. The combination, with the oppositely swinging jaws adapted to form a bundle between them, of a wire-holding device near the free end of one jaw, a wire-holding device near the free end of the opposite jaw, knives carried by the jaws and adapted to sever the wire, nippers carried by one of the jaws and adapted to engage the severed ends of the wire, and mechanism for twisting the wire ends together, substantially as described. 6th. The combination, with the oppositely arranged jaws, of a tension device or wire-holder near the free end of one jaw, a wire-holding device near the free end of the opposite jaw, knives carried by the jaws and adapted to sever a wire by the closing of the jaws, revoluble nippers carried by one of the jaws and extending below the knives to engage the wire ends, mechanism for closing the nippers upon the wire ends, and a device for twisting the nippers and wires, substantially as described. 7th. The combination, with the oppositely arranged compressing jaws, of a tension device near the free end of one jaw adapted to hold a wire, nippers arranged near the free end of the opposite jaw to engage the end of a wire, knives carried by the jaws and adapted to cut the wire when the jaws are closed, a revoluble post held at the free end of one of the jaws, a second set of nippers carried by the post and extending beneath the knives to engage the wire, and a vertically movable stem held in the post and adapted to close the second set of nippers upon the wire, substantially as described. 8th. The combination, with the oppositely arranged compressing jaws, of slotted throat plates on the lower portion of meeting faces of the jaws to guide a wire, a wire-holding device near the free end of one jaw, a wire-holding device near the free end of the opposite jaw, knives carried by the jaws and adapted to sever the wire by the closing of the jaws, a revoluble post held to turn above the knives, a pair of nippers pivoted in the posts and extending downward between the knives and the throat plates, and a revoluble and vertically movable stem threaded in the post and adapted to close the nippers upon the wire ends, substantially as described.

No. 46,276. Halter Ring. (*Anneau de licou.*)

Johann Wilhelm Ziellenbach, Creffeld, Germany, 6th June, 1894; 6 years.

Claim.—1st. In apparatus for detachably securing horses cattle and other animals, the combination of an open housing or bracket

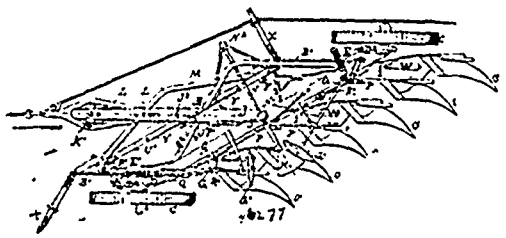
with a ring holder or ring holders therein, and a removable pin or pivot connecting the ring holders and housings, constructed and



arranged, substantially as hereinbefore described. 2nd. Apparatus for detachably holding horses, cattle and other animals constucted and arranged, substantially as hereinbefore described.

No. 46,277. Apparatus for Steam Cultivation.

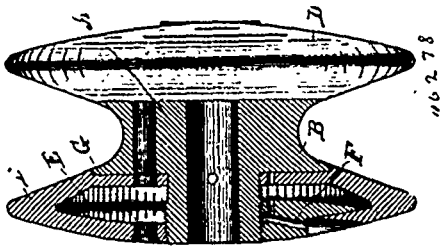
(*Cultivateur à vapeur.*)



Robert Henry Fowler, Thomas Benstead, John Ogleby and Harry Evershed, Leeds, County of York, England, 6th June, 1894; 6 years.

Claim.—1st. In apparatus for steam cultivation wherein the framing carrying the cultivating tools is arranged as a parallel motion, the combination with the perch pins carrying the axles of the travelling wheels, of steering gear consisting of cranks E, connected to nuts E^1 on screw spindles E^2, carried by swivelling brackets F, engaged by pins F^1, with slots A^1, on the main frame A, said screw spindles being connected by universal joints to steering spindles G, whereby the travelling wheels can be adjusted to any angular position for steering, and also automatically brought into either of the requisite positions for travelling with the frame in the square or in the oblique position, substantially as described. 2nd. In apparatus for steam cultivation wherein the framing carrying the cultivating tools is arranged as a parallel motion, the combination with the main frame A, of an arm J, pivotted thereto, and to the front bar B, of the parallel motion frame and carrying at its front end a castor wheel K, said arm J, being connected by a slotted pivot connection with a looped hauling lever L, carrying a roller bearing against an angular bar M, fixed to the front bar B, of the parallel motion frame whereby such frame is held securely in the oblique position when travelling, substantially as described. 3rd. In apparatus for steam cultivation wherein the framing carrying the cultivating tools is arranged as a parallel motion, the combination with the castor arm J, of a stud J^6, fixed thereon, and a semi-cylindrical rotatable socket N^2, carried by the main frame, whereby the castor arm is retained in the middle or square position during the operation of turning, substantially as described. 4th. In apparatus for steam cultivation wherein the framing carrying the cultivating tools is arranged as a parallel motion, the combination with the parallel motion bar B, of framed arms P, connected to the bar B, and to a supporting bar Q, by pivotted connections and carrying two pairs of shares or cultivating tools O, O, O^1, O^1, of which the one pair or the other is brought into the soil by a semi-rotation of the arm P, or both pairs can be brought into a position raised out of the soil by a quarter revolution of the arm, substantially as described. 5th. In apparatus for steam cultivation wherein the framing carrying the cultivating tools is arranged as a parallel motion, the combination of the arms P, carrying two sets of tools O, O, O^1, O^1, with toothed segments S, gearing with other toothed segments U, fixed on a bar U^1, carried by radius arms T, and connected with the castor arm J, by chains or equivalent means whereby on the moving of the parallel motion from the one oblique position to the opposite one, the toothed segments U, are made to turn the arms P, so as to raise the one set of ploughs from the soil and to lower the other set onto the soil, substantially as described.

No. 46,278. Trolley Wheel. (*Roue de trollée.*)

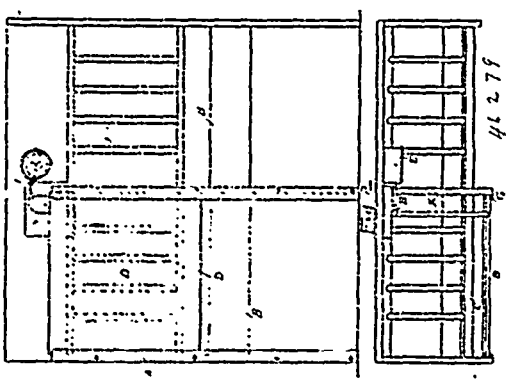


Robert Stewart Galbraith, Toronto, Ontario, Canada, 6th June, 1894; 6 years.

Claim.—1st. A trolley wheel composed of an electrically conducting hub A, a screw threaded projection B, extending beyond each side of the hub A, electrically conducting flanges D, D^1, arranged one on either side of said hub and screwed on said projection, bolts G, to lock the flanges to the hub, substantially as specified. 2nd. A trolley wheel composed of an electrically conducting hub A, a screw-threaded projection B, extending beyond each side of the hub A, electrically conducting flanges D, D^1, arranged one on either side of said hub, and screwed on said projections, bolts G, to lock the flanges to the hub, a chamber formed in each of said flanges, a passage formed through the side at or near the rim of the said flange into the chamber at or near the boxing, a bolt passing through said flanges to secure them to the hub, substantially as specified.

No. 46,279. Automatic Stock Feeding Device.

(*Appareil automatique pour nourrir le bétail.*)



James Howard Carpenter, Edmund Heffield and Thomas Treadwell Eaton, all of Louisville, Kentucky, U.S.A., 7th June, 1894; 6 years.

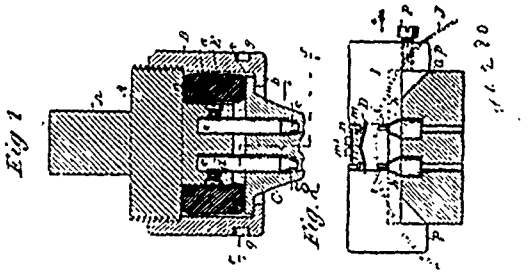
Claim.—1st. In an automatic stock-feeding device, the combination of a hopper and feed-trough, a gravity door or shield normally closing the same, and sustained in an elevated position, a pivoted lever engaging with said shield at one end, a yoke *b*, sustaining said lever at its fulcrum, a pivoted eccentric normally engaging the opposite end of said lever, a second pivoted lever bearing normally on said pivoted eccentric at one end, the disc R supporting the opposite end of said lever, an excision a^{11} in said disc and suitable clock mechanism for rotating said disc, and adapted to carry the excision therein to a perpendicular at predetermined times, all adapted, in combination, to release the gravity shield and expose the contents of the hopper, substantially as and for the purpose specified.

No. 46,280. Machine Die. (*Bouterolle.*)

Aimé Vullier Millis, Massachusetts, U.S.A., 7th June, 1894; 6 years.

Claim.—1st. The upper composite die, comprising a die block, spaced, depending and parallel punches on the die block, a stripper block perforated to receive the punches, and held on the die block below it, a keeper sleeve screwed on the die block by its upper end, flanged inwardly at its lower end and on which flange a radial flange on the upper end of the stripper block seats, and a spring intervening the die block and stripper block, substantially as described. 2nd. The composite lower die, comprising an elongated die block, upright anvil blocks at the front of the block, a double plate spring clasping device on the die block, adapted to hold pail ears above the anvil blocks, and a gage plate adjustable on the die block, substantially as described. 3rd. The composite upper die, comprising a

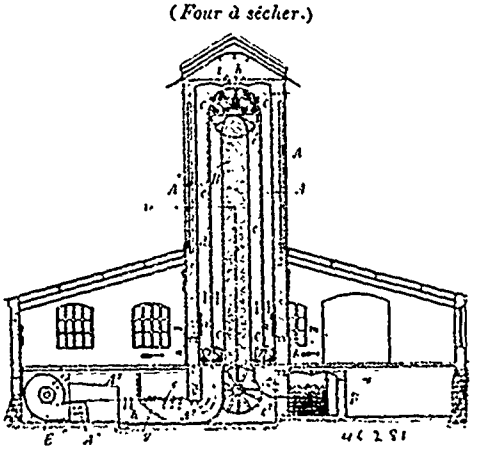
cylindrical die block having an axial shank on its upper face and threaded peripherally near the top, having its body reduced diametrically below the thread, a cylindrical keeper sleeve internally



threaded and engaging therewith the thread on the die block, an inwardly extending radial flange at the base of the keeper sleeve, two parallel depending spaced punches secured in sockets in the under face of the die block and cone pointed at their lower ends, a stripper block perforated to slip on the punches and radially flanged at its upper end to seat on the flange of the keeper sleeve, and a spring encircling the reduced part of the die block and intervening its shoulder and the top of the stripper block, substantially as described. 4th. The composite lower die, composed of an elongated rectangular die block, cylindrical anvil blocks seated in spaced vertical sockets at the front of the die block, an adjustable gage plate notched centrally on its upper edge, and a spring clasping device, composed of a bent lower spring plate secured at its rear end to the top of the die block, an upper straight spring plate shorter than and secured upon the lower plate by its rear end near the centre of said lower plate, and a guide piece secured on the lower spring plate and having opposite vertical flanges loosely embracing the edges of the upper spring plate, substantially as described.

No. 46,281. Drying Apparatus.

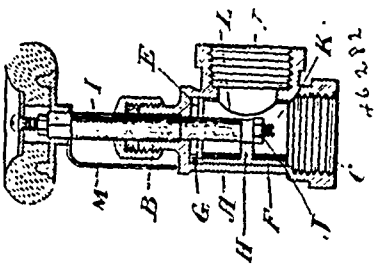
(*Four à sécher.*)



Fredrick Hiorth, Christiania, Norway, 7th June, 1894; 6 years.

Claim.—1st. In a drying apparatus, the combination with a chamber divided by a vertical wall into two channels or shafts communicating with each other at their upper end and being at their lower ends connected with air ducts, of a transporting device for the goods to be dried, consisting in endless chains laid over sheaves on top of and below the partition wall so that chains will move downward in one channel and upward in the other channel, substantially as described. 2nd. In a drying apparatus, the combination with slowly moving endless chain, and a drying chamber of a partition wall that divides the chamber into two parallel shafts communicating with each other at their upper end, of openings in the front and back wall of the drying chamber and rails leading through these openings into the shafts between the endles chains, and carriages for the goods to be dried running on the said rails and adapted to be caught by hooks on the chains, when pushed into the path of the same, so that the carriages will be lifted by the chains and transported up one of the shafts over the position and down the other shaft till it hits the rail at the bottom of this shaft, substantially as described. 3rd. In a drying apparatus of the type described, the combination with the openings at the lower ends of the shaft, and the rails, and the carriages running on the same, of automatically closing doors for the said openings, the troisting apparatus for the said doors involving a coupling, which is acted upon by a lever, arranged at the rails in the bottom of the shaft which is depressed at the moment a carriage hanging on the chains approaches the rail, substantially as described, 4th. In a drying apparatus for the type specified, the combination with the shafts, through which the material is moved, of a fan or blower for taking the damp air from the bottom of one of the shafts and forcing dry and heated air into the other shaft and of a condensing apparatus arranged in the duct between the fan and the shaft from which the damp air is exhausted, and of a heating chamber arranged in the duct between the fan and the other shaft, substantially as described.

No. 46,282. Valve. (*Soupape.*)

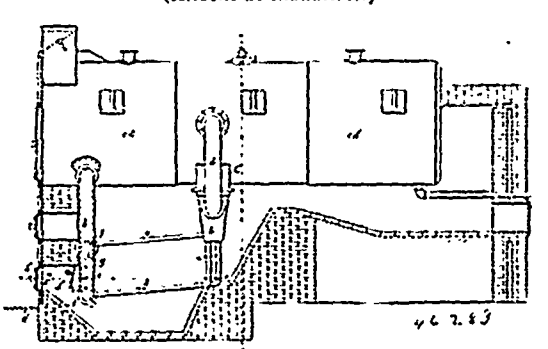


James Morrison, Toronto, Ontario, Canada, 7th June, 1894; 6 years.

Claim.—1st. A valve consisting of a suitable body provided with the usual ports, a valve within the body, a valve stem connected to the valve, and a spring to hold the valve in its seat, substantially as specified. 2nd. A valve consisting of a suitable body and centre or body cast in one piece, an opening through the bonnet or centre, a port in the side of the body, a valve arranged to close the said port, consisting of a semi-circular piece of metal, a valve stem, means for connecting the valve stem to the valve, and a spring to hold the valve in its seat to close the said port, substantially as specified. 3rd. A valve consisting of a suitable body provided with the usual ports, a valve within said body to close one of said ports, said valve consisting of a semi-circular plate of metal arranged to fit said body, a bifurcated lug formed integrally with the said valve, a valve stem connected to said lug and arranged to operate said valve, and a spring to hold the said valve on its seat, substantially as specified. 4th. In a valve, the combination of a body A fitted with two ports C and D, a stop E, within the body A, the valve F, within the body A, having a lug G, arranged to strike against the stop E, the valve stem I connected to the valve F, and a spring K to hold the valve F on its seat, substantially as specified. 5th. In a valve, the combination of the body A, the centre or bonnet B formed integrally with the body A, the ports C and D, the stop E, at the closed end of the body A, the valve F, the lug G, connected to the valve F, working against the stop E at each end of the stroke of the valve, the bifurcated lug H, connected to the valve F, the valve stem I having two flattened sides at one end to engage with the forks of the lug H, and the spring K to hold the valve F on its seat, substantially as specified. 6th. In a valve, the combination of the body A, and centre or bonnet B, the ports C and D, the stop E, within the body A, the valve F, the lug G, connected to the valve F, and arranged to strike against the stop E at each end of the stroke of the valve, the lug H, the valve stem I connected to the lug H, the coiled spring K, arranged to hold the valve F on its seat, and having an opening L, to permit of the passage of the fluid through the port D, substantially as specified.

No. 46,283. Attachment for Boilers.

(*Attache de chaudières.*)



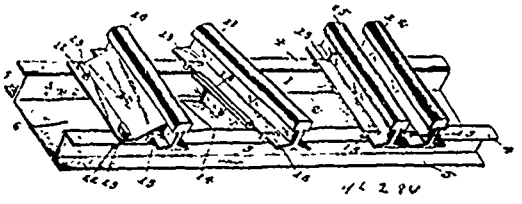
Edward B. Parkhurst, Woburn, Massachusetts, U.S.A., 7th June, 1894; 6 years.

Claim. 1st. An attachment for boilers consisting of a water leg, and suitable connections therefor with the boiler, a series of grate bars, connecting at their rear ends with said water leg, a water-box or manifold with which the front ends of said grate bars are connected, a lower water box or manifold, a series of lower grate bars connected at their front ends with said lower manifold, suitable connections whereby said manifolds are connected with the water space of the boiler, and a series of vertical connections, one for each

of the lower water grate tubes, whereby said lower water grate tubes are connected with the water leg, the alternate tubes of the lower water grate being longer than the others, and said vertical connections being set staggering or in two lines, substantially as and for the purposes set forth. 2nd. In an attachment for boilers, comprising upper and lower tubular water grates and suitable supply connections therefor with the water space of the boiler, the combination therewith, of a waterleg secured to the boiler and suitably connected therewith, and a series of vertical connections one for each of the lower water grate tubes, said vertical connections being located between the rear ends of said lower water grate tubes and the water leg, substantially as set forth.

No. 46,284. Metallic Cross Tie.

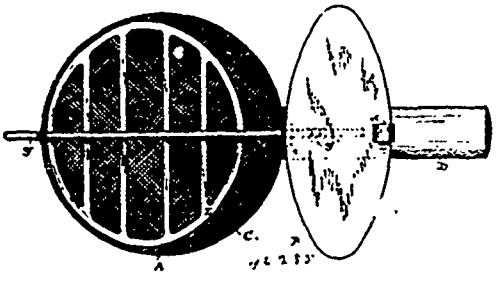
(*Traverse métallique de chemin de fer.*)



Albert G. Budington, Austin, Texas, U.S.A., 7th June, 1894; 6 years.

Claim.—1st. The combination with rails, of a hollow cross-tie having parallel vertical sides provided with flat upper faces supporting the rails, and the rail chairs arranged within the cross-tie and fitting snugly between the sides thereof, and each composed of a bottom flange resting upon the cross-tie, a web and a top portion 16, arranged flush with the upper faces of the sides of the cross-tie and provided with integral parallel upward extending flanges arranged transversely of the cross-tie and projecting above the upper faces of the chair and the sides of the cross-tie and receiving the rails between them and embracing the same, substantially as described. 2nd. The combination of a hollow cross-tie, a chair arranged within the cross-tie and provided with side flanges extending upward, a rail mounted on the cross-tie and arranged between the upwardly-extending side flanges of the chair, and clips composed of bars arranged on the lower faces of the top flanges of the tie and provided at their ends with upwardly-extending prongs passing through the tie and engaging the bottom flanges of the rails, substantially as described. 3rd. The combination of a cross-tie provided with top flanges, a rail mounted on the cross-tie, an inclined brace engaging the rail beneath the head thereof and having its bottom arranged on the cross-tie, bolts passing through the bottom of the brace and the top flanges of the cross-tie, and keys passing through the shanks of the bolts and engaging the cross-tie beneath the bottom flanges thereof, substantially as described. 4th. The combination of a cross-tie provided with top flanges, a rail chair arranged within the tie and comprising a bottom plate, a web and a top plate having upwardly extending flanges, a rail mounted on the cross-tie and arranged within the upwardly extending flanges of the chair, clips 13, having prongs extending upward through the tie and engaging the rail, an inclined brace engaging the rail beneath the head, and bolts provided with keys and securing its inclined brace to the cross-tie, substantially as described.

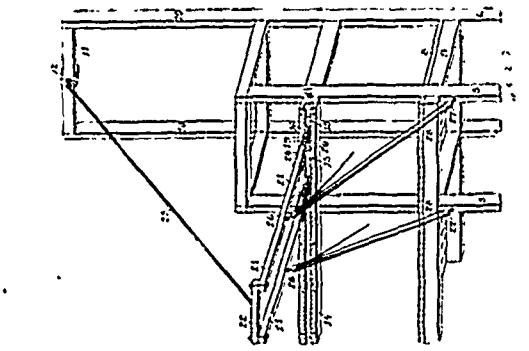
No. 46,285. Flour Sifter. (*Sas à fleur.*)



Donald McKenzie, and Samuel W. Roberts, both of Cleveland, Ohio, U.S.A., 7th June, 1894; 6 years.

Claim.—1st. In a flour sifter, the handle hinged to the bucket part thereof, and the shifting-rod of the comotor connected with a depending-arm of said handle, substantially in the manner as shown and for the purpose described. 2nd. In a flour sifter, the combination with the bucket part thereof of a hinged handle having an arm depending therefrom, and the comoter with a rod extending through said bucket and connected with said arm, substantially as shown and for the purpose described. 3rd. A covered flour sifter, having the handle with a depending-arm vibratively connected therewith, and the rod of the comoter upon the screen bottom of the bucket attached to said handle-arm, substantially as shown and described.

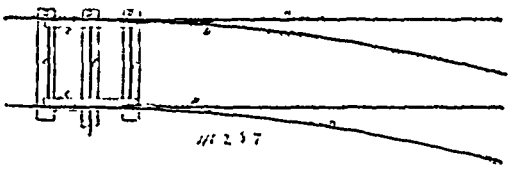
No. 46,286. Hoisting Apparatus. (*Vindas.*)



George Franklin Jennings, Fall River, Massachusetts, U.S.A., 7th June, 1894; 6 years.

Claim.—1st. In a hoisting apparatus, in combination a horizontally-supported rail, a shoe transverably supported by the rail, booms universally pivoted to the shoe, a cross-bar pivoted to the outer ends of the booms, and a stay for supporting the same. 2nd. In a hoisting apparatus, the combination, with a rail, a shoe traversably supported by the rail, booms pivoted to the shoe, and a cross-bar pivoted to the outer ends of the booms, of a longitudinal rail supported above and to the rear of the boom-rail, a traversable support mounted thereon, a trolley-stay secured to such support and to the cross-bar of the booms, and a trolley-carriage carried by the stay. 3rd. The combination with the grooved-rail 14 secured to a frame-work, the shoe 15 movable in the grooved-rail, castings 16 having ears 17 secured to the shoe, the swivel-blocks having extensions 19 pivoted between the ears, the plates 20 pivoted to these extensions, the booms 21 each secured between a pair of the plates 20, the cross-bar 22 pivoted to the outer ends of the booms, and a down-fall for depressing the ends of the booms, of the supports 10, the rail 11 supported between them, the movable-strap 12 having the eye-bolt 13 mounted on the rail, the pulley 25 supported by the eye-bolt, the trolley-stay 23 secured to the eye-bolt and to the cross-bar 22, a trolley-carriage movable on the stay, tackle for operating the carriage, and a bucket adapted to be elevated and lowered by the tackle. 4th. The combination with the grooved-rail 14 secured to a frame-work and extending horizontally, the shoe 15 movable in the groove of the rail, the booms 21 each of which is universally pivoted to the shoe, and the cross-bar 22 pivoted to the outer ends of the booms, of a stay, secured to the cross bar, for supporting the outer end of the booms and adapted to serve as a cable-way, as described.

No. 46,287. Railway Switch. (*Aiguille de chemin de fer.*)



William H. Bird, St. Thomas, Ontario, Canada, 7th June, 1894; 6 years.

Claim.—1st. The combination in a railway switch, of the main rails with vertically adjustable switch-rails or switch-points, substantially as and for the purpose hereinbefore set forth. 2nd. In a railway switch, the combination of vertically adjustable switch-rails or switch-points with horizontally adjustable inclined planes, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the switch rails B, B, the adjustable inclined planes C, C, and the cover plate F, substantially as and for the purpose hereinbefore set forth.

No. 46,288. Process for Compressing Fodder into Blocks. (*Procédé pour presser le fourrage.*)

Mark Knight Westcott, Melbourne, Colony of Victoria, 7th June, 1894; 6 years.

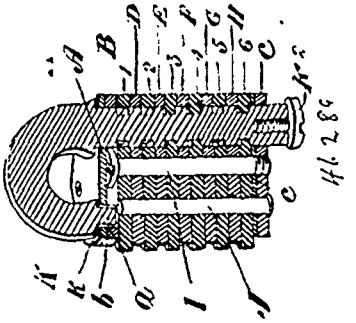
Claim.—My improved process for compressing fodder into blocks, consisting essentially, first, in compressing such fodder into blocks, secondly, in clamping said blocks in frames while the blocks are under pressure, thirdly, in heating and cooling such clamped blocks, substantially as and for the purposes hereinbefore set forth.

No. 46,289. Permutation Lock. (*Serrure à combinaison.*)

Josiah J. Deal, Canton, Ohio, U.S.A., 7th June, 1894; 6 years.

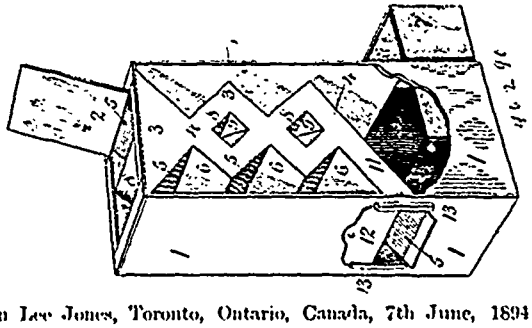
Claim.—1st. The combination with a series of pivoted movable discs, and intermediate immovable discs suitably held together, of a

shackle or bolt having a series of annular grooves corresponding in number to the movable discs and designed to co act with peculiarly formed arc-shaped slots, the major portion of which are of less diame-



ter than the shank of the shackle, while the remaining portion of the slot is of the full diameter of the shackle, as shown and for the purpose specified. 2nd. The combination with a series of pivoted movable discs, and intermediate immovable discs suitably held together, of a shackle or bolt having a reduced end designed to fit into a hole in the top plate of the lock, a series of annular grooves corresponding in number to the movable plates and designed to co-act with peculiarly formed arc-shaped slots, the major portion of which are of less diameter than the shank of the shackle while the remaining portion of the slot is of the full diameter of the shackle, as shown and for the purpose specified. 3rd. The combination, with the movable discs and immovable discs held together by the central spindle I, the movable discs having slots l^2, arranged as specified, and the slots b^2, diametrically opposite and having the pin J, extending through the slots b^2, and the holes J in the immovable discs, of the shackle K, having the annular grooves corresponding in position to the peculiarly formed slots in the movable discs and having the reduced end k, designed to fit into the recess in the top plate A, as and for the purpose specified. 4th. The combination, with the movable discs and immovable discs held together by the central spindle I, the movable discs having slots l^2, arranged as specified, and the slots b^2, diametrically opposite and having the pins j, extending through the slots b^2, and the holes j in the immovable discs of the shackle K, having the annular grooves corresponding in number and position to the peculiarly formed slots in the movable discs and having the reduced end k, designed to fit into the recess in the top plate A, and the screw pin k^2, in the bottom of the shank of the shackle, as and for the purpose specified. 5th. The combination, with the movable discs and immovable discs held together by the central spindle I, the movable discs having slots l^2 arranged as specified, and the slots b^2, diametrically opposite and having the pins j, extending through the slots b^2, and the holes J, in the immovable discs, of the shackle K, having the annular grooves corresponding in number and position to the peculiarly formed slots in the movable discs and having the reduced end k, designed to fit into the recess in the top plate A, and the screw pin k^2, secured in the bottom of the shank of the shackle and the spring washer c, between the bottom disc C, and the disc 6, as and for the purpose specified. 6th. The combination, with the immovable and movable discs held together as specified, and having peculiarly formed slots l^2, of the shackle K, provided with annular grooves corresponding in number and position to the slots, l^2, and the lugs projecting from the immovable plates in alignment with one another, and the lugs projecting from the movable plates, designed to be placed in a line with one another when the shackle is locked but some of which are designed to be moved out of alignment with the lugs in the immovable plates so as to form the combination to unlock, as and for the purpose specified.

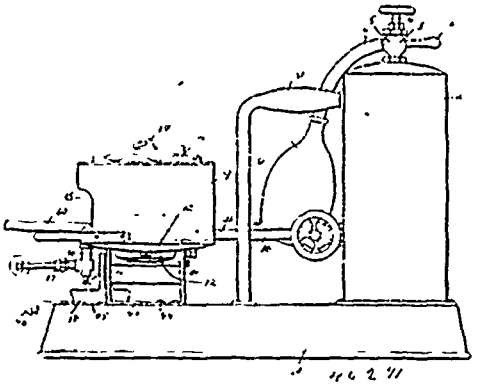
No. 46,290. Cinder Sifter. (*Crible à cendres.*)



John Lee Jones, Toronto, Ontario, Canada, 7th June, 1894; 6 years.

Claim. 1st. A cinder sifter having a series of inclined sieves and inclined planes arranged alternately, over one another, said sieves and inclined planes being in duplicate so as to downwardly converge and diverge, respectively, and a series of divides having grooved inclines thereon as specified, to throw the cinders and ashes outward to slide down said inclined sieves, substantially as shown and described. 2nd. A cinder sifter having a series of inclined sieves and inclined planes arranged alternately over one another, said sieves and planes being in duplicate so as to downwardly converge and diverge, respectively, a series of divides having grooved inclines as specified, and a shute at the lower extremity to discharge the cinders separate from the ashes and outside the casing of the sifter, substantially as shown and described. 3rd. A cinder sifter having a series of inclined sieves and inclined planes arranged alternately over one another, said sieves and planes being in duplicate so as to downwardly converge and diverge, respectively, a series of divides having grooved inclines as specified, a shute at the lower extremity to discharge the cinders from, and an ash-pan beneath the shute to receive the ashes separated from the cinders, substantially as shown and described.

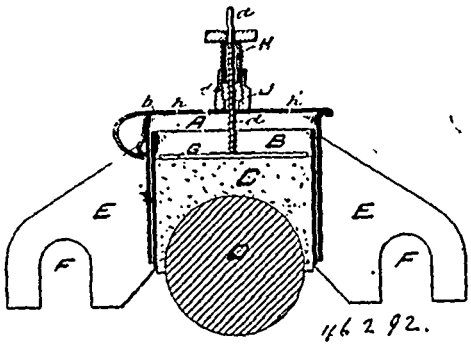
No. 46,291. Soldering Stove. (*Poêle à souder.*)



Edward Trimble Burgess, Columbus, Ohio, U.S.A., 7th June, 1894; 6 years.

Claim —1st. In a soldering stove, the combination of the stove body or flame chamber, a burner-head projecting through the bottom plate thereof, and iron rests rising from said bottom plate on opposite sides of said burner, said rests consisting as described of a back plate and arms 21, substantially as and for the purpose specified. 2nd. In a soldering stove, the combination of the stove body or flame chamber, having a concaved or depressed bottom portion as described, a burner-head projecting within said chamber through said depressed bottom portion and iron rests 21 formed integral with said bottom portion and projecting therefrom on opposite sides of said burner-head, said rests consisting of the arms or ribs 21, substantially as specified. 3rd. In a soldering stove, the combination of the cylindrical stove or flame chamber, a burner-head projecting within said chamber through the bottom plate thereof, soldering iron supporting ribs or rests 21, rising from said bottom plate on opposite sides of said burner-head and flues connecting as described the forward and rear portions of said flame chamber, substantially as and for the purpose specified. 4th. In a soldering stove, the combination of the cylindrical stove or flame chamber, having a suitable burner therein, a ring plate 24 about the upper side of said stove body, a flange 26 thereon, lower lugs 28, and upper lugs 27 projecting inwardly therefrom, a top plate having a notch 31 adapted to receive one of said lugs 27, substantially as and for the purpose specified. 5th. In a soldering stove, the combination of the stove body or flame chamber, a cylindrical burner body, a longitudinal burner-head projecting from said burner body within said flame chamber, slotted burner openings in the sides and top of said burner-head, as described, and a burner tube leading within said burner body, of an oil supply pipe passing above and in front of said burner, and a valve opening and valve in said pipe, substantially as and for the purpose specified. 6th. In a soldering stove, the combination of the stove body or flame chamber, an oil reservoir supported adjacent thereto, a cylindrical burner body, a longitudinal burner head projecting from said burner body within said flame chamber, and a burner tube leading within said burner body, as described, of an oil supply pipe leading from said reservoir over said burner and in front of said burner tube, a valve opening and valve in said pipe as described, and a handle rising centrally from the supporting base of the stove and reservoir, and an opening in said handle through which said oil pipe passes, substantially as and for the purpose specified. 7th. In a soldering stove, the combination with the stove body or flame chamber, a burner having its head projecting within said stove body, a burner tube leading within said burner body, an oil supply pipe passing above and in front of said burner, and a valve opening and valve in said pipe, as described, of a laterally movable oil opening supported beneath said burner, and a central deflector plate projecting therefrom, as described, the latter being adapted to close said burner tube opening, substantially as and for the purpose specified.

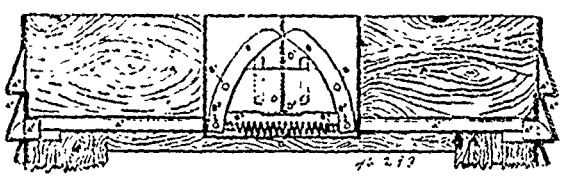
No. 46,292. Machine for Oiling Pistons Rods.
(*Graisseur pour pistons.*)



Joseph LeBlanc, Montreal, Quebec, Canada, 7th June, 1894; 6 years.

Claim.—1st. In an oiling machine, the combination of the two boxes A and B, the one working freely inside the other, all substantially as set forth. 2nd. In an oiling machine, the combination of the perforated plate G, with the rod *a* welded to it, all substantially as set forth. 3rd. In an oiling machine, the combination on the cover *b* of the box A, of the collar J, with the hollow thumb screw H, all substantially as set forth. 4th. In an oiling machine, the combination of the double acting light spring *d*, with the screw H and the plate G, all substantially as set forth.

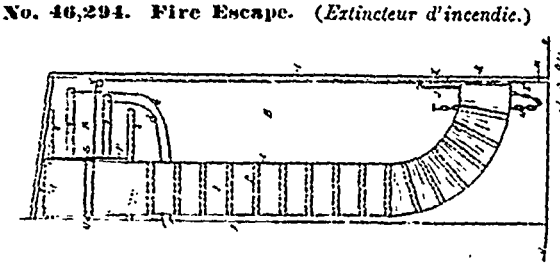
No. 46,293. Apparatus for Adjusting the Position of Sashes in Railway Carriages, &c.
(*Appareil pour ajuster les chassis dans les chars de chemins de fer.*)



David Thompson Seymour, Glenrosa, Brisbane, in the Colony of Queensland, 7th June, 1894; 6 years.

Claim.—1st. Improved apparatus for adjusting the position of sashes in railway carriage, tram car, and other windows consisting of the combination with the cross-bar of the sash of a window of a bolt or bolts such as A^1, lever or levers such as B, springs such as C, and ratchet bar or bars such as A^3, the said lever or levers being operated by means of a cam such as D, substantially as hereinbefore described and explained. 2nd. Apparatus for adjusting the position of sashes in railway carriage, tram car and other windows consisting of the combination with the cross-bar of the sash of a window, of a bolt such as A^1, having notch such as F, finger such as G, on the spindle of a handle spring such as C, and ratchet bar such as A^3, substantially as hereinbefore described and explained.

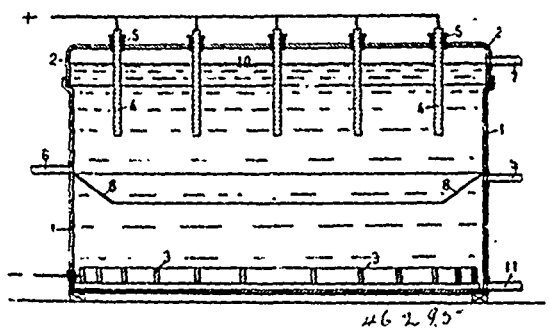
No. 46,294. Fire Escape. (*Extincteur d'incendie.*)



Nazaire Bouvier et Isac Belair, tous deux de Montreal, Quebec, Canada, 8 juin, 1894; 6 ans.

Résumé.—1° L'établissement en permanence du tube E, enfermé dans la charpente A, B, C, suivie du demi-cercle F, et de la barre G, la dite charpente A, B, C, étant suivie de la plateforme W, et de la porte P, permettant l'entrée dans le tube E, le tout tel que décrit et pour les fins mentionnées. 2° Dans les appareils de sauvetage contre les incendies, la combinaison de la porte P, suivie d'une plaque de cuivre S, avec les coulisse Q, Q, les bandes de cuivre Y et Z, les fils électriques *d*, la corde T, les poulies U et V, et la porte K, suivie des tringles L, de la chaîne N, des gonds M, et de la targette X, le tout tel que décrit et pour les fins mentionnées.

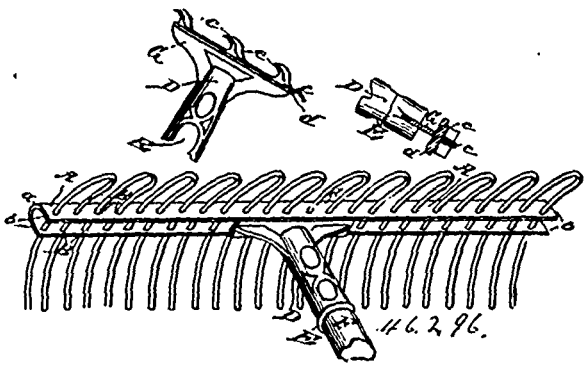
No. 46,295. Electrolytic Trough or Cell.
(*Cellule électrolytique.*)



Hermann Thofehrn, Paris, France, 8th June, 1894; 6 years.

Claim.—1st. In a closed electrolytic trough or cell, the arrangement of the electrodes in such a manner that the gases evolved on one electrode rise and come into contact with the other electrode, or mix or combine near the latter with the gases evolved therefrom, such mixing or combination being capable of regulation by means of a screen or shield which diverts, if necessary, a portion of the rising gases, and the products being drawn off as formed, substantially as described. 2nd. The improved electrolytic trough or cell made in two parts and provided with upper and lower electrodes, an inclined screen or shield, and pipes for the supply of the solution and withdrawal of same, and of the gases and products resulting from the electrolysis, substantially as described, and shown with reference to the accompanying drawing.

No. 46,296. Lawn Rake. (*Rateau pour pelouses.*)



Lewis Gibbs, Canton, Ohio, U.S.A., 8th June, 1894; 6 years.

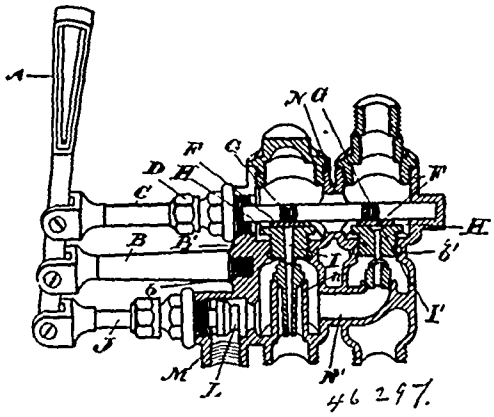
Claim.—1st. As an improved article of manufacture a U-shaped rake head, constructed of spring metal and formed with coincident tooth openings, whereby when the teeth are inserted in said openings they are automatically locked to the head by its spring action, substantially as set forth. 2nd. The combination with a rake head constructed in U-form in cross-section, and of spring metal, and provided with coincident holes, of teeth inserted through said holes, when the webs of the head are compressed, whereby when the pressure is removed, from the head, the webs will distend, and thereby lock the teeth to the head, substantially as set forth. 3rd. The combination with a rake head, constructed of spring metal of U-form in cross-section, and provided with coinciding holes of U-shaped teeth, inserted through said holes, and clamped in position by the resiliency of the metal, substantially as described and for the purpose set forth. 4th. The combination with a rake head and its teeth, of a handle socket, having a head which is provided with laterally extending hooks engaging the teeth, said hooks, socket head and rake head being tinned together, substantially as described and for the purpose set forth. 5th. The combination with a rake head, and its teeth, said rake head being of U-form in cross-section, of a handle socket, provided with a head having a central longitudinal shoulder to fit between the webs of the rake head, and support the same, said socket head being provided with hooks which engage the teeth, substantially as described and for the purpose set forth.

No. 46,297. Injector. (*Injecteur.*)

James Morrison, Toronto, Ontario, Canada, 8th June, 1894; 6 years.

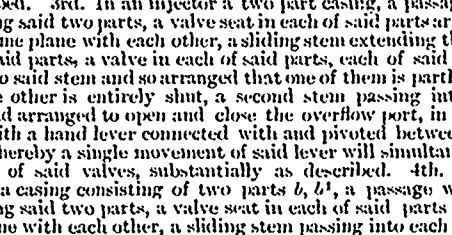
Claim.—1st. In an injector, a two point casing, a passage way connecting said two parts, a slide valve in each of said parts arranged to open and close the steam ports, a sliding stem passing through said two parts and having said valves secured thereto by pins projecting from their backs, a second stem passing into said injector and having

a valve thereon to open and close the overflow, a post projecting from said casing between said stems, and a hand lever pivoted to said stems and post, whereby a single movement of said lever simultaneously moves all of said valves, substantially as described. 2nd. In an injector a two part casing, a passage way connecting said two parts, a valve seat in each of said parts a stem having two valves independently secured thereto on the same plane with each other and adapted to slide over said valve seats, the valves being so arranged that one is partly open while the other is shut, substantially as described. 3rd. In an injector a two part casing, a passage way connecting said two parts, a valve seat in each of said parts arranged on the same plane with each other, a sliding stem extending through each of said parts, a valve in each of said parts, each of said valves secured to said stem and so arranged that one of them is partly open while the other is entirely shut, a second stem passing into said casing and arranged to open and close the overflow port, in combination with a hand lever connected with and pivoted between said stems, whereby a single movement of said lever will simultaneously move all of said valves, substantially as described. 4th. In an injector, a casing consisting of two parts b, b^1, a passage way N, connecting said two parts, a valve seat in each of said parts on the same plane with each other, a sliding stem passing into each of said parts and having valves secured thereto, arranged to open and close the orifices in said valve seats, a steam inlet on the upper side of said valves, a water inlet at the lower end of one of said parts, the lower end of the other part forming the water outlet and overflow, a valve controlling said overflow and a stem secured to said valve, in combination with a post B extending from said casing between the said stems, and a hand lever pivoted to said stems and post, whereby a single movement of said lever simultaneously moves all of said valves, substantially as described.



No. 46,298. Heating Apparatus.

(*Appareil de chauffage.*)



Roland H. Stubbs, Waterford, New York, U.S.A., 8th June, 6 years.

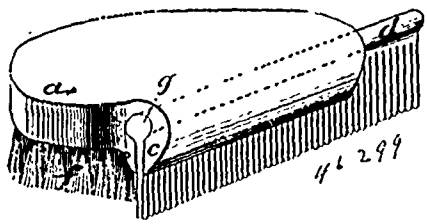
Claim.—1st. The combination with a relatively thin, flexible pipe and a metal wall cast around the same, of relatively thick coupling sections secured directly to the casting in communication with the respective terminals of the pipe, substantially as described. 2nd. In a fire-pot for heating apparatus, the combination with a relatively thin, flexible pipe, and relatively thick coupling-sections severally contiguous to and communicating with the respective pipe terminals, of a fire-wall cast upon and around the pipe, and the contiguous communicating ends of the pipe and coupling-sections, substantially as described.

No. 46,299. Combination Hair Brush and Comb.

(*Brosse et peigne combinés.*)

Cornelius De Nyse Hoagland, New York, State of New York, U.S.A., 8th June, 1894; 6 years.

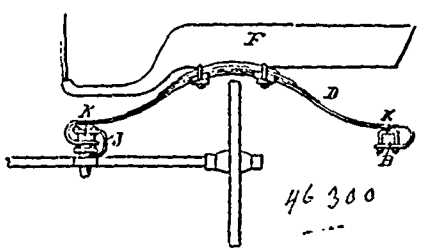
Claim.—1st. In a combination hair brush and comb, the combination of a brush having a mortise or groove in the lower surface of the back of the brush, with a comb having a back which corresponds and fits the said groove or mortise so that the comb can be removed from and replaced in the brush at will, substantially as shown and for the purpose specified. 2nd. In a combination hair-



brush and comb, the combination of a brush and comb, the comb attached to the side of the brush, so that the teeth of the comb are at right angles to the lower surface of the back of the brush and project slightly below the bristles, substantially as shown and for the purpose specified. 3rd. In a combination hairbrush and comb, the comb attached to the side of the brush in such a manner that the end of the comb projects in length beyond the brush, substantially as shown and for the purpose specified. 4th. The combination hairbrush and comb, the comb having a half heart shaped back, substantially as shown and for the purpose specified.

No. 46,300. Vehicle Running Gear.

(*Train de voiture.*)



Garland Brainard St. John, Kalamazoo, Michigan, U.S.A., 8th June, 1894; 6 years.

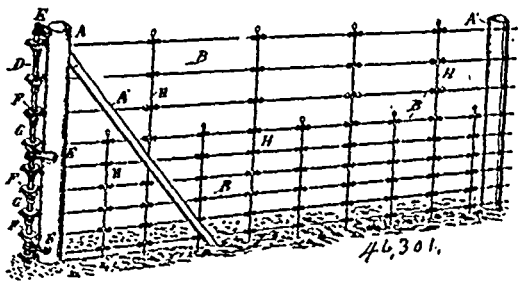
Claim.—1st. In a coupling for the running-gear of vehicles, the combination of the front and rear axles, a suitable connecting device extending from one to the other, a conical oil-holding socket attached to the forward axle, a conical pivot-pin secured to the said gear-connecting device and adapted for engagement with said socket, and a stirrup or hook fastened at only one of its ends to said gear-connection, the other end extending a short distance under some part of the socket, whereby the cone is held in place normallly, but is not prevented from wrenching out of the socket in case the vehicle overturns. 2nd. In a vehicle gear-coupling, the combination with the front and rear axles and suitable connecting means, of a conical oil-holding socket clipped to the back side of the front axle, a cone engaging said socket secured to the gear-connection and a stirrup or hook secured at one end only to said gear-connection, the other end extending a short distance under some part of the socket, substantially as and for the purpose set forth. 3rd. In a coupling in the running gear of vehicles, the combination of a front and rear axle, a suitable connecting device extending from one to the other, a conical oil-holding socket attached to the forward axle, a conical pivot-pin secured to the said gear-connecting device and adapted for engagement with said socket, and a loop of suitable material extending under some portion of said oil-holding socket to engage the same and connect the upper member so as to retain the conoidal pivot-pin in the socket and prevent any accidental displacement, for the purpose specified. 4th. In a vehicle gear-coupling, the combination with the front and rear axles, a suitable connecting means, a conical oil-holding socket attached to the front axle, a cone engaging said socket secured to the gear-connection, a loop of suitable material extending from said gear-connection under some portion of the socket to retain the two together to prevent accidental displacement, for the purpose specified. 5th. In a vehicle gear coupling, the combination of the front and rear axles and suitable connecting means, of a conical oil-holding cup attached to said front axle and a cross-bar and conoidal or conical, pivot-pin integral therewith, said pivot-pin and bar being joined together to take the place of the upper half of the ordinary fifth wheel, head blocks and cross-bar, substantially as described.

No. 46,301. Wire Fence. (*Clôture en fil de fer.*)

Eliott D. Barling, Pontiac, Michigan, U.S.A., 9th June, 1894; 6 years.

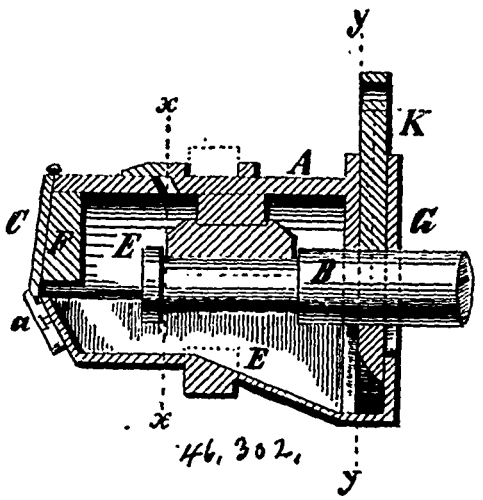
Claim.—1st. In a fence, the combination of the longitudinal wires, the end post through which said wire pass, the vertical rod adjacent thereto, the ratchet carrying drums journalled upon said rod and upon which said wires are wound, and the eliptical springs support-

ing said rod and bearing against said post. 2nd. In a frame, the combination of the lateral wires, the end post through which the said wires pass, the rotative drum mounted on said rod and having



a ratchet disc, the non-rotative plate located above said disc and having a detent that engages therewith, and the eliptical springs supporting said rod and bearing against said post. 3rd. In a fence, the combination of the lateral wires, the vertical stays consisting of two strands of wire twisted together and having diametrically opposed loops extending in opposite directions in the same plane across which the lateral wires lie, and which are twisted to confine the wires. 4th. In a fence, the combination with the lateral wire, and vertical stays, the rotative drum upon which said lateral wire is wound, having an internal ratchet disc, the non-rotative plate located above said disc, said plate having a depending hook that embraces the periphery of said disc, and a detent that engages the ratchet openings therein, said plate also having the slotted arm that receives and guides the wire to said drum, and means for rotating said drum, substantially as set forth.

No. 46,302. Car Axle Box. (*Boîte à graisse de chars.*)



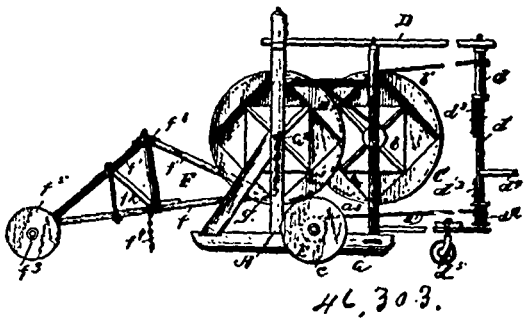
James L. Kinsell and Fenner A. Leavens, both of Belle Plaine, Iowa, U.S.A., 9th June, 1894; 6 years.

Claim.—1st. A car axle box having a narrow base, and extended sides to form chambers for the tow or cotton waste with its lubricating material to hold and retain it against the sides of the journal end of the axle, and a hinged lid having a compressor upon its inner side to force said tow or cotton waste back in the box, substantially as and for the purpose set forth. 2nd. A car axle box having a recessed guide upon its inner end, coiled springs located therein, and bearing sections for the journal end of the axle, said sections having rabbeted or overlapping edges, substantially as and for the purpose specified.

No. 46,303. Stump Extractor. (*Arrache-souche.*)

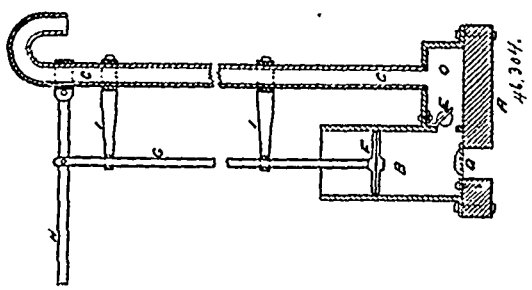
Jerome Abbee, Reno, Nevada, U.S.A., 9th June, 1894; 6 years.

Claim.—1st. The herein described improved stump extractor, comprising the main frame, the windlass, the horizontal rotary shaft having a drum, a rope encompassing said drum, the triangular frame having rollers at its outer end, and a chain at its inner end encompassing said shaft, and the central chain depending from said latter frame, substantially as set forth. 2nd. The herein described improved stump extractor comprising the main frame, the horizontal rotary shafts mounted in said frame, the drums thereon, the outwardly extended horizontal bars, the perpendicular windlass drum supported at the outer ends thereof, the ropes encircling said drums and secured one to one of said horizontal shafts and the other to said windlass drum, the triangular frame having rollers at its outer end and provided with a central depending chain, and the chain connected to the inner end of said frame, and also secured to and passed around one of said shafts, substantially as set forth. 3rd. The



herein described improved stump extractor, comprising the frame, the shaft a^2 mounted therein, the winding drum thereon having a circumferential groove, the second winding drum together with its shaft, the rope passed around said first drum and connected to said latter shaft, the windlass, the rope connected thereto and to said second winding drum, the triangular frame having rollers at its outer end, and the chain connected thereto and to said shaft a^2, substantially as set forth.

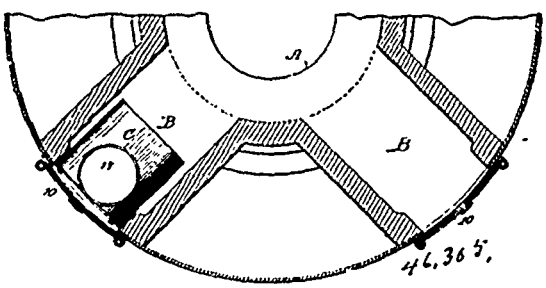
No. 46,304. Force Pump. (*Pompe foulante.*)



John Condon, Peterboro', Ontario, Canada, 9th June, 1894; years.

Claim. The combination of the plank A, casting B, O, plunger F, valves D and E, substantially as and for the purpose hereinbefore set forth.

No. 46,305. Lime Kiln. (*Four à chaux.*)

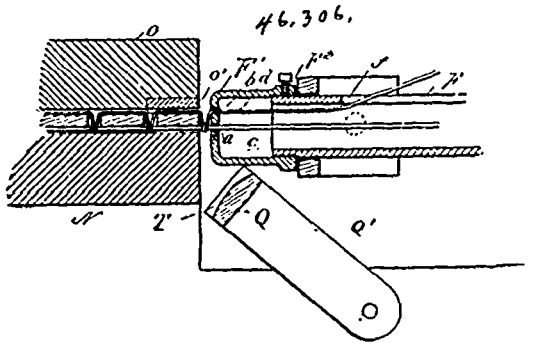


James O'Connell, New York, and George Sniffin, Tuckahoe, both in the State of New York, U.S.A., 9th June, 1894; 6 years.

Claim.—1st. In a kiln, a boiler located in the arch thereof, as and for the purpose set forth. 2nd. In a kiln, a boiler located in an arch of the kiln and comprising a fixture of the kiln, as and for the purpose set forth. 3rd. In a kiln, doors closing the outer ends of the arches, and an air duct leading into the rear or inner portion of the arch, and communicating with the atmosphere outside of the kiln, as and for the purpose specified. 4th. The combination, with a kiln and its arches, of a boiler permanently located within an arch of the kiln, a damper regulating the supply of heat from the kiln to the boiler, and means, substantially as shown and described, for closing the outer end of the boiler, as and for the purpose specified. 5th. The combination, with a kiln and its arches, of a boiler located in one of the arches, means for regulating the heat contained within the kiln in its passage to the boiler, and an air duct located beneath the boiler, in communication with the outside atmosphere and likewise in communication with the arch, beyond the inner end of the boiler, as and for the purpose set forth. 6th. The combination, with a kiln and its arches, of a boiler located therein, the body of the boiler comprising a water jacket and an inner chamber extending through from front to rear of the boiler,

doors closing the outer end of the central chamber of the boiler, a damper located within the said boiler chamber, and an air duct located beneath the boiler, in communication with the outside atmosphere and with the arch back of the boiler, substantially as shown and described, whereby the heat of the kiln is utilized for generating steam for supplying the burners, or for other purposes, as and for the purpose set forth.

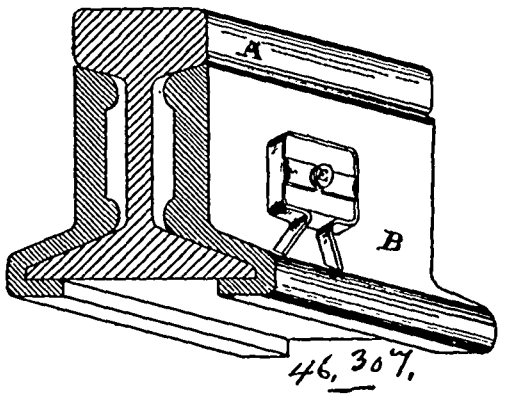
No. 46,306. Wire and Slat Fabric Weaving Machine.
(*Machine pour tisser la toile métallique.*)



Walter Clark Pratt and John Charles French, both of Lansing, Michigan, U.S.A., 9th June, 1894; 6 years.

Claim.—1st. In a slat and wire weaving machine, the combination with a frame, a reciprocating carriage thereon, a twister wheel on the carriage, a table having an even top in which a series of transverse grooves or indentations are formed, a clamping bar formed with an even under face having a series of transverse grooves cut therein, and means for actuating the clamping bar, substantially as described. 2nd. In a slat and wire fabric weaving machine, the combination of the frame B, a reciprocating carriage thereon carrying the twisters, and a movable guide bar in front of the twisters to support the slat while being entered between the wires, substantially as described. 3rd. In a slat and wire fabric weaving machine, the combination with the frame, a reciprocating carriage thereon, the twisters journalled therein, of a guide bar pivoted in front of the carriage having grooves for the reception of the lower strand of wire, the parts arranged and operating, substantially as described. 4th. In a slat and wire fabric weaving machine, the combination of the frame, a reciprocating carriage thereon, the twisters journalled therein, of a guide bar supported at the upper end on pivoted links arranged in front of the twisters in the initial position of the carriage, adapted to be rocked out of the path of the carriage in its forward movement, and a connection from the carriage to the bar, whereby it is rocked into operative position on the return of the carriage, substantially as described. 5th. In a slat and wire fabric weaving machine, the combination of the twister frame, the twisters journalled therein and consisting of tubes, binding wire spools supported on the tubes, longitudinal slots in the sides of said tubes, a twister head at the end of the tubes, rotatorily adjustable having a central aperture, and a series of apertures beside the central aperture at varying distances from the centre, substantially as described. 6th. In a slat and wire fabric weaving machine, the combination of the twisters, a drive mechanism therefor, a constantly revolving drive shaft, a drive wheel thereon connected to the drive mechanism of the twisters, a clutch between the drive wheel and shaft, means for connecting the clutch and shaft, means for automatically breaking said connection, and an adjustment for varying the period of actuation, substantially as described. 7th. In a slat and wire fabric weaving machine, the combination of the twisters, a reciprocating carriage in which they are journalled, a drive mechanism for the twisters, comprising a constantly revolving shaft, and means for intermittently connecting said twisters and shaft, substantially as described. 8th. In a slat and wire fabric weaving machine, the combination of the twisters, a reciprocating carriage in which they are journalled, a drive mechanism for the twisters comprising a constantly revolving shaft, a sprocket wheel sleeved thereon, a sprocket chain connecting the twister wheel with said sprocket wheel, and adjustable means for breaking the connection at the end of the desired movement, substantially as described. 9th. In a slat and wire fabric weaving machine, the combination with the twisters, of a drive mechanism therefor comprising a constantly revolving shaft, a clutch in the drive mechanism therefor consisting of a fixed and loose member, a drive wheel on the loose member, a spring for normally separating the members, a screw on the loose member, and a lever engaging the threads of the screw for forcing the members together, substantially as described. 10th. In a slat and wire fabric weaving machine, the combination with the twisters, of a drive mechanism therefor comprising a constantly revolving shaft, a clutch in the drive mechanism consisting of a fixed and loose member, a drive wheel on the loose member, a spring for normally separating the members, a screw on the loose member, a pivoted arm, a latch on the arm engaging the threads of the screw, and a lever for actuating the arm, substantially as described. 11th. In a slat and wire fabric weaving machine, the combination, with the twisters, of a drive mechanism therefor comprising a constantly revolving shaft, a clutch in the drive mechanism consisting of a fixed and loose member, a drive wheel on the loose member, a spring for normally separating the members, a screw on the loose member, a pivoted arm, a spring-latch on the arm engaging the screw, a lever and spring for actuating the arm, and adjustable stop for the arm, substantially as described.

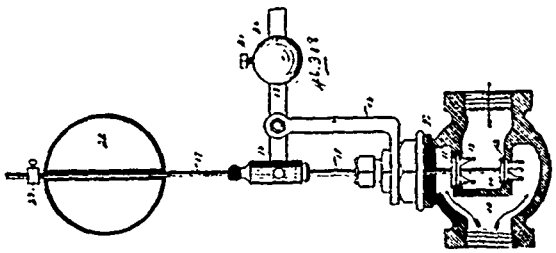
No. 46,307. Nut-Lock. (*Arrête-écrou.*)



Nicholas Edward Lister, Westfield, County of Kings, and Wellington Le Baron Hannor, St. John, County of St. John, both in New Brunswick, Canada, 9th June, 1894; 6 years.

Claim.—1st. In a nut-lock, a locking-plate formed of sheet metal so shaped and tempered as to engage snugly the edge of the nut the greater part of its circumference, and to have the ends formed as divergent legs or braces to rest upon the base of rail or base of improved fish-plate, and also to have two parts of the same metal with concave openings in ends each to reach partially across face of nut from opposite sides towards the bolt, and adapted to grasp the projecting ends of bolt immediately in front of nut, substantially as described. 2nd. The combination with the rail, the fish-plate, the bolt and the nut of the locking-plate formed and tempered to spring snugly over the nut and having two parts or legs each of which is bent part way across front of nut with ends shaped to grasp the thread on either side of bolt immediately in front of nut, and having principal ends of plate serve as legs or braces to bear upon the base of rail or improved fish-plate, in the manner and for the purposes hereinbefore set forth.

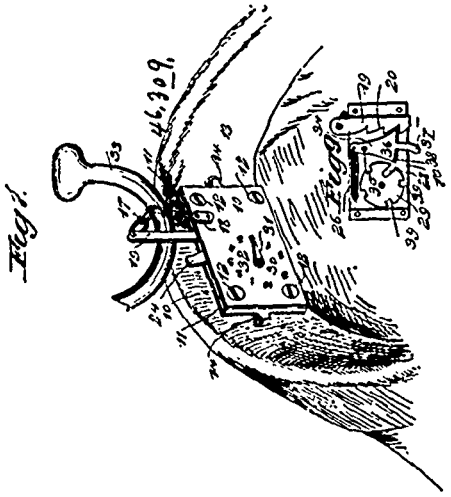
No. 46,308. Fluid Ejector. (*Ejecteur de fluide.*)



Philip Braender, assignee of Nicholas Power, both of New York, State of New York, U.S.A., 9th June, 1894; 6 years.

Claim.—1st. In an apparatus for draining cellars, the combination, with a pressure pipe, a discharge pipe, and an intermediate ejector, of a balance valve located in the pressure pipe, the valve discs of which are mounted upon a stem, the said stem being connected with a float operating the valve discs, and a counterweight connected with the valve stem, whereby the stem, the parts connected therewith and the valve discs are counterbalanced, substantially as shown and described. 2nd. In an apparatus for draining cellars and for like purposes, the combination, with a pressure pipe, and an intermediate ejector between the two pipes and in communication with the locality to be drained, of a balance valve located in the pressure pipe, an arm fulcrumed upon a fixed support and connected with the valve stem outside of the valve casing, a weight adjustably mounted upon the said arm, a float having free movement upon a continuation of the valve stem and provided with an adjustable collar, the said weight serving to accurately counterbalance the valve stem and parts directly connected therewith or carried thereby, whereby the float upon the rising or the falling of the water to predetermined points will open or close the valve, the valve remaining in the position in which it is placed by the float owing to the mechanical balancing of the valve, until the float is called upon to act, substantially as shown and described.

No. 46,309. Coat Lock. (*Cadenas pour habits.*)



John Sprague Barney and George Forrest, both of Brooklyn, New York, U.S.A., 11th June, 1894; 6 years.

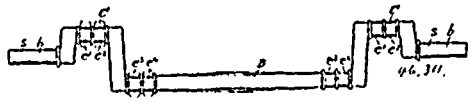
Claim.—1st. The combination, with the coat, of a lock secured thereto, and a hang chain adapted to be secured by the lock, substantially as described. 2nd. The combination, with the coat, of a lock secured thereto, the hang chain fastened to the lock, a bolt on the hang chain, and means for locking the bolt in the lock, substantially as described. 3rd. The herein described lock, comprising a case, a hang chain secured thereto, a bolt carried by the chain and mechanism in the case to engage the bolt, substantially as described. 4th. The herein described lock, comprising a case, a hang chain secured thereto, a toothed bolt attached to the hang chain and adapted to enter the lock, a tumbler pivoted in the lock and adapted to engage the bolt, and mechanism for locking the tumbler, substantially as described. 5th. The herein described lock, comprising a case open on opposite edges, a chain secured to the case, a toothed bolt carried by the chain, a tilting tumbler held in the case to engage the bolt, and the revoluble disc to lock the tumbler, substantially as described. 6th. The combination, of the lock case, the toothed bolt, the tilting tumbler having a lug on its back side, the slotted disc opposite the lug, and means for turning the disc, substantially as described. 7th. The combination, of the case having a dial thereon, the toothed bolt, the sprung-pressed tumbler to engage the bolt, the lug on the back of the tumbler, the slotted disc opposite the tumbler, a stem for the disc, and the hand on the stem arranged to move over the dial, substantially as described. 8th. The combination, of the case, the toothed bolt, the tumbler pivoted in the case and provided with a widened central portion, as shown, and the notched disc arranged behind the tumbler, substantially as described.

No. 46,310. Fruit Pitter. (*Routoire pour fruits.*)

James Levin Hall, Kingston, Massachusetts, and Frank Howard Chase, Grand Rivers, Kentucky, both in U.S.A., 11th June, 1894; 6 years.

Claim.—1st. A small fruit-pitter, or seeder, composed of a suitable handle and a series of prongs or fingers fixed side by side, in said holder, and having heads provided with shoulders or enlargements on their adjacent sides, substantially as shown and described. 2nd. A small fruit-pitter, or seeder, composed of a series of elastic prongs, or fingers attached to a suitable holder arranged side by side and having enlarged heads of double-conical form on adjacent sides, substantially as shown and described. 3rd. A small fruit-pitter, or seeder, composed of a series of elastic prongs, or fingers, secured to a suitable holder, and arranged convergently at their free ends, as shown and described. 4th. The combination, with the elastic prongs, or fingers, set in a suitable holder, of a seed discharger, consisting of a perforated plate adapted to slide on said fingers, as shown and described. 5th. The combination, with the elastic fingers set in a suitable holder and having enlarged conical heads, of the seed discharger, composed of the plate having a series of perforations which are considerably larger than the shanks but slightly narrower than the heads of said fingers, as shown and described for the purpose specified. 6th. The combination, with a series of elastic fingers arranged convergently as specified, of the seed discharger consisting of a plate having a series of holes which are elongated radially, as shown and described.

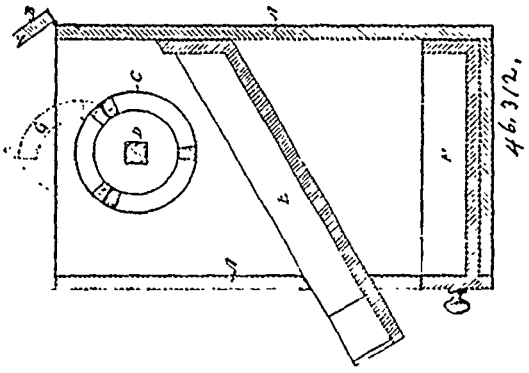
No. 46,311. Crank Shaft for Threshing Machines. (*Arbre à manivelle pour machines à battre.*)



John P. McCloskey, Sarnia, Ontario, Canada, 11th June, 1894; 6 years.

Claim.—1st. As a new article of manufacture, a crank shaft S formed with the cranks, throws or portions C^1, each of which is formed with two bearings, and a portion B, formed with four bearings for operating the decks or other operative portions of a thrashing machine, substantially as and for the purposes set forth. 2nd. A crank shaft S formed with the cranks, throws or portions C^1 and B, in combination with the boxes F^1, F^2 and F^3, F^4, for operating the decks or other operative portions of a thrashing machine, substantially as and for the purpose set forth. 3rd. As a new article of manufacture, a crank shaft S formed with the cranks, throws or portions C^1, C^2, each of which is formed with two bearings for operating the decks or other operative portions of a thrashing machine, substantially as and for the purposes set forth. 4th. A crank shaft S formed with the cranks, throws or portions C^1 and C^2, in combination with the boxes F^1, F^2 and F^3, F^4, for operating the decks or other operative portions of a thrashing machine, substantially as and for the purposes set forth. 5th. As a new article of manufacture, a crank shaft S formed with the cranks, throws or portions C^1, each of which is formed with two bearings, and a portion B, formed with four bearings, and the resistance of which portion B is regulated by increasing or reducing its weight, substantially as and for the purposes set forth. 6th. As a new article of manufacture, a crank shaft S formed with the cranks, throws or portions C^1 each of which is formed with two bearings, and a portion B formed with four bearings, and the resistance of which portion B is regulated according to the distance said portion B is out of line with the journals *b* of said crank shaft, substantially as and for the purposes set forth. 7th. As a new article of manufacture, a crank shaft S formed with the cranks, throws or portions C^1, each of which is formed with two bearings, and a portion B formed with four bearings, and the resistance of which portion B is regulated partly by increasing or reducing the weight of said portion B, and partly by increasing or reducing the distance, said portion B is out of line with the journals *b*, of said crank shaft, substantially as and for the purposes set forth. 8th. A crank shaft S, formed with the cranks, throws or portions C^1, and counterbalance portion S, in combination with the boxes F^1, F^2 and F^3, F^4, the resistance of which portion B is regulated by increasing or reducing its weight, substantially as and for the purposes set forth. 9th. A crank shaft S, formed with the cranks, throws or portions C^1, and counterbalance portion B, in combination with the boxes F^1, F^2 and F^3, F^4, the resistance of which portion B is regulated according to the distance said portion B is out of line with the journals *b*, of said crank shaft, substantially as and for the purposes set forth. 10th. A crank shaft S, formed with the cranks, throws or portions C^1, and counterbalance portion B, in combination with the boxes F^1, F^2 and F^3, F^4, the resistance of which portion B is regulated partly by increasing or reducing the weight of said portion B, and partly by increasing or reducing the distance said portion B is out of line with the journals *b*, of said crank shaft, substantially as and for the purposes set forth.

No. 46,312. Ash Sifter. (*Crible à cendres.*)

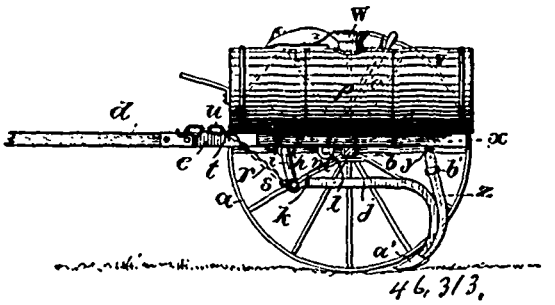


Agnes Ellen Bennett, Toronto, Ontario, Canada, 11th June, 1894; 12 years.

Claim.—1st. An ash sifter consisting of a case A, an inclined chute E located within the case A, and having a back E arranged

to close an opening formed in the front of the case A, substantially as and for the purpose specified. 2nd. An ash sifter consisting of a case A, a cylindrical sieve mounted within the case A, having a lid G hinged to the cylindrical sieve C, a spindle D for the cylindrical sieve C mounted in bearings in the sides of the case A, a lid B for the top of the case A, an opening in the front of the case A, below the cylindrical sieve C, an inclined chute E arranged to discharge the cinders through the opening in the front, a back c for the inclined chute E, arranged to close the opening in the front of the case C, and a drawer F located in the lower part of the case A to receive the ashes, substantially as and for the purpose specified.

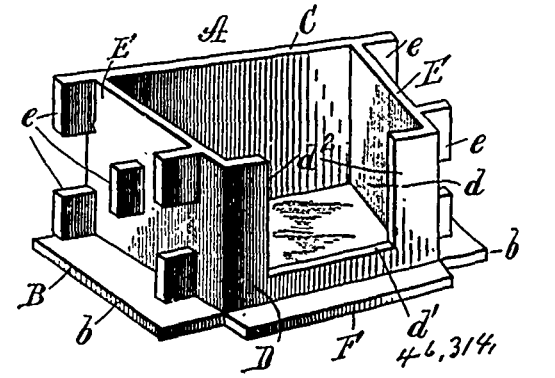
No. 46,313. Irrigating Plough. (*Charrue à arroser.*)



Joseph W. Askew, Baileyville, Texas, U.S.A., 11th June, 1894; 6 years.

Claim.—1st. In combination, with an irrigating plough, substantially as shown and described, the draft-bar g, provided with crank-arms i, plow-beams j, their front ends swivelled on said crank-arms, ratchet rod m, having chain spools n, rigidly secured thereon, ratchet lever o, rigidly secured to one end of said rod, and working in the ratchet p, chains q, having their lower ends secured to said plough-beams and their upper ends to said spools, braces k, their front ends swivelled on the crank-arms i, and their rear ends adjustably secured to the axle b, and draft chains r, having their rear ends adjustably secured to crank-arms i, and their front ends to the double-tree u, substantially as shown and described and for the purpose set forth. 2nd. In combination with an irrigating plough, substantially as shown and described, the draft-bar g, provided with crank-arms i, plough-beams j, their front ends swivelled on said crank-arms, chains q, having their lower ends secured to said plough-beams, and their upper ends to the spools n, operated by a suitable ratchet mechanism, braces k, their front ends swivelled on the crank-arms i, and their ends adjustably secured to the axle b, and draft chains r, having their rear ends adjustably secured to the crank-arms i, and their front ends to the double-tree u, substantially as shown and described and for the purposes set forth.

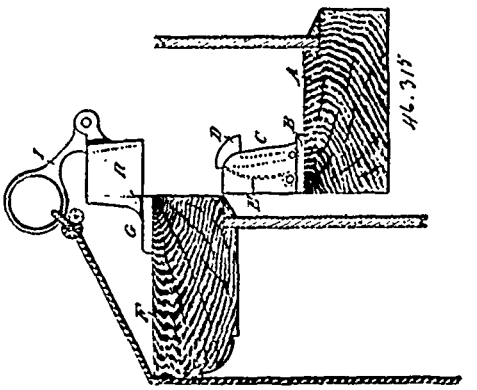
No. 46,314. Anchor Box. (*Ancre de tirant.*)



Henry A. Goetz, Albany, Indiana, U.S.A., 11th June, 1894; 6 years.

Claim.—1st. An anchor box for the ends of beams in buildings, having a base plate, and sides vertical thereto provided with lugs projecting laterally therefrom at different points distributed over the surface thereof for anchoring the box in the wall, substantially as described. 2nd. An anchor box having a rib rising slightly at the front edge of the base plate, and a horizontal flange or ledge projecting from the base plate in front of the rib and the front plate D of the box, in combination with a beam provided with a notch to receive said rib, substantially as described. 3rd. An anchor box for beams, consisting of a base and four plain vertical walls cast in one piece, the front wall open centrally and part way across to receive the beam, whereby the remainder of the wall forms a straight, solid, upright flange on each side of the beam when in place, substantially as described. 4th. An anchor box for beams, provided with sides flaring from front to rear, and a base plate provided with an upwardly projecting rib or ledge at its front edge, and a supporting flange or ledge extending from the front edge of said plate beyond and in front of said rib, substantially as described. 5th. An anchor box provided with vertical sides, having exterior anchoring lugs projecting laterally therefrom, and a base plate with an upwardly projecting rib or lugs at its front edge, in combination with a beam notched to receive said rib or lugs, substantially as described. 6th. An anchor box provided with vertical sides, having a flange at the front edge of each projecting inwardly therefrom partly across the front of the box, in combination with a beam lying between the said flanges, substantially as described. 7th. An anchor box provided with vertical sides, arranged at an angle inclining away from each other from front to rear and provided with an inwardly projecting flange at the front edge of each, in combination with a beam lying between said flanges, substantially as described.

No. 46,315. Sash Fastener. (*Arrête-croisée.*)

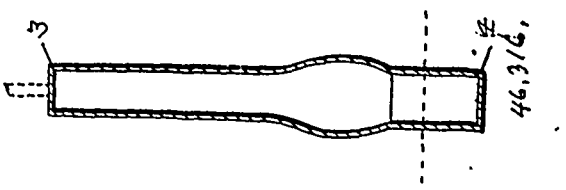


James Paul and John T. Paul, Edinburgh, William J. Roberts, Chapel, Galashiels, and Frank M. H. Young, Edinburgh, all in Scotland, 11th June, 1894; 6 years.

Claim.—1st. In a window fastener, the combination of the boxes C and H, the box C being provided with a bolt or catch D, adapted to engage the box H, and the box H provided with a releasing device for the bolt or catch D, substantially as and for the purpose set forth. 2nd. In a window fastener, the combination of the boxes C and H, adapted to fit one within the other, the box C being provided with a bolt or catch D, adapted to engage the box H, and the box H, being provided with a lever I, adapted to bear upon the bolt or catch for disengaging it from the box H, substantially as and for the purpose set forth.

No. 46,316. Method of Forming Glass Articles.

(*Machine à faire des objets en verre et ébauches pour cette fin.*)



Wilhelm Jarskouw, and Frank G. Farnham, both of White Mills, Pennsylvania, U.S.A., 11th June, 1894; 6 years.

Claim.—1st. The herein described method of forming chimneys and tumblers consisting in blowing them in one blank, of which the closed bottom of the tumbler forms the end of the blank removing one only of said closed ends and dividing the blank transversely into separate portions to form the two articles, substantially as described. 2nd. The improved blank consisting of a chimney or like article having formed there with an extension in the form of a tumbler or the like, substantially as described. 3rd. The herein described process of forming a glass tumbler or like article having a permanently closed end with another article having both ends open, consisting in forming said tumbler as an extension to said article with the openings in each continuous, and then separating them to form the open end of both articles, substantially as described.

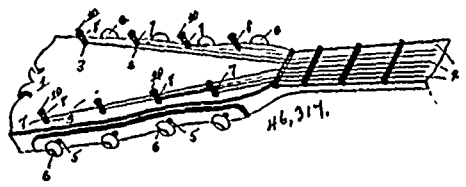
No. 46,317. String-Clamp for Musical Instruments.

(*Agrafe de cordes pour instruments de musique.*)

Edward L. Gosse, and Joseph H. Simms, both of Kansas City, Missouri, U.S.A., 11th June, 1894; 6 years.

Claim.—1st. In a string-clamp for musical instruments, the combination with a recessed post which is internally threaded and longitudinally grooved, of a sliding-block engaging said longitudinal

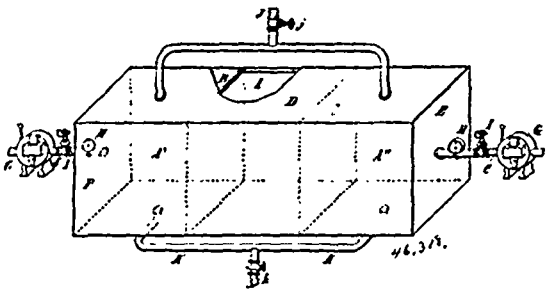
grooves, and a screw engaging said internal threads and operatively connected to the sliding-block so as to move the same in one direction or the other, substantially as set forth. 2nd. In a string-



clamp for musical instruments, the combination with a recessed post which is internally screw-threaded and provided with a roughened surface to the inner end of said recess, of a screw engaging said recess, and a block carried by said screw and adapted to force and clamp the string firmly onto the roughened surface at the inner end of said recess, substantially as set forth. 3rd. In a string-clamp for musical instruments, the combination with a recessed post internally threaded and provided with a roughened surface at the inner end of said recess, and longitudinally grooved, of a sliding-block engaging said longitudinal grooves, and provided with a tooth at its inner end, and a screw engaging said internal threads and operatively connected to said block, so as to move the same in one direction or the other, substantially as set forth. 4th. In a string-clamp for musical instruments, the combination with a post internally threaded and longitudinally grooved and apertures registering with the lower ends of said grooves, of a screw engaging said internal threads and provided with a conical projection, and a sliding-block engaging said longitudinal grooves and dove-tailed onto the conical projection of said screw, substantially as set forth. 5th. In a string clamp for musical instruments, the combination with a post diametrically recessed and externally threaded at its upper end, and having a transversely extending serrated surface at its lower end, and a collar internally threaded engaging the external threads at the upper end of the post, of a sliding block engaging said recess and provided with a transversely extending serrated surface at its lower end, and means to cause the sliding block to move downward upon and clamp the string between said serrated surfaces and means to elevate said block when desired, substantially as set forth. 6th. In a clamping device for stringed instruments, the combination with a post recessed to form two portions at opposite sides of said recess which are internally threaded, and externally threaded at their upper ends, a collar internally threaded and engaging the external threads to bind the portions from spreading, and grooves in said post extending transversely of the lower end of said recess, of a screw engaging said internal threads and provided at its lower end with a conical lug, and a clamp-bar dove-tailed onto the said lug, and provided at its lower end with teeth vertically above the transverse grooves at the lower end of said recess, substantially as set forth.

No. 46,318. Manufacture of Sugar.

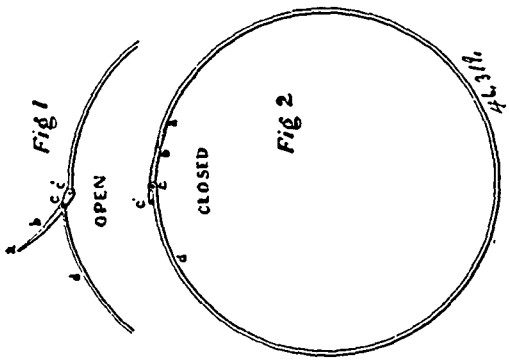
(Fabrication de sucre.)



Jean-Ercole Pelligrini, of Barcelona, Spain, 11 juin, 1894; 18 years.

Résumé.—1°. Un procédé de fabrication du sucre cristallisable par la synthèse des trois corps : acide carbonique, ethylène, eau, combinés dans les proportions indiquées par la formule 4 C, O^2, 4 C^2 H^4, 3 H^2 O, qui peut être considérée comme donnant la composition du sucre cristallisable, cette synthèse pouvant être réalisée par tout moyen approprié, permettant de combiner dans les proportions voulues, les trois corps pris comme bases. 2° En vue de réaliser d'une façon pratique, le procédé de fabrication du sucre par synthese, des trois corps, ethylène, acide carbonique, eau, ci dessus revendiqué, l'application du phénomène connu en chimie sous le nom d'osmose, et ce, quelle que soit la matière poreuse employée. 3° Un appareil permettant de réaliser la synthèse des trois corps ethylène, acide carbonique, eau, en vue d'obtenir du sucre cristallisable, au moyen de l'osmose, cet appareil étant constitué par un cube de pierre ponce platinée dans l'intérieur duquel sont pratiqués des canaux parallèles, ne traversant pas de part en part le cube, mais s'arrêtant à une certaine distance de la face opposée à celle d'où ils partent, le dit cube étant placé dans une caisse hermétiquement close, de dimensions telles, que deux chambres soient juxtaposées aux faces opposées sur lesquelles débouchent les canaux intérieurs l'éthylène et l'acide carbonique mélangés à la vapeur d'eau étant refoulés séparément dans les chambres, d'où ils pénètrent dans les canaux pratiqués dans le cube de pierre ponce platinée, pour se mélanger par osmose et donner, comme produit final, un jus sucré qui est traité ensuite par les procédés employés en raffinerie.

No. 46,319. Pneumatic Tyre. (*Bandage pneumatique.*)



George Meade and John Gardner, both of Toronto, Ontario, Canada, 11th June, 1894; 6 years.

Claim.—1st. In a pneumatic tire, the combination with the ring D, of the lever B, pivotally connected with the ends of the ring D, at the points C and C^1, substantially as and for the purpose specified. 2nd. In a pneumatic tire, the combination with the ring D, attached to the edge of the shoe or outer covering, of the lever B, pivotally connected with the ends of the ring D, at the points C and C^1, and the catch or clasp A, adapted to engage with the ring D, when the lever B is lowered, substantially as and for the purpose specified. 3rd. In a pneumatic tire, the combination with the rim of the wheel of a divided ring attached to the edge of the shoe or outer covering, one end of the ring being pivotally connected with the end of a lever, while the other end of the ring is also pivotally connected with the lever at a point nearer the free end thereof, and a catch or clasp for securing the lever in position when the ring is tightened on the rim, substantially as and for the purpose specified.

No. 46,320. Mucilage, Size and Adhesive Compound. (*Mucilage, colle et composé adhésif.*)

Charles Michael Higgins, Brooklyn, New York, U.S.A., 11th June, 1894; 6 years.

Claim.—1st. An adhesive compound composed of water, dextrine, a boron compound, and peroxide of hydrogen, substantially as described. 2nd. An adhesive compound formed of water, a boron compound, dextrine, peroxide of hydrogen, and an alkali or thickening agent, substantially as herein set forth. 3rd. An adhesive compound formed of water, borax, dextrine, peroxide of hydrogen, and an alkali, substantially as herein set forth. 4th. An adhesive compound formed first dissolving dextrine with a boron compound in water, and then adding to this solution peroxide of hydrogen, and allowing the mixture to clear and settle, substantially as herein set forth.

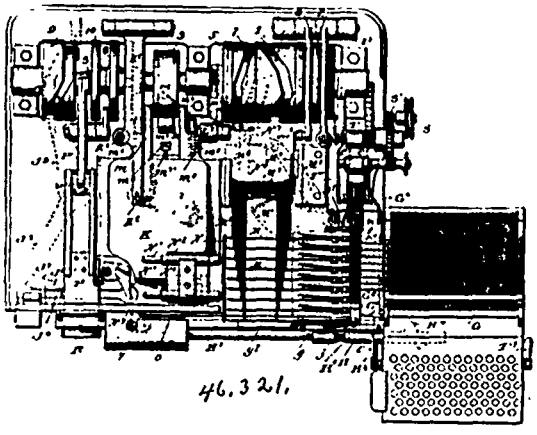
No. 46,321. Line Casting Machines.

(*Machine pour le coulage des lignes.*)

Wilber Stephen Scudder, Brooklyn, New York, U.S.A., 11th June, 1894; 6 years.

Claim.—1st. The combination in a line-casting machine having suitable operating mechanism, of a series of matrices disconnected from the machine, and each of the matrices having several different characters, less in number than the assortment used in the machine, the characters being independently usable. 2nd. In a line-casting machine, a series of matrix bars each having a body part of uniform width and thickness throughout and disconnected from the machine and each provided with a group of different characters in intaglio type, less in number than the assortment used in the machine and upon one edge thereof, the characters being independently usable, a corresponding series of aligning notches upon its opposite edge, and an individual selecting device for each species of the series. 3rd. A matrix-bar having a body part of uniform width and thickness, disconnected from the machine and having a group of different characters less in number than the assortment used in the machine of substantially the same face width, the characters being independently usable and all upon one edge thereof and having a corresponding series of aligning notches upon its opposite edges. 4th. The combination in a line-casting machine, having suitable operating mechanism, of a series of matrices constructed to be assembled side by side in different orders to form the impression line, each matrix having several different characters less in number than the assortment used in the machine, the characters being independently usable.

5th. A series of matrix-bars disconnected from the machine and each carrying a group of different characters formed in intaglio type upon one edge, each species of the series provided with a selecting



device forming part and moving with it, as a hook, differing in size from each other for each species of the series. 6th. A series of matrix-bars disconnected from the machine and having body pieces of the same length and width and each provided with a selecting device forming part of and moving with it and differing in size from each species of matrix-box. 7th. In a line-casting machine, a series of matrix-bars having body pieces of the same length and width and each provided with a selecting device forming part of and moving with the bar, and differing in size for each species of the matrix-bar, the selecting devices of the matrix bars being adapted to be arranged in the same vertical plane when said bars are assembled to form a line, and means for engaging the selecting devices of a line of matrix-bars and elevating and separating the different species simultaneously. 8th. In a line-casting machine, the combination, a matrix-bar having a group of different intaglio type impressed upon one edge, and a corresponding series of aligning notches upon its other edge, an aligning bar, and a series of stops adapted to arrest the matrix bar with any desired notch opposite the aligning bar. 8a. In a line-casting machine in which the matrices, when released, descend by gravity, an accelerating device common to a plurality of matrices, and which operates on each of said matrices only as that matrix is released to hasten its descent. 9th. In a line-casting machine, in combination, a matrix bar having a group of different intaglio type impressed upon one edge, and a corresponding series of aligning notches upon its other edge, an aligning bar, a series of stops adapted to arrest the matrix-bar with any desired notch opposite aligning bar, and a detent to prevent displacement of the arrested matrix-bar. 10th. In a line-casting machine, in combination, a matrix-bar provided with a group of intaglio type on one edge, and a corresponding series of aligning notches upon its outer edge, an aligning bar adapted to engage any one of the notches, a series of adjustable stops adapted to arrest the matrix-bar with any desired notch opposite the stationary aligning bar, and means for pushing the matrix-bar from the stop and into engagement with the aligning bar. 11th. In combination in a line-casting machine having a race-way, a matrix-bar provided with a group of intaglio type on one edge, and a corresponding series of aligning notches on its other edge, an aligning bar constructed to be engaged by any one of the notches, a series of adjustable stops adapted to arrest the matrix-bar at any aligning point, and means for pushing the matrix-bar from its supporting stop horizontally into the race-way and into engagement with the aligning bar and a spring detent at the entrance to the race-way for preventing the return of the matrix-bar. 12th. In combination in a line-casting machine, having a race-way, a series of matrix bars, each having a group of intaglio type on one edge, and a corresponding series of aligning notches on the other edge, an aligning bar constructed to be engaged by any one of the notches, a series of adjustable stops adapted to arrest any matrix-bar at the aligning point, means for advancing the matrix bars from their stops into the race way, and into engagement with the aligning bar, a spring detent at the entrance to the race way to prevent the return of the matrix-bars, and a spring yielding abutment against which the forward end of the line bears during the assembling operation. 13th. In a line-casting machine, the combination of a matrix-bar formed with intaglio type on one edge, corresponding aligning notches on its opposite edge, a stationary aligning-bar, a vertical series of stops corresponding with the aligning notches of the matrix-bar, a finger-key and connected mechanism for projecting any one of the stops into the path of the matrix bar, and means for subsequently engaging the matrix bar with the aligning-bar to bring the desired character into line. 14th. In a line-casting machine, the combination with the plurality of matrix-bars each provided with a group of different type in intaglio upon its front edge, and a corresponding series of aligning notches upon its rear edge, a stationary aligning-bar, a vertical series of stops corresponding with the aligning notches, means as finger-keys and connections whereby the desired stop can be projected into the path of the matrices, and means for engaging the liberated matrix-bar with the aligning-bar, whereby the selected character upon each matrix-bar is brought to a uniform line. 15th. The combination with the series of matrix-bars each having a group of type on its edge, of a magazine having a chamber for and adapted to contain a plurality of each species of the series, means for separately delivering either species of matrix-bars, a series of stops corresponding to the characters upon the matrices, finger-keys and connected mechanism whereby any desired stop can be projected into the path of and any one of the matrix-bars delivered upon said stop. 16th. The combination of a series of matrix-bars each having a similar number of intaglio type upon one edge, and corresponding aligning notches upon its rear edge, a magazine having a separate chamber for each species of matrix-bar, and means for delivering them separately in a vertical path, an aligning-bar, a series of stops corresponding in number to the characters on the matrix bar, means for discharging the matrix-bar from the magazine, and means for projecting any one of the stops into the path of the matrix-bar for arresting it at the desired point. 17th. The combination with the matrix-bar magazine, the assembly-box, and mechanism for delivering a selected matrix from the magazine to the assembly-box, of a series of stops, mechanism whereby the appropriate one of said stops is projected into the path of the delivered matrix to arrest its descent, and a detent to prevent displacement of the arrested matrix. 18th. A series of matrix-bars, each having a body piece of the same height and width, but differing in thickness, and an upwardly extending hook of different height for each species of matrix-bar, a magazine having a separate chamber for each species of matrix and a wire for sustaining the same by their hooks, a channel leading from each chamber to adjacent delivery points, and a gate in each channel, said gate acting in its forward movement to project a matrix-bar to a delivery point, and hold it there and in its rearward movement to release the same for use. 19th. A matrix-bar magazine comprising separate chambers for each species of matrix, a delivery channel extending at right angles from each chamber to the point of delivery, and an assembling box below the delivery point and receiving the matrix-bars from all the channels 20th. A matrix-bar magazine having separate chambers for each species of matrix, a delivery channel extending from each chamber to the point of delivery, each delivery channel being at right angles to the matrix-bar chambers, and an assembling box below the delivery point and receiving the matrix bars from all the channels. 21st. A matrix-bar magazine having separate storage chambers for each species of matrix arranged at right angles to the storage chambers, a delivering device in connection with each channel, and a vibrating device in each channel arranged to keep the matrix-bar in position to engage the delivering device. 22nd. A magazine for storing matrix-bars having a separate chamber for each species of matrix-bar, a delivery channel extending at right angles from each chamber to the point of delivery and normally charged with matrix-bars, a delivery device in connection with each channel, and a spring for accelerating the delivery of the matrix-bar. 23rd. In combination with a magazine comprising a separate chamber for each species of matrix-bar, a separate delivery channel extending at right angles from each chamber to the delivery point, the assembling box arranged to receive matrix-bars from all the channels, the race-way extending from the assembling box, an automatic detent at the entrance of the race-way, and an ejector for opening the assembling box and ejecting the matrix-bars beyond the detent and into the race-way. 24th. In combination, a matrix-bar magazine, delivering devices for the separate species of matrix-bars, a vertical channel extending downwardly from the adjacent delivery points of the respective channels, an assembling box at the lower part of the vertical channel, and a series of stops, any one of which is adapted to be temporarily interposed in the assembling box to stop the descending matrix-bar at the desired point. 25th. The combination with the magazine, the matrix-bar delivering channels at right angles thereto, the delivering devices, the assembling box, the adjustable stops, a race-way extending at right angles thereto, a carriage for receiving the matrix-bars and an ejector for opening the assembling box and delivering the matrix-bar to the carriage. 26th. The combination of the assembly box, the series of stops adapted to be projected therein, the matrix-bar magazine, the delivery gates therefor, the ejector, and the bell crank lever and its cam connected to and adapted to operate in connection with the delivery gates and the ejector, substantially as and for the purposes hereinbefore set forth. 27th. A distributing device for matrix-bars and the like comprising carriers, and means for arranging them in one plane, when in receiving position and for separating them into other planes to deliver different species of matrix simultaneously. 28th. A distributor device for matrix-bars and the like, differing in species comprising carriers and means for arranging them in one plane when in receiving position at the race-way, to engage all the matrix-bars of a line, and for separating the carriers and matrix-bars into other planes, according to species, and to deliver the matrix-bars simultaneously to their proper magazines. 29th. A distributing device for matrix-bars and the like constructed to receive a line of matrix-bars in the path or race-way where they are assembled, and raise them therefrom and separate them into different horizontal planes and deliver them properly separated, and simultaneously to the magazines whence they were taken. 30th. In combination, the

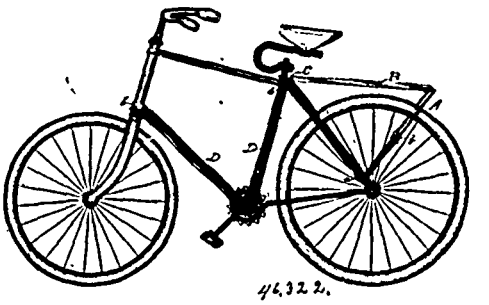
chambered magazine, a distributor having a matrix-bar engaging wire for each chamber, said wires being carried upon radially moving arms or levers, constructed to swing them from the chambers to proper position in the path or race-way for receiving the hooks of the matrix-bars, and by a reverse movement to elevate and separate the different species of matrix-bars for delivery, each to its proper chamber of the magazine. 31st. The combination of the matrix-bar separate chambers for each species of matrix-bar, a supporting wire in each chamber upon which the matrix-bars are sustained, a series of radially moving distributing arms or levers each provided with a distributing wire arranged to register with the corresponding wire of a magazine chamber when in its elevated position, and means for depressing said distributor arms to bring the distributor wires into a vertical plane over the race-way, to engage the selecting hooks of the several species of matrices. 32nd. The matrix-bar distributer in combination with the chambered magazine, the distributor having a radially moving arm for each species of matrix-bar, said series of arms each carrying a distributor wire, means for moving said arms, said arms being so pivoted and proportioned each to the other that in their downward position they will occupy a vertical plane above the race-way, and means for moving said arms upward whereby upon such movement the arms will be separated horizontally, so as to register each with its corresponding chamber of the magazine, thereby elevating and separating the matrix-bars according to species, and a pusher for wiping the matrix-bars from the distributor wires into the storage chambers of the magazine. 33rd. In a line-casting machine having a race-way for the matrices, a magazine having a separate chamber for each species of matrix-bar, matrix-bars divided into species each having a selecting device different from the other, distributing wire carriers normally registering each with a chamber of the magazine, and operating mechanism for first moving the distributing wire carriers to a position above the race-way where they will automatically receive the selecting devices of the matrix-bars in the race-way and then changing their position to separate and transfer the matrices each to its proper magazine chamber. 34th. In a line-casting machine having a race-way and a carriage for moving the assembled line along the race-way, the combination with the distributor, the aligning bar, and the line carriage, of mechanism for depressing the matrix-bars and spacers to predetermined levels after the casting operation and before they engage the distributor, and aligning-bar retracting mechanism and carriage-spreading mechanism, which operate to withdraw the aligning-bar from engagement with the matrix-bars, and to loosen the hold of the carriage on the line, before the depressor acts thereon. 35th. The combination, the key levers, the matrix-bar releasing mechanism and the interchangeable slide bars connecting the key levers and matrix-bar releasing mechanism. 36th. In combination, the key levers, the matrix-bar releasing mechanism and stop-bars, and the interchangeable slide-bars connecting the key levers, the matrix-bar releasing mechanism and the stop-bars. 37th. In a line-casting machine, the combination, with the finger key levers, the stop-bars and the matrix-bar delivering mechanism all in fixed relation, of interchangeable slide-bars extending between the key levers, the stop-bars and the matrix-bar delivering mechanism to be operated. 38th. In combination, the finger key levers, the rocker rods, the stop bars, and the slide-bars connecting the key levers with the mechanism to be operated, said slide-bars each provided with distinctive means for engaging predetermined combinations of stop-bar and matrix-bar delivering mechanism and arranged to be interchangeable with the key levers. 39th. In combination, the finger key levers, their rear ends arranged in line across the key-board, the matrix-bar releasing mechanism also in line across the key-board, the stop-bars in line across the key-board, and the slide-bars interchangeable with the key levers and each provided with extensions arranged to engage predetermined combinations of stop-bar and matrix-bar releasing mechanism, wherever located in their field. 40th. In combination, the non-changeable finger key levers stop-bar and matrix-bar delivering mechanism, the assembly box into which the stop-bars are projected and which is arranged to receive the matrix-bars, and a series of interchangeable connecting bars intermediate the key levers, stop-bar and matrix-bar delivering mechanism, and each provided with a selecting device or devices for projecting the desired stop into the assembly box and releasing the desired matrix-bar. 41st. In combination, the chambered matrix-bar magazine, the delivering channels, the spring actuated delivery gates, the retracting device actuated by and restoring said gates to their operative positions, the spring detents for holding said gates, the slide bars E^2, each provided with extensions for rocking a rod and projecting a stop-bar and releasing the desired matrix-bar and arresting it at the desired point, and the key levers for actuating the said slide-bars and with which they are interchangeable.

No. 46,322. Mud-Guard for Bicycles.

(*Garde-crotte pour bicycles.*)

Marius E. Griswold, Chicago, Illinois, U.S.A., 11th June, 1894; 6 years.

Claim.—1st. The herein described mud-guard for bicycles, consisting of the combination of the folding frame A removably attached to the rear fork, and the band B attached to said frame and to the frame of the machine, all substantially as shown and described. 2nd. The herein described mud-guard for bicycles, consisting of the elastic band D, passing under the treadle yoke, having the hooks d, d^1 on each end, one of which is attached at or near the saddle, and the other to the front fork, all substantially as shown and described. 3rd. The herein described mud-guard for bicycles,



consisting of the combination of the folding frame A removably attached to the rear fork, the band B attached to said frame and to the frame of the machine and the elastic band D, one end of which is attached at or near the end of B, and which passes under the treadle yoke, the other end of which is attached to the front fork, all substantially as shown and described. 4th. The herein described mud-guard for bicycles consisting of the combination of the elastic folding frame A, removably attached to the rear fork, having the sliding joints b therein, and the band b, one end of which is attached to said frame, and the other end of which carries a hook C, all substantially as shown and described. 5th. The herein described folding frame for a mud-guard, consisting of the two jointed rods, each having a hook or bracket a, adapted to embrace the fork of the machine, all substantially as shown and described.

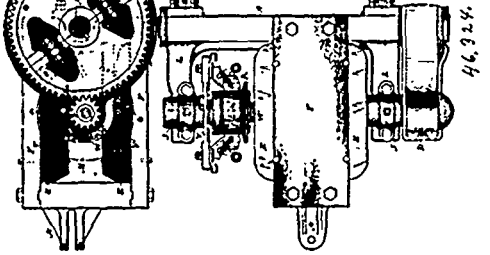
No. 46,323. Process of Extracting Fluids from Mosses. (*Procédé pour extraire les fluides de la mousse.*)

Thomas E. Wallace, St. John, New Brunswick, Canada, 11th June, 1894; 6 years.

Claim.—The art or process of preparing moss by steam, substantially as described, the effect of which is to make it capable of being easily pressed or squeezed to extract the moisture from it and thus dried, and when so treated and dried it becomes a tougher, more springy, spongy and cleaner product, capable of absorbing large quantities of water or other fluids easily and rapidly, and more marketable for the uses to which it is applied.

No. 46,324. Electric Motor for Street Cars.

(*Moteur électrique pour chars de rue.*)



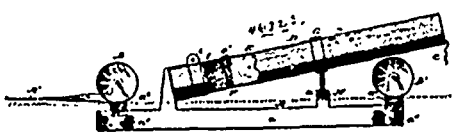
Elihu Thomson Swampscott, and Edwin W. Rice, jr., Lynn, both in Massachusetts, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. An electric motor for railway cars, comprising a field magnet frame having journal-bearings S S, for the axle, projecting arm, projecting-arm extensions L L^1, for the armature-bearings J J^1, and interiorly-projecting poles V V^1, arranged in pairs above and below the armature, field-coils E E, surrounding the respective pairs of poles, and an armature M, substantially filling the space inclosed by said poles and field-coils and geared to the axles through a single reduction-gearing comprising a pinion P^1, on the armature-shaft and a gear-wheel Q, on the axle. 2nd. An electric motor for railway cars, consisting of the comparatively flat and shallow magnetizable frame having pairs of salient poles projecting inwardly from its upper and lower portions, the field-coils surrounding the poles and forming a space or recess bounded partly by both poles and coils, and an annular armature wound with coils and substantially filling said space, said armature being journalled in the frame and geared to the axle through a single reduction-pinion and spur-wheel gearing, as described. 3rd. An electric motor for railway cars, having field-coils surrounding the armature, and a field-magnet frame inclosing both field-coils and armature, and having polar projections extending between the coils and the arma

ture, so as to separate them and hold the coils from contact with the armature. 4th. An electric motor for railway cars, having field-coils surrounding the armature and a field-magnet frame inclosing both field-coils and armature, and having polar projections extending between the ends of the field-coils and the periphery of the armature, so as to separate them and hold the coils from contact with the armature. 5th. An electric motor for railway-cars having field coils surrounding the armature, so as to directly polarize the same, and a field-magnet having inwardly-projecting poles extending substantially through the coils, so as to effectually separate and support the ends of the field-coils from the cylindrical portion of the armature. 6th. The combination, in an electric motor, of an outer magnetic mass or frame having pairs of salient poles projecting inwardly therefrom, at opposite points, with a field-coil inclosing each pair of poles, and an armature substantially filling the space bounded by the poles and coils and projecting beyond the coils, the said poles extending between the armature and field-coils, so as to mechanically separate them. 7th. The combination, in an electric motor, of an outer magnetic mass or frame having pairs of salient poles projecting inwardly therefrom at opposite points, with a field-coil surrounding each pair of poles, an armature substantially filling the space bounded by poles and coils, the commutator to one side of the field-coils, and the armature connections brought from the body of the armature in toward the shaft, so as to avoid the field-coils, and then led back and out to the commutator-segments, and means, such as binding, for holding in the contracted portions of the said connections. 8th. In combination with the railway car motor casing partly open on its under side, the sliding panel normally closing the open portion. 9th. The railway motor casing having an opening in its under side and a door closing said opening.

No. 46,325. Pyrotechnic Railway Danger Signals.

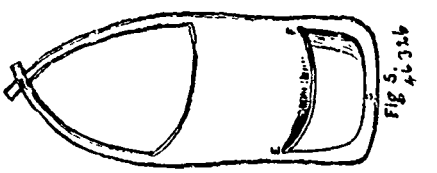
(Signal de chemin de fer pyrotechnique.)



Frank A. Fox, New York, Arthur P. Yates, Syracuse, David H. Roberts, New York, all in the State of New York and Albert M. Fox, Fostoria, Ohio, all in the U.S.A., 12th June, 1894; 6 years.

Claim.—1st. A pyrotechnic railroad danger signal comprising a suitable carriage adapted to travel along the railroad rail or rails and carrying an inflammable substance serving the double purpose of impelling the device along the track and emitting a continuous light, substantially as described. 2nd. A pyrotechnic railroad danger signal comprising a suitable carriage adapted to travel along the railroad rail or rails and provided with a receptacle charged with an inflammable substance adapted to serve as a propelling means and at the same time emit a continuous light as the device moves over the track, substantially as described. 3rd. A pyrotechnic railroad danger signal comprising the carriage composed of a pair of longitudinal disposed bars suspended on opposite sides of a single rail from light rollers resting upon and extending across the top of the rail, so as to afford a broad bearing surface thereon, a tubular case mounted on said carriage and containing a suitable charge of inflammable material adapted when ignited to impel the carriage and also emit a signal light and a further charge of similar material adapted to emit a coloured light, substantially as described. 4th. In a pyrotechnic railroad danger signal, the combination of a pair of longitudinally disposed frame-bars adapted to straddle a railroad rail and provided with lugs or friction devices to impinge against the sides of the rail, a pair of rollers mounted upon said frame-bars, transversely thereof, and adapted to rest upon the top of the rail and hold said bars suspended therefrom so as to balance and steady the device as it moves along the rail, and means for impelling the device along the track, substantially as described. 5th. In a pyrotechnic railroad danger signal, the combination with the longitudinal frame bars having the rocket or case mounted thereon charged with an inflammable impelling and light-giving substance, of the rollers arranged transversely of said bars and above the same so as to travel along the top of the rail with the bars suspended and balanced one on either side of the rail, substantially as described. 6th. A rocket signal comprising a suitable carriage adapted to be impelled along the track rail or rails, a cylinder or a case charged with an inflammable substance adapted to emit light and also impel the device along the track, and a torpedo-supporting tongue extending in front of said carriage, substantially as described. 7th. A rocket signal comprising a carriage adapted to be mounted upon the track rail or rails and balanced thereon, a cylinder or case charged with an inflammable impelling and light-giving substance mounted on said carriage and inclined rearwardly and upwardly from front to rear thereof, and a torpedo-supporting projection or tongue extending in front of the carriage, substantially as described. 8th. A railroad danger signal consisting of a pair of bars arranged to straddle a single track rail, a pair of light rollers arranged transversely of and above said bars, a tubular casing detachably supported upon the carriage in a rearwardly and upwardly inclined position, and forwardly projecting torpedo-supporting tongue, substantially as described.

No. 46,326. Children's Bib. (*Bavette.*)



Mariam Elizabeth Raine, Vancouver, British Columbia, Canada, 12th June, 1894; 6 years.

Claim. The making in or attaching to a child's bib 1, the pocket H, with the stiffner or band L, in the top part thereof from E to F, substantially as and for the purposes hereinbefore set forth.

No. 46,327. Process of Tawing Hides or Skins.

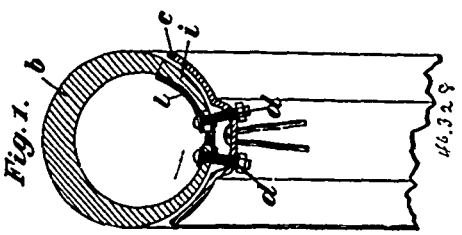
(*Procédé de mégisser les peaux.*)

William Zahn, Newark, New Jersey, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. In the art of tawing skins or hides, the herein described composition, consisting of chrome alum, sulphide of sodium and sulphide of potassium, substantially as set forth. 2nd. In the art of tawing skins or hides, the herein above described composition, consisting of chrome alum and a sulphide of an alkali, or earth alkali, substantially as set forth.

No. 46,328. Tire for the Wheels of Cycles.

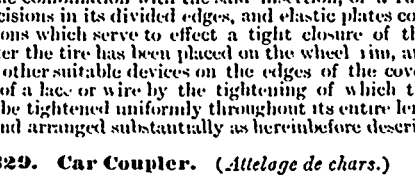
(Bandage pour roues de cycles.)



Josef T. Poplawsky, Bremerhaven, German Empire, 12th June, 1894; 6 years.

Claim.—1st. The improved construction of tyre for the wheels of cycles constructed and arranged, substantially as hereinbefore described. 2nd. In a tire for cycle wheels, as a substitute for an air chamber, a ring-shaped metallic insertion of spiral form closed upon itself, the separate convolutions of the said insertion being made corrugated or undulating for the purpose of giving it great strength and considerable elasticity, the said insertion being constructed in one or more lengths suitably connected together, so that in case of damage to the insertion it can readily be repaired or replaced, constructed and arranged substantially as hereinbefore described. 3rd. In a tire for cycle wheels, having an elastic insertion as specified in claim 1, the combination with the said insertion, of a rubber cover having incisions in its divided edges, and elastic plates covering the said incisions which serve to effect a tight closure of the said incisions after the tire has been placed on the wheel rim, and having eyelets or other suitable devices on the edges of the cover for the reception of a lace or wire by the tightening of which the rubber cover can be tightened uniformly throughout its entire length, constructed and arranged substantially as hereinbefore described.

No. 46,329. Car Coupler. (*Attelage de chars.*)

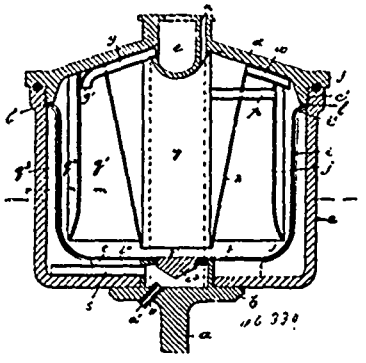


Frederick Knowlson and William Curtis, both of Lindsay, Ontario, Canada, 12th June, 1894; 6 years.

Claim.—A car coupling comprising an ordinary draw-bar and link, coupling-pin C, frame G, bolt E, having a bevelled end to ride

or press down the inner end of the link, spring D, and pin F, all formed, arranged and combined as and for the purpose hereinbefore set forth.

No. 46,330. Centrifugal Creamer. (*Crémeuse.*)



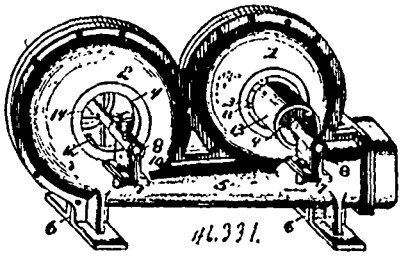
Olof Ohlsson, Newark, New Jersey, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. The combination in a centrifugal creamer, with a rotary bowl *c*, of a cup-shaped partition *i*, removable from said bowl, and a cover *d*, having partitions removable from said bowl *c* therewith, said cup-shaped partition and partitions of the cover forming chambers or compartments in the main chamber of the bowl, said partitions being provided with ducts or passages for the milk, cream and skim milk, all substantially as and for the purposes set forth. 2nd. In a centrifugal creamer, the combination with the rotary bowl and its cover, the partition *j* and *i* inclined oppositely, the outer walls of said partitions being inclined towards passages *p* and t^1 leading to the centre of the main chamber, and the inner walls of said partitions being outwardly inclined toward outwardly extending blue or skim milk passages or ducts j^1, i^1, substantially as set forth. 3rd. In a centrifugal creamer, the combination with the rotary bowl and its cover, the partitions *i*, *j*, having oppositely inclined side walls and passages or openings there through for the cream and skim milk, the inner walls being inclined toward the skim milk passages and the outer walls to the cream passages, one of said partitions being secured to the cover and being removable therewith, and the other resting in the bowl *c*, and being removable from said bowl, substantially as set forth. 4th. In a centrifugal creamer, the combination with the centrifugal bowl and its cover, of a plurality of partitions arranged one with the other and forming a series of vertical chambers or compartments which extend from one end of the bowl to the other, as shown, wings for imparting rotary movement in the fluid, inlet ducts for the milk or unseparated fluid to the bowl, exit ducts for the partially separated skim or blue milk from the inner chambers to the outer chambers of the series and cream inlets from each of the other chambers to the inlet chamber, substantially as set forth. 5th. In a centrifugal creamer, the combination with the centrifugal bowl *c*, of a cover *d*, having a partition *j* extending down from the said cover and forming inner and outer compartments, and a partition *i* extending from the bottom upward and subdividing the outer chamber, the said partitions *i* and *j* forming a series of cream separating chambers, and each having ducts or passages for leading the blue or partly separated fluid outward from the inner to the next outer chamber, and with ducts or passages leading inward from the outer chamber to the cream chamber at the centre, and means for supplying the creamer with the unseparated fluid, substantially as set forth. 6th. The combination with the partitions *i* and *j*, extending upward through the bowl of a centrifugal creamer and forming a series of chambers q^1, q^2, q^3 therein, of a tube *p* extending through the partition *j*, and leading the cream from the chamber p^2 to the cream wall, a ducts leading the blue milk from the inner chamber q^1 to the chamber q^2, and from the chamber q^2 to the chamber q^3, ducts for leading the cream from the chamber q^3 to the cream wall, and ducts for conveying the unseparated fluid to the creaming chamber, and for leading blue milk from the machine, substantially as set forth. 7th. In combination with the bowl of a centrifugal creamer and its cover, a plurality of partitions concentrically arranged one within the other, and having alternating blue milk eduction passages, and inwardly leading cream passages from each of the chambers formed by said partitions, substantially as set forth.

No. 46,331. Blower. (*Souffleur.*)

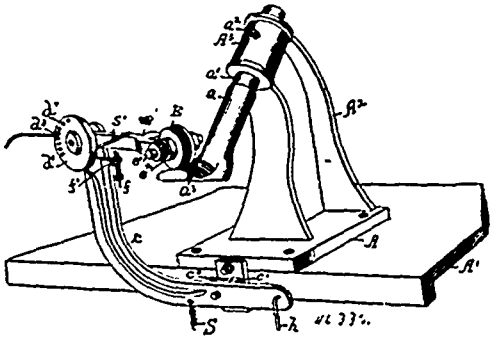
George A. Spang, Tonawanda, New York, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. A blower having a plurality of fans disposed in tandem, and a common discharge or outlet arranged tangentially to said fans, substantially as specified. 2nd A blower having a plurality of fans, and a common discharge or outlet arranged tangentially to and upon the same side of said fans, substantially as specified. 3rd. A blower having a plurality of fans disposed in tandem and arranged in independent fan-casings provided respectively with air-inlets, and a common discharge or outlet arranged tangentially to the fans, substantially as specified. 4th. A blower having a plurality of fans, and a common discharge or outlet arranged at a tangent to said fans, the shaft of the rear fan being



arranged in a plane below that of the shaft of the front fan, whereby the rear fan discharges in a plane lower than the front fan, substantially as specified. 5th. A blower having a plurality of fan-casings, and a common discharge or outle connecting said casings and arranged at a tangent thereto, a separating wall arranged between the fan-casings and extending below the plane of the upper side of said discharge or outlet, and rotatary fans located respectively in the said casing, each casing being provided with an air inlet, substantially as specified.

No. 46,332. Machine for Creasing Boot and Shoe Uppers. (*Machine à faire des plis dans les empeignes des chaussures.*)



George Knight, Brocton, Massachusetts, U.S.A., 12th June, 1894; 6 years.

Claim. 1st. The combination with a horn to enter and support a boot or shoe to be creased, of a fixed support, a creasing tool, a carrier therefor attached to said support and movable thereon in a line parallel with the desired lines of the creases, whereby movement of said carrier causes said tool to be moved across said horn in the lines of and to form said creases in the boot or shoe upon the horn, and means to move said carrier, substantially as described. 2nd. The combination with a fluted horn to enter and support a boot or shoe to be creased, of a fixed support, a roller creasing tool, a carrier therefor attached to said support and movable thereon in a line parallel with the lines of the flutes in said horn, whereby movement of said carrier causes said tool to be moved across said horn and in the lines of the flutes therein to form creases in the boot or shoe upon the horn, and means to move said carrier, substantially as described. 3rd. A creasing machine, consisting of a fluted horn, a fluted roller creasing tool, a fixed support, a carrier attached thereto and movable in a direction parallel with the lines of the flutes in said horn, an arm pivoted to said carrier, and in the free end of which said roller creasing tool is journalled, and means for moving said carrier to cause said tool to follow in the lines of the flutes in said horn to crease a boot or shoe upon the latter, substantially as described. 4th. In a creasing machine of the class described, a flute horn, a fixed support, a carrier attached to said support and movable thereon in a line parallel with the lines of the flutes in said horn, an arm pivoted to said carrier, and a creasing tool mounted in the free end of said arm, combined with a spring to press said tool towards the fluted surface of said horn, and means to move said carrier to cause said tool pressed into the flutes in the horn to be moved in the lines of said flutes to crease a boot or shoe placed upon said horn, substantially as described. 5th. In a creasing machine of the class described, a base, a standard thereon having an angularly positioned head, a horn adjustably mounted in said head and held thereby in an angular or inclined position, combined with a pivoted carrier, an arm as *e* pivoted to said carrier, a creasing tool on the end of said arm, and a spring to press said tool towards the fluted surface of said horn, substantially as described. 6th. In a creasing machine of the

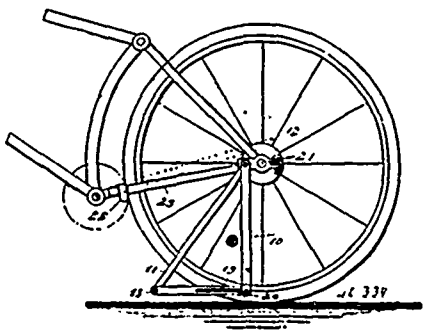
class described, a base, a fluted horn carried thereby, a plate b^1 pivotally connected to said base, combined with a carrier pivoted to said plate, an arm as c pivoted to said carrier, a creasing tool on the end of said arm, and a spring to press said tool towards the fluted surface of said horn, substantially as described. 7th. In a creasing machine of the class described, a horn, combined with a pivoted carrier c, a creasing tool, and a supporting arm therefor pivoted to said carrier, the spring s, the disc d provided with a series of holes, and the pin d^3 all to operate, substantially as described. 8th. In a creasing machine of the class described, a base, a horn carried thereby, a pivot stud b^3 attached to said base, a creasing tool and the carrier c therefor having a slot, and a collar b^4 in said slot and clamped to said pivot stud, all to operate, substantially as described.

No. 46,333. Art or Process of Purification and Decoloration of Saccharine Solutions. (*Art de purifier et décolorer des solutions sucrées.*)

Peter H. Vander Weyde and Orazio Lugo, both of New York, State of New York, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. The process herein described which consists in the treatment of saccharine solutions with nascent hydrate oxide of aluminum generated by an electric current. 2nd. The treatment of saccharine solutions by an electric current introduced by an anode of aluminum, substantially as and for the purposes described.

No. 46,334. Safety Bicycle Stand.
(*Support pour bicycles.*)



Clayton J. Whipple, Waterloo, Iowa, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. A portable bicycle stand, comprising a clamp or attaching device, and a triangular support pivoted thereto, and formed of three pivotally connected members, the base member having a sliding connection with one of the side members, whereby the three members may be folded parallel with each other, substantially as set forth. 2nd. A bicycle stand comprising a clamp, side pieces pivoted to the clamp, and a slotted base piece connecting the free ends of the side pieces and held to slide on one of its pivot pins, substantially as described. 3rd. A bicycle stand comprising a clamp having a socket therein, and a clamping bolt to compress the socket, side pieces pivoted on opposite sides of the clamp, and a slotted base piece connecting the free ends of the side pieces and held to slide on one of its securing pins, substantially as described. 4th. The herein described holder for holding the stand raised, the same consisting of plates and means for clamping the same on the bicycle frame, the plates having opposite bends to accommodate the frame, opposite bends to accommodate the stand and flanged free ends, substantially as described. 5th. The combination with a bicycle stand of a clamp for securing the stand to a bicycle, said clamp having a proper formation to accommodate a member of the bicycle frame, and adjustably and pivotally connected with said stand, substantially as described.

No. 46,335. Manufacture of Hygienic Garments.
(*Fabrication de vêtements hygiéniques.*)

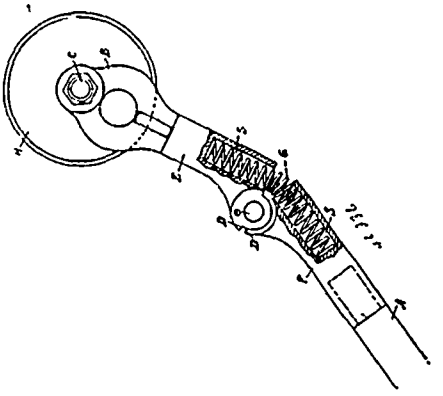
Ferdinand Linneborn, Hagen, Germany, 12th June, 1894; 6 years.

Claim.—Hygienic underclothing characterized by inner threads of linen and outer threads of wool forming a fabric capable of production in the piece or in the form more or less of the desired garment or other article, constructed and arranged substantially as hereinbefore described.

No. 46,336, Trolley Arm. (*Bras de trollées.*)

Arthur H. Smith, London, Ontario, Canada, 12th June, 1894; 6 years.

Claim.—1st. As a new article of manufacture, a trolley arm, formed with a supplemental jointed swinging outer end portion, substantially as shown and described and for the purpose set forth. 2nd. A trolley arm formed with a supplemental jointed swinging outer end portion, and the application of a spring to said outer end portion, to cause the latter to swing in contact with the electric feed wire, substantially as shown and described and for the purpose set forth. 3rd. A trolley arm, formed with a jointed outer end E, F, in which are formed the sockets S, S, and shoulders D, D, in combi-



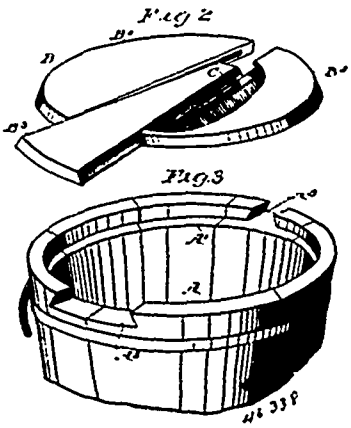
nation with a spring G, substantially as shown and described and for the purpose set forth. 4th. A trolley arm, formed with a jointed outer end E, F, in which are formed the sockets S, S, and shoulders D, D, and the spring G, in combination with a bracket B, and trolley wheel H, substantially as shown and described and for the purpose set forth.

No. 46, 337. Manufacture of Hard Soap.
(*Fabrication de savon dur.*)

Natali Osuchowski, Varsovia, Poland, and Alexander Sigismund Zwierzchowski, Paris, France, 11th June, 1894; 6 years.

Claim.—1st. The improved manufacture of hard soap without unsalting which consists in boiling fatty and oily matters either separately or in combination with alkali on a slow fire without at first adding water, whilst afterwards water it added in small successive quantities to the frothing mass till it ceases to froth and becomes uniform and transparent, finally drying and pressing in moulds. 2nd. Hard soap composed of pure oxide of potash, free from water, and dry beef, fat, crude or melted in substantially the proportions specified and treated as described. 3rd. The process of rapid saponification of the neutral fats by means of alkaline carbonates at a low temperature such as from 90° to 120° consisting in boiling the fats with alkaline carbonate lyes without addition of water in the first instance, while towards the end small quantities of water are added by degrees until the mass ceases frothing, substantially as described. 4th. Hard soaps containing as ingredients fatty and oily matters that have been boiled either separately or in combination with alkali, without at first adding water whilst afterwards water has been added in small successive quantities to the frothing mass till it ceases to froth and become uniform and transparent after which it was dried and pressed in moulds.

No. 46,338. Cover for Receptacles for Butter and other Articles. (*Couvercle de réceptacle à beurre ou autres.*)



Henry C. Carter, East Orange, New Jersey, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. The combination, with a receptacle having its open end provided with a croze and opposite dove-tail grooves, which are of different size and located above the croze, of a cover composed of side sections adapted to fit in said croze, and an intermediate wedge-shape section having bevelled sides which fit in said grooves, and

means for connecting the several sections, whereby the middle one is slidable between the others, yet remains engaged therewith, as shown and described. 2nd. The combination, with a receptacle having a croze and its upper edge grooved or slotted transversely, at diametrically opposite points, the sides of the grooves being undercut to form a dove-tail, of the sectional cover whose middle or locking section has its end portions bevelled to adapt them to fit in the dove-tail grooves, and means for holding it in slidable engagement with the side sections, as shown and described.

No. 46,339. Manufacture of Emery-Wheels, Grindstones, Hones, Millstones and the like. (*Fabrication de roues à émeri, meules, pierres à aiguiser, etc.*)

Olaf Terp, Forest Hill, Surrey England, 12th June, 1894; 6 years.

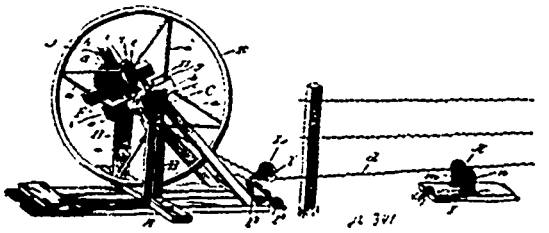
Claim.—A grinding wheel provided with a coating consisting of a cement made of chloride of calcium, chloride of magnesium, water, and bitter earth, with grains of emery embedded in said cement, substantially as described.

No. 46,340. Production of Artificial Crystalline Carbonaceous Materials. (*Production de matières de carbon artificiel cristallisées.*)

Edward Goodrich Acheson, Monongahela City, Pennsylvania, U.S.A., 12th June, 1894; 6 years.

Claim.—1st. The product being silicide of carbon sic. 2nd. The crystalline product containing a compound of silicon and carbon and being characterized by great hardness, refractibility and infusibility. 3rd. The crystalline compound containing silicide of carbon sic, and being characterized by its great hardness, refractibility and infrasibility. 4th. The process of making a hard and refractive compound of carbon and silicon which consists in subjecting materials containing carbon and silicon, free or combined to the action of an electric current. 5th. The process of making a hard and refractive compound of carbon and silicon, which consists in subjecting materials containing carbon, silica, free or combined and a suitable flux to the action of an electric current. 6th. The process of making a hard and refractive compound of carbon and silicon which consists in subjecting materials containing carbon, silica, free or combined, a suitable flux and a core conducting material to the action of an electric current. 7th. The process of making a hard and refractive compound of carbon and silicon, which consists in subjecting materials containing carbon, silica, free or combined, and a metallic chloride to the action of an electric current. 8th. The process of making a hard and refractive compound of carbon and silicon, which consists in subjecting materials containing carbon, silica, free or combined and a chloride of an alkali metal to the action of an electric current. 9th. The process of making a hard and refractive compound a carbon and silicon, which consists in subjecting materials containing carbon, silica, free or combined, a chloride of an alkali metal and a core of conducting material to the action of an electric current.

No. 46,341. Reel Carrier. (*Porte-dévidoir.*)

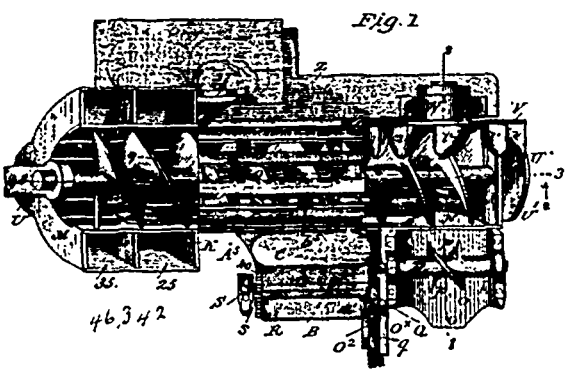


William M. Barger, Webster City, Iowa, U.S.A., 12th June, 1894; 6 years

Claim. 1st. In a machine of the class described, the combination of a supporting frame provided with bearings, a shaft journalled in the bearings, and a hand wheel mounted on the shaft and provided with flanges for detachably engaging a wire spool, substantially as and for the purpose described. 2nd. In a machine of the class described, the combination of a frame provided with suitable bearings, a shaft journalled therein, and a hand wheel mounted on the shaft and rotating therewith and comprising a rim, a hub, having flanges for detachably engaging a wire spool, and spokes connecting the rim and the hub, substantially as described. 3rd. In a machine of the class described, the combination of a supporting frame, a shaft journalled thereon, a hand wheel mounted on the shaft and provided with a hub having radial arms provided with projecting flanges for removably engaging a wire spool, a hub mounted on the shaft and having radial arms provided with projecting flanges for engaging one end of a spool, and means for detachably connecting the hub to the shaft, substantially as described. 4th. In a machine of the class described, the combination with a shaft for supporting a spool of wire, of a hand wheel secured on the shaft and having flanged arms projecting from the hub to receive the cross-bars of a wire spool, and provided with webs at the angles of the arms, the outer ends of the flanged arms being connected with the rim of the wheel by spokes extending from the adjacent edges of the arms and united at the rim, and a movable hub having flanged arms to engage the opposite end of the spool, substantially as described. 5th. In a machine of the class described, the combination of a frame, a shaft journalled therein, a hub mounted on the shaft, and a brake comprising an outer arm arranged to engage the hub, an inner arm pivoted to the frame and connected with the outer arm, and an adjusting screw mounted on the frame and engaging the inner arm, substantially as and for the purpose described. 6th. In a machine of the class described, the combination of a frame, a shaft journalled therein, a hand-wheel mounted on the shaft and adapted to engage one end of a spool, a hub arranged on the shaft for engaging the other end of the spool, a brake arranged to engage the hub, a washer arranged on the shaft and designed to be interposed between the hand-wheel and the spool, and a pin passing through the shaft and engaging the washer, whereby a spool is held out of contact with the hand-wheel, substantially as described.

No. 46,342. Potato Digger. (*Arrache-patates.*)

Fig. 1



Charles H. Hall, Glidden, Wisconsin, Almond D. Hall, John V. Kinney and Joseph K. Roy, all of St. Louis, Missouri, all in the U.S.A., 13th June, 1894; 6 years.

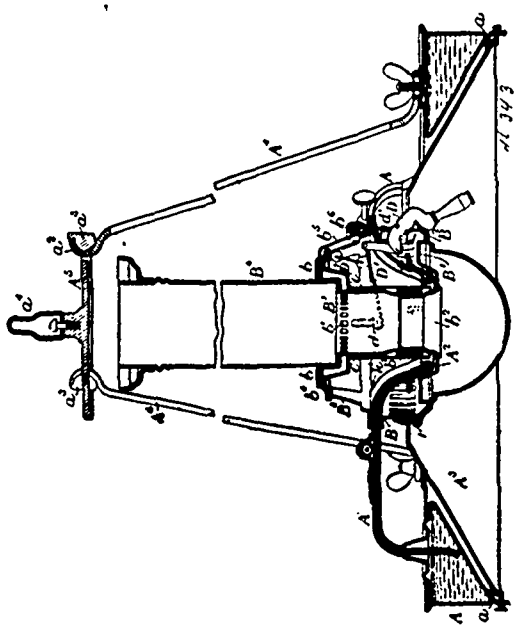
Claim. 1st. A potato digging machine, comprising a main frame, a supplemental or conveyor frame pivotally connected to and supported thereon, conveying, separating and digging mechanism mounted on such supplemental frame, and a lever mechanism secured to the main frame and connected with the supplemental frame, for adjusting the same, substantially as and for the purposes described. 2nd. In a potato digging machine in combination, a main frame comprising a body or supporting portion, a drive axle, having a main drive wheel disposed at one side, a rearwardly and diagonally outward extending portion having a caster wheel support, a draft pole or tongue projected forward from such frame at a point between said main and caster wheel supports, and a supplemental frame having the digging, separating and conveyor mechanism secured thereon and projected with its digger portion to one side in front of the caster wheel support, all arranged substantially as shown and for the purposes described. 3rd. The combination, in a potato digging machine, with the main frame, and supporting devices and the digging and conveying mechanism arranged substantially as shown of a tongue or draft pole pivotally connected at its rear to the main frame for vertical oscillation, substantially as and for the purposes described. 4th. The combination, with the main frame, the supporting axle and main drive wheel and the caster wheel supports, of a conveyor and digging mechanism, pivotally supported on the main frame, having at its digger end a forwardly projecting member, a rock shaft journalled parallel with but in advance of the axle, said shaft having a crank member, having a pivotal connection with the aforesaid projecting member, and an operating lever, all arranged substantially as shown and described. 5th. In a potato digging machine, the combination, with the frame and supporting means, of a conveyor frame disposed transversely at an angle, pivotally connected to such main frame, having at its lower end a forwardly projecting digger or plough portion, and a screw conveyor journalled in such frame, having a drive pulley held to run on the ground, all arranged substantially as and for the purposes described. 6th. In a potato digging machine, substantially as described, the combination with the main frame, including the drive axle, and the conveyor frame, held on such main frame, having at its lower end a forwardly projecting plough or digger trough, and the elevating and separating mechanism, arranged substantially as shown, of a rotary clod breaker, having radial propeller blades, journalled transversely in such plough trough, and a drive belt connecting such rotary breaker and the drive axle, as and for the purposes shown and described. 7th. In a potato digging machine, having a digging plough portion and a screw conveyor projected upward at right angles thereto, of a combined retarding and screw clearing mechanism having portions

fitting between the spiral ways of the receiving end of the said screw conveyor, as and for the purposes described. 8th. In a potato digging machine, the combination with the main frame, a digger plough portion, the conveyor or receiving chamber and the screw conveyor, having a drive or ground engaging wheel at its lower end, of a rotary clearing disc journalled on the conveyor or frame, having outwardly projecting studs or fingers projected to enter the rear spiral way portion of the feed end of the screw, and adapted to be rotated in the direction of the feed of such screw by the rotation of the said screw, all arranged substantially as shown and described. 9th. The combination with the main frame, the diagonally and transversely disposed conveyor frame having bearing portions at each end, a forwardly projecting digger trough and feed opening at the lower end, and a conveyor screw journalled in such conveyor bearings, having a projecting stud or axle portion at its lower end, and a drive or ground wheel secured thereon, of a rotary cleaner disc journalled at the rear of the feed opening of the conveyor frame having outwardly projecting finger portions, the lower ones of which are held to engage the rear spiral portions of the feed end of the screw, and be thereby moved successively in engagement therewith, all substantially as shown and for the purpose described. 10th. In a potato digging machine, substantially as described, the combination with the main frame, having a main and caster wheel support, and draft pole projected forward at a point about centrally of such wheel supports, of a diagonally and transversely disposed conveyor frame having a slatted bottom, with its lower end extended to a point at one side of the draft pole, and formed with a digger plough, its upper end having separating portions, and receiving chambers connected therewith, and a screw conveyor journalled longitudinally in such frame, and having its lower end a drive or ground wheel whereby it is rotated, all substantially as shown and described. 11th. In a potato digging machine, a conveyor or receiver arranged to elevate the potatoes as they are dug, having a slatted bottom, and a receiving opening at the plough end, of a screw conveyor journalled therein, having its blade portion at the receiving end formed blunt, and sharp at the slatted or elevating portion, as and for the purposes described. 12th. The combination in a potato digging machine, with the digging plough and a diagonally disposed conveyor frame held transversely to the plough, said frame having a central portion formed longitudinally slatted, connected at intervals by transverse members, of a screw conveyor journalled in such frame, having such of its blade portions as operate in such central portion formed with sharp peripheral edges, as and for the purposes described. 13th. In a potato digging machine, substantially as described, the combination with the digger plough, the conveyor frame projected upward therefrom at right angles, said frame having a feed opening at one side of the lower end, a substantially circular and longitudinally slatted central portion, and separating portions at the upper end, of a screw conveyor having the end portions of its spiral blades made with blunt peripheral edges, and its central portion made with such edges sharpened, all substantially as shown and described. 14th. In a potato digging machine, substantially as described, the combination with the conveyor frame, having a longitudinally slatted bottom, and the screw conveyor, said slatted bottom having potato passages formed therein at its upper end, and a second series of wider passages at a point beyond the first passages, and independent receivers or chambers held under such passages, having valved discharge throats. 15th. In a potato digging machine, essentially as described, a conveyor chute or chamber, a screw conveyor operating therein, said chamber having longitudinally slatted bottom, terminating at the upper end in a series of potato passages, a trough or receiver, held thereunder, said passages terminating in upwardly inclined guides, and a second trough or receiver held thereunder, and a second trough or receiver, arranged to receive the larger potatoes carried up over such guides, all arranged substantially as shown and described. 16th. The combination of the conveyor frame, the screw conveyor operating therein, said frame having a longitudinally slatted bottom, the upper end of which terminates in reduced finger portions, whereby passages are formed, said passages terminating in upwardly inclined guide members, arranged between the fingers, such fingers tapering to a point from the inner edge of the guides upward, and independent trough or receiving chambers held, one to receive the smaller potatoes which pass through the passages, and the other the larger ones which are carried over the guides. 17th. In a potato digger, substantially as described, the combination with a screw conveyor, retarding and clearing members projected in the rear spiral way portions, and held to be engaged thereby and moved successively downward into such ways, substantially as shown and for the purpose described.

No. 46,343. Lamp. (*Lampe.*)

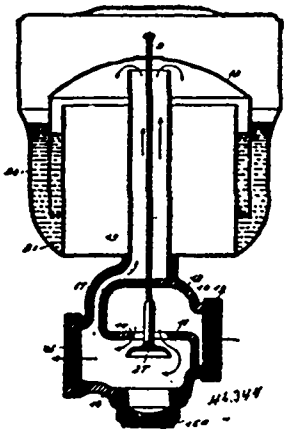
The Ross-Atkins Sunlight Oil Lamp Co., assignee of John Howard Ross, all of Birmingham, England, 13th June, 1894; 6 years.

Claim.—1st. The combination of the annular reservoir A, with its underside coned and the conical reflector A^3, held up to the reservoir with interposed cushions A, substantially as and for the purpose set forth. 2nd. The combination of the reservoir A, and three or more removable hangers A^4, hooked to the hanging plate A^5, substantially as described. 3rd. In combination with a pair of coned plates stamped to form wick passages A^1, and the wick cone A^2, the slotted rim B, and the conical rim B^3, with lateral openings substantially as described. 4th. The combination of the deflector and bezel rings B^1, B^2, having one hinge P, provided with a retarding spring *s*, and the catch D, with its sliding bolt E, substantially as described. 5th. In combination with the rim B^3, the



apertures *b* and valve b^4, the tube C, having slots b^7, the internal sliding tube B^5, with its slots b^1, and refractory lining, the studs *d*, lever D^1, linked to the catch D, arranged and operating substantially as and for the purpose set forth. 6th. In combination with the burner cap F, the rotatable ring F^2, the notches c^2, c^3, and studs G, substantially as and for the purpose set forth.

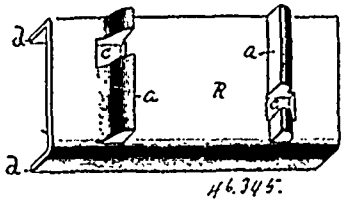
No. 46,344. Gas Governor. (*Régulateur de gaz.*)



Silas H. Moore, Alfred M. Vernon, and Henry J. Goodwin, all of New York, State of New York, U.S.A., 13th June, 1894; 6 years.

Claim. 1st. A gas governor, comprising a valve casing having an upper and lower chamber connected by a passage, the upper chamber having an inlet and the lower one an outlet, a liquid-containing tank on the top of the valve casing, a central tube projecting upward into the tank which is fitted closely around the base of said tube, a channel leading from the lower chamber of the valve casing and delivering into the tube, a float suspended in the tank and extending over the tube top, a valve rod carried by the float and extending down through the tube and top of the lower or gas inlet chamber, and a valve on the lower end of the rod to close the central gas passage in the partition, substantially as described. 2nd. As an article of manufacture, the valve casing consisting of an integral casing having the following construction and arrangement of parts, a tube projecting vertically from the top of the casing, a gas passage extending angularly and communicating at its upper end with the said tube and at its lower end with a gas outlet chamber formed in the lower portion of the casing, an inlet chamber arranged above such outlet chamber, and an intervening partition between the inlet and outlet chambers having a gas passage therein as shown and described.

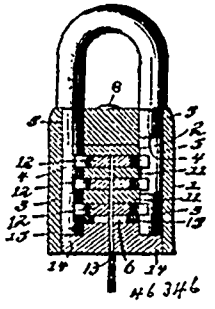
No. 46,345. Railway Tie Plate and Method of Making same. (*Plaque pour traverses de chemin de fer et méthode de fabrication.*)



The Q and C, Company, assignee of William Westly Holmes, all of Chicago, Illinois, U.S.A., 13th June, 1894; 6 years.

Claim.—1st. The method herein described for forming tie-plates which consists in first producing a metal plate having on one face parallel ribs, second removing the ends of said ribs for a distance equal to the width of the required flanges on the opposite face of the plate, and finally bending the edges of the plate at right angles to the body of the plate, and also at right angles to the first named ribs, substantially as and for the purposes specified. 2nd. A tie-plate having on its rail face parallel ribs, and on its tie-face parallel ribs, and on its tie-face parallel ribs at right angles to the ribs on its rail face, substantially as and for the purposes specified.

No. 46,346. Padlock. (*Cadenas.*)



Benjamin F. Loughmiller, Aspen, Colorado, U.S.A., 1894; 6 years.

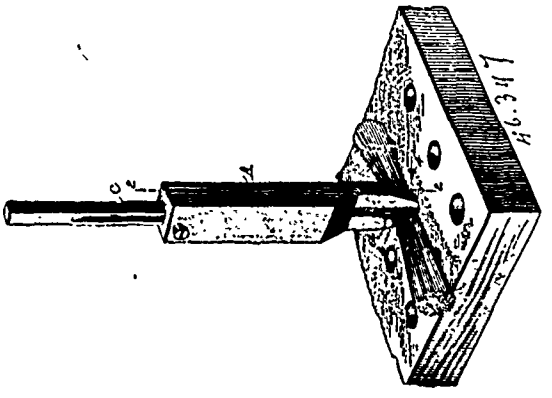
Claim.—1st. In a padlock, the combination with a hollow shell or casing, and a shackle having its legs fitted in openings or sockets in the top thereof, of a frame fitted snugly within said shell or casing and having a bottom plate which closes the lower end or mouth of the opening in the shell or casing, and also having parallel spaced webs, the bottom plate and webs being provided with registering openings, and tumblers fitted loosely between the webs, held in place by the side walls of the shell or casing and provided with openings registering with those in the webs and bottom plate for the reception of a key, substantially as specified. 2nd. In a padlock, the combination with a shell or casing provided with an elongated recess, openings or sockets in the upper end and grooves or channels in the side walls of said recess, and a shackle having its legs fitted in said openings or sockets and adapted to lie in the grooves or channels with their inner notched surfaces exposed, of a frame fitted snugly into said recess and provided with lateral ears to close the lower ends of the grooves or channels in the side walls of said recess and tumblers mounted upon and carried by said frame, substantially as specified. 3rd. In a padlock the combination with a hollow shell or casing and a shackle having its legs fitted in openings or sockets in the top of said shell or casing, of a frame fitting snugly in the interior of said shell or casing and having side bars, a bottom plate and transverse webs, and tumblers rotatably mounted upon said frame between the webs and adapted to project at their peripheries beyond the side edges of such webs to engage the notches of the shackle, substantially as specified.

No. 46,347. Brush Making Tool.

(*Outil pour faire les brosses.*)

McClintock Young, Frederick, Maryland, U.S.A., 1894; 6 years.

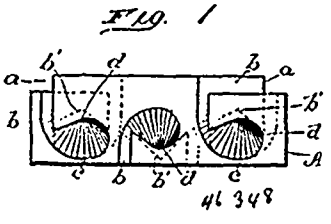
Claim.—1st. In a brush making tool a hollow stock or body having at its end substantially parellel rigid jaws to receive and hold between them a brush tuft, said jaws having in their inner faces longitudinal grooves to hold and guide a fastener in combination with the movable plunger or driver, substantially as described. 2nd. A brush making tool comprising a hollow stock or body tapered at its end and notched transversely to the direction of the taper to form parallel rigid jaws, and having longitudinal grooves in the inner walls of said notch to receive, hold and guide a fastener, and a reciprocating plunger or driver within the hollow body of a width



at its driving end to slide in said grooves and extending entirely across the fastener held therein.

No. 46,348. Self Locking Cleat for Electric Wires.

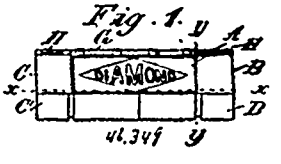
(*Taquet automatique pour fil électrique.*)



Elias Nashold and Henry W. Baskette, both of Chicago, Illinois, U.S.A., 14th June, 1894; 6 years.

Claim.—1st. As an improved article of manufacture, a cleat consisting of a block having one or more recesses in its portion adjacent to the support, and one or more grooves extending obliquely across the cleat and terminating in flaring openings on each side thereof, the apexes of said openings being in substantially a direct line across the cleat, substantially as described. 2nd. As an improved article of manufacture, a cleat consisting of a block having one or more recesses *a*, in its portion adjacent to the support, and one or more grooves *b*, extending obliquely across the cleat and with a vertical bend therein and terminating in flaring openings on each side of the cleat, the apexes of said openings being in substantially a direct line across the cleat, substantially as described. 3rd. As an improved article of manufacture, a cleat consisting of a block having one or more recesses *a*, in its portion adjacent to the support, and one or more grooves *b*, extending obliquely across the cleat and with a vertical bend therein and terminating in flaring openings on each side thereof, substantially as described.

No. 46,349. Stove Back. (*Plaque de poêle.*)

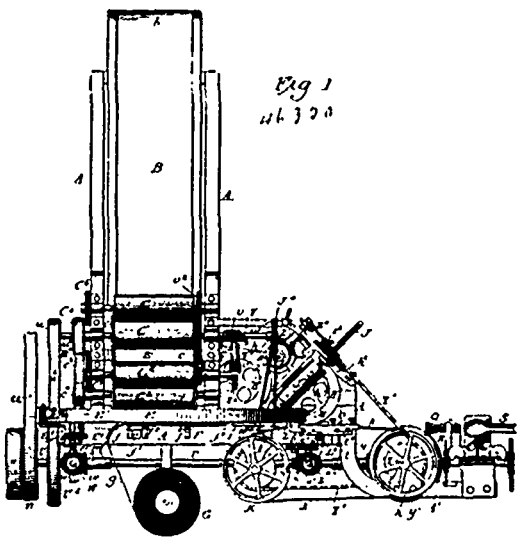


Fay O. Farwell and The Adams Company, both of Dubuque, Iowa, U.S.A., 14th June, 1894; 6 years.

Claim.—An extension back for fire boxes for stoves, provided with a flange at the top of the back, adapted to fit over and rest upon the oven plate, in combination with the extension side wings, having flanges thereon, and at a different angle than the aforesaid flanges and adapted to engage therewith, and to be held in position by friction, and having tenons thereon engaging with mortises, with bottom pieces, all combined, substantially as described.

No. 46,350. Cigarette Machine.

(*Machine à cigarette.*)



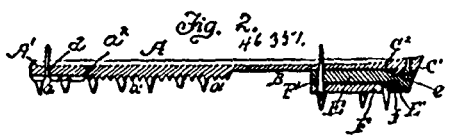
Edward P. Pollard, New York, State of New York, U.S.A., 14th June, 1894; 6 years.

Claim.—1st. A device for feeding loose, fibrous or shredded tobacco in cigarette machines, comprising a casing or hopper having a lateral mouth or discharge opening, a discharge roll working therein, a belt moving edgewise across the mouth of the hopper, substantially in the same horizontal plane as the bottom of the discharge roll, which throws the tobacco directly and laterally thereon, and an abutment between which and the mouth of the hopper the belt is arranged to move. 2nd. A device for feeding loose, fibrous or shredded tobacco in cigarette machines, comprising a casing, endless aprons arranged one above the other, and moving continuously in the same direction, in the same vertical plane, and the lower one projecting slightly beyond the other, groups of rolls combing or drawing out the fibres from the aprons, a carrying-belt moving across the face of the last roll, which throws the tobacco latterally upon the belt, with its fibres transverse thereto, and an abutment opposite the mouth of the hopper, bearing against the outer edge of the belt to prevent the lateral escape of the tobacco therefrom, substantially as hereinbefore set forth. 3rd. A device for feeding and carrying loose, fibrous or shredded tobacco in cigarette machines, comprising a casing or hopper, devices enclosed therein for combing or drawing out loose, fibrous tobacco fed thereto, a discharge-roll working in the mouth of the hopper, a carrying-belt moving across this mouth and the face of the discharge-roll, which discharge-roll throws the tobacco laterally upon the carrying-belt, a pressing-belt moving over and in the same direction with the carrying-belt, and an abutment against which the opposite edges of both belts work, to prevent the lateral escape of the tobacco therefrom, substantially as hereinbefore set forth. 4th. A filler forming device for cigarette machines, comprising two converging endless belts moving in the same direction, mechanism for discharging tobacco laterally between the belts, and a resilient or yielding abutment bearing against the outer edges of the belts, to prevent the escape of tobacco therefrom, substantially as hereinbefore set forth. 5th. A filler-carrying device for cigarette machines, comprising a flexible, resilient hoop or endless belt moving in a vertical circuit without guides or supports except in that portion of its circuit in which it carries the filler, and friction rollers directly and positively driving the belt, substantially as hereinbefore set forth. 6th. The hereinbefore described filler pressing device for cigarette machines, comprising a flexible, resilient hoop or endless belt moving in a vertical circuit, a guide around which it moves while pressing the filler, but unsupported elsewhere, and friction-rollers directly and positively driving the belt, substantially as hereinbefore set forth. 7th. A device for vertically pressing the filler in cigarette machines, comprising a flexible, resilient hoop or endless carrying-belt moving in a vertical circuit without guides or supports except in that portion of its circuit in which it carries the filler, a similar flexible, resilient endless pressing belt moving in a vertical circuit over the carrying belt, a guide around which the pressing belt moves while pressing the filler, and friction rollers directly and positively driving each belt, substantially as hereinbefore set forth. 8th. A filler carrying device for cigarette machines, comprising two flexible resilient hoops or endles belts moving one over the other in a vertical circuit, friction rollers directly and positively driving the belts, a guide around which one of the belts runs, and a rocking arm or latch-lever on which the guide is mounted, substantially as hereinbefore set forth. 9th. A device for feeding loose, fibrous or shredded tobacco and compressing it vertically, in cigarette machines, comprising two endless converging belts of flexible, resilient material, such as steel, arranged one above the other in the same vertical plane, friction gearing actuating them, mechanism for feeding the tobacco laterally between the belts, and a resilient or yielding abutment bearing against the edges of the belts on one side to prevent the lateral escape of the tobacco. 10th. A device for feeding a cigarette wrapper longitudinally and vertically or edgwise to the wrapping devices of a cigarette machine, comprising endless belts arranged one above other, mechanism for driving them positively in the same direction and at the same speed, a yielding abutment between which and the adjacent edges of the belt the wrapper passes, a fixed guide for the wrapper, and mechanism for drawing or feeding the wrapper positively, at the same speed as the belts, substantially as hereinbefore set forth. 11th. A filler forming device for cigarette machines, comprising converging belts arranged one above the other, mechanism for discharging the tobacco laterally between the belts, an abutment bearing against the edges of these belts opposite the feed side, a compressing or filler-forming belt working diagonally between the converging belts, and a wrapper guide against which the diagonal belt compresses the tobacco to form the filler, substantially as hereinbefore set forth. 12th. A filler forming and wrapper applying device for cigarette machines, comprising converging belts arranged one above the other, a compressing or filler forming belt working diagonally between them, and a fixed wrapper guide bearing against the edges of the converging belts, to form the filler and compress it against the wrapper, substantially as hereinbefore set forth. 13th. A filler forming, pasting and wrapper-applying device for cigarette machines comprising converging belts arranged one above the other, a compressor filler forming belt working diagonally between them, a wrapper-guide against which the filler is compressed, and mechanism applying paste to the upper edge of the wrapper above the belt, before the guide commences its folding action, substantially as hereinbefore set forth. 14th. A filler forming, pasting and wrapper applying device for cigarette machines, comprising converging belts arranged one above the other, mechanism for feeding the tobacco laterally between them, a yielding abutment bearing against the outer edges of these belts, a compressing or filler forming belt working diagonally between the converging belts, a wrapper-guide against which this belt compresses the tobacco to form the filler, mechanism applying paste to the upper edge of the wrapper above the belt, at the point of convergence of the diagonal belt and wrapper-guide, before the folding action commences, and mechanism for moving the belts and wrapper at a uniform speed in the same direction, substantially as hereinbefore set forth. 15th. A filler forming and wrapper folding device for cigarette machines, comprising laterally curved resilient endless belts, normally moving parallel with each other, with mechanism, substantially such as described, which causes them at intervals to converge and overlap each other to fold the wrapper upon the filler. 16th. A cigarette filler forming and wrapping device, comprising a flexible, resilient, laterally curved endless belt, mechanism for moving it in the line of movement of the filler, a series of flexible, resilient, laterally curved endless belts normally movable parallel with each other on the opposite side of the filler, mechanism for moving them at substantially the same speed as the opposed belt, and a guide which causes these last named belts to converge laterally and overlap each other to form the filler and partially enfold it in the wrapper, substantially as herembefore set forth. 17th. The combination, substantially as herembefore set forth, of endless belts lying one above the other, between which the filler is carried, an endless belt moving diagonally between them, a series of laterally curved, flexible, resilient endless belts, normally moving parallel with each other and the opposed diagonal belt, and a guide which causes the series of belts to converge laterally and overlap to form and wrap the filler. 18th. The combination, substantially as hereinbefore set forth, of endless belts lying one above the other, between which the filler is carried, an endless belt moving diagonally between them, a wrapper guide bearing against the edges of one side of the filler-carrying and pressing belts, a series of laterally curved, flexible, resilient endless belts normally moving parallel with the opposed diagonal belt between which last named belts the wrapper passes, and a guide which causes the series of belts to overlap each other laterally to wrap the filler. 19th. The combination, substantially as herembefore set forth, of a wrapper-guide, a series of laterally-curved, flexible, resilient endless belts, normally moving in path parallel with that of the filler, a similar belt on the opposite side of the filler, a folding-guide which causes the series of parallel belts to overlap and fold the wrapper upon the filler, and a separator which temporarily prevents contact of the edges of the wrapper. 20th. The combination, substantially as hereinbefore set forth, of a series of flexible, resilient endless belts, normally moving in parallel paths, a guide which causes them to converge laterally and overlap, and an adjustable tongue or cam in the guide to vary the overlap, and consequently the size of the cigarette formed by them. 21st. The combination, substantially as hereinbefore set forth, of a series of flexible, resilient endless belts, normally moving in parallel paths, a guide which causes them to converge laterally and overlap to fold the wrapper upon the filler, a separator opposed to these belts, and an up-turner or guide, which folds the unpasted side of the wrapper upon the filler. 22nd. The

combination, substantially as hereinbefore set forth, of a series of flexible resilient endless belts, normally moving in parallel paths, a guide which causes them to converge laterally and overlap, to fold the wrapper upon the filler, another guide which folds the unpasted side of the wrapper upon the filler, and still another guide which folds the pasted edge of the wrapper upon the folded unpasted edge. 23rd. The combination, substantially as hereinbefore set forth, of a casing or hopper, a belt moving edgewise across its mouth, a wrapper-guide at the side or edge of the belt directly opposite the forward end of the mouth of the hopper, and means for discharging the tobacco directly upon the belt between the hopper and guide, for the purposes specified. 24th. The combination, substantially as hereinbefore set forth, of a casing or hopper, a belt moving edgewise across its mouth, a wrapper-guide, and a yielding abutment opposite the mouth of the hopper, and means for discharging the tobacco directly upon the belt, for the purposes specified. 25th. A device for severing continuous cigarettes, comprising a cutter, a cigarette-holder, and mechanism, substantially such as described, which causes both the cutter and holder alternately to approach and recede from each other, in paths intersecting the normal line of movement of the continuous cigarette, for the purposes specified. 26th. A device for severing continuous cigarettes comprising a cutter, a shaft on which it is mounted, bearings in which the shaft turns, cranks moving in similar paths connected with the bearings and means for rotating the cutter-shaft and cranks, substantially as and for the purpose specified. 27th. A device for severing continuous cigarettes, comprising two crank discs, parallel shafts on which they are mounted, a pitman connecting the cranks of these discs, a slide frame actuated by the pitman, a tubular cigarette holder carried by this slide frame, and means for operating the holder laterally, the organization being such that the holder is reciprocated both longitudinally and laterally across the normal path of the continuous cigarette alternately towards and from the cutter, substantially as and for the purpose specified. 28th. A device for severing continuous cigarettes, comprising a rotary cutter, a shaft on which it is mounted, bearing in which the shaft turns, cranks mounted on parallel shafts and connected with the bearings, a pitman connecting the cranks, a slide frame provided with forks or guides embracing the crank shafts, a cigarette holder carried by the slide frame, and means for operating the holder laterally, the organization being such that the cutter and holder alternately approach and recede from each other, substantially as and for the purpose specified. 29th. A device for severing continuous cigarettes, comprising parallel crank shafts, a pitman connecting them, a shaft rotating in bearings carried by the cranks, a cutter on the shaft, a slide frame actuated by the pitman, guide slots in the frame embracing the crank shafts, a cigarette holder carried by the slide frame, means for reciprocating the slide frame and rotating the cutter at different speeds, and means for operating the cigarette holder laterally, substantially as and for the purpose specified. 30th. The combination with a cigarette-holder, of a device for cutting a continuous cigarette passing through the holder, comprising a rotary cutting blade, a shaft to which it is secured, a bearing in which the shaft is mounted, and a crank shaft operatively connected with said bearing to cause it to move both longitudinally with reference to the axis of the holder, and also laterally relatively thereto, substantially as hereinbefore set forth.

No. 46,351. Sole and Heel Plate.

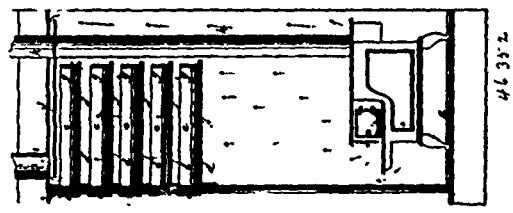
(*Semelle et plaque de talon.*)



John T. E. Nelson, Cedar Home, Washington, U.S.A., 15th June, 1894; 6 years.

Claim.—1st. In boots and shoes the metallic sole piece having the integral tread shank and heel seat having the tread provided with openings for the spike shanks and the heel seat provided with the undercut mortise, the heel piece having on one side a tenon to fit said mortise and provided in its outer side with an undercut mortise and the spike plate fitted in said mortise, substantially as set forth. 2nd. A metallic sole piece having the integral tread shank and heel seat and provided in the tread with openings for the spikes and the detachable heel piece fitted to the heel seat, all substantially as set forth. 3rd. In boots and shoes the improved sole piece herein described made of metal having the integral tread shank and heel seat, the tread being provided with ribs and openings for the spike shanks, the heel seat being provided with an undercut mortise, the heel piece having a tenon fitted to said mortise and also provided with an undercut mortise and the spike plate fitted to the undercut mortise of the heel piece, all substantially as and for the purposes set forth. 4th. In boots and shoes, a metallic sole piece having openings for the spike shanks, a heel seat having an undercut mortise, the heel piece fitted to said mortise and an intermediate shank portion arranged between the heel seat and sole piece, all substantially as and for the purposes set forth.

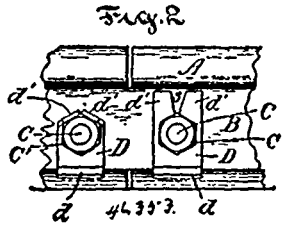
No. 46,352. Fruit Drier. (*Etuve à fruits.*)



Mary Jane Richmond, Republic, Missouri, U.S.A., 15th June, 1894; 6 years.

Claim.—In a fruit-drier, a portable casing structure comprising three sides, open at the top and at the bottom, two of said sides having doors, a series of removable trays above said doors, and an imperforate draft-deflecting board above said trays, in combination with the fixed floor, the ceiling and the wall provided with cleats adapted and arranged to form guides for the open sides and ends of said casing structure and co-acting with the latter to form a closure, the ceiling within the closure having an opening for the escape of the fumes and hot air, and an opening for the smoke pipe of a stove within said closure, as shown and described.

No. 46,353. Nut Lock. (*Arrête-écrou.*)

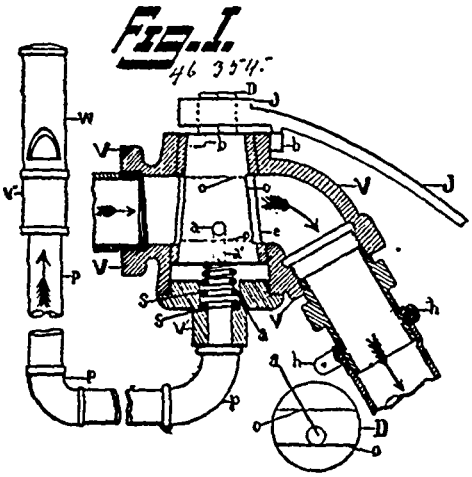


James McCormick, Sudbury, Ontario, Canada, 15th June, 1894; 6 years.

Claim.—1st. In a nut lock, the combination with the rail A, fish plate B and bolt C, with nut C^1, of a washer D having a straight upturned flange *d* abutting against a projecting part of the rail, and the ends d^1 formed by a triangular incision and turned up against the sides of the nut, substantially as set forth 2nd. In a nut lock, a plate having an eye and one part parallelogrammic, and such part turned up to form a flange *d*, and another part provided with a triangular incision extended to within the range of the angle of the nut forming ends d^1 adapted to be turned up against the sides of the nut, substantially as set forth.

No. 46,354. Air Brake for Railway Trains.

(*Frein atmosphérique pour train de chemin de fer.*)

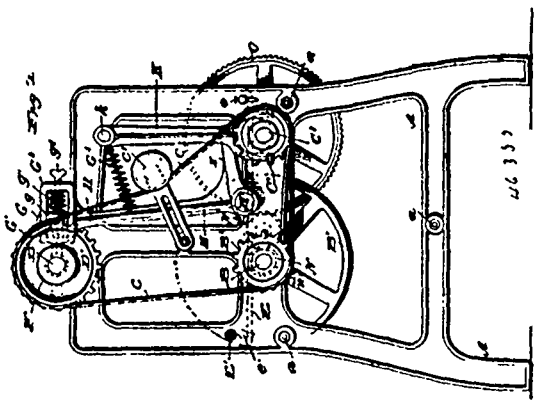


Andrew Reid, Saginaw, Michigan, U.S.A., 15th June, 1894; 18 years.

Claim.—1st. A port or opening *a*, in the cocks D and D^1, by which said cocks the air brakes are controlled and regulated, and

by which said port or opening the pressure of the compressed air in the train pipes is transferred, when the cocks are closed to a system of smaller pipes. 2nd. On railways where they use the automatic train signal apparatus, a piston x contained in a cylinder A, which receives the compressed air, and which said piston x is forced down by the said compressed air so as to open the signal discharge valve u, when the stop-cock D^1 is closed, and the compressed air in the train pipes H escapes thence through the port a into the pipes p, thence into the cylinder A. 3rd. A whistle W, so constructed that the escaping compressed air forces a head r^1 resting on the flanges or wings c, upwards against a base or seat g, in which said head r^1 and base g are grooves, through which the said compressed air escapes gradually and blows a whistle W, thus giving the alarm and also setting the brakes. 4th. The combination, as hereinbefore described, of the said port a, the said piston x, and the whistle w connected by the pipes p. 5th. The combination, as hereinbefore described, of the said port a, and the said whistle W connected by pipes p.

No. 46,355. Starching Machine. (*Machine à empeser.*)



Allen Conkling, Chicago, Illinois, U.S.A., 15th June, 1894; 6 years.

Claim.—1st. In a starching machine, the combination with the rolls, one fixed and the other movable, of means automatically actuating the movable roll, as set forth. 2nd. In a starching machine, a movable starch extracting roll and an agitator operatively arranged for automatic, simultaneous, conjoint action, as set forth. 3rd. In a starching machine, the combination with a movable roll, of movable bearings in which the shaft thereof is mounted to move, arms carrying said bearings and provided with lateral portions, cams acting upon the under side of said portions and means for actuating the cams, substantially as specified. 4th. In a starching machine, the combination with a movable roll, of elongated bearings for the shaft thereof each having a yielding seat, arms mounted for oscillatory movement and carrying said bearings and ,means acting upon the lateral portions extending from said arms for oscillating the arms, as set forth. 5th. In a starching machine, the combination with a fixed roll, and a movable roll, of oscillating arms carrying supports for the shaft of said movable roll, cams for actuating the arms and means for the automatic actuation of the cams, substantially as specified. 6th. The combination with a starch box and the fixed and movable rolls, of an agitator within the starch box independent of said rolls and mounted for reciprocatory movement, an oscillating arm therewith and an eccentric for operating said arm, as set forth. 7th. The combination with the starch box, and the agitator therein independent of the starch applying devices, of an oscillating arm connected with the agitator and having its lower end bifurcated and an eccentric mounted to work between the arms of the bifurcation, as set forth. 8th. In a starching machine, the combination with a movable roll and an agitator mounted for reciprocatory movement, of automatic operating devices for simultaneously actuating said roll and agitator, substantially as specified. 9th. In a starching machine, the combination with a movable roll and reciprocatory agitator, of an oscillatory arm connected with the agitator, oscillating arms supporting the shaft, of the roll and automatic mechanism for actuating said arms, substantially as specified.

No. 46,356. Hay Carrier Track.

(*Rail pour transport à foin.*)

James W. Provan, Oshawa, Ontario, Canada, 15th June, 1894; 6 years.

Claim.—1st. In a hay carrier track, two L-shaped rails arranged parallel to each other and having the edges of their horizontal flanges rigidly held at a pre determined distance from each other by suitable means, the vertical flange of the L-shaped rails forming the tread for the grooved wheels of the carrier, substantially as and for the purpose specified. 2nd. In a hay carrier track, two L-shaped rails, having the edges of their horizontal flanges rigidly held by suitable means at a pre determined distance from each other, forming a continuous slot, and the upper edges of their vertical flanges

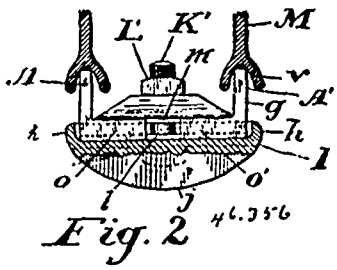
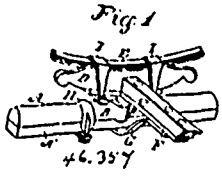


Fig. 2 46,356

rigidly held parallel to each other, forming the tread for the grooved wheels of the carrier, substantially as and for the purpose specified. 3rd In a hay carrier track, two L-shaped rails arranged parallel to each other and having the edges of their horizontal flanges held in juxtaposition so as to form a continuous slot, in combination with a lipped clip beneath said rails engaging with the vertical flanges of the L-shaped rails, a rectangular washer resting on the horizontal flanges of t' e rails, and butting against their vertical flanges, a hanger passi g through holes formed in the washer, the lipped clip and the continuous slot, an upper binding nut and a lower non-rotatable nut, substantially as and for the purpose specified. 4th. In a hay carrier track, two L-shaped rails arranged parallel to each other, and having the edges of their horizontal flanges held in juxtaposition so as to form a continuous slot, in combination with a lipped clip beneath the L-shaped rails and a washer on top of the horizontal flanges of the said rails and butting against the vertical flanges thereof and hanger, the whole being clamped together, substantially as and for the purpose specified. 5th. In a hay carrier track, a lipped clip applied to the underside of the horizontal flanges, of two L-shaped rails, and engaging with the vertical flanges thereof, in combination with the two L-shaped rails, and a washer between the vertical flanges of said rails and on top of the horizontal flanges thereof, and a hanger, the whole being clamped together, substantially as and for the purpose specified. 6th. In a hay carrier track, a hanger passing through a slot formed between the edges of the horizontal flanges of two L-shaped rails, arranged parallel to each other, in combination with the lipped clip, engaging with the outside angle of each rail, a nut on the end of the hanger held from turning by a transverse rib formed on the lipped clip, a washer resting on the horizontal flanges of the L-shaped rails and butting against the vertical flanges of the rails, and an upper clamping nut on the top of the washer, substantially as and for the purpose specified. 7th. In a hay carrier track, a connecting clip applied to the bottom of the horizontal flanges at the ends of adjoining L-shaped rails, and having lips adapted to engage with the vertical flanges at the outside angle of said rails, in combination with the L-shaped rails, a connecting washer covering the joint between said rails and resting on their horizontal flanges, and bolts and nuts binding the rails, the connecting washer and connecting clip together, substantially as and for the purpose specified. 8th. In a hay carrier track, a connecting clip applied to the bottom of the horizontal flanges at the ends adjoining L-shaped rails, and having lids adapted to engage with the vertical flanges at the outside angle of said rails, and a transverse groove formed in the seat of said connecting clip, in combination with L-shaped rails having the ends of their horizontal flanges upset, a connecting washer covering the joint between said rails and resting on their horizontal flanges, and bolts and nuts binding the rails, the connecting washer and connecting clip together, substantially as and for the purpose specified. 9th. In a hay carrier track, a connecting clip applied to the bottom of the horizontal flanges at the ends of adjoining L-shaped rails, and having lips adapted to engage with the vertical flanges at the outside angle of said rails, and a transverse groove formed in the seat of said connecting clip, in combination with L-shaped rails having the ends of their horizontal flanges upset, a connecting washer covering a joint between said rails and resting on their horizontal flanges, and a transverse groove formed on the bottom of said washer and bolts and nuts binding the rails, the connecting washer and connecting clip together, substantially as and for the purpose specified. 10th. A hay carrier track comprising the following elements: L-shaped rails A, A^1, having horizontal flanges a, and vertical flanges b arranged parallel and at a predetermined distance from each other, the hanger C, lipped clips D having lips d, d^1 and ribs c, c^1, washers F, upper clamping bolts G, under non-rotatable bolts H, the ribbed and lipped connecting clips I, transverse grooves I, connecting washers J, transverse grooves n on connecting washers, upset ends of horizontal flanges o, o^1, bolts K, K^1, nuts L, L^1, substantially as and for the purpose specified.

No. 46,357. Fifth Wheel. (*Rond d'avant-train.*)



Garland Brainard St. John, Kalamazoo, Michigan, U.S.A., 15th June, 1894; 6 years.

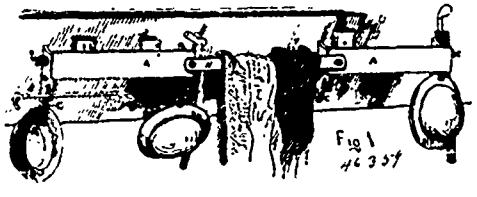
Claim.—1st. The combination with the front axle, having a gain formed therein to receive the socket-iron, of the socket-iron B, enveloping the gained portion of the axle and terminating at the bottom of the part so gained, and having a socket B^2, closed at the bottom and opening upwardly formed at one side of the longitudinal centre, clips securing said socket-iron to the axle and covering the joint at the ends, the reach and bolster or head-block, and the reach iron F with the dawnwardly extending cone F^1 engaging with said socket, substantially as and for the purpose set forth. 2nd. The combination with a reach and bolster provided with a downwardly extending conical pin or lug, substantially as described, of the front axle A, having the gain *a*, and recess a^1, formed therein, the socket-iron B, having the socket B^1, formed with a closed bottom, and partly within and partly without said socket-iron, and clips adapted to secure the socket-iron to the axle and cover the joints at the ends, substantially as and for the purpose set forth. 3rd. The combination in a vehicle, of the reach having a downwardly extending cone attached thereto, the front axle having a socket-iron secured thereto, the socket coinciding with said cone, and a spring-hook extending from the reach under the axle and bearing thereon, whereby the parts are prevented from rattling when in normal position, and are permitted to separate in case the vehicle overturns.

No. 46,358. Material for Applying Oil to Axle Bearings. (*Matérial pour appliquer l'huile aux coussinets.*)

George Jackson Churchward, Swindon, Wiltshire, England, 15th June, 1894; 6 years.

Claim.—A compound material consisting of curled horse hair closely intermingled with the threads of cotton or woollen waste, by combing or carding the two together, constituting an elastic material for raising oil by capillary action and applying it to the axle bearings of locomotives and other railway vehicles.

No. 46,359. Rack for Holding Hats, Canes, Umbrellas, Shawls, etc. (*Porte-chapeau, canne, parapluie, châle, etc.*)



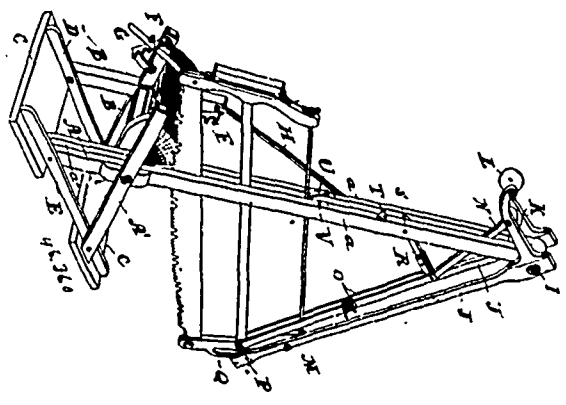
George Philion, Mishawaka, Indiana, U.S.A., 15th June, 1894; 6 years.

Claim.—1st. In combination with the racks A, A, the bar H, at each end secured to the front of one of said racks respectively, substantially as and for the purpose set forth. 2nd. In combination, the racks A, A, connecting bar H, pendant brackets *b*, *b*, and clips *c*, substantially for the purpose set forth. 3rd. The book-rack A, and pendant brackets *b*, *b*, provided with notches *d*, *d*, combined with the clips *c*, *c*, provided with forwardly projecting thumb-pieces *t*, *t*, substantially as shown. 4th. In combination, the book-rack A, the pendant brackets *b*, clips *c*, and umbrella holders, substantially as set forth. 5th. The combination of hat, cane and umbrella holders adapted for church pews, substantially as shown and described.

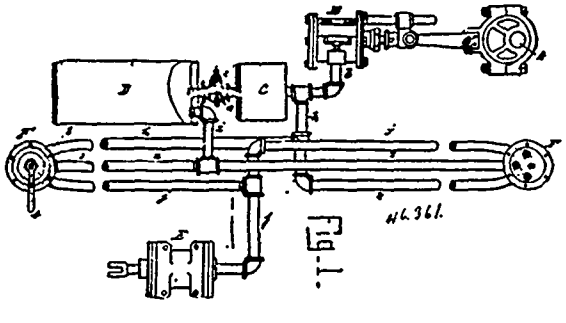
No. 46,360. Wood Sawing Machine.
(*Machine pour scier le bois.*)

Charles Bilbrough, Markham, Ontario, Canada, 16th June, 1894; 6 years.

Claim. 1st. In a machine for sawing wood, the combination of the saw, a saw horse to support the wood being sawn, one of the legs extended uprightly, an arm, one end of which is pivotally connected to the extension of the leg, and the opposite end of the arm pivotally connected to the head of the saw, substantially as specified. 2nd. The combination of the saw-horse, one of the legs extended uprightly, the arms J, J^1, one end of which is pivotally connected to the extension of the leg, and the opposite end having a bolt working in a slot in the head of the saw, and a second arm one end of which is pivotally connected to the said leg extension, and the opposite end pivotally connected to the head of the saw, substantially as specified. 3rd. In a machine for sawing wood, the combination of the saw, the extension *a*, a^1, the slot in the extension *a*, a^1, the arms J, J^1, pivotally connected to the extension *a*, a^1, the bracket K connected to the pivoted end of the arms J, J^1, the counter balance L connected to the bracket, the saw, the opposite end of the arms J, J^1, connected together by a bolt P, working in a slot Q formed in the head of the saw, the arm N, one end of which is pivotally connected to the bracket K, the slats O, one end of which is pivotally connected to the opposite end of the arm N, substantially as specified. 4th. In a machine for sawing wood, the combination of the saw, the extension *a*, a^1, the slot in the extension *a*, a^1, the arms J, J^1 pivotally connected to the extension *a*, a^1, the bracket K connected to the pivoted end of the arm J, J^1, the counter balance L connected to the bracket, the saw, the opposite end of the arms J, J^1, connected together by a bolt P, the arm N one end of which is pivotally connected to the bracket K, the slats O, one end of which is pivotally connected to the opposite end of the arm N, a slot Q formed in the head of the saw, the said bolt working in the said slot, an arm R, one end of which is pivotally connected to the slats O and arm N at their juncture, and the opposite end of the said arm pivotally connected to the extension *a*, a^1, substantially as specified.



No. 46,361. Air Brake. (*Frein atmosphérique.*)

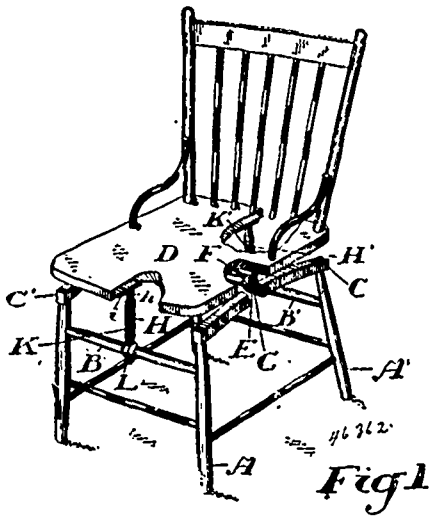


Moses L. Rothschild, Chicago, Illinois, U.S.A., 16th June, 1894; 6 years.

Claim. 1st The combination, with an air compressor, a regulating reservoir, a car reservoir for compressed air, connections between said reservoirs, and an air brake cylinder, of a valve consisting of a shell having four ports formed in its bottom, the first connected with an air compressor and regulating reservoir, the second connected with a car reservoir, the third connected with the brake cylinder, and the fourth opening into the air, and a rotary disc or plate having the bottom surface provided with a series of grooves adapted to connect the second named port with either the first or third, and to connect the third port with the fourth, or to isolate all of said ports from each other, substantially as shown and described. 2nd. In combination with an air compressor of the type which is governed by the resistance of compressed air, a reservoir for compressed air connected directly with the compressor, a second reservoir for compressed air connected with said first reservoir, an air brake cylinder, and a four way cock controlling the connection between said two reservoirs, and also controlling a connection from said cock to said air brake cylinder, whereby said reservoirs may be connected together, or either may be connected with said air brake

cylinder, substantially as shown and described. 3rd. In combination with an air compressor of a type whose action is regulated by the resistance of the air compressed, two reservoirs for the storage of air, one of which is directly connected with said first named reservoir, a connection from said second reservoir to the air brake cylinder, and means for closing the connection between said reservoirs in opening the connection from said second reservoir to said air brake cylinder, substantially as shown and described. 4th. In combination with an air compressor B, and means for operating the same, a reservoir C, connected directly with said compressor, a reservoir D for storage of compressed air connected with said reservoir C, a four-way cock F, in the connection between said two reservoirs, and an air brake cylinder E, connected with said four-way cock, substantially as shown and described. 5th. In an air brake mechanism, the combination with an air compressor of the type whose operation is controlled by air pressure, of a regulating reservoir connected with the discharge port of said compressor, a car reservoir for compressed air, an air brake cylinder, and means, substantially such as described, whereby said compressed air reservoir may be connected either with said regulating reservoir or said air brake cylinder, substantially as and for the purposes set forth.

No. 46,362. Chair. (*Chaise.*)



James Meehan, Cartier, Ontario, Canada, 16th June, 1894; 6 years.

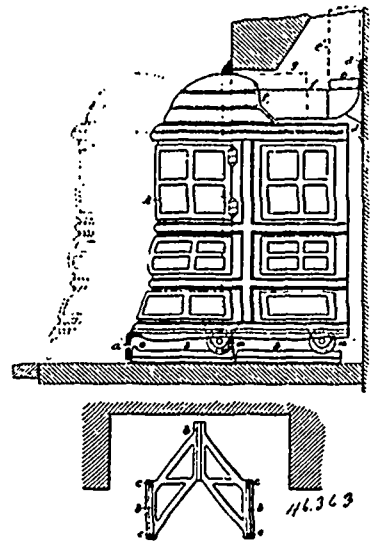
Claim.—1st. In a chair, a seat suitably shaped, pivotally connected at each side thereof to frame pieces and provided with spring connections between the front and rear sides of the seat and rungs of the chair, substantially as and for the purpose specified. 2nd. In a chair, a seat pivotally connected at each side thereof to curved frame pieces, and provided with spring connections between the front and rear sides of the seat and the rungs of the chair, substantially as and for the purpose specified. 3rd. In a chair, the seat D, in combination with the brackets E, pivot pins F, the curved frame pieces C, and C^1, the plunger H, hinged to the seat, spiral spring K, the run B, having hole *j*, formed therein, substantially as and for the purpose specified. 4th. In a chair, the seat D, in combination with the brackets E, pivot pins F, the curved frame pieces C, and C^1, the plungers H, and H^1, hinged to the seat, the spiral springs K, and K^1, the rungs B, and B^1, perforated with holes to receive the plungers, substantially as and for the purpose specified. 5th. In a chair, the seat D, pivotally connected midway of the sides thereof to the upwardly curved frame pieces C, C^1, in combination with the plungers H, H^1, hinged to the front and rear of said seat, the spiral spring K, K^1, located around the said plungers between the lower washers L, and the adjustable upper washers N, and the rungs B, B^1, perforated with holes to receive the lower ends of the plungers, substantially as and for the purpose specified.

No. 46,363. Stove and Furnace, Etc.

(*Poêle et fournaise, etc.*)

Thomas Austin, Brooklyn, New York, U.S.A., 16th June, 1894; 6 years.

Claim.—1st. A stove or furnace resting and capable of motion on rails, and having a pipe section *f* rigidly attached to it, in combination with an immovable pipe-section *c* secured to the wall and communicating with the flue, said pipe-sections being in alignment and adapted to be telescoped by the movement of the stove on said rails and to maintain a constant communication between the stove and flue irrespective of the position of the stove in the fire-place, substantially as described. 2nd. A stove or furnace resting and capable of motion on rails, and having a pipe section *f* rigidly attached to it, in combination with an immovable pipe-section *c* secured to the wall and communicating with the flue, said pipe-sections being in alignment and adapted to be telescoped by the movement of the stove

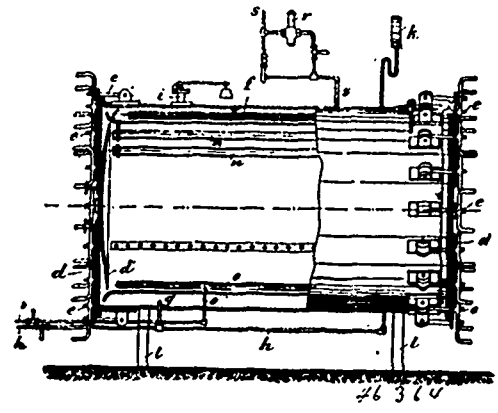


on said rails and to maintain a constant communication between the stove and flue irrespective of the position of the stove in the fire-place, in combination with said rails, and stops thereon for limiting the outward movement of the stove or furnace, as set forth.

No. 46,364. Disinfecting Oven

(*Foyer à désinfecter.*)

Fig.



Olaf Baumback, Copenhagen, Denmark, 16th June, 1894; 6 years.

Claim.—An improved disinfecting oven consisting of two chambers, one placed inside the other, both being made steam tight when in operation. The articles to be disinfected are to be suspended or placed on a perforated shelf in the inner or small chamber, the heating being effected for the most part indirectly by compressed or high pressure steam, and in special cases by the direct action of the condensation water free from rust and oil, penetrating through holes in the lower part of the apparatus, the quantity and pressure of the said water being regulated as required.

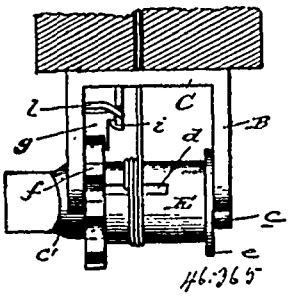
No. 46,365. Fence Wire Tightener.

(*Tendeur de fil de fer.*)

Isaac K. Hollinger, Grenville, Ohio, U.S.A., 16th June, 1894; 6 years.

Claim.—In a wire stretcher, the combination of a frame comprising a plate, brackets extending forwardly from the plate, the wall G, arranged parallel to one of the brackets and having the inwardly directed flange *i*, the wall H, extending from the lower end of the wall G, to the bracket, and the pin or bolt *l*, connected to the bracket and extending laterally from the same so as to close the upper end of the space between the bracket and the wall G, a spool

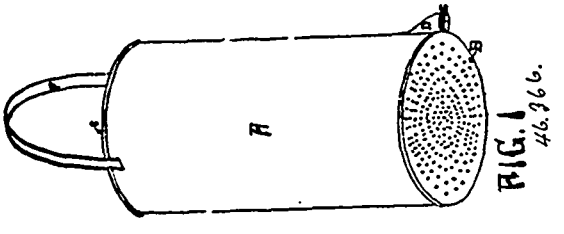
journalled in the brackets of the frame, and having ratchet teeth, and the pawl F, loosely arranged between the wall G, and the



bracket and having the lateral lugs *k*, adapted to engage the flange of the wall G, the said pawl being adapted to engage the ratchet teeth of the spool, all substantially as and for the purpose set forth.

No. 46,366. Potato Bug Sprinkler.

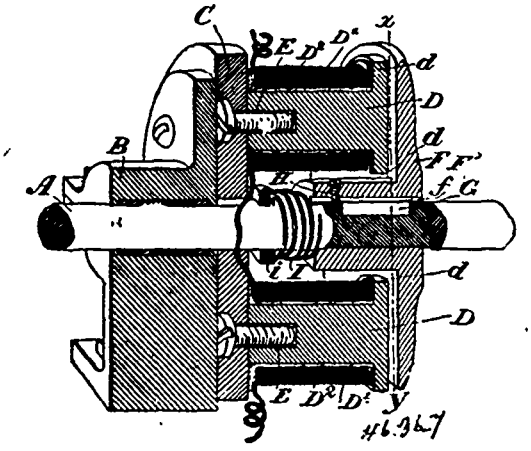
(Arrosoir pour patates.)



John Lashbrook, Stratford, Ontario, Canada, 16th June, 1894; 6 years.

Claim.—An article of manufacture comprising a metallic cylinder A, having one head *c*, air tight, and a handle F, secured to said air tight head *c*, at the other end of said cylinder A, a perforated cover or bottom B, made fast to the cylinder A, and an opening D, covered by a screw cap E, through which the sprinkler may be filled, substantially as and for the purpose hereinbefore set forth.

No. 46,367. Electric Brake. (*Frein électrique.*)

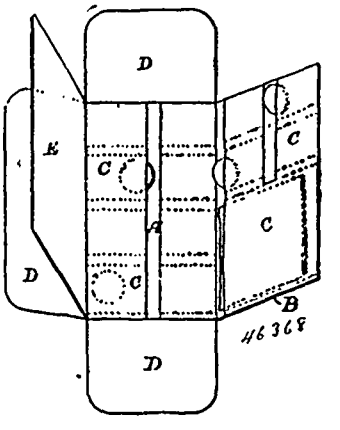


Francis N. Denison, Toronto, Ontario, Canada, 16th June, 1894; 6 years.

Claim.—1st. In an electro-magnetic brake, the combination with the main driving shaft and double magnets secured to one of the bearing standards of the shaft by means of its yoke through which the shaft passes, of a disc secured on the shaft opposite the face of the cores of the magnet, and having a hub extending inwardly between the magnets, the discs being so arranged that when the current is thrown through the magnet, a magnetic pull is exerted upon the disc and means being provided that when the current is thrown out of the magnets the disc is thrown away from the cores of such magnet a limited distance, as and for the purpose specified. 2nd. The combination, with the main driving shaft A, yoke C, the double magnet, the cores of which are secured to the yoke through which the shaft passes, of a disc D, having a hub extending inwardly between the coils of the magnets, which hub is provided with a longitudinal groove by which it is secured on the shaft by means of the feather key G, and a stop pin H, extending through the inner end of the hub and caused to normally abutt the inner end of the feather key by the spiral spring I, encircling the shaft and extending between the collar *i*, and the inner end of the hub as and for the purpose specified. 3rd. The combination, with the main driving shaft A, the yoke C, secured to the bearing standard B, of the shaft, the double magnet comprised of the two coils, the cores D, of which are secured to the yoke by the screws E, the flanges *d*, made on the end of the cores, the coils D^1, wound upon the flanged spool D^2, between the flange of the cores and the yoke, and the arc-shaped notches d^1, cut in the flanges next the shaft, of the disc F, provided with an inwardly extending hub F^1, longitudinal groove *f*, the key G, secured in the shaft and extending into the groove *f*, the stop pin H, spiral spring *i*, and collar I, as and for the purpose specified.

No. 46,368. Card Packet. (*Enveloppe.*)

FIG 1.



Percy L. Fison and Hartley Illingworth, both of Ripon, York, England, 16th June, 1894; 6 years.

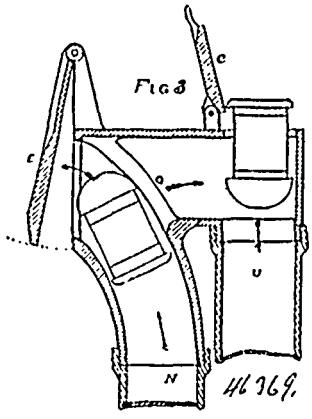
Claim.—1st. A card packet or envelope for the purpose set forth comprising two cards provided with recesses or pockets to receive coins and flexibly connected together along one of their edges and flaps flexibly secured to the remaining edges of one of the cards, as shown and described. 2nd. A card packet or envelope for the purpose set forth comprising cards provided with recesses or pockets to receive coins and flexibly connected together, along one of their edges, flaps flexibly secured to the remaining edges of one of the cards and a sheet of note paper secured at one end to one of said cards, substantially as described. 3rd. A card packet or envelope comprising two cards provided with recesses or pockets to receive coins and flexibly connected together along one of their edges, for the purpose set forth. 4th. A card packet or envelope for the purpose set forth, comprising two cards flexibly connected together and flaps along the edges thereof, substantially as described. 5th. A card packet or envelope comprising a main writing tablet of double thickness and flaps along the edges of same, substantially as described. 6th. A card packet or envelope comprising a main writing tablet of double thickness, flaps along the edges of same and a sheet of note paper secured at one edge to said tablet, substantially as set forth. 7th. A card packet or envelope comprising a writing tablet, flaps along the edges separated from such tablet by lines of perforations and a sheet of paper E secured to the tablet, substantially as and for the purpose set forth. 8th. A card packet or envelope having a series of pockets or recesses for the reception of coins or other articles, such card, packet or envelope being provided with an additional sheet of note paper E, as shown and described.

No. 46,369. Pneumatic Carrier. (*Transport pneumatique.*)

Wilson Phillips and John McCleary, both of Toronto, Ontario, Canada, 16th June, 1894; 6 years.

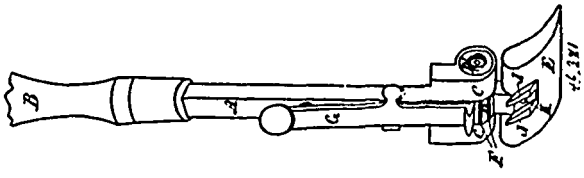
Claim.—1st. In pneumatic carriers, the combination of the tube N, guide G, gate E, with the tube U, guide H and gates C and F.

2nd. In pneumatic carriers, the combination of the tubes N and U, guide G, gates E and C. 3rd. In pneumatic carriers, the tube N,



combined with the guide G and gate E. 4th. In pneumatic carriers, the tube U, combined with the guide H and the gates C and F.

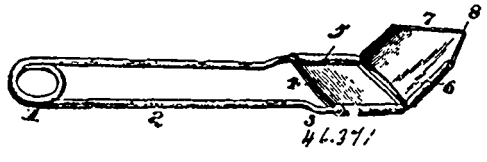
No. 46,370. Metal Scraping Tool.
(*Grattoir métallique.*)



John A. Rennie, Bathurst, New Brunswick, Canada, 16th June, 1894; 6 years.

Claim.—1st. A metal scraping implement, comprising a handle and shank terminating in jaws, a rotary head carrying the scraping tool and journalled between said jaws, and a spring catch pivoted to the shank and engaging said rotary head to lock the same at any desired angle or adjustment with respect to the shank, as set forth. 2nd. A metal scraping implement, comprising a handle having a shank terminating in jaws, a rotary head journalled between said jaws, a spring catch engaging said head to hold it fixed at the desired adjustment, and tools interchangeably attached to said head, as set forth.

No. 46,371. Vegetable Parer.
(*Machine à peler les pommes.*)



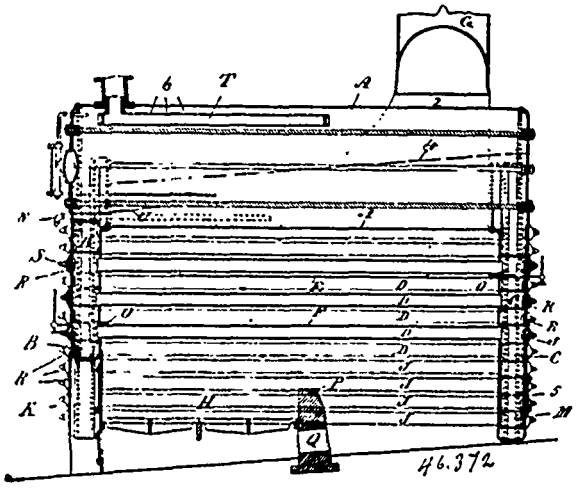
Addison M. Mundell, Paola, Kansas, U.S.A., 18th June, 1894; 6 years.

Claim.—The herein described fruit and vegetable parer, the same consisting of the wire blank bent at its centre and having its terminals near their ends bent at an obtuse angle, an intermediate plate connecting the terminals and bent about the same, and a knife bent about the angularly disposed portions of the terminals and having a rear cutting edge located adjacent to but spaced from the plate, and having its rear end diagonally disposed to form a point, substantially as specified.

No. 46,372. Steam Boiler. (*Chaudière à vapeur.*)

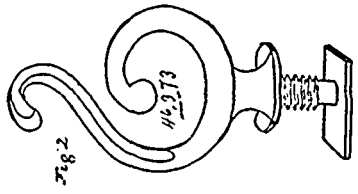
John Hazlett, Kingston, Ontario, Canada, 18th June, 1894; 6 years.

Claim.—1st. In a steam boiler, consisting of the drum A, front and rear water legs B, C, connected by water tubes D, the baffle plates E, F, extending from said legs alternately, a submerged baffle plate U, in said drum, the dry pipe T, having perforations 6, along the top, and the water legs having apertures opposite each water tube, said apertures closed by a cap R, and screw S, as and for the purpose set forth. 2nd. The steam drum A, and water legs B, C, connected by an integral plate forming the end of said drum and the front of the water leg, said water legs forming an integral portion of said drum, as set forth. 3rd. In a steam boiler, having water legs B, C, the front leg arched around the fire doors, and the rear leg straight at the bottom, and forming a mud chamber M, as set forth. 4th. The water leg B, having a tubular collar



and feed pipe N, passing therethrough, as set forth. 5th. The smoke stack G, divided at the base and straddling the steam drum, and connected to the boiler above the water line in said drum, as set forth. 6th. The perforated steam boxes O, in combination with a steam supply pipe and a baffle plate, as and for the purpose set forth.

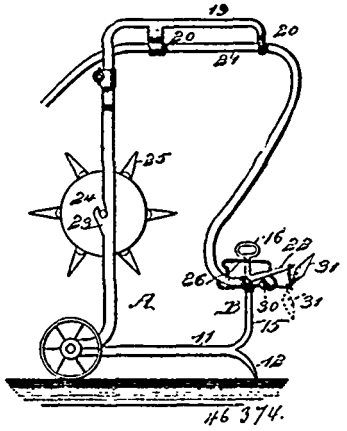
No. 46,373. Terret and Hook for the Back Pads of Harnesses. (*Crochet pour coussinets de sellettes.*)



Edward John Harris, Neepawa, Manitoba, Canada, 18th June, 1894; 6 years.

Claim.—1st. The combination of the terret and post, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of posts and hooks, substantially as and for the purpose hereinbefore set forth.

No. 46,374. Combined Reel and Lawn Sprinkler.
(*Dévidoir et arrosoir pour le gazon.*)

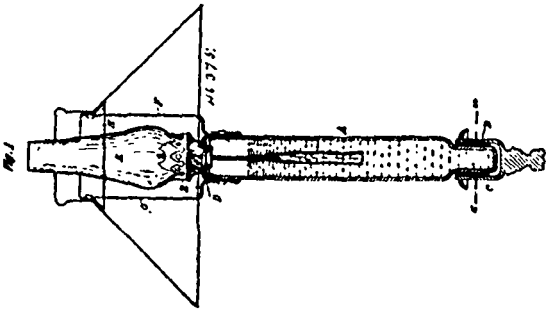


William L. Van Horne and Morton Yount, both of Norfolk, Nebraska, U S A., 18th June, 1894; 6 years.

Claim.—1st. A hose reel and sprinkler, constructed substantially as shown and described. 2nd. In a hose reel and sprinkler, the

combination with a suitable supporting standard, provided with an upwardly extending stem, of a revolving nozzle holder mounted upon said stem and adapted to removably hold the nozzle of the hose, substantially as shown and described. 3rd. A frame provided with guides for the reception of a hose, and a revolving table adapted to removably receive the nozzle of the hose, substantially as shown and described. 4th. A portable frame provided with guides for the reception of a hose, a revoluble table adapted to receive and temporarily hold the nozzle of a hose, and a deflecting plate carried by the table and adjustable with reference to the nozzle end of the hose, whereby a broad spray may be produced, substantially as shown and described. 5th. A frame provided with guides to receive a hose, a revolving table and clamps carried by said table, adapted to hold temporarily in engagement with the table the nozzle of a hose, substantially as and for the purpose specified. 6th. A portable frame, guides carried by the frame adapted to receive a hose, a revolving table mounted upon said frame and adapted to temporarily receive and hold the nozzle of a hose, a deflecting plate pivotally connected with the table and adapted to extend in the path of the stream of water delivered from the hose nozzle, and an adjusting device whereby the plate may be held in predetermined position, or dropped entirely from out of the path of the stream of water, substantially as and for the purpose specified. 7th. A portable frame, a reel carried by the said frame and adapted to receive a hose, guides also carried by the frame, adapted to hold the hose in a predetermined position, and a revoluble table carried by the frame and adapted to removably hold a hose nozzle in position to deliver a stream of water over a predetermined area, as and for the purpose specified.

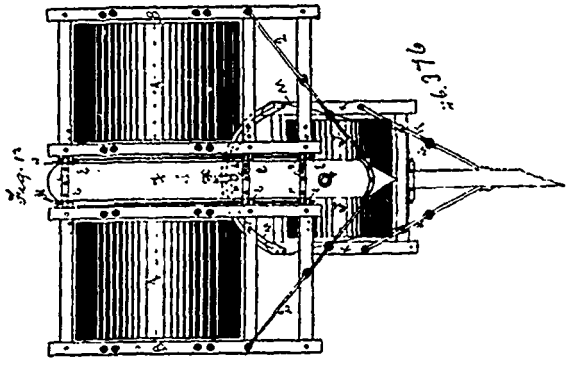
No. 46,375. Lamp. (*Lampe.*)



Frederic E. Baldwin, New Brighton, New York, U.S.A., 18th June, 1894; 6 years.

Claim.—1st. The combination with a lamp reservoir, of a loose helical spring surrounding the lower end of said reservoir, said spring being of such length that the inner portion holds the reservoir while the outer portion is free to start the expansion of the spring to fit sockets of varying sizes. 2nd. The combination of a lamp reservoir having its lower end reduced in size to form a shoulder, and a loose helical spring strip surrounding said reduced portion, said spring being of such length that the inner portion holds the reservoir while the outer portion is free to start the expansion of the spring to fit sockets of varying sizes. 3rd. The combination with a cylindrical reservoir A, made in imitation of a candle, the metal cap D, fitting over the open end of the cylinder and adapted to be held thereon by friction, the burner E, secured to the cap, the side supports F, G, attached to the cap and the shade ring H, carried by the said supports.

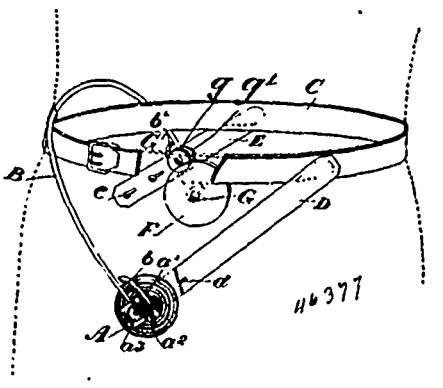
No. 46,376. Land Roller. (*Rouleau d'agriculture.*)



David Smith, Holland, Ontario, Canada, 18th June, 1894; 6 years.

Claim.—1st. The combination with the rollers A, A, and frames B, B, of the hinged reach F, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with said rollers, frames and reach of the pivoted roller J, the frame K, and sand board M, with braces Q, Q, substantially as and for the purpose hereinbefore set forth.

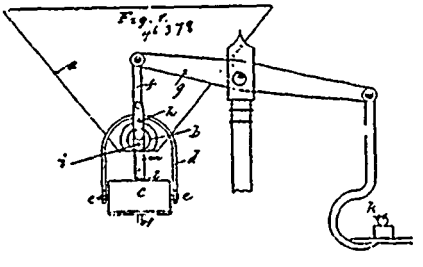
No. 46,377. Hernia Truss. (*Bandage herniaire.*)



Charles Cluthe, Toronto, Ontario, Canada, 18th June, 1894; 6 years

Claim.—1st. The combination, with the wire hoop having the front loop and the hernia pad adjustable therein, of the belt and front diagonal brace adjustably connected to the knob on the central wire of the pad, as and for the purpose specified. 2nd. The combination, with the wire hoop having a rear loop and pad adjustably held in the same, of the belt and rear brace and adjustable washers in the rear loop, connected to the rear brace by their binding screw, as shown and for the purpose specified. 3rd. The combination with the wire hoop B, provided with a front loop b, and spiral pad A, adjustably held in the loop b, of the rear loop b^1, pad F, adjustably held in the same, washers g, g^1, binding screw G, and diagonal brace E, attached to the belt C, and to the binding screw G, of the washers, as shown and for the purpose specified. 4th. The combination, with the wire hoop B, provided with a front loop b, and spiral pad A, the central wire of which is secured in the loop by the washers a^1 and a^2, of the knob a^3, secured on the end of the central wire a, connected to the diagonal brace D, which is secured to the belt C, as and for the purpose specified. 5th. The combination, with the hoop B, provided with a front loop b, and spiral spring pad A, adjustably held therein, and connected by the brace D, to the belt C, of the rear loop b^1, provided with an adjustable pad F, and adjustable washers g, g^1, held in position by the binding screw G, which is connected by the diagonal brace E, to the belt C, as shown and for the purpose specified.

No. 46,378. Automatic Scale Weighing Machine.
(*Balance à bascule automatique.*)

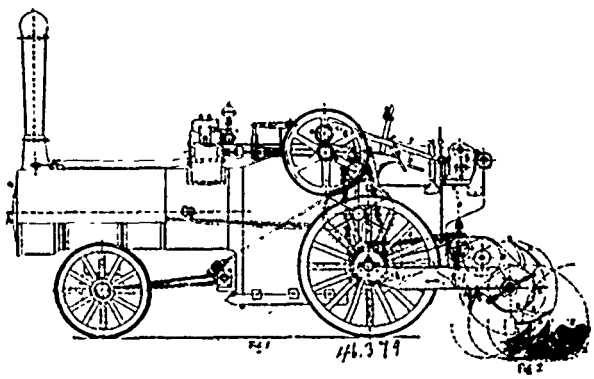


Ernest C. Chard, Chelsea, Middlesex, England, 19th June, 1894; 6 years.

Claim.—1st. In automatic scale weighing apparatus or machines, in combination, a bent arm or frame attached to the scale arm of a scale, a shutter attached to and operated by said bent arm or frame, said shutter sliding in grooves and closing or opening an aperture in a chute connected to a hopper containing the substance to be weighed, a scale having two compartments separated by an inclined partition and being pivoted to said bent arm or frame aforesaid, catch pieces on said scale pan engaging on stop pieces attached to a suitable part of said apparatus, a guide for receiving the weighted substance and conveying it to a desired receptacle. 2nd. In automatic liquid weighing machines or apparatus, in combination, a frame carrying a tipping scale pan having two compartments, a valve or cock connected to said frame, an arm balanced upon a centre one end of which is connected to the frame controlling the value and the other end provided with a pan for the reception of weights, stop pieces upon said scale pan engaging with a stop piece upon the hopper or

receptacle containing the liquid to be weighed or measured, substantially as described and illustrated.

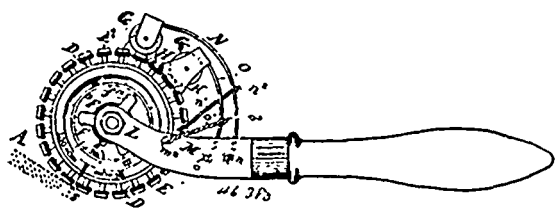
No. 46,379. Plough. (*Charrue.*)



Andreas Mechwart, Budapest, Hungary, 19th June, 1894; 6 years.

Claim. 1st. In combination with a motor, a secured shovel or spade system, the surfaces of which shovels or spades are curved inwards, which successively cut into the soil, rotating in similar manner to a trailing wheel, so arranged that the rut of both or at least the one trailing wheel x^1 (Fig. 4) is ploughed up, situated in a swinging, yielding suspended frame B, B, driven by means of a tooth or chain wheel from the swinging axis or spindle of the frame so that the wheel on the swinging axis or spindle makes as great a revolution as the drum wheel, constructed and arranged substantially as hereinbefore described. 2nd. In combination with claim 1, the secured knife axis or spindle C, the stripper or scraper S fastened on same (Figs. 1 and 2), or knife or cutter (Fig. 8), or the springs (Fig. 11), constructed and arranged, substantially as hereinbefore described. 3rd. In combination with the contents of claim 1, the arm *s* with movable end pieces, which by means of a spring or weight are pressed on to the stripping or scraping shovel or spade, (Fig. 9), as also the compulsory or forced inwards guidance of the stripper or scraper, by means of the forehanging shovel or spade, (Fig. 10), constructed and arranged, substantially as hereinbefore described. 4th. In combination with claim 1, the step formed deposited knife or cutter, (Figs. 6 and 7), constructed and arranged substantially as hereinbefore described.

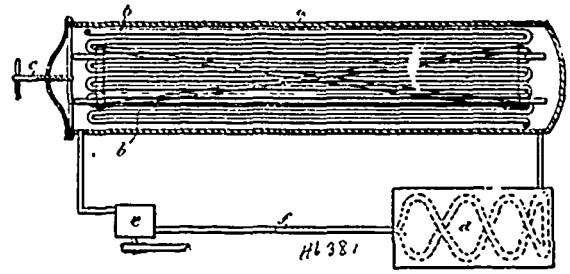
No. 46,380. Apparatus for Indexing.
(*Appareil pour index.*)



Edgar A. Goddin, Stoke Newington, County of London, England, 19th June, 1894; 6 years.

Claim.—1st. In an indexing tool or implement, for printing letters or the like indications, an expansible printing wheel, consisting of a disc, provided with a suitable number of radiating guideways containing a series of slides each of which is provided with a letter or other indication, at its outer end, and a pin or stud on its side, which either enters a spiral, or volute groove formed upon the adjacent side of a second disc, or engages with the outer end of one of a series of radiating arched spring arms, substantially as set forth and shown in the drawings. 2nd. In an indexing tool or implement, the combination of parts, for effecting the inking in one or more colours, and adaptable to the varying positions of the printing surfaces, consisting of arms pivoted at one end to a suitable support and having at their other extremities an inking roll, carried between two suitable ears, the underside of one of which is of such a form as, on engagement with a lifting plate attached to the letters or other signs it is not to ink, to cause the inking roll to be lifted clear of those letters, substantially as set forth and shown in the drawings. 3rd. In an indexing tool or implement, the combination of parts, for adjusting the distance between the letters, or other signs, on the expansible wheel, consisting of a rotatable disc, nut or equival ent part, having applied to it either a scale moving under, or about, a suitable pointer, or any appropriate indicator co-operating with a scale, substantially as set forth and shown in the drawings. 4th. In an indexing tool or implement, the combination of an expansible printing wheel, having a scale by which its circumference can be accurately gauged, with one or more ink-roll carrying arms provided with cams that co-operate with parts of the expansible wheel, carrying the printing surfaces, to effect the printing in different prearranged colours under the varying conditions of the printing surfaces, substantially as set forth and shown by the drawings. 5th. In an indexing tool or implement, the combination of the rotatable guide plate C, formed with radial guides upon it and bearing a graduated scale, letter slides D, movable in said guides and carrying at their outer ends plates *d*, having overlapping parts d^1, and supporting letters E, spirally grooved rotatable scroll plate B, projections from said slides fitting the groove of said scroll plates, said guide plate and scroll plate being suitably secured together, one or more ink rolls G, and their carrying arms N, O, provided with cams H, each of which is adapted to engage its respective overlapping part d^2, a spring plate F, having an arm to serve as a pointer in connection with said graduated scale, a suitable handle or holder as M, and axial connection between it and the rotatable parts of the tool, all substantially as and for the purpose set forth.

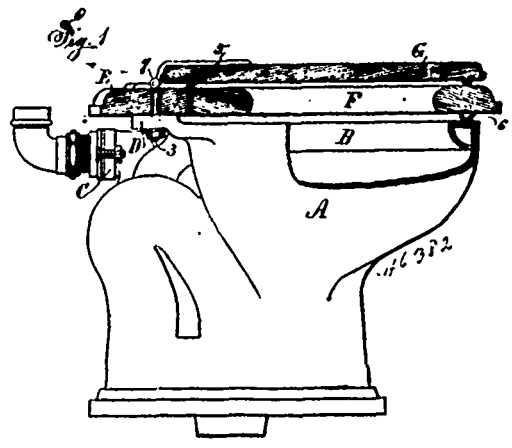
No. 46,381. Process of Vulcanizing Wood.
(*Procédé pour vulcaniser le bois.*)



Henry Lawrence Rutherford, of Montreal, Quebec, Canada, 19th June, 1894; 6 years.

Claim.—The method of vulcanizing wood, which consists in first placing the same in a closed receptacle or chamber, heating said chamber therein, and then heating and causing a continuous circulation of the air, as described.

No. 46,382. Water Closet. (*Cabinet d'aisance.*)

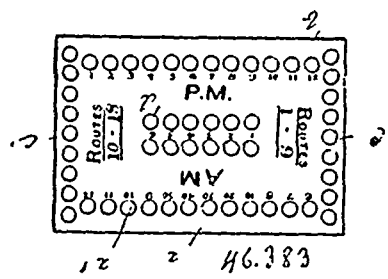


Edward Hammann, Brooklyn, New York, U.S.A., 19th June, 1894; 6 years.

Claim.—1st. The combination with the porcelain water closet having a flange at the rear, of a seat plate above the rear portion of such closet, and bolts for permanently securing the seat plate to the porcelain of the closet, a seat and hinges for connecting the seat to the seat plate, a lid extending at its rear edge over the upper surface of the seat plate, and hinges for connecting the lid directly to the seat plate, substantially as set forth. 2nd. The combination with the water closet having a flange or shelf at the rear portion, of a seat and seat plate hinged together and finished all around their outer edges, the seat plate resting upon and connected with the flange or shelf, substantially as set forth. 3rd. The porcelain water closet in one piece, having a supply water way at the back, and a rim surrounding and forming the top of the bowl, and a flange or shelf at the rear portion only of the rim, either level with the rim or raised above the same, and adapted to receive and support a seat plate, substantially as specified. 4th. The porcelain water closet in one

piece, having a supply water way at the back and a flushing ring surrounding and forming the top of the bowl, and a flange or shelf at the rear portion only of the flushing rim, in combination with a seat plate to the rear of the flushing rim and resting upon the flange, and means for connecting the seat plate to the flange, and a seat hinged to the seat plate, substantially as specified.

No. 46,383. Transfer Ticket. (*Billet de correspondance.*)



Andrew McFarland, Toronto, Ontario, Canada, 19th June, 1894; 6 years.

Claim.—A transfer ticket, the combination of the ticket means for indicating along its edges the hours of the day, the division of the hour, the route, and having in its central portion means for indicating the days of the weeks, and having arranged opposite each hour the divisions of the hour, route and day, means for rendering the ticket easily mutilateable, substantially as set forth.

No. 46,384. Apparatus for Drying Clothes.
(*Appareil pour sécher les vêtements*)

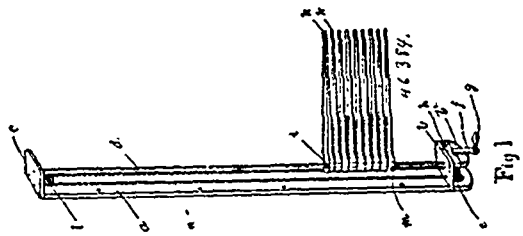
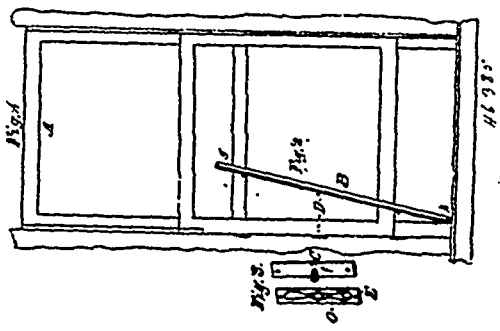


Fig 1

Joseph Lalonde, Winnipeg, Manitoba, Canada, 19th June, 1894; 6 years.

Claim.—1st. In an appliance for drying clothes, &c., the combination of the arms *k*, *k*, *k*, with the tube *i*, washers *j*, *j*, rod *d*, card *n*, pulley *l*, back *a*, top plate *c*, substantially as and for the purpose above set forth. 2nd. In an appliance for drying clothes, &c., the combination of the arms *k*, *k*, *k*, with the tube *i*, flanged as shown washers *j*, *j*, rod *d*, card *n*, pulley *l*, back *a*, top plate *c*, and box *b*, perforated as shown, with lower portion b^1, and screws at b^2, b^3, the axle reel *e*, crank *f*, and handle *g*, substantially as and for the purpose above set forth.

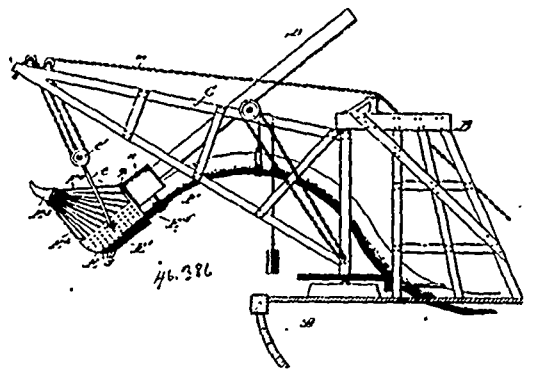
No. 46,385. Window Sash Slat Fastener.
(*Fermeture pour barres de croisée de fenêtre.*)



Joseph William Crevier and Edouard Leclerc, both of Montreal, Quebec, Canada, 19th June, 1894; 6 years.

Claim.—A window sash-slat fastener, comprising a knob-headed pin C, riveted to a metallic plate *f*, secured to a window sash-slat in combination with the wire spring D, perforated metal plate E, and bevelled angle on the sash slat *g*, secured to a window frame, substantially as and for the purpose hereinbefore set forth.

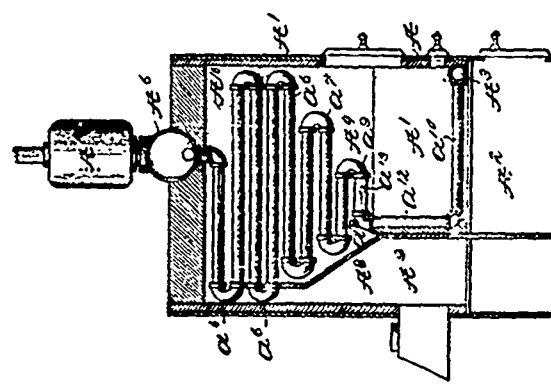
No. 46,386. Dredging Machine.
(*Machine à draguer.*)



Cyrus Harvey Underwood, Chicago, Illinois, U.S.A., 19th June, 1894; 6 years.

Claim. 1st. A dredge comprising a grated receptacle terminating in a plough-point, substantially as described. 2nd. The combination, with a dredge-beam and means for operating it, of a plough-scoop, secured to said beam, comprising a grated receptacle terminating in a plough-point, and a suction pipe extending from said receptacle, substantially as described. 3rd. A dredge comprising a perforated scoop-portion, a sole extending from the scoop at an angle thereto, a plough-point at the end of the sole, and a grate-portion extending between the plough-point and scoop, the parts being in rigid relation, substantially as described. 4th. In a dredging machine, the combination with a dredge beam and means for operating it, of a plough-scoop secured to the end of said beam, comprising a perforated scoop-portion E^1, a sole E^2, a plough-point E^3, and rods E^4, extending between the plough point and scoop, substantially as described. 5th. In a dredging machine, the combination with a dredge-beam and means for operating it, of a plough-scoop secured to the end of said beam, comprising a grated receptacle terminating in a plough-point, a suction pipe extending from said receptacle, and a shield *n*, for the end portion of the beam at the plough-scoop, substantially as described.

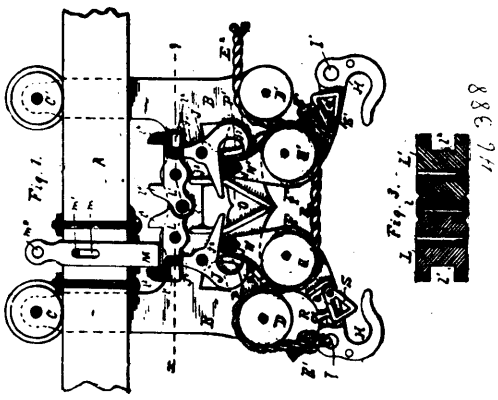
No. 46,387. Boiler. (*Chaudière.*)



Hamline W. Reynolds, Geneva, New York, U.S.A., 19th June, 1894; 6 years.

Claim.—The combination of the casing having a coal supply door and partition A^5, the upper part of which is inclined upward and rearward, and forms with the rear of said casing a down tube flue for the boiler, a fire box made of tubes forming part of the water circulating system of the boiler, and having its rear end next to the partition, water tubes projecting from the tubes forming the rear of the fire box, into said fire box and toward the front of the casing and of less length than the depth of said fire box, and having their rear ends on said inclined part of a partition A^5, water tubes above and forming a continuation of the tubes projecting into the fire box and extending from the front to the rear wall of the casing and overlapping and part resting on the top of the partition A^5, an upper header into which these last named tubes are inserted, down tube water tubes, a header connecting the ends of the tubes forming the fire box, and connected with said upper header by the down tube water tubes.

No. 46,388. Hay Carrier. (*Monte-foin*)



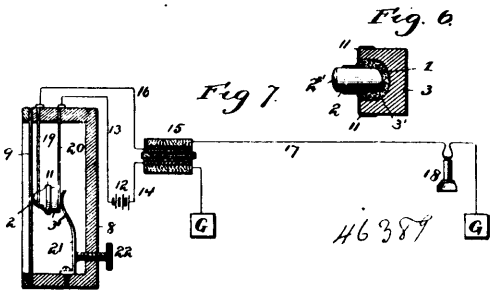
William Louden, Fairfield, Iowa, U.S. A., 19th June, 1894 ; 6 years.

Claim.—1st. The combination with a hay carrier, of two pulley blocks, and means to positively lock both pulley blocks in the carrier, substantially as set forth. 2nd. The combination with a hay carrier, of two pulley blocks and means to lock both pulley blocks simultaneously in the carrier, substantially as and for the purpose set forth. 3rd. The combination of a hay carrier, of an elevated track, a stop to limit the movement of the carrier on the track, a hoisting rope, two pulley blocks mounted upon the rope, and means whereby the pulley blocks will jointly release the carrier from the stop and be positively locked in the carrier. 4th. The combination with a hay carrier, of two pulley blocks, a registering head fitted on each pulley block, and two grappling hooks adapted to engage the registering heads and lock the pulley blocks in the carrier, substantially as set forth. 5th. The combination with a hay carrier of two grappling hooks, two pulley blocks adapted to engage the grappling hooks, and a locking dog to lock the hooks in engagement with the pulley blocks. 6th. The combination with a hay carrier of two grappling hooks, two pulley blocks adapted to catch on the hooks, and means whereby the hooks are locked in position and the pulley blocks retained thereby. 7th. The combination with a hay carrier, of a stop to arrest the movement of the carrier on its track, two pulley blocks adapted to hold the load, two grappling hooks to catch and retain the pulley blocks, and a locking dog to alternately engage the stop and to hold the grappling hooks in engagement with the pulley blocks, substantially as and for the purpose set forth. 8th. The combination with a hay carrier, of a stop to arrest the movement of the carrier on its track, two pulley blocks adapted to hold the load, two grappling hooks to engage the pulley blocks, and a pair of locking dogs pivoted together and adapted to alternately engage the stop and the grappling hook, substantially as set forth. 9th. The combination with a hay carrier, of two pulley blocks, two grappling hooks to engage them, two forked locking dogs pivoted together, and a movable stop to engage them all, arranged to operate substantially as set forth. 10th. The combination with a hay carrier, of two pulley blocks and two grappling hooks to engage them, the throat of the carrier being made in two divisions, substantially as and for the purpose set forth. 11th. The combination with a hay carrier having two grappling hooks and a V-shaped partition in its throat, of two pulley blocks adapted to enter the separate divisions and lock therein, substantially as shown and described. 12th. In hay carriers, the combination of a stop to arrest the movement of the carrier, two pulley blocks, two grappling hooks and two locking dogs pivoted together, and having recesses in their outer ends, substantially as and for the purpose set forth. 13th. In hay carriers, a pulley block having a hook thereon, a stop pivoted in the shank of the hook so as to swing against the inner face of the point of the hook, and a finger on the stop extending beyond the shank of the hook, substantially as and for the purpose set forth. 14th. The combination of the stop M, locking dogs L and L^1, grappling hooks J and J^1, pulley blocks F and F^1, and the hoisting rope E, substantially as shown and described.

No. 46,389. Microphone. (*Microphone.*)

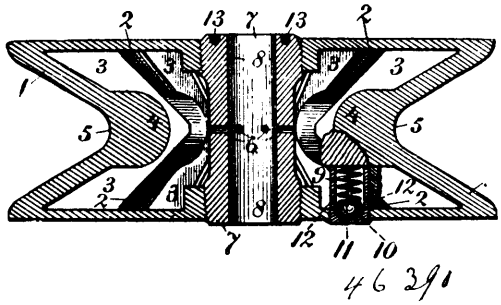
Charles Clamond, Paris, France, 19th June, 1894 ; 6 years.

Claim.—1st. The method of transmitting vocal and other sounds telegraphically, by causing said sounds to vary the cross-section and length and corresponding electrical resistance of an electrical conductor included in a charged electric circuit, and thereby producing electrical undulations similar in form to the sound-waves which accompany the utterance of said vocal and other sounds, substantially as described. 2nd. A telephonic transmitter comprising two electrodes at a distance from each other and a plastic, viscid conducting body maintained in invariable contact with the two electrodes, the whole included in a charged electric circuit, substantially as described. 3rd. A telephonic transmitter comprising two separated electrodes forming the terminals of a charged electric circuit, a plastic viscid conducting body maintained in invariable contact with the two electrodes, and an elastic non-conducting sleeve enveloping the plastic body, substantially as described. 4th. A telephonic transmitter comprising one fixed electrode and one



electrode movable toward and from the other under the influence of sound-waves, a plastic, viscid conducting body maintained in invariable contact with the two electrodes, a diaphragm for receiving the impact of sound-waves and giving motion to the movable electrode, and a charged electric circuit including in series the two electrodes and the plastic viscid conductor, substantially as described. 5th. In a telephonic transmitter, the combination of a diaphragm and an electrode receiving motion from said diaphragm with another electrode separated from the first, a plastic viscid conductor maintained in invariable contact with the two electrodes, an elastic non-conducting sleeve enveloping the plastic conductor and a portion of the electrodes, and a charged electric circuit terminating at the electrodes, substantially as described. 6th. In a telephonic transmitter, the combination of an electrode having a convex surface and a second electrode having a concave surface embracing but out of contact with the convex surface of the first electrode, and a plastic viscid conductor bridging the two electrodes and in invariable contact with the same, substantially as described. 7th. In a telephonic transmitter, the combination of an electrode having a convex spherical surface and another electrode having a spherical cavity larger in diameter, but concentrically arranged with reference to the first electrode, and a plastic viscid conductor bridging the two electrodes and in invariable contact with their spherical surfaces, substantially as described. 8th. A microphonic element consisting of a plastic viscid conductor, substantially as described. 9th. A microphonic element consisting of a viscid, plastic conductor, composed of an intimate mixture of a fluid and of finely divided solids, either or both of which are conductors of electricity, substantially as described. 10th. A microphonic element consisting of a viscid, plastic conductor of electricity, composed of an intimate mixture of a non-conducting fluid or fluids with finely-divided conducting solids, substantially as described. 11th. A microphonic element consisting of a viscid and plastic conductor of electricity, composed of an intimate mixture of a viscid, non-conducting fluid with finely divided metal or metals or metalloids, substantially as described. 12th. A viscid and plastic microphonic element consisting of an intimate mixture of glycerine and finely divided metal or metals or metalloids, substantially as described.

No. 46,390. Trolley Wheel. (*Roue de trollée.*)

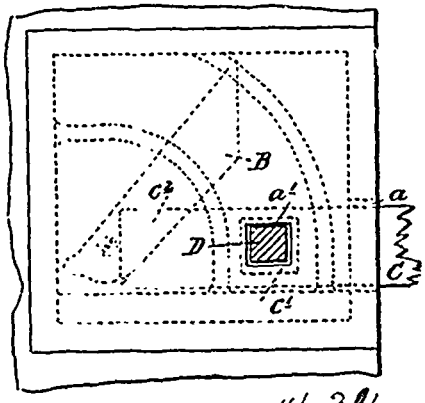


Frederick Lepper and William Wighton, both of Toronto, Ontario, 19th June, 1894 ; 6 years.

Claim—1st. A trolley wheel having a hollow or chamber within, a series of centrally pointed walls around the periphery of said chamber, and a conical bushing screwed therein at the centre of the wheel, and having radial oil-holes communicating with the axle-hole at the centre of said conical bushing, substantially as set forth. 2nd. A trolley wheel having a hollow within, a series of centrally pointed walls as specified, a conical bushing screwed therein at centre, and having an axle-hole, and radiating oil-holes as specified, and an inlet valve in one side of the wheel and consisting of a tube, a ball, and a spring to actuate the ball in said tube, substantially as set forth.

No. 46,391. Elevator. (*Elévateur.*)

Fig. 3



Alexander Shepherd and John Malcolm Shepherd, both of Edinburgh, Scotland, 19th June, 1894; 6 years.

Claim.—1st. In lifts, hoists and the like, an interlocking connection between the movable doors in the framework, giving access to the lift, and a movable guard carried by the lift, whereby no door can be opened unless the lift is brought stationary opposite it, and when once the door is opened the lift cannot again be started until the door is closed, and whereby the door remains closed until the next visit of the lift, as set forth. 2nd. In lifts, hoists and the like, having sliding, hinged or swinging doors, the lock A, having pivoted bolt B, working in conjunction with the sliding rod and shutter C, C¹, and bolt or sneck D, substantially as and for the purposes hereinbefore described and shown. 3rd. In lifts, hoists and the like, having an under or luggage compartment, the lock A, having pivoted bolt B, working in conjunction with the sliding rods C, C³, and shutter C⁴, recesses F¹, and bolt or sneck D, substantially as hereinbefore described and shown. 4th. In lifts, hoists and the like, having lift up doors, the lock A, having pivoted bolt B, working in conjunction with the sliding rod C, having groove c^3 and shutter, and the flange or sneck D, substantially as and for the purposes hereinbefore described and shown.

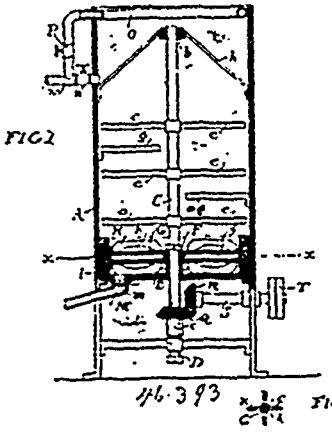
No. 46,392. Salt. (*Sel.*)

George Weddell, Newcastle-on-Tyne, England, 19th June, 1894; 6 years.

Claim.—1st. The admixture with salt for dietetic, medicinal, veterinary, agricultural, and preserving purposes of the chemical or mineral ingredients in the manner and in about the proportions as hereinbefore described. 2nd. A composition for admixture and in admixture with salt composed of the respective ingredients as described.

No. 46,393. Lime Slaking Machine.

(*Machine pour éteindre la chaux.*)



John L. Bowles, Philadelphia, Pennsylvania, U.S.A., 19th June, 1894; 6 years.

Claim. 1st. The combination with the vessel having a solid bottom provided with a stationery annular gear, of a central shaft, a spider carried by the shaft and having one or more radial arms, and rotary sleeves carried by the radial arms and provided with radial projections, and with gear-wheels meshing with the stationery gear. 2nd. In a mixing machine, the combination of a closed vessel, a vertical shaft journalled therein and provided with laterally projecting arms, rotary sleeves journalled on said arms and free to rotate thereon provided with a series of projections, a stationary annular gear located within the vessel, gear-wheels carried by the sleeves and engaging with the stationary gear, and power devices to rotate the vertical shaft, whereby the positive rotation of the shaft turns the projecting arms carried by it in a horizontal plane, and moves the gear-wheels of the sleeves upon the stationary gear of the vessel causing the sleeves to rotate upon the arms as axes, and thoroughly mix the contents of the vessel by a series of projections carried by them. 3rd. In a mixing machine, the combination of a closed vessel, a main rotary shaft journalled therein and provided with radially projecting arms, rotary sleeves upon said radial arms adapted to rotate thereon, and a series of radially projecting wings K arranged longitudinally upon the sleeves and forming a series of longitudinal mixing wings carried by each arm and moving therewith about the axis of the main rotary shaft and also about the rotary arms. 4th. In a mixing machine, the combination with a suitable vessel to contain the ingredients to be mixed, of a rotary shaft journalled therein and carrying one or more radial arms *c*, the stationary projecting arms or blades projecting from the interior of the vessel, and the rotary wings or blades K carried by the shaft C, and rotating transversely to the axis of rotation of the shaft. 5th. In a mixing machine, the combination with a suitable vessel to contain the ingredients to be mixed, of a rotary shaft journalled therein and provided with a series of radial arms, sleeves journalled upon said radial arms and free to rotate thereon transversely to the axis of rotation of the shaft, and provided with longitudinally arranged radially projecting wings K, of a length approximately equal to the length of the sleeves. 6th. In a mixing machine, the combination with a suitable vessel to contain the ingredients to be mixed, of a rotary shaft journalled thereon and provided with a series of radial arms, sleeves journalled upon said radial arms and free to rotate thereon transversely to the axis of rotation of the shaft, and provided with longitudinally arranged radially projecting wing K, of a length approximately equal to the length of the sleeves provided with openings or perforations *k*. 7th. The combination with the vessel A of the shaft C, having the radial arms *f*, rotary sleeves G journalled on said arms *f*, and provided with radial projections, gear-wheels H carried by the sleeves G, stationary gear I located within the vessel A meshing with the gear-wheels H, and the hood L extending over the gear-wheels H and stationary gear I.

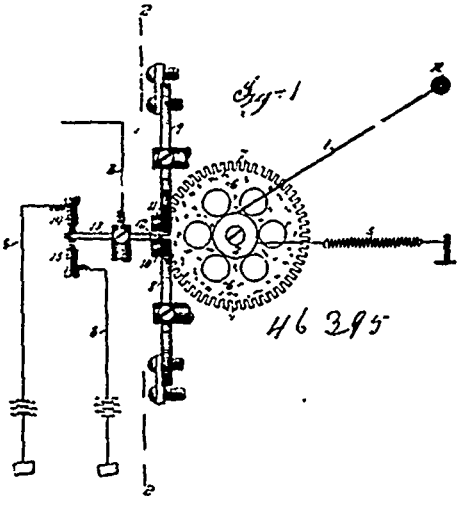
No. 46,394. Liniment. (*Onguent.*)

Joseph Livingston, Lobo, Ontario, Canada, 19th June, 1894; 6 years.

Claim.—A compound composed of British oil, oil of spike, oil of hemlock, camphor gum, liquid opodeldoc, beef-gall and alcohol in the proportions, and for the purposes set forth.

No. 46,395. Electro Mechanical Movement.

(*Mouvement électro-mécanique.*)



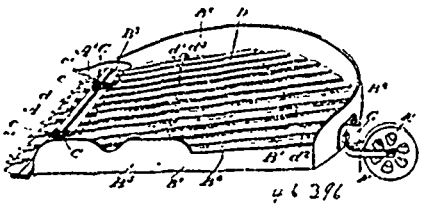
Elisha Gray, Highland Park, Illinois, U.S.A., 19th June, 1891; 6 years.

Claim.—1st. The combination of a magnet, a movable series of teeth, and a lever mounted so that it may vibrate and placed within the range of magnetic influence of the magnet, the movement of the teeth operating to make and break the magnetic circuit and thereby give a vibratory movement to the lever, and an electric circuit controlled through the movement of the lever, substantially as set forth.

2nd. The combination of a magnet, a movable series of teeth forming, when in proper position, a part of the magnetic circuit of the magnet, and a vibrating electric circuit breaker, the movement of the teeth operating to make and break the magnetic circuit and thereby give a vibratory movement to the electric circuit breaker, substantially as set forth. 3rd. The combination of a magnet, a toothed wheel, the teeth thereof forming, when in proper position, a part of the magnetic circuit of the magnet and a vibrating electric circuit breaker, the revolution of the wheel operating to make and break the magnetic circuit and thereby give a vibratory movement to the electric circuit breaker, substantially as set forth. 4th. The combination of a magnet or magnets, constituting two partially or wholly independent magnetic circuits, a movable series of teeth, and a vibrating electric circuit breaker, the movement of the teeth operating to alternately make and break said magnetic circuits and thereby vibrate the electric circuit breaker, substantially as set forth. 5th. The combination, with a lever mounted so that it may vibrate and provided with a bifurcated magnetizable portion, of a series of teeth adapted to attract the magnetizable portion of the lever and movable with reference thereto, said teeth being so arranged with reference to the lever that as they are moved in proximity to it the lever is caused to vibrate, substantially as set forth. 6th. A magnet in which one pole piece is provided with a lever mounted so that it may vibrate, and the other pole piece is movable and provided with a number of teeth of magnetic material so arranged with reference to the lever that as they are moved in proximity to it the lever is caused to vibrate, substantially as set forth. 7th. A magnet in which one pole piece is provided with a bifurcated lever mounted so that it may vibrate, and the other pole piece is movable and provided with a number of teeth of magnetic material so arranged with reference to the lever that as they are moved in proximity to it the lever is caused to vibrate, substantially as set forth. 8th. The combination with a lever mounted so that it may vibrate and provided with a magnetizable portion, of a rotary disc provided with a number of teeth adapted to attract the magnetizable portion of the lever, said teeth being so arranged with reference to the lever that as the disc is rotated the lever is caused to vibrate, substantially as set forth. 9th. The combination with a lever mounted so that it may vibrate and provided with a bifurcated magnetizable portion of a rotary disc provided with a series of teeth adapted to attract the magnetizable portion of the lever, said teeth being so arranged with reference to the lever that as the disc is rotated the lever is caused to vibrate, substantially as set forth. 10th. A magnet in which one pole piece is provided with a lever mounted so that it may vibrate, and the other pole piece is provided with a number of teeth attached to a rotary disc, and so arranged with reference to the lever that as the disc is rotated the lever is caused to vibrate, substantially as set forth. 11th. A magnet in which one pole piece is provided with a lever mounted so as to vibrate and acting as a circuit maker and breaker, and the other pole piece is movable and provided with a number of teeth so arranged with reference to the lever that as they are moved in proximity to it the lever is caused to vibrate, substantially as set forth. 12th. A magnet in which one pole piece is provided with a lever mounted so that it may vibrate, and acting as a circuit maker and breaker, and the other pole piece is provided with a number of teeth attached to a rotary disc, and so arranged with reference to the lever that as the disc is rotated the lever is caused to vibrate, substantially as set forth. 13th. The combination of a telautographic transmitting-pen, an electric circuit, a vibrating electric circuit maker and breaker for sending pulsations to line, and a source of magnetic energy, and a circuit or circuits therefor serving to transmute the movements of the transmitting-pen into vibrations of the circuit maker and breaker, substantially as set forth. 14th. The combination of a telautographic transmitting-pen, an electric circuit, a circuit making source of magnetic energy and a circuit or circuits therefor, a series of teeth connected with the transmitting-pen so as to move therewith, the movement of the teeth operating to change said magnetic circuit or circuits and thereby cause the circuit making and breaking lever to vibrate, substantially as set forth. 15th. The combination of a telautographic transmitting pen, an electric circuit, a circuit making and breaking lever for producing pulsations in said circuit, said lever being provided with a bifurcated magnetizable portion, a series of teeth adapted to attract the magnetizable portion of the lever and connected with the transmitting pen so as to move therewith, said teeth being so arranged with reference to the magnetizable portion of the lever that as they are moved in proximity to it the lever is operated, substantially as set forth. 16th. The combination of a telautographic transmitting pen, an electric circuit, a circuit making and breaking lever for producing pulsations in said circuit, and a magnet of which the lever or a part thereof constitutes one pole piece and the other pole piece whereof is provided with a series of teeth connected with the transmitting pen so as to move therewith, said teeth being so arranged with reference to the lever that as they are moved in proximity to it the lever is operated to produce pulsations in the circuit, substantially as set forth. 17th. The combination of a telautographic transmitting pen, an electric circuit, a circuit making and breaking lever for producing pulsations in said circuit, said lever being provided with a magnetizable portion, a rotary disc provided with a number of teeth adapted to attract the magnetizable portion of the lever and connected with the transmitting pen so as to be rotated as the pen moves, said teeth being so arranged with reference to the magnetizable portion of the lever that as they are moved in proximity to it the lever is operated, substantially as set forth. 18th. The combination of a magnet, a movable tooth or series of teeth, and a lever mounted so that it may vibrate, the movement of the teeth operating to make and break the magnetic circuit and thereby give a vibratory movement to the lever, and an electric circuit controlled through the movement of the lever, substantially as described.

No. 46,396. Clover Seed Attachment for Mowers.

(*Attache de semoir pour faucheuses.*)



The Massey Harris Company, assignee of Lyman M. Jones, William F. Johnston, and William J. Clokey, all of Toronto, Ontario, Canada, 20th June, 1891; 6 years.

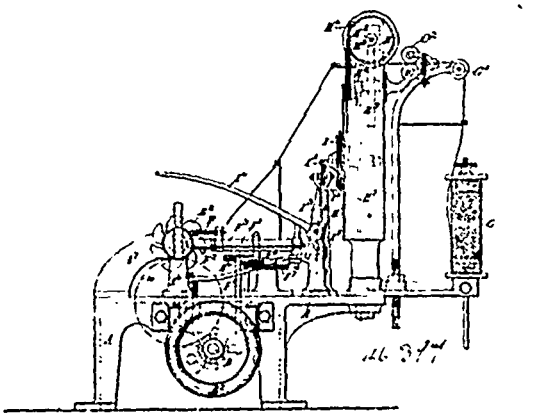
Claim.- 1st. The combination with the cutter-bar of a mower, of a rearwardly extending table attachment providing with the back and side board and inclined slatted, false bottom and means whereby the attachment is secured to the cutter bar, and supported from the ground, as and for the purpose specified. 2nd. The combination with the cutter-bar A, of the attachment B, consisting of the bottom or table B^1, arc-shaped side and back board B^2, slanting inner side board B^4, and open, slatted, false bottom inclined upwardly from front to rear, and means whereby the front of the attachment is secured to the cutter-bar, as and for the purpose specified. 3rd. The combination with the cutter-bar A, of the attachment B, consisting of the bottom or table B^1, arc-shaped side and back board B^2, slanting inner side board B^4, and open, slatted, false bottom inclined upwardly from front to rear and the cross-bar C, secured to the cutter-bar A, by the bolts c, and to the front cross-bar of the attachment B^3, by the bolts c^1, as and for the purpose specified. 4th. The combination with the cutter-bar A, of the attachment B, consisting of the bottom or table B^1, arc-shaped side and back board B^2, slanting inner side board B^4, and open, slatted, false bottom inclined upwardly from front to rear, and the cross-bar C, secured to the cutter-bar A, by the bolts c, and to the front cross-bar of the attachment B, by the bolts c^1, the cross-bars extending rearwardly over the seats of the false bottom, as and for the purpose specified. 5th. The combination with the cutter-bar A, and the bottom or table B^1, provided with an arc-shaped side and back board B^2, of the open, slatted, false bottom D, connected together by the cross-bars d^1, d^2, and supported by the standards d^3, d^4, and means for securing the front of the attachment to the cutter-bar of the mower, as and for the purpose specified. 6th. The combination with the cutter-bar A, the table or bottom B^1, the side and back board B^2, open slatted, false bottom D, suitably supported and inclined upwardly from front to rear of the inner side bar B^4, having an upward extension or guiding board B^5, at the front and the opening B^6, to the rear of it, and means whereby the attachment is secured to the cutter-bar, as and for the purpose specified. 7th. The combination with the cutter-bar and the attachment thereto, of the bottom or table B^1, side and back board B^2, and inner side board B^4, open, slatted, false bottom D, suitably supported and inclined upwardly from front to rear of the caster-wheel E, journalled in the forked bracket F, which is swivelled in the bracket G, secured to the back board B^2, as and for the purpose specified.

No. 46,397. Machinery for Winding Thread upon Star Shaped Disc Holders. (*Machine à bobiner le fil sur des porte-disques en forme d'étoile.*)

John Keats, Bagnall Hall, Stafford, England, 20th June, 1894; 6 years.

Claim.—1st. In machinery for winding thread upon star shaped disc holders, the combination with a suitable framing and driving mechanism, of a series of change wheels, a shaft on which such wheels are mounted, a rocking frame in which said shaft is mounted, adjusting mechanism for said change wheels and means for setting them in position, a rotary winder shaft to carry the star shaped disc holders, means for retaining said holders in place upon said winder shaft, a driving connection between the shaft carrying the change wheels and said winder shaft and a reciprocating thread guide having a movement transversely of the line of rotation of the holders, for the purpose set forth. 2nd. In machinery for winding thread upon star shaped disc holders, the combination with a suitable framing, of a rotary winder shaft to carry the star shaped disc holders, means for retaining said holders in place upon said winder shaft, a reciprocating thread guide having a movement transversely of the line of rotation of the holders, a movable yielding resistance

carrier or slide carrying said guide and having a tendency toward said holders, operating mechanism for rotating said winder shaft and imparting a reciprocating movement to said thread guide and



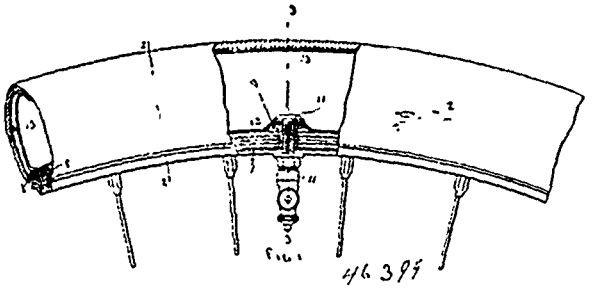
inclined bearing surfaces in connection with said carrier or slide and the said means for retaining the holders in place, acting to adjust said carrier, for the purpose set forth. 3rd. In machinery for winding thread upon star shaped disc holders, the combination with the rotating holder, its operating mechanism, the reciprocating thread guide and its operating mechanism, of a thread supply and length measuring and indicating mechanism with the thread suitably guided to same from such supply, for the purpose set forth. 4th. In machinery for winding thread upon star shaped disc holders, the combination with the rotating holder, its operating mechanism, the reciprocating thread guide its operating mechanism, and the friction clutch for throwing the machine into and out of operation, of a thread supply, length measuring and indicating mechanism with the thread suitably guided to same from such supply and oscillatory detent mechanism adapted to be acted upon by said indicating mechanism to actuate the said friction clutch for automatically stopping the machine. 5th. In machinery for winding thread upon star shaped disc holders, the combination with the rotating holder, its operating mechanism, the reciprocating thread guide, its operating mechanism, and the friction clutch for throwing the machine into and out of operation, of a thread supply, length measuring and indicating mechanism with the thread suitably guided to same from such supply, and mechanism comprising a notched cam I, wedge shaped rocking arm I^1 suitably supported, a vertical lever I^3, and head lever I^4, adapted to be acted upon by said indicating mechanism to actuate the said friction clutch for automatically stopping the machine. 6th. The means above described for operating the thread layer, such thread layer being fitted to a rock shaft mounted on a slide which bears upon the accumulated thread on the holder, and is caused to retreat with its thread layer as the thread accumulates, the rock shaft being connected through a rock lever with a cam on the cam shaft. 7th. In machinery for winding thread upon star shaped disc holders, the combination with the rotating holder drawing upon the thread, of a thread supply and an intermediate tension device comprising a pair of friction rollers through which the thread passes, one mounted in a fixed bearing and the other in a movable one, and an adjustable yielding pressure connection, for the purpose set forth.

No. 46,398. Process of Plating Metals with Aluminum or its Alloys. (*Procédé de plaquer le métal avec de l'aluminum ou ses alliages.*)

Edward C. Broadwell, Philadelphia, Pennsylvania, U.S.A., 20th June, 1894; 6 years.

Claim.—1st. The art of plating metal with aluminum, which consists in dipping the metal to be coated into a bath of molten aluminum or alloy thereof in the presence of a halogen element in an uncombined condition, substantially as described. 2nd. The art of plating metals with aluminum, which consists in treating the metal to be coated with a solution of a halogen in the water, and then dipping the metal thus treated into a bath of molten aluminum or alloy thereof, substantially as described. 3rd. The process of plating metals with aluminum, which consists in treating the metal to be coated with a solution of bromine, and then dipping the same into a bath of molten aluminum or alloy thereof, substantially as described. 4th. The method of plating metals with aluminum, which consists in coating the article to be plated with the salt of a metal decomposable from its haloid salt by the reagency of molten aluminum, and then dipping the metal thus treated into a bath of aluminum or alloy thereof, that is to form the coating, substantially as described. 5th The method of continuously plating metals with aluminum or alloy thereof, which consists in treating the metal to be coated with a flux containing a haloid salt of a metallic substance, keeping this flux continuously acidulated by the addition from time to time of small quantities of acid, and then dipping the metal to be coated after treatment with this flux in the bath of molten aluminum or alloy thereof which is to form the coating, substantially as described. 6th. The process of forming on metals a surface coating of aluminum or aluminum alloy, which consists in placing on the metal to be coated a compound resolvable into its elements or, some of them by the reagency of molten aluminum, and then dipping the metal thus treated into a bath of molten aluminum or alloy thereof, substantially as described. 7th. The process of forming on metals a surface coating of aluminum, which consists in placing on the surface of the metal to be coated a film of a haloid salt, of a metal reducible from its haloid salts by the action of the molten aluminum, and then dipping the metal thus treated into a bath of molten aluminum or alloy thereof, substantially as described. 8th. The process of plating metals with aluminum or alloy thereof, which consists in treating the same with a flux containing zinc chloride, and then dipping the metal thus treated into a bath of molten aluminum or alloy thereof, substantially as described.

No. 46,399. Bicycle Tire. (*Bandage de bicycle.*)



Edward S. Beach, assignee of Frederick White, both of Boston, Massachusetts, U.S.A., 20th June, 1894; 6 years.

Claim.—1st. In a tire, the herein described combination of a troughed rim, a sheath, an inner inflatable tube, a pair of interior hoops, a transverse clamp and means for holding it in place, the sheath being formed with shoulders along each margin, the outer shoulders engaging the rim, the inner shoulders being engaged by the hoops, and the transverse clamp holding the hoops against the inner shoulders, all substantially as and for the purpose set forth. 2nd. In a tire, the combination of a troughed rim, a sheath and interior expansible tube with a pair of hoops intermediate the sheath and expansible tube, the sheath being provided with a shoulder along each margin, the outer shoulder lying in the rim, and the inner shoulders forming abutments to prevent the hoops moving internally, all substantially as and for the purpose set forth. 3rd. In a tire, the combination of a troughed rim and a split sheath with a pair of hoops, the sheath being formed with outer marginal shoulders engaging the flanges of the rim, and with inner marginal shoulders forming abutments for the hoops, all substantially as and for the purpose set forth.

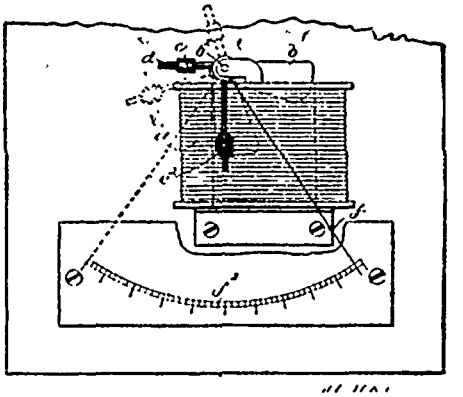
No. 46,400. Incandescent Electric Lamp and Socket. (*Lampe électrique à incandescence et douille*)

Charles Albert Hussey, New York, State of New York, U.S.A., 21st June, 1894; 6 years.

Claim.—1st. In a combined incandescent electric lamp and socket, the combination, with a lamp having two filaments, and a socket arranged to receive said lamp, of conductors for supplying current to the lamp, and a switch in the socket adapted to connect said filaments in series, or in multiple with said conductors, substantially as described. 2nd. In a combined incandescent electric lamp and socket, the combination, with a lamp having two filaments, and a socket arranged to receive said lamp, of conductors for supplying current to the lamp, and a switch in the socket adapted to connect said filaments singly or in series with said conductors, substantially as described. 3rd. In a combined incandescent electric lamp and socket, the combination, with a lamp having two filaments, and a socket arranged to receive said lamp, of conductors for supplying current to the lamp, and a switch in the socket adapted to connect said filaments singly, in series, or in multiple with said conductors, substantially as described. 4th In a combined electric lamp and socket, the combination, with a lamp having two filaments, and contact pieces on the lamp forming terminals of said filaments,

of a socket arranged to receive the base of said lamp, and having contact pieces corresponding to and adapted to make contact with the contact pieces of the lamp, conductors for supplying current to the lamp, and a switch in the socket adapted to connect said filaments singly, in series or in multiple with said conductors, substantially as described. 5th. In a combined incandescent electric lamp and socket, the combination with a lamp having two filaments, and three contact pieces on the base of the lamp, insulated from each other, and forming terminals of said filaments, of a socket arranged to receive the base of said lamp, three contact pieces in said socket insulated from each other, corresponding to and adapted to make contact with the contact pieces of the lamp when the base of the lamp is in place within the socket, conductors for supplying current to the lamp, and a switch in the socket connected with said conductors and with said socket contact pieces, and adapted to connect said filaments singly, in series, or in multiple with said conductors, substantially as described. 6th. In a combined incandescent electric lamp and socket, the combination with a lamp having two filaments, a casing surrounding the base of the lamp and forming a terminal or contact piece for said filaments, and contact pieces in the base of the lamp insulated from each other and from the casing, and forming other terminals of said filaments, of a socket having a spring clasp adapted to receive said lamp, and to make electrical contact with said casing, contact pieces in said socket, insulated from each other and from the clasp, and corresponding to and adapted to make electrical contact with the contact pieces of said lamp when the lamp is in place within said socket, conductors for supplying current to the lamp, and a switch in the socket connected with said conductors, and with said spring clasp and contact pieces, and adapted to connect said filaments singly, in series, or in multiple with said conductors, substantially as described. 7th. In a combined incandescent electric lamp and socket, the combination with a lamp having two filaments, a screw projecting from the base thereof and forming a terminal or contact piece for said filaments, and other contact pieces in the base of the lamp, insulated from each other and from said screw, and forming other terminals of said filaments, of a socket adapted to receive said lamp, and having a contact piece with a screw-threaded aperture therein adapted to receive said screw, other contact pieces in said socket insulated from each other and from the apertured contact piece, and adapted each to make electrical contact with a contact piece of the lamp when the lamp is in place within said socket, conductors for supplying current to the lamp, and a switch in the socket connected with said conductors and with the contact pieces of the socket, and adapted to connect said filaments singly, in series, or in multiple with said conductors, substantially as described. 8th. In a combined incandescent electric lamp and socket, the combination, with a lamp having two filaments, a screw projecting from the base thereof, and forming a terminal or contact piece for said filaments, a grooved ring surrounding said screw and insulated therefrom, and forming another terminal or contact piece for said filaments, and a casing surrounding the base of the lamp and forming a third terminal or contact piece for said filaments, of a socket, having a spring clasp adapted to receive said lamp and to make electrical contact with said casing, a contact piece insulated from said spring clasp and having a screw-threaded aperture adapted to receive said screw, and a ring insulated from said clasp, and apertured contact piece and adapted to make contact with the contact ring on the base of the lamp, conductors for supplying current to the lamp, and a switch in the socket, connected to said conductors, and with said spring clasp, contact ring, and apertured contact piece, and adapted to connect said filaments singly, in series, or in multiple with said conductors, substantially as described. 9th. In a combined incandescent electric lamp and socket, the combination, with two filaments, and a supply, and a return conductor for supplying current to said filaments, of a revolubly mounted conducting contact piece connected to the supply conductor, stationary contact pieces adapted to make contact with said revolving contact piece in different positions thereof, one terminal of each filament being connected in common to one of said stationary contact pieces, and the second terminal of one filament being connected to another of said stationary contact pieces, suitable connections between the second terminal of the other filament and the return conductor, and means for connecting the second terminal of the first-mentioned filament with the return conductor when the common ends of said filaments are connected with said revolving contact piece, substantially as described. 10th. In a combined incandescent electric lamp and socket, the combination, with two filaments, and a supply, and a return conductor for supplying current to said filaments, of a revolubly mounted conducting contact piece connected to the supply conductor, stationary contact pieces adapted to make contact with said revolving contact piece in different positions thereof, one terminal of each filament being connected in common to one of said stationary contact pieces, and the second terminal of one filament being connected to another of said stationary contact pieces, suitable connections between the second terminal of the other filament and the return conductor, two adjacent contact pieces normally separated, one connected to the second terminal of said first-mentioned filament and the other connected to the return conductor, and means for bringing said adjacent contact pieces into contact when the common ends of said filament are connected with said revolving contact piece, substantially as described. 11th. In a combined incandescent electric lamp and socket, the combination with two filaments and a supply and return conductor for supplying current to said filaments, of a revolubly mounted conducting contact piece connected to the supply conductor, contact brushes arranged about said revolving contact piece and adapted to make contact therewith in different positions thereof, one terminal of each filament being connected in common to two of said contact brushes, and the second terminal of one filament being connected to another of said contact brushes, suitable connections between the second terminal of the other filament and the return conductor, two adjacent brushes normally separated, one connected to the second terminal of said first-mentioned filament, and the other connected to the return conductor, and means for bringing said adjacent contact brushes into contact when said filaments are connected through one of said common contact brushes with the revolving contact piece, substantially as described. 12th. In a combined incandescent electric lamp and socket, the combination with two filaments 4 and 5, and a supply and a return conductor for supplying current to said filaments, of a revolubly mounted contact piece 39 connected to the supply conductor, brushes 41, 42 and 43 arranged about said contact piece 39, and adapted to make contact therewith in different positions thereof, one terminal of each filament being connected in common to brushes 42 and 43, and the second terminal of filament 5 being connected to brush 41, suitable connections between the second terminal of filament 4 and the return conductor, two adjacent brushes 46 and 47 normally separated, one connected to the second terminal of filament 5, and the other to the return conductor, and a cam 48 revolving with said contact piece 39, and adapted to bring said bushes 46 and 47 into contact when said contact piece 39 is in contact with brush 43, substantially as described.

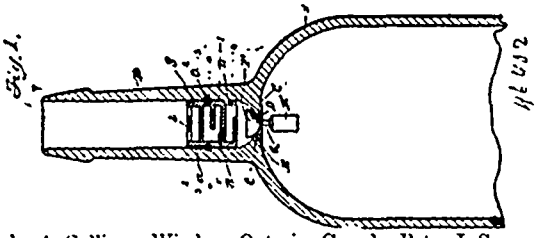
No. 46,401. Galvanometer. (*Galvanomètre.*)



The Whitney Electric Instrument Company, Saco, Maine, assignee of Adrian H. Hoyt, Penacook, New Hampshire, both in the U.S.A., 21st June, 1891; 6 years.

Claim. 1st. The combination of a solenoid coil with an armature pivoted near one end of its own length and near one end of said coil, and provided with a counter balancing weight as c, and a weighted arm as c, c^2, opposing a variable resistance to the oscillatory movement of the said armature under the attraction from the said solenoid, substantially as described. 2nd. The combination of the solenoid flat or oval in cross section, with the armature pivoted at one end near one end of one side of the opening through the solenoid, the said armature being wider at its free end than at its pivoted end, and provided with a retractor to oppose its oscillatory movement produced by the attraction of the solenoid, substantially as described. 3rd. The combination of the solenoid, flat or oval in cross section with the armature pivoted at one end near one end of one side of the opening through the solenoid, and provided with a weighted arm opposing a variable resistance to its oscillatory movement, substantially as described.

No. 46,402. Bottle Stopper. (*Bouchon de bouteille.*)



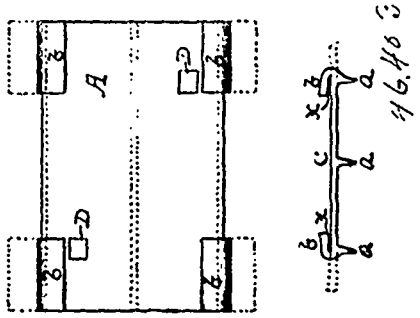
Charles A. Sullivan, Windsor, Ontario, Canada, Peter J. Sweeney, Detroit, Michigan, U.S.A., John A. Smith and William Revell, both of Windsor, Ontario, Canada, 21st June, 1894; 6 years.

Claim. 1st. In combination with a bottle, a stopper consisting of a globe valve F provided with a weighted stem, a valve seat at the

neck of the bottle, and a guard secured in the neck of the bottle above the valve, substantially as described. 2nd. In combination, with a bottle provided with a globe valve seat and with an expanding opening, opening downward from the valve seat, a globe valve and a weighted stem attached thereto, and a guard shell provided with diaphragms partially crossing the interior thereof and arranged in staggered order and provided with means for securing it in the neck of the bottle, substantially as described.

No. 46,403. Railway Tie Plate.

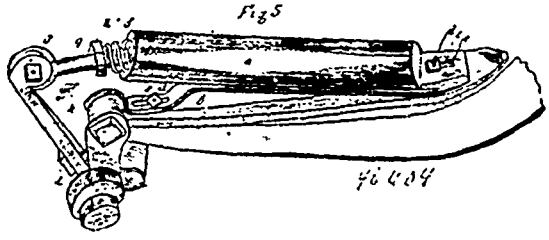
(*Plaque de traverses de chemin de fer.*)



The Q and C Company, assignee of William W. Holmes, both of Chicago, Illinois, U.S.A., 21st June, 1894; 6 years.

Claim.—1st. The method herein described for making railway tie-plates, which consist in first forming a plate or bar with a longitudinal rib or ribs upon one face thereof, and then forming abutments on the opposite face of the plate by folding a section or sections of the plate upon itself, substantially as and for the purpose specified. 2nd. A railway tie-plate having on one face a longitudinal truss rib, and on the opposite face folds of the body metal which form abutments for the foot flange of a rail, substantially as and for the purpose specified.

No. 46,404. Shaft Holder. (*Porte-arbre.*)



William H. Davies, William P. Johnstone, John Dickson and Thomas F. McCaffrey, all of Neepawa, Manitoba, Canada, 21st June, 1894; 6 years.

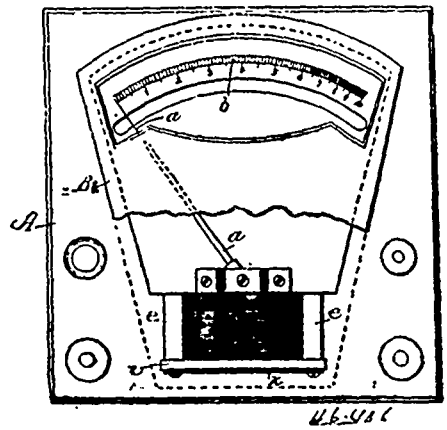
Claim.—1st. A cylinder for the purpose of holding a spiral spring having one end flattened and bent back, which flattened part is attached to the cylinder and is made of such shape that when fastened to the lower side of the shaft, when in use, the cylinder will assume a perpendicular position, substantially as described. 2nd. The combination of the brace, as represented by the figure 1, and the rod represented by the figure 2, with the adjustable nut thereon, that when joined together and placed in position will hold the spiral spring when the cylinder, substantially as described.

No. 46,405. Fabric. (*Tissus.*)

John F. Palmer, Riverside, Illinois, U.S.A., 21st June, 1894; 6 years.

Claim.—1st. A fabric made of rubber or similar material having imbedded therein substantially parallel threads out of intimate contact with each other. 2nd. A fabric made of rubber or similar material, having embedded or vulcanized therein substantially parallel threads out of intimate contact with each other. 3rd. A fabric made of a sheet of rubber or similar material, having imbedded and vulcanized therein substantially parallel fibrous threads substantially non-extensible and out of intimate contact with each other. 4th. A fabric made of two or more plies of rubber, each having embedded therein parallel fibrous threads, the threads in one ply presenting an angle to the threads in the other. 5th. A fabric made of two or more plies of rubber, each ply having imbedded and vulcanized therein substantially non extensible parallel fibrous threads out of intimate contact with each other, the threads in adjacent plies presenting an angle to each other. 6th. A tube wound spirally with a rubber strip having imbedded therein parallel fibrous threads. 7th. A tube having an outer surface of rubber wound spirally with threads parallel with each other, and kept out of contact by the rubber. 8th. A tube wound spirally with two or more strips of rubber having imbedded and vulcanized therein substantially parallel fibrous threads, one strip being applied in a different spiral from the other, and the whole vulcanized together. 9th. A tube having its surface covered with two or more spirally applied strips of rubber or similar material, each having imbedded therein substantially parallel fibrous threads of substantially non-stretching character, one of said strips being arranged in a different spiral from the other, and the strips being so applied that the threads of one are prevented from contact with the threads of the other, the whole being vulcanized.

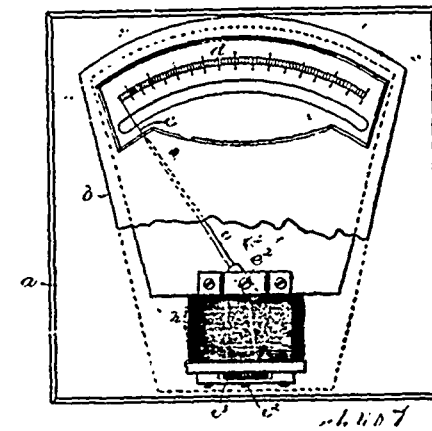
No. 46,406. Galvanometer. (*Galvanomètre.*)



The Whitney Electrical Instrument Company, Saco, Maine, assignee of Adrian H. Hoyt, Penacook, New Hampshire, all in the U.S.A., 21st June, 1894; 6 years.

Claim.—1st. The combination of the horse-shoe field magnet *e*, with the solenoid coils *f*, between the branches of said magnet and with its axis parallel thereto, the needle or armature *d*, pivoted at an intermediate point in the length of said solenoid coil, and the adjustable pole pieces g, g^2, connected with the branches of the magnet, and extending between the coils of the solenoid towards the needle, substantially as and for the purpose described. 2nd. The combination of the pivoted indicating armature or needle with the coil and the field magnet having its extremities connected by a magnetic strip, and having adjustable polar extensions co-operating with the said needle, substantially as and for the purpose described

No. 46,407. Galvanometer. (*Galvanomètre.*)



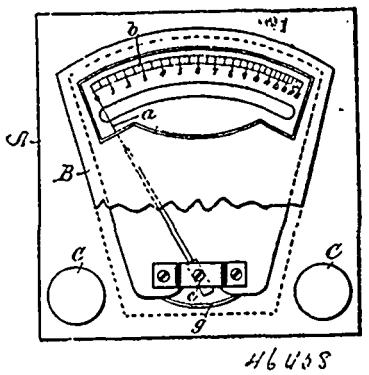
The Whitney Electrical Instrument Company, Saco, Maine, assignee of Adrian H. Hoyt, Penacook, New Hampshire, all in the U.S.A., 21st June, 1894; 6 years.

Claim.—1st. The combination of a field magnet and needle pivotally supported in the field thereof, with a solenoid and core co-operating with said needle, substantially as and for the purpose

described. 2nd. The combination of a field magnet and needle movable in the field thereof, with a solenoid and movable core piece therein, and means to adjust the said core piece relative to said needle, substantially as and for the purpose described.. 3rd. The combination of the field magnet and needle pivotally supported in the field thereof, with a solenoid and core therein of greater extent toward the needle at one side than at the other side of the axis thereof, *substantially as and for the purpose described.*

No. 46,408. Electric Measuring Instrument.

(*Instrument pour mesurer l'électricité.*)

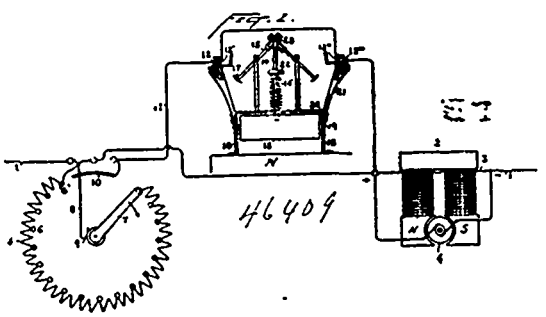


The Whitney Electrical Instrument Company, Saco, Maine, assignee of Adrian H. Hoyt, Penacook, New Hampshire, all in the U.S.A., 21st June, 1894; 6 years.

Claim.—1st. An electrical indicating instrument comprising a field magnet and an indicating armature or needle pivoted in the field thereof, combined with a bridge or keeper connecting the poles of the said magnet, and modifying the effect of the magnetic field upon said needle, substantially as described. 2nd. An electrical *indicating instrument comprising a field magnet and an indicating* armature or needle pivoted in the field thereof, combined with a bridge or keeper connecting the poles of said magnet, and laterally adjustable thereon, the said keeper deviating from the direct line between the poles so that its adjustment on said poles varies the magnetic effect on the indicating needle, substantially as described. 3rd. An electrical indicating instrument comprising a field magnet and an indicating armature or needle pivoted in the field thereof, combined with adjustable secondary poles constituting a magnetic shunt whereby the effective strength of the field relative to the magnet may be varied, substantially as and for the purpose described.

No. 46,409. Automatic Switch for Electric Motors.

(*Commutateur automatique pour moteurs électriques.*)

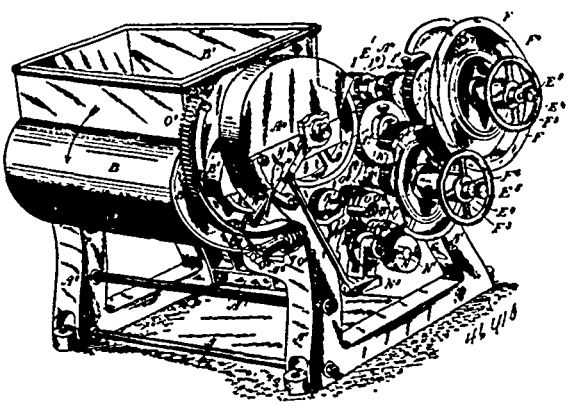


The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Robert T. Lozier, Schenectady, New York, U.S.A., 21st June, 1894; 6 years.

Claim.—1st. The combination of a motor, a circuit-breaker in the main motor circuit, means, such, for example, as a spring, tending to move the same to its open position, and an armature in operative relation to the field-magnet of the motor connected to said circuit-breaker so as to close the circuit when the armature is attracted, substantially as described. 2nd. The combination of a shunt motor, a circuit-breaker in the main motor circuit outside of the motor terminals, means, such, for example, as a spring, tending to move the same to its open position, and an armature, in operative relation to the field-magnet of the motor, connected to said circuit-breaker so as to close the circuit when the armature is attracted, substantially as described. 3rd. The combination of a motor, a rheostatic controlling switch therefor, said switch having considerable resistance in circuit when first moved to close the motor circuit, and being constructed to cut out resistance as the switch is moved forward, a contact connected to a circuit breaker contact and through the same to one terminal of the motor, said first mentioned contact being connected to the line when the resistance is cut out, and a circuit breaking device having a tendency to open but being held closed by the current when it is of normal strength, substantially as described. 4th. The combination of a circuit, a rheostatic controlling switch and a motor interposed in said circuit, a circuit-breaker exterior to the motor terminals and having a tendency to move to its open position, and an armature connected to said circuit-breaker and in position to be attracted by the field-magnet of the motor, substantially as described. 5th. The combination of a circuit, a rheostatic controlling switch and a motor interposed in said circuit, said switch consisting of a series of contacts connected by resistances, one end of the resistance being connected to one terminal of the motor, a switch-arm to which the circuit is connected, adapted to move over said contacts, beginning at the end opposite to that connected to the motor terminal, a circuit-breaker held open when the motor is out of use, and an armature in proximity to the field-magnet connected to the circuit-breaker for holding the same, substantially as described. 6th. The combination of a motor field-magnet pole, a guide thereon, an armature adapted to reciprocate therein, means for holding said armature away from the magnet when the circuit is open, pivoted circuit closing arms operatively connected to said armature, and contacts in the motor circuit adapted to be connected by movement of said pivoted arms, substantially as described. 7th. The combination of the field-magnet pole, slotted standards 18 carrying a cross-piece and standards, the contacts carried by the latter standards, the reciprocating armature and its supporting rod, the rods 15 slotted at their adjacent ends and connected to the armature rod, and the contacts carried by said pivoted arms and adapted to connect the first mentioned contacts, substantially as described. 8th. The combination of the movable armature, a rod projecting therefrom, two pivoted arms with slotted intersecting ends, a pin connecting the rod with the arms at their intersection, connecting plates carried by the arms, and contacts adapted to be connected thereby, substantially as described. 9th. The combination of a motor, a circuit-breaker in the main motor circuit having several contacts, means tending to move the circuit-breaker to its open position, an armature attracted to its forward position when the current through the motor is of normal strength, and a circuit-closing device moved by said armature and connecting said several contacts, whereby the circuit is broken at several points, substantially as described.

No. 46,410. Machine for Kneading Dough, &c.

(*Machine à pétrir la pâte.*)



George Samuel Baker, London, England, 21st June, 1894; 6 years.

Claim.—1st. In a machine such as described, the combination, with the drum of bearings such as B^3, B^5, drum-pivotting shafts C, carrying a pinion gearing with spur wheels D^2, on the shafts of the kneading or mixing arms, substantially as described. 2nd. In a machine such as described, the combination, with a mixing blade or arm of a coned shaft and bearings, substantially as described. 3rd. In a machine such as described, the combination, with the drum of a quadrantal rack worm gearing therewith, mitre gear wheels Q, Q^1, spur wheels N, O^1, P^1, R^1, friction wheels N^4, O, P, and bracket such as N^2, N^3 arranged and operating, substantially as described. 4th. In a machine such as described, the combination, with the driving shaft of a single driving pulley capable of being readily "clutched" to or "unclutched" from it, substantially as described. 5th. In a machine such as described, the combination, with the shafts E and H, and pinions I^1, K^2, thereon of clutches and other means for simultaneously connecting and disconnecting the pinions with and from their respective shafts or for simultaneously disconnecting both pinions from their shafts for the purpose of reversing or arresting the motion of one set of the arms, substantially as described. 6th. In a machine such as described, the com-

bination, with the two shafts E, H, having pinions I, and H^1 rigidly, and I^1 and K^2 detachably mounted thereon, and spur wheels M and L connecting the two rigidly attached pinions of two inter-gearing wheels F^2, G, and clutch devices for securing or releasing each of said wheels F^2, G, to or from its respective shafts, substantially as and for the purpose described. 7th In a kneading or mixing machine, the combination, with the two shafts E, H, and clutches such as i^2, i^3 and K, K^1 thereon at the back of the machine of means such as described for simultaneously operating the two clutches from the front of the machine, substantially as described. 8th. The combination and arrangement of parts constituting the complete machine, substantially as described.

No. 46,411. Pneumatic Tyre. (*Bandage pneumatique.*)

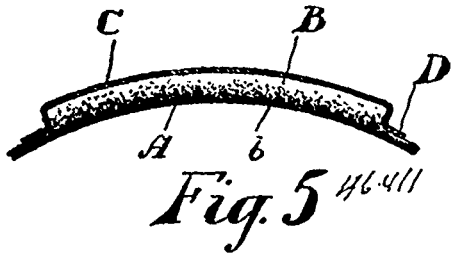
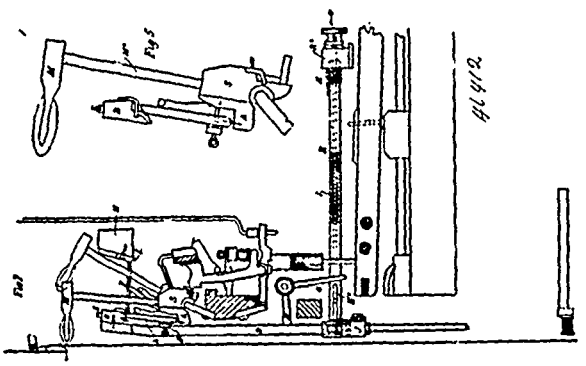


Fig. 5 46411

Hans J. Canfield, Toronto, Ontario, Canada, 21st June, 1894; 6 years.

Claim.—1st. The art of forming a puncture closing inner tube for a pneumatic tire as follows: By bringing together the edges of a raw rubber strip so as to form a tube, and covering the joint by a raw rubber strip, and stretching on the latter and cementing thereto a strip of linen or other non-elastic material, then putting the rubber tube thus prepared against a mandrel and subjecting the tube to the final stage of vulcanization so that it has, when removed, from the mandrel, the normal concave shape as shown, and then joining the ends of the tube in the usual manner, so that the non-elastic material and rubber strip form the tread or face of the tube, substantially as specified. 2nd. The art of forming a puncture closing inner tube for a pneumatic tire as follows: By bringing together the edges of a raw rubber strip so as to form a tube, and covering the joint by a raw rubber strip, and stretching on the latter and cementing thereto, and to the tube by means of overlaps a strip of linen or other non-elastic material, then putting the rubber tube thus prepared against a mandrel and subjecting it to the final stage of vulcanization, so that it has, when removed from the mandrel, the normal concave-shape as shown, and then joining the ends of the tube in the usual manner, so that the non-elastic material and rubbr strip from the tread or face of the tube, substantially as specified. 3rd. The art of forming a puncture closing inner tube for a pneumatic tire as follows: By bringing together the edges of a raw rubber strip so as to form a tube, and covering the joint by means of a raw rubber strip, and stretching on the latter and cementing thereto a strip of linen or other non-elastic material with overlaps which are attached to the rubber tube, then putting the rubber tube thus prepared against a mandrel and subjecting it to the final stage of vulcanization so that it has, when removed from the mandrel the normal concave-shape, as shown, and then by joining the ends of the rubber tube, so that the non elastic material and rubber strip form the tread or face of the tube, and inflating in the usual manner, giving the tread of the inner tube covered by the compressed rubber strip, and the strip of non-elastic material the opposite or convex-shape it takes when in place in the completed tire, substantially as specified. 4th. The art of forming a puncture closing inner tube for a pneumatic tire as follows: By forming a rubber tube and fixing thereon, and along that portion which is to become the tread, a rubber strip, and stretching along the latter and attaching thereto a strip of non-elastic material which material is also attached to the inner rubber tube, then putting the rubber thus prepared through the final stage of vulcanization, and then by joining the ends of this rubber tube and inflating the inner rubber tube thus formed, in the usual manner, giving the tread of the tube covered by the rubber strip and strip of non-elastic material the convex-shape it takes when in place in the completed tire, substantially as specified. 5th. The art of forming a puncture closing inner tube for a pneumatic tire as follows: By forming a rubber tube and fixing thereon along that portion which is to become the tread a rubber strip and stretching along the latter and attaching thereto and to the rubber tire by means of overlaps a strip of non-elastic material, then putting the rubber tube thus prepared against a mandrel and subjecting it to the final stage of vulcanization so that it has when removed from the mandrel the concave shape as shown, and then by joining the ends of the rubber tube so that the non-elastic material and rubber strip form the tread or face of the tube and inflating in the usual manner, giving the tread of the inner tube covered by the rubber strip and the strip of non-elastic material the opposite or convex shape it takes when in place in the completed tire, substantially as specified. 6th. The art of forming a puncture closing inner tube for a pneumatic tire as follows.—by forming a rubber tube and fixing thereon and along that portion which is to become the tread, a rubber strip, and stretching along the latter and attaching thereto a strip of non-elastic material, then putting the rubber tube thus prepared through the final state of vulcanization, and then by joining the ends of this rubber tube, and inflating the inner rubber tube thus formed, in the usual manner, giving the tread of the tube covered by the rubber strip and the strip of non-elastic material the convex shape it takes when in place in the completed tire, substantially as specified. 7th. A puncture closing inner tube for a pneumatic tire consisting of an inner tube having a protecting rubber strip held in compression on its tread by means of a strip of non-elastic material, substantially as specified. 8th. A puncture closing inner tube for a pneumatic tyre consisting of an inner tube having a rubber strip held in compression on its tread by means of a strip of non-elastic material stretched on and cemented to the rubber strip with overlaps of the non-elastic material attached to the inner tube, substantially as specified. 9th. In a pneumatic tyre, an inflatable inner tube in combination with a rubber strip attached to its tread, which assumes when the inner tube is inflated, a curve the reverse of that which it has in its normal condition after vulcanization and a strip of non-elastic material attached, substantially as specified. 10th. A pneumatic tyre containing the following elements, namely, an outer covering, an inner inflatable tube, a rubber strip on the tread of the inner tube and a strip of non-elastic material for holding the rubber strip and that portion of the inner tube to which the rubber strip adheres in compression, substantially as specified. 11th. In a pneumatic tyre, a rubber strip held in compression by means of a strip of non-elastic material and located between the inner and the outer tube, substantially as specified.

No. 46,412. Repetition Attachment for Piano Fortes.
(*Attache de répétition pour pianos.*)



Walter Simpkins and Guiliano Ajello, both of Camden, London, England, 21st June, 1894; 6 years.

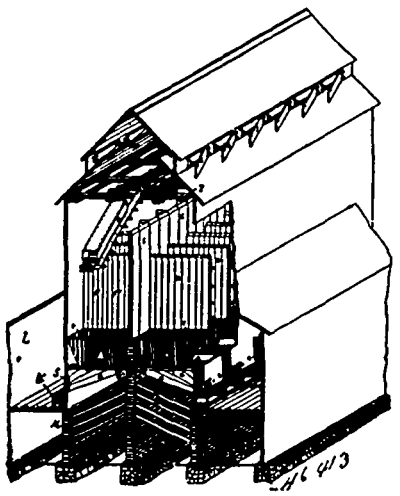
Claim.—1st. A repetition attachment for piano fortes comprising reciprocating bar so situated that the hammers of the action when in the check position after striking the strings are vibrated about their centres by said reciprocating bar, substantially as described and for the purposes stated. 2nd. A repetition attachment for piano fortes comprising a reciprocating bar adjustable in such manner as to be brought into or thrown out of the path of projections on or secured to the ordinary hammer butts or shanks which projections are designed to make connection with said bar when the hammers are in the check position whereby the hammers are vibrated about their centres by said reciprocating bar, substantially as described and for the purposes stated. 3rd. A repetition attachment for piano fortes comprising a notched and clothed bar such as B, supported in a plane parallel to the plane of the strings by rods such as D jointed to arms H secured to a shaft C, and reciprocated by means of an extension to one of the rods D engaging in a clutch such as J on the end of a connecting rod actuated by any suitable motive power, the said bar being brought into its operative position by partially rotating the aforesaid shaft C and put into its inoperative position by releasing the extension from the clutch J, the said bar B when in its operative position being located in the path of projections such as the adjustable spring controlled tongue pieces A, secured to or formed one on each hammer butt or shank, all the parts being arranged so as to operate substantially as in the manner and for the purposes hereinbefore set forth and illustrated in the accompanying drawing.

No. 46,413. Kilns for Drying Kindling Wood.
(*Etuve pour le bois d'allumage.*)

Paul H. Knowlton and Thomas A. Knowlton, both of Boston, Massachusetts U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. In an apparatus for drying kindling wood, the combination of a series of perforated or slotted hoppers, a conveyor

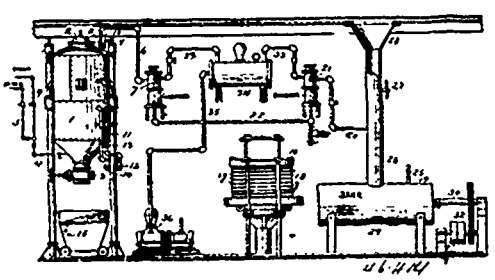
delivering wood thereto, and a heating apparatus for heating the air which circulates through the perforations or slits of said hoppers, substantially as described. 2nd. In an apparatus for drying kind



ling wood, the combination of a kiln, having compartments, hoppers at the bottom thereof leading to delivery shutes, a distributor located above said compartments, and comprising a horizontal tapering platform, and an endless wood-conveyor co-operating therewith, said wood-conveyor conveying the wood from the wide toward the narrow end of said platform, from the sides of which it falls into the heated compartments, and a driving gear operating said wood-conveyor, and a conveyor for dumping the wood upon the platform at its wider end, substantially as described. 3rd. In a kiln for drying kindling wood, a distributor for distributing the wood to the hoppers, consisting of a horizontal tapering platform, having side openings above the hoppers, and removable blocks contained therein, and a wood conveyor co-operating with said platform adapted to convey the wood from the wide toward the narrow end thereof, that the wood may fall off the sides of said platform in its passage, into said hoppers, substantially as described. 4th. In an apparatus for drying kindling wood, a distributor for distributing the wood to a series of hoppers, consisting of a horizontal tapering platform, and a wood-conveyor operating to convey the wood from the wide toward the narrow end of said platform, that the wood may fall off the sides of said platform as it is moved along, substantially as described. 5th. In an apparatus for drying kindling wood, a distributor for distributing the wood to a series of hoppers, consisting of a horizontal tapering platform, and an endless chain wood-conveyor operating to convey the wood from the wide toward the narrow end of said platform, that the wood may fall off the sides of said platform as it is moved along, substantially as described. 6th. In an apparatus for drying wood, a kiln having heating pipes in a lower main compartment thereof, extending longitudinally the kiln and arranged in diagonal planes as shown, substantially as described. 7th. In an apparatus for drying kindling wood, a kiln having air-tight side and end walls, air inlets at the lower end and ventilators at the upper end, a heating apparatus at the lower part for heating the air which circulates up through the kiln, a wood distributor at the upper end, a conveyor delivering the wood thereto, a series of wood drying hoppers to which the wood is delivered by the distributor, and delivery shutes leading therefrom, substantially as described.

No. 46,414. Method of Treating Garbage.

(*Méthode de traiter les tripailles.*)

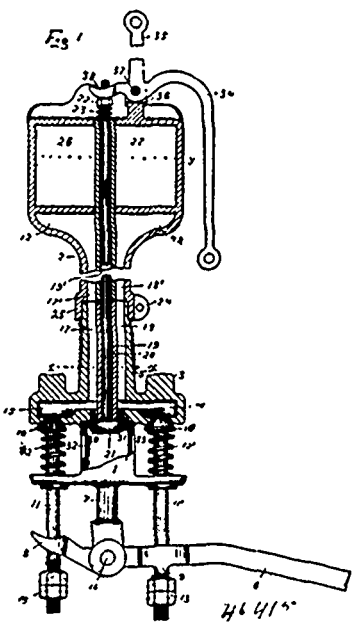


Hartio B. Arnold, Boston, Massachusetts, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. The improved sanitary process of disposing of city garbage and recovering useful products therefrom which consists in first cooking the garbage in a closed vessel for a period of from four to eight hours, more or less according to the nature of its ingredients, and condensing all vapours which pass off during the cooking operation, then separating the solid matter or tankage from the water and grease, then pressing the tankage to separate an additional quantity of water, and then drying the tankage in a closed drier and condensing the vapours thus produced, substantially as described. 2nd. The improved sanitary process of disposing of city garbage and recovering useful products therefrom which consists in first subjecting the garbage to the direct action of steam in a closed vessel for a period of from four to eight hours, more or less according to the nature of its ingredients, and condensing all the vapours which pass off during the cooking operation, then drawing off separately the grease which arises to the top, the solid matter or tankage at the bottom, and the intermediate water, then subjecting the tankage to pressure to separate an additional quantity of water, and then drying the tankage from the presses in a closed drier and condensing the vapors thus produced, substantially as described.

No. 46,415. Water Alarm for Steam Boilers, &c.

(*Indicateur d'eau pour chaudières à vapeur, etc.*)

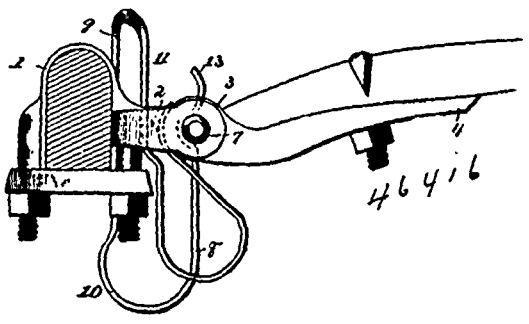


Peter A. Kerchner, Fort Wayne, Indiana, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. In a water alarm for steam boilers, the combination of the casting 3 having a vertical threaded portion adapted to be mounted within a boiler shell, provided with a central perforation for the valve-stem 20 carrying upon its lower end the spring pressed valve 21, vertical steam channels and transverse channels connected therewith, and having inlet ports and valve seats as described, the casting I provided with an open topped chamber having lateral inlet ports, vertical perforations for the valve stems and a dependent lug in which the float stem is mounted, the valves 10 and 10^1 having threaded valve-stems with the nut 13 thereon, loosely mounted in the said casting I and carrying spiral springs as shown, and the valve 21 having a spring actuated stem loosely mounted in the perforation 19, with the float-lever 6 fulcrumed on the lug 7 and adapted to actuate the valves 10 and 10^1, and the whistle 2 having steam channels adapted to register with the said channels 17 and 18, and having a lever adapted to actuate the valve 21, all substantially as described. 2nd. In a water-alarm for steam-boilers, the combination of the casting 3 having a vertical threaded portion adapted to be mounted in a boiler shell and provided with a central perforation 19 for the valve-stem 20 bearing on its lower end the valve 21, vertical and transverse steam channels having inlet ports and valve seats as described, the casting I having a central chamber with inlet ports and adapted to contain the valve 21, a lug 7 having a bifurcated head, and vertical perforations for the valve-stems, as shown, and the valves 10 and 10^1 having their stems provided with spiral springs and threaded nuts, as described, with the float-lever 6 pivotally mounted in the lug 7 and having upon one end the bifurcated lug 8 and upon the other end a proper float, all substantially as described. 3rd. A whistle for steam boilers comprising a central longitudinal perforation having a proper valve-stem loosely mounted therein, carrying a proper spring pressed valve and having suitable means for operating the same, the spring-pressed valves 10 and 10^1, as shown, vertical steam channels having out-let ports, as shown, sounding chambers and lateral openings therefor, as described, the said whistle being adapted for making three separate and indepen-

dent signals, the third signal being produced by a union of the other two sounds or signals, all substantially as set forth and described. 4th. A whistle for steam boilers consisting of an elongated stem having an annular flange and lateral lugs upon its lower end and provided with longitudinal steam channels in which is loosely mounted a spring-pressed valve-stem carrying upon its lower extremity a normally closed valve 21 and surmounted by a lever-arm having a bifurcated lug adapted to operate the said valve, all substantially as described.

No. 46,416. Thill Coupler. (*Armon de limonière.*)



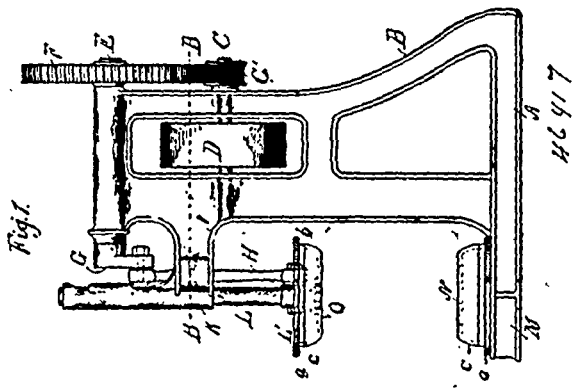
John B. Pouk and James Brotherton, both of Spring Valley, Illinois, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. In a coupling for poles and shafts, the combination of an axle clip having forwardly projecting ears, an iron having an eye arranged between the ears, a coupling pin passed through the ears and an eye and projecting from one side thereof, and having a head at its extended end, and provided adjacent to the head with a stop flange bearing against the adjacent ear, and forming an annular recess between it and the pin head, and a spring composed of two approximately U-shaped sides, one of the sides being arranged between the ears and engaging said eye to prevent rattling, and the other side engaging the extended portion of the pin in the annular recess between the head and the stop flange to retain the pin in place, and adapted to be sprung back to release the pin, substantially as described. 2nd. In a coupling for poles and shafts, the combination of an axle clip having forwardly projecting ears, an iron having an eye arranged between the ears, a coupling pin passed through the ears and the eye and extended from one side thereof, and having a head at its extended end, and provided adjacent to the head with a stop-flange bearing against the adjacent ear, and a spring composed of two approximately U-shaped sides provided at the tops of their front portions with curved bends, one of the sides being arranged between the ears to engage said eye, and the other side being located outside of the ears and engaging the pin between the head and the stop-flange, the latter side having its front portion extended vertically above the bend to form a thumb-piece, substantially as described. 3rd. In a coupling for poles and shafts, the combination of an axle clip having forwardly projecting ears, an iron having an eye arranged between the ears, a coupling pin passed through the ears and the eye and extended from one side thereof, and a spring constructed of a single piece of resilient metal bifurcated to form opposite sides, the sides being bent on themselves to form approximately U-shaped portions, and having at the upper ends of the front portion curved bends, the front portion of one of the sides being extended above the bend to form a thumb-piece, one of the sides being located between the ears and engaging said eye, and the other side being located at one side of the coupling and engaging the extended end of the pin, substantially as described.

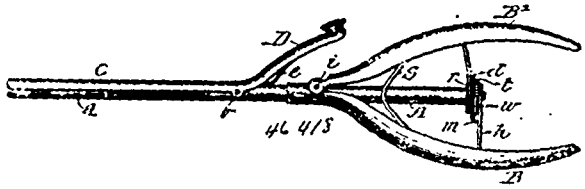
No. 46,417. Barrel Press. (*Presse pour douves de baril.*)

Thos. Craney, Bay City, Michigan, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. A barrel press comprising in combination, a base standard, a lateral extension on the base, a corresponding extension on the standard above the base, a head having a body portion on the base extension, a complementary reciprocating head supported on the extension of the standard, and means for actuating said reciprocating head, substantially as described. 2nd. In a barrel press, comprising a frame, a stationary flanged, cylindrical head on the base, a corresponding head slidingly supported in the frame above, means for reciprocating the upper head to and from the lower head, substantially as described. 3rd. In a barrel press, the combination of the base, the extension at one end, the flanged cylindrical head on the extension, a standard, a side extension thereof, a guide bearing on said side extension, a bar slidingly engaging therein, a flanged cylindrical head on the lower end thereof, a pitman connecting to said bar at the lower end, and an actuating crank shaft journalled on the frame for said pitman, substantially as described.



No. 46,418. Curling Iron. (*Fer à friser.*)



Charles Fremont Stout, and Howard Byron Stout, both of Chicago, Illinois, assignees of Charles Frank Suyder, St. Louis, Missouri, all in the U.S.A., 22nd June, 1894; 6 years.

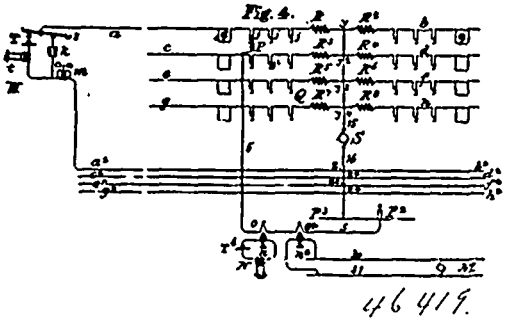
Claim.—1st. The combination of the rod A having two bearings, one of which is the standard *h* at its rear end, and the other in lower part B of the handle near its longitudinal centre in both of which it revolves, substantially as described. 2nd. In combination with the two parts B and B¹, connected by the pivot pin *i*, and the rod A, having a circular groove therein and the pin *i* fitting loosely in said groove so as to allow the rod to revolve freely under said pin, but confine the same against endwise motion, substantially as described. 3rd. In combination with the two parts B and B¹ of the handle pivoted together as described, the two springs S S seated as described on each side of the rod A, their upper ends abutting against the rack-frame *f*, and their lower ends against the standard *h*, adapted to hold the said parts asunder with the required force, substantially as and for the purpose described. 4th. The combination of the upper part B¹ of the handle hinged to the lower part B by means of the pin *i*, and provided with the rack-frame *f* rigidly fastened thereto, said rack-frame having a single vertical row of teeth, the described pinion *r*, having a disc *d*, provided with spring pawl *w*, and adapted to turn freely upon the reduced end of the rod A, and the ratchet wheel *t* rigidly fastened upon the rod A, the whole adapted to revolve the rod A as required, substantially as described. 5th. In combination with the upper part B¹ of the handle, the lower part B, having the standard *h* rigidly fastened thereon, and furnishing a bearing for the rear end of rod A to turn freely in, and provided with check spring pawl *m* mounted thereon adapted to prevent retroaction of the ratchet wheel *t* when required, substantially as described.

No. 46,419. Telephone Circuit. (*Circuit de téléphone.*)

The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of John Stone Stone, Boston, Massachusetts, U.S.A., 22nd June, 1894; 6 years.

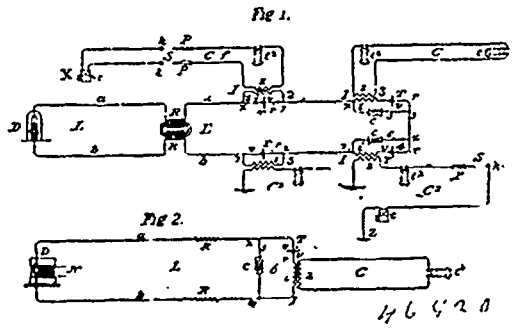
Claim.—1st. In a system of telephonic circuits and apparatus, the combination of a common current generator, two telephone circuits connected in parallel therewith, and each including a telephone receiver, and a telephone transmitter supplied with current thereby, a relatively high apparent resistance or impedence device in series in each of the said circuits, and means for establishing a short circuit between like points on the said two circuits outside of their respective resistance or impedence devices, whereby is constituted a compound telephone circuit having a source of transmitter current in a bridge between its direct and return conductor, and two impedence devices in parallel also included in said bridge, substantially as described. 2nd. The combination of a telephone circuit extending between two stations and containing at each a variable resistance transmitter and a receiving telephone, a branch or bridge uniting the direct and return conductors of the said circuit at some interme-

diate point between the two stations thereof, a transmitter current supplying generator included in said bridge, and two electro-magnetic resistance or impedence coils also included in said bridge in multiple arc with each other, and in series with said



generator, substantially as described. 3rd. The combination, substantially as hereinbefore described, of a common current generator, a number of telephone circuits containing each a transmitting and a receiving telephone extending from substations to said generator, and connected in parallelism with one another to the poles thereof, a relatively high apparent resistance or self-induction device included in each of the said circuits, and link connection or short circuiting devices adapted to electrically unite points on any two of said circuits situated external to their respective resistance or self-induction devices, whereby the said devices of the said two circuits may be placed simultaneously in parallel circuit with each other and in series with the generator, for the purposes specified. 4th. In a system of telephone circuits and apparatus, the combination of a number of telephone circuits, each including a variable resistance transmitter and a receiver, a transmitter current generator common to and connected in parallel with all of the said circuits, an electro-magnetic or self-induction device normally included in each circuits, and having an apparent resistance or impedence high relatively to the total resistance or impedence of any of the said circuits, and link or paralleling connection devices adapted to unite any two circuits at points outside of or beyond their respective self induction devices, and simultaneously to establish a bridge between their direct and return conductors, to place said self-induction devices in parallelism with each other, and in series with the generator in the circuit of said bridge, substantially as described. 5th. In a telephone circuit switching system, the combination of a series of telephone circuits extending between substations and a central station, and a dynamo machine serving as a common current supply generator therefor included in a section of conductor common to all of the said circuits, with a connection device such as a plug socket or spring jacks for each circuit, a relatively high self-induction or electro-magnetic resistance for each line located between the said plug socket and the dynamo connection thereof, and connection conductors provided with terminal plugs adapted for insertion into the plug sockets of any two lines respectively and thereby to constitute a compound telephone circuit, having the said dynamo in a bridge thereof, and having the said electro-magnetic resistance of both lines also in the same bridge in series with the said dynamo and in parallel with each other, substantially as described.

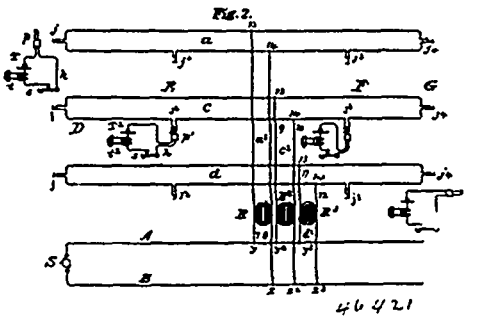
No. 46,420. Telephone Transmitter Circuit and Apparatus. (*Transmetteur téléphonique.*)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of John Stone Stone, Boston, Massachusetts, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. The combination in a telephone transmitting apparatus of a variable resistance transmitter, and an induction coil therefor, a current supply circuit divided into two parallel branches containing respectively the said transmitter in series with the primary helic of its induction coil, and a condenser, and a direct, or conversation circuit, extending to a receiving telephone and including the secondary helix of the said induction coil. 2nd. The combination in a telephone system of three branch circuits converging at two points, one containing a source of current, and electro-magnetic regulating or steadying device, and the other two containing respectively, a condenser, and a variable resistance transmitter in series with the primary helix of its associated induction coil, with a direct or conversation circuit including the secondary helix of said induction coil, substantially as specified. 3rd. The combination, substantially as hereinbefore described, of a variable resistance transmitter, a current supply circuit therefor including in series the said transmitter and the primary helix of its associated induction coil, and an electro-static shunt circuit around the said transmitter and primary helix with a direct or conversation circuit including the secondary helix of said induction coil, and a speaking telephone. 4th. The combination, of a common current supply circuit including a generator, and an electro-magnetic current regulating device, a series of direct telephone or conversation circuits, extending to receiving telephones, a number of variable resistance transmitters, each having an associated induction coil, the said transmitters and the primary helices of their respective induction coils being serially connected in the common supply circuit, and the secondary helices of the said coils being included in the said telephone circuits respectively, and a condenser for each transmitter shunting the said transmitter, and its associated primary helix, substantially as described.

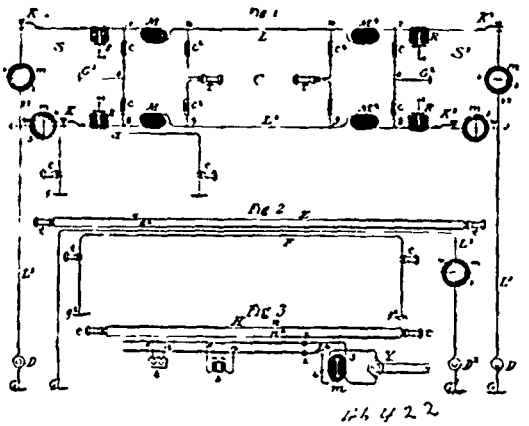
No. 46,421. Telephone Circuit. (*Circuit de téléphone.*)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of John Stone Stone, Boston, Massachusetts, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. In a telephone system, the combination, substantially as hereinbefore described, of a common current generator for the transmitters of said system, a number of telephone circuits of approximately equal resistance or impedence in parallel with the said generator, and a relatively high inductance device connected in series with the said common generator. 2nd. The combination in a telephone system, of a number of parallel double conductor telephone circuits, each including transmitting and receiving instruments, a common current generator for the transmitters of said circuits, and a section of conductor common to the said telephone circuits and including the said generator, the impedence of the said common section being high relatively to that of each of the telephone circuits and their included instruments. 3rd. A telephone system comprising a plurality of telephone circuits extending to substations and including receiving and transmitting telephones, a magneto electric or dynamo electric generator common to the said circuits connected in parallel therewith and supplying currents for the transmitters thereof, and an electro-magnetic resistance of a magnitude high relatively to that of each of the said circuits, and their included instruments in series with the said generator, whereby a stable operating current is delivered to the said circuit, substantially as described. 4th. A dynamo electric generator, a main circuit therefor, a telephone transmitter deriving its operating current from the said main by means of a branch circuit, a relatively electro-magnetic resistance or retardation coil interposed in the said branch circuit between the said transmitter and the main circuit, and a telephone circuit connected directly or inductively with said branch and adapted to be operated by said transmitter, substantially as described. 5th. In a factory or hotel system of telephones, the combination of a plurality of telephone circuits extending between a number of stations, a telephone transmitter and receiver at each station, and switching devices for connecting them with any of the said circuits, a transmitter current supply generator for all of the said telephone circuits included in a common supply circuit, feed connections extending from the said common supply circuit to the said telephone circuits, and an electro-magnetic resistance, impedence or retardation coil interposed in each feed connection, substantially as and for the purpose specified.

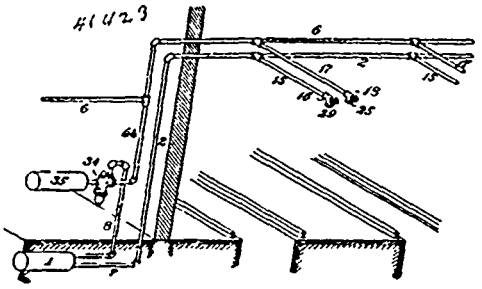
No. 46,422. Apparatus for Suppressing Telephone Disturbing Currents. (*Appareil pour supprimer les courants troublant pour téléphones.*)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Frank Albert Pickernell, Newark, New Jersey, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. The combination of a dynamo, and a working circuit supplied thereby, and including translating devices, of a differentially wound series connected electro-magnetic resistance included in the said circuit, substantially as and for the purposes described herein. 2nd. In combination with a composite system of simultaneous telegraphic and telephonic transmission, a dynamo supplying the working current thereof, and a differentially wound and series connected electro-magnetic resistance included in the circuit of, and near to the said dynamo, and organized to oppose and suppress the disturbing producing variations of the dynamo itself, but to offer no appreciable opposition or impedence to the transmission of the telegraphic signals, substantially as specified. 3rd. The hereinbefore described inductive or electro-magnetic resistance appliance, consisting of a ring or endless iron core, and two magnetizing coils of equal magnetizing power wound differentially thereon and connected in series.

No. 46,423. Locomotive Fire Kindling Apparatus. (*Appareil pour le bois d'allumage des locomotives.*)

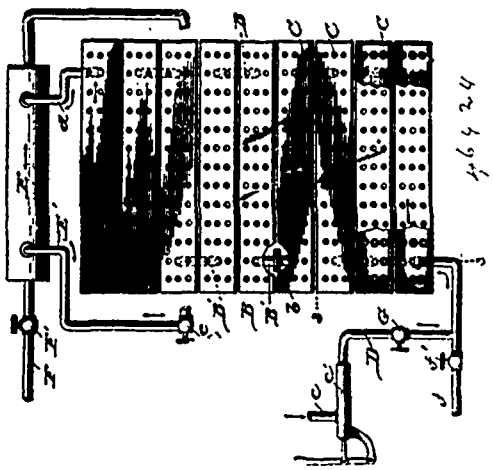


John S. Leslie, Paterson, New Jersey, assignee of James McNaughton, Waukesha, Wisconsin, all in the U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe leading from a source of fluid pressure supply to the fuel reservoir, and means for opening communication between the main fuel reservoir and a source of fluid pressure, in and by a reduction of pressure in the supply pressure pipe, substantially as set forth. 2nd. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading from a source of fluid pressure supply to the fuel reservoir, and a differential pressure device interposed between the supply pressure pipe and main fuel reservoir, which automatically effects the discharge of fluid from said main fuel reservoir into and through the fuel service pipe, in and by the reduction of pressure in the supply pressure pipe, substantially as set forth. 3rd. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe leading from a source of fluid pressure supply to the fuel reservoir, and a differential pressure device, interposed between the supply pressure pipe and main fuel reservoir, which automatically effects the discharge of fluid from said main fuel reservoir into and through the fuel service pipe, and the return of fluid from said pipe to said reservoir, in and by the reduction and the restoration, respectively, of pressure in the supply pressure pipe, substantially as set forth. 4th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a supply pressure pipe leading thereto from a source of fluid pressure supply, a valvular appliance interposed between the supply pressure pipe and fuel reservoir and controlling the application and release of fluid pressure to and from the interior of the fuel reservoir, by variations of pressure in the supply pressure pipe, a fuel service pipe leading from the fuel reservoir, a delivery connection for discharge from the fuel service pipe, and a release cock or valve controlling an opening for discharge from the supply pressure pipe, substantially as set forth. 5th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a supply pressure pipe leading thereto from a source of fluid pressure supply, a valvular appliance interposed between the supply pressure pipe and fuel reservoir, and controlling the application and release of fluid pressure, to and from the interior of the fuel reservoir by variations of pressure in the supply pressure pipe, a fuel service pipe leading from the fuel reservoir, a series of valved delivery connections for discharge from the fuel service pipe at anyone of a series of points in its length, and a series of release cocks or valves, each controlling an opening or discharge from the supply pressure pipe adjacent to one of the delivery connections of the fluid service pipe, substantially as set forth. 6th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a supply pressure pipe leading thereto from a source of fluid pressure supply, an auxiliary pressure reservoir, a valvular appliance, as a triple valve, controlling communication between the supply pressure pipe and auxiliary pressure reservoir, between the auxiliary pressure reservoir and the main fuel reservoir, and between the main fuel reservoir and the atmosphere, a fuel service pipe leading from the fuel reservoir, a delivery connection for discharge from she fuel service pipe, and a relief cock or valve, which controls an opening through which fluid under pressure may be discharged from the supply pressure pipe to automatically actuate the valvular appliance in direction to impart pressure to the fluid in the main fuel reservoir, and by the closure of which pressure is restored in the supply pressure pipe to automatically actuate the valvular appliance in direction to release pressure from the fluid in the main fuel reservoir, substantially as set forth. 7th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe, leading from a source of fluid pressure supply to the main fuel reservoir, means for simultaneously opening communication between the fuel service pipe and the service fuel reservoir, and between the main fuel reservoir and the source of fluid pressure, and a delivery connection leading from the service fuel reservoir, substantially as set forth. 8th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe, leading from a source of fluid pressure supply to the main fuel reservoir, a valve device for controlling the supply of fluid from the source of fluid pressure supply to the main fuel reservoir, and also to a valve device for opening communication from the fuel service pipe to a service fuel reservoir, and a delivery connection leading from the service fuel reservoir, substantially as set forth. 9th. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe leading from a source of fluid pressure supply to the main fuel reservoir, a service fuel reservoir, a delivery connection leading therefrom, a valve controlled communication between the fuel service pipe and service fuel reservoir, and a valvular appliance interposed between the supply pressure pipe and main fuel reservoir, which automatically effects the discharge fluid from said main fuel reservoir into and through the fuel service pipe, and the coincident opening of communication between said fuel service pipe and the service fuel reservoir, in and by a reduction of pressure in the supply pressure pipe, and which closes communication between the fuel service pipe and service fuel reservoir, and coincidently affects the return of fluid from the fuel service pipe to the main fluid reservoir, in and by a restoration of pressure in the supply pressure pipe, substantially as set forth. 10th. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a supply pressure pipe leading from a source of fluid pressure supply to the main fuel reservoir, a valvular appliance controlling the application and release of fluid pressure to and from the interior of the fluid reservoir by variations of pressure in the main supply pressure pipe, a fuel service pipe leading from the fuel reservoir, a delivery connection leading therefrom, a service fuel reservoir, a feed valve controlling communication between the fuel service pipe and service fuel reservoir, and a release cock which coincidently controls a discharge passage from the supply pressure pipe for reducing and restoring, respectively, the pressure therein, and a passage through which when open pressure from said pipe effects and maintains the unseating of the feed valve, substantially as set forth. 11th. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a supply pressure pipe leading from a source of fluid pressure supply to the main fuel reservoir, a valvular appliance controlling the application and release of fluid pressure to and from

the interior of the main fuel reservoir by variations of pressure in the supply pressure pipe, a fuel service pipe leading from the fuel reservoir, a delivery connection leading therefrom, a service fuel reservoir, a feed valve controlling communication between the fuel service pipe and service fuel reservoir, and a release cock which coincidently controls communication between the supply pressure pipe and the atmosphere, and between the supply pipe and a pressure device for unseating the feed valve, substantially as set forth. 12th. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a supply pressure pipe leading from a source of fluid pressure supply to the main fuel reservoir, a valvular appliance controlling the application and release of fluid pressure to and from the interior of the main fuel reservoir by variations of pressure in the supply pressure pipe, a fuel service pipe leading from the fuel reservoir, a series of service fuel reservoirs connected to the fuel service pipe at different points in its length, and each provided with a valved delivery connection, a series of feed valves, each controlling communication between the fuel service pipe and one of the service fuel reservoirs, and a series of release cocks, each located adjacent to one of the fuel service reservoirs and coincidently controlling communication between the supply pressure pipe and the atmosphere, and between the supply pressure pipe and a pressure device for unseating the feed valve of the adjacent service reservoir, substantially as set forth. 13th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a delivery connection leading from the fuel service pipe, a supply pressure pipe leading from a source of fluid pressure supply to the main fuel reservoir, and a differential pressure device which cuts off the discharge from the supply pressure pipe and controls the release of pressure from the main fuel reservoir, substantially as set forth.

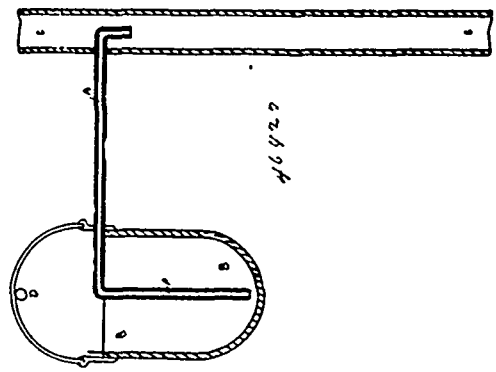
No. 46,424. Steam Generating Grate.
(*Appareil de générateur à vapeur.*)



Charles W. Hicks and Carlos W. Evans, both of the City of Ashburn, Georgia, U.S.A., 22nd June, 1894; 6 years.

Claim.—1st. In a steam generating and circulating apparatus, the combination with a boiler, of a hollow grate, a pipe connecting the boiler and grate, an injector connected to said pipe and by which the primary circulation of water therein is started, a mud drum in connection with the hollow grate, and a second pipe communicating with the boiler and the mud drum, whereby the water from the boiler is made to circulate through the grate and mud drum and whereby its heating is expedited and its sediment removed, substantially as described. 2nd. In a steam generating grate of the class described, the combination with perforated hollow grate bars, of flanged coupling pipes alternately located at opposite ends of said bars, and extending below the same, the flange being provided with perforations and fasteners, whereby suitable packing material can be interposed between them, and whereby the bars can be disconnected separately, as and for the purpose set forth. 3rd. In a steam generating apparatus, a hollow grate composed of rectangular hollow bars provided with a plurality of draught openings therein, a coupling pipe located and connecting the alternate ends of said bars, said pipes being arranged to extend below the bars, and being provided with perforated flanges and fasteners adapted to enter said perforations to lock the flanges together, receiving and discharging pipes connecting the opposite extremities of said grate with the boiler, a mud drum interposed within the circulation of said pipes, all arranged and adapted to operate, in the manner and for the purpose substantially as described. 4th. The herein described grate having receiving and discharging pipes connected at opposite ends thereof, said grate being composed of perforated rectangular hollow bars, in combination with coupling pipes located alternately at the opposite ends of the bars, and provided with flanges adapted to be placed face to face, and to have suitable packing material interposed between them, and devices for clamping said flanges together, whereby the bars are permitted to expand and contract and can be removed, in the manner and for the purpose substantially as described. 5th. The combination, with a boiler of a water grate composed of a series of hollow rectangular bars provided with a plurality of perforations or draught openings, flanged coupling pipes connecting the alternate ends of said bars to effect a zigzag passage through the grate, receiving and discharging pipes connecting the opposite end of said grate with the boiler at a point below the water line, a mud drum included within the water circuit, a blow-off valve and an injector, substantially as described. 6th. A water grate composed of a series of hollow grate bars connected alternately at their opposite ends by means of independent flanged pipes or elbows such as B^1, whereby the bars are allowed to contract and expand, in combination with a boiler, and pipes connected to maintain a circulation in the boiler and grate, substantially as described.

No. 46,425. Appliance for Disinfecting Water-Closets. (*Appareil pour désinfecter les latrines.*)



George Turner Orton, Winnipeg, Manitoba, Canada, 22nd June 1894; 6 years.

Claim.—The combination of the liquid disinfectant-holder B, B, and the gauging syphon pipe A, A, with the flush pipe C, C, substantially as and for the purpose hereinbefore set forth.

No. 46,426. Device for Liberating Horses from Vehicles while in Motion. (*Appareil pour dételer les chevaux pendant que la voiture est en mouvement.*)

Isaac Briggs, Middleboro, Massachusetts, U.S.A., 22nd June, 1894; 6 years.

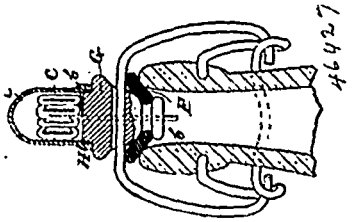
Claim.—1st. In combination, with a pair of trace irons *e*, *e*, a lever I for simultaneously withdrawing and rotating the same into such a position that the traces will be instantly disengaged from their irons, substantially as described. 2nd. A pair of trace irons *e*, *e*, with their guide pins *h*, *h*, a whiffletree A, a pair of sockets *c*, *c*, having cam shape slots *d*, *d*, a releasing lever I, and the connections *k*, *k*, interposed between it and the trace irons, substantially as set forth. 3rd. A pair of trace irons *e*, *e*, each having a guide pin *h*, a whiffletree having sockets *c*, *c*, each provided with a cam shape slot *d*, and a releasing lever I, in combination with connecting rods *k*, *k*, and a spring K by which the lever is returned from its releasing to its normal position, substantially as specified. 4th. In combination with the shafts B, B, and a pair of hold back straps, a pair of hold back irons *s*, *s*, having yielding front portions *t*, *t*, to insure the instant release of the straps therefrom when pulled forward by the escaping horse, as described. 5th. A combined shaft supporting and axle-locking device I, I, secured at its forward end preferably to the cross-bar *a*, and engaging with the reach D, for preventing the dropping of the shafts upon the ground and also for preventing the forward axle C from turning around its bolt and its wheels from changing their direction, substantially as set forth.

No. 46,427. Air Filtering Stopper for Bottles, &c.
(*Bouchon de filtre à air pour bouteilles, etc.*)

Johannis Jacobus Van Hest, Amsterdam, Holland, 23rd June, 1894; 6 years.

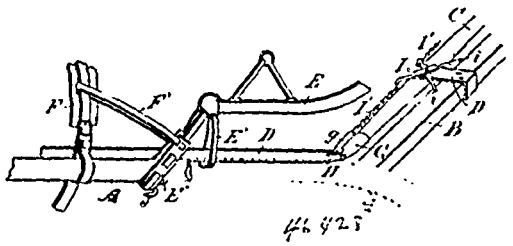
Claim.—1st. An air filtering stopper or closing device for bottles, jars, preserve boxes or tins, and the like, consisting of a tube or pipe having a multiplicity of bends and compressed into compact shape, one end thereof passing through the cork, stopper, or lid of the bottle, jar or other receptacle and being adapted to enter the said receptacle, for the purpose specified. 2nd. The combination,

with an air-filtering stopper or closing device consisting of a tube or pipe having a multiplicity of bends, one end passing through the



cork or stopper and a protecting cap provided with an aperture for the passage of the air, and secured to the cork, stopper or lid of the bottle, jar or other receptacle, substantially as described.

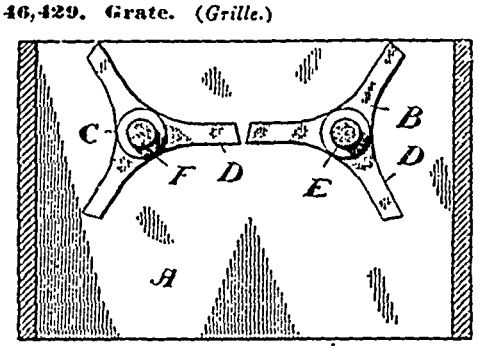
No. 46,428. Horse Detacher. (*Dételage instantané.*)



William W. Dickinson, Robert A. Dickinson, and Gideon Dickinson, all of Dundonald, Ontario, Canada, 23rd June, 1894; 6 years.

Claim.—1st. In a horse detacher, the combination with the whiffletree of tips G, each provided with a box g, and lug g^{11}, forming a notch g^{1}, for the reception of the tug end, a pin H held slidingly in each box, and passing through the notch g^{1}, and lug g^{11}, and having a reduced shouldered end passing through the inner end of the box, a spring H coiled on the reduced end of the pin, and projecting said pin through the g^{11}, and crossed levers I, pivoted on the whiffletree and connections I^{1}, connecting the ends of said levers with the inner ends of the pins, substantially as set forth. 2nd. In a whiffletree tip or socket for horse detachers, the combination with the body of the tip of a box g, a lug g^{11}, forming a notch for the reception of the tug and, a pin H, held slidingly in said box and lug, and having a shouldered and reduced end h, projecting through the inner end of said box, and a spring H^{1}, coiled upon said reduced end and pressing against the inner end of the box and the shoulder of the pin, substantially as set forth. 3rd. In a horse detacher, the combination with the whiffletree of crossed levers I, pivoted centrally upon the same, sliding pins H, at the ends of the whiffletree connected to the ends of said levers, and springs H, pushing said pins endwise so as to open said levers, substantially as set forth.

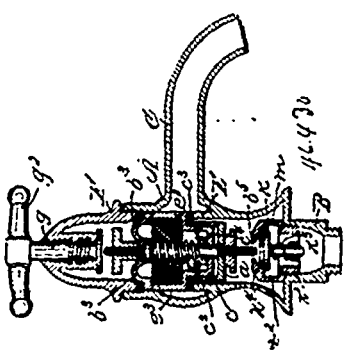
No. 46,429. Grate. (*Grille.*)



Andrew Scharg, and Duncan Dempster, both of Brantford, Ontario, Canada, 23rd June, 1894; 6 years.

Claim.—1st. In a grate, the bars journalled in the frame of the grate, and each provided with three radial flanges, in combination with means for imparting a simultaneous inward rotary motion to the grate-bars, substantially as and for the purpose specified. 2nd. In a grate, two grate-bars journalled in the frame of the grate and each provided with three radial flanges suitably slotted, in combination with means for imparting a simultaneous inward rotary motion to the grate bars, substantially as and for the purpose specified. 3rd. In a grate, two grate-bars journalled in the frame of the grate, and each provided with three radial flanges transversely slotted, in combination with means for imparting a simultaneous inward rotary motion to the grate-bars, substantially as and for the purpose specified. 4th. In a grate, two grate-bars longitudinally movable in their bearings and each provided with three radial flanges suitably slotted, in combination with means for imparting a simultaneous inward rotary motion to the grate-bars, substantially as and for the purpose specified. 5th. In a grate, two grate-bars rotatable in their bearings and each provided with three radial flanges, in combination with means for holding the grate-bars with any one flange of one, in juxta position with one of the flanges of the other, substantially as and for the purpose specified. 6th. In a grate, two grate-bars rotatable in their bearings and each provided with three radial flanges suitably slotted, in combination with means for holding the grate-bars with any one flange of one, in juxtaposition with one of the flanges of the other, substantially as and for the purpose specified. 7th. In a grate, grate-bars B and C, each provided with three radial flanges D, in combination with a gear-wheel G and H, secured to the spindles E and F, one of the gear-wheels being provided with three notches M, with any one of which the weight actuated stop K engages, substantially as and for the purpose specified. 8th. In a grate, the combination of the following elements:—the grate-bars B and C, radial transversely slotted flanges D, spindles E and F, longitudinally movable in their bearings, gear-wheels G and H connected by feathers or their equivalents, to the said spindles, annular groove G, formed in the end of one or both of the spindles E and F, one or more notched brackets T, notches M, weight actuated stop K, and the spindle end to which the crank handle J may be connected, substantially as and for the purpose specified. 9th. In a grate, a rotary grate-bar, to the spindle of which a wheel is connected, provided with a notch with which a weight actuated stop engages, in combination with a crank handle loosely fitting the suitably shaped end of the spindle and provided with a cam adapted to engage with and release the said stop from the notch when the crank handle is revolved, substantialy as and for the purpose specified. 10th. In a grate, two rotary grate-bars, to the spindles of which two gear-wheels are connected, meshing with one another, one of the wheels being provided with a notch with which a weight actuated stop engages, in combination with a crank handle loosely fitting the suitably shaped end of the spindle and provided with a cam adapted to engage with and release the said stop from the notch when the crank handle is revolved, substantially as and for the purpose specified. 11th. In a grate, the combination of two rotary grate-bars each provided with three radial flanges, two gear-wheels connected to the spindles of the said grate-bars and meshing with one another, three notches formed in one of the wheels, a weight actuated stop adapted to engage with any one of the notches, and a crank handle loosely fitting the suitably shaped end of one of the spindles and provided with a cam adapted, when the crank handle is revolved, to engage with and release the said stop from the notch in which it lies, substantially as and for the purpose specified. 12th. A crank handle J, adapted to engage with the end I, of the spindle of a grate-bar, and provided with jaws U, substantially as and for the purpose specified 13th. A crank handle J, adapted to loosely fit the end I, of the spindle of a grate-bar and provided with the cam Q, substantially as and for the purpose specified. 14th. A crank handle J, adapted to loosely fit the end of the spindle of a grate-bar, and provided with the cam Q, in combination with the jaws U, substantially as and for the purpose specified.

No. 46,430. Fluid Discharging Apparatus.
(*Robinet pour fluides.*)

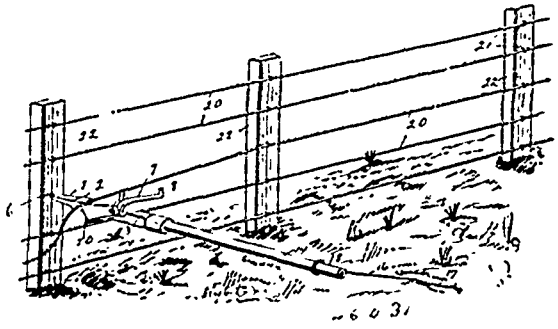


William T. Messinger, Boston, Massachusetts, U.S.A., 23rd June, 1894; 6 years.

Claim.—1st. The combination of the main shell or chamber of a fluid discharging apparatus, with the main valve controlling the flow of fluid therefrom, and the auxiliary valve acted upon by the fluid entering the shell which tends to close said auxiliary valve, said main valve co-operating with the auxiliary valve as described, opening the same when the main valve is opened and permitting the auxiliary valve to close when the main valve is closed, as and for the purpose described. 2nd. The chamber provided at one end with a cylindrical seat piece having lateral ports, and with a packing disc at its other end, combined with the cylindrical valve co-operating

with said seat piece and controlling the said ports, and its stem passing through said packing disc, the said chamber having lateral openings between the seat piece and packing disc, substantially as described. 3rd. The chamber provided at one end with a cylindrical seat piece having lateral ports and with a packing disc at its other end combined with the cylindrical valve co-operating with said seat piece and controlling the said ports, and its stem passing through said packing disc, and said chamber having lateral openings between the seat piece and packing disc, and a cylindrical strainer confined therein by said packing disc, substantially as described. 4th. The combination of the main shell or chamber of a fluid discharging apparatus with the main valve controlling the flow of fluid therefrom, and the auxiliary valve chamber vented as described and the auxiliary valve therein, constantly exposed to the pressure of the fluid entering the shell, which tends to close the said auxiliary valve, said main valve co-operating with the auxiliary valve as described, opening the said valve when the main valve is opened and permitting the auxiliary valve to close when the main valve is closed, substantially as and for the purpose described. 5th. The combination of the main shell of the faucet provided with a seat as E, with a removable valve chamber having an annulus that engages with said seat, and the valve seating on said annulus, a packing disc at the opposite end of said chamber from said annulus, and a removable cam piece or cover for the valve shell between which and the seat in the valve shell the removable chamber is secured, substantially as described.

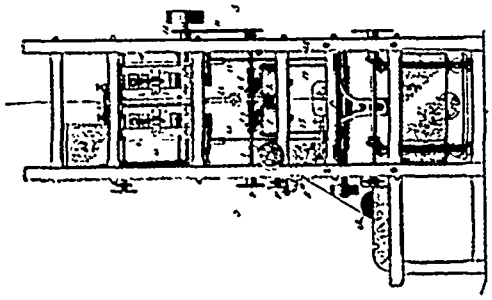
No. 46,431. Wire Stretcher. (*Tendeur de fil de fer.*)



John L. Cram, and Elbert E. Waller, City of Ava, Illinois, U.S.A., 23rd June, 1894; 6 years.

Claim.—The combination of a wire stretching device, constructed in the form of a lever and provided with a movable clamping jaw to hold and stretch a wire, and an anchor 16 having two integral, parallel arms 17 pointed at their outer ends, and a circular eye 18 at the opposite end which loosely encircles and holds said lever, substantially as herein specified.

No. 46,432. Cloth Painting Machine.
(*Machine pour peindre la toile.*)



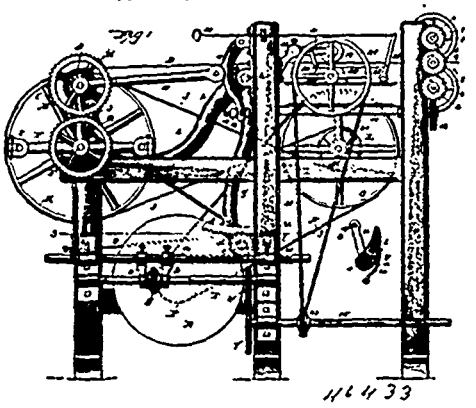
Eugene Henry Schofield and Oren Dunham, both of Ludington, Michigan, U.S.A., 23rd June, 1894; 6 years.

Claim.—1st. In a cloth painting machine, the combination with the paint applying devices, of endless travelling belts between which the painted cloth is passed and brushes secured to each belt at a distance from one another, substantially as set forth. 2nd. In a cloth painting machine, the combination with the paint applying devices, of endless travelling belts between which the painted cloth is passed, and brushes secured at intervals to such belts, the brushes on one belt being opposite the spaces between the brushes on the other belt, substantially as set forth. 3rd. In a cloth painting machine, the combination with the paint applying devices, of a pair of endless brushes between which the painted cloth is passed, and means for causing said brushes to move transversely across the cloth, substantially as set forth. 4th. In a cloth painting machine, the combination with the paint applying devices, of a pair of endless brushes between which the painted cloth is passed, and means for moving said brushes transversely across the cloth in opposite directions to each other, substantially as set forth. 5th. In a cloth painting machine, the combination with the paint applying devices, of two pairs of endless brushes between which the cloth is passed, one pair of said brushes being actuated to move transversely across the cloth, and the other longitudinally of the cloth, substantially as set forth. 6th. In a cloth painting machine, the combination with the paint applying devices, of two pairs of endless brushes between which the painted cloth is passed, one pair of said brushes being actuated to travel transversely across the cloth in opposite directions to each other, and the other pair being actuated to travel longitudinally of the cloth in the same direction, substantially as set forth. 7th. In a cloth painting machine, the combination with the paint applying devices and a pair of squeeze rolls between which the painted cloth is passed, of a pair of travelling endless brushes working on opposite sides of the cloth, each of said endless brushes being composed of a series of brushes with spaces between them, substantially as set forth. 8th. In a cloth painting machine, the combination with the paint applying devices and a pair of squeeze rolls between which the painted cloth is passed, of a pair of travelling endless brushes adapted to work on opposite sides of the cloth, each of said brushes being composed of a series of brushes arranged at intervals, and the brushes in one series being arranged opposite the spaces between the brushes in the other series, substantially as set forth. 9th. In a cloth painting machine, the combination with the paint applying devices and a pair of squeeze rollers, of a pair of endless brushes working on opposite sides of the cloth and travelling transversely of the cloth in opposite directions to each other, substantially as set forth. 10th. In a cloth painting machine, the combination with a paint applying devices and a pair of squeeze rollers, of two pairs of endless brushes working on opposite sides of the cloth, one pair of said brushes travelling transversely of the cloth, and the other pair travelling longitudinally of the cloth, substantially as described. 11th. In a cloth painting machine, the combination with the paint applying devices and a pair of squeeze rollers, of two pairs of endless brushes working on opposite sides of the cloth, said brushes of one pair travelling transversely of the cloth in opposite directions to each other, and the brushes of the other pair travelling longitudinally of the cloth in the same direction, substantially as described. 12th. In a cloth painting machine, the combination with paint applying devices and endless travelling brushes, of casings inclosing said brushes and being open at their adjacent sides, and scrapers arranged in said casings in the path of said brushes, substantially as set forth. 13th. In a cloth painting machine, the combination with paint applying devices, endless travelling brushes arranged to operate on opposite sides of the cloth, casings inclosing the said brushes and chambers in said casings, of adjustable scrapers located in said chambers and adapted and arranged to be brought into the path of the brushes, a benzine containing tank and valved pipe connection between said tank and chambers, and discharge pipes for said chambers, substantially as described. 14th. In a cloth painting machine, the combination with paint applying devices, endless travelling brushes arranged to operate on opposite sides of the cloth, casings inclosing the said brushes, and chambers in said casing, of adjustable scrapers located in said chambers and adapted and arranged to be brought into the path of the brushes, and discharge pipes for said chambers, substantially as described. 15th. In a cloth painting machine, the combination with a reel, a paint vat and suitable guide and immersing rollers, of a tension device engaging the cloth between the reel and the immersing rollers, comprising a pair of U-shaped brackets pivoted to the frame of the machine, a roller loosely journalled in said brackets to one side of their pivots, a bar extending across each of said brackets, and a weight adjustably secured on each of said bars, substantially as described. 16th. In a cloth painting machine, the combination with a reel, a paint vat and suitable guide and immersing rollers, of a pair of squeeze rollers, connected by a belt with and driven by the guide roller, substantially as described. 17th. In a cloth painting machine, the combination with a reel, a paint vat and suitable guide and immersing rollers, of a tension device engaging the cloth between the reel and the immersing rollers, and a pair of squeeze rollers connected by a belt with and driven by the guide roller, substantially as described. 18th. In a cloth painting machine, the combination with a reel, a paint vat and suitable guide and immersing rollers, of a weighted tension roller between which and the guide roller the cloth is passed, and a pair of squeeze rollers connected by a belt with and driven by the guide roller, substantially as described. 19th. In a cloth painting machine, the combination with a reel, a paint vat and suitable guide and immersing rollers, of a pair of squeeze rollers, having padded surfaces connected with and driven by the said guide roller, substantially as described. 20th. In a cloth painting machine, the combination with a reel, a paint vat, suitable guide and immersing rollers, and a tension device engaging the cloth between said reel and the immersing rollers, of a pair of endless travelling brushes working on opposite sides of the cloth, and means for removing the surplus paint from the cloth located between said brushes and the immersing rollers, substantially as described. 21st. In a cloth painting machine, the combination with a reel, a paint vat, and suitable guide and immersing rollers, of a pair of endless travelling brushes working on opposite sides of the cloth, means for causing said brushes to travel transversely of the cloth, and means for removing the surplus paint

from the cloth located between said brushes and the immersing rollers, substantially as described. 22nd. In a cloth painting machine, the combination with a reel, a paint vat, suitable guide and immersing rollers, of a pair of endless travelling brushes working on opposite sides of the cloth, means for causing the said brushes to travel transversely of the cloth in opposite directions to each other, and means for removing the surplus paint from the cloth located between the said brushes and the immersing rollers, substantially as described. 23rd. In a cloth painting machine, the combination with a reel, a paint vat, suitable guide and immersing rollers, of two pairs of endless travelling brushes working on opposite sides of the cloth, means for causing one pair of said brushes to travel transversely of the cloth and the other pair to travel longitudinally of the cloth, and means for removing the surplus paint from the cloth located between said brushes and the immersing rollers, substantially as set forth. 24th. In a cloth painting machine, the combination with a reel, a paint vat, and suitable guide and immersing rollers, of a pair of endless travelling brushes working on opposite sides of the cloth, and a pair of squeeze rollers connected by a belt with, and driven by the guide roller, substantially as set forth. 25th. In a cloth painting machine, the combination with a reel, a paint vat, suitable guide and immersing rollers, and a tension device engaging the cloth between said reel and the immersing rollers, of a pair of endless travelling brushes working on opposite sides of the cloth and a pair of squeeze rollers connected by a belt with, and driven by said guide roller, substantially as set forth. 26th. In a cloth painting machine, the combination with a reel, a paint vat, of suitable guide and immersing rollers, of a pair of endless travelling brushes working on opposite sides of the cloth, means for causing said brushes to travel transversely of the cloth, and a pair of squeeze rollers connected by a belt with, and driven by said guide roller, substantially as set forth. 27th. In a cloth painting machine, the combination with a reel, a paint vat, suitable guide and immersing rollers, and a tension device engaging the cloth between said reel and the immersing rollers, of a pair of endless travelling brushes working on opposite sides of the cloth, means for causing said brushes to travel transversely of the cloth, and a pair of squeeze rollers connected by a belt with, and driven by said guide roller, substantially as described. 28th. In a cloth painting machine, the combination with a reel, a paint vat, suitable guide and immersing rollers, and a tension device engaging the cloth between said reel and the immersing rollers, of two pairs of endless travelling brushes working on opposite sides of the cloth, means for causing one pair of said brushes to travel transversely of the cloth and the other pair to travel longitudinally of the cloth, and a pair of squeeze rollers connected by a belt with, and driven by the guide roller, substantially as described. 29th. In a cloth painting machine, the combination with a reel, a paint vat, suitable guide and immersing rollers, and tension device engaging the cloth between the said reel and the immersing rollers, of two pairs of endless travelling brushes working on opposite sides of the cloth, means for causing the brushes of one pair of said brushes to travel transversely of the cloth in opposite directions to each other, and the brushes of the other pair to travel longitudinally of the cloth in the same direction, and a pair of squeeze rollers connected by a belt with, and driven by the guide roller, substantially as described. 30th. In a cloth painting machine, the combination with a reel, a paint vat, and suitable guide and immersing rollers, of a tension device engaging the cloth between the reel and the immersing rollers, comprising a pair of U-shaped brackets pivoted to the frame of the machine, a roller loosely journalled in said brackets to one side of their pivots, a bar extending across each of said brackets, a weight adjustably secured on each of said bars, and a windlass for swinging said brackets on their pivots so as to elevate the roller, substantially as described. 31st. In a cloth painting machine, the combination with a reel, a paint vat, and suitable guide and immersing rollers, of reciprocating carriages working in said vat, rotary agitators journalled in said carriages and means for actuating said carriages and agitators, substantially as described. 32nd. In a cloth painting machine, the combination with a reel, a paint vat, and suitable guide and immersing rollers, of reciprocating carriages working in said vat, rotary agitators loosely journalled in said carriages, stationary racks in said vat and pinions on the journals of said agitators engaging said racks, substantially as described. 33rd. In a cloth painting machine, the combination with a reel, a paint vat, and suitable guide and immersing rollers, of reciprocating carriages working in said vat, rotary agitators loosely journalled in said carriages, fixed racks in the paint vat, pinions on the journals of the agitators engaging said racks, a horizontally reciprocating endless cable connected with and actuating the carriages and means for operating the same, substantially as described. 34th. In a cloth painting machine, the combination with a reel, a paint vat, and suitable guide and immersing rollers, of reciprocating carriages working in said vat, rotary agitators loosely journalled in said carriages, fixed racks in the paint vat, pinions on the journals of the agitators engaging said racks, a horizontally reciprocating endless cable connected with and actuating the said carriages, a rotary endless worm shaft, and a sleeve working thereon attached to said cable and provided with a pivoted dog working in said worm, substantially as described. 35th. In a cloth painting machine, the combination with a reel, a vertically adjustable paint vat, and suitable guide and immersing rollers, of reciprocating carriages working in said vat, rotary agitators loosely journalled in said carriages, fixed racks in the paint vat, pinions on the journals of the agitators engaging said racks, a horizontally reciprocating endless cable detachably connected with so as to actuate the said carriages, and means for operating the said cable, substantially as described. 36th. In a cloth painting machine, the combination with a reel, and suitable guide rollers, of a paint vat provided with a pocket or depression in the bottom thereof in which the lower immersing roller works and stirrers dipping into said pockets, substantially as described. 37th. In a cloth painting machine the combination with a reel, suitable guide and immersing rollers, and a paint vat provided with a pocket or depression in the bottom thereof in which the lower immersing roller works, of reciprocating carriages working in said vat, rotary agitators journalled in said carriages, and arms depending from said carriages and working in said pocket or depression, substantially as described. 38th. In a cloth painting machine the combination with a reel, suitable guide and immersing rollers, and a vat provided with a pocket or depression in the bottom thereof in which the lower immersing roller works, of reciprocating carriages working in said vat, rotary agitators loosely journalled in said carriages, fixed racks in the paint vat, pinions on the journals of the agitators engaging said racks, a horizontally reciprocating endless cable connected with and actuating said carriages in alternately opposite directions, and arms depending from said carriages and working in said pocket or depression below the lower immersing roller, substantially as described.

No. 46,433. Apparatus for Reeling Fabrics.

(*Appareil pour dévider les tissus.*)

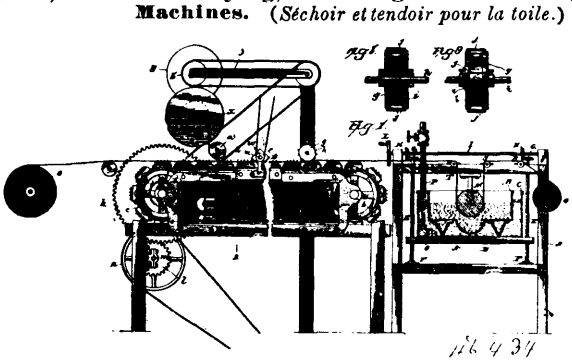


Eugene Henry Schofield and Oren Dunham, both of Ludington, Michigan, U.S.A., 23rd June, 1894; 6 years.

Claim.—1st. In a reeling apparatus, the combination with the reel, of guide rollers adapted to be actuated by the shifting of the cloth and a connection between said rollers and the opposite ends of the reel for changing the alignment of the latter, substantially as set forth. 2nd. In a reeling apparatus, the combination with the reel, of hook arms engaging said reel and guide rollers adapted to be actuated by the edges of the cloth, said rollers being connected with said arms for imparting motion thereto, substantially as set forth. 3rd. In a reeling apparatus, the combination with the reel, of guide rollers adapted to be actuated by the edges of the cloth, screw rods operated by said rollers and being connected with the ends of said reel for changing the alignment thereof, substantially as set forth. 4th. In a reeling apparatus, the combination of guides having bevelled edges between which the cloth engages in shifting, and a reel connected with said guides whereby its alignment will be changed by the motion of the guides, substantially as set forth. 5th. In a reeling apparatus, the combination with the shaft F, of the reel supporting spiders through which said shaft passes, having journal bearings in the arms thereof for the reception of a reel shaft adapted to be driven by the shaft F, guiding rollers actuated by the shifting of the fabric and connected with the reel shaft for changing the alignment thereof, substantially as set forth. 6th. In a reeling apparatus, the combination with the reel, of guide rollers adapted to be actuated by the shifting of the cloth, the levers 17 connected to said reel, and worm and wheel connection between said levers and rollers, substantially as set forth. 7th. In a reeling apparatus, the combination with the reel and a speed changing device having a movable member, of a bell crank-lever, one arm of which engages the reel and a rack pinion connection between the other arm of said lever and the said movable member of the speed changing device, substantially as set forth. 8th. In a reeling apparatus, the combination with the reel, a friction disc suitably geared or belted thereto for driving the same, the power shaft and a movably supported friction wheel driven thereby, and working upon the the face of the disc, of a bell crank-lever, one arm of which engages the reel, and a rack and pinion connection between the other arm of said lever and the support of the friction wheel, substantially as set forth. 9th. In a reeling apparatus, the combination with a reel, a friction disc suitably geared or belted thereto for driving the same, a driven

counter shaft and a friction wheel splined upon said shaft and working upon the face of said disc, of a movable rack-bar, an arm projecting therefrom on each side of the said frictional wheel for shifting the same upon the counter shaft, a rotatable shaft carrying a pinion engaging and operating said rack-bar, a bell crank lever, one arm of which engages the reel, and a rack and pinion connection between the other arm of said lever and the rotatable shaft, substantially as described. 10th. In a reeling apparatus, the combination with the reel, a friction disc suitably geared or belted thereto for driving the same, a clutch for throwing the reel into and out of gear, the power shaft and a friction wheel driven thereby and working upon the face of said disc, of a bell crank lever, one arm of which engages and is actuated by the reel, a rack and pinion connection between the other arm of said lever, and the support for the friction wheel, a lock device for said lever and a hand lever connected with for simultaneously operating said lock device and the reel cloth, substantially as described. 11th. In a reeling apparatus, the combination with the reel, the adjustable reel frame, the friction disc suitably geared or belted to the reel, a clutch for throwing the reel into and out of gear, the power shaft and a friction wheel driven thereby, movably supported and working upon the face of said disc, of a bell crank lever, one arm of which engages the reel, a rack and pinion connection between the other arm of said lever, and the support for the friction wheel, a spring actuated lock device for said lever, and a hand lever connected with, for simultaneously operating said lock device and the reel clutch, substantially as set forth. 12th. In a reeling apparatus, the combination with the reel, of an automatic cloth guide operated by the cloth being reeled, and connected with, so as to change the alignment of the reel, substantially as described. 13th. In a reeling apparatus, the combination with the reel, of an automatic cloth guide comprising two pairs of guide rollers adapted to be actuated by the shifting of the cloth, and a connection between each pair of said rollers and the reel, whereby the reel is alternately shifted out of alignment in opposite directions, substantially as described. 14th. In a reeling apparatus, the combination with the reel, of an automatic cloth guide comprising a pair of transverse shafts, a loose and a fixed guide roller on each of said shafts, the loose roller of one shaft opposing the fixed roller of the other, all of said rollers being provided with bevelled or inclined faces, a gear on one end of each of said shafts, an intermediate gear connecting the same, a pair of screw shafts having a worm connection with one of said transverse shafts at one end, and at their opposite ends provided with right and left hand screw threads respectively, screw threaded sleeves working thereon, levers pivotally connected to said sleeves, and a rod connecting each of said levers with the shaft of the reel, substantially as described.

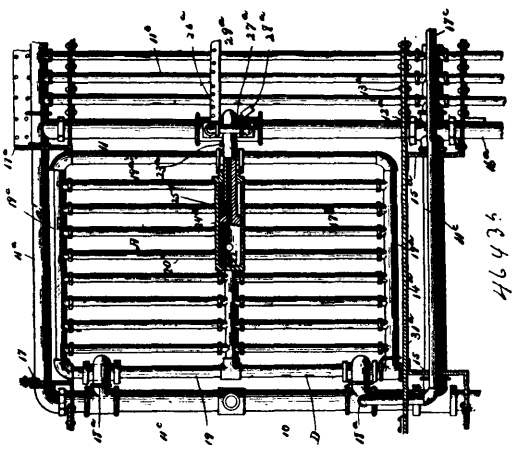
No. 46,434. Cloth Drying, Tentering and Trimming Machines. (*Séchoir et tendoir pour la toile.*)



Eugene Henry Schofield and Oren Dunham, both of Ludington, Michigan, U.S.A., 23rd June, 1894; 6 years.

Claim.—1st. The combination with the cloth carrier consisting of travelling belts, and a heated compartment located beneath the carrier and adapted to be spanned by the cloth, of means for holding the cloth aloof from said belts so as to form exits for the heated air between the edges of the cloth and the belts, substantially as set forth. 2nd. The combination of cloth carriers consisting of travelling belts, provided with longitudinal series of teeth, and guards arranged between the belt and points of the teeth, substantially as set forth. 3rd. The combination of cloth carriers consisting of belts, provided with longitudinal series of teeth, and guards arranged between said belts and the points of the teeth, and pinioning wheels arranged to register with each series of teeth, substantially as described. 4th. The combination with the cloth carriers, consisting of belts provided with longitudinal series of teeth, and guards arranged between said belts and the points of said teeth, of a pinioning wheel registering with each series of teeth and comprising a wheel with a peripheral groove into which the teeth project, and transverse bars circumferentially arranged, spanning said groove, substantially as described. 5th. The combination of the cloth carriers consisting of link chains, to the links of which are secured blocks, a series of teeth longitudinally arranged in each block, and a guard consisting of a flattened arch of wire secured at its ends respectively to said block and intersecting each tooth of the block between the point thereof and the surface of the block, substantially as and for the purpose described. 6th. The combination with the cloth carriers comprising link chains provided with longitudinal series of teeth and guards intersecting the teeth between their points and the chains, of a heated compartment located between the carriers and under-lying the cloth stretched between the carriers, said compartment being open at the top and bottom thereof, substantially as and for the purpose described. 7th. The combination with the cloth carriers, provided with longitudinal series of teeth, and guards intersecting said teeth between their points and the surface of the carrier, of trimmers provided with rotary cutters entering the cloth adjacent to said guards, substantially as described. 8th. The combination with the cloth carriers and the trimmers, of a storage reel for the finished cloth, a pair of storage spools for the trimmings, and a pair of vertically movable friction wheels bearing upon and operating said spools, substantially as described. 9th. The combination with the cloth carriers provided with longitudinal series of teeth, and guards intersecting said teeth between their points and the surface of the carrier, and trimmers provided with rotary cutters entering the cloth adjacent to said guards, of a storage reel for the finished cloth, a pair of storage spools for the trimmings, and a pair of vertically movable friction wheels bearing upon and rotating said spools, substantially as described. 10th. The combination with the cloth carriers and the trimmers, of a storage spool for the trimmings, and a movable friction wheel for operating said spool, substantially as set forth. 11th. The combination of the cloth carrier having rows of teeth, the trimmers located between said rows of teeth, a storage spool for the trimmings, and a movable friction wheel for operating said spool, substantially as set forth.

No. 46,435. Prison Cell, Safe and other Repositories. (*Cellule de prison, coffre-fort, etc.*)



Paul Emerson Glafeke, Cheyenne, Wyoming, U.S.A., 23rd June, 1894; 6 years.

Claim.—1st. In a structure of the class described, the hollow walls having a door opening, a hollow door communicating therewith and hinged thereto, combined with means for supplying liquid under pressure to the walls of the door, a diaphragm valve connected with the liquid supply means, and an alarm mechanism adapted to be operated by said diaphragm valve, substantially as specified. 2nd. In a structure of the class described, the walls thereof consisting of inner and outer plates forming intermediate spaces communicating with each other, a hollow door, hollow hinges communicating only with the intermediate spaces of the door and cell, means for supplying a fluid agent under pressure to the walls and door, and an alarm mechanism operated by a reduction of pressure in the walls or door, substantially as specified. 3rd. In a structure of the class described, the walls thereof consisting of inner and outer metal plates, tie-bolts connecting the plates, flanged filling strips between the edges of the plates, rivets connecting the flanges and edges of the plates, means for supplying a fluid agent under pressure to the space between the plates, and an equalizer connected with the said supplying means, substantially as specified. 4th. In a structure of the class described, the walls thereof consisting of inner and outer metal plates, tie-bolts connecting the plates, flanged filling-strips between the edges of the plates, rivets connecting the flanges and edges of the plates, means for supplying a fluid agent under pressure to the space between the plates, an equalizer connected with the said supplying means, and an alarm mechanism operated by a reduction of pressure in the walls, substantially as specified. 5th. In a structure of the class described, the combination with the hollow walls and door, of pipes leading thereto, means for supplying a fluid agent under pressure to the pipes, means for drawing off the fluid from the pipes, tubes extending from the pipes, diaphragm-valves mounted on the tubes, a contact-point on the upper side of the valve, a piston extending from the valve, a spring for depressing the piston, a contact point carried by the piston, electrical conductors, alarm-bells connected therewith, and wires leading from the contact-points to said

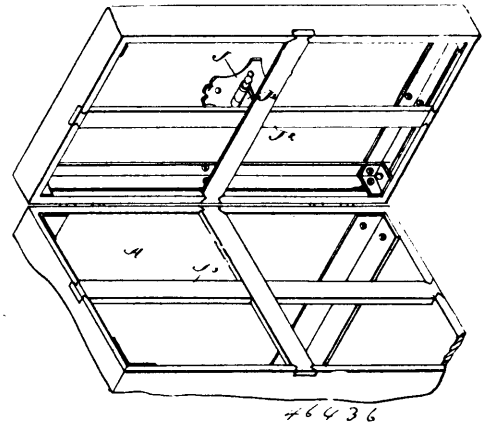
electrical conductors, substantially as specified. 6th. In a structure of the class described, the combination with the hollow walls and door, of pipes leading thereto, means for supplying a fluid agent under pressure to the pipes, means for drawing off the fluid from the pipes, tubes extending from the pipes, diaphragm-valves mounted on the tubes, a ring swivelled on the valve and provided with a contact-point and binding-post, a piston passing through the ring and valve and connected with the diaphragm, a spring for depressing the piston and valve, a ring mounted on the piston and provided with a binding-post and contact-point, electrical conductors, alarm-bells connected therewith, and wires leading from the conductors to the binding-posts of the ring, substantially as specified. 7th. In a structure of the class described, the combination with the hollow walls and door, of the fluid agent supply-pipes leading thereto, means for forcing the agent through the pipes, diaphragm-valves connected with the pipes, alarm mechanism operated by the valves, and gages located on the pipes above the valves, substantially as specified. 8th. In a structure of the class described, a door comprising a hollow frame and an intermediate filling of hollow boxes with connecting pipes arranged between the boxes and the frame, and means for forcing fluid therein, substantially as specified. 9th. In a structure of the class described, a hollow wall or grating consisting in a series of vertical and transverse connected pipes, means for supplying a fluid under pressure to the said tubular wall or grating, and an alarm operated by a reduction of pressure due to the breaking, leaking or opening of the said wall or grating, substantially as specified. 10th. In a structure of the class described, a hollow wall or grating, consisting in a series of connected pipes and having a door-opening, a tubular keeper at one side of the opening and communicating with the said pipes, means for supplying fluid under pressure to the said pipes and keeper, a door closing said opening and having a bolt to engage the keeper, and an alarm mechanism operated by a reduction of pressure in the wall or its keeper, substantially as specified. 11th. In a structure of the class described, a hollow wall or grating, consisting in a series of connected pipes, and having a door-opening, a hollow door formed of a series of connected pipes, means for supplying fluid under pressure to said door and hollow wall or grating, alarm mechanism connected with the said wall and door and actuated by the breaking or leaking of said pipes or opening of the door, substantially as specified. 12th. In a structure of the class described, a hollow wall or grating formed of a series of connected pipes and having a door-opening bounded by tubes, a hollow door for said door-opening formed of connected pipes, and having a tubular or valved hinge connected with one of the pipes at said opening, a fluid-pressure mechanism connected with the hollow wall and its door to fill the same with fluid under pressure, and an alarm actuated by a diminution of pressure in said piping, substantially as specified. 13th. In a structure of the class described, a cage or cell constructed of a series of tubes arranged to admit of a circulation of fluid in them, a door of like construction and having tubular or valved hinges connecting it with the body of the structure, gauges connected with the door and with the body of the structure, an alarm device, and an electric connection between the gauges and the alarm, substantially as specified. 14th. In a structure of the class described, a coil or cage, the body of which comprises a series of tubes connected to admit of fluid circulating through them, a door of similar construction having a tubular or valved hinge connection with the body of the structure, a fluid-operated bolt carried by the door, pressure gauges connected with the door and with the body of the structure, an apparatus for creating fluid pressure, also connected with the structure and with the door, an alarm mechanism, and an electric connection between the alarm mechanism and the gauges, substantially as specified. 15th. The combination with the tubular structure, and a fluid-pressure apparatus connected therewith, of the gauge indicating the pressure in said structure, and an alarm electrically connected with the said gauge and actuated from its pointer axis or centre pin, substantially as specified. 16th. In a structure of the class described, the combination with a prison-cell, cage, etc., the walls of which are formed of connecting pipes, of a supply-pipe leading from the office or other suitable point to said pipes, a fluid-pressure apparatus at the office end of the pipe to force a fluid therethrough into the walls, a valve in the pipe adjacent to said apparatus, a valved exhaust-pipe leading from said supply-pipe above its valve, a fluid pressure gauge connected with said pipe above said valves, electrical contact devices actuated from the pointer axis of the said gauge, and an alarm electrically connected with said devices, substantially as specified.

No. 46,436. Internal Stay for Trunks, etc.

(*Arrêt intérieur pour coffres, etc*)

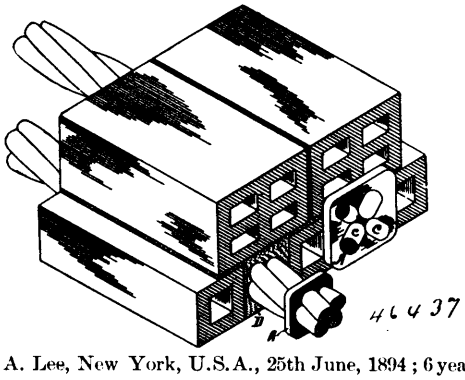
John Thomas Dwyer, Montreal, Quebec, Canada, 25th June, 1894; 6 years.

Claim.—1st. A stay for trunks, boxes and other receptacles, composed of bearing plates secured internally to the centre of the bottom, sides and ends of the trunk, box or receptacle, and a removable stay or stays connected with such plates, for the purposes set forth. 2nd. The combination with the bottom sides, ends and corners of a trunk, of bearing plates secured to such parts, and a removable stay or stays connected with such plates, for the purposes set forth. 3rd. In combination with the back and front of a trunk or box, bearing plates secured to such parts, stay C and means for locking the ends of same to said plates so as to hold such plates and the parts carrying them against bulging movement inward or outward. 4th. The combination with the back and front, the ends and bottom of a trunk or box, of bearing plates secured to such parts, and stays



with means for pivotally and removably connecting such stays with each other and with said plates, substantially as set forth. 5th. The combination with the lid of a trunk, of a bearing plate on the inside of same, a horizontal stay secured at its ends to the edge of such lid, and a vertical stay between the bearing plate and said horizontal stay, all as herein set forth. 6th. In combination with the body of a trunk, vertical plates in the corners, a central plate secured to stay C, and radial arms hinged thereto and bearing against corner plates, all as herein set forth. 7th. The combination with the body of a trunk and removable stays, of the corner plate G^5, with means for locking such stays and plates together, and corner strips K, K, as and for the purposes set forth. 8th. The combination with the dove-tail notched edges of the trunk and its lid, of the stays J^2, J^3 having their ends dove-tailed to fit such notches, for stiffening the edges of the trunk, as shown.

No. 46,437. Tension Rods for Fireproof Floors, Roofs, &c. (*Tirant à tension pour planchers, toits, etc., à l'épreuve du feu.*)



Thomas A. Lee, New York, U.S.A., 25th June, 1894; 6 years.

Claim.—1st. A rod for the purposes described consisting of two or more strands twisted together but held apart at intervals by separating pieces for increasing the cement engaging and shearing surface of the said rod, substantially as set forth. 2nd. A rod for use in concrete, mortar, cement, and the like, consisting of two or more strands of wire or small rods, and a separating piece or pieces placed between the strands of the said rod, the strands of the rod being held together between the said separating pieces, but allowed to separate around the said pieces, whereby greater cement engaging surface is produced, substantially as and for the purposes set forth. 3rd. A tension rod for the purposes described consisting of two or more strands of wires, twisted together, and of separating pieces held in position by the said strands or wires and projecting from the said rod, whereby concrete or other embedding material may more firmly cling to the said rod, substantially as set forth. 4th. A twisted tension rod for the purposes provided with pieces of metal or other material strung thereon, substantially as set forth. 5th. A tension rod for the purposes described consisting of two or more strands, of angular cross-section, secured together, substantially as set forth.

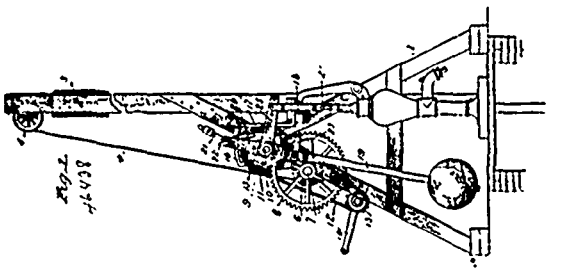
No. 46,438. Motor for Operating Pumps.

(*Moteur pour pompes.*)

Louis Henry Lloyd, Lincoln, Illinois, U.S.A., 25th June, 1894; 6 years.

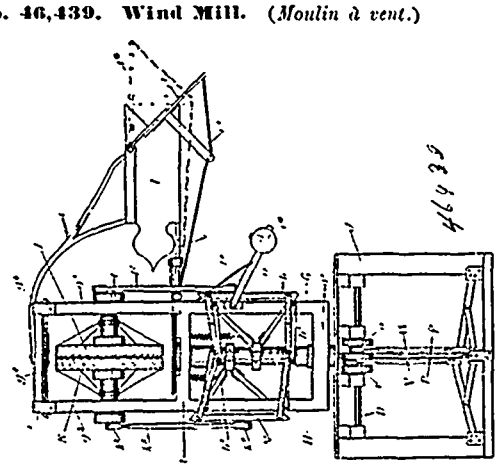
Claim.—1st. In a device for imparting a reciprocating movement to a pump-rod or other device, the combination of a frame, a gravi-

tating weight, a ratchet-wheel driven by said drum, a pendulum pivotally mounted adjacent to said ratchet wheel, an automatic pawl carried by said pendulum and movable thereon and engaging



the ratchet-wheel, whereby the force exerted by the ratchet-wheel is communicated to the pendulum, an arm connected to the pendulum and adapted to be connected to the pump-rod or other device, and means carried by the frame for automatically engaging the ratchet-wheel and stopping its rotation when the pendulum reaches the limit or nearly the limit of its swing in one direction, substantially as described. 2nd. In a motor for imparting a reciprocating movement to a pump rod or other device, the combination of a frame, a drum journalled thereon and a cable and weight for operating said drum, a ratchet-wheel driven by said devices, a pendulum swung concentrically with said ratchet wheel and extending above the ratchet-wheel, a weighted pawl carried by the pendulum and adapted to be thrown in and out of engagement with said ratchet wheel as the pendulum passes the centre, a pawl pivoted on the frame and normally held out of engagement, devices for forcing said pawl into engagement with the ratchet wheel to relieve the pressure against the other pawl, and an arm connected to the pendulum and adapted to be connected to the device to be operated, substantially as described. 3rd. In a motor for operating a reciprocating part or device, the combination of a drum and devices for imparting rotation thereto, a ratchet wheel driven by the drum, a pawl 16 provided with a depending arm 17 to normally hold it out of engagement with the ratchet wheel, a pendulum swung concentrically to the ratchet-wheel, an arm 23 carried by the pendulum and adapted to strike said arm 17, a weighted pawl 20 pivoted on the pendulum and normally engaging the ratchet wheel, and an arm connected to the pendulum and adapted to be connected to the device to be operated, substantially as described.

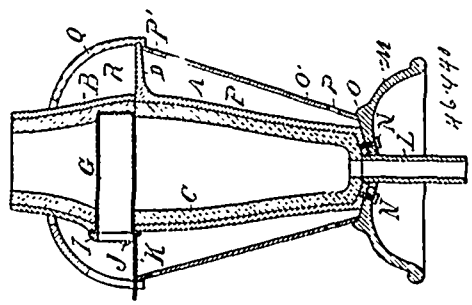
No. 46,439. Wind Mill. (*Moulin à vent.*)



John Boisclair, Montreal, Quebec, Canada, 25th June, 1894; 6 years.

Claim.—1st. In a wind-mill, the combination of the two wheels K and I_2, secured to the hubs k and l, turning with and on shaft M, and having the disc cranks k^2 and l^2, joined to the connecting rods k^3 and l^3, cross heads N and O having the pieces n, n^1, o and o^1, joined to the collars n^2 and o^2, rings p and q, having projections p^2, and secured to connecting rods P and Q, levers T and S, connecting rods V and W, and shaft U, with the retangular frame G, hollow column H having the four vertical slots h, frame J, and vane I, substantially as described and for the purposes set forth. 2nd. In a wind-mill, the combination of the mechanism of the wind-mill with a stopping device composed of a vane I, supported by the pieces i and i^1 and having the deflector i^2, automatically locking the mill through the cord i^4, levers i^5 and i^6, pieces i^{10}, and the uprights g^3, substantially as described and for the purposes set forth. 3rd. In a wind-mill, the combination of the mechanism of the wind-mill with a hand stopping device composed of the cord i^{13}, sector i^{14}, levers i^{15} and i^{17}, pieces i^1 and i, vane I, levers i^7 and i^8, pieces ^{9} and ^{10}, and the uprights g^2, substantially as described and for the purposes set forth. 4th. In a wind mill, the combination of a hand and an automatic stopping device with an automatic starting one composed of the weight i^{11}, cord i^{12}, piece i^3, vane I, piece i, levers i^7 and i^8, pieces i^9 and i^{10}, and the uprights g^3, substantially as described and for the purposes set forth.

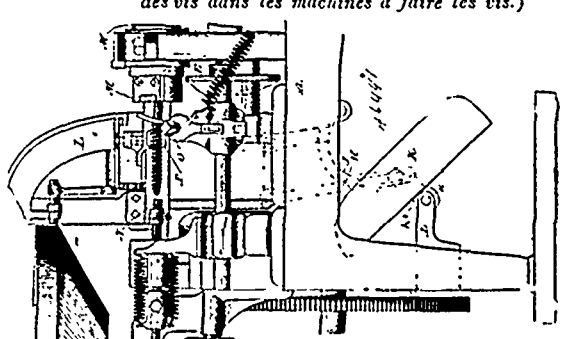
No. 46,440. Dental Furnace. (*Fournaise dentaire.*)



James Hunter Downie, Detroit, Michigan, U.S.A., 25th June, 1894; 6 years.

Claim.—1st. In a dental furnace, the combination of the furnace casing made in two oppositely tapering sections, a lining or refractory material moulded therein, means for securing the sections together, and a muffle in the furnace, immediately above the upper edges of the lower section and extending across the same, substantially as described. 2nd. In a dental furnace, the combination of the furnace casing made in two sections, a lining of refractory material therein, one only of said sections having a recess formed in its edge and a muffle located in said recess at the joint between the two sections, substantially as described. 3rd. In a dental furnace, the combination of a furnace casing, an annular flange about the casing, a cap or cover for said flange forming the oven R in its sides within, and having door openings in its sides, substantially as described. 4th. In a dental furnace, the combination of the furnace casing, the horizontal annular flange surrounding the casing, the cap Q supported on the flange having aperture R^1, and the muffle opening on a level with said flange, substantially as described. 5th. In a dental furnace, the combination of the furnace casing, a muffle, a marginal flange on the muffle, and a clamping ring secured to the casing for clamping the flange against the casing around the muffle, substantially as described. 6th. In a dental furnace, the combination of the furnace casing, a muffle, a marginal flange on the muffle, a clamping ring secured to the casing for clamping the flange against the casing around the muffle, and a shelf supported by said ring, substantially as described. 7th. In a dental furnace, the combination of the furnace casing, a muffle, a marginal flange on the muffle, a clamping ring secured to the casing for clamping the flange against the casing around the muffle, and a shelf formed integral with said ring and extending out on the plane of the bottom of the muffle, substantially as described.

No. 46,441. Device for Separating the Turnings from the Finished Screws in Screw Making Machines. (*Appareil pour séparer les tournures des vis dans les machines à faire les vis.*)

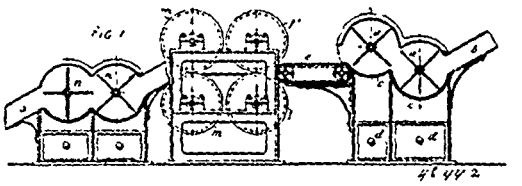


Jason Allen Bidwell, Cleveland, Ohio, U.S.A., 25th June, 1894; 6 years.

Claim.—1st. In combination with mechanism for operating the screw-threading and discharging of screws in a screw-making machine, a chute arranged beneath the discharge of the machine and movable to deliver at two separate points, and mechanism connected to the operating mechanism and to said chute to move the same to deliver the turnings at one point and the finished screws at another point, substantially as set forth. 2nd. In combination with mechanism for operating the screw-threading and discharging of screws in

a screw-making machine, a chute pivoted beneath the discharge of the machine to oscillate toward two separate points, a cam receiving motion from the operating mechanism, and means connecting said cam and chute whereby the chute is alternately tilted to deliver the turnings at one point and the finished screws at another point, substantially as set forth. 3rd. In a screw-making machine, the combination with a shaft having suitable connection to operate the screw threading and discharging mechanism, of a chute pivoted beneath the discharge of the machine to swing to discharge at two separate points, a cam-receiving intermittent motion from said shaft, and means connecting said cam and chute whereby said chute is tilted into its two positions by said cam, substantially as set forth. 4th. In a screw-making machine, the combination of a shaft having means for operating the screw-threading mechanism, a quill upon said shaft and carrying means for operating the gripping and discharging mechanism of the machine, a clutch sliding upon and revolving with the shaft and engaging a clutch upon said quill, means actuated by the shaft for intermittently throwing said clutches into engagement, a cam upon the quill, a chute pivoted beneath the discharge of the machine to swing and discharge at two separate points, and mechanism connecting said cam with said chute to alternately tilt the same into two positions to discharge the turning at one point and the finished screws at another point, substantially as set forth. 5th. In a screw-making machine, the combination of a revolving shaft having means for operating the screw-threading mechanism, and provided with a radially projecting finger a quill having means for operating the gripping and discharging mechanism and formed with a clutch at one end, a clutch sliding upon and revolving with the shaft and adapted to engage the clutch upon the quill, a shaft parallel with the operating shaft and provided with a star-wheel engaged by the radiating finger and with a cam, a lever connected to shift the clutch and engaging said last-mentioned cam, a cam upon the quill, a chute pivoted beneath the discharge of the machine to deliver at two separate points, and mechanism connecting said cam and chute to tilt the latter to alternately discharge the turnings at one point and the finished screws at another point, substantially as set forth. 6th. In a screw-making machine, the combination of a chute pivoted to rock at its middle and arranged beneath the discharge of the machine, a cam receiving intermittent motion from the operative mechanism of the machine, and a lever bearing against said cam and connected to said chute to rock it to alternately deliver at its opposite ends, substantially as set forth. 7th. In a screw-making machine, the combination of a chute arranged beneath the discharge of the machine and pivoted upon a transverse rock shaft at its middle, an arm upon said rock shaft and having a stud, an arm pivoted at one end and having a slotted end engaging said stud, a cam receiving intermittent motion from the operative mechanism of the machine, a lever pivoted to have one end bear against said cam, and a link connecting the other arm of said lever and the slotted arm, substantially as set forth. 8th. In a screw-making machine, the combination of a cam connected to receive intermittent motion from the operative mechanism of the machine, a lever pivoted to have one end bear against said cam, a chute pivoted at its middle to discharge at its opposite ends, an arm pivoted at one end and movably connected to rock said chute, and a curved link between said arm and the lever, substantially as set forth. 9th. In a screw-making machine, the combination of a cam connected to receive intermittent motion from the operative mechanism of the machine and formed with a plain annular face having a bulge at one point, a lever pivoted to have the end of its upper arm bearing against the face of the cam, a spring attached to said lever to force said end against the cam, an arm pivoted at its upper end and having a slotted lower end, a link connecting the lower end of the lever and said arm, a rock shaft having an arm provided with a stud engaging the slot of the arm, and a chute secured at its middle upon said shaft, substantially as set forth. 10th. In a screw-making machine, the combination of a cam connected to receive intermittent motion from the operative mechanism of the machine and provided with knobs upon its cam surface, a lever pivoted to have one end bear against said cam surface and having means for yieldingly holding it against said surface, a chute pivoted to discharge at two separate points, and mechanism connecting the lever and said chute to tilt said chute into its two positions and to vibrate the same, substantially as set forth. 11th. In a screw making machine, the combination of a continually revolving shaft having means for operating the screw threading mechanism and provided with a radiating finger, a quill upon said shaft having means for operating a part of the screw threading mechanism and formed with a clutch, a quill upon the shaft having means for operating the gripping and discharging mechanism and formed with a clutch, a clutch sliding upon and revolving with the shaft and adapted to alternately engage the clutches upon the quills, a lever engaging said clutch with one end, a shaft journalled parallel with the operating shaft and having a star-wheel engaged by the radiating finger upon the latter and having a cam engaging the clutch operating lever, a cam upon the quill operating the gripping and discharging mechanism, a lever having one end bearing against said cam, an arm pivoted at one end and having its other end slotted, a link between the lever and said arm, a rock-shaft having an arm provided with a stud engaging the slot in the end of the slotted arm, and a chute secured at its middle upon said rock shaft, substantially as set forth. 12th. In a screw making machine, the combination of an arm pivoted at one end and formed with a longitudinal slot at its other end and receiving intermittent rocking motion, a rock shaft having a chute secured at its middle upon said shaft and formed with an arm, a bushing inserted through said arm, a screw bolt inserted through said bushing and through the slotted arm, a washer between the slotted arm and the rocking arm, and a nut bushing upon the end of the screw bolt and within the slot of the slotted arm, substantially as set forth.

No. 46,442. Decorticating, Preparing, Twisting and Winding Peat, &c. (*Appareil à décortiquer, préparer, tordre et enrouler la tourbe, etc.*)



Gustave A. Cannot, London, England, 25th June, 1894; 6 years.

Claim.—1st. The combination of the revolving beaters *a*, *a*, and screens *c*, *c*, grooved cylinders *f*, *f*¹ and *m*, *m*¹ and the revolving beaters *n*, *n*, all arranged and operating, substantially as set forth. 2nd. The combination of the revolving beaters *a*, *a*, endless travelling bands *c*, and grooved rollers *f*, *f*, arranged and operating, substantially as set forth. 3rd. The decorticating device, consisting of grooved cylinders *f*, *f*¹, made to revolve in opposite directions and a device by which one of the said cylinders is made to reciprocate backward and forward endways whilst revolving, substantially as set forth. 4th. The decorticating device, consisting of grooved cylinders *f*, *f*¹, made to revolve in opposite directions, and also both made to reciprocate backward and forward endways whilst revolving, substantially as set forth. 5th. The combination with a carding engine, of the receiving trough 2, open at the side adjoining the doffing cylinder of the carding engine, the revolving funnel-shaped twisting device 9, the rollers 5 and 6, the revolving roller 14, the roller 18, carried in slotted guide 15, the guiding bar 19, sliding block 20, connecting rod 21, and adjustable crank 22, all substantially as set forth. 6th. In combination with the carding engine, the hollow receiving trough 2, revolving twisting device 9, and rollers 5 and 6, substantially as set forth. 7th. The combination of the rollers 14 and 18, slotted guides 15, guiding bar 19, sliding block 20, connecting rod 21, and adjustable crank 22, substantially as set forth. 8th. The revolving tubular funnel shaped twisting device 9, substantially as and for the purpose specified.

No. 46,443. Pneumatic Tire Repairer.

(*Appareil à réparer les bandages pneumatiques.*)

Charles E. Buckbee, George Cronk and Charles S. Wheeler, all of Flushing, Michigan, U.S.A., 25th June, 1894; 6 years.

Claim.—1st. The method of repairing pneumatic tires, which consists in injecting rubber cement through a fracture of the tire, to cover the inner surface of the tube about the point of fracture, and then causing the cement to fill the fracture from the inner surface to the exterior of the tube, substantially as set forth. 2nd. The method of repairing pneumatic tires, which consists in inserting a tubular needle connected with a supply of rubber cement into the hole or fracture to be repaired, forcing sufficient of the cement through the needle to cover the inner surface of the tube about the point of fracture and form a button thereon, and withdrawing the needle while the tire is inverted, so that the current of cement will follow the needle and fill the puncture, substantially as set forth. 3rd. A tire repairer, comprising a flexible cement tube closed at one end and open at the other, a cap adapted to fit the open end of the cement tube, and a tubular needle secured to the cap, substantially as described. 4th. A tire repairer, comprising a cap adapted to be attached to a source of cement supply, a tubular needle leading from the cap, and a plunger adapted to fit within the needle, substantially as described.

CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO THE FOLLOWING PATENTS.

3484. JOSEPH R. SMITH, 2nd five years of No. 31,477, from the 1st day of June, 1894. Improvements in Metallic Ladders, 1st June, 1894.

3485. THOMAS SHAW, 2nd five years of No. 31,699, from the 2nd day of July, 1894. Improvements in Automatic Apparatus for Testing Mine Gases, 1st June, 1894.

3486. AUGUSTA M. McLEOD, 2nd five years of No. 31,495, from the 4th day of June, 1894. Improvements in Medicinal Compounds, 1st June, 1894

3487. THE DOMINION REDUCTION COMPANY (assignees), 2nd five years of No. 31,522, from the 7th day of June, 1894. Improvements in Baths or Solutions for use in separating Metals from their Ores and Process of making the same, 4th June, 1894.

3488. THE RATHBUN COMPANY (assignees), 3rd five years of No. 20,619, from the 25th day of November, 1894. Improvements on Combined Fire Proof Elevators and Ventilating Shafts, 4th June, 1894.

3489. THE RATHBUN COMPANY (assignees), 2nd five years of No. 31,664, from the 25th day of June, 1894. Improvements in the Manufacture of Hollow Skew Backs, 4th June, 1894.

3490. THE RATHBUN COMPANY (assignees), 2nd five years of No. 31,665, from the 25th day of June, 1894. Improvements in the Method of Drying Porous Hollow Ware, 4th June, 1894.

3491. THE RATHBUN COMPANY (assignees), 2nd five years of No. 31,666, from the 25th day of June, 1894. Improvements in Apparatus for regulating the flow of Plastic Mixtures of Clay, Saw-dust and other ingredients from presses, 4th June, 1894.

3492. THE RATHBUN COMPANY (assignees), 2nd five years of No 31,667, from the 25th day of June, 1894. Improvements in the Manufacture of Flat Blocks and Slabs from any Clay or Clay Mixture, 4th June, 1894.

3493. THE RATHBUN COMPANY (assignees), 2nd five years of No. 31,941, from the 3rd day of August, 1894. Improvements in Porous Earthenware Building Material, 4th June, 1894.

3494. THE RATHBUN COMPANY (assignees), 2nd five years of No. 31,968, from the 3rd day of August, 1894. Improvements in Process for Manufacturing Building Material, 4th June, 1894.

3495. GEORGE A. CONANT, 3rd five years of No 19,538, from the 9th day of June, 1894. Improvements in Bluing Compounds, 7th June, 1894.

3496. AUGUSTUS G. PARKHURST, 2nd five years of No. 31,596, from the 12th day of June, 1891. Improvements in Combined Curb and Gutters, 7th June, 1894.

3497. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,803, from the 24th day of July, 1894. Improvements in Clip for Railroad Switch Pivotal Tie Rods, 7th June, 1894.

3498. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,804, from the 24th day of July, 1894. Improvements in Switch Rail Chairs, 7th June, 1894.

3499. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,805, from the 24th day of July, 1894. Improvements in Switch Stands, 7th June, 1894.

3500. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,806, from the 24th day of July, 1894. Improvements in Tie Rods for Switch Rails, 7th June, 1894.

3501. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,807, from the 24th day of July, 1894. Improvements in the Manufacture of Clips for connecting Tie Bars with Switch Rails, 7th June, 1894.

3502. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,808, from the 24th day of July, 1894. Improvements in Rail Braces, 7th June, 1894.

3503. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,809, from the 24th day of July, 1894. Improvements in Railway Frogs, 7th June, 1894.

3504. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,810, from the 24th day of July, 1894. Improvements in Railway Switch Stands, 7th June, 1894.

3505. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,811, from the 24th day of July, 1894. Improvements in Switch Stands, 7th June, 1894.

3506. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,818, from the 24th day of July, 1894. Improvements in Lifting Jacks, 7th June, 1894.

3507. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 31,819, from the 24th day of July, 1894. Improvements in Switch Rail Chairs, 7th June, 1894.

3508. THE CANADA SWITCH COMAPNY (assignees), 2nd five years of No. 31,856, from the 1st day of August, 1894. Improvements in Lifting Jacks, 7th June, 1894.

3509. THE CANADA SWITCH COMPANY (assignees), 2nd five years of No. 38,046, from the 2nd day of January, 1897. Improvements in Devices for securing Guard Rails in place, 7th June, 1894.

3510. ALEXANDER F. WARD and THOMAS S. CHRISTIE, 2nd five years of No. 31,574, from the 11th day of June, 1894. Improvements in Machines for Pointing and Lapping Hoops, 11th June, 1894.

3511. ALEXANDER SMITH, 2nd five years of No. 31,879, from the 1st day of August, 1894. Improvements in Fifth Wheels and Friction Plates for Vehicles, 11th June, 1894.

3512. FRANK B. HOWARD, 2nd five years of No. 31,629, from the 21st day of June, 1894. Improvements in Apparatus for Pressing Pulp, 12th June, 1894.

3513. WILLIAM HARMAN, 2nd five years of No. 31,585, from the 12th day of June, 1894. Improvements in Bridges, 12th June, 1894.

3514. THOMAS G. MASON and VINCENT M. RISCH, 2nd five years of No. 31,618, from the 22nd day of June 1894. Improvements in Reed Organs, 12th June, 1894.

3515. JOHN PATTEN, 2nd five years of No. 31,627, from the 19th day of June, 1894. Improvements in Nail Drivers, 15th June, 1894.

3516. JOSEPH MOSELEY, 2nd and 3rd five years of No. 31,615, from the 18th day of June, 1894. Improvements in and machinery or apparatus for the Manufacture of Cards for use in Carding Cotton and Wool, 15th June, 1894.

3517. THE OFFICE SPECIALTY MANUFACTURING CO. (assignees), 2nd five years of No. 31,608, from the 18th day of June, 1894. Improvements in Suspension File Boxes, 18th June, 1894.

3518. THE MASSEY MANUFACTURING CO. (assignees), 2nd five years of No. 31,642, from the 22nd day of June, 1894. Improvements in Harvesters, 19th June, 1894.

3519. SAMUEL B. BOULTON, 2nd five years of No. 31,638, from the 22nd day of June, 1894. Improvements in treating timber with Antiseptic or Preservative Fluid, and in apparatus employed therefor, 19th June, 1894.

3520. EUGENE HERMITE, CHARLES F. COOPER and EDWARD J. PATERSON, 2nd five years of No. 31,656, from the 24th day of June, 1894. Improvements in Apparatus for Electrolyzing Bleaching Solutions, 19th June, 1894.

3521. WALTER J. ALLEN and LAWRENCE J. HICKEY, 2nd five years of No. 31,659, from the 24th day of June, 1894. Improvements in Valves for Steam Engines, 21st June, 1894.

3522. ALFRED F. BILDERBEC-GOMESS, 2nd five years of No. 33,320, from the 2nd day of January, 1895 Improvements in removing Animal Fur, Feathers, Hair, Bristles and the like from their natural skins and in transferring the same to artificial backing, 21st June, 1894.

3523. JENNIE E. BARKER, 2nd five years of No. 34,132, from the 19th day of April, 1895. Improvements in Addressing Machines, 22nd June, 1894.

3524. JAMES B. RHODES, 2nd five years of No. 31,708, from the 2nd day of July, 1894. Improvements in Saw Swaging Machines, 22nd June, 1894.

3525. LEVI WALKER, 2nd five years of No. 31,678, from the 26th day of June, 1894. Improvements in Plow Colters, 23rd June, 1894.

3526. SPRIGGS & BUCHANAN (assignees), 2nd five years of No. 31,671, from the 25th day of June, 1894. Improvements in Snap Links, 25th June, 1894.

3527. THE MONTREAL STAVE AND BARREL COMPANY (assignees), 2nd five years of No. 31,668, from the 25th day of June, 1894. Improvements in the Construction of Casks or Barrels and Box Barrels or Packages, and in Machinery or Mechanism used in the Manufacture of Barrels and Packages, 25th June, 1894.

3528. HOMMO BUIKEMA, 2nd five years of No. 35,274, from the 24th day of October, 1895. Improvements in Organ Pedal Covers, 25th June, 1894.

3529. LYDIA A. CHESTER, 3rd five years of No. 19,641, from the 25th day of June, 1894. Improvements on Grapnels, 25th June, 1894.

TRADE-MARKS

Registered during the month of June, 1894, at the Department of Agriculture—Copyright and Trade-Mark Branch.

4963. THE CROMPTON CORSET COMPANY, of Toronto, Ont. Corsets, 2nd June, 1894.

4964. THE UNITED KINGDOM TEA COMPANY, LIMITED, of 21 Mincing Lane, London, England. General Trade Mark, 4th June, 1894.

4965. EMIL JACOB LOEWÉ AND EMILE SCHUMANN, of 62 Haymarket, London, England, trading under the name and style of LOEWÉ & COMPANY. Pipes, 6th June, 1894.

4966. JOSEPH TETLEY & COMPANY, of London, England. Tea, 8th June, 1894.

4967. HENRY HART JOWITT, of Stanley, New Jersey, U.S.A., trading under the name of J. JOWITT & SON. Papers, Felts and like merchandise and particularly Waterproofed Carbonized Felts and Papers, 9th June, 1894.

4968. THE ELI PETTIJOHN CEREAL COMPANY, of Minneapolis, Minnesota, U.S.A. General Trade Mark, 11th June, 1894.

4969. J. GIRARDIN & COMPANY, of Brockville, Ont. Cigars, 12th June, 1894.

4970. DR. A. GUDE & COMPANY, of Leipzig, Germany. A Preparation for the Cure of Anaemia and Chlorosis, 13th June, 1894.

4971. ROY & BOIRE DRUG COMPANY, of Manchester, New Hampshire, U.S.A. Cough Syrup, 13th June, 1894.

4972. DAVID SIMMONS PERRINS, of London, Ont., trading as D. S. PERRIN & COMPANY. Chocolates and other Confections, 14th June, 1894.

4973. P. DUTOICT & COMPANY, of Brussels, Belgium. Corsets, 14th June, 1894.

4974. THE OTTAWA BREWING AND MALTING COMPANY, LIMITED, of Ottawa, Ont. Beer, 16th June, 1894.

4975. JOSEPH WARD, of Montreal, Que. Salt, 18th June, 1894.

4976. JAMES BOULTON & COMPANY, LIMITED, of Crayford Mills, Station Street, Stratford, Essex, England. Chemical Preservative for Provisions, 18th June, 1894.

4977. C. F. BOEHRINGER & SOEHNE, of Waldhof, near Mannheim, Germany. Lactyl Derivatives of Paraphenetidine to be used as Medicinal Compounds, 21st June, 1894.

4978. LAWRENCE J. COSGRAVE, of Toronto, Ont., trading as COSGRAVE & COMPANY. Ale, 22nd June, 1894.

4979. LAWRENCE J. COSGRAVE, of Toronto, Ont., Trading as COSGRAVE & COMPANY. Brown Stout Porter, 22nd June, 1894.

4980. EMPIRE TOBACCO COMPANY, of Montreal, Que. Cigars in goods manufactured from Tobacco Leaf, 28th June, 1894.

4981. THE AUER INCANDESCENT LIGHT MANUFACTURING COMPANY, LIMITED, of Montreal, Que. Auer Incandescent Light Burners and Mantles, 29th June, 1894.

4982. THE BRIDGEPORT BRASS COMPANY, of Bridgeport, Connecticut, U.S.A. Bicycle Lanterns, 29th June, 1894.

4983. DANIEL S. SAGER, of Brantfort, Ont. A Medicine or Remedy for the Cure of the Tobacco and other Allied Habits, 29th June, 1894.

COPYRIGHTS

Entered during the month of June, 1894, at the Department of Agriculture—Copyright and Trade-Mark Branch.

7428. CANADA. A Portfolio of Original Photographic Views of our Country. Volume 1, Number 3. Art Publishing Co., Toronto, Ont, 1st June, 1894.

7429. CANADA. A Portfolio of Original Photographic Views of our Country. Volume 1, Number 4. Art Publishing Co., Toronto, Ont., 1st June, 1894.

7430. A HARMONY OF THE GOSPELS, being the Life of Jesus in the words of the Four Evangelists. Arranged by W. H. Withrow, D.D., F. R. S. C.; Wm. Briggs (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 1st June, 1894.

7431. RESCUED IN TIME. A Tale by Cornelius Wilson. Wm. Briggs, (Book-Steward of the Methodist Book and Publishing House), Toronto, Ont., 2nd June, 1894.

7432. A HUNDRED YEARS TO COME. Words by W. C. Brown. Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7433. COUNTED IN. Words and Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7434. HE CAME FROM THE HEAVENLY LAND. Words and Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7435. HE'S CALLING US HOME. Words and Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7436. MY HEART THY THRONE. Words and Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7437. OH, WANDERER LOST. Words and Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7438. THE PRECIOUS BLOOD. Words by Mrs. J. C. W. Daly. Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7439. WHO IS IT CALLING THEE. Words by E. C. S. Music by John Marchant Whyte, Toronto, Ont., 4th June, 1894.

7440. CASE'S DIRECTORY OF FORT WILLIAM, PORT ARTHUR AND THE DISTRICT OF THUNDER BAY, 1894. Frederick C. Perry & Thaddeus R. Case, Fort William, Ont., 4th June, 1894.

7441. ORDER BLANK A 1, OF THE COPELAND-CHATTERSON SYSTEM OF BILLING AND SHIPPING. Copeland, Chatterson & Copeland, Brantford, Ont., 5th June, 1894.

7442. ORDER BLANK A 2, OF THE COPELAND-CHATTERSON SYSTEM OF BILLING AND SHIPPING. Copeland, Chatterson & Copeland, Brantford, Ont., 5th June, 1894.

7443. ORDER BLANK C, OF THE COPELAND-CHATTERSON SYSTEM OF BILLING AND SHIPPING. Copeland, Chatterson & Copeland, Brantford, Ont., 5th June, 1894.

7444. THE PERFECTION BILLING AND CHARGING BLANK. Copeland, Chatterson & Copeland, Brantford, Ont., 5th June, 1894.

7445. LANGLEY'S SIMPLEX ACCOUNT BOOK. James P. Langley, Toronto, Ont., 5th June, 1894.

7446. CYCLISTS' MAP SHOWING ALL THE ROADS IN THE VICINITY OF TORONTO, Joseph Lloyd, Toronto, Ont., 8th June, 1894.

7447. MY LITTLE IRISH LOVE. Song. Words by Henry P. Blackey. Music by Charles R. Palmer. The Anglo-Canadian Music Publishers' Association (Limited) London, England, 8th June, 1894.

7448. BELL TELEPHONE COMPANY OF CANADA (LIMITED) TORONTO, AND TORONTO JUNCTION EXCHANGES, SUBSCRIBERS' DIRECTORY, ONTARIO DEPARTMENT, MAY, 1894. Bell Telephone Company of Canada, Ld., Montreal, Que., 9th June, 1894.

7449. CHROMO LITHOGRAPH OF A LITTLE GIRL in a blue dress and mob cap, with one stocking removed, which she is darning. The Royal Soap Company, Winnipeg, Man., 11th June, 1894.

7450. CHROMO LITHOGRAPH OF A GIRL in a primrose coloured dress and wide hat holding a kitten in her arms which has been frightened by a fox terrier which stands with its fore paws planted against its little mistress. The Royal Soap Company, Winnipeg, Man., 11th June, 1894.

7451. CHROMO LITHOGRAPH OF A CHILD in a light flowing dress standing partly in front of a large vase filled with green shrubs. The Royal Soap Company, Winnipeg, Man., 11th June, 1894.

7452 to 7459. PROGRESSIVE DRAWING COURSE, Selby & Co., Toronto, 11th June, 1894. (Part 1, " 2, " 3, " 4, " 5, " 6, " 7, " 8)

7460. DREAMLAND AND LOVELAND. Serenade. Words by Wallace Bruce. Music by W. C. Barron. Whaley, Royce & Co., Toronto, Ont., 15th June, 1894.

7461. A FOOLISH MARRIAGE. An Edinburgh Story of Student Life, by Annie S. Swan. Wm. Briggs (Book Steward of the Methodist Book and Publishing House) Toronto, Ont., 16th June, 1894.

7462. CANADA: A Portfolio of Original Photographic Views of Our Country. Volume I, Number 5. Art Publishing Company, Toronto, Ont., 18th June, 1894.

7463. CANADA: A Portfolio of Original Photographic Views of Our Country. Volume I, Number 6. Art Publishing Company, Toronto, Ont., 18th June, 1894.

7464. CYCLISTS HANDY ROAD MAP. 60 MILES AROUND TORONTO. Scale 4 Miles to 1 Inch. Frederick Rowell Ward, Toronto, Ont., 18th June, 1894.

7465. EDNINA. Grande Valse pour Piano, par V. E. Green, Whaley, Royce & Co., Toronto, Ont., 19th June, 1894.

7466. THE PRODIGAL. Song. Words and Music by Henry Morey. Whaley, Royce & Co., Toronto, Ont., 20th June, 1894.

7467. A VETERAN OF 1812. The Life of James FitzGibbon, by Mary Agnes FitzGibbon. Wm. Briggs (Book Steward of the Methodist Book and Publishing House) Toronto, Ont., 20th June, 1894.

7468. WHAT THE PEOPLE SAY. (Testimonials.) TheMetallic Roofing Company of Canada (Limited.) Toronto, Ont., 22nd June, 1894.

7469. VALSE BRILLANTE. In E flat, by John Post. Whaley, Royce & Co., Toronto, Ont., 22nd June, 1894.

7470. AT THE COURT. Minuet. Old Fashioned Dance, for Piano, by F. J. Hatton. Whaley, Royce & Co., Toronto, Ont., 23rd July, 1894.

7471. OUR CITY AND OUR SPORTS. Souvenir and Official Programme of the 12th Annual Meet of the Canadian Wheelmen's Association, Montreal, July, 1894. The Montreal Bicycle Club, Montreal, Que., 23rd June, 1894.

7472. CANADA. A Portfolio of Original Photographic Views of Our Country, Vol. I., No. 7. Art Publishing Co., Toronto, Ont., 25th June, 1894.

7473. DAISY DALTON'S DECISION, by Amelia Panton Stroud, Milford Bay, Simcoe, Ont., 26th June, 1894.

7474. WANTED, by Mrs. G. R. Alden (Pansy). Wm. Briggs (Book Steward of the Methodist Book and Publishing House), Toronto, Ont., 26th June, 1894.

7475. THE LINTON INSTITUTE. For the Permanent Cure of Stammering, Stuttering and all voice defects, Toronto, Canada (book). G. Windsor Linton, Toronto, Ont., 26th June, 1894.

7476. MAMIE AND I. Bicycle Song. Words by George H. Orr. Music by Charles R. Palmer. Whaley, Royce & Co., Toronto, Ont., 29th June, 1894.

7477. THE COLONIAL CONFERENCE. Delegates, Senators, Members of Parliament, etc., held in the Senate Chamber, Ottawa, on the 28th June, 1894 (photo). Geo. R. Lancefield, Ottawa, Ont., 29th June, 1894.

THE LITTLE HELPMATE; or, HOW TO KEEP A HUSBAND AT HOME. A Directory of Useful Information *re* Cooking, together with several valuable Household Recipes, etc., by E. M. Tree, St. John, N.B., 30th June, 1894.

7479. CANADA. A Portfolio of Original Photographic Views of Our Country, Vol. I., Number 8. Art Publishing Co., Toronto, Ont., 30th June, 1894

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