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# The Canadian Patent Office

## RECORD





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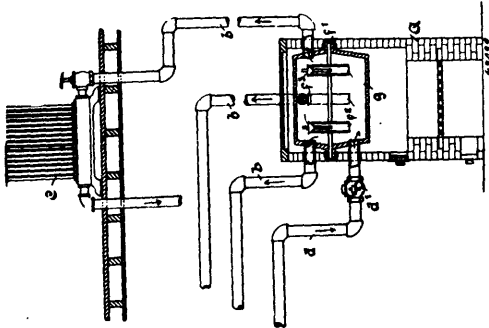
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### INVENTIONS PATENTED.

NOTE.—Patents are granted for 18 years. The term of years for which the fee has been paid, is given after the date of the patent.

#### No. 48,082. Hot Water Heater. (*Calorifère à eau.*)



Frederick K. Caswell, Hartford, Connecticut, assignee of Charles T. Wiley, Greenfield, Massachusetts, both of the U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. In a hot water apparatus for heating buildings, a circulator with a diaphragm separating the vessel into two chambers located one above the other, a tubular passage between the two chambers, a riser extending from the upper chamber, means for preventing the flow of water from the riser into the lower chamber and a return pipe entering the lower chamber and having a return check valve, all substantially as described. 2nd. In a hot water apparatus for heating buildings, a circulator provided with a diaphragm separating the vessel into two chambers located one above the other, a tubular passage between the two chambers, a check valve arranged in the communicating passage and opening upward, a riser extending from the upper chamber and a return pipe entering the lower chamber and having a return check valve, all substantially as described.

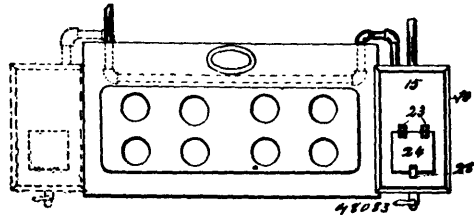
#### No. 48,083. Range Tank.

(*Calorifère à eau pour poêles de cuisine.*)

James J. Malley and Henry J. Brinkenamp, both of St. Louis, Missouri, U.S.A., 1st February, 1895; 6 years.

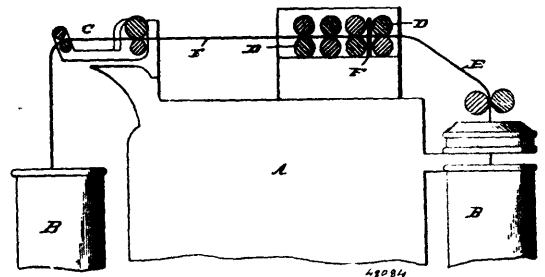
*Claim.*—The improved range tank, comprising the body 10 having a closed bottom and substantially vertical side and end walls, the upper edges of which are first bent outward to about a right angle to form wide horizontal flanges 13, 14, which are cut away at each

corner of said body to form an angular space thereat, the covers 15 formed of a sheet of metal and having an angular notch 17 in each corner thereof, the edges of the cover-sheet being bent down and



inward to form grooves or channels which are engaged by the marginal edges of said flanges 13, 14, on said body, and compressed against the same, and the said flanges 13, 14 of the body and the seamed margin of said cover being then conjunctively bent downward at a point some distance from the upright walls of said body to form a projection both horizontally and obliquely outside the plane of the side portions of said body, and presenting a substantial and finished appearance, and said cover having an aperture to afford access to the interior of said body, and a lid applied to said aperture, substantially as herein specified.

#### No. 48,084. Selvedge Protector for Cotton Machinery. (*Protecteur de lisière pour machines à coton.*)



George Townsend, William Armitage and Hartley Spencer, all of New Bedford Massachusetts, U.S.A., 1st February, 1895; 6 years.

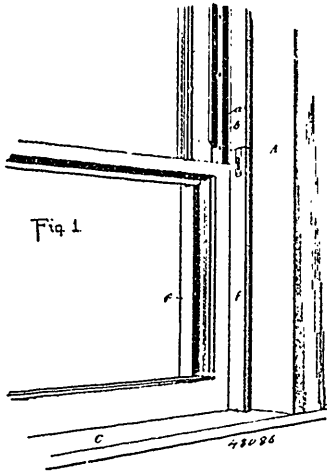
*Claim.*—A selvedge protector for cotton machinery, consisting of a flat body provided with an inverted U-shaped sliver notch in its under edge and adapted to be loosely interposed in an upright position between closely adjacent parts of the drawing rolls of such machinery and astride of the sliver passing therethrough, said protector plate being unattached to the machine and free to slide on its lower edge to accommodate itself to the lateral or transverse motion of the sliver, substantially as set forth.

#### No. 48,085. Artificial Fuel. (*Combustible artificiel.*)

Edward Fenchwanger, assignee of Ferdinand Johann Koopmann, both of Munich, Germany, 1st February, 1895; 6 years.

*Claim.*—The herein described composition of matter to be used as a fuel when pressed into moulds, consisting of small coal or coal dust, grain or pulverized spar or marble, and peels or waste of the nut of the palm or other similar oleaginous fruit, substantially in the proportions specified.

**No. 48,086. Window. (Fenêtre.)**

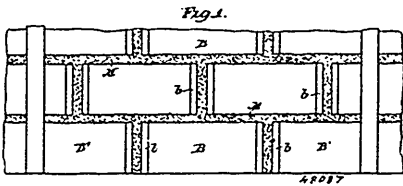


Ferdinand Christoph Von Heydebrand and Under Lasa and George Semler, all of New York, State of New York, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. In a window, the combination of a casing provided with vertical grooves, a window sash provided with pivots entering the said grooves in the casing, and bearings in the grooves normally out of engagement with the sash pivots, but with which they are engaged to temporarily suspend the sash so that the same may be swung upon its pivots, substantially as described. 2nd. In a window, the combination of a casing, vertical grooves therein, a vertically moving sash provided with pivots entering the said grooves in the casing, and movable bearings normally disconnected from the sash pivots, but adapted to be moved into the path of the sash pivots to co-operate therewith, to temporarily suspend the sash so that the same may swing on its pivots, substantially as described. 3rd. In a window, the combination of a casing having grooves therein, a sash provided with pivots entering and traversing the grooves in the casing and pivoted hooks adapted to be swung into the path of the sash pivots to co-operate therewith to suspend the sash to swing upon its pivots, substantially as described. 4th. In a window, the combination of a casing provided with vertical grooves, a sash provided with pivots entering and traversing the grooves, bearings within the grooves, normally out of engagement with the sash pivots, but adapted to be engaged therewith to temporarily hold the window suspended, in order that the same may be turned on its pivots, and movable inside and outside beads, substantially as described. 5th. In a window, the combination of a casing provided with vertical grooves, a sash provided with pivots entering the grooves, pivoted hooks adapted to be swung across the grooves to co-operate with the sash pivots to hold the sash suspended, and movable inside and outside beads, substantially as described. 6th. In a window, the combination of a sash provided with pivots, a casing provided with vertical grooves and with recesses in proximity to said grooves, together with pivoted hooks located in the recesses and adapted to be swung across the grooves to co-operate with the sash pivots, substantially as described. 7th. The combination, in a window, of a sash provided with pivots, a casing provided with vertical grooves and recesses in proximity to said grooves, pivoted hooks located within the recesses and adapted to be swung across the grooves, to co-operate with the sash pivots, and stop-pins for limiting the movement of the hooks, substantially as described.

**No. 48,087. Floor and Floor Blocks.**

(Plancher et blocs de plancher.)



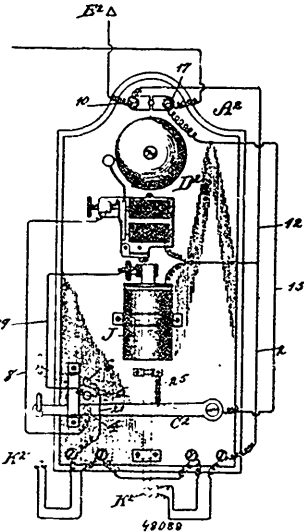
Thomas A. Lee, New York, State of New York, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. A floor or like structure constructed of courses of tiles or floor blocks, without the use of I-beams or other girders within the said courses, the said tiles or blocks being provided with inclined sides forming channels between them, and mortar or other

cement filling in the said channels and forming compression resisting ribs, substantially as and for the purposes set forth. 2nd. A floor or like structure constructed of courses or tiles or floor blocks extending between supports and without the use of I-beams or other girders within the said courses, the said tiles or blocks being laid with spaces or channels, as distinguished from mere cement joints, between adjacent courses and between adjacent blocks in each course, and mortar or other cement filling in said channels, substantially as and for the purposes set forth. 3rd. A floor or like block consisting of a hollow tile B, and end slabs b closing the ends of the hollows, the walls of the said block projecting at the base whereby channels for the cement may be formed between adjacent blocks when placed base to base, substantially as and for the purposes set forth. 4th. In combination in a floor, roof, or like structure, blocks provided with hollows and slabs closing the said hollows and projecting bases leaving channels between adjacent blocks, and mortar or other cement filling the said channels, substantially as and for the purposes set forth. 5th. In combination in a floor, roof, or like structure, blocks provided with hollows and slabs b closing the said hollows, and laid with spaces between adjacent blocks, and ribs of mortar or other cement filling the said spaces between the blocks, substantially as and for the purposes set forth. 6th. The improvement in the art of laying floors which consists of laying and spacing the floor blocks upon a temporary support with channels between adjacent courses or blocks, and thereafter pouring in or otherwise filling such channels with mortar or other cement, and when the floor has set removing the temporary support, whereby the floor blocks may be laid throughout with unskilled labour and the mortar or cement thereafter applied, substantially as and for the purposes set forth.

**No. 48,088. Telephone Signalling Device.**

(Appareil à signal pour téléphones.)



John E. Dalrymple, assignee of Fred H. Brown, both of Chicago, Illinois, U.S.A., 1st February, 1895; 6 years.

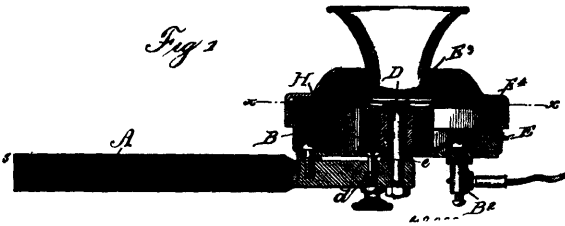
*Claim.*—1st. A telephone signalling apparatus, comprising a line circuit or circuits, a switching device located at each station, a call circuit, a battery circuit and telephonic circuit for each station, and means for connecting the call circuit of the station receiving the call in circuit with the line and cutting out the call circuit of the station sending the call. 2nd. A telephonic signalling apparatus, comprising a line circuit or circuits, a switching device located at each station, a call circuit, a battery circuit and telephonic circuit for each station and a movable switch lever for connecting the call circuit of the station receiving the call in circuit with the line and cutting out the call circuit of the station sending the call. 3rd. A telephonic signalling apparatus, comprising a line circuit or circuits, a call circuit, a battery circuit, a telephonic circuit for each station and a circuit changer for including the calling device of the station sending the signal in circuit with the line and also with a battery or other source of generation, and a circuit changer at the receiving station normally in circuit with the calling device of that station.

**No. 48,089. Telephone. (Téléphone.)**

John E. Dalrymple, assignee of Fred H. Brown, both of Chicago, Illinois, U.S.A., 1st February, 1895; 6 years.

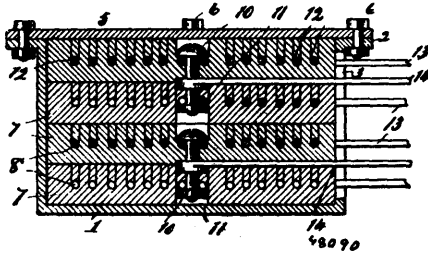
*Claim.*—1st. In a magneto telephone, the combination of two permanent magnets, one of said magnets having an end inserted in the enclosing case, the other magnet being entirely enclosed in the en-

closing case. 2nd. In a magneto telephone, the combination of a permanent magnet, one end of which forms a handle and another magnet entirely enclosed in an enclosing case or shell. 3rd. In a magneto telephone, the combination of a permanent magnet or



magnets and an enclosing case, one of the magnets being entirely within the enclosing case. 4th. In a magneto telephone, the combination of a bar magnet either straight or bent, and a horse-shoe magnet, the horse-shoe magnet being entirely enclosed in the enclosing case. 5th. In a magneto telephone, the combination of a bar magnet, an enclosing case and a horse-shoe magnet, said magnets being out of contact and remote from each other. 6th. In a magneto telephone, the combination of a bar magnet and a horse-shoe magnet, one end of said horse-shoe magnet being in close proximity or contact with the diaphragm. 7th. In a magneto telephone, the combination of a permanent magnet forming a handle having a helix on one end, an enclosing case and horse-shoe magnet contained therein with suitable means for adjusting one of the permanent magnets to the diaphragm.

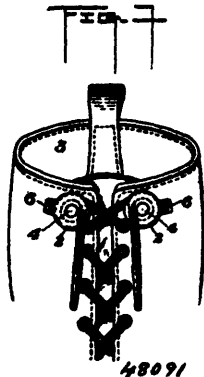
**No. 48,090. Rheostat. (Rheostat.)**



Thomas W. Shelton, St. Louis, Missouri, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. A rheostat, comprising a cylindrical casing, a cover bolted to said casing, a series of fire-clay discs or plates in which are imbedded suitable wire coils, bolts connecting each pair of said discs, and suitable conductors from said bolts to the outside of the cylindrical casing. 2nd. A rheostat, comprising a cylindrical casing provided with a vertical slot in its face, a vertical rib on the interior of its wall, a suitable cover for said casing, a series of fire-clay discs located within said casing, said discs being provided with convolute grooves in their faces and semi-circular depressions in their edges, suitable conductors imbedded in said convolute grooves or depressions, bolts securing the discs together in pairs, and conductors leading from said bolts to the outside of the casing. 3rd. In a rheostat, pairs of discs or plates of fire-clay or analogous material bolted together, said plates having imbedded therein convolute conductors, and suitable conductors from the bolts to the edges of the discs or plates.

**No. 48,091. Lace Fastener. (Agrafe de lacets.)**

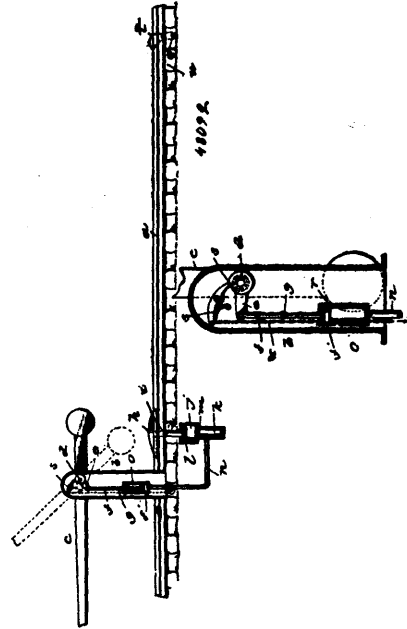


Alexander Matchett, Pittsburg, Pennsylvania, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. A lace fastener consisting of a disc having a stem provided with a radial spring finger extending intermediately be-

tween the disc and the article to which it is applied, said finger having a downwardly bent or curved portion in its length to hold the lace in place, substantially as described. 2nd. A lace fastener consisting of a disc having an oblique hole therethrough, and provided with a stem having a radial spring finger extending intermediately between the disc and the article to which it is applied, said finger having a downwardly bent or curved portion in its length to hold the lace in place, substantially as described.

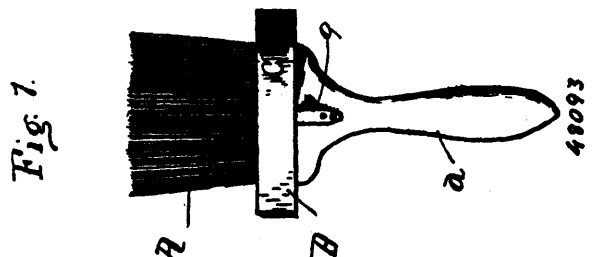
**No. 48,092. Railway Gate. (Barrière de chemin de fer.)**



James H. Fitzgerald, Neapolis, Virginia, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. In a railway gate of the class described, the combination with a mast or arm mounted on a rock-shaft, a pawl for holding the mast in elevated adjustment, a tread-bar located alongside the rail and connected to the pawl by a cable extending alongside the track, whereby the pawl is disengaged by the approaching train, and the mast allowed to descend, and a pneumatic pump lift provided with a piston connected to lift and restore the mast to its upright position, in the manner and for the purpose substantially as described. 2nd. In a railway gate of the class described, the combination, with a balanced mast or arm sustained by a clutch or pawl, a tread-bar located alongside the track and connected with the catch by a cable, and a pneumatic pump in connection with an air cylinder and a piston within the cylinder connected to restore the mast to its raised position. 3rd. In a railway gate, the combination of a pivoted mast or arm sustained in raised adjustment by a catch, a tread-bar connected by a cable to the catch, a tread-bar connected to actuate a pneumatic pump, and an air cylinder provided with a piston connected to the mast and actuated by the pump, all arranged and adapted to operate in the manner, and for the purpose set forth. 4th. In an automatic railway gate, a pivoted mast provided with a spring-actuated pawl, or catch adapted to hold the mast in raised position, in combination with a tripping device connected to the pawl, a pneumatic pump provided with a tread-bar adapted to be actuated by a passing train, and a cylinder containing a piston connected to raise the mast.

**No. 48,093. Brush. (Pinceau.)**

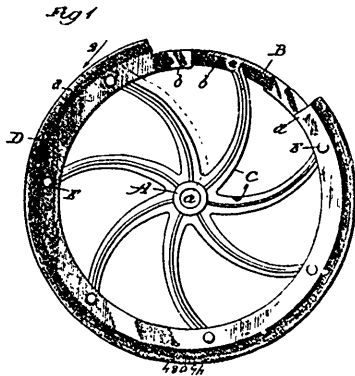


Frances Joseph Clarke, Newport, Rhode Island, U.S.A., 1st February, 1895; 6 years.

*Claim.*—In combination, the brush having the square shoulder e,

the receptacle containing absorbent material and having flanges to bear on the square shoulder and act in conjunction therewith to form a tight joint and inclose the absorbent material, and the leaf springs secured to opposite sides of the handle, and arranged with their free upper ends a sufficient distance from the square shoulder to receive the flanged bottom of the receptacle, said springs acting to hold the flanges c, against the shoulder r, and arranged to be sprung inwardly to release the receptacle, substantially as described.

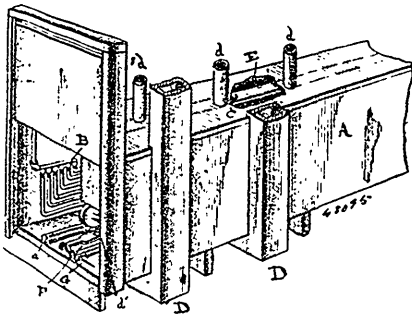
**No. 48,094. Car Wheel. (Roue de chars.)**



John Player, Topeka, Kansas, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. An improved car wheel composed of a hub, a rim having internal annular flanges at each edge of its peripheral surface, and radial arms connecting the hub and rim in one integral casting, substantially as described. 2nd. An improved car wheel, composed of a central portion having a hub, a rim provided with internal annular flanges at each edge of its peripheral surface, and radial arms connecting the hub and rim in one integral casting, in combination with a flanged tire, and means for securing the tire and central portion together, substantially as described. 3rd. An improved car wheel, composed of a central portion having a hub, a rim provided with internal annular flanges at each edge of its peripheral surface, and curved radial arms cross-shaped in cross section connecting the hub and rim in one integral casting, in combination with a flanged tire shrunk upon the rim, and screw bolts for securing the tire and central portion together, substantially as described.

**No. 48,095. Brick Kiln. (Four à briques.)**



John Starkey, Minerva, Ohio, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. The combination of the air tight drying tunnel A, having openings d, in its top, the perforated slide E, located in the top of the tunnel to control the inlet of air through said openings, the conduit C, located below the tunnel and communicating therewith, the chimney D, leading from said conduit, and steam pipes B, located in the tunnel, substantially as shown and for the purpose described. 2nd. The combination of the air tight tunnel A, having cold air inlets d, at the top and hot air outlets d', at the bottom, the slides E and F, for closing said inlets and outlets, the conduit C, located below the tunnel and leading from its said hot air outlets, the chimney D, communicating with said conduit, and the track a, and steam pipes B, located in the tunnel, substantially as shown and for the purpose described.

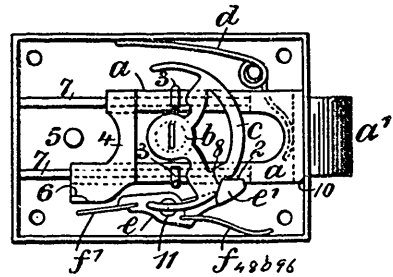
**No. 48,096. Lock. (Serrure.)**

John Julia Ridgway, Brooklyn, New York, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. The combination, with a spring latch bolt and its

tumbler, of a sector, means for turning the same and disconnecting the tumbler from the bolt, a spring tail on the tumbler and a projection on the bolt for engaging the tail when the bolt is first projected, and which projection and tail separate when the bolt is pres-

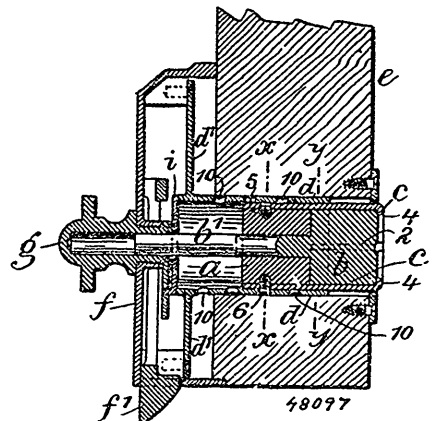
Fig. 1



sed inwardly so that the tumbler comes into action to hold the bolt, substantially as specified. 2nd. The combination, with a spring latch bolt having projections, of a tumbler for engaging and holding the latch bolt as projected, a spindle and sector for releasing the tumbler and retracting the bolt, a means connected with said tumbler and engaged by a projection of the bolt for holding the tumbler away from the bolt as projected, the parts separating when the latch bolt is pressed inwardly to permit the tumbler to engage and secure the latch bolt, substantially as set forth. 3rd. The combination, with a spring latch bolt, having a notch 2, and projections 3 and 6, of a tumbler for engaging the notch 2 and holding the latch bolt as projected, a spindle and sector having a notch in its edge receiving the tumbler dog, a knob or key for actuating the sector and disengaging the tumbler and retracting the bolt, a spring tail connected with the tumbler and engaged by over-riding the projection 6 for holding the tumbler away from the bolt as projected and from which tail the projection separates as the bolt is moved back in closing the door so as to allow the tumbler to engage the latch bolt, substantially as specified.

**No. 48,097. Lock. (Serrure.)**

Fig. 1.

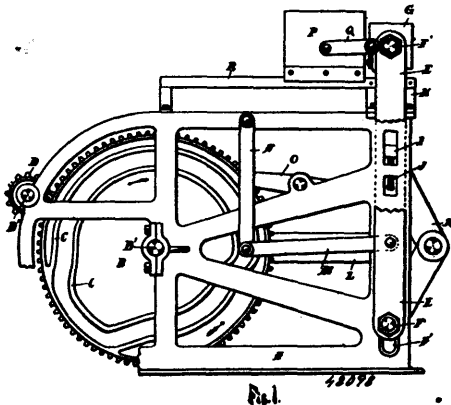


John Julia Ridgway, Brooklyn, New York, U.S.A., 1st February, 1895; 6 years.

*Claim.* 1st. The combination in a lock or latch with the pins and springs, of a separate rigid pin cylinder having a central opening, and means for fixing the same in its relation to the lock or latch, a rotary pin and key cylinder having a spindle passing through the central opening of the rigid pin cylinder and engaging the latch mechanism, said rotary pin cylinder being adapted to receive the key, substantially as set forth. 2nd. The combination in a lock or latch with the pins and springs, of a separate rigid pin cylinder having a central opening and means for fixing the same in its relation to the lock or latch, a rotary pin and key cylinder having a spindle passing through the central of the rigid pin cylinder and engaging the latch mechanism, said rotary pin cylinder being cut

from the periphery inwardly to a depth reaching to the spindle so as to provide a web of metal between the bases of the slots, that is in line with the spindle, the pins and their holes being in line with the cuts, substantially as set forth. 3rd. The combination in a lock or latch with a tubular holder adapted to fit into an opening through a door, of a fixed and a rotary pin cylinder, a tubular case receiving said pin cylinders and in which they are secured, said parts forming a key mechanism adjustable longitudinally in the tubular holder to provide for doors of various thicknesses, substantially as set forth. 4th. The combination of a lock or latch with the back plate and a tubular holder connected thereto, and adapted to fit into an opening through a door, of a key mechanism longitudinally adjustable in said tubular holder to provide for doors of various thickness and comprising a fixed pin cylinder, a rotary pin and key cylinder, a tubular case therefor, and a spindle adapted to operate the latch mechanism, substantially as set forth. 5th. The combination with the tubular holder *d*, and back plate *d'* made as one, of the tubular case *c*, adjustable longitudinally in the tubular holder *d*, and means for connecting said parts, the pin cylinder *a*, rigidly secured within the case *c*, the rotatable pin and key cylinder *b*, within said case *c*, and having a spindle connected therewith and extending through the cylinder *a*, and adapted to operate the latch mechanism, substantially as set forth. 6th. The combination with the tubular holder *d*, and back plate *d'*, of the tubular case *c*, longitudinally adjustable in the tubular holder *d*, and having an interned flange 4, the pin cylinder *a*, held rigidly within the case *c*, the rotary pin and key cylinder *b*, cut from the periphery inwardly toward the centre to form key slots 2 and 3, and received within the case *c*, between the cylinder *a*, and interned flange 4, and having a spindle *b'*, passing through the cylinder *a*, and engaging the latch mechanism regardless of the position of the tubular case *c*, in the tubular holder *d*, substantially as set forth. 7th. The combination in a latch with a longitudinally adjustable key mechanism, of the back plate *d'*, and the tubular holder *d* connected therewith, said tubular holder *d*, having groups of holes 10 in the sides, the holes of one group being intermediate to those of the other group to provide for small adjustments of the key mechanism in the said tubular holder *d*, substantially as set forth.

**No. 48,098. Brick Press. (Presse à briques.)**

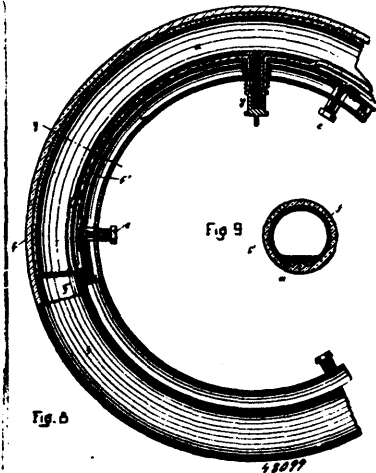


Edward Warden Seamans, Grand Rapids, Michigan, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. In a brick press, a mould open at the top and bottom, a head to close the top of said mould, a movable ram within said mould, a knuckle-joint lever operating said ram, a vertically movable bolt to which said lever is pivoted at its lower end, bars connecting said bolt and head rods pivoted to said bars, and a longitudinally movable bar pivoted to the middle joint of the lever, rolls on said rods and bar-wheels having cam ribs engaging said rolls and means for rotating said wheels, substantially as described. 2nd. In a brick press, a mould open at the top and bottom, a movable head to close the top of the mould, a vertically movable ram in said mould, a cross-head to operate said ram, set screws to limit the downward movement of said cross-head, a vertically movable bolt, a knuckle-joint lever connected at its ends to said bolt and cross-head bars, connecting said bolt and movable head, rods pivoted to said bars, rolls on said rods, a bar pivoted to the middle joint of said lever, rolls on said bar, a pivoted lever engaging said ram, rolls on said lever, and wheels having cam ribs engaging all of said rolls, substantially as described. 3rd. In a brick press, the combination with a mould and a head, movable both vertically above and to, and horizontally over the top of said mould, of a box having a discharge opening in its bottom, and pivoted rods, connecting said head and box together, substantially as described. 4th. In a brick press, the combination with a mould, and a table, having its top in the plane of the top of said mould, of a head, a box, having a discharge opening in its bottom, pivoted rods, connecting said head and box together, and bars for moving said head horizontally over and vertically above and to the top of said mould, substantially as shown and described. 5th. In a brick press, a mould, a ram mov-

able in the mould, a head movable both horizontally and vertically, said head having a plurality of equal sides, each provided with an indented design, bars supporting and holding said head, a bolt passing through said bars and head and serving to secure them together, so that any one of the faces of the head may be adjusted into operative position, and a box movable with said head and having a discharge opening in its bottom, substantially as described. 6th. In a brick press, a mould, a ram movable in the same, a cross-head to operate said ram, and detached from the ram and having an opening, an extension on said ram passing through said opening and movable therein, mechanism for operating the cross-head, and a pivoted lever engaging said extension at one end and having a roll at the other, and a wheel having cam ribs engaging said roll, substantially as described. 7th. In a brick press, a mould, a movable head to close said mould, a vertically movable bolt, bars connecting said bolt and head and adapted to oscillate at their upper ends, a table having its surface in the plane of the top of said moulds, a box open at the bottom traversing said table and moulds, and attached to the bars, rods *M* pivoted to said bars, pivotally supported rods *N*, pivoted to said rods *M*, rolls on said rods, and wheels having cam ribs engaging said rolls, whereby said head is moved back over the table to release the pressed bricks, and then moved forward to bring the box over the mould, and then moved to place over the mould, substantially as described. 8th. In a brick machine, in combination with a mould, a movable head, a ram pivoted bars supporting the head, and a lever *K* to operate the ram, a longitudinally movable bar *L*, pivoted to said lever, rods *M* pivoted to said bars *E*, a pivoted lever *O* engaging the ram, rolls on said bar *L*, rods *M* and lever *O*, wheels having cam ribs engaging said rolls, substantially as described.

**No. 48,099. Pneumatic Vehicle Tire. (Bandage pneumatique.)**



George Hostel Chinnock, Brooklyn, New York, U.S.A., 1st February, 1895; 6 years.

*Claim.*—1st. The combination with the rim of a wheel, of a spring band divided into segments which are joined end to end with overlapping portions, an inflatable tube located around the segments, a cover over the tube having its edges located between the segments and the rim, and means for putting the segments under tension. 2nd. The combination, with the rim of a wheel, of a spring band divided into segments which extend around said rim, and means for putting the segments under tension. 3rd. The combination with the rim of a wheel, of a spring band divided into segments, which are joined end to end, with overlapping portions, an inflatable tube located on the segments, a slotted cover over the tube and having its edges located between the segments and the rim, and means for putting the segments under tension, said means consisting of wedge-shaped bolts, which press against the edges of holes provided in the overlapped portions of said segments. 4th. The combination with the rim of a wheel, of an inflatable tube circumscribing the same, a cover therefor, a band divided into segments which are joined end to end, with overlapping portions, which contain longitudinal holes, bolts passing through said holes, and having one pair of opposite sides parallel to each other, the other pair being tapered toward each other, and pressing against the edges of the holes in the direction of the length of the segments and nuts upon the bolts on the side of the rim opposite the said segments. 5th. The combination with the rim of a wheel, of a spring band divided into segments which are joined end to end with overlapping portions, an inflatable tube located around the segments, a slotted cover surrounding the tube and having notches in the edges thereof, bolts having tapered portions, which pass through the segments and the rim, and located at and in said notches, and having grooves in which the edges of the segments are sprung. 6th. The combination with the rim of a wheel, of a slotted cover containing an inflatable tube, a pair of parallel beads,

extending along each edge of the cover, a band having thickened edges which are located against said heads, and means for clamping said band to said rim.

**No. 48,100. Process of Making Waterproof Fabric.**

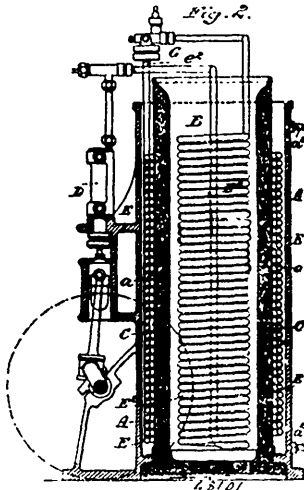
(*P. ocdé pour fabriquer les tissus imperméables.*)

Jacob Gold and Abraham Rudolph, both of Montreal, Quebec, Canada, 2nd February, 1895; 6 years.

*Claim.*—1st. A waterproof fabric consisting of two layers of cloth or fabric united by an intermediate waterproof binding. 2nd. A waterproof fabric consisting of two layers of cloth or fabric united by an intermediate layer of thin rubber tissue which has been rendered adhesive by heat and partially dissipated, as and for the purpose set forth. 3rd. In the process of making waterproof fabric, introducing a layer of thin rubber tissue between two layers of cloth or fabric and subjecting the same to heat and pressure, for the purpose set forth. 4th. In the process of making waterproof fabric, introducing a layer of thin rubber tissue between two layers of cloth or fabric and ironing same with a highly heated iron, a dammer being interposed between the iron and the fabric, as and for the purpose set forth.

**No. 48,101. Apparatus for Producing Cold.**

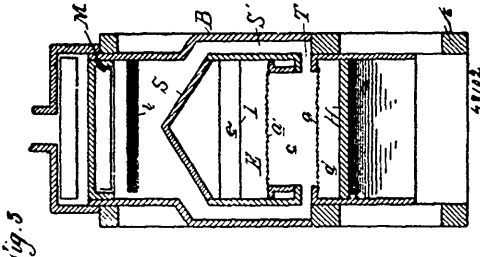
(*Appareil pour produire du froid.*)



I. and E. Hall, assignee of Everard Heskett and Alexander Marcet, all of 23 St. Swethins Lane, London, England, 2nd February, 1895; 6 years.

*Claim.*—In an apparatus for producing cold, the combination of a condenser tank having within it a refrigerator tank with a compressor, and a regulating valve and tubing connected to the inlet and outlet of the compressor, one part of the tubing being situated in the condenser tank and another part in the refrigerator tank, substantially as described and illustrated drawings.

**No. 48,102. Grain Cleaner. (Cylindre-émoteur.)**



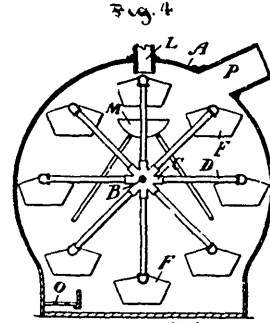
Lafayette Lewis and Ella Le Mond, assignee of George Albert Smith, all of Paulding, Ohio, U.S.A., 2nd February, 1895; 6 years.

*Claim.*—1st. The herein described method of scouring grain which consists in feeding grain into a scouring casing, and then feeding the grain circularly around the casing and tangentially therefrom by the centrifugal force imparted thereto by the scouring cylinder, substantially as described. 2nd. The herein described method of scouring

grain, which consists in first feeding the grain into a scouring casing, then feeding the grain circularly around the casing and tangentially therefrom by the scouring cylinder, and simultaneously separating the dust therefrom by an air current, substantially as described. 3rd. The combination of a perforated casing, a rotary scouring cylinder therein, a feed spout leading into the casing at the side, and a tangential delivery spout on the same side, substantially as described. 4th. The combination of a perforated casing, a rotary scouring cylinder therein, an enlargement on one side of the casing a feed spout delivering into the lower portion of the enlargement a diaphragm or wall above the feed spout, and a delivery spout formed between the diaphragm and the upper portion of the enlargement of the casing, substantially as described. 5th. The combination of a perforated casing, an enlargement formed on one side thereof, by tangential extensions of the casing, a diaphragm extending parallel with the upper extension, a rotary scouring cylinder in the casing in close proximity to the inner edge of the diaphragm and an inlet spout entering the casing below the diaphragm, substantially as described. 6th. The combination of an inclined chute, oppositely inclined screens at the ends of the chute, a transverse inclined groove or chute at the base of the screens, feed spouts leading to the top of each screen, a valve for controlling the supply to each screen and means for vibrating the screens and chute, substantially as described. 7th. The combination of the casing, an expansion chamber, a dust chamber, a fan therein, a scouring chamber, a scouring device therein, a feed chute leading to the scouring devices, and air passages leading through the scouring chamber, and the feed chute into the dust chamber, substantially as described.

**No. 48,103. Garbage or Rubbish Drier.**

(*Appareil pour sécher les trippailles ou vitanges.*)



James Mann, Dowagiac, Michigan, U.S.A., and Robert Mann, Peterboro, Ontario, Canada, 2nd February, 1885; 6 years.

*Claim.*—1st. In a garbage or rubbish drier, the combination of a casing having an inlet aperture at its top and a door in one end near the top, a shaft journaled in said casing and projecting through one of its ends, a crank ratchet wheel and pawl at said projecting end of the shaft, a hub with arms or spokes secured to said shaft within said casing and near one side thereof, a stud secured to the end of each arm or spoke parallel to the shaft, a bucket removably journaled upon each stud so as to be suspended therefrom, and having a perforated bottom, a draining pan under the inlet aperture and secured to one side of the casing and having an outlet through the same, a fire grate in the lower part of the casing and a smoke outlet in the upper part, substantially as set forth. 2nd. In a garbage or rubbish drier, the combination of a casing adapted to contain a reel and a fire grate and provided with an inlet aperture at the top, a reel journaled in said casing supporting a number of suspended pans or buckets and a draining pan under said inlet aperture and having an outlet at one end of the casing by which it is supported, substantially as set forth. 3rd. In a casing for a garbage or rubbish drier, the combination of ends and rim, of a door in one of the ends near the top, a draining pan secured to the same end and having a discharge aperture, an inlet aperture at the top of the rim and a smoke outlet in said rim, substantially as set forth. 4th. In a reel for a garbage or rubbish drier, the combination of a shaft adapted to be journaled in a casing, a hub secured to said shaft, arms or spokes on said hub, a stud at the end of each arm or spoke parallel to the shaft, and a pan or bucket removably journaled upon each stud and suspended therefrom, substantially as set forth.

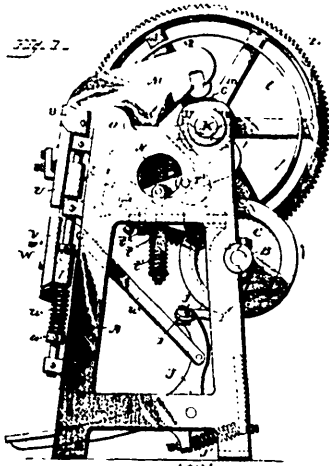
**No. 48,104. Hoop-making Machine.**

(*Machine à tailler les cercles.*)

The Plenkharp Barrel Machine Company, assignee of James Plenkharp and William R. Liggett, all of Columbus, Ohio, U.S.A., 2nd February, 1895; 6 years.

*Claim.*—1st. A hoop-making machine comprising a former to shape the hoop iron about, gripping devices to hold the overlapping ends of the hoop iron die-plates movably related to the gripping

devices and provided with punching, rivet-holding and riveting instrumentalities, and mechanism for automatically actuating the said mechanisms, and moving the parts to successively bring the punching, rivet holding and riveting instrumentalities in operative relation to the overlapping ends of the hoop-iron, substantially as



described. 2nd. A hoop-making machine comprising a former to shape the hoop-iron about, gripping devices to hold the overlapping ends of the hoop-iron, movable die-plates provided with punching, rivet-holding and riveting mechanism, jaws to press the die plates together, and mechanism for independently and automatically actuating the jaws and moving the said die-plates to successively bring the punching, rivet-holding and riveting mechanism into proper relation with the overlapping ends of the hoop-iron, substantially as described. 3rd. A hoop-making machine comprising a former, to shape the hoop iron about, gripping devices to hold the overlapping ends of the hoop iron, jaws, movable die-plates carried by the said jaws and provided with the punching, rivet-holding, and riveting devices, mechanism for automatically opening and closing the said jaws, and independent mechanism for automatically moving the said die plates relative to the jaws to successively bring the punching, rivet-holding and riveting devices into proper relation with the overlapping ends of the hoop-iron, substantially as set forth. 4th. A hoop making machine comprising a former, to shape the hoop iron about, gripping devices to hold the overlapping ends of the hoop iron, jaws having ribs on their opposing sides, die plates provided with rearwardly projecting rods which are mounted in the said ribs, and mechanism for opening and closing the jaws and moving the said rods longitudinally in the said ribs, substantially as and for the purpose described. 5th. In a hoop making machine comprising a former, to shape the hoop iron about, gripping devices to hold the overlapping ends of the hoop irons, jaws having ribs on their opposing sides, die plates provided with rearwardly projecting rods which are mounted in the said ribs, springs mounted on the said rods and confined between stops thereon and the said ribs of the jaws, and the mechanism for opening and closing the jaws and independently moving the said rods forward against the tension of the said springs, substantially as described. 6th. In a hoop making machine, the combination with jaws, one of the jaws having an opening for the passage of the rivet forming wire, and a wire feeding mechanism carried by the said apertured jaw, of die plates located between the said jaws and pressed together thereby, and mechanism for moving the said die plates between the said jaws, whereby a portion of the wire is cut-off sufficient to form a rivet, substantially as set forth. 7th. In a hoop making machine, the combination with jaws, one of the jaws having an opening for the passage of the rivet forming wire, and a wire feeding mechanism carried by the said apertured jaw, and consisting of two grooved rollers geared to revolve together, and mechanism for actuating the said rollers, of die plates located between the said jaws and pressed together thereby, and mechanism for moving the said die plates between the said jaws, whereby a portion of the wire is cut-off sufficient to form a rivet, substantially as set forth. 8th. In a hoop making machine, a combination with jaws having an opening for the passage of the rivet forming wire, and a wire feeding mechanism carried by the said apertured jaw, and consisting of grooved rollers of the plate T, loosely mounted on the journal of one of the rollers, the disc S, the pawl S<sup>1</sup>, pivoted to the plate T, and having spring s<sup>1</sup>, and biting edge s, and means for actuating the said pawl to operate the said rollers, substantially as described. 9th. In a hoop making machine, the combination with jaws, one of the jaws having an opening for the passage of the rivet forming wire, and a wire feeding mechanism carried by the said apertured jaw, and consisting of grooved rollers of the plate T, loosely mounted on the journal of one of the rollers, the disc S, the pawl S<sup>1</sup>, pivoted

to the plate T, and having spring s<sup>1</sup>, and biting edges, the lever T<sup>2</sup>, mounted between its ends on a spring actuated rod I, and connected at one end with the pawl S<sup>1</sup>, and adapted to have its other end actuated by a cam, and an adjustable stop T<sup>2</sup>, substantially as and for the purpose described. 10th. In a hoop making machine, a combination of gripping devices to clamp the overlapping ends of the hoop iron, two formers and mechanism for separating the said formers to stretch the hoop, substantially as described. 11th. In a hoop making machine, the combination with the jaws S, and the formers, of mechanism for moving the formers to clamp the hoop between the jaws and the upper former, and separate the said formers, substantially as described. 12th. In a hoop making machine, the combination of the jaws S, guide rods, formers mounted on the said guide rods, springs to support the said formers on the guide rods, and mechanism to separate the formers and press them against the jaws S, against the tension of the said springs, substantially as described. 13th. In a hoop making machine, the combination, with gripping devices to clamp the overlapping ends of the hoop iron, the formers, and mechanism for separating the formers to stretch the hoop, of an adjusting mechanism to adjust the relative distance apart of the said formers, substantially as and for the purpose described. 14th. In a hoop making machine, the combination, with gripping devices to clamp the overlapping ends of the hoop iron, the formers, and the treadle, of toggle levers connecting the formers to effect a separation thereof to stretch the hoop and a rod connecting the said toggle levers with the treadle, substantially as set forth. 15th. In a hoop making machine, the combination, with the former for shaping the hoop, jaws for gripping the ends of the hoop, shaft K provided with cams for actuating the said jaws, gear wheel L, secured on shaft K, and provided with rim I, having depressions I<sup>1</sup>, and the shaft B, having pinion D, in mesh with gear wheel L, of a continuously driven pulley C, mounted on shaft B, a pawl E constructed to interlock and normally hold out of engagement with the said pulley, and a trip for releasing the said pawl to permit it to engage with the said pulley to start the machinery, and having one end constructed to travel on the said rim I, substantially as and for the purpose specified. 16th. In a hoop making machine, the combination, with the former for shaping the hoop, jaws for gripping the ends of the hoop, shaft K provided with cams for actuating the said jaws, gear wheel L, secured on the shaft K, and provided with rim I, having depressions I<sup>1</sup>, and the shaft B, having pinion D, in mesh with gear wheel L, of a continuously driven pulley C, mounted on shaft B, a pawl E constructed to interlock and normally held out of engagement with the said pulleys, and a trip for releasing the said pawl having a cam edge f<sup>2</sup> to engage with said pawl, and having a lateral extension f<sup>2</sup> inclined on its outer edge to be engaged by the treadle, and having a horizontal arm f, to engage with the said rim I, substantially as described and for the purpose specified. 17th. In a hoop making machine, the combination, with the former for shaping the hoop, jaws for gripping the ends of the hoop, shaft K provided with cams for actuating the said jaws, gear wheel L, secured on shaft K, and provided with rim I, having depression I<sup>1</sup>, and the shaft B, having pinion D, in mesh with gear wheel L, of a continuously driven pulley C, mounted on the shaft B, a pawl E constructed to interlock and normally held out of engagement with the said pulley, a sleeve d keyed on said shaft B, and having a lateral extension, a pawl E pivoted to the said lateral extension and adapted to interlock with the pulley C, and a trip for releasing the said pawl having a cam edge f<sup>2</sup> to engage with the said pawl, and having a lateral extension f<sup>2</sup>, inclined on its outer edge to be engaged by the treadle, and having a horizontal arm f, to engage with the said rim I, substantially as and for the purpose described. 18th. In a hoop making machine the combination with the former for shaping the hoop, jaws for gripping the ends of the hoop, shaft K, provided with cams for actuating the said jaws, gear wheel L, secured on shaft K, and provided with rim I, having depressions I<sup>1</sup>, and the shaft B, having pinion D, in mesh with gear wheel L, of a continuously driven pulley C, mounted on shaft B, a pawl E, constructed to interlock and normally held out of engagement with the said pulley, a trip for releasing the said pawl having a cam edge f<sup>2</sup>, to engage with the pawl, and having a lateral extension f<sup>2</sup>, inclined on its outer edge and a treadle having a pivoted arm f, to engage with the inclined edge of the said lateral extension f<sup>2</sup>, substantially as described and for the purpose specified. 19th. In a hoop making machine the combination of the jaws S, guide rods, formers mounted on the said guide rods, a cross head T, springs mounted on the said guide rods, collars m<sup>1</sup> and m<sup>2</sup>, and actuating mechanism for separating the formers and pressing the upper former against the said jaws S, substantially as described. 20th. In an organized machine for making hoops, the combination with the rivet wire feeding mechanism, of the lever T<sup>2</sup>, pivoted between its ends and carrying a pawl at one end to actuate the said feeding mechanism, and adapted to be operated on at the other end by a cam, an adjustable stop T<sup>2</sup>, and a spring for returning the said lever to a normal position after being actuated, substantially as described.

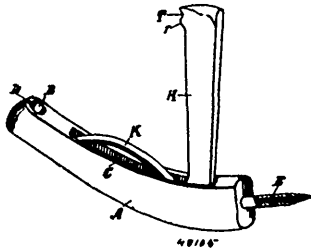
**No. 18,105. Burglar Alarm. (Avertisseur de voleur.)**

Robert S. Hodgins, Lucan, Ontario, Canada, 2nd February, 1895; 6 years.

*Claim.* - 1st. A body A, in which the openings B, C, and recess G are formed, said openings B being fitted to receive and hold a cartridge, and means for securing said body to any suitable support,

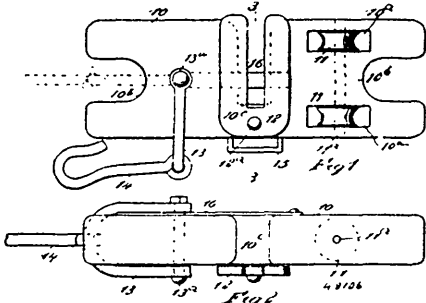


in combination with a hammer H, formed with the projection I, and flange J, and pivotally supported in the opening C, and a spring K, substantially as and for the purpose set forth. 2nd. A body A, provided with a screw threaded shank E, and in which body the



openings B, C, and recess G are formed, said opening B being fitted to receive and hold a cartridge, in combination with a hammer H, formed with the projection I, and flange J, and pivotally supported in the opening C, and a spring K, substantially as and for the purpose set forth. 3rd. A body A, provided with a screw threaded shank E, and in which body the openings B, C, groove D, and recess G are formed, said opening B being fitted to receive and hold a cartridge, in combination with a hammer H, formed with the projection I, recess T, and flange J, and pivotally supported in the opening C, and a spring K, substantially as and for the purpose set forth. 4th. A body A, in which the openings B, C, groove D, and recess G are formed, said opening B being fitted to receive and hold a cartridge, and means for securing said body to any suitable support in combination with a hammer H, formed with the projection I, and flange J, and pivotally support in the opening C, and a spring K, substantially as and for the purpose set forth. 5th. A body A, provided with a screw threaded shank E, and in which body the openings B, C, and recess G are formed, said opening B being fitted to receive and hold a cartridge, in combination with a hammer H, formed with the projection I, and flange J, and pivotally supported in the opening C, and a spring K, substantially as and for the purpose set forth.

**No. 48,106. Rope Clamp for Pulleys and Belaying Cleats.** (*Lien de cordage pour poulies et taquet pour amarrer.*)



Henry Vachon, Golden, British Columbia, Canada, 2nd February, 1895; 6 years.

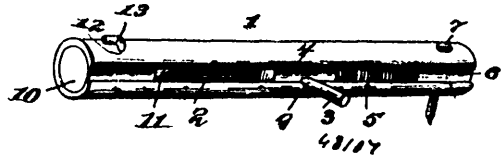
*Claim.*—1st. The combination, with a slotted block adapted for connection with a fixed object, of a slotted clamping plate pivoted on said block so as to permit the slots of the block and plate to be aligned, substantially as described. 2nd. The combination, with a pulley block, the body of which is transversely slotted, of a clamping plate having two spaced limbs and pivoted on the block opposite the transverse slot in the block, substantially as described. 3rd. The combination, with a pulley block body slotted at each end, and also slotted transversely between its ends, and a shackle loop therefore, of two limbed clamping plate pivoted on the block at one side opposite the transverse slot, substantially as described. 4th. The combination, with a rope cleat slotted in its head between the ears thereof, of a two limbed clamping plate pivoted on the cleat head opposite its slot, substantially as described. 5th. The combination, with an axially slotted rotatable post, of a clamping plate having two spaced parallel limbs, and pivoted on the post opposite its slot, substantially as described.

**No. 48,107. Burglar Alarm.** (*Avertisseur de voleur.*)

James W. Horn, New Madison, Ohio, U.S.A., 2nd February, 1895; 6 years.

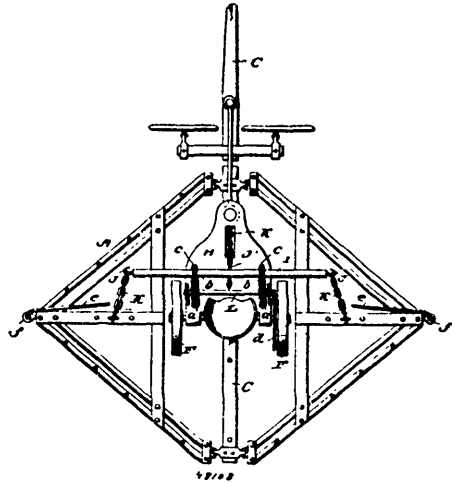
*Claim.*—A burglar alarm comprising a tubular casing having at one side a longitudinal slot and provided at the bottom of the same with a notch, a plug arranged within one end of the casing, a fastening device passing through the casing and the plug and serving as

the means for securing the device to a window or the like, a hammer arranged within the casing and conforming to the configuration thereof, and provided with an arm located in the slot of the casing



and adapted to engage the notch, a spiral spring located within the casing and interposed between the plug and the hammer for actuating the latter, a removable plug or block fitted in the casing at the other end thereof and provided at its inner end with a cap-receiving projection, and a pin or key passing through the casing, and the block or plug, substantially as described.

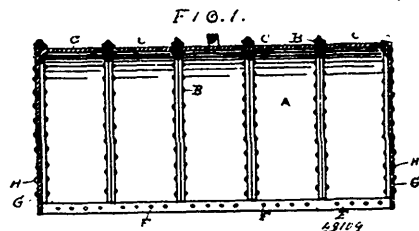
**No. 48,108. Harrow.** (*Herse.*)



Thomas J. Hubbell, Santa Cruz, California, U.S.A., 2nd February, 1895; 6 years.

*Claim.*—1st. A harrow or cultivator consisting of the two toothed carrying frames connected together upon a central line to swing vertically, a wheeled platform, mechanism of the platform for suspending and lowering the said frames, and a draft pole connected at its rear end with the forward end of the platform and frames, substantially as described. 2nd. A harrow or cultivator consisting in two toothed carrying frame, a central longitudinal bar to which the inner sides of said frames are hinged, a wheeled platform, mechanism adjustably suspending the said bar and frames from the said platform, and a draft pole connected at its rear end with the forward ends of the platform and central bar, substantially as described. 3rd. A harrow or cultivator consisting in a wheeled platform H, a rock shaft L journalled thereon and having segment a, provided with depending chains b, a cross bar I suspended from said chain and provided with end and middle chains K, K', respectively, a central bar C suspended by the chain K', tooth carrying frames hinged at their inner edges to the bar C and connected with the lower ends of the chains K, the ropes c for swinging the frames upwardly and the draft pole C' connected at its rear end to the forward ends of the platform and bar C, substantially as set forth and described.

**No. 48,109. Annealing Box.** (*Boîte à recuire.*)



William H. White, Apollo, Pennsylvania, U.S.A., 2nd February, 1895; 6 years.

*Claim.*—1st. The herein described annealing box comprising I

beams arranged transversely of the box with their bases or flanges abutting and rivetted or bolted together both upon the inside of the box, said beams being bent or curved to provide an arched roof or top, and sides for the box, as specified. 2nd. The herein described annealing box comprising I beams arranged transversely of the box with their bases or flanges abutting and rivetted or bolted together both upon the inside and outside of the box, said beams being bent or curved to provide an arched roof or top and sides for the box, the bases of the said beams being cut away upon the interior of the box near the lower edges of the sides of the box, and angle strips arranged longitudinally of and within the box upon each side and rivetted or bolted to the I beams, as specified.

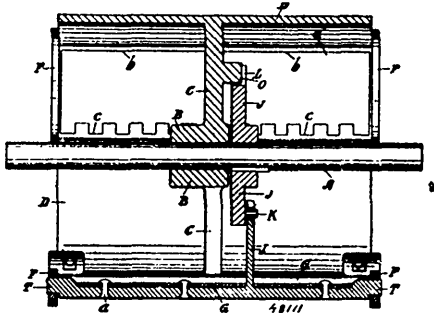
**No. 48,110. Catamential Sac. (Sac cataménial.)**



Maud H. E. King, Toronto, Ontario, Canada, 2nd February, 1895; 6 years.

*Claim.*—A sanitary cloth or capon consisting of a bag of porous fiber, a filling of disinfected cotton batting within the bag, and means for attaching the sanitary cloth to the waist band, substantially as described.

**No. 48,111. Root Cutter. (Coupe-racine.)**

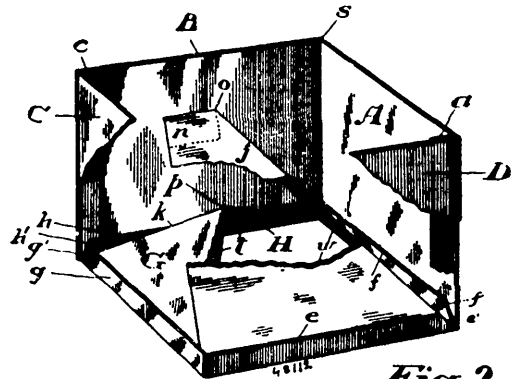


David Maxwell, sr., St. Mary's, Ontario, Canada, 2nd February, 1895; 6 years.

*Claim.*—1st In a root cutter, a pivotal or tilting knife or knives, and suitable means for supporting and operating the same, substantially as and for the purpose set forth. 2nd. In a combined root pulper and slicer, a pivotal or tilting knife or knives, each of which is provided with slicing and pulping edges, and supported over elongated openings, in the face or rim of a drum or other suitably shaped frame or support, substantially as and for the purpose set forth. 3rd. In a root cutter, a drum or other suitable shaped frame or support in the face of which an elongated opening or openings E, are formed, and bridges F, extending across said openings, and the pivotal or tilting knife or knives G, supported in said bridges over said openings, one of the cutting edges being adjusted below and the other above the face of the wheel when in operation, substantially as and for the purpose set forth. 4th. In a root cutter, a drum in the face of which an elongated opening or openings E, are formed, bridges F, extending across said openings, and a pivotal or tilting knife or knives G, and trunnions T, T, the latter being supported in said bridges, so that one of the cutting edges of said knife or knives may be adjusted above and the other below the face of the drum when in operation, substantially as and for the purpose set forth. 5th. In a root pulper and slicer, a drum in the rim or face D, of which an elongated opening or openings E, are formed, and bridges F, extending across said openings, and a pivotal or tilting knife or knives G, each of which is provided with a slicing edge b, and a pulping edge c, in combination with the knife holder H, provided with the trunnions T, T, substantially as and for the purpose set forth. 6th. In a combined root pulper and slicer, the drum S, and collar J, or their equivalent, one rigidly secured to, and the other revolving perfectly free on the shaft A, within a certain limit, and means for limiting the movement of the part revolving perfectly free on the shaft, substantially as and for the purpose set forth. 7th. In a combined root pulper and slicer, the drum S, and collar

J, or their equivalent, one rigidly secured to, and the other revolving perfectly free on the shaft A, within a certain limit, and a recess L, formed in one, and a projection O, on the other, substantially as and for the purpose set forth. 8th. In a combined root pulper and slicer, the drum S, and collar J, or their equivalent, one rigidly secured to, and the other revolving perfectly free on the shaft A, within a certain limit, and a recess L, formed in one, and a projection O, on the other, and means for communicating this limited movement to the knife or knives G, for the purpose of tilting the latter, substantially as and for the purpose set forth. 9th. In a combined root pulper and slicer, the drum S, and collar J, or their equivalent, one rigidly secured to, and the other revolving perfectly free on the shaft A, within a certain limit, and means for regulating or limiting the movement of one independent of the other, a knife or knives G, supported in openings in said drum, arms I, and studs K, substantially as and for the purpose set forth. 10th. In a combined root pulper and slicer, the drum S, and collar J, or other equivalent, one rigidly secured to, and the other revolving perfectly free on the shaft A, within a certain limit, and a recess L, formed in one, and a projection O, on the other, arms I, studs K, a knife or knives G, and means for supporting said knife or knives in or over the openings E, in the drum, substantially as and for the purpose set forth.

**No. 48,112. Knock-down Box. (Boîte pliante.)**



*Fig. 2*

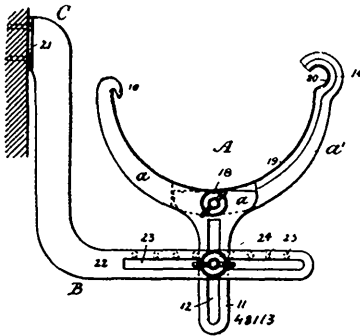
Frederick George Alexander, Toronto, Ontario, Canada, 2nd February, 1895; 6 years.

*Claim.*—1st. In a knock-down box, the sides thereof, in combination with an inner folding bottom-piece and an outer folding half-bottom piece, substantially as described and specified. 2nd. In a knock-down box, the sides thereof, in combination with an inner folding bottom-piece, an outer folding half bottom-piece and a lid, substantially as and for the purpose specified. 3rd. In a knock-down box, the four sides thereof formed from two integral pieces which are creased and provided with connecting flaps, in combination with an inner folding bottom-piece provided with connecting flaps, and an outer folding half bottom-piece provided with connecting flaps, the inner folding bottom-piece forming, when unfolded, the bottom of the box and overlying the outer folding half bottom-piece, substantially as described and specified. 4th. In a knock-down box, in combination with the sides thereof which are suitably connected together, an inner folding bottom-piece suitably connected to two adjoining sides and having one corner free and an outer folding half bottom-piece suitably connected to the opposite sides, the inner folding bottom-piece forming when unfolded, the bottom of the box and overlying the outer folding half bottom-piece to the inner corner of which the free corner of the inner folding bottom-piece is gummed when the box is formed, substantially as described and specified. 5th. In a knock-down box of greater length than its width or height, so as to leave the free corner of the inner bottom-piece exposed when the box is folded, the four sides thereof formed from two integral pieces which are creased and provided with connecting flaps, in combination with an inner folding bottom-piece provided with connecting flaps, and an outer folding half bottom-piece provided with connecting flaps, the inner folding bottom-piece forming, when unfolded, the bottom of the box and overlying the outer folding half bottom-piece to the inner corner of which the free corner of the inner folding bottom-piece is gummed when the box is formed, substantially as described and specified. 6th. A knock-down box, comprising the following elements:— the sides A, B, C, D, connecting flaps a and c, crease or fold r, crease or fold s, E, F, the inner folding bottom-piece, connecting flap o, bevelled at e', connecting flap f, bevelled at f', crease or fold j, z, the gummed part on the free corner of the inner folding bottom-piece G, H, the outer folding half bottom-piece g connecting flap, bevelled at g', h connecting flap bevelled at h', crease or fold k, and the lid I, substantially as described and specified. 7th. A knock-down box in which the free corner of the folding bottom-piece is held in place by gum, clip, or otherwise, substantially as described and specified.

**No. 48,113. Eaves Trough Hanger.**

(Support pour larmiers de toit.)

Fig. 1.

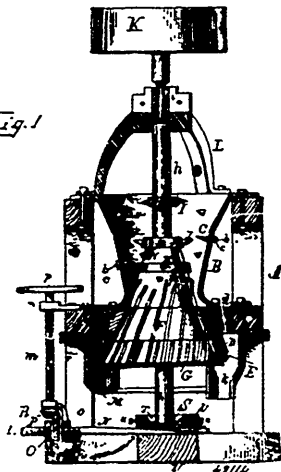


Allen R. Lewis and David E. Barrett, both of Shelton, Washington, U.S.A., 2nd February, 1895; 6 years.

**Claim.**—1st. An eaves trough hanger, composed of two curved sections *a, a'*, which are adjustable toward and from each other in the same plane, one having a horizontal groove 13, and the other a corresponding projection adapted to slide therein, one of said sections being also provided with a slot which is parallel to the said groove and projection, and a clamp screw which passes through the sections and serves to fasten them in any horizontal adjustment, as shown and described. 2nd. In an eaves trough hanger, the combination, with a trough support, comprising two sections having guided movement one upon the other, each section being provided with a stop adapted for engagement with an eaves trough, one of the sections being provided with a slotted shank, and clamping screw adjustably connecting the members of the eaves trough support, of a bracket adapted to be secured to a fixed support, one portion of the bracket being slotted, and clamping screw passed through the slotted portion of the bracket, and the shank of the eaves trough support, as and for the purpose specified.

**No. 48,114. Grinding Mill. (Moulin à blé.)**

Fig. 1



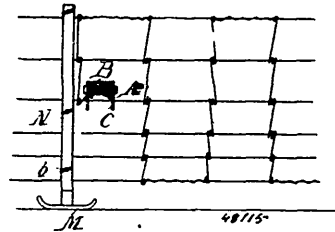
Hiram S. Atkins, Stowe, Vermont, U.S.A., 2nd February, 1895; 6 years.

**Claim.**—1st. The combination with a grinding mill, of means for raising and lowering the shaft to which the grinding cone is connected, consisting of a movable wedge, a grooved step for the end of the shaft to rest on, and a grooved centering block, substantially as and for the purpose described. 2nd. A grinding mill having its cone and shell provided with independently removable breaking-knives, means of raising and lowering the grinding cone consisting of a movable wedge, a grooved step for the end of the cone shaft to rest on, and a grooved centering block, and means for operating the wedge consisting of a feed nut having a gear wheel, and a shaft and pinion for operating them, substantially as and for the purpose set forth.

**No. 48,115. Wire Stay Weaving Machine.**

(Machine à tisser les étuis en fil de fer.)

Fig. 1.



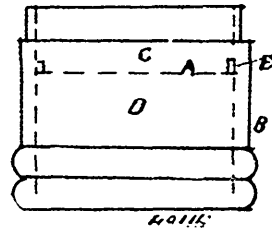
Elmer H. Stowell, Drayton Plains, and George W. Terry, Pontiac, both of Michigan, U.S.A., 2nd February, 1895; 6 years.

**Claim.**—1st. In a wire stay weaving machine, the combination of a U-shaped frame having notched wire bearings *D* formed in the bottom of the legs, and a wire spool or pin *H* near the top thereof to receive the coil of wire, substantially as described. 2nd. The combination with the longitudinal wires of a wire fence, of a spacing standard *K* notched to engage with such wires, the clamping bar *N* on said standard *K* upon which said standard is supported, and a hand weaving machine for twisting the wires beside the spacer, substantially as described.

**No. 48,116. Sponge Holder and Water Bottle.**

(Porte éponge et bouteille à eau.)

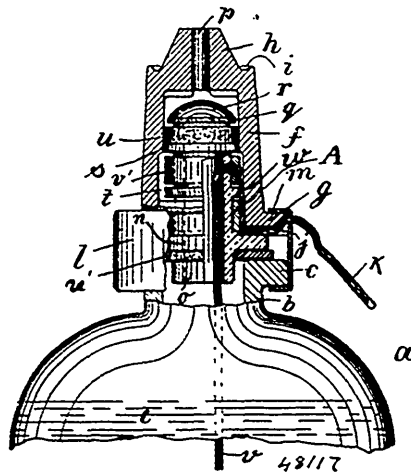
Fig 1



Thomas Edwards and Alfred J. Wright, both of Hamilton, Ontario, Canada, 2nd February, 1895; 6 years.

The combination of a water bottle and sponge holder with perforated centre plate *A*, retained by bead *E*, substantially as and for the purpose hereinbefore set forth.

**No. 48,117. Non-filling Bottle. (Bouteille à bouchon fixe.)**

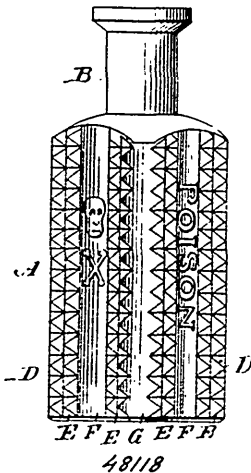


Harvey Isaac Leith, Providence, Rhode Island, U.S.A., 2nd February, 1895; 6 years.

**Claim.**—1st. The combination with a bottle, of a perforated cap, a seal clamping the cap over the mouth of the bottle, a tube having a valve and forming a communication from the interior of the bottle to the interior of the cap, an air conduit extending from the in-

terior of the bottle to the exterior thereof, a seal stopping up the air conduit at a point within the cap, and a flexible ligature attached to the seal and extending to the outside of the cap and of the bottle. 2nd. The combination with a bottle, of a perforated cap, a seal clamping the two together, a tube passing from the interior of the bottle to the interior of the cap, a cork or similar corking material at the upper portion of said tube and fitting tightly between the tube and the cap, the tube being provided with grooves around the outside of the same, porous wrings fitting in the respective grooves loosely between the tube and the inner wall of the cap and located below the cork and the capillary conduit and extending from the interior of the bottle through the wall of said tube and into the upper groove, the lower groove being connected by a conduit with the outside of the bottle and with the upper groove. 3rd. The combination with a bottle, of a closed cap fitted over the mouth thereof and sealed thereto, an air conduit extending from the bottom of the bottle inside, through a valved partition into the cap, and having this entrance into the cap sealed, and a flexible ligature extending from the last named seal to the outside bottle.

**No. 48,118. Bottle. (Bouteille.)**

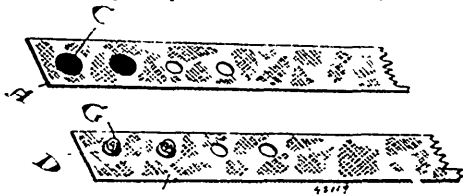


James Henry Valentine, Chatham, New Jersey, U.S.A., 2nd February, 1895; 6 years.

*Claim.*—1st. In a four-sided bottle, two substantially flat rectangular adjacent smooth side walls, adapted for a label, and two substantially flat rectangular adjacent rough side walls roughened with peculiarly disposed warning projections, said roughened walls being each opposite one of said smooth walls, substantially as and for the purpose set forth, whereby substantially half said body is smooth and half is rough, and when the bottle is grasped its warning provisions and one of its smooth sides must be felt. 2nd. In a bottle, the square body A, having the two adjacent smooth flat label walls C, C, and the two adjacent roughened warning walls D, D, each of said roughened walls, being opposite one of said smooth walls, and all of said walls extending continuously, substantially the entire height of the body, whereby substantially half the square body is smooth and half is roughened, when the bottle is grasped its warning provisions and one of its smooth walls must be felt. 3rd. In a bottle having four substantially flat, rectangular walls, the two adjacent smooth label walls C, C, and the two adjacent roughened warning walls D, D, the latter each opposite one of said smooth walls and constructed with vertical rows of warning projections E, E, near their edges, and with central grooves F, between said projections, whereby substantially half said body is smooth and half is rough, and when the bottle is grasped its warning provisions and one of its smooth walls must be felt.

**No. 48,119. Device for Fastening Dresses.**

(Appareil pour boutonner les robes.)

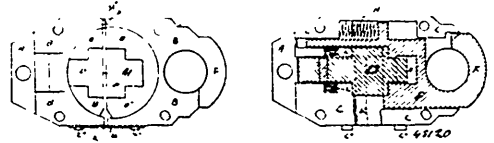


Francis Morton, Toronto, Ontario, Canada, 2nd February, 1895; 6 years.

*Claim.*—A strip of belting or other flexible material, adapted to be

connected to one side of a dress opening and provided with a series of hollow fastener caps C, in combination, with a similar strip adapted to be connected to the other side of the dress opening and provided with a series of fastener locks D, having spring heads G, which may be forced within the hollow caps C, substantially as and for the purpose specified.

**No. 48,120. Mail-bag Lock. (Cadenas pour sacs de malles.)**



Donat Blondeau, Québec, Province de Québec, Canada, 4 février, 1895; 6 ans.

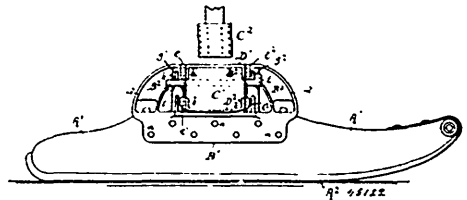
*Résumé.*—1. Un cadenas pour sac de malle, ayant un pêne fourchu D, muni de carbes G, G, tel que montré. 2. Un cadenas pour sac de malle, ayant une couverture B, pourvue d'une cavité B, B, servant à recevoir les scellés, la dite cavité étant traversée par un obstruteur M, tel que décrit. 3. Dans un scellé pour sac de malle, un obstruteur M disposé tel que montré et pour les fins indiquées.

**No. 48,121. Plastic Compound. (Composition plastique.)**

William M. Dawson, New York, State of New York, U.S.A., 2nd February, 1895; 6 years.

*Claim.*—1st. The process of making a compound to restrain the setting of plaster cement and the like, which consists in mixing organic matter and water, holding the same at a temperature and for a period to produce fermentation or decomposition, mixing the resultant liquor with lime, and then drying and reducing the mass to a fine powder, as specified. 2nd. The herein described restraining compound, which results from the mixture of lime and a liquor obtained by the decomposition of organic matter in water, as described.

**No. 48,122. Sleigh. (Traineau.)**



David R. McLaren, Hinckley, Minnesota, U.S.A., 4th February, 1895; 6 years.

*Claim.*—1st. In a sleigh, the runners A<sup>1</sup>, cap plates B<sup>1</sup> embracing the upper edges of said runners and having standards B<sup>2</sup>, B<sup>2</sup>, provided with circular adjacent sides and with curving strengthening webs d, plates D<sup>1</sup>, D<sup>2</sup>, having channels c<sup>1</sup>, c<sup>2</sup>, adapted to embrace the circular adjacent sides of said standards and attached to the upper and lower surfaces of the bolster beam, said lower plate B<sup>2</sup> being curved to permit the runner to oscillate beneath the bolster beam, substantially as and for the purpose set forth. 2nd. In a sleigh, the runner A<sup>1</sup>, cap plate B<sup>1</sup> embracing the upper edges of said runners and having standards B<sup>2</sup>, B<sup>2</sup> provided with circular adjacent sides, and with curved strengthening webs d, and with lugs g<sup>1</sup>, g<sup>2</sup>, plates D<sup>1</sup>, D<sup>2</sup>, having channels c<sup>1</sup>, c<sup>2</sup>, adapted to embrace the circular adjacent sides of said standards and attached to the upper and lower surfaces of the bolster beam, said lower plate B<sup>2</sup> being curved to permit the runner to oscillate beneath the bolster beam, in combination with pin E adapted to be inserted through the bolster beam and project by its ends beneath the said lugs g<sup>1</sup>, g<sup>1</sup>, substantially as and for the purpose set forth.

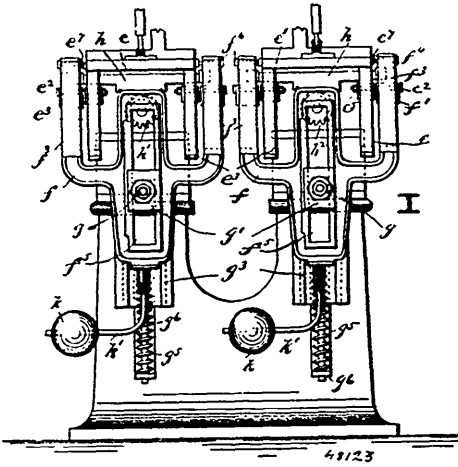
**No. 48,123. Brush Making Machine.**

(Appareil pour fabriquer les brosses.)

Carl Rohse, Striegau, Silesia, Germany, 4th February, 1895; 6 years.

*Claim.*—1st. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, of another movable working-table adapted to receive the brush block to be furnished with bristles, both the said tables being coupled so as to be adapted to move simultaneously in the same way, substantially as and for the purpose herebefore set forth. 2nd. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, of another movable working-table adapted to receive the brush-block to be furnished with bristles, both the said tables being coupled so

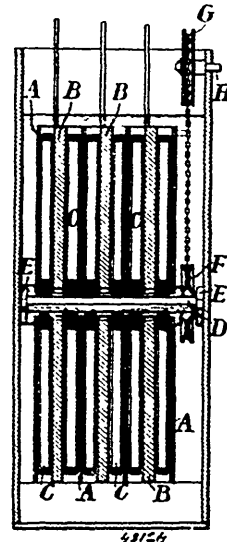
as to be adapted to move simultaneously in the same way, and having common driving mechanisms, substantially as and for the purpose hereinbefore set forth. 3rd. In a brush-making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working-table adapted to receive the brush-block



to be furnished with bristles, and also to be inclined to any plane, both the said tables being coupled so as to be adapted to be simultaneously inclined in the same direction, and for the same angle, substantially as and for the purpose hereinbefore set forth. 4th. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working-table adapted to receive the brush-block to be furnished with bristles, and also to be inclined to any plane, both the said tables being coupled so as to be adapted to be simultaneously inclined in the same direction, and for the same angle, and having common driving mechanisms, substantially as and for the purpose hereinbefore set forth. 5th. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working-table adapted to receive the brush-block to be furnished with bristles, and also to be inclined to any plane, each of said tables being arranged in a separate frame, and being adapted to be oscillated independent of said frame, as well as together with the same, both the said tables being coupled so as to be adapted to be simultaneously inclined in the same direction, and for the same angle, substantially as and for the purpose hereinbefore set forth. 6th. In a brush-making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working-table adapted to receive the brush-block to be furnished with bristles, and also to be inclined to any plane, each of said tables being arranged in a separate frame, and being adapted to be oscillated on an axis lying rectangular to the axis of the tables, both the said tables being coupled so as to be adapted to be simultaneously oscillated on either of said two axis, substantially as and for the purpose hereinbefore set forth. 7th. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working-table adapted to receive the brush-block to be furnished with bristles, and also to be inclined to any plane, each of said tables being arranged in a separate frame between slotted upright arms of the same, and having legs carrying pivots taking into said slots, the tables being held within said frames by bolts secured to one of the two parts, and by slotted guide-pieces secured to the other of the two parts, said bolts taking into the slots of said guide-pieces, substantially as and for the purpose hereinbefore set forth. 8th. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working-table adapted to receive the brush-block to be furnished with bristles, and also to be inclined to any plane, each of said tables being arranged in a separate frame between slotted upright arms of the same, and having legs containing adjustable slides carrying pivots, said slotted arms containing slides carried by said pivots, the tables being held within said frames by bolts secured to one of the two parts, and by slotted exchangeable guide-pieces secured to the other of the two parts, said bolts taking into the slots of said guide-pieces, substantially as and for the purpose hereinbefore set forth. 9th. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working-table adapted to receive the brush-block to be furnished with bristles, and also to be inclined to any plane, each of said tables being arranged

in a separate frame between upright arms of the same, said arms being supported by a rack supported in its turn by a cog wheel, each of said frames having a central vertical slot containing an adjustable pivot taking into a vertical guide way, the shafts of said cog wheels carrying other cog wheels adapted to be driven simultaneously by a common rack, substantially as and for the purpose hereinbefore set forth. 10th. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working table adapted to receive the brush-block to be furnished with bristles, and also to be inclined to any plane, said tables being connected by means of universal joints with a rod adapted to be displaced longitudinally within a guide, the latter being secured to a rack arranged rectangularly to said rod, and being adapted to move said tables forwards and backwards by the mediation of said rod, substantially as and for the purpose hereinbefore set forth. 11th. In a brush making machine, the combination with a movable working-table adapted to receive the brush-block to be bored, and to be inclined to any plane, of another movable working table adapted to receive the brush block to be furnished with bristles, and also to be inclined to any plane, each of said tables being arranged in a separate frame between upright arms of the same, said arms being supported by an exchangeable curved rack supported in its turn by a cog-wheel, the shafts of the respective two cog-wheels of the said two frames carrying other cog-wheels gearing with a common rack, one of said shafts carrying a third cog-wheel gearing with a cogged slide, the latter being adapted to be displaced by a grooved wheel, substantially as and for the purpose as set forth. 12th. In a brush-making machine, the combination with a working-table *c*, adapted to receive the block to be bored, and to be inclined to any plane, of another working-table *c'*, adapted to receive the block to be furnished with bristles, and also to be inclined to any plane, each of said tables being arranged in a separate frame *f*, between slotted upright arms *f'* of the same, and having slotted legs *c''*, containing adjustable slides *c''*, carrying pivots *c''*, said slotted arms *f'*, containing slides *f'*, carried by said pivots *c''*, said arms *f'*, being supported by an exchangeable curved rack *h*, supported in its turn by a cog-wheel *h'*, *h''*, each of said frames *f*, having a central vertical slot *g'*, containing an adjustable slide *g'*, carrying a pivot *g*, the latter carrying in its turn a slide *g''*, arranged in a guide *g''*, said tables *c*, *c'*, being held within said frames *f*, by bolts *f''*, secured to the arms *f'*, and by slotted curved exchangeable guide-pieces *c'*, secured to the tables *c*, *c'*, the latter being connected by means of universal joints *d'*, *d''*, with a rod *d*, adapted to be displaced longitudinally within a guide *b''*, *b''*, the latter being secured to a rack *b''* arranged rectangularly to said rod, and gearing with a cog-wheel *b''*, means for driving the latter as well as said cog-wheels *h'*, *h''*, substantially as and for the purpose as set forth.

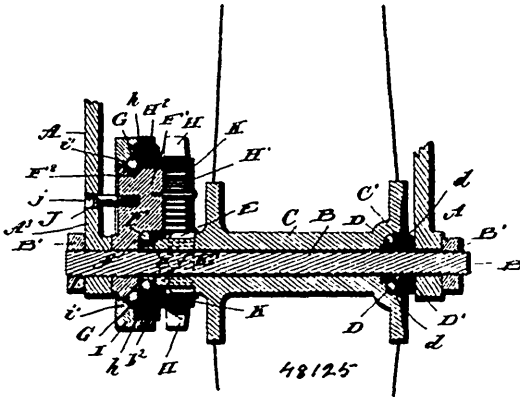
No. 48,124. Storage Voltaic Battery  
(Pile secondaire voltaïque)



Ludwig Epstein, London, England, 4th February, 1895; 6 years.

Claim. - 1st. In a secondary voltaic battery cell or spindle mounted in bearings on the ends of the cell, passing clear through the plates, and having fixed on it revolving agitators, one between each negative plate and the next positive plate, substantially as and for the purpose set forth. 2nd. A negative plate for a secondary voltaic battery, consisting of a sheet or a portion of a sheet of wire gauze amalgamated and electrolytically coated with zinc.

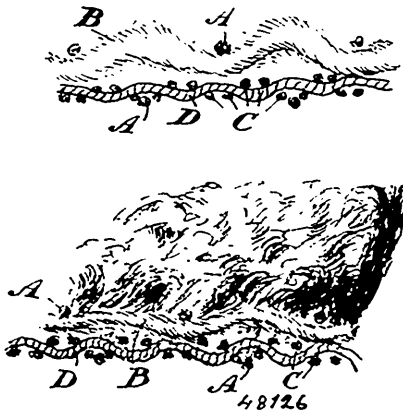
**No. 48,125. Bicycle Gearing.** (*Engrenage de bicyclette.*)



Van Dyke Crusier, Flatbrush, New York, U.S.A., 4th February, 1895; 6 years.

*Claim.*—1st. The combination with the axle and the eccentric thereon, of the sprocket-wheel with internal gear, the wheel hub with pinion meshing with said gear, and the frame with a plurality of holes and a removable screw engaging one of said holes and the eccentric whereby the chain may be adjusted by the adjustment of said screw, substantially as specified. 2nd. The combination with the axle and the eccentric thereon, of the sprocket wheel with internal gear, the wheel hub with its pinion meshing with said gear, and the plate secured to the eccentric and arranged upon the inner face of the sprocket-wheel for covering said gear and pinion, substantially as specified. 3rd. The combination with the rear axle, of the eccentric fast thereon, the wheel-hub with its pinion, the sprocket-wheel with its internal gear and the ring movable with the sprocket wheel about the eccentric, and a screw removably held in the frame for engaging the eccentric to adjust the chain, substantially as specified.

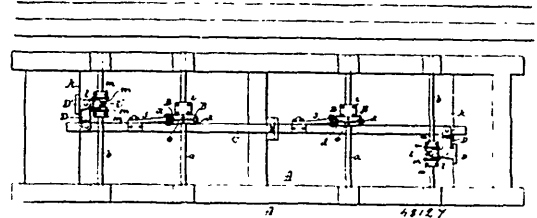
**No. 48,126. Process of Producing an Imitation of Buffalo Robes.** (*Procédé pour produire une imitation de robes de buffle.*)



The Waterloo Woollen Company, assignee of John Field Motley, both of Waterloo, Ontario, Canada, 4th February, 1895; 6 years.

*Claim.*—1st. The process herein described of producing a woven curly robe, consisting in inter-weaving a face web having a worsted roving weft and an inner web having a carded woollen yarn weft then passing the combined web through a fulling machine, so as to shrink the inner web and produce upon the face a series of loops of the worsted roving, and then combing such loops, as and for the purpose specified. 2nd. The process herein described of producing a woven curly robe, consisting in interweaving a face web having a worsted roving weft and an inner web having a carded woollen yarn weft then passing the combined web through a fulling machine, so as to shrink the inner web and produce upon the face a series of loops of the worsted moving, then combing such loops and finally submerging in hot and cold water alternately until the desired curl is imparted to the face of the robe, as and for the purpose specified.

**No. 48,127. Off-setting Device for Saw-mill Carriages.** (*Renversement pour appareil à donner la voie aux châssis de scieries.*)



James McAllister, and Albert C. Hubbell, both of South Manistique, Michigan, U.S.A., 4th February, 1895; 6 years.

*Claim.*—1st. The combination with the frame of a saw-mill carriage and an axle, of a friction device mounted on the axle and adapted to automatically grip the same at the first movement of the carriage, and a connection between said friction device and a part independent of said frame, whereby to off-set said frame, substantially as set forth. 2nd. The combination with the frame of a saw-mill carriage, and an axle, of a friction device mounted on the axle and adapted to automatically grip the same when the carriage begins to move, and a bar connected with said friction device and with a part independent of said frame, whereby to off-set the frame when the carriage first begins to move, said friction device being constructed and adapted to permit the rotation of said axle after the frame of the carriage shall have been off-set, substantially as set forth. 3rd. The combination with the frame of a saw-mill carriage, and an axle, of a friction device mounted on the axle, a bar connected with said friction device and with a bell crank lever pivoted to said frame, said bell crank lever being also pivoted to a part independent of the frame, said friction device being constructed and adapted to automatically grip the axle when the carriage begins to move to off-set the frame and permit rotation of the axle when the frame of the carriage shall have been off-set, substantially as set forth. 4th. The combination with the frame of a saw-mill carriage and axles, of a friction device mounted on one of said axles, a longitudinally movable bar connected with said friction device a bell crank lever pivoted to said bar, a collar on the other axle and connected with said bell crank lever, and means for preventing lateral movement of said collar, substantially as set forth. 5th. The combination with the frame of a saw-mill carriage and axles of a friction device mounted on one of said axles, said friction device comprising two boxes having a lining of soft material to produce a gripping surface, two heads or plates, connecting devices between said heads or plates and springs bearing against said heads or plates and boxes, and a connection between said friction device and a part independent of said frame, substantially as set forth. 6th. The combination with the frame of a saw-mill carriage, and an axle, of a collar mounted on said axle, two boxes having a lining of soft material to grip said collar, plates bearing against said boxes, rods connecting said plates, said boxes being made with sockets, springs in said sockets, said springs bearing at one end against the bottom of said sockets and at their other ends against said plates, and a connection between said boxes and a part independent of said frame, whereby when the carriage is first moved said frame will be off-set automatically, substantially as set forth. 7th. The combination with the frame of a saw-mill carriage, and an axle, of a sectional collar secured on said axle, a friction device adapted to grip said collar, a bar connected with said friction device, a bell crank lever pivoted to the frame and to said bar, collars arranged in pairs on another axle, and connected with said bell crank lever and means for preventing said collars from moving laterally on the axle, substantially as set forth. 8th. The combination with the frame of a saw-mill carriage, and an axle, of a friction device mounted on the axle, a longitudinally movable bar, a pitman connecting said bar and friction device, and a bell crank lever pivoted to the frame and connected with said bar and with a part independent of said frame, substantially as set forth. 9th. The combination with the frame of a saw-mill carriage and axles, of a friction device connected with one axle, two collars mounted side by side loosely on another axle, means for preventing lateral movement of said loose collars, and devices connecting said loose collars with the friction device, substantially as set forth.

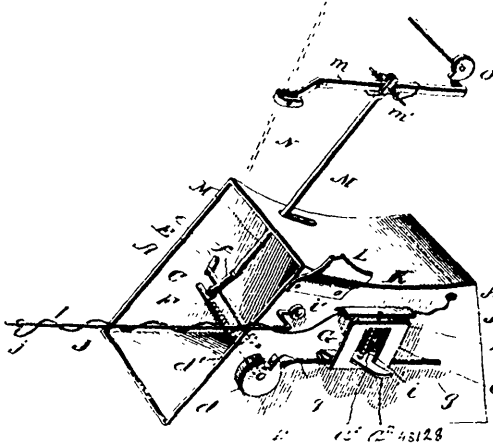
**No. 48,128. Automatic Fire Lighter.**

(*Allumoir automatique.*)

Gustavus A. Hege and Katharine M. Krehbiel, administratrix of the Estate of Adolph J. Krehbiel, deceased, all of Halstead, Kansas, U.S.A., 4th February, 1895; 6 years.

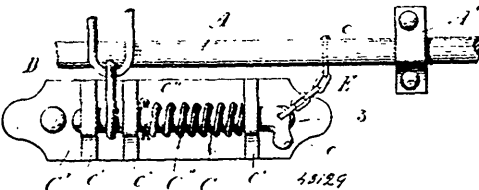
*Claim.* 1st. In a fire lighter, the combination of a clock mounted upon a base portion which carries a clamp for holding a match and a friction wheel adapted to rasp against the head of the match when the said wheel is revolved, a fuse and an extinguisher over the same, substantially as shown and described. 2nd. In a match lighter, the combination of the clock mounted on a base portion carrying a

plate provided with a spring actuated clamp for holding a match which is adapted to be held in contact with an eccentric friction wheel having a milled edge, and means for automatically rotating the said wheel, a fuse and an extinguisher over the same, substantially as shown and described. 3rd. In a fire lighter, the combi-



nation of the clock having a base portion carrying the plate G having a groove in its upper edge for the reception of a fuse, an extinguisher projecting over the said fuse, and the automatically operated friction wheel for igniting in its rotary movement a match carried on said plate G, substantially as shown and described. 4th. In a fire lighter the combination of the clock seated on the base A, the shaft C mounted in said base having a notched friction wheel keyed to an outer end, and a catch pin *f* seated in the said shaft, a stop shaft E mounted for vertical play, and a coiled spring carried on the shaft C, one end being secured to said stop shaft and its other end secured to the said catch pin which is held in a set position by means of a lever connected to the clock-work mechanism, substantially as shown and described. 5th. A fire lighter, comprising in combination the shaft C the coiled spring thereon, the stop shaft E to which is secured one end of the said coil spring one end of the said shaft E seated in an elongated slot whereby when the catch pin *f* is released, and under tension of the said spring is caused to rotate with the shaft C, it strikes the under side of the stop shaft which is allowed to yield slightly, all substantially as shown and described. 6th. In combination with a base portion, the lever M adapted to catch the pin *f* and hold the same set, the upper end of the said lever M attached to a dropper *m*, a stop shaft E mounted for vertical play, the double acting spring *m* secured thereto, one end of the said dropper secured to the edge of the frame N, and its other end designed to rest on the edge of a drop wheel O, and means for operating the same, substantially as described. 7th. In combination with the fire lighting apparatus as described, the lever M, catch pin *f*, dropper *m*, one end secured to the edge of the frame N, its free end resting upon the drop wheel O, the said drop wheel, and the dial wheel P secured to a collar Q carried on the hour post of the clock between the hands and the hour wheel, in such a manner and with sufficient friction that the dial plate and the drop wheel may be set to touch off the mechanism for lighting the match which is carried on the base portion, substantially as shown and described.

**No. 48,129. Live Stock Releaser. (Chasse-bétail.)**



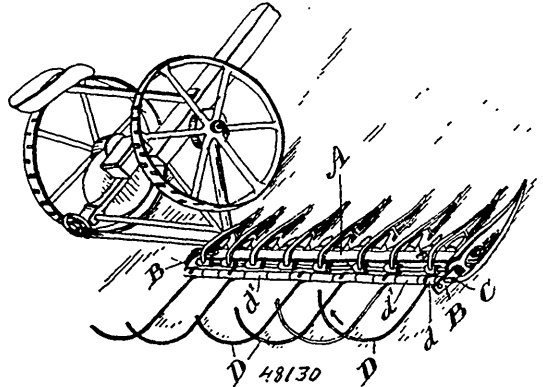
Jacob Strome Hallman, Petersburg, Ontario, Canada, 4th February, 1895; 6 years.

*Claim.*—1st. In a live stock releaser, the combination of a rod slidingly secured transversely to and at the head of the stalls, a lever or handle at one or both ends of said rod adapted to move the same in its bearings, a series of spring bolts, each held slidingly in three lugs on a base secured at each stall close to said slide rod, a connecting chain secured to one end of each of said bolts and to the slide rod, adapting said bolt to be withdrawn from one of the lugs by said rod and a series of rings or chains, each adapted to be engaged by the free end of said bolt between two of the lugs from one of which the bolt is adapted to be withdrawn, substantially as set

forth. 2nd. In a live stock releaser, the combination of a base C<sup>1</sup>, carrying three lugs c<sup>1</sup>, two of which are close together and adapted to pass a ring or chain link between them, a bolt C, adapted to slide in said lugs and engage a chain link or ring between the two lugs that are close together, a spring C<sup>2</sup>, coiled upon said bolt between the two lugs that are farthest apart, a pin in said bolt between the end of said spring and the central lug and a handle c, at the end of the bolt projecting from the end lug against which the other end of the spring abuts and a ring or chain like D, adapted to be engaged by said bolt between the two lugs that are close together, substantially as set forth. 3rd. In a live stock releaser, the combination of a rod A, slidingly secured transversely at the head of the stalls, a lever or handle B, fulcrumed to a suitable object and pivotally connected to said rod and adapted to move the same in its bearings, and a series of a suitable device adapted to be operated by said rod and hold chains or other means by which live stock may be tied, substantially as set forth.

**No. 48,130. Pea Harvester.**

(Appareil pour récolter les pois.)

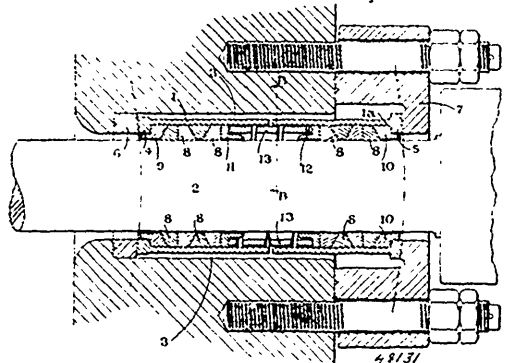


William Glover St. John, Sunderland, Ontario, Canada, 4th February, 1895; 6 years.

*Claim.*—1st. A bundle forming attachment for pea harvesters comprising a series of arms pivotally attached to the rear of the cutter bar, resting on the ground and having the rear curved end of each successive bar from the outside to the inside decreasing in height and length of curve and so arranged that the base of each arm resting on the ground successively increases from outside to inside as and for the purpose specified. 2nd. A bundle forming attachment for pea harvesters comprising a series of arms pivotally attached to the rear of the cutter-bar, resting on the ground and having upwardly extending curved rear portions, the spaces between two arms towards the inner end of the bar being wider than the spaces between the other arms, as and for the purpose specified. 3rd. The combination with a cutter-bar, of a rod C, extending from end to end to the rear of the same and supported in suitable arms B, and provided with abutting sleeves *d* and *d*<sup>1</sup>, and rearwardly extending arms D, curved and otherwise constructed as shown and attached at the front to the sleeves *d*, as and for the purpose specified.

**No. 48,131. Packing for Piston Rods.**

(Garniture pour tiges de piston.)

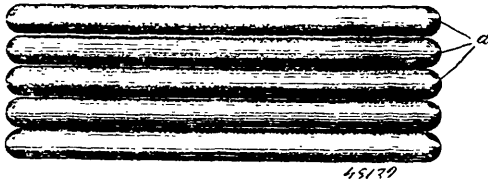


Trevor Keene, Birkenhead, Chester, England, 4th February, 1895; 6 years.

*Claim.*—1st. A piston rod packing, comprising a sleeve having a

spherical bearing at each end struck from the same point approximately coincident with the mean position of the piston and packing rings within the sleeve, the convex surface *o*. said bearings facing outwardly from the cylinder, substantially as described. 2nd. In metallic rod packing, in combination, a sleeve divided transversely into two parts and having concentric spherical end bearing surfaces struck from a point approximately coincident with the mean position of the piston, flanges upon said parts, split neck rings bearing against said flanges and packing rings confined by said split neck rings, substantially as described. 3rd. In metallic rod packing, in combination, a sleeve divided transversely into two parts and having concentric spherical end bearing surfaces struck from a point approximately coincident with the mean position of the piston, internal flanges on the outer portions of the said parts, split neck rings bearing against the said flanges, packing rings confined by the said neck rings, and an interposed spring pressing the two parts of the sleeve asunder and against the end bearing surfaces, substantially as described. 4th. In metallic rod packing, in combination, a sleeve divided transversely into two parts and having concentric spherical end bearing surfaces struck from a point approximately coincident with the mean position of the piston, internal flanges on the outer portions of the said parts, split neck rings bearing against the said flanges, two groups of packing rings confined by the said neck rings, and a spring interposed between the two groups of packing rings, and adapted to transmit pressure, through the packing rings to press the two parts of the sleeve asunder and against the end bearing surfaces, substantially as described. 5th. In metallic rod packing, in combination, a sleeve having concentric spherical end bearing surfaces and divided transversely into two parts, each part having at the end an internal flange adapted to engage with and hold the split neck rings but to pass over the swelled part of rod, and split neck rings and packing rings held within the said sleeve and an interposed spring pressing the two parts of the said sleeve asunder, substantially as described.

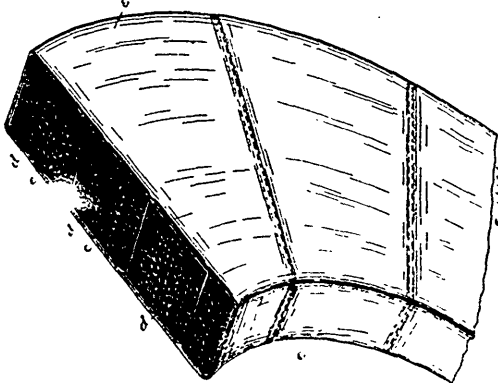
**No. 48,132. Bearing. (Coussinet.)**



Franz Ewald Thormeyer, Hamburg, Germany, 4th February, 1895; 6 years.

*Claim.*—1st. A bearing mainly consisting of a series of cylindrical metal bars or rods *a* rounded off at the ends, and surrounding the spindle or shaft, constructed and arranged, substantially as described. 2nd. In the bearing referred to in the first claim, a modified form of bars or rods *a*, the main feature of the modification being, that the said rods are provided with pins or journals *b* at their ends, which pins are fitted in bushings or boxes adapted to keep the rods *a* out of contact with each other, constructed and arranged, substantially as described.

**No. 48,133. Manufacture of Secondary Transformer Coils. (Fabrication de fil de transformateur électrique.)**

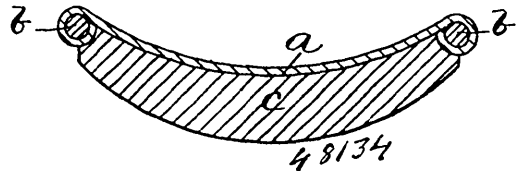


Baron Henry Tindal, Amsterdam, assignee of August Schmeller, Aarlanderveen, Alfen and Willem John Wisse, Haarlem, all in Holland, 4th February, 1895; 6 years.

*Claim.*—1st. The manufacture of secondary transformer coils for use in the production of high tension electric currents by boiling

coils of insulated wire in wax or a waxy substance, then pressing them, and then putting them into preliminary use for the purposes of evaporating moisture therefrom and of filling up the interstices therein, additional wax or waxy substance being supplied to the coils as long as heating thereof is produced by the passage of an electric current therethrough, as set forth. 2nd. A secondary coil for a transformer, composed of wire covered with several layers of insulating material, and the convolutions of which are embedded in wax or a waxy substance, and are separated from one another in a circular direction by strips or layers *c*<sup>1</sup>, of insulating material such as paper, cotton and the like, and are firmly secured together by binding cords passed several times transversely through the coil, which is finally provided with an outer protecting layer of material such as shellac varnish, substantially as and for the purpose hereinbefore set forth.

**No. 48,134. Wheel Rim. (Jante de roue)**

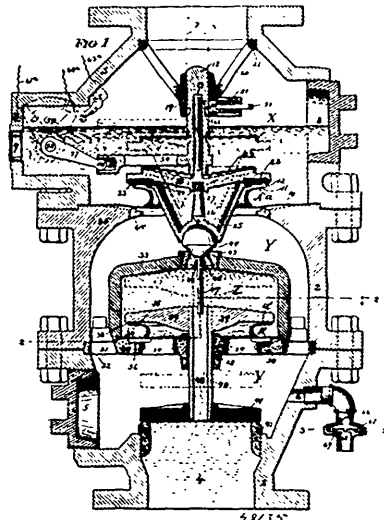


S. N. Brown & Co., assignee of Charles H. Brown, both of Dayton, Ohio, U.S.A., 4th February, 1895; 6 years.

*Claim.*—1st. The combination of a wooden rim or felly, of a metallic reinforcing band around the outer periphery of said felly, wires rolled in the circumferential edges of said metallic band forming circumferential beads that inclose the outer edges of said felly, substantially as and for the purpose specified. 2nd. In a wheel, the combination with the wooden rim, of a metallic reinforcing band inclosing said rim, wires rolled in the circumferential edges of said metallic band and projecting laterally beyond the edges of said rim whereby means are provided for protecting said rim against torsional strain, and for obtaining a specified degree of lightness, substantially as described.

**No. 48,135. Automatic Fire Extinguisher.**

(Eteincieur automatique d'incendie.)



George E. Hibbard, Chicago, Illinois, U.S.A., 4th February, 1895; 6 years.

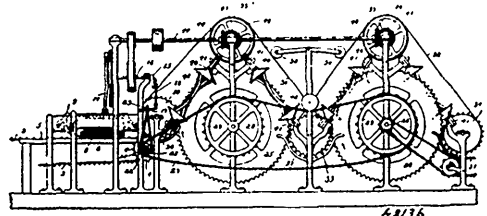
*Claim.*—1st. The combination with a valve and a seat thereof, of a flexible ring carrying the seat, said ring having a portion exposed to the pressure and so located that the pressure forces it toward the valve, whereby the valve and seat are held together, substantially as set forth. 2nd. The combination with a valve and a seat thereof, of a flexible ring carrying said seat and extending inward beneath the valve, the valve being movable toward and from the seat, substantially as set forth. 3rd. The combination of a casing, a valve located therein, a flexible ring having its inner margin reflexed, and a valve-seat carried by the reflexed portion of said ring, substantially as set forth. 4th. The combination with a casing, a valve located therein, and a flexible valve supporting ring, of means for adjusting the pressure of said ring against the valve, substantially as set forth. 5th. The combination with a casing, and a valve



located therein, of the flexible ring A, having the reflexed inner margin  $\alpha$ , and the adjustable ring 64 bearing against the ring A, substantially as set forth. 6th. The combination with a casing and a valve, of a flexible valve supporting ring having its inner margin reflexed, said ring being formed of two annular plates having their inner margins reflexed and secured together, substantially as set forth. 7th. The combination with two movable valves and a rigid stem connecting them, of a seat for each of said valves, and a flexible ring carrying one of said seats and extending inward beneath the valve, substantially as set forth. 8th. The combination of a casing having an inlet and an outlet and having chambers Y and Z, the latter being in open communication with the water supply and having two openings, a valve controlled by the pressure in the system for controlling one of said openings, a flexible ring forming a valve seat support surrounding the other of said openings, a valve 39, located in the chamber Z, and resting upon said ring, a valve 41, located in chamber Y, and closing the inlet, and a stem connecting said valves, substantially as set forth. 9th. The combination of a casing having an inlet and an outlet, and having chambers Y and Z, the latter being in open communication with the water supply and having two openings, a valve controlled by the pressure in the system for controlling one of said openings, a flexible ring having a reflexed margin surrounding the other of said openings, a valve 39, located in chamber Z, and resting upon said ring, a valve 41, located in chamber Y, and closing the inlet, and a hollow stem 40, connecting the valves 39 and 41, and having a passageway 48, communicating with the chamber Z, and the inlet, substantially as set forth. 11th. The combination with a casing having the communicating chambers X and Y, of a valve for controlling the opening through which they communicate, a flexible diaphragm arranged on said valve so as to be movable independently of it, an alarm mechanism, and suitable connections between said alarm mechanism and diaphragm, substantially as set forth. 12th. The combination with a casing having the communicating chambers X and Y, and a valve for controlling the opening through which they communicate, of a flexible diaphragm arranged on said valve, a stem to which said diaphragm is secured, means for sustaining and guiding said stem, an alarm mechanism, and suitable connections between said stem and alarm mechanism, substantially as set forth. 13th. The combination of a casing having the communicating chambers X and Y, a valve convex on its top side, controlling the opening through which said chambers communicate, and having a guide stem 16, a flexible diaphragm secured to the top side of said valve, a stem 18 having a closed bore in which the stem 16 fits, the lower end of said stem 18 being secured to said diaphragm, means for guiding the stem 18, an alarm mechanism and means connecting the alarm mechanism and diaphragm, substantially as set forth. 14th. The combination of a casing having communicating chambers X and Y, the valve 15, a flexible diaphragm carried by said valve, two separate alarms, means actuated by the movement of the diaphragm for starting one of said alarms, and means actuated by the movement of the valve for starting the other of said alarms, substantially as set forth. 15th. The combination, with the casing having the communicating chambers X and Y, the chamber X having an outlet and the chamber Y having an inlet, the valve 15 controlling the opening through which said chambers communicate, and the valve 44 controlling the inlet of the chamber Y, said valve 44 having a spherical top, of a spherical socket 26 in which said valve 44 fits, and means connecting said socket to the valve 15, substantially as set forth. 16th. The combination of a casing having the chamber Y, the chamber Z located therein and having two openings, communicating with the chamber Y, a valve controlled by the pressure in the system controlling one of said openings, an outward seating valve located in the chamber and closing the other of said openings, and a passage connecting said chamber with the water supply, substantially as set forth. 17th. The combination of the casing having an inlet and an outlet and having communicating chambers X and Y, a valve 15, controlling the opening through which they communicate, the dome 33, located in the chamber Y and having two openings, the valve 44, closing one of said openings, a part extending from the valve 15 to the valve 44, a valve 39, located in the chamber Z of the dome and closing its second opening, a smaller valve 41, located in the chamber Y and closing the inlet, and a stem connecting the valves 39 and 41, substantially as set forth. 18th. The combination with the casing having the chamber Y and the drain pipe 66, of the valve casing 67, and the valve disc 68 situated therein and having the spring tongues 69 bent downward and resting upon the casing, whereby the valve is held normally off of its seat, said disc being slit to form said tongues, substantially as set forth. 19th. As a new article of manufacture, a link for sprinkler heads, made up of two corrugated plates placed parallel to each other, each having a part overlapping the other, and fusible keys inserted beneath said overlapping parts, substantially as set forth. 20th. As a new article of manufacture, a link for sprinkler heads made up of two corrugated plates placed parallel to each other, each of said plates having one of its ends reflexed so as to overlap the

other plate, and fusible keys inserted beneath said reflexed ends, substantially as set forth. 21st. As a new article of manufacture, a link for sprinkler heads made up of two corrugated plates placed parallel to each other, each of said plates having a slot extending to one of its ends and having its other end reflexed so as to overlap the other plate, and fusible keys inserted beneath said reflexed ends, the meeting faces of the plates being soldered, substantially as set forth. 22nd. In a sprinkler head, the combination of a frame, a pointed stem having a shoulder, a disc having a central opening and slits radiating therefrom, said disc fitting loosely upon said stem, above the shoulder, and a deflector having in its top side a conical depression forming a bearing for the point of the stem, and having also a circular rabbet in which said disc fits, the metal forming the margin of the rabbet being turned over the edge of the disc, substantially as set forth.

**No. 48,136. Breaking and Scutching Machine for Flax, &c. (Machine à casser et éplucher le lin.)**

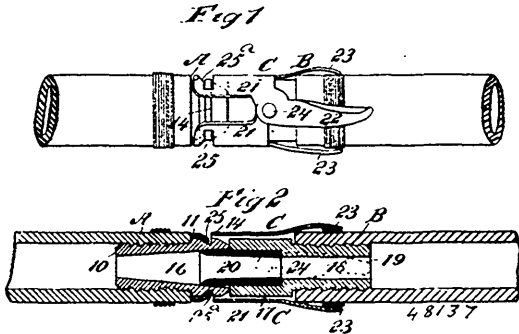


Alexander Morison, Alpena, Michigan, U.S.A., 4th February, 1895; 6 years.

*Claim.*—1st. The combination, with a braking table provided with longitudinal slots, a carrier arranged to hold the material at right angles to the slots and adapted to feed it in the direction thereof, and a braking roller adapted to move transversely said table, substantially as described. 2nd. The combination of a grated table provided with a carrier adapted to feed the material in the longitudinal direction of said table, and a transversely moving fluted or grooved roller upon said table, substantially as described. 3rd. The combination of a longitudinally grated table, a carrier adapted to feed the material in the longitudinal direction of said table, and a transversely moving carriage containing a roller bearing upon said table and provided with a surface adapted to intermesh with said table, substantially as described. 4th. The combination of a longitudinally grated table, a carrier adapted to feed the material in the longitudinal direction of said table, and a fluted or grooved traversing roller bearing upon said table provided with a reduced front end, substantially as described. 5th. The combination of a longitudinally grated table, endless carrier chains arranged longitudinally of said table, and a transversely reciprocating carriage provided with one pair more fluted rollers adapted to intermesh with said table, substantially as described. 6th. The combination of a longitudinally grated table, endless carrier chains arranged longitudinally of said table, a transversely reciprocating carriage provided with one or more fluted rollers adapted to bear upon said table and revolve by intermeshing therewith, and means for lifting or tilting the carriage, substantially as described. 7th. The combination of a longitudinally grated table, endless carrier chains arranged longitudinally of said table, a transversely reciprocating carriage supported upon said table and carrying one or more rollers adapted to bear upon said table and intermesh therewith and fixed inclines adapted to lift the carriage at each end of the stroke, substantially as described. 8th. The combination of the longitudinally grooved spreading table, the braking table adjacent thereto and formed of longitudinal bars placed at intervals, the carrier chains running in the longitudinal direction of said tables and provided with upwardly projecting spurs for carrying the material, the adjustable intermittently operating feed devices for said chain carrier, the reciprocating traversing carriage provided with a pair of fluted breaking rollers adapted to bear upon and intermesh with the bars of the braking table, and travellers on the carriage adapted to engage with fixed inclines to tilt or lift the carriage at the ends of its travel, substantially as described. 9th. The combination, with the grated breaking table and carrier chains for feeding the material in the longitudinal direction of said table, of the transversely reciprocating carriage freely supported upon said table, the fluted breaking rolls longitudinally journaled in said carriage and adapted to intermesh with said table, the fixed inclines on the frame, the travellers on the carriage adapted to engage with said inclines to tilt the carriage at the ends of its travel, and the intermediate gearing connecting the two rollers, substantially as described. 10th. In a braking and scutching machine, the combination with a carrier-wheel and means for holding the fiber on the wheel, of revolving, obliquely arranged scutchers parallel with the path of the fiber, and means for actuating the scutchers, substantially as described. 11th. The combination in devices for scutching, of a carrier-wheel provided with a cable adapted to grip the material centrally of its length upon the periphery of said wheel, of two pairs of revolving

scutchers, one pair arranged on opposite sides of the ascending slanting portion of the periphery of the upper half of said wheels, and the other pair on the corresponding descending slanting portion thereof, substantially as described. 12th. The combination in devices for scutching, of a carrier-wheel provided with a cable to grip the material centrally of its length upon the periphery of said wheel, of one or more revolving scutchers mounted in proximity to the periphery of said wheel and provided with curved blades adapted to strike the material in the curved path in which the material is carried, substantially as described. 13th. The combination with the revolving scutchers, of a peripherally toothed carrier-wheel, an endless gripping cable engaging into a peripheral groove of said wheel and passing around a portion of said wheel, and means for feeding the material between the periphery of said wheel and the gripping cable, substantially as described. 14th. The combination with revolving scutchers, of two like carrier-wheels peripherally provided with carrying teeth, and arranged one behind the other in planes parallel to each other on opposite sides of a central plane, a gripping cable for each wheel engaging in a peripheral groove of said wheel and arranged to pass around the upper half of the wheel and means for feeding the material to the first wheel, and from said wheel to the second wheel, substantially as described. 15th. The combination of two like carrier-wheels peripherally provided with carrying teeth and arranged one behind the other in planes parallel to each other on opposite sides of a central plane, a gripping cable for each wheel engaging in a peripheral groove of the wheel, and arranged to pass around the upper half of the wheel, means for feeding the material to the first wheel, and from said wheel to the second wheel and revolving scutchers arranged to operate upon the material while held in a slanting position upon said wheel, substantially as described. 16th. The combination with the revolving scutchers, of a carrier-wheel having peripheral carrying teeth, an endless gripping cable engaging into a peripheral groove of said wheel and cable guides to carry said cable around the upper portion of said wheel, substantially as described. 17th. The combination with the carrier, of the breaking devices, of two peripherally toothed carrier-wheels arranged one behind the other in rear of said carrier and in proximity to it, but on opposite sides of a central vertical longitudinal plane through said carrier, an endless gripping cable for each carrier-wheel passing around a set of cable guide wheels arranged to hold said cable in engagement with the upper portion of the periphery of said carrier-wheel, and intermediate carrier devices formed by curved guide bars arranged beneath the cable guide in front of each carrier-wheel and of carrying-teeth on said cable guides, substantially as described. 18th. In a machine for breaking and scutching fibrous plants, the combination of a longitudinally grated table provided with a carrier for carrying the material in the longitudinal direction of said table, one or more fluted traversing rollers intermeshing with said grated table, two peripherally toothed carrier-wheels arranged in different parallel planes, one behind the other and in rear of the carrier of the grated table, an endless gripping cable for each carrier-wheel passing round a set of cable guides arranged to hold said cable in travelling engagement with the upper portion of the periphery of said carrier-wheel, intermediate carrier devices between the carriage of the grated table and the first carrier-wheel and between the first and second carrier-wheel, and revolving scutcher in slanting position in proximity to the slanting portions of the peripheries of the carrier-wheels, substantially as described.

**No. 48,137. Hose Coupling. (Joint de boyau.)**

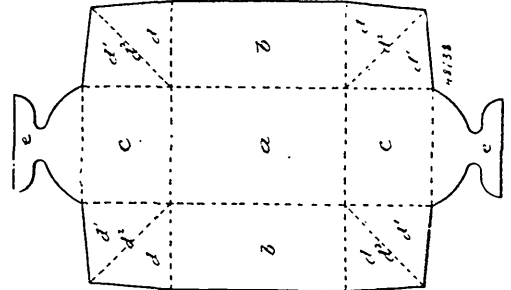


Joseph S. Blackburn, Salem, Ohio, U.S.A., 4th February, 1895; 6 years.

*Claim.*—1st. In a hose coupling, the combination, with a section having a shoulder, of a second section adapted to abut against the first-named section, spring-controlled jaws pivoted upon the second section and extending longitudinally thereof, the ends of the said jaws protruding in front of the section and being adapted for engagement with the shoulder of the first section, and levers located exteriorly of the sections and connected with the jaws for raising the same out of contact with the said shoulder, as and for the purpose set forth. 2nd. In a hose coupling, the combination with a section consisting of a shank, and a head, the head having a groove

formed therein, one wall of which is straight, forming a shoulder, of a second section, comprising a head and shank, spring controlled and oppositely located jaws pivoted upon the head thereof, levers connected with the jaws, and ribs formed upon the inner faces of the jaws, adapted for engagement with the shoulder of the first-named section when the two sections are brought in contact, as and for the purpose set forth. 3rd. In a hose coupling, the combination with a receiving section consisting of a shank and a head, the head having an annular groove produced exteriorly therein, one wall of which is straight, forming a shoulder, the said section being likewise provided with a tapering inner bore widest at the head, of a locking section comprising a head and shank, an elastic tube fitted in the head and adapted to enter the bore of the opposing section at the head portion thereof, oppositely disposed jaws pivoted upon the head of the locking section, which jaws are provided with transverse openings, the outer walls of said openings being bevelled rearward and inward, whereby the outer walls of the openings extend inward beyond the plane of the inner rear faces of the jaws, levers connected with the jaws at opposite ends, and spring fingers projected from the jaws over the shank, as and for the purpose set forth.

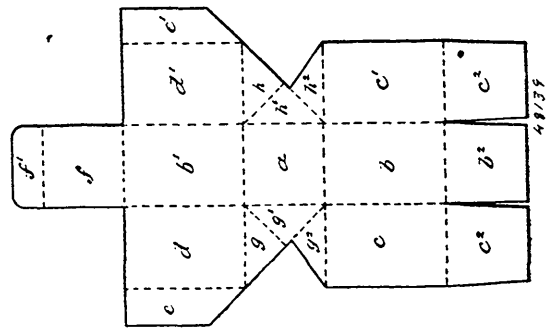
**No. 48,138. Paper Box. (Boîte en papier.)**



Frank Peart Birley, Toronto, Ontario, Canada, 4th February, 1895; 6 years.

*Claim.* 1st. The herein described improvement in folding boxes consisting of a single blank formed with bottom, sides and ends as set forth, corner sections that are infolded and overlapped, and locking flaps formed as extensions of the end sections of the box, said flaps having T heads adapted to interlock with said overlapping corner sections, all substantially as specified. 2nd. The herein described box, formed of a single piece, consisting of the bottom *a*, sides *b*, *b'*, ends *e*, *e'*, triangular corner sections *d*, *d'*, adapted to fold in upon and overlap each other as set forth, and end flaps *e*, the latter being tucked under the said triangular infolded sections, all substantially as specified.

**No. 48,139. Paper Box. (Boîte en papier.)**

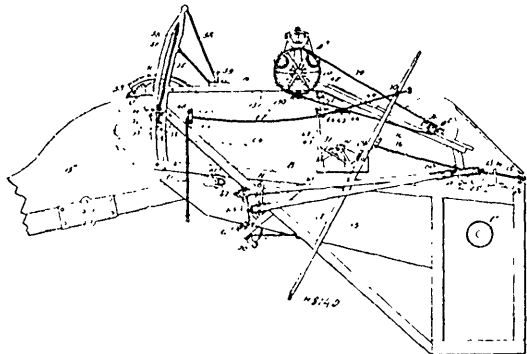


Frank Peart Birley, Toronto, Ontario, Canada, 4th February, 1895; 6 years.

*Claim.*—1st. A folding box blank, made of a single piece having a bottom portion with extensions *b*, *b'*, and sides *c*, *c'*, *d*, *d'*, as set forth, wings *e*, *e'*, extending outward from sections *d*, *d'*, and adapted to fold inward against section *b* and a flap *b'* adapted to fold inward over said wings to lock the latter to the section *b*. 2nd. A folding box blank made of a single piece, having a bottom portion with extensions *b*, *b'* and sides *c*, *c'*, *d*, *d'*, as set forth, wings *e*, *e'* extending outward from sections *d*, *d'* and adapted to fold inward against section *b*, a flap *b'* adapted to fold inward over said wings to lock the latter to the section *b*, and flaps *c*, *c'* provided with interlocking slits, all substantially as and for the purposes specified. 3rd. A folding box blank consisting of the bottom *a*, sides *b*, *c*, *c'* with end extensions *b*, *b'*, *c*, *c'* respectively, sides *b*, *d*, *d'*, with lateral wings

*c c'* and flaps *f, f'* as described, and triangular strengthening portions *h, h', h'', g, g', g'',* all substantially as specified.

**No. 48,140. Band Cutter and Feeder for Threshing Machines.** (*Coupe-hart et alimentateur pour machines à battre.*)



William Taylor, Carman, Manitoba, Canada, 4th February, 1895; 6 years.

*Claim.*—1st. In a feed device for threshing machines, a conveyor, the driving mechanism thereof, and a governor controlling the said mechanism, whereby when the said governor decreases in speed to a predetermined extent the driving mechanism of the conveyor will be retarded or stopped, as and for the purpose specified. 2nd. In a feed device for threshing machines, a conveyor, gearing adapted to operate the same, a friction disc carried by one of the gears, a drive shaft, a friction wheel held to slide on the shaft and adapted to engage with the said disc, and an adjusting device connected with the friction wheel, whereby the latter may be moved to or from the center of the said disc to increase or decrease the speed of the disc and consequently of the conveyor, as and for the purpose specified. 3rd. In a threshing or like machine, a shifting lever extending both above and below the machine, a link likewise connected with the shifting lever and extending in direction of one end of the machine, and a continuation of said link extending in direction of the opposite end of the machine, whereby the shifting mechanism may be operated from the top of the machine, from either end, or from the ground, as desired and as described. 4th. In a feeding device for threshing machines, a conveyor, gearing adapted, to operate the same, a friction disc carried by one of the gears a driving shaft, a friction wheel carried by the said shaft and adjustable to and from the disc, a governor, and a shifting connection between the governor and the said friction wheel, whereby the said wheel, by the action of the governor, may be carried into or out of engagement with the disc, or made to contact more or less positively therewith, as and for the purpose set forth. 5th. In a feeding device for threshing machines, a conveyor, a drive shaft, gearing operating the said conveyor, a driving connection between the drive shaft and the gearing of the conveyor, a governor, means substantially as described, for operating the same, and a shifting device operated by the governor and connected with the driving mechanism of the conveyor, the said shifting device serving to regulate the speed that the driving gear of the conveyor receives from the driving shaft, as and for the purpose specified. 6th. In a feeding device for threshing machines, the combination with a conveyor, gearing connected therewith, and a friction disc carried by one of the gears, of a driving shaft, movable boxes journaled on the said shaft, a friction wheel carried by the shaft and adapted for engagement by the said friction disc, a governor, means for driving the same, substantially as described, and a shifting lever operated from the governor and operating upon the said boxes, the shifting lever serving normally to hold the friction wheel in engagement with the disc and relieving the boxes from pressure when influenced by the slow movement of the governor, as and for the purpose specified. 7th. In a feeding device for threshing machines, the combination with the conveyor, gearing operating the same, a friction disc carried by the gearing, a drive shaft adjustable to and from the disc, and a friction wheel adjustable upon the said shaft and adapted for engagement with the said disc, of an adjusting device connected with the said friction wheel, whereby it is moved to or from the centre of the disc, a governor, means for driving the same and a shifting lever operated by the governor and operating upon the said shaft to move the same to or from the disc, as and for the purpose specified. 8th. The combination, with a driving shaft, a gear loosely mounted upon the said driving shaft and adapted to be driven from the cylinder shaft of a threshing machine, a clutch carried by the driving shaft and adapted for frictional engagement with the driving gear, and a lever adapted to throw the said clutch in gear, of a rack surface formed upon the lever, a pivoted toothed segment engaging with the said rack, a spring normally holding the lever in position to uncouple the clutch from the driving gear, a

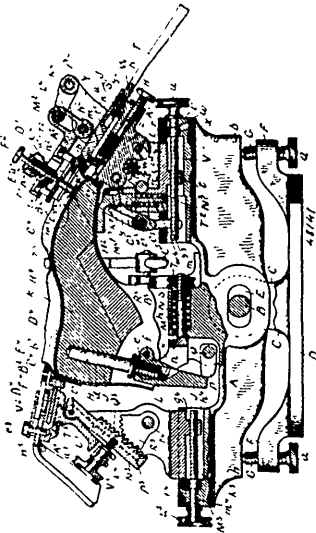
governor and a latch controlled by the governor, the said latch being adapted for locking engagement with the said segment, as and for the purpose specified, whereby when the lever is locked in position to throw the clutch in engagement with the driving gear, and the speed of the governor is lessened to a predetermined extent, the latch will release the locking device of the said lever, and release the driving gear from said clutch, as and for the purpose specified. 9th. In a band cutter and feeder, a feed-pan provided with stepped partitions, one of said partitions being slotted, and a sheaf-spreading and breaking device held to reciprocate over the pan, the said device consisting of a frame and toothed blades carried by the frame, the blades being opposite the slots in the said partition of the pan, as and for the purpose specified. 10th. In a band cutter and feeder for threshing machines, the combination with a feed-pan, and means, substantially as shown and described, for reciprocating the same, the said pan being provided with stepped partitions, the forward partition having openings produced therein, of a sheaf-spreading and breaking device located over the feed-pan, the said device consisting of a frame provided with segmental plates secured thereto at an angle and provided with peripheral teeth, the said plates being located opposite the openings in the partition of the feed-pan, and arms projected from the said toothed plates into the said openings in the feed-pan partition, and means, substantially as described, for reciprocating the said sheaf-spreading and breaking device, as and for the purpose specified. 11th. In a band cutting and feeding attachment for threshing machines, the combination, with a conveyor, of a second conveyor coupled thereto, a driving connection between the two conveyers, and a wheeled support attached to one of the conveyers, as and for the purpose specified. 12th. In a band cutting and feeding attachment for threshing machines, the combination with a conveyor, of a second conveyor, a forked support carried by one of the conveyers and adapted to rest upon the opposing conveyor, a driving belt connecting the drive shafts of the two conveyers, and supports connected with both conveyers at their receiving ends, whereby the said ends may be raised or lowered as desired, as specified. 13th. In a band cutting and feeding attachment for threshing machines, the combination with a conveyor, of a second conveyor, a forked support carried by one of the conveyers and adapted to rest upon the opposing conveyor, a driving belt connecting the driving shafts of the two conveyers, a wheeled support attached to one of the conveyers, provided with a tongue, and legs pivotally located at the receiving ends of both conveyers, whereby they may be elevated or depressed at said ends, as and for the purpose set forth. 14th. The combination, with the cylinder shaft of a threshing machine, a band cutting and feeding attachment and the driving mechanism thereof, of a gear loosely mounted upon the said cylinder shaft and meshing with a gear in the driving mechanism of the attachment, a ratchet formed upon the face of the said gear of the cylinder shaft, and a disc secured upon the cylinder shaft, provided with a spring-controlled pawl engaging with the said ratchet, substantially as described, whereby in the event of a sudden stoppage of the cylinder shaft the driving mechanism of the band-cutting and feeding attachment may continue to move for a certain length of time, as set forth. 15th. In a band-cutting and feeding attachment for threshing machines, the combination, with the frame thereof, a drive-shaft, a rock-shaft provided with a sleeve extending a portion of its length, a crank-arm projected from the said sleeve and also from the said shaft at opposite ends, a spreader shaft, a sleeve held to rotate on the spreader shaft, a crank-arm projected from the spreader shaft sleeve and likewise from the said shaft, the crank-arms of the spreader shaft and its sleeve being oppositely placed to those of the rock-shaft and its sleeve, eccentrics located upon opposite ends of the drive-shaft, shaker arms pivotally connected, a pair being located at each side of the said frame, one shaker rod or arm of each pair being connected with one of the said eccentrics and both shaker rods of a pair being connected, one with a crank-arm from the spreader shaft or its sleeve, and the other with the crank arm of the rock shaft or its sleeve, of feed pens arranged in pairs, a crank connection between one of the feed pens and the rock-shaft, the other feed pen having like connection with the rock-shaft sleeve, and a spreading and breaking device located above the feed pens, said device being in two sections, comprising a body and segmental toothed plates at an angle to the body, one section being attached to the spreader-shaft and the other section to its sleeve, substantially as shown and described.

**No. 48,141. Lasting Machine.** (*Machine à enformer.*)

Clarence Seward Luitwieter, Newton, assignee of Charles Willick King, Auburndale, both of Massachusetts, U.S.A., 6th February, 1895; 6 years.

*Claim.*—1st. In a lasting machine, in combination, a pin for insertion in the heel of a last, an arm or rod to which said pin is pivoted, a socket or bearing for said arm in which it is adapted to move back and forth, a spring arranged to act upon said arm, an extension of said pin beyond its pivot and means for acting on said extension to swing the pin on its pivot against said spring. 2nd. In a lasting machine, in combination, a pin for insertion in the heel of the last, an arm or rod to which said pin is pivoted, a socket or bearing for said arm in a support, a spring adapted to bear and act upon said arm, an arm independent of said pin pivoted to a support and adapted to bear and act upon said pin. 3rd. In a lasting

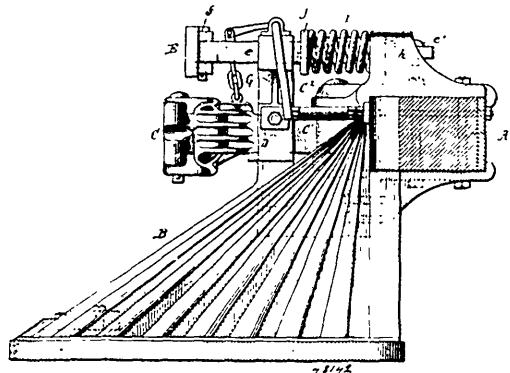
machine, in combination, two curved arms pivoted by their ends to a suitable support, projecting forward therefrom and crossing each other, a chain or flexible band disposed freely in between said arms, and secured by its ends to the other end of the curved arms. 4th. In a lasting machine, in combination a block pivoted to a suitable support, two curved arms pivoted thereto by their ends, projecting forward therefrom, and crossing each other, a chain or flexible band



disposed freely in between said arms and secured by its end to the other ends of the curved arms. 5th. In a lasting machine, in combination, a base or support having a groove in its upper side, a block arranged to slide back and forth therein, a block pivoted to said sliding block, two curved arms pivoted thereto by their ends, projecting forward therefrom and crossing each other, a chain or flexible band disposed freely in between said arms, and secured by its ends to the other ends of the curved arms. 6th. In a lasting machine, in combination, a base or support having a groove in its upper side, a block arranged to slide back and forth therein, a block pivoted to said sliding block, two curved arms pivoted thereto by their ends, projecting forward therefrom and crossing each other, a chain or flexible band disposed freely in between said arms and secured by its ends to the other ends of the curved arms, a block adapted to move back and forth in a seat or socket arranged to bear upon said curved arms at or near their crossed portions, a spring to said last block and a screw arranged to bear against said block. 7th. In a lasting machine, a last for the upper on a suitable support, a plate arranged to bear upon and hold said last upper against and on a support, a pivoted arm on which said plate is carried and supported, a slot in said arm, and a lever engaging with said slot for the purpose specified. 8th. In a lasting machine, in combination, two plates pivoted together having forward extending arms, their inner edges curved, each plate having a curved slot through it, a support on which said plates rest and are arranged to move, two pins or pivots on said support, over which said curved slots are disposed respectively, each plate having an internal gear at its opposite end, a gear to engage with each plate internal gear and a segment of a gear having a handle to engage with said gears. 9th. In a lasting machine, in combination, a plate having an under curved rib or rim, a support to which said plate is pivoted, a transverse oblong plate on the under side of said former plate, an arm to each end of said transverse plate passing up through an opening or hole through said former plate, connected together at their upper ends above said former plate and means for pressing upon said connection. 10th. In a lasting machine, in combination, a plate having an under curved rib or rim, and hollowed out between said rib or rim, a support to which said plate is pivoted, a transverse oblong plate on the under side of said former plate, an arm to each end of said transverse plate passing up through an opening or hole through said former plate, connected together at their upper ends above said former plate and means for pressing upon said connection. 11th. In a lasting machine, in combination, a plate having an under curved rib or rim, a transverse oblong plate on the under side of said former plate, an arm to each end of said transverse plate passing up through said former plate, connected together at their upper ends above said former plate, a lever pivoted to a suitable support and extending upward in two arms straddling the former plate, and bent over toward each other and then downward and arranged to bear in the operation of the lever upon said transverse plate arms. 12th. In a lasting machine, in combination, a body or support for the various parts of the machine pivoted to a suitable base or support by a horizontal slot, and a screw at each end of said base, screwing up through a projection of said base for the machine body

to rest thereon. 13th. In a lasting machine, in combination, a block or standard on a support, its upper side or surface being inclined upward toward the last, a longitudinal groove in its upper side a bar or plate arranged to slide back and forth in inclined guideways on such incline from and to the last, two plates pivoted together having forward extending arms and supported on said bar or plate, an under rib to said bar or plate extending down into said groove, gear teeth on its under edge, a segmental gear engaging with said rib gear, and a pivoted lever to which said segmental gear is secured for operation thereof. 14th. In a lasting machine, in combination, a block or standard on a support, adapted to move back and forth in suitable guideways having a downwardly projecting lug, a screw engaging with said lug and the block support, the upper side or surface of said block being inclined toward the last, a longitudinal groove in its upper side, a bar or plate arranged to slide back and forth in inclined guideways on such incline from and to the last, two plates pivoted together having forward extending arms and supported on said bar or plate, an under rib to said bar or plate extending down into said groove, gear teeth on its under edge, a segmental gear engaging with said rib gear, and a pivoted lever to which said segmental gear is secured for operation thereof. 15th. In a lasting machine, a lever having an angular or hook end pivoted by a slot to a pivot on a suitable support, a socket in said lever, a pin in said socket bearing on said pivot, a spring in said socket bearing on said pin and a lever connected to said first lever for operation thereof. 16th. In a lasting machine, a lever having an angular or hook end pivoted by a slot to a pivot on a suitable support, a socket in said lever, a pin in said socket bearing on said pivot, a spring in said socket bearing on said pin, a slot in one arm of said lever and a lever connected by a pin disposed in said slot.

**No. 48,142. Locomotive Buffer. (Tampon de locomotive.)**



The Gould Coupler Company, New York, assignee of Willard Fillmore Richards, Buffalo, both in New York, U.S.A., 6th February, 1895; 6 years.

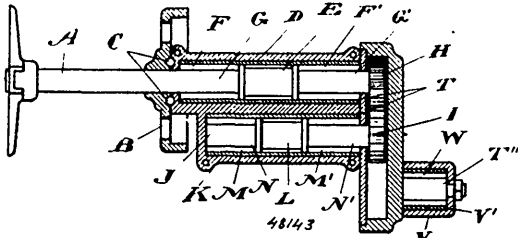
*Claim.*—1st. The combination with the pilot and the pilot beam of a locomotive, of a transverse buffer plate arranged above the pilot, guides arranged behind the buffer plate and secured to the pilot and the pilot beam respectively, supporting stems carrying the buffer plate and arranged in said guides, and buffer springs which resist the inward movement of the buffer plate, substantially as set forth. 2nd. The combination with the pilot of a locomotive, of a buffer plate arranged above the pilot, a standard rising from the pilot and having guide openings, stems carrying the buffer plate and guided in the openings of said standard, and buffer springs surrounding said stems, and bearing at their rear ends against abutments on the pilot beam, substantially as set forth. 3rd. The combination with the pilot and the pilot beam of a locomotive, of a transverse buffer plate arranged above the pilot, a supporting yoke for the draw-head shank secured to the pilot, a standard arranged on said yoke and having guide openings, perforated lugs secured to the pilot beam, stems carrying the buffer plate and guided in said openings and perforated lugs, and buffer springs surrounding said stems and abutting at their rear ends against said lugs, substantially as set forth.

**No. 48,143. Windmill. (Moulin à vent.)**

William H. Shapley, Brantford, Ontario, Canada, 6th February, 1895; 6 years.

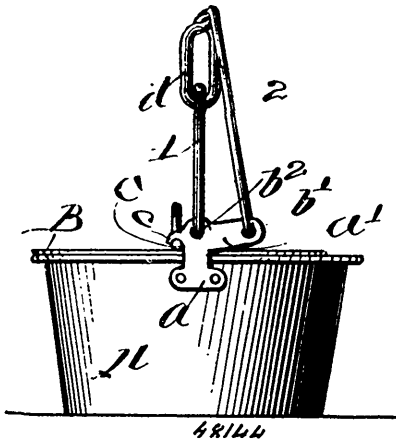
*Claim.*—1st. In a windmill, the combination of a wheel shaft, an outer casing in which is an inserted casing extending from one bearing to the other for the wheel shaft and roller bearing for the journals of the wheel shafts within the casing, substantially as set forth. 2nd. In a windmill, the combination of the wheel shaft, a casing for the wheel shaft and an inner casing and ball bearings, substantially as set forth. 3rd. In a windmill, the combination of the wheel shaft, a casing for the wheel shaft and an inner casing, two journals for the wheel shaft within the casing, a separator mounted on the wheel shaft between the said journals and roller bearings

within the said casing for the said journals, substantially as set forth. 4th. In a windmill, the combination of a gear shaft, a casing for the gear shaft, and roller bearings for the gear shaft within the casing, substantially as set forth. 5th. In a windmill, the com-



48143  
bination of the gear shaft, a casing for the gear shaft, two journals for the gear shaft, a separator mounted on the gear shaft between the said journals and roller bearings for the journals of the gear shaft within the said casing, substantially as set forth. 6th. In a windmill, the combination of the pitman, a crank pin for the pitman and inner casing and roller bearings for the crank pin within the said casing, substantially as set forth. 7th. In a windmill, the combination of the centre pipe, a turn-table for the centre pipe, and ball bearings for the turn table, substantially as set forth.

**No. 48,144. Saucepan. (Casserole.)**



48144  
Robert B. Vanderburg, Long Beach, California, U.S.A., 6th February, 1895; 6 years.

*Claim.*—1st. A cooking utensil provided with two bails pivoted thereto a short distance apart, said bails being connected at, or near, their central portions by means of a device adapted to allow each a limited movement with respect to the other, substantially as described. 2nd. A cooking utensil provided with oppositely arranged ears, and a cover having correspondingly arranged projections adapted to engage said ears to secure the cover upon the utensil, substantially as described. 3rd. The combination with a cover having oppositely arranged projections located in a line eccentric to the centre, of a kettle having correspondingly arranged hooks adapted to engage with said projections, whereby the cover may be secured upon the kettle so as to completely close the same, or by turning the cover around, it may be secured upon the kettle so as to leave a slight opening at one side thereof, substantially as described.

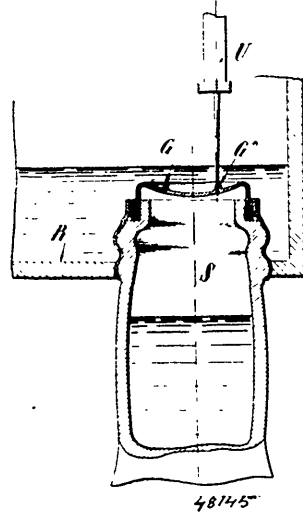
**No. 48,145. System of Bottle Corking, etc.**

(Système de bouchage de bouteilles, etc.)

Louis Mathieu, Gustave Jean Loustalot, Bordeaux, France, 6 Février 1895, 18 ans.

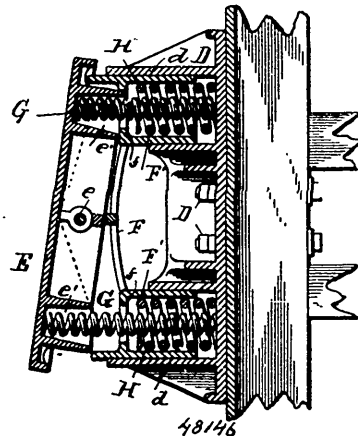
*Résumé* 1o. Un disque en matière extensible C, qui vient s'appuyer à la partie supérieure du flacon sur une bague en caoutchouc entourant le goulot, et contre laquelle il est fortement appliqué, au moyen d'une capsule qui peut être soit filetée, soit sertie, le disque C étant muni d'un petit téton percé d'un trou par lequel s'échappe l'air, contenu dans le flacon placé sous l'eau après son remplissage et porté à une température peu élevée, le dit téton étant ensuite fermé sous l'eau avec une pince appropriée, en vue d'isoler complètement du contact de l'air la substance renfermée dans le flacon, le dit flacon pouvant en outre, être porté à une température très élevée si la conservation de la substance l'exige et cette élévation de température suivie d'un refroidissement ayant pour autre effet d'appliquer fortement le disque C contre les parois du goulot, ce qui donne une

étanchéité plus complète. 2o. En combinaison avec la fermeture ci-dessus revendiquée, une grille F disposée à la partie supérieure du flacon et dans les trous de laquelle viennent se loger les particules



48145  
solides qui se forment à la surface de certains liquides, et ce en vue d'empêcher, pendant la désoxygénation l'obstruction du trou du téton. 3o. L'emploi en combinaison d'un diaphragme téton G permettant de la désoxygénation et de l'élévation à une haute température, le dit téton étant, au moment voulu, percé au moyen d'un poinçon sous une couche du liquide à conserver, porté à une haute température, étant refermé également au contact de l'air, ainsi qu'il a été ci-dessus décrit.

**No. 48,146. Car Buffer. (Tampon de chars.)**

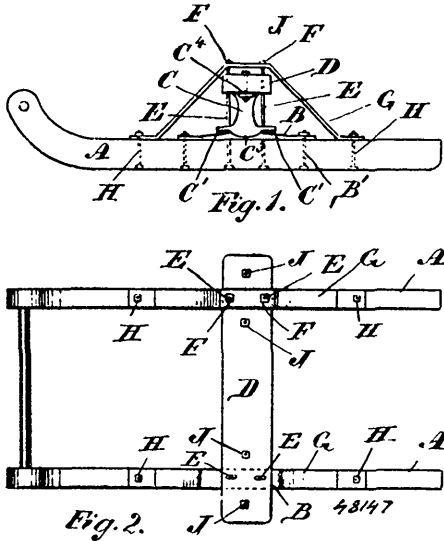


48146  
The Gould Coupler Company, New York, assignee of William Fillmore Richards, New York, both in the State of New York, U.S.A., 6th February, 1895; 6 years.

*Claim.*—1st. In a car buffer, the combination with the base plate or bracket secured to the end of the car and having a forwardly projecting socket, of a follower carrying a buffer and guided in said socket, and a light spring and a heavy spring fitted in said socket, said light spring holding the follower and buffer out normally and the heavy spring being adapted to bear against the follower when the light spring has been partially compressed, substantially as set forth. 2nd. The combination with the end sill of a car, of a base plate or bracket secured to outer side of the end sill, a transverse yoke or frame guided on said base plate or bracket and capable of moving toward and from the latter, a buffer plate mounted on said yoke, and buffer springs which resist the inward movement of said yoke, substantially as set forth. 3rd. The combination with the end sill of a car, of a base plate or bracket secured to the outer side of the end sill, a transverse yoke or frame guided on said base plate and capable of moving toward and from the latter, an oscillatory buffer plate pivoted to said yoke, heavy buffer springs interposed between said yoke and the base plate and light springs interposed between the oscillatory buffer plate and the base plate, substantially as set forth. 4th. In a car buffer, the combination with the base

plate having sockets, of a yoke having followers guided in said sockets a buffer plate mounted on said yoke, light buffer springs interposed between said base plate and the buffer plate and heavy buffer springs abutting against said base plate and adapted to be compressed by said followers, substantially as set forth. 5th. In a car buffer, the combination with the base plate having sockets, of a yoke having followers guided in said sockets, and provided with a shoulder or flange, light buffer springs interposed between the base plate and the buffer plate and heavy buffer springs arranged in the sockets of the base plate between the latter and the shoulders or flanges of the followers, substantially as set forth.

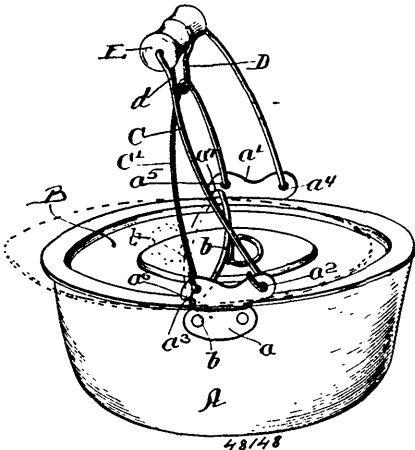
No. 48,147. Bob-Sled. (Traineau-jumeau.)



George Warder, Bowmanville, Ontario, Canada, 6th February, 1895; 6 years.

Claim.—1st. The combination with the runners A, of a bob-sled, of a plate B, having a raised centre and secured to the top of the runner, a metallic standard or knee C, having rocking feet C', standing on said plate, a bench D, bolted to said standards or knees, rods or bolts E, E, passing through said runners and plate and loosely through the feet of the standards and the bench, and a brace G, connecting said rods at top, and the ends bolted to the runner, as set forth. 2nd. A bob-sled, having runners A, A, plates B, B, secured thereto, standards C, C, having rounded feet in contact with said plates and connected by a bench D, and rods or bolts E, E, passing loosely through said feet and bench and braces G, G, connected to said rods above the bench, and bolted at the ends to the runners, as and for the purpose set forth.

No. 48,148. Saucepan. (Casserole.)

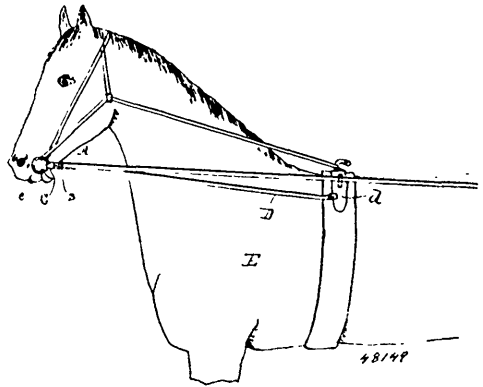


Lundovic J. Painter, Chicago, Illinois, U.S.A., 6th February, 1895; 6 years.

Claim.—1st. The combination with the pan A, having the two

bails C, C', of an oscillating link D, pivoted upon one of said bails and embracing the other, substantially as described. 2nd. The combination with the pan A, having the two bails C, C', of the handle E, upon one of the bails and the link D, embracing the other bail and pivoted upon the handle so as to oscillate longitudinally thereof, substantially as described.

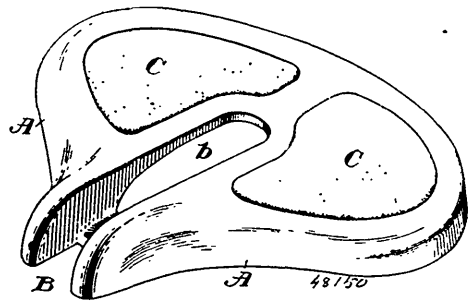
No. 48,149. Harness Attachment. (Attache de harnais.)



Allen A. Sage, Detroit, Michigan, U.S.A., 6th February, 1895; 6 years.

Claim.—1st. The herein described harness attachment consisting of the roller A, arranged on an axle a, in the frame B, the buckle tongue b, pivotally joined to the bar f, and the strap C, adapted to be used in connection with the driving rein and bridle bit, in the manner as herein shown and specified. 2nd. In a harness attachment, the combination of a roller arranged on an axle in one end of a frame and a buckle arranged in the other end of said frame for the purposes substantially as described and specified.

No. 48,150. Bicycle Saddle. (Selle de bicyclee.)



Henry Andrew Christy, Chicago, Illinois, U.S.A., 6th February, 1895; 6 years.

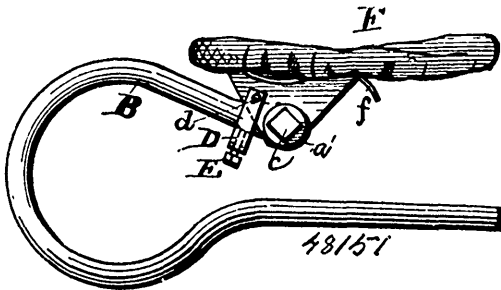
Claim.—1st. A bicycle saddle having a solid top provided with a horn portion shortened up or truncated so that it will not project between the legs of the rider, and also cut away and recessed upon its upper surface centrally of said horn portion, substantially as described. 2nd. A bicycle saddle having a solid top provided upon its upper surface with recessed or sunken portions at each side of the seat portion constructed to receive and hold removable pads, said recesses being formed with abrupt marginal walls to prevent the pads from slipping, substantially as described. 3rd. A bicycle saddle having a solid top provided upon its upper surface with recessed or sunken portions at each side of the seat portion constructed to receive and hold pads, said recesses being formed with abrupt marginal walls to prevent the pads from slipping, in combination, with pads adapted to fit said recesses so as to be removably retained therein, substantially as described. 4th. A bicycle saddle having a solid top provided upon its upper surface with recessed or sunken portions at each side of the seat portion constructed to receive and hold removable pads, and having a horn portion shortened up or truncated so that it will not project between the legs of the rider, and also cut away or recessed upon its upper surface centrally of said horn portion, substantially as described.

No. 48,151. Bicycle Saddle. (Selle de bicyclee.)

Irving G. Chatfield, Waterbury, Connecticut, U.S.A., 6th February, 1895; 6 years.

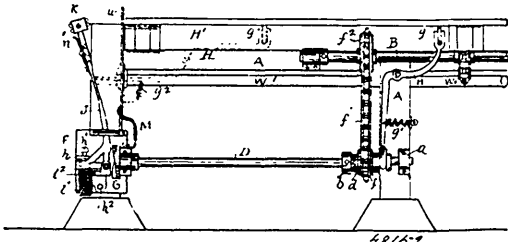
Claim. 1st. A bicycle-saddle having its frame-work composed of

two frame-pieces substantially oval in general outline, and wider at their outer rear than at their forward ends, each having an oval opening conforming to its outline, and having their outer edges higher than their inner edges, which are substantially parallel.



substantially as described. 2nd. A bicycle-saddle having its framework composed of two frame-pieces, oval in general outline, and tapering at their forward ends, having their outer edges higher than their inner edges, which are substantially parallel, and constructed with ears depending from their inner edges to receive a screw-bolt, by means of which they are clamped to a saddle-post, substantially as described. 3rd. A bicycle-saddle composed of two independent frame-pieces, having their outer edges higher than their inner edges, and together having the general form of the hip-bone, a saddle-post to which the said frame-pieces are adapted to be secured, and an adjusting device connecting the saddle-post and frame-pieces at a point in rear of the attachment of the latter to the former, substantially as described.

**No. 48,152. Lumber Stamping Attachment.** (*Attache d'etampe pour le bois.*)

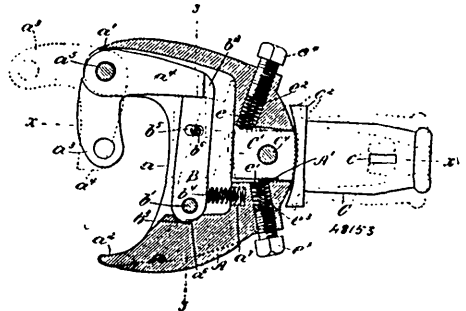


John P. Riedy, Williamsport, Pennsylvania, U.S.A., 6th February, 1895; 6 years.

*Claim.*—1st. The combination of a lumber sawing or trimming machine, with an impact stamp located so as to swing in a plane at right angles to the line of feed of the planks and with mechanism for effecting a rapid vibration of said stamp whereby the marking of the ends of the successive planks can be effected without any stoppage in their forward movement, substantially as specified. 2nd. The combination of a lumber sawing or trimming machine, with an impact stamp located so as to swing in a plane at right angles to the line of feed of the plank, power actuated mechanism for effecting quick vibration of said stamp and a controlling device for said mechanism having a portion projecting into the path of the forwardly moving plank, substantially as specified. 3rd. The combination of a lumber sawing or trimming machine, with a lever carrying an impact stamp and located so as to swing in a plane at right angles to the line of feed, a cam acting upon said lever so as to carry its stamp away from the end of the plank, a spring acting upon the lever so as to bring the stamp into contact with the end of the plank when said lever is released from the control of the cam and means for rotating said cam, substantially as specified. 4th. The combination of a lumber sawing or trimming machine, an impact stamp located so as to swing in a plane at right angles to the line of feed of the planks, mechanism for moving said stamp away from the end of the plank, a spring for bringing the stamp forcibly into contact with the end of the plank on its release and a recoil spring whereby the stamp is slightly retracted after giving its blow, substantially as specified. 5th. The combination of a lumber sawing or trimming machine, a lever carrying an impact stamp and located so as to swing in a plane at right angles to the line of feed of the plank, a shaft having a cam which acts upon said lever so as to carry its stamp away from the end of the plank, a spring acting upon the lever to bring the stamp into contact with the end of the plank when said lever is released from the control of the cam, a driving clutch for the shaft and a clutch controlling lever having a portion projecting into the path of the plank as the latter moves forward, substantially as specified. 6th. The combination of a lumber sawing or trimming machine, with a lever carrying an impact stamp and located so as to swing in a plane at right angles to the line of feed of the plank, a shaft having a cam for moving said lever so as to

carry its stamp away from the end of the plank, a spring acting upon the lever to bring its stamp into contact with the end of the plank when said lever is released from the control of the cam, a recoil spring acting upon the lever so as to effect a slight withdrawal of the stamp after it has delivered its blow, a driving clutch for the cam shaft, and a clutch controlling lever having a portion projecting into the path of the forwardly moving planks, substantially as specified. 7th. The combination of a lumber sawing or trimming machine, with a lever carrying an impact stamp and located so as to swing in a plane at right angles to the line of feed of the plank, a cam acting upon said lever so as to move the stamp away from the end of the plank, means for operating said cam and a structure carrying said lever and adjustable from and toward the face of the cam so as to vary the extent of movement imparted by the latter to the stamp lever, substantially as specified.

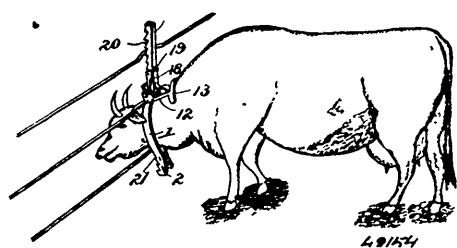
**No. 48,153. Car Coupler.** (*Attelage de chars.*)



Horace Boyd and Elias Frantz, both of Copley, Pennsylvania, U.S.A., 7th February, 1895; 6 years.

*Claim.*—1st. A car coupler provided with a draw-head having a chamber, a draw-bar or neck movably held in the chamber of said head and springs adjustably engaging said bar and neck so as to afford a range of movement of said bar or neck, substantially as and for the purposes described. 2nd. A car coupler provided with a draw-head having a rear rectangular chamber, a draw-bar provided with a hollow slotted neck and with a solid tongue pivotally supported in the chamber of said draw-head, springs engaging said tongue, and set screws engaging said springs, substantially as and for the purposes described. 3rd. A car coupler provided with a draw-head having a knuckle jointed coupling jaw and a locking device maintained in position with the tail piece of said jaw by means of a spring, a device adapted to shift said locking block out of engagement with said coupling jaw, a movable draw-bar or neck connected with said head under the tension of springs and set screws connected with said head and engaging said springs, substantially as and for the purposes described. 4th. A car coupler provided with a draw-head having a pivotally supported coupling jaw and a locking device maintained in operative position therewith by means of a spring, a releasing appliance for shifting said device out of engagement with said jaw, a draw-bar or hollow neck provided with a tongue pivoted in the rear wall of said draw-head and engaged by springs, and means for controlling the position thereof, substantially as and for the purposes described. 5th. A car coupler provided with a draw-head having a pivotally supported coupling jaw, a locking device therefor held under spring tension in engagement therewith with a pivotally supported bell crank appliance for shifting said locking device, a draw-bar provided with a dish shaped collar or yoke and a tongue pivotally supported in said draw head and spring controlled means between said head and tongue, substantially as and for the purposes described. 6th. A car coupler provided with a draw-head having a rear chamber, a draw-bar or neck pivotally supported therein under spring tension and said bar or neck provided with a friction collar or yoke adapted to limit the range of movement of said bar or neck with respect to said head, substantially as and for the purposes described.

**No. 48,154. Animal Poke.** (*Carcan.*)

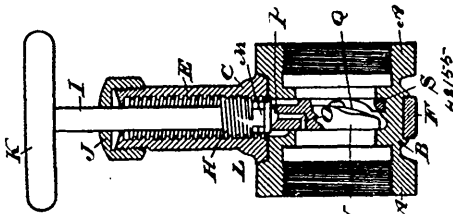


William J. Harvis and Adelbert Harvis, both of Chedi, South Dakota, U.S.A., 7th February, 1895; 6 years.

*Claim.*—An animal poke consisting of a yoke adapted to be secured

to the animal's neck, two arms rising vertically therefrom, and having a transverse lip at their upper ends, a lever pivoted between the arms, a spring for giving the lever a tendency to bear against the lip whereby the lever is held in place, two rearwardly extending rods secured to the yoke and having a plate at their ends, said plate being adapted to engage the neck of the animal and hold the pole secure, and a spur secured to the lever and adapted to engage the animal's neck, when the lever is pushed back, substantially as described.

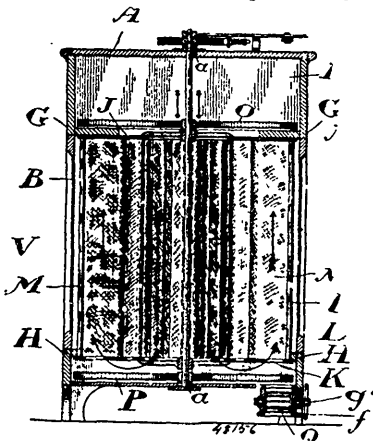
**No. 48,155. Valve. (Soupape.)**



Edmund H. Lunken, Cincinnati, Ohio, U.S.A., 7th February, 1895, 6 years.

*Claim.*—1st. In a straightway valve, the combination with the valve stem I, and the disc N, loosely coupled thereto and provided with the relief port O, of the self-adjusting member P, interposed between the disc and stem at the upper end of the relief-port and co-operating with the under surface of the lower end of the stem, substantially as and for the purpose described. 2nd. In a straightway valve, the combination with the valve stem I, and the disc N, loosely coupled thereto, and provided with the relief port O, of the self-adjusting member P, interposed between the disc and stem at the upper end of the relief port and provided with the perforations co-operating with the relief port, substantially as and for the purpose described. 3rd. In a straightway valve, the combination with the valve stem I, and the disc N, loosely coupled thereto and provided with the relief port O, of the self-adjusting member P, provided with the flaring perforation and interposed between the disc and stem at the upper end of the relief port, said perforation co-operating with the relief port, substantially as and for the purpose described. 4th. In a straightway valve, the combination, with the valve stem I, and the disc N, provided with the relief port O, of the perforated self-adjusting member P, fitted in a recess in the upper edge of the valve-disc and co-operating with the lower end of the valve stem, substantially as and for the purpose described. 5th. In a straightway valve, the combination, with the valve-stem I, and the disc N, provided with the relief port O, of the self-adjusting member P, provided with the flaring perforation and fitted in a recess in the upper edge of the valve disc and co-operating with the lower end of the valve-stem, substantially as and for the purpose described. 6th. In a straightway valve, the combination of the casing provided with the guideway R, the reciprocating disc N, provided with the rib Q, co-operating with the guide way, and the fixed wedging surfaces T, T', inclined both toward the vertical plane of the disc and toward its centre and over which the disc rides as it is forced to its seat, substantially as and for the purpose described.

**No. 48,156. Dust Collector. (Aspirateur de poussière.)**

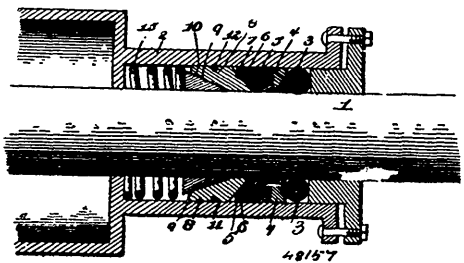


Harvey Christopher Malsness, Stratford, Ontario, Canada, 7th February, 1895; 6 years.

*Claim.*—1st. In a dust collector, a cylinder comprising an inner chamber, and a series of outer chambers formed by passing a continuous web of fabric round a series of rods connecting two spiders forming the ends of the cylinder: substantially as and for the

purpose specified. 2nd. In a dust collector, a cylinder comprising an inner chamber, and a series of outer chambers formed by passing a continuous web of fabric round a series of rods connecting two spiders forming the edges of the cylinder, one spider opening into the central chamber only and the other into all the chambers, substantially as and for the purpose specified. 3rd. In a dust collector, a cylinder comprising an upper spider J, provided with the openings f and g, and a lower spider provided with the openings h, i, j, f and g, in combination with the series of rods b, b', c, d and c', and the web of fabric L, wound round the said rods, substantially as and for the purpose specified. 4th. In a dust collector, the combination of a chamber, red dust collector, cylinder means for imparting an intermittent revolving motion to the said cylinder, means for shutting out the air from each outer chamber in succession and a knocker arranged to jar the said chamber so cut off, substantially as and for the purpose specified. 5th. In a dust collector, a circular dust outlet valve fitted within a casing, and chambered so as to receive the dust at the upper side of the casing and discharge it at the lower side, in combination with means for rotating the said valve, substantially as and for the purpose specified. 6th. In a dust collector, the combination of the casing T, open at the top and bottom, with the circular valve Q, fitting the casing T and provided with L-shaped arms forming chambers R, and with means for rotating the same, substantially as and for the purpose specified. 7th. In a dust collector, a cylinder comprising a central chamber and a series of outer cloth walled chambers, in combination with a casing so shaped as to direct the dust laden air into the central chamber, and thence up into the outer chamber from which it escapes through the meshes of the cloth, substantially as and for the purposes specified. 8th. In a dust collector, a rotatable cylinder comprising a central cloth walled chamber and a series of cloth walled outer chambers, in combination with a casing so shaped as to direct the dust laden air into the central chamber and thence up into the outer chambers, a triangular board located so as to close each outer chamber in turn, means to revolve the said cylinder intermittently, and means to agitate the chamber so cut off, substantially as and for the purpose specified. 9th. In a dust collector, the combination of the following elements, the casing A, the cylinder E, the spindle F, the ratchet wheel w, the lever r, the spring dog a', the pitman u, the crank wheel t, the shaft s, the bevel gear wheel r, the pinion g, and the driving shaft n, substantially as and for the purpose specified. 10th. In a dust collector, the combination of the following elements:—the casing A, the cylinder E, the spindle F, the ratchet-wheel w, the lever r, the spring dog a', the pitman u, the crank-wheel t, the shaft s, the bevel gear-wheel r, the pinion g, the driving-shaft n, the rotating pin p, carried by a disc on the shaft n, the knocker k, the hoop V, on the cylinder E, substantially as and for the purpose specified. 11th. In a dust collector, the combination of the following elements:—the casing A, the cylinder E, the spindle F, the ratchet-wheel w, the lever r, the spring dog a', the pitman u, the crank-wheel t, the shaft s, the bevel gear-wheel r, the pinion g, the driving shaft n, the rotating pin p, carried by a disc on the shaft n, the knocker k, the hoop V, on the cylinder E, sprocket-wheel c', connected by a sprocket-chain to the sprocket-wheel f, on the spindle g', of the rotary valve O, substantially as and for the purpose specified. 12th. In a dust collector, the combination, with the casing A, having a bottom into which the collected dust falls, of the cylinder spindle F, the revolving scraper P, the casing T, the valve Q, and means for revolving the said spindle and valve, substantially as and for the purpose specified. 13th. In a dust collector, the combination of a casing provided with an upper chamber D, having a ledge G extending around it, of the cylinder spindle F, the scraper O, and means for revolving the said scraper and spindle, substantially as and for the purpose specified. 14th. In a dust collector, the combination of the casing A, the ledge G, the cylinder spindle F, the scrapers O and P, a dust outlet, and means for revolving the said spindle, substantially as and for the purpose specified.

**No. 48,157. Rod Packing. (Garniture de tige.)**



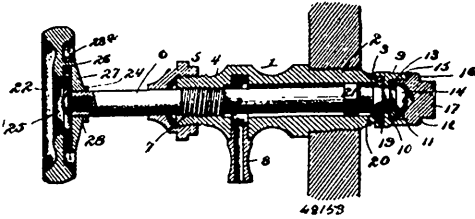
Eugene A. Bryant, Marshfield, Wisconsin, U.S.A., 7th February, 1895; 6 years.

*Claim.*—A piston rod packing consisting of a box, a rod passing through the box, a ring of soft packing material embracing the rod and arranged in one end of the box, a metallic ring lying adjacent to the said packing ring and having a bevelled face adapted to partially embrace the ring, a rubber ring adjacent to the metallic ring



and having its remaining end formed with a flaring inwardly inclined face, a metallic section adjacent to the rubber section and fitting within the inclined face and having a similarly inclined face on its remaining end, a second metallic section arranged adjacent to the first metallic section and fitting within the inclined face thereof, said second metallic section being formed of a series of independently movable longitudinal sections, and a spring bearing against the said section and operating to keep the several sections of the packing engaged, substantially as described.

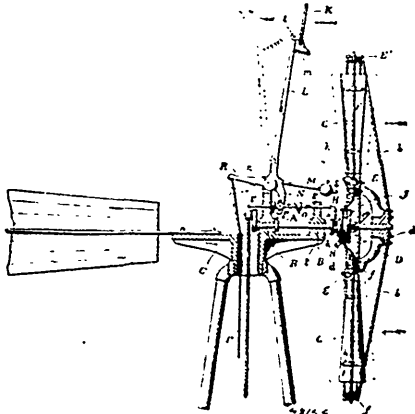
**No. 48,158. Gage Cock. (Robinet-jauge.)**



Charles R. Moore and Herbert E. Lane, both of Newport, Vermont, U.S.A., 7th February, 1895; 6 years.

*Claim.*—1st. In a gage cock, the combination of the tubular body, provided with a raised valve seat on its inner end, a longitudinally movable valve-stem arranged to work through said body, and a valve-disc loosely or pivotally mounted on one end of said valve-stem and provided with a renewable packing ring adapted to work against said valve-seat, substantially as set forth. 2nd. In a gage cock, the combination of a tubular body provided with a valve-seat on its inner end, a longitudinally-adjustable valve-stem arranged to work through said valve-body and provided near one end with a squared combined guide and cleaning collar adapted to work in said body, and a valve disc loosely or pivotally mounted on one end of said valve-stem and working against said valve-seat, substantially as set forth. 3rd. In a gage cock, the combination of a tubular valve body provided with a raised valve-seat on its inner end, the longitudinally-movable valve-stem working in said body and provided at one end with a squared projection and a threaded socket, and adjacent to such end with an exteriorly-tapered collar, a valve disc loosely mounted to turn on the valve-stem between the squared projection and tapered collar thereof, and provided at one side with an interiorly-threaded annular flange and at its opposite side with an annular seat, a soft metal renewable packing ring fitted in said seat and adapted to be held against said tapered collar on the valve-stem, a washer with a squared opening fitted over said squared projection, a pivot clamp-screw working over said washer and engaging the threaded socket of the valve-stem, and a threaded cap-plug fitted in the interiorly-threaded annular flange of the valve-disc to inclose said washer and screw, substantially as set forth. 4th. The combination with a valve-stem or the like, of a metallic hand-wheel provided with a central hub-rib having a series of integral rivet pins projected from one side, a wheel-plate spaced from the hub-rib and secured on said pins and having a squared collar, and a heat non-conducting packing interposed between said plate and said rib, substantially as set forth.

**No. 48,159. Wind Mill. (Moulin à vent.)**

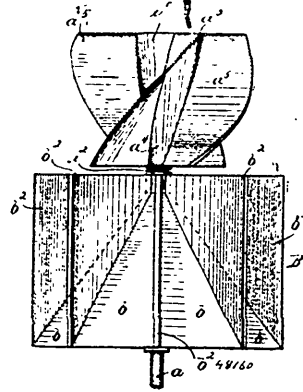


Titus Becker, New Dundee, Ontario, Canada, 7th February, 1895; 6 years.

*Claim.*—1st. The combination of a disc K, weight M, arms N and R, and rod O, secured to lever L, said lever pivoted to casting

C, the clutch J, the cranks H, secured to rods G, the rings E and E', secured to hub D, by straps b and bolts d, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the disc K, weight M, arms N and R, and rod O, secured to lever L, the cranks H, fastened to rods G and entering groove of clutch J, the rings E and E', secured to hub D, by straps and bolts, substantially as and for the purpose hereinbefore set forth.

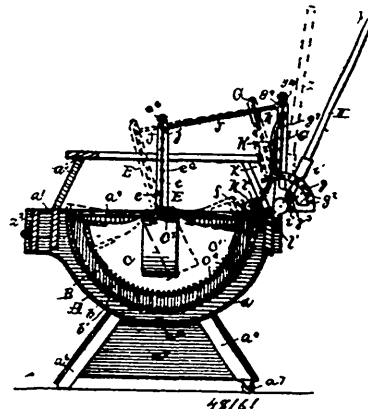
**No. 48,160. Wind Mill. (Moulin à vent.)**



Edwin Ruthven Whitney, Manchester, New Hampshire, U.S.A., 7th February, 1895; 6 years.

*Claim.*—1st. The combination with a wind motor wheel composed of a conical body and series of spiral blades thereon, mounted to turn about a vertical axis, of a deflector coaxial with said wheel and adapted to deflect the air from a direction lateral to their common axis towards a direction in line therewith, substantially as and for the purpose described. 2nd. The combination of a wind motor wheel composed of a conical body mounted on a vertical shaft, and a series of vanes projecting radially from said body, and extending in a spiral direction from the apex to the base thereof, with a deflector coaxial with said motor wheel, and having deflecting surfaces converging towards the apex of said wheel body, substantially as described. 3rd. The combination of a wind motor wheel composed of a conical body mounted to turn on a vertical axis and a series of vanes projecting radially from said body, and extending in a spiral direction from the apex to the base thereof, with a deflector coaxial with said wheel and adapted to deflect a current of air thereto consisting of a series of deflecting surfaces, inclined from the horizontal towards the vertical direction, and a series of concentrating blades, radiating from the axis of the deflector, substantially as described.

**No. 48,161. Washing Machine. (Machine à laver.)**



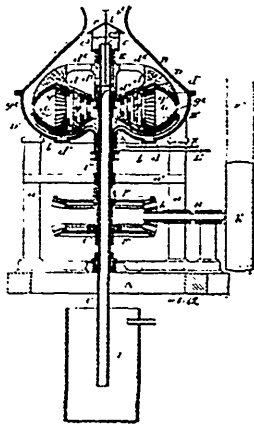
Joseph Fletcher, Philow, Clinton, Iowa, U.S.A., 7th February, 1895; 6 years.

*Claim.*—1st. In a washing machine of the class hereinbefore described, in combination with the suds box A, having an arc-shaped bottom, the rubbers B, C, having a conformity of outline with each other and with the arc-shaped bottom of the suds box, a standard as E, fixed to the upper rubber, a standard G, having the operating handle fixed thereto, a link rod as J, adjustably secured to and pivotally connecting the standards or arms E and G, and a link rod K, adjustably secured to and pivotally connecting the standard G, and the lower rubber B, whereby the rubbers B and C, are given

simultaneous movements in opposite directions, substantially as described. 2nd. In a washing machine of the class hereinbefore described, in combination with the suds box A, having an arc-shaped bottom, the rubbers B, C, having a conformity of outline with each other and with the arc-shaped bottom of the suds box, a standard, as E, fixed to the upper rubber C, and provided with a series of bearings  $e^2$ , a standard G, having a series of bearings  $g^2$ , a connecting link rod J, adjustable in the bearings  $e^2$  and  $g^2$ , and an adjustable operating handle I, substantially as described. 3rd. In a washing machine of the class hereinbefore described, in combination with the suds box having an arc-shaped bottom, the rubbers B, C, having a conformity of outline with each other and with the arc-shaped bottom of the suds box, a standard, as E, fixed to the upper rubber, a standard G, a link rod J pivotally connecting the arms E and G, a link rod K pivotally connecting the standard G and the rubber B, an operating handle I, adjustably fixed to the arm G by means of the quadrant shaped plate  $g^1$ , with a series of holes  $g^2$ , and the hole  $g^2$  and securing bolts, and adjustable bearings for the standard G, substantially as described. 5th. In a washing machine of the class hereinbefore described, in combination with a suds box A having an arc shaped bottom, the rubbers B, C, having a conformity of outline with each other and with the arc shaped bottom of the suds box, an arm as E, fixed to the upper rubber C, an arm G, a link rod J connecting the arms E and G, link rod K connecting the arm G and rubber B, and adjustable plates H, with conical bearings  $h$ , for cone shaped journals  $g$ , on the arm G, substantially as described.

**No. 48,162. Ore Crusher. Etc.**

(Machine à broyer le minerai etc.)



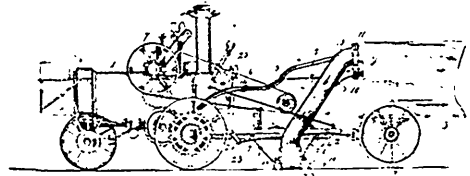
James Sutherland, Parkville, New York, U.S.A., 7th February, 1895; 6 years.

*Claim.*—1st. A grinding mill comprising upper and lower tables having grinding surfaces between which the material is fed, means for rotating one of the tables relatively to the other, a hollow delivery shaft at the axis of rotation of said rotary table with a receiving mouth above the rotary table and means for directing the ground material along the exterior of the upper table from the grinding surfaces to the receiving mouth of the hollow delivery shaft, substantially as set forth. 2nd. The combination with the upper and lower grinding tables and means for rotating them simultaneously in opposite directions, of a hollow shaft having a receiving mouth located above the upper table and the casing surrounding the grinding tables and forming between it and the exterior of the upper table a passageway to the receiving mouth of the hollow shaft, the said hollow shaft forming an outlet for the pulverized ore after it has passed between the grinding tables, substantially as set forth. 3rd. The combination with the grinding tables and means for rotating one of them relatively to the other, of one or more mullers interposed between the opposite faces of the grinding tables, the said mullers being geared to the opposite faces of the grinding tables, substantially as set forth. 4th. The combination with the casing and the rotating grinding tables located therein, of a general outlet for the pulverized ore through the shaft at the center of the grinding tables and an amalgamating trough located in the bottom of the casing beneath the low table for amalgamating the ore which shall escape between the lower table and the casing, substantially as set forth.

5th. The combination with the grinding tables, of a casing having an amalgamating trough beneath the tables, the lower table forming a shield or cover over the trough, substantially as set forth. 6th. The combination with the grinding tables and means for rotating one of them relatively to the other, of one or more mullers interposed between the opposite faces of the grinding tables, the said mullers being provided with a series of annular ribs, and the opposite faces of the grinding tables being provided with a corresponding series of annular grooves, the said mullers being geared to the opposite faces of the grinding tables, substantially as set forth.

**No. 48,163. Street Cleaning Machine.**

(Machine pour nettoyer les rues.)

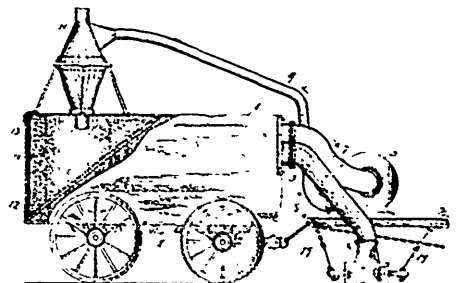


Robert W. Furnas, John H. Furnas and Jesse Kellum, all of Indianapolis, Indiana, U.S.A., 7th February, 1895; 6 years.

*Claim.* 1st. In a pneumatic street cleaning machine, a gathering hood extended transversely with the line of movement of the machine, and provided with a top close to the surface of the street, and aprons depending therefrom, and adapted in conjunction with the street surface to form a transverse channel, and means of maintaining a current of air through such channel, substantially as shown and described. 2nd. In a street cleaning machine, a dirt receptacle, a gathering hood adapted to contact with the street and in conjunction with the street surface to form a laterally extending channel, a pipe extending from such hood to the dirt receptacle, pipes extending from the dirt receptacle to the ends of such hood forming circuits through the hood, pipes and dirt receptacle, and means of maintaining a current of air through such circuits, substantially as shown and described. 3rd. A street cleaning machine consisting of an engine, a dirt receptacle connected therewith, a hood, pipes so connecting the hood and dirt receptacle as to form a circuit through such hood, pipes and dirt receptacle, a pipe leading from such dirt receptacle to a fire box, and means for forcing air through such pipes, substantially as shown and described. 4th. In a street cleaning machine, a gathering hood consisting of rigid sections flexibly connected, and aprons depending therefrom to contact with the street, and form a channel in such hood for the passage of air, substantially as shown and described. 5th. In a street cleaning machine, a gathering hood consisting of rigid sections flexibly connected, and aprons depending therefrom to contact with the street and form channels in such hood for the passage of air, such aprons formed continuous of flexible material reinforced by small sections of metal plates secured thereto, substantially as shown and described. 6th. In a street cleaning machine, a gathering hood, a dirt receptacle, an exhaust pipe leading from such hood to such dirt receptacle, aprons dividing such hood into one main central channel with a small longitudinal channel on the side of such main central channel, and a pipe leading from such dirt receptacle into the main central channel in such hood, substantially as shown and described. 7th. In a street cleaning machine, a gathering hood, a dirt receptacle, an exhaust pipe leading from such hood to such dirt receptacle, aprons dividing such hood into one main central channel, and a small longitudinal channel on each side of such main central channel, and a pipe leading from such dirt receptacle to the main central channel in such hood, substantially as shown and described.

**No. 48,164. Street Cleaning Machine.**

(Machine pour nettoyer les rues.)



Robert W. Furnas, John H. Furnas, and Jesse Kellum, all of Indianapolis, Indiana, U.S.A., 7th February, 1895; 6 years.

*Claim.*—1st. In a pneumatic street cleaning machine, a gathering

hood adapted to convey a current of air transversely with the line of movement of the machine and whose top is parallel with and close to the surface of the street, a dirt box, an exhaust fan, and a pipe leading from the hood to the upper end of the box and another from the box to the exhaust fan, substantially as shown and described. 2nd. In a pneumatic street cleaning machine, a gathering hood, a dirt box, a centrifugal dust arrester provided with a dust box below it, and means of exhausting the air from the hood through the upper end of the dirt box and blowing it into the dust arrester tangentially, substantially as shown and described. 3rd. In a pneumatic street cleaning machine, a gathering hood, a dust arrester, an exhaust fan, means of conveying the air from the hood to the exhaust fan and means of conveying a portion of the current from the exhaust fan to the dust arrester and a portion to the hood, substantially as shown and described. 4th. In a pneumatic street cleaning machine, a gathering hood, a dirt box, a centrifugal dust arrester, and means of exhausting the air from the hood through the dirt box and propelling a small portion of it to the dust arrester and the balance to the hood, substantially as shown and described. 5th. In a pneumatic street cleaning machine, a gathering hood, a dirt box, a pipe extending from the hood to the dirt box, an exhaust fan, a pipe extending from the box to the fan, a centrifugal dust arrester, and means of conveying a portion of the current to the dust arrester and a portion of it to the hood, substantially as shown and described. 6th. In a pneumatic street cleaning machine, an air tight dirt box, a gathering hood, a pipe leading from the hood to the dirt box, an exhaust fan, a pipe leading from the dirt box to the fan, a dust box, a centrifugal dust arrester mounted on the dust box, a divided pipe leading from the exhaust fan, a small branch of it extending to the dust arrester and a larger branch of it leading to the hood, substantially as shown and described. 7th. In a pneumatic street cleaning machine, a gathering hood adapted to convey a current of air transversely with the line of movement of the machine, and a means of exhausting the air from the hood, such hood being gradually increased in dimensions from the point where the air enters it to the exit opening, substantially as shown and described. 8th. In a pneumatic street cleaning machine, a gathering hood extended transversely with the line of movement of the machine, and an exhaust pipe leading from one end of the hood, the other end of the hood being open and smaller than the exit end, substantially as shown and described. 9th. In a pneumatic street cleaning machine, a double hood consisting of two separate hoods one within the other, substantially as shown and described. 10th. In a pneumatic street cleaning machine, a double hood consisting of two separate hoods, one inclosed within the other, and means of exhausting the air from the inner hood and returning it to the outer hood, substantially as shown and described. 11th. In a pneumatic street cleaning machine, a double hood consisting of two separate hoods, one inclosed within the other, one end of the inner hood being open and an exhaust pipe leading from the other end of the same, a return pipe adapted to convey a portion of the current of air into the outer hood, and a means of exhausting the air from such inner hood, and returning a portion thereof to the outer hood, substantially as shown and described. 12th. In a pneumatic street cleaning machine, a double hood extended transversely across the path of the machine, and parallel with and close to the street surface, and consisting of two separate hoods, one inclosed within the other, and means of exhausting the air from the inner hood and returning it to the outer hood, substantially as shown and described. 13th. A pneumatic street cleaning machine, consisting of a suitable carriage, an air tight dirt box mounted on such carriage, a double hood supported from such carriage and contacting with the street surface and consisting of two separate hoods, one inclosed within the other, an exhaust pipe extending from one end of the inner hood to the air tight dirt box, a fan mounted on the carriage, means of actuating such fan, a pipe leading from the air tight dirt box to the fan, a dust box mounted on the carriage, a centrifugal dust arrester mounted on the dust box, and a divided pipe leading from the exhaust fan, a small branch of it leading to the dust arrester and a larger branch to the hood, substantially as shown and described.

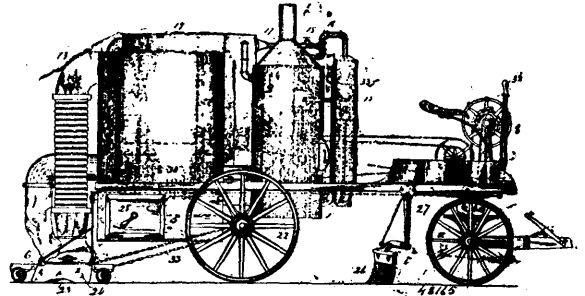
#### No. 48,165. Street Cleaning Machine.

(Machine pour nettoyer les rues.)

Robert W. Furnas, John H. Furnas, and Jesse Kellum, all of Indianapolis, Indiana, U.S.A., 7th February, 1895; 6 years.

*Claim.*—1st. The combination, in a pneumatic street cleaning machine, of a gathering hood, a dust collecting chamber, means of introducing steam into the dust collecting chamber, pipes forming a continuous circuit through the hood and steam filled dust collecting chamber, and means of maintaining a current of air through such circuit. 2nd. The combination, in a pneumatic street cleaning machine, of a gathering hood, a dust collecting chamber, a furnace, and an exhaust fan and connections for conducting air from the hood through the dust collecting chamber to the furnace. 3rd. The combination, in a pneumatic street cleaning machine, of a gathering hood, a dust collecting chamber, a furnace, means for introducing steam into the dust collecting chamber, and an exhaust fan and connections for conducting air from the hood through the steam filled dust collecting chamber to the furnace. 4th. The combination, in a pneumatic street cleaning machine, of a gathering hood, a dust collecting chamber, a furnace, means of introducing steam into the dust collecting chamber, and an exhaust fan and connections for

conducting air from the hood through the steam filled dust collecting chamber, and then a portion of it therefrom to the furnace, and a portion to the hood, substantially as shown and described. 5th. The combination in a pneumatic street cleaning machine, of a gathering hood, a dust collecting chamber a pipe leading from the hood to the upper end of the dust



collecting chamber, an engine and boiler, a pipe leading from the engine to the upper end of the dust collecting chamber for introducing steam therein, an exhaust fan and means for driving it, an air passage leading from near the lower end of the dust collecting chamber up through it centrally out of its top to the exhaust fan, a pipe leading from the exhaust fan to the hood, substantially as shown and described. 6th. In a pneumatic street cleaning machine, the combination of a gathering hood, a furnace, an exhaust fan and pipe connections for conveying the air from the hood to the dust collecting chamber and then a portion of it to the furnace and a portion back to the hood, and a valve located in said pipes for regulating the proportions of air which shall pass to the furnace or be returned to the hood respectively, substantially as shown and described. 7th. In a pneumatic street cleaning machine, the combination of a gathering hood, a dust collecting chamber, a furnace, an exhaust fan, pipes leading from the hood to the dust collecting chamber and from the dust collecting chamber to the exhaust fan, a pipe leading from the exhaust fan to the furnace and another to the hood, and a valve located in one of said pipes for regulating the proportion of air which shall pass to the furnace or be returned to the hood respectively, substantially as shown and described. 8th. In a pneumatic street cleaning machine, a dust collecting chamber, an engine, an expander to which steam is conducted from the engine, and pipes leading from the expander to the dust collecting chamber for introducing steam into the latter. 9th. The combination, in a pneumatic street cleaning machine, of a dust collecting chamber, a steam engine and boiler, an expander, a pipe leading from the expander to the dust collecting chamber for introducing steam therein, and another pipe leading from the expander to the smoke stack of the boiler, substantially as shown and described. 10th. In a pneumatic street cleaning machine, the combination of a gathering hood, a dust collecting chamber, a pipe leading from the hood and entering the dust collecting chamber tangentially, means for introducing steam into the dust collecting chamber and an opening for the escape of air therefrom, and means of maintaining a current through the pipes, hood and dust collecting chamber, substantially as shown and described. 11th. In a pneumatic street cleaning machine, a gathering hood whose front apron is adapted to contact with the street surface and having a rear apron which extends almost but not entirely to the surface of the street, and means of exhausting the air from such hood, substantially as shown and described. 12th. In a pneumatic street cleaning machine, a hood adapted to contact with the surface of the street and having a rear apron extending almost but not entirely to the surface of the street and being formed in sections and hinged at the top so that it can swing backward but not forward, and means of exhausting the air from the hood, substantially as shown and described. 13th. In a pneumatic street cleaning machine, a gathering hood consisting of two hoods, one inclosed within the other, the rear apron of the inner hood extending almost but not entirely to the surface of the street, a dust collecting chamber, an exhaust fan and connections for exhausting the air from the inner hood, introducing it into the dust collecting chamber and returning it to the outer hood. 14th. In a pneumatic street cleaning machine, a gathering hood consisting of two hoods, one enclosed within the other, the rear apron of the inner hood extending almost but not entirely to the surface of the street, a dust collecting chamber, a furnace, and connections for exhausting the air from the inner hood, passing it through the dust collecting chamber and conducting a portion therefrom to the furnace and a portion back to the outer hood. 15th. In a pneumatic street cleaning machine, a double gathering hood, one being within the other, the rear apron of the inner hood extending almost to the street surface and being formed of sections and so hinged at the top as to swing backward but not forward, a dust-collecting chamber, a pipe leading from the inner hood to the dust-collecting chamber and an exhaust fan and connections for exhausting the air from the inner hood, introducing it into the dust collecting chamber and returning it to the outer hood. 16th. In a pneumatic street cleaning machine, a gathering hood adapted to drag upon the surface of the street, suitable connections with the framework of the machine whereby

such hood may have play in any direction, and friction rollers mounted at the ends of such hood to protect the hood from contact with the street curbing. 17th. In a pneumatic street cleaning machine, a gathering hood adapted to contact with the surface of the street, friction rollers mounted horizontally on the end of such hood to prevent contact with the curb stone, an opening at the end of the hood whereby the dirt near the curb-stone can be drawn into the hood, and means of exhausting the air from the hood. 18th. In a pneumatic street cleaning machine, a gathering hood adapted to contact with the surface of the street, an exhaust pipe leading from the hood, and a deflector mounted within the hood under the opening therefrom into the pipe, and so arranged as to deflect the air into such pipe. 19th. In a pneumatic street cleaning machine, a gathering hood adapted to contact with the surface of the street, a dust chamber, a pipe leading from the hood to the dust chamber, a pyramidal deflecting block fastened by a cable so as to drag on the street's surface within the hood immediately beneath the opening therefrom into the suction pipe, and means of conveying the air from the hood to the dust chamber.

**No. 48,166. Paper Doll. (Poupée en papier.)**



The Sackett & Wilhelms Lithographing Company, assignees of Edwaad C. Betzig, all of New York, State of New York, U.S.A., 8th February, 1895; 6 years.

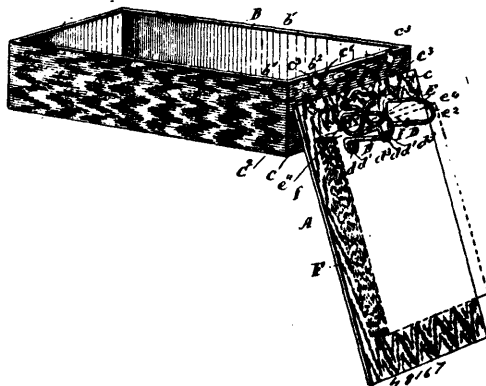
*Claim.*—1st. The herein described paper-doll, comprising a body having an integral head and slits cut, from the edges of the body toward the neck portion, forming thereby integral extensions, in combination with a detachable garment having parts overlapped by the said extensions when the garment is adjusted to the body, substantially as described. 2nd. The herein described paper-doll, comprising a body having an integral head and slits cut from the edges of the body toward the neck portion, forming thereby integral extensions, in combination with a detachable garment having tabs or projections adapted to be overlapped by the said extensions, when the garment is adjusted to the body, substantially as described. 3rd. The herein described paper-doll, having a body and integral arms inturned towards the body, combined with a detachable garment having parts adapted to be overlapped by the inturned arms, when the garment is adjusted to the body, substantially as described. 4th. The herein described paper-doll having a body and integral arms inturned towards said body, combined with a detachable garment having parts adapted to be overlapped by the inturned arms, and parts to rest thereon, when the garment is adjusted to the body, substantially as described. 5th. The herein described paper-doll, comprising a body having an integral head and slits cut from the edges of the body toward the neck portion, forming thereby integral extensions, and having also arms inturned towards the body, in combination with a detachable garment having parts adapted to be overlapped by said extensions, and by said inturned arms, when the garment is adjusted to the body, substantially as described. 6th. The herein described paper-doll, comprising a body having an integral head and slits cut from the edges of the body toward the neck portion, forming thereby integral extensions, and having also arms inturned towards the body, in combination with a detachable garment having parts adapted to be overlapped by said extensions, by said inturned arms and adapted to rest on the latter, when the garment is adjusted to the body, substantially as described.

**No. 48,167. Bill File. (Serre-papier.)**

Wells Lowry Brewer, Rochester, New York, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. In a bill file, the combination of receiving wires D,

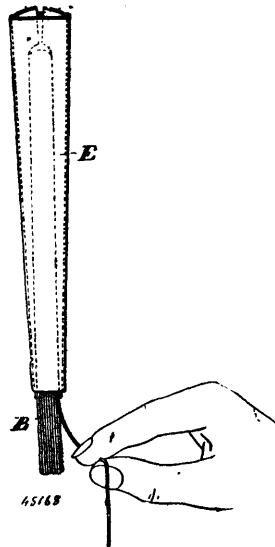
transfer wires E, co-operating with the wires D, and having their free ends normally interlocked with the corresponding ends of the wires D, and a spring for separating the interlocking ends of said wires, substantially as and for the purpose described. 2nd. In a bill file, the combination of receiving wires D, provided with re-



cessed ends having lateral slots or recessed  $d^2$ , transfer wires E, co-operating with the wires D, and having their free ends provided with projections  $e^2$ , for entering the lateral recesses  $d^2$ , and a spring for separating the interlocking ends of said wires, substantially as and for the purpose specified. 3rd. In a bill file, the combination of a receiving wire D, and a spring transfer wire E, having its free end normally interlocked with the corresponding end of the wire D, substantially as and for the purpose set forth. 4th. In a bill file, the combination of a base piece A, a stationary receiving wire D, and a transfer wire E secured to the base piece A, and formed with an arched portion  $e^2$ , having its free end normally interlocked with the corresponding end of the stationary receiving wire D, and a spring portion  $e^4$ , interposed between the base piece and said arched portion, substantially as and for the purpose described. 5th. In a bill file, the combination of a base piece A, the two receiving wires D formed of a single piece, laterally extending base loops  $d$ , formed of said piece and interposed between the receiving wires D, fastening means  $d^1$  for securing said piece to the base piece, and a transfer wire co-operating with the receiving wire, substantially as and for the purpose specified. 6th. In a bill file, the combination of a base piece A, receiving wires D, transfer wires E formed of a single piece and having the free ends arched and normally interlocked with corresponding ends of the receiving wires D, base loops  $e$  formed of said piece and interposed between the transfer wires and having spring portions  $e^3$ , substantially as and for the purpose set forth. 7th. In a bill file, the combination of a base piece A, receiving and transfer wires on the base piece, and a casing or cover B removably hinged to said base piece, substantially as and for the purpose described.

**No. 48,168. Device for Holding Skein Threads.**

(Appareil pour tenir les écheveaux de fil.)

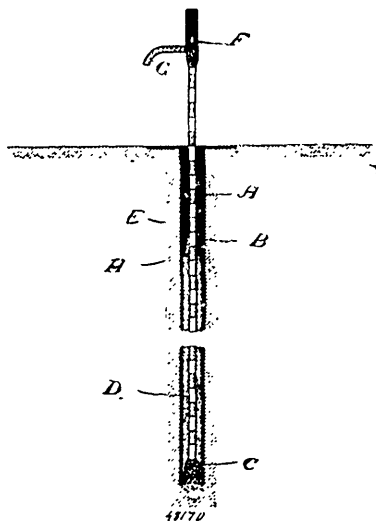


Leonard Owen Smith, Philadelphia, Pennsylvania, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. A device for holding silks or threads, consisting of an outer envelope or casing open at one or both ends, with an inner

card to carry said silks or threads, said parts being co-operatively conformed to prevent the card from being withdrawn from said envelope except in one direction, substantially as described. 2nd. A device for holding silks or threads, consisting of an outer envelope or casing open at both ends, with an inner card to carry said silks or threads, said parts being co-operatively conformed to prevent the card from being withdrawn from said envelope except in one direction, substantially as described. 3rd. A device for holding silks or threads, consisting of an outer casing or envelope open at both ends, the opening at one end being narrower than the opposite end with an inner card of substantially the same configuration as the envelope, substantially as described. 4th. A device for holding silk or threads, consisting of an elongated card provided with a recess at one end for receiving said threads or silks, and of a case or wrapper so conformed relative to said card as to resist withdrawal of card excepting in one direction, substantially as described. 5th. A device for holding embroidery silk or thread, consisting of an elongated card the opposite edges of which incline toward each other, said card carrying longitudinally thereon the skein of thread, with an outer casing enveloping said card and shaped to correspond therewith, said casing being open at the narrower end to permit the threads to be independently withdrawn there-through, substantially as described. 6th. A device for holding embroidery silks or threads consisting of an elongated, tapered card recessed at the broader end and enveloped in a casing of corresponding shape and size, said casing being open at the narrower end to permit threads mounted upon said card to be withdrawn from the holder through the narrower end of the casing without displacing said card, substantially as described. 7th. A device for carrying threads consisting of an elongated card, the edges of which incline toward each other, said card being recessed as described, a skein of thread longitudinally disposed on said card with an envelope open at both ends and surrounded the same, substantially as and for the purpose specified. 8th. A device for holding silks or threads consisting of a casing carrying an inner card recessed or perforated at one or both ends and adapted to carry a skein of thread a portion of said card adjacent to a recess at one end being bent or extended over the adjacent edge of the case or envelope to prevent said card from being withdrawn excepting in one direction, substantially as described. 9th. In a device for holding silks or threads consisting of an elongated casing or envelope, an inner card recessed or perforated at one end and supporting a skein of thread, the portion of said card adjacent to said recess being hooked over the adjacent end of the case and attached thereto to prevent the parts from being separated, substantially as described. 10th. A device for holding threads consisting of a substantially parallel sided casing or envelope carrying an inner card recessed or perforated at one end and supporting a skein of thread, the portion of the said card adjacent to the recess being hooked over the end of the case and attached thereto by a suitable adhesive substance to prevent the parts from being separated, substantially as described. 11th. A device for carrying silks or threads consisting of a casing open at both ends carrying an inner card recessed at the upper end and supporting a skein of thread, the portion of the card on each side of the recess being partially or wholly bent over the adjacent end of the casing and attached thereto to prevent the withdrawal of the card, substantially as described.

**No. 48,170. Automatic Apparatus for Raising Liquids.** (*Appareil pour pomper les liquides.*)

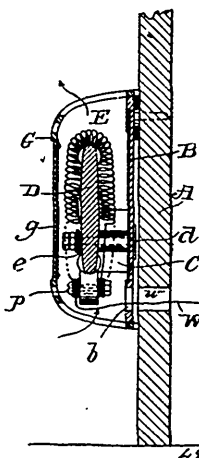


Benjamin Kerr, Toronto, Ontario, Canada, 8th February, 1895; 6 years.

*Claim.*—1st. An automatic apparatus for raising liquids, comprising an ejecting pipe with an enlargement at its lower end which approximately fills the outer casing, by means of which the natural gas contained in the earth may be utilized to raise the water through the ejecting pipe, and discharge the same above the surface of the earth, substantially as described and specified. 2nd. In an automatic apparatus for raising liquids, the combination of outer casing A, ejecting pipe B, concentrator G, and discharge spout G, substantially as described and for the purpose specified. 3rd. In an automatic apparatus for raising liquids, the combination of outer casing A, ejecting pipe B, concentrator C, discharge spout G, upper enlarged end F, substantially as described and for the purpose specified.

**No. 48,171. Electric Heater.**

(*Appareil de chauffage électrique.*)

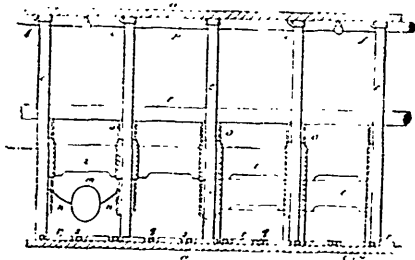


The Consolidated Car Heating Company, assignee of James F. McElroy, both of Albany, New York, U.S.A. 8th February, 1895; 6 years.

*Claim.*—1st. In an electric heater, the combination of an elongated elliptically formed porcelain core, a spiral groove extending from one end of the core to the other, a coiled wire wound in the form of a spiral spring placed in said groove, said porcelain core suitably mounted, substantially as described and for the purpose set forth. 2nd. In an electric heater, the combination of a plate secured to the riser of the seat of a street car, a post protruding from said plate, an elliptically formed porcelain core secured to said post, a spiral groove extending from one end of said elliptically formed core to the other, a coiled wire wound in the form of a spiral spring

**No. 48,169. Cattle Stall for Ships.**

(*Stalle à bestiaux pour vaisseaux.*)



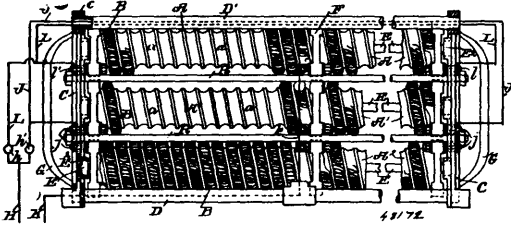
John Rooth, Douglas, Isle of Man, 8th February, 1895; 6 years.

*Claim.* 1st. Cattle stalls for shipboard arranged side-by-side in rows running fore and aft with alley ways between the rows, and constructed with stowable stanchions c, and shifting boards b and i, so as to be readily erected and taken apart, combined with bolsters or pads at the back of such stalls, and collars or stocks for embracing the necks of the animals, substantially as described and illustrated. 2nd. In shipboard cattle stalls, the collars m for encircling the animals' necks, connected by short lengths of chain or rope n n, with slide rods o o, substantially as described and illustrated. 3rd. In shipboard cattle stalls, in combination, floor battens arranged both fore and aft and thwartship with passage ways for drainage in the fore and aft battens, pads for the animals' rumps, and collars or stocks for their necks, substantially as described and illustrated.

placed in said groove, a front piece secured to said plate placed about said core and winding, a series of openings at the top and bottom of said front piece, substantially as described and for the purpose set forth. 3rd. In an electric heater, an elliptically formed elongated porcelain core mounted within a radiator, an arm connected with said porcelain core provided with an elongated slot, a bolt passing through said elongated slot for the purpose of securing one end of said core, a spring washer placed in contact with the head of said bolt and said arm, arranged in such a manner that a longitudinal and transverse motion may be provided for in said porcelain core, substantially as described and for the purpose set forth. 4th. In an electric heater, the combination of two or more elliptically formed elongated porcelain cores, a projecting arm placed on the end of each of said cores arranged in such a manner that said arms shall pass each other forming an overlapping joint, a coiled wire wound in the form of a spiral spring extending in a spiral path along each of said cores, said porcelain cores suitably mounted within a radiator, a front piece having openings at the top and bottom, substantially as described and for the purpose set forth.

**No. 48,172. Electric Heater.**

(Appareil de chauffage électrique.)

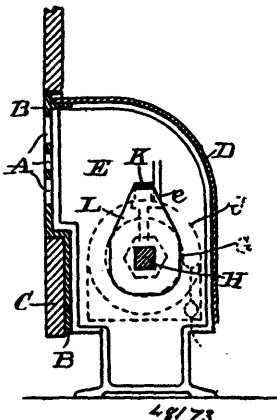


The Consolidated Car Heating Company, assignee of James F. McElroy, both of Albany, New York, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. In an electric heater, the combination of a frame, two or more spindles mounted therein, a coil of wire traversing in a spiral path about each of said spindles, a tube secured to said frame into which the live wires are placed, said live wires connected with the coils on said spindles, substantially as described and for the purpose set forth. 2nd. In an electric heater, a frame provided on each side with a tube, a series of non-conductor spindles secured at each end of said frame, a coiled spiral spring extending in a spiral path about each of said spindles, a wire provided with a cut-out connecting two of the spindles, a wire provided with a cut out connecting with one of said spindles, each of the live wires passing into said tube, substantially as described and for the purpose set forth. 3rd. In an electric heater, the combination of a frame consisting of an end piece containing a chair for the reception of a plate, a non-conducting spindle, a bolt passing through said plate and longitudinally through said spindle, a tube placed on each side of said frame secured at one end to the end of said frame, the opposite end of said tube movable within a collar in said frame, a series of rods passing through said frame from end to end capable of adjustment, substantially as described and for the purpose set forth.

**No. 48,173. Electric Heater.**

(Appareil de chauffage électrique.)

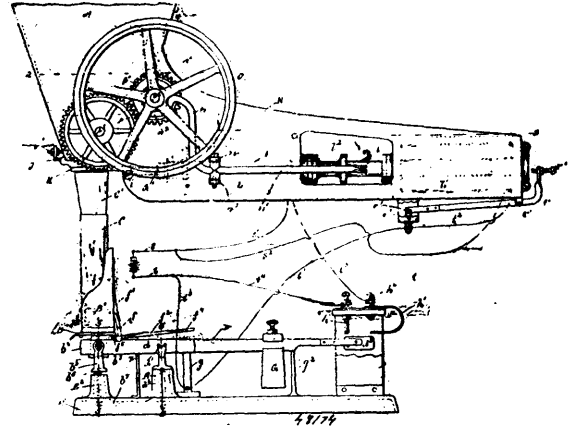


The Consolidated Car Heating Company, assignee of James F. McElroy, both of Albany, New York, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. In an electric heater, a spindle constructed of non-conducting substance, a rod passing therethrough, an arm at the end of said spindle supported to the end of the heater, a resistant

material placed on said spindle, all suitably encased within a radiator having an opening at the top and at the bottom, substantially as described and for the purpose set forth. 2nd. In an electric heater, a non-conducting spindle, wire coiled about the same, said spindle mounted at each end within a radiator, said radiator provided with a metallic plate curved to form a concave surface toward the front of the radiator, with a means for introducing air to the interior of the heater near the bottom thereof and emitting the same near the top thereof, substantially as described and for the purpose set forth.

**No. 48,174. Automatic Weighing and Package Filling Machine. (Machine automatique à empaqueter et peser.)**



William Henry Doble, assignee of Edward Henry Dewson, both of Quincy, Massachusetts, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. In an automatic weighing and package filling machine, the combination with a hopper, a weighing scale and a gate which controls the outlet of the hopper, of a solenoid whose core is connected with the gate and wires leading therefrom, a source of electrical supply, a contact piece connected with the scale beam which when the scale beam tips completes the circuit and the core of the solenoid moves in a direction to close the gate, the circuit being broken by the dropping of the scale beam when the package is removed, and means whereby when a box is again placed on the scales electrical connection is automatically made whereby the core is thrown in the reverse direction and the gate is opened, substantially as described. 2nd. In an automatic weighing and package filling machine, the combination with a hopper, a weighing scale, and a gate controlling the outlet of the hopper, of a double solenoid having a core connected with the gate, and wires leading therefrom, a source of electrical supply, a contact piece connected with the scale beam which when the scale beam tips completes the circuit and the core of the solenoid moves in a direction to close the gate, the circuit being broken by the dropping of the scale beam when the package is removed, and means whereby when a box is again placed on the scales electrical connection is automatically made whereby the cores are thrown in the reverse direction and the gate is opened, substantially as described. 3rd. In an automatic weighing and package filling machine, the combination with a hopper, a weighing scale, and a gate controlling the outlet of the hopper, of a double solenoid having cores connected with the gate, a contact piece on the scale beam, two terminal pieces adapted to be electrically connected by the contact piece when the scale beam tips, and suitable wires connected with the said terminals and solenoids, and a source of electrical supply whereby the circuit is completed by the tipping of the scale beam and the cores of the solenoids move and close the gate, the circuit being broken by the dropping of the scale beam when the package is removed, and means whereby when a box is again placed on the scales electrical connection is automatically made whereby the cores are thrown in the reverse direction and the gate is opened, substantially as described. 4th. In an automatic weighing machine, the combination with a hopper, a weighing scale, and a gate controlling the outlet of the hopper, of a solenoid whose core is connected with the gate, and wires leading therefrom, a spring lever which is within the circuit, and adapted to be operated by the placing of a box on the scales whereby the circuit is completed, and the core of the solenoid is moved in a direction to open the gate, substantially as described. 5th. In an automatic weighing and package filling machine, the combination with a hopper and a weighing scale, of a feeder in the hopper operated by a driving mechanism, a gate which controls the outlet of the hopper, and means whereby when the scale beam tips, the gate will be moved automatically to close the mouth of the hopper, and the feeder will be thrown out of engagement with the driving mechanism, substantially as described. 6th. In an automatic weighing and package filling machine, the combination with a hopper and a weighing scale, of a gate con-

trolling the outlet of the hopper, a solenoid whose core is connected with the gate, a contact piece on the scale beam, two terminal pieces adapted to be electrically connected by the contact piece when the scale beam tips, and suitable wires connected with said terminals and solenoid and a source of electrical supply whereby the circuit is completed by the tipping of the scale beam, and the core of the solenoid moves in a direction to close the gate, a feeder in the hopper mounted on a shaft which is geared to the driving mechanism through a clutch, a lever and link connection between the clutch of the driving mechanism and the core of the solenoid whereby when the core is moved in a direction to close the gate the clutch will be disengaged and the feeder will stop, and when the core is moved in the reverse direction and the gate is opened the clutch will be thrown into engagement, substantially as described. 7th. In an automatic weighing and package filling machine the combination with a hopper, a weighing scale and a gate controlling the outlet of the hopper, of a double solenoid having cores connected with the gate, a contact piece on the scale beam, two terminal pieces adapted to be electrically connected by the contact piece when the scale beam tips, and suitable wires connected with said terminals and solenoids and a source of electrical supply whereby the circuit is completed by the tipping of the scale beam, and the cores of the solenoids move in a direction to close the gate, the circuit being broken by the falling of the scale beam when the package is removed, and means whereby when a box is again placed on the scales another electrical circuit is completed whereby the cores are thrown in the reverse direction and the gate is opened, a feeder in the hopper mounted on a shaft which is geared to the driving mechanism through a clutch operated through a lever and link connection by the cores of the solenoids whereby the feeder is thrown into gear with the driving mechanism when the gate is open, and thrown out of gear when the gate is closed, substantially as described. 8th. In a weighing and package filling machine, the combination with the platform, of a guard having an upright rear wall, a bent finger pivoted to the rear part of the platform, its upper end projecting through a slot in said wall, a spring fixed to the wall and pressing said finger into the slot, and a lever pivoted to said platform and extending rearwardly through a slot in said finger, and two metallic points with which the said lever is adapted to make and break electrical connection as the finger piece is pressed against the spring or released, substantially as described. 9th. In a weighing and package filling machine, the combination of a gate, a solenoid whose core is connected with the gate, a source of electrical supply connected with the solenoid, a pivoted lever carrying at one end a striking point in line with the core of the solenoid, and having at its other end a contact piece, two contact points which are connected by the contact piece and form a part of the circuit, the lever being so adjusted that when a current of electricity is passed through the solenoid the core will be drawn against the striking point and turn the lever on its pivot lifting the contact piece and breaking the circuit, substantially as described. 10. In a weighing and package filling machine, the combination with a hopper, a weighing scale and a gate controlling the outlet of the hopper, of a double solenoid having its cores connected with the gate, a contact piece on the scale beam, two terminal pieces adapted to be electrically connected by the contact piece when the scale beam tips, suitable wires connected with said terminals and solenoids and a source of electrical supply whereby the circuit is completed by the tipping of the scale beam and the cores of the solenoids move in a direction to close the gate, the circuit being broken by the falling of the scale beam when the package is removed, a spring controlled lever  $f^2$ , which is connected with the scale platform and which carries a contact piece forming part of the circuit through the second solenoid and which is adapted to be moved so as to complete the circuit by the placing of a box on the scale platform, thereby causing the core to move and open the gate, a pivoted lever  $v$ , carrying at one end a striking point in line with said second solenoid and having at its other end a contact piece, two contact points which together with the contact piece form a part of the circuit, the lever  $v$ , being so adjusted that when the core is moved to open the gate it will be thrust against the striking point and tip the lever and break the circuit and will fall back and close the circuit at that point when the core is withdrawn, and a secondary fulcrum  $x$  for the lever  $f^2$ , whereby the circuit is broken at another point when the scale beam begins to tip and before the circuit is re-established through the first solenoid, and a feeder which is connected by a clutch with driving mechanism, the clutch being connected with the core of the solenoid in such a manner as to have the feeder operate only while the gate is open, substantially as described.

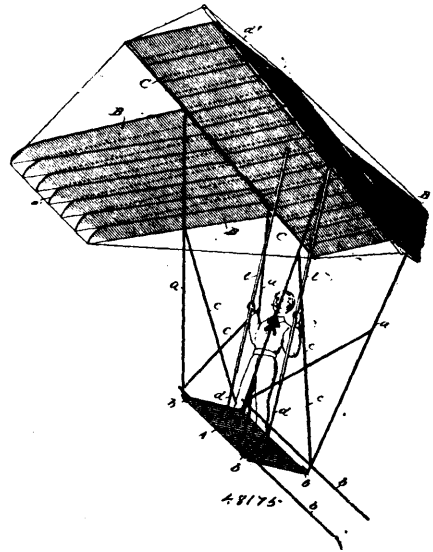
#### No. 48,175. Apparatus for Aerial Navigation.

(Appareil pour la navigation aérienne.)

Nicholas Hermann Borgfelt, Brooklyn, and Charles Friedrich Zenger, New York, both in the State of New York, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. In an aerial apparatus, the combination of wings, each having an outer and an inner section, the inner sections of the wings being pivotally connected to each other and each wing being pivoted intermediate of its sections, together with mechanism for swinging the wings on their pivots, all arranged so that a movement of the operating mechanism will swing the sections of each wing in

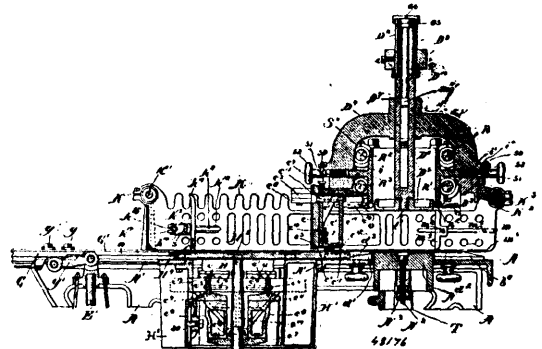
opposite directions, as set forth. 2nd. In an aerial apparatus, the combination, with a centre shaft, of wing-rods pivoted thereto by one end and connected to rock shafts intermediate of the ends of the rods, each of said wing-rods having combined therewith a section of fabric, all arranged in such a manner that each wing rod overlaps



the section of fabric attached to the next adjacent wing-rod, as set forth. 3rd. In an aerial apparatus, the combination of wings, each having an outer and inner section, each wing being pivoted intermediate of its sections, together with a centre shaft to which the inner section of each wing is pivoted, as set forth. 4th. The combination, with a base A, of wings provided with stiffening rods F, F, of sliding tubes  $l, l$  fastened to the stiffening rods F, F, together with guide-rods  $d, d$  co-operating with the tubes and mounted on the base, substantially as described. 5th. The combination, with pivoted wings of a base A, suspending rods  $a$  attached thereto, said rods being also attached to the wing pivots, substantially as described. 6th. The combination, with a base A, and suspending rods  $a, a$  pivotally attached thereto, and mechanism for operating wings, of wings carried by said rods and said wing operating mechanism, substantially as specified. 7th. In an aerial apparatus, a pair of double acting wings pivoted intermediate of their ends and to a centre shaft and arranged to confine the air upon the down stroke, and to allow free circulation upon the up stroke, in combination, with operating mechanism for the wings connected to the wings by pivotal connections, as set forth.

#### No. 48,176. Machine for Making Paper Boxes.

(Machine pour faire les boîtes en papier.)



Eugene Henry Taylor, Lynn, John F. Spaulding, Boston, James G. Tewksbury, Somerville, and Benjamin Spaulding, Tewksbury, all in Massachusetts, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. The combination with a side guide, of a longitudinally adjustable block thereon, a gauge carrier pivoted to said block at the inner side of the guide, and means to turn said gauge carrier on its pivot and maintain it in adjusted position, substantially as described. 2nd. In a box-making machine, the combination with the former, and means to feed the blanks thereto one at a time, of tracts to support the body of the blank while being fed, and adjustable auxiliary tracts to support the ends of the blank, and maintain the blank horizontal beyond the main supporting tracts, substantially as described. 3rd. In a box-making machine, the combina-

tion with a stationary middle track and laterally adjustable side tracks, to support the blank, of auxiliary tracks to support the ends of the blank beyond the side tracks, substantially as described. 4th. The combination with a side-guide of a longitudinally adjustable block secured thereto, a gauge carrier pivoted to said block at the inner side of the guide, and a threaded post and nut for effecting an exact adjustment of the gauge carrier on its pivot, substantially as described. 5th. A stationary middle track, laterally adjustable side tracks, side guides, auxiliary tracks mounted on said guides beyond the side tracks, and means to adjust said auxiliary tracks upon the guides, of cross-shafts provided with right and left hand threads to engage bearings in the guides, and a connecting shaft and gearing whereby the said guides are made adjustable simultaneously, substantially as described. 6th. In a box-making machine, the combination with a former, of pasting and wetting devices for the blank located at a distance from the former, tracks to sustain the blank while being fed to the former adjustable auxiliary tracks to support the pasted ends of the blank and correctly present them to be acted upon by the former, and feeding mechanism for the blank, substantially as described. 7th. In a box-making machine, the combination with a former and means to feed the blanks thereto one at a time, of tracks upon which the blank is supported while being fed, and adjustable yielding track-like supports interposed between the back of the former and the adjacent ends of the tracks, whereby formers of different sizes may be used, substantially as described. 8th. In a box-making machine, the combination with gauges to position a pile of blanks, a former, means to actuate it, and a reciprocating feeder, to feed the undermost blank of the pile to the former, of a vertically adjustable end gauge, a gauge plate on the lower end thereof made yielding to accommodate variations in the thickness of the blank, and an adjustable presser foot between said end gauge, and former to maintain the blank flat after it has been fed past the end gauge, substantially as described. 9th. The combination with the former, and a reciprocating feeder to feed the blanks thereto, of an adjustable end gauge provided with a yielding gauge plate to admit thereunder one blank at a time, and a longitudinally curved presser foot intermediate said gauge and former to maintain the blank flat after passing the end gauge, substantially as described. 10th. The combination with a former, and end gauge adjacent thereto, and feeding mechanism, of an adjustable presser foot intermediate, the end gauge and former and consisting of curved plates adapted to bear at their edges upon the blank and maintain it flat, substantially as described. 11th. In a box-making machine, a head, and end gauge vertically adjustable therein, combined with a presser foot composed of a curved plate secured to the head, and a co-operating curved plate, adjustably supported by and longitudinally movable with relation to said head, and longitudinal edges of the curved plates resting on the upper surface of and maintaining the blank flat, substantially as described. 12th. In a box-making machine, the combination with a former, of blank supporting tracks terminating some distance from the former, filling plates at the rear of the former and adjustable towards and from it, and yielding track-like supports carried by the filling plates to support the blank between the former and the end of the track, substantially as described. 13th. The combination with the former, and side guides, of vertically extended edge guides longitudinally adjustable on said guides, and projecting ledges on the underside of the guides to support the extreme edges of the blank, substantially as described. 14th. In a box-making machine, the combination with wetting devices to moisten the blank parallel to its front and rear edges and also to moisten it parallel to its side edges, laterally adjustable pasting devices to paste the ends of the blank, and side tracks to support the blank movable laterally with said pasting devices, and rigid connections between the pasting and laterally adjustable wetting devices, whereby both may be adjusted laterally, of means including a reciprocating yoke to operate the wetting and pasting devices simultaneously, substantially as described. 15th. In a box-making machine, the combination with a paste pan, pasters therein, a track movable with said pan and an end wetter for the blank parallel to said track, of a reciprocating spindle to actuate the pasters, and a support for the end wetters rigidly connected to the spindle and to move therewith, substantially as described. 16th. In a box-making machine, the combination with a reciprocating yoke, a slide longitudinally adjustable thereon, and an upright and spindle secured to said slide, of a laterally adjustable paste-pan through which the spindle is extended, pasters attached to the spindle, and end wetters supported upon the upright parallel to the inner side of the paste-pan, substantially as described. 17th. The combination with the lateral support *e<sup>s</sup>*, the end wetter holder having a longitudinal slot in its inner side, and wetting devices in said support and holder, the end-most holding frame of the transverse wetting devices resting at one end in the slotted holder, of a reciprocating yoke, means to adjust the lateral support thereon, and connections between the yoke and end wetter holder, whereby the latter may be longitudinally adjusted on the yoke, substantially as described. 18th. In a box-making machine, the combination with a former, a reciprocating cross-head having rack teeth and to which said former is attached, and rigid guides for said cross-head, of a gear in mesh with the rack teeth, a pinion movable with said gear, and a reciprocating toothed arm in engagement with said pinion to rotate it first in one and then in the other direction, and thereby reciprocate the cross-head and former, substantially as described. 19th. In a box-making

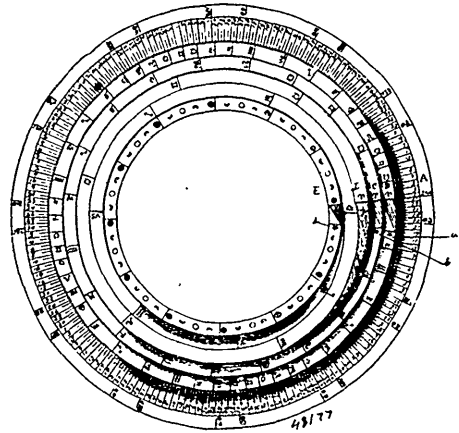
machine, the combination with a reciprocating cross-head, vertical guides therefor, and an attached former, of a cam-actuated arm, rack teeth on said cross-head and arm, and intermediate gearing connecting them whereby the cross-head and former are reciprocated, substantially as described. 20th. The combination with the former, and means to move it, of a movable follower, a slide-rod attached thereto and extended through the head of the machine and means to cushion the follower as it rises and falls, substantially as described. 21st. The combination with a reciprocating former, of a follower adapted to be raised thereby, a slide rod attached to the follower, a cylinder on the upper end of the rod, a piston movable thereon, and its attached piston rod, and a latch to maintain the piston rod elevated, substantially as described. 22nd. In a box-making machine, the combination with a former, a follower movable thereby, a slide-rod detachably secured to said follower, and a cushioning device for the follower, of means to normally limit the descent of the follower, and a latch to permit the follower to drop into abnormal position whereby it can be detached from the said slide rod, substantially as described. 23rd. The combination with a reciprocating former, and means to move it, of a movable follower, a cushioning device therefor including a piston, a rod to control the descent of the follower, and a latch for said rod, substantially as described. 24th. The combination with a reciprocating former, of a follower movable thereby, side and end wiper plates between which it moves, and a slide rod detachably connected to the follower, substantially as described. 25th. The combination with a former, of compound turners located at the corners thereof, and automatic actuating means to first move said turner toward the sides of the former, and then cause a portion of the turners to turn by a continuation of the same movement about each of the corners of the former, whereby the sides and the corner flaps of a blank are turned over upon the sides and ends of the former, substantially as described. 26th. The combination with a former, of compound turners located at the corners thereof, adjusting devices for said turners, and actuating means to first move said turners toward the sides of the former and then cause a portion of the turners to turn about each of the corners of the former, whereby the sides and the corner flaps of a blank are turned over upon the sides and ends of the former, substantially as described. 27th. The combination with a former, of folding turners located adjacent the corners thereof and normally extended, toward the sides of the former to turn the side flanges of a blank against the former, and thereafter by a continuation of the same movement to fold portions of said turners about the corners and ends of the former, to thereby turn the corner flaps of the blank inward against the ends of the former, substantially as described. 28th. The combination with the reciprocating former, and means to move it, and a follower to clamp a blank upon the former, of compound turners supported adjacent to the path of movement of the corners of the former, and actuating mechanism to move said turners against the sides of a clamped blank and turn them over upon the former, a portion of the turners being then turned about the corners and toward the ends of the former, to turn the corner flaps of the blank upon the ends of the former, substantially as described. 29th. The combination with the former, of compound turners pivotally supported adjacent the corners thereof, rock-shafts to which portions of said compound are connected and means to normally maintain the parts of the turners extended, of means to actuate said rock shafts to move the extended turners toward the sides of the former, continued movement of said shafts turning the connected portions of the turners over upon the ends of the former, substantially as described. 30th. The combination with a former, of compound turners adjacent the corners thereof, rock-shafts parallel to the sides of the former, and extended loosely through hubs on portions of the compound turners, pivotal connections uniting the parts of each compound turner, gearing intermediate and rock-shafts and other portions of the turners and means to actuate the rock-shafts and thereby first move the turners bodily toward the former, and thereafter to move portions of them over upon the ends of the former, substantially as described. 31st. The combination with a former, of compound turners located adjacent the corners thereof and each consisting of wings or plates hinged together, rock-shafts on which the compound turners are loosely supported, engaging gears secured upon said shafts and to one wing or plate of each compound turner, respectively, means to normally extend the parts of the compound turners, and actuating mechanism for the rock-shafts to move the compound turners around the said shafts and also to move one plate or wing of each turner relatively to its fellow, substantially as described. 32nd. The combination with a former, or rock-shafts parallel to the sides thereof, of compound turners consisting of portions jointed together and provided with hubs to loosely embrace said shafts and longitudinally adjustable thereon, means to retain them in adjusted position on said shafts, connections between the rock-shafts and a portion of each compound turner, and means to actuate the rock-shafts, substantially as described. 33rd. The combination with the former, rock-shafts, bearings for and at the extremities of said rock-shafts, compound turners provided with hubs to loosely embrace said shafts and laterally adjustable thereon inside of said bearings, and means to hold the said turners in the required positions of adjustment along said rock-shafts and thereby adapt them for boxes of different sizes, of mechanism to positively actuate said rock-shafts and thereby cause the compound turners to bend the sides and corner flaps of the blank about the former, substantially as described. 34th. The



combination with the former, means to move it, a movable follower, and adjustable side wiper plates parallel to the sides of and adjacent to the path of movement of the former, of rock-shafts supported at their extremities in bearings on the side wiper plates, folding turners pivotally supported on said shafts connections between said shafts and portions of the said turners, and means to actuate said rock-shafts, whereby the said turners first are moved toward the sides of the former, and then portions thereof are folded about the corners thereof, substantially as described. 35th. The combination, with the reciprocating former, means to move it, and a movable follower, of compound turners to turn the side flanges of a blank over upon the sides of the former, portions of said turners being movable to turn the corner flaps of the blank over upon the ends of the former, end wiper plates to turn the end flaps of the blank down upon the corner flaps as the former is moved between said wiper plates, and actuating devices for said turners and wiper plates, substantially as described. 36th. In a box-making machine, the combination, with a reciprocating former, a movable follower, feeding mechanism to place the blank between the follower and former, and means to move the former to raise the blank and clamp it against the follower, of side and lip turners, actuating mechanism for said turners acting to positively move them and cause them to turn and hold the sides and corner flaps of the blank against the sides and ends respectively of the former, and end wiper plates to turn the ends of the blanks over upon the previously turned corner flaps, substantially as described. 37th. The combination, with a reciprocating former, and means to move it, a movable follower to co-operate therewith to clamp a blank, and end and side wiper plates, of compound turners supported by the side wiper plates and adjustable with relation thereto, and mechanism to actuate the compound turners to first move them towards the sides of the former and afterward turn the portions of the turners around the corners of and towards the ends of the former, whereby the sides and corner flaps of the blank are turned over upon the former, substantially as described. 38th. In a box-making machine, the combination, with the former means to reciprocate it, a movable follower against which the blank is clamped by the former, and adjustable side and end wiper plates between which the follower is moved, of laterally adjustable side and lip turners carried by the side wiper plates, and independent actuating mechanism for the said turners, to move the sides and corner flaps of the blank towards the former, and hold them in such position, substantially as described. 39th. In a box-making machine, the combination, with the pressure head, of the threaded pressure screws, and nuts on said screws loosely mounted and rotatable in the said pressure head, substantially as described. 40th. In a box-making machine, the combination, with the pressure head, of the threaded pressure screws, nuts on said screws loosely mounted and rotatable in the said pressure head, and a reciprocating rack and gearing to oscillate the said pressure screws, substantially as described. 41st. The combination, with the pressure head, of the threaded pressure shafts, and nuts loosely mounted in said pressure head and provided with pinions, and the intermediate gears, substantially as described. 42nd. The combination, with the pressure head, of the threaded pressure shafts, and nuts loosely mounted in said pressure head and provided with pinions, the intermediate gears, the worm gear connected with one of the said intermediate gears, and the worm shaft, substantially as described. 43rd. In a box-making machine, the combination, with the threaded pressure screws, of the pressure head, nuts loosely mounted and rotatable in the said head, an end wiper plate supported by and adapted to rock with relation to the pressure head, and yielding supports to act upon the end wiper plate and maintain it in normal position, substantially as described. 44th. In a box making machine, the combination, with the threaded pressure screws, of the pressure head nuts loosely mounted and rotatable in the said pressure head, a rocking block having a convex back to rest in a concavity in the head, and end wiper plate attached to said block, and a yielding support at each side of the concavity to bear against the back of the said block, substantially as described. 45th. The combination with the pressure head having a vertical concavity therein, of a rocking block having a convex back to rest in the concavity and an attached end wiper plate, yielding supports adapted to bear upon the back of the block at opposite sides of its centre, and adjustable sleeves for the said yielding supports, substantially as described. 46th. The combination with the pressure head having a rigid lug at the bottom and a movable locking lug at the top thereof, and a concavity between said lugs, of a rocking block having at its back a convexity to rest in said concavity, pivots secured to said block and held in place in said lugs, yielding supports between the pressure head and the block at opposite sides of its centre, and the end wiper plate attached to the face of the block, substantially as described. 47th. The combination with the pressure head, of a rocking block pivoted thereto, a locking device to hold the said block in place, an end wiper plate attached to the face of said block and spring-supported shanks adapted to bear against the back of said block, and position it, and the attached wiper plate, substantially as described. 48th. The combination with the pressure head having projecting lugs at the top and bottom thereof, and a concavity between them, of a rocking block having a convex back to rest it in said concavity pivots secured to said block and located in line with the centre of the curve forming the convex back thereof and pivoted in said lugs, and the end wiper plate attached to the face of said block, substantially as described. 49th. In a paper box,

making machine, the combination with the main driving shaft, of a brake wheel fast thereon, a co-operating friction shoe, a threaded rod, an engaging collar therefor pivoted to said shoe, and means to rotate the rod to set or release the brake, substantially as described. 50th. The combination with the driving pulley, and the main driving shaft, of a clutch mechanism between the shaft and the driving pulley, a brake wheel on said shaft, a co-operating friction shoe, a rotatable rod having a threaded end to engage and move said shoe, means to operate the clutch mechanism, and connections between said means and the threaded rod to rotate the latter and set the brake when the clutch mechanism is made inoperative, substantially as described. 51st. The combination with the main driving shaft, of a brake wheel thereon, a friction shoe, and a threaded collar attached to said shoe, a rod oppositely threaded at its ends and provided with a gear fast thereon, a threaded sleeve in engagement with one end of the rod, the other end thereof engaging the collar on the shoe, and a reciprocating rack bar in engagement with and to rotate the gear on the rod to set or release the brake, substantially as described. 52nd. The combination with a reciprocating former, of mechanism to bend the blank held upon it, and thereby form the box or cover, and plates adjustable towards and from the path of the movement of the former, to engage the downturned edges of the finished box or cover and strip it from the former as it descends, substantially as described.

**No. 48,177. Astronomical Chart. (Carte astronomique.)**

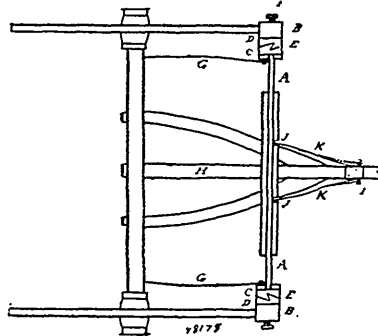


Frank Earl Ormsby and Ebenezer Sprague, both of Chicago, Illinois, U.S.A., 8th February, 1895; 6 years.

*Claim.*—In an astronomical or educational chart, the combination, with the stationary bed-piece or disc bearing a circular arrangement of figures representing a yearly calendar and certain signs relating to the movements of the earth, of movable or revoluble rings or discs superposed upon said bed-piece or disc, on a common axis or pivot at the centre of the latter, and bearing the signs of the zodiac and certain division lines denoting the movements thereof due to the movements of the earth, substantially as set forth.

**No. 48,178. Automatic Vehicle Brake.**

(Frein automatique de roue.)



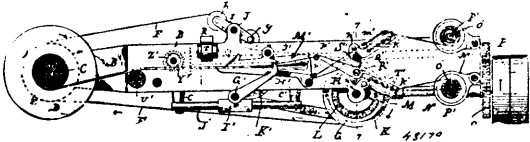
Horace D. Cool, Little Valley, and Charles G. Locke, Randolph, both in the State of New York, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. A cylindrical clutch with diagonal lips and shoulder projection, substantially as and for the purpose hereinbefore set forth.

2nd. A cylindrical clutch brake shoe in two sections, substantially as and for the purpose hereinbefore set forth. 3rd. A cylindrical clutch brake shoe controlled from the axle and operated by the reach of the vehicle, as and for the purpose hereinbefore set forth. 4th. A sliding reach and adjustable shifting devices connecting the reach with the rock shaft, substantially as and for the purpose hereinbefore set forth. 5th. A cylindrical clutch brake shoe for vehicles, a rock shaft provided with crank arms, a cylindrical clutch brake mounted upon each crank arm composed of two sections, controlled by tension devices holding said sections in engagement, a rod attached to one section and to a fixed portion of the vehicle, a sliding reach, and means for operating the crank shaft, substantially as and for the purpose hereinbefore set forth.

**No. 48,179. Slat and Wire Fabric Loom.**

(*Métier pour tisser la toile métallique.*)



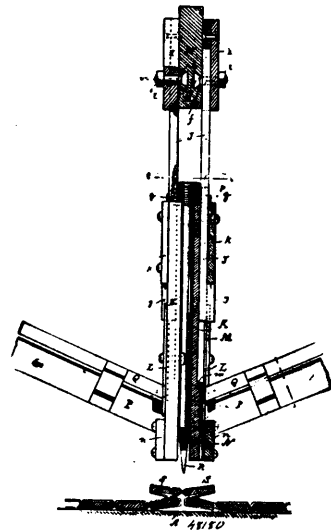
Charles E. Parks, assignee of Lobegott Mollart, both of Watertown Wisconsin, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. In a loom for weaving slat and wire fabric, the combination of a pulley controlled fabric winding device, a drive-belt for the pulley, a rod loose in bearings on the loom-frame, a yoke fast on the rod, rollers loose on the yoke against opposite sides of the belt, an arm also fast on said rod, a detent pivoted to the arm, a rack on said loom-frame engaging the detent, and a hand lever connected to the aforesaid rod, substantially as set forth. 2nd. In a loom for weaving slat and wire fabric, the combination of a driven shaft having fixed bearings, a feed roller carried by the shaft and provided with a friction collar another feed-roller parallel to the first, and a pivotal spring-controlled yoke having bearings for the shank of the second feed-roller, substantially as set forth. 3rd. In a loom for weaving slat and wire fabric, the combination of a drive-shaft, a counter-shaft in gear therewith, another shaft that is arranged in fixed bearings and has belt and pulley connection with the counter-shaft and carries a feed-roller, and a yielding feed-roller parallel to the one aforesaid, substantially as set forth. 4th. In a loom for weaving slat and wire fabric, the combination of an intermittently rotative drum provided with peripheral passages that come into successive register with an opening in the loom-frame, and feed-rollers adjacent to said opening, substantially as set forth. 5th. In a loom for weaving slat and wire fabric, the combination of an intermittently rotative drum provided with peripheral passages that come into successive register with an opening in the loom-frame, feed-rollers adjacent to said opening, and a slat-guide succeeding the rollers, substantially as set forth. 6th. In a loom for weaving slat and wire fabric, the combination of the slat-feed drum provided with a series of peripheral passages and a corresponding series of peripheral lugs, and a cam-actuated spring-controlled pawl-mechanism working in conjunction with the drum-lugs, substantially as set forth. 7th. In a loom for weaving slat and wire fabric, the combination of a slat-feed drum provided with a series of peripheral passages and a corresponding series of peripheral lugs, a spring and lever controlled pawl working in conjunction with the drum-lugs, and a rotary cam for actuating the pawl lever, substantially as set forth. 8th. In a loom for weaving slat and wire fabric, the combination of reciprocative cross-heads, a rod loose in the cross-heads, a series of beater-arms fast on the rod, a driven crank, and a link connecting said rod and crank, substantially as set forth. 9th. In a loom for weaving slat and wire fabric, the combination of reciprocative cross-heads, a rod loose in the same, a series of beater-arms fast on the rod, two straight parallel paths one of which has its extremities joining the other, pivotal spring-controlled gates at the junctures of the paths, another arm fast to said rod, and a projection on the latter arm, having a travel in said paths, substantially as set forth. 10th. In a loom for weaving slat and wire fabric, the frame having one side thereof provided with a feed-opening for slats, a stay-rod, and a series of slotted plates arranged at intervals on the rod, the slots in these plates being permanently in line with said feed-opening, substantially as set forth. 11th. In a loom for weaving slat and wire fabric, a stay-rod, a series of slotted plates secured thereto, and a spring-metal wing on each of these plates, the plates serving as slat and fabric guides and their wings as tension devices for said fabric, substantially as set forth. 12th. In a loom for weaving slat and wire fabric, the combination of frame stay-rods, perforated plates fast thereon, spools arranged on the plates, and spindles that extend through the plate-perforations and spools, substantially as set forth. 13th. In a loom for weaving slat and wire fabric, the combination of a pair of parallel shafts connected by tooth gear, combined wire guides and spreaders, fast on the shafts, and suitable mechanism for rocking the shafts at predetermined intervals, substantially as set forth. 14th. In a loom for weaving slat and wire fabric, the combination, of parallel shafts connected by toothed gear, combined with guides and spreaders fast on the shafts, an arm fast to one of said shafts, a pivotal shoe on the arm, and a rotary disc having a cam groove

engaging the shoe, this cam groove being in the form of two concentric half-circles joined by two segments of equal radius struck from different centers eccentric to that of the half circles and crossing each other in line with the latter center, substantially as set forth. 15th. In a loom for weaving slat-and-wire fabric, a series of rocking wire-spreaders, each of which has a flanged rear end provided with an eye for the passage of wire drawn from a spool, a series of parallel sheaves on fixed bearings, a succeeding spring-hung sheave, another sheave having a fixed bearing forward of the one that is spring-hung, and a wire-guide in the form of a perforated device at the forward extremity of said spreader, substantially as set forth. 16th. In a loom for weaving slat-and-wire fabric, the combination of an automatic slat-feed, slat and fabric guides in line with the feed, reciprocative and rocking beaters, rocking wire-spreaders operating conjointly with the beaters, and an automatic take-up for the fabric, substantially as set forth. 17th. In a loom for weaving slat-and-wire fabric, the combination of an automatic slat-feed, slat and fabric guides in line with the feed, reciprocative and rocking beaters, rocking wire-spreaders operating conjointly with the beaters, a splitting device for the fabric, and an automatic take-up for said fabric, substantially as set forth. 18th. In a loom for weaving slat-and-wire fabric, the combination of an intermittently rotative drum having peripheral passages that come into successive register with an opening in the loom frame, a feed mechanism succeeding the opening slat and fabric guides in line with the feed, reciprocative and rocking-beaters, wire-spreaders operating conjointly with the beaters, and an automatic take-up for the fabric, substantially as set forth.

**No. 48,180. Stapling and Cutting Machines.**

(*Machine à cramponner et couper.*)



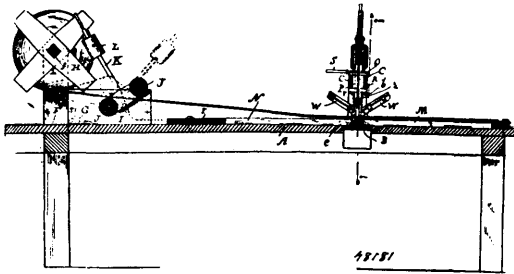
Chas. E. Parks, assignee of Lobegott Mollart, both of Watertown, Wisconsin, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. The combination of a reciprocative hanger, staple driving plungers that depend from the hanger and are individually provided with a lateral lug on the outer face, a guide stock held loose on each plunger to have movement therewith at a certain time in either direction of its travel, a staple-guide connected to each guide-stock and pivotal fingers on said guide-stock actuated by the relative plunger-lug to come in and out of the path of staples on the guide, substantially as set forth. 2nd. The combination of a reciprocative hanger, staple driving plungers that depend from the hanger and are individually provided with a lateral lug on the outer face, a guide-stock held loose on each plunger to have movement therewith at a certain time in either direction of its travel, a staple-guide connected to each guide-stock, pivotal fingers on said guide-stock actuated by the relative plunger-lug to come in and out of the path of staples on the guide, and a flat spring in the aforesaid guide-stock, this spring serving as a temporary stop for each staple fed from said guide, substantially as set forth. 3rd. The combination of a longitudinally grooved and reciprocative hanger, bolts having their heads in sliding dovetail engagement with the hanger-groove, plungers having head-plates retained on the bolts, guide-stocks held loose on the plungers, to have movement therewith at a certain time in either direction of travel, and suitable means for feeding staples to said guide-stocks in advance of a descent of the aforesaid plungers, substantially as set forth. 4th. The combination of a bed-piece provided with guide-standards, braces connecting the standards, a hanger loose in the standards, toggle-joints connecting the brace and hanger, guides extending upward from said braces, links arranged to work in the guides, levers connecting the links and toggle-joints, a hand-lever connected to said links another link connection between one end of the hand-lever and one of the toggle-

joints and a series of plungers depending from said hanger, guide stocks for the plungers, suitable means for limiting independent movement of said plungers in their guide-stocks, and other suitable means for feeding staples to said guide-stocks in advance of a descent of the aforesaid plungers, substantially as set forth. 5th. The combination of a reciprocative hanger, staple-driving plungers depending therefrom, guide-stocks engaging the plungers, suitable means for limiting movement of the plungers in the guide-stocks, other suitable means for feeding staples to said guide-stocks in advance of a descent of said plungers, and chisels loosely mounted on said guide-stocks in the path of the aforesaid hanger, substantially as set forth. 6th. The combination of a lever-controlled reciprocative hanger, staple-driving plungers depending therefrom, guide-stocks engaging the plungers, suitable means for limiting movement of the plungers in the guide-stocks, other suitable means for feeding staples to said guide-stocks in advance of a descent of said plungers, and chisels loosely mounted on said guide-stocks in the path of the aforesaid hanger, substantially as set forth. 7th. A method of securing the wires of slat-and-wire fabric, and forming the same into sections, this method consisting in doubling the fabric on itself in such a manner as to have slats thereof disposed in opposing vertical pairs, driving staples across said wires intermediate of these slats, substantially as set forth.

#### No. 48,181. Stapling and Cutting Machine.

(Machine à cramponner et couper.)

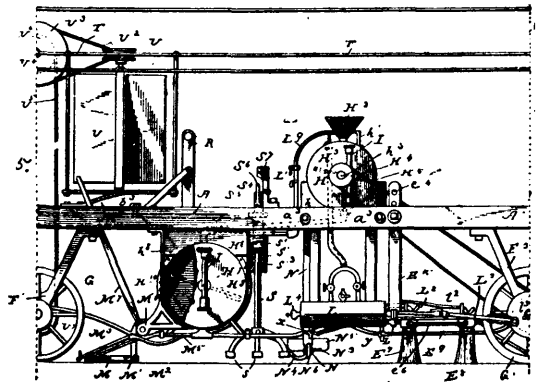


Charles E. Parks, assignee of Lobegott Mollart, both of Watertown, Wisconsin, U.S.A., 8th February, 1895; 6 years.

*Claim.*—1st. The combination of a suitable table, supports projecting above the same, a tightener for slat and wire fabric drawn from a reel journaled in the supports, a carriage having a travel transverse to the table, a staple-driving and fabric cutting mechanism supported by the carriage, and suitable means for holding panel-frames on said table against a draw of the fabric incidental to an operation of the tightener, substantially as set forth. 2nd. The combination of a suitable table having parallel longitudinal gages one at least of which is adjustable in a direction transverse of the table, supports projecting above the table, a tightener for slat and wire fabric drawn from a reel journaled in the supports, a carriage having a travel cross-wise of said table, a staple-driving and fabric-cutting mechanism supported by the carriage, and suitable means for holding panel-frames on said table against a draw of the fabric incidental to an operation of the tightener, substantially as set forth. 3rd. The combination of a suitable table, a carriage having a travel transverse to the table, a guide-stock vertically reciprocative in the carriage, plungers arranged in the guide-stock to move both with and independent of the same, suitable means for feeding staples to said guide-stock in advance of a descent of the plungers, and other suitable means for drawing a web of slat and wire fabric taut on said table, substantially as set forth. 4th. The combination of a suitable table, a carriage having a travel transverse to the table, a guide-stock vertically reciprocative in the carriage, plungers arranged in the guide-stock to move both with and independent of the same, suitable means for feeding staples to said guide-stock in advance of a descent of the plungers, yielding stops for the temporary restraint of the staples thus fed, and suitable means for drawing a web of slat and wire fabric taut on said table, substantially as set forth. 5th. The combination of a suitable table, a carriage having a travel transverse to the table, a guide-stock vertically reciprocative in the carriage, plungers arranged in the guide-stock to move both with and independent of the same, lugs on the plungers, inclined staple-guides extended from said guide-stock adjacent to the paths of the plungers, spring-controlled staple stops pivotally connected to the aforesaid guide-stock to have portions thereof normally in the paths of the plunger-lugs, and suitable means for drawing a web of slat and wire fabric taut on said table, substantially as set forth. 6th. The combination of a suitable table, a carriage having a travel transverse to the table, a guide-stock vertically reciprocative in the carriage, plungers arranged in the guide-stock to move both with and independent of the same, suitable means for feeding staples to said guide-stock in advance of a descent of the plungers, a knife connected to said carriage, and suitable means for actuating this knife coincident with the action of said plungers, substantially as set forth. 7th. The combination of a suitable table, a carriage having a travel transverse to the table, a vertical guide-stock loose in the carriage but provided with a stop in opposition to the top of the same, plungers

loose in the guide-stock, suitable means for limiting movement of the plungers in said guide-stock, other suitable means for feeding staples to the aforesaid guide-stock in advance of a descent of said plungers, a knife having one end thereof pivotally hung from said carriage, a lever linked to the upper portion of the aforesaid carriage and pivotally connected to said plungers, and a hanger connecting these plungers and other end of the knife, substantially as set forth. 8th. The combination of a suitable table, a carriage having a travel transverse to the table, a vertical guide-stock loose in the carriage, but provided with a stop in opposition to the top of the same, plungers loose in the guide-stock, suitable means for limiting movement of the plungers in said guide-stock, other suitable means for feeding staples to the aforesaid guide-stock, in advance of a descent of said plungers, a knife having one end thereof pivotally hung from said carriage, and a weighted lever controlling the movement of the aforesaid guide-stock plungers and knife, substantially as set forth. 9th. The combination of a suitable table, a carriage having a travel transverse to the table, a guide-stock vertically reciprocative in the carriage, plungers arranged in the guide-stock to move both with and independent of the same, inclined staple guides extended from the said guide-stock adjacent to the paths of the plungers, staple-stops in the form of fingers that have beveled inner edges at their lower extremities and are pivoted in pairs to the aforesaid guide-stock, suitable means for actuating these fingers on their pivots, and other suitable means for drawing a web of slat and wire fabric taut on said table, substantially as set forth. 10th. The combination of a suitable table, provided with bearings for the journals of a reel of slat and wire fabric, a tightener for the fabric that consists of end-blocks journaled in bearings adjacent to the reel, a pair of bars joined at their ends to said blocks, and a lever fast on one of the end block journals, a carriage having a travel transverse to the table, a staple-driving and fabric-cutting mechanism supported by the carriage, and suitable means for holding panel-frames on said table against a draw of the fabric incidental to an operation of the tightener, substantially as set forth. 11th. The combination of a suitable table provided with bearings for the journals of a reel of slat and wire fabric, a fabric-tightener provided with a weighted actuating lever, a carriage having a travel transverse to the table, a staple-driving and fabric-cutting mechanism supported by the carriage and suitable means for holding panel-frames on said table against a draw of the fabric incidental to an operation of the tightener, substantially as set forth. 12th. A method of making panels, the same consisting in first fastening one end of a continuous web of slat and wire fabric to the outer end of the outermost wooden frame in a pair laid in successive order and held stationary for a time, drawing the fabric taut over the frames, simultaneously fastening said fabric to the meeting ends of said frames, and cutting the aforesaid frames, whereby one panel is completed and the outer end of the fabric-web made fast to the frame succeeding said finished panel, other frames being supplied from time to time as the work proceeds.

#### No. 48,182. Painting Machine. (Machine à peindre.)



William Charles Gebhardt, Otis McGaffey, junr. and Charles J. Butfield, all of Luling, Texas, U.S.A., 11th February, 1895; 6 years.

*Claim.*—1st. In a travelling automatic painting machine, the combination with the bearing wheels of the machine, of a reciprocating paint brush adapted to alternately sweep back and forth over the surface to be painted, suitable connections between the brush and the said machine bearing wheels, for reciprocating the brush, substantially as described. 2nd. In a traveling automatic painting machine, the combination with the bearing wheels of the machine, of a reciprocating paint brush adapted to alternately sweep back and forth over the surface to be painted a device for vertically adjusting the brush, and suitable connections between the brush and the said machine bearing wheels for reciprocating the brush, substantially as described. 3rd. In a travelling automatic painting machine, the combination, with the bearing wheels of the machine, of a reciprocating brush adapted to alternately sweep back and forth over the surface to be painted, guides which direct the movement of the brush,

and suitable connections between the brush and the said machine bearing wheels for reciprocating the brush, substantially as described. 4th. In an automatic painting machine, the combination with a reciprocating paint brush, of adjustable guides which direct the movement of the brush, said guides having an upward curve at each extremity to raise and turn the brush and suitable connections between the brush and the machine wheels for reciprocating the brush, substantially as described. 5th. In an automatic painting machine, the combination with a series of reciprocating paint brushes, having a spacing and connecting device between each brush and the next of the series of adjustable guides which direct the movement of each brush of the series, said guides having an upward curve at each extremity to raise and turn the brushes, and a suitable connection between the series of brushes and the machine wheels for reciprocating the brushes, substantially as described. 6th. The combination with the frame A<sup>1</sup>, of the crank shaft F, the wheels G keyed to the shaft, the connecting rods E<sup>5</sup> E<sup>6</sup>, the brush E<sup>1</sup>, the slotted guides E<sup>9</sup> engaging the ends e<sup>2</sup> e<sup>2</sup> of the brush back E<sup>2</sup>, and the adjusting bars E<sup>4</sup> supporting the guides and adjustably attached to the frame A<sup>1</sup>, substantially as described. 7th. The combination with the frame A<sup>1</sup>, of the crank shaft F, the wheels G keyed to the shaft, the connecting rods E<sup>5</sup> E<sup>6</sup>, the brush E<sup>1</sup>, the brush E, the gauge rods E<sup>9</sup> connecting the brushes, the slotted guides E<sup>9</sup> engaging the ends e<sup>2</sup> e<sup>2</sup> of the brush backs E<sup>2</sup> of each brush, and the adjusting bar E<sup>4</sup> supporting the guides and adjustably attached to the frame, as described. 8th. The combination with the frame A<sup>1</sup> of the crank shaft F<sup>2</sup> the wheels G<sup>1</sup> keyed to the shaft the connecting rods E<sup>10</sup> E<sup>14</sup>, their respective sets of brushes E<sup>7</sup> E<sup>8</sup> and E<sup>11</sup> E<sup>12</sup>, their respective gauge rods, e<sup>9</sup>, e<sup>7</sup>, their respective slotted guides E<sup>9</sup>, E<sup>13</sup>, formed in one piece, and the adjustable guide supports adjustably attached to the frame, A<sup>1</sup>, as described. 9th. The combination with the frame A<sup>1</sup>, having the crank shaft F, the wheels G, keyed to the shaft, the connecting rods E<sup>5</sup>, E<sup>6</sup>, the brushes E<sup>1</sup>, E, the gauge rods E<sup>9</sup>, connecting the brushes, the slotted guides E<sup>9</sup>, engaging the ends e<sup>2</sup>, e<sup>2</sup>, of the backs E<sup>2</sup>, of each brush, and the adjusting bars E<sup>4</sup>, supporting the guides and adjustably attached to the frame, of the crank shaft F<sup>2</sup>, wheels G<sup>1</sup>, keyed to the shaft, the connecting rods E<sup>10</sup>, E<sup>14</sup>, their respective sets of brushes E<sup>7</sup>, E<sup>8</sup>, and E<sup>11</sup>, E<sup>12</sup>, their respective gauge rods e<sup>9</sup>, e<sup>7</sup>, their respective slotted guides E<sup>9</sup>, E<sup>13</sup>, formed in a single piece, and the adjustable guide supports E<sup>15</sup>, E<sup>16</sup>, adjustably attached to the frame, substantially as described. 10th. The combination with the frame A<sup>1</sup>, of the cross-piece M<sup>2</sup>, journalled in the bearings M<sup>6</sup>, secured to the frame A<sup>1</sup>, brushes adjustable on the cross-piece M<sup>2</sup>, the lever M<sup>7</sup>, for raising the brushes and the rack M<sup>8</sup>, for locking the lever, substantially as described. 11th. The combination with the frame A<sup>1</sup>, of the cross-piece M<sup>2</sup>, and the brushes M<sup>9</sup>, M<sup>10</sup>, facing each other and adjustable along the cross-piece M<sup>2</sup>, substantially as described. 12th. In an automatic painting machine, the combination of a reciprocating paint brush, suitable connections between the brush and the machine wheels for reciprocating the brush, a receptacle for containing the paint, and suitable pipe connections between the brush and the paint receptacle for supplying paint to the brush, substantially as described. 13th. In a painting machine, having a paint brush adapted to be automatically operated by the machine, the combination of a sprinkler on the brush, a paint receptacle and suitable pipe connections between the receptacle and the sprinkler to supply paint to the brush, substantially as described. 14th. In a painting machine, having a paint brush adapted to be automatically reciprocated by the machine, a paint receptacle, a paint distributor secured to and reciprocating with the brush, suitable flexible pipe connections between the receptacle for supplying paint to the distributor, an air pump actuated by the machine, and suitable pipe connections between the air pump and the paint receptacle, substantially as described. 15th. The combination with an automatic painting machine, having the reciprocating brush E<sup>1</sup>, and suitable connections with the wheel G, for reciprocating the brush, of the sprinkler K<sup>1</sup>, located between the brush bristles, the paint cylinder H<sup>7</sup>, the flexible tube communication K, between the sprinkler and the cylinder, a valve in said tube for closing the same, an air pump operated by the machine wheels, and pipe communication between the air pump and the cylinder, substantially as described. 16th. The combination with a painting machine having forward and central reciprocating brushes E<sup>1</sup>, E, and E<sup>7</sup>, E<sup>8</sup>, and suitable connections with the wheels G, G<sup>1</sup>, for reciprocating the brushes, of the sprinklers located in the brushes, the paint cylinder H<sup>7</sup>, flexible tube communication between each brush and the paint cylinder, the valves therein, the mixer cylinder H, the paint supply pipe J, connecting the cylinders, the air pump L, its piston rod connection with the wheels G<sup>1</sup>, its air pressure tube L<sup>8</sup>, communicating with the mixer cylinder H, the stirrers H<sup>3</sup>, H<sup>9</sup>, located in the cylinders, their belt and pulley connections actuated by the wheels G, G<sup>1</sup>, the gauges I, on the cylinders, and means on the mixer cylinder H for filling the same, substantially as described. 17th. The combination with a painting machine having brushes adapted to be automatically operated by the machine to paint a surface, of a set of laterally adjustable brushes located at an angle to the first brushes and adapted to paint each side of a projection or rib on said surface, and suitable connections between each set of brushes and the machine, whereby both sets of brushes are simultaneously driven to paint an irregular surface, as described. 18th. In a painting machine, the combination with the laterally adjustable paint brushes mounted on the cross-piece M<sup>2</sup>, as described, of

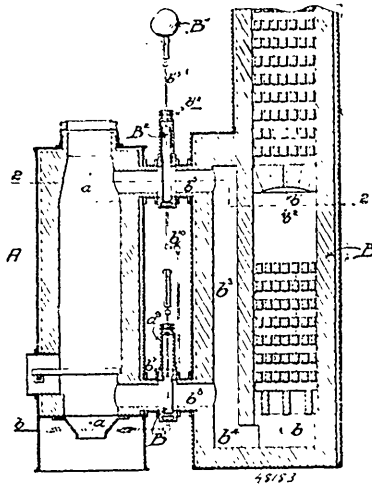
the reciprocating paint brushes E<sup>1</sup>, E, and E<sup>7</sup>, E<sup>8</sup>, their adjustable slotted guides, suitable connections between the brushes and the wheels G, G<sup>1</sup>, for reciprocating the same, the sprinklers on each brush, the paint cylinder H<sup>7</sup>, its tube communication with the several sprinklers, the mixed cylinder H, its tubular connection with the cylinder H<sup>7</sup>, the stirrers H<sup>3</sup>, H<sup>9</sup>, their belt and pulley communications with the wheels G, G<sup>1</sup>, the gauges on the cylinders and means on the mixed cylinder H, for filling the same as described. 19th. In a travelling painting machine, having supporting wheels, the combination with a paint receptacle mounted thereon, of the standards N<sup>1</sup>, secured to the machine frame A<sup>1</sup>, the sprinkler N, journalled therein and having the drip rim N<sup>5</sup>, its valve and valve handle N<sup>2</sup>, N<sup>3</sup>, the lever N<sup>6</sup>, for rocking the sprinkler, its catch N<sup>7</sup>, on the standard N<sup>1</sup>, the pipe N<sup>4</sup>, for supplying paint to the sprinkler connected to said receptacle and an air pump actuated by the machine to force the paint to the sprinkler, substantially as described. 20th. In a painting machine having brushes adapted to be automatically operated by the machine, a paint receptacle, detachable tubular connections between the paint receptacle and the brushes, and an air pump connected with the paint receptacle to force the paint through the connections, the combination with the pump valves to cut off the communication of the pump with the paint receptacle and the air supply, and a cock to connect the pump directly through the detachable tube connections to the brushes, substantially as described. 21st. The combination with the frame A<sup>1</sup>, of the cross-brace a<sup>4</sup>, the piston S<sup>1</sup>, secured to the same, the rod S, provided with a suitable foot and having the piston head s<sup>1</sup>, the spring S<sup>3</sup>, located in the piston between the piston head s<sup>1</sup>, and the bottom of the piston, the plunger S<sup>5</sup>, located in the piston, the lever S<sup>4</sup>, pivoted to the cross-piece and having its head bearing against the plunger S<sup>5</sup>, and the rack S<sup>7</sup>, substantially as described. 22nd. The combination with a travelling automatic painting machine having supporting wheels, of a detachable sweeper, driving gear for operating the sweeper, and suitable connections between the supporting wheels of the painting machine, and the sweeper driving gear, substantially as described. 23rd. The combination with a travelling automatic painting machine having supporting wheels, of a detachable sweeper consisting of a vertically swinging box pivoted to the sweeper frame, a rotating roller brush, and suitable connections between the roller brush and the wheels of the painting machine to actuate the brush, as described. 24th. The combination, with a travelling automatic painting machine having supporting wheels, of a detachable surfacing machine having driving gear and suitable connections between the supporting wheels of the painting machine and the driving gear of the surfacing machine, substantially as described. 25th. The combination, with a travelling automatic painting machine, of a detachable surfacing machine having supporting wheels consisting of a pair of drums turning in the machine frame, an endless belt passing over said drums and provided with suitable brushes, and suitable connections between one of the drums and the wheels of the painting machine to actuate the drum and move the endless belt, as described. 26th. The combination, with a travelling automatic painting machine having supporting wheels, of a detachable sweeper having suitable driving gear, a detachable surfacer having suitable driving gear, and suitable connections between the supporting wheels of the painting machine and the respective driving gears of the sweeper and surfacing machines, substantially as described. 27th. The combination, with a travelling automatic painting machine having supporting wheels, of a detachable sweeper having a rotating roller brush, a detachable surfacer consisting of rotating drums having an endless brush belt driven by said drums, and suitable connections between the roller brush, the connections between the roller brush, the drums and the wheels of the machine to actuate the sweeper and surfacer, as described. 28th. The combination, with a travelling automatic painting machine having supporting wheels and driving gear to actuate the machine, of a fixed rotating axle having one or more of the supporting wheels laterally adjustable thereon, and suitable connecting mechanism between said driving gear and axle, substantially as described. 29th. The combination, with an automatic painting machine having moving parts, of laterally fixed rotating axles, suitable connecting mechanism between said axles and said moving parts and supporting wheels laterally adjustable upon said axles, substantially as described.

**No. 48,183. Connecting Flue for Water Gas Apparatus.** ( *Tubes de raccord pour générateur à gaz.*)

The Economical Gas Apparatus Construction Company, assignee of John Townsend Wescott, all of Toronto, Ontario, Canada, 11th January, 1895; 6 years.

*Claim.*—1st. The combination of a gas generator having steam supply pipes at top and bottom, a superheater and fixing chamber or carburetter having a passage way or flue b<sup>1</sup> for the gases, a passage way or flue connecting the top of the generator with the passage way of flue b<sup>3</sup> of the superheater, and having a water cooled valve and a passage way or flue connecting the bottom of the generator with the passage way or flue b<sup>2</sup> of the superheater and having a water cooled valve. 2nd. The combination of a gas generator having steam supply pipes at top and bottom, a superheater and fixing chamber or carburetter having passage ways or flues for the water gas, a passage way or flue connecting the top of the generator with

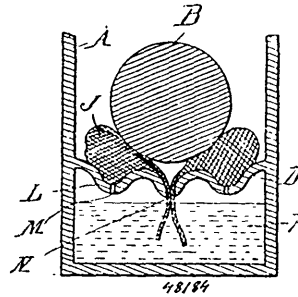
the superheater and having a water cooled valve, and a passage way or flue connecting the bottom of the generator with the superheater and having a water cooled valve. 3rd. The combination of a gas generator having steam supply pipes at top and bottom, a superheater and fixing chamber or carburetter having passage ways or flues for the water gas, a passage way or flue connecting the



top of the generator with the superheater and having a water cooled valve, a passage way or flue connecting the bottom of the generator with the superheater and having a water cooled valve, and mechanism for operating said valve. 4th. The combination of a gas generator having steam supply pipes at top and bottom, a superheater and fixing chamber or carburetter having passage ways or flues for the water gas, a passage way or flue connecting the top of the generator with the superheater and having a water cooled valve, a passage way or flue connecting the bottom of the generator with the superheater and having a water cooled valve, said valves being connected together, and mechanism for operating said valves simultaneously and in opposite directions so that when one is opened the other is closed. 5th. The combination of a gas generator having steam supply pipes at top and bottom, a superheater and fixing chamber or carburetter having passage ways or flues for the water gas, a passage way or flue connecting the top of the generator with the superheater and having a water cooled valve, a passage way or flue connecting the bottom of the generator with the superheater and having a water cooled valve, said valve being connected together by links and levers, a counterbalance weight connection with one of said valves, and a lever for operating said valves through said links and levers. 6th. The combination of a gas generator having steam supply pipes at top and bottom, a superheater and fixing chamber or carburetter having passage ways or flues for the water gas, a passage way or flue connecting the top of the generator with the superheater and having a water cooled valve, a passage way or flue connecting the bottom of the generator with the superheater and having a water cooled valve, said valves being connected together by links and levers, a counterbalance weight which with the weight of one of the valves counterbalances the weight of the other valve, and a lever for shifting the position of the valves. 7th. The combination of a generator having steam supply pipes at top and bottom and gas flues at top and bottom, valves in said flues one of which is open when the other is closed, and counterbalanced mechanism for holding said valves in whatever position they may be placed. 8th. The combination of a generator having steam supply pipes at top and bottom, and gas flues at top and bottom, valves in said flues one of which is open when the other is closed and a lever for adjusting said counterbalance mechanism. 9th. The combination of the valves B<sup>1</sup> and B<sup>2</sup>, one above the other and connected with each other by links and levers, and a counterbalance weight connection with the upper valve and with said valve balancing the lower valve, whereby the valves when moved normally remain in the position to which they have been moved. 10th. The combination of the valves B<sup>1</sup> and B<sup>2</sup>, one above the other and connected with each other by links and levers, and a counterbalance weight connection with the upper valve, and a lever for operating said valves and connections. 11th. In a gas making apparatus, the combination of a water cooled box, and a disc valve in said water cooled box. 12th. In a gas making apparatus, the combination of a water cooled box, and a disc valve of constantly decreasing thickness from the edges to the centre of its faces. 13th. In a gas making apparatus, the combination of a water cooled box, and a doubled faced combined wedge valve. 14th. In a gas making apparatus, the combination of a water cooled box, a bonnet over the opening in said box, and a disc valve in said box and when raised into said bonnet having its lower end opposite the hollow water

filled walls in the top of said box. 15th. In a gas apparatus, the combination of a superheater, a generator connected with said superheater, a generator connected with said superheater fly flues, a washer connected with said superheater and water cooled valves in said flues, the water outlets of which are connected with the washer, for the purpose set forth. 16th. In a gas making apparatus, the combination with the generator having steam supply pipes at top and bottom, a superheater and fixing chamber consisting of two independent superheater or fixing chambers one located directly above the other and communicating with each other, an intermediate chamber having suitable air blast passage or passages, and a similar chamber at the bottom of the lower superheater provided with air blast passage or passages, and flues or passage ways connecting the generator with the lower chamber of the superheater, the whole arranged for the purposes set forth.

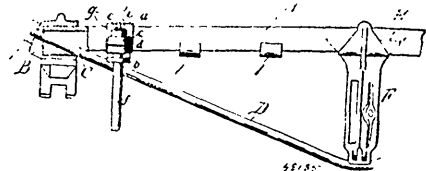
**No. 48,184. Journal Lubricator. (Graisseur de tourillon.)**



Miss Julia Elizabeth Wright, Windsor, Ontario, Canada, assignee of Arthur Wilcox, Detroit, Michigan, U.S.A., 11th February, 1895; 6 years.

*Claim.* 1st. In a journal box, the combination of an enclosing casing, the diaphragm extending across the same and comprising the bottom section and the vertical section E, forming the oil receptacle F, and a wick receptacle G, of troughs formed at the foot of the vertical sections of the diaphragm, a wick leading from the oil receptacle through the wick tube and into the journal box above the diaphragm, and a pad in the trough with which said wick connects, substantially as described. 2nd. In a journal lubricator, the combination of the casing forming the axle box, a diaphragm made integral therewith and extending across the same from side to side and comprising a bottom having the oppositely inclined portions a, the vertical sections E, at the sides forming the oil receptacle F, and the wick chambers G, of wicks H, extending from the oil receptacle through the wick chamber and through apertures in the top of the diaphragm, an oiling pad J, on the inner face of the vertical section of the diaphragm, a trough L between it and the vertical section of the diaphragm and drainage ports from the trough into the oil receptacle, substantially as described.

**No. 48,185. Brake Beam. (Sommiere de frein.)**



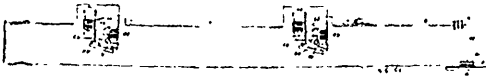
Charles Brady King, Adolph Barthel and James Whittemore, all of Detroit, Michigan, U.S.A., 11th February, 1895; 6 years.

*Claim.* 1st. A brake beam consisting of a single beam of angle iron arranged with the opening between the wings extending forwardly, a central post having formed integrally therewith, a head having an aperture in which the beam is fitted, break heads having sockets in which the ends of the beam engage, and a truss rod passing over the post and having a bearing on the break-heads at the ends of the beam, passing between the wings thereof through the break-head, substantially as described. 2nd. In a brake beam, the combination with the angle bar, iron beam, of the brake-heads, a truss rod, a post, a head formed integral therewith, having an eye through which said beam is sleeved, substantially as described. 3rd. In a brake beam, the combination with an open angle beam, the brake-heads, the truss rod and post, of the tie plates connecting the edges of the angle iron, substantially as and for the purpose described. 4th. In a brake beam, the combination of the angle beam, of the finger guard clamp consisting of a split clamp adapted to engage over the beam, lugs at the ends thereof, and a clamping bolt formed on the end of the finger guard, substantially as described. 5th. In a brake beam, the combination of the brake beam, of the split finger guard clamp, the finger guard consisting of a pin, a

screw bolt formed on the end of the pin, and engaging through lugs on the clamp, and the lug *d'*, on said bolt, engaging a corresponding bearing in the lug on the clamp, substantially as described. 6th. In a brake beam, the combination with the cambered angle-iron beam, the brake heads, and the truss rod, of a post having an eye through which said beam is sleeved, of the head of filler block *H*, forming the inner face of said eye and extending some distance each side of the middle of said post to form the bearings *k* and *l*, substantially as and for the purpose described.

**No. 48,186. Burglar Alarm for Railway Trains.**

(*Avertisseur d'effraction*)

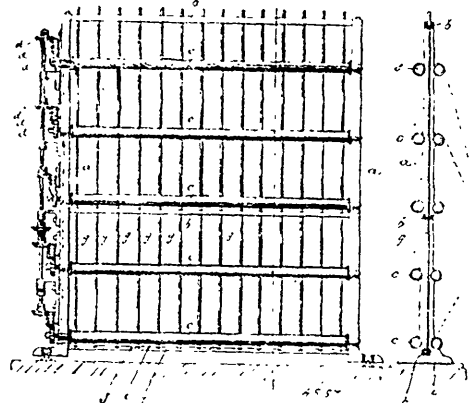


Max Z. Levy, Kansas City, Missouri, U.S.A., 11th January, 1895; 6 years.

*Claim.*—1st. In a train-robber alarm, the combination with a hinged-door carried by each car, and having a suitable inscription, springs exerting their pressure against the same, a spring-actuated armature bolt locking each door, and a vertically moving platform in the cab of the engine, of an electrical circuit, an electro magnet located in said circuit and carried by each car, a contact plate also located in said circuit, a second contact-plate carried by the movable platform, so that as the movable platform is depressed the circuit will be completed and the passengers and express messengers warned, substantially as set forth. 2nd. In a train-robber alarm, the combination with an electrical circuit, a plate, a second and movable plate above the first-mentioned plate, and an electro-magnet, all of these being located in the electrical circuit, of a hinged door having a catch, a spring-actuated armature bolt engaging the same, springs bearing against the under side of the door, and means to move the last-mentioned contact-plate down upon the first-mentioned contact-plate to complete the circuit and warn the passengers and express messenger, and means to break the circuit by elevating the movable platform, substantially as set forth. 3rd. In a train-robber alarm, the combination with an electrical circuit, a plate, a second plate, an electro magnet, a second electro magnet, the armature of the second electro-magnet and a clapper carried thereby, all of these being located in said electrical circuit, of a hinged door having a catch, a spring-actuated armature bolt engaging same, springs bearing against the under side of said door, and means to cause the contact of the two contact-plates so as to complete the electrical circuit, sound the alarm and elevate the hinged-door, substantially as set forth. 4th. In a train-robber alarm, the combination of an electrical circuit, a plate, a vertically movable platform located in the floor of the engine cab, and carrying a second plate above the first-mentioned plate, said plates being located in the electrical circuit, with springs supporting said platform so that said plates shall be out of contact, clips or catches depending from and carried by the floor of the cab adjacent to the margin of the opening in which the movable platform fits, a slidable frame carried at the lower side of said platform, and having bolt-ports, suitably guided engaging the catches depending from the floor of the cab at one end of the opening, angle-bolts pivotally carried at the underside of the movable platform and engaging the clips or catches at the opposite end of said opening, and pivotally connected at their opposite ends to the rear end of the slidable frame, and means to move said frame bodily rearward so as to unlock the platform, substantially as set forth. 5th. In a train-robber alarm, the combination of an electrical circuit, a plate, a vertically movable platform located in the floor of the engine-cab, and carrying a second plate above the first-mentioned plate, said plates being located in the electrical circuit, with springs supporting said platform so that said plates shall be out of contact, clips or catches depending from and carried by the floor of the cab adjacent to the margin of the opening in which the movable platform fits, a slidable frame carried at the lower side of said platform, and having bolt-ports, suitably guided, engaging the catches depending from the floor of the cab at one end of the opening, angle-bolts pivotally carried at the under side of the movable platform and engaging the clips or catches at the opposite end of said opening, and pivotally connected at their opposite ends to the rear end of the slidable frame, a bracket, a lever projecting vertically through an opening in the floor of the cab and carried by said bracket, and an arm projecting from the front end of the slidable frame and pivotally connected to said lever above its fulcrum point, substantially as set forth. 6th. In a train-robber alarm, the combination of an electrical circuit, a contact-plate, and a second contact-plate, these contact-plates being located in said electrical circuit, with a vertically movable platform carrying the last-mentioned contact-plate, springs supporting said platform so that said plates shall not normally contact, and a switch located in said circuit, so that when open the platform may be depressed without completing the circuit, substantially as set forth. 7th. In a train-robber alarm, in combination, a casing surrounding an opening in the floor of the cab of an engine, a spring supported platform fitting in said opening, a box in each car, a hinged-door closing the upper end of each box, and having catches, spring actuated armature-levers engaging said catches, springs bearing

against the under side of each door, an electro magnet located adjacent to each armature lever, and within a box, a second electro-magnet carried in each box and having an armature provided with a bell clapper, electric conductors extending longitudinally of each car, said electro magnets and the armatures having bell clappers, forming part of said electric conductors, flexible connections between the cars, through which the electric conductors extend, a strip communicating or joining the rear ends of said conductors, a plate carried at the under side of the movable platform and forming a part of one of said conductors, a battery located in said casing to which the other conductor leads, a second plate located below and out of contact with the first mentioned plate, and a conductor leading therefrom, to the opposite pole of the battery, substantially as set forth.

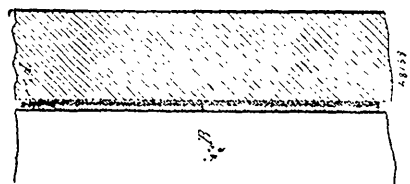
**No. 48,187. Bank Creel. (*Canot de porte-bobines.*)**



George James Torrance, Kearney, New Jersey, U.S.A., 11th February, 1895; 6 years.

*Claim.*—1st. The improved bank creel, herein described, in which is combined with the creel frame, the horizontal rollers arranged in pairs therein, for revolving the spools, means for simultaneously revolving or rotating said rollers, and vertical guiding rods, held in said frame to separate the spools from one another, the said dividing rods being oval in form, substantially as and for the purposes set forth. 2nd. The improved bank creel, herein described, in which is combined with the frame, its horizontal rollers arranged in pairs and means for operating said rollers, of vertical bars for supporting the spools, a bottom rail supporting said dividing rods, and a false or shell rail having perforations or apertures to receive said dividing rods, and prevent lateral displacement, substantially as set forth.

**No. 48,188. Weather Strip. (*Bourrelet de porte.*)**



Walter Thomas Hall, and William Joseph Bayliss, both in London, England, 11th February, 1895; 6 years.

*Claim.*—1st. An improved draught excluder for windows, doors, and the like, formed from a length of elastic enclosed in a tube of baize, cloth or the like material, and fixed in the rebate of the door frame, or corresponding part of the window, substantially as and for the purposes specified. 2nd. The improved draught excluder for windows, doors and the like, made and fitted substantially in the manner described and shown in the accompanying drawings and for the purposes specified.

**No. 48,189. Process for Producing Alcohol.**

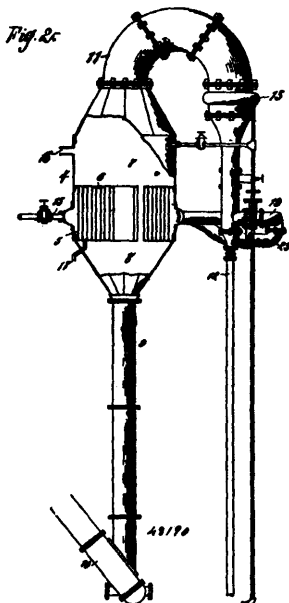
(*Procédé pour la production de l'alcool.*)

Robert Zdarek, Vienna, Austria, 11th February, 1895; 6 years.

*Claim.*—1st. A process for producing alcohol from cellulose alone or from lignin and cell-juice and cellulose consisting in first mashing up the said substances in water with 1 to 2 parts per thousand of the mash water, of nitric or sulphuric acid or both acids, then boiling the mass under pressure, decanting and agam boiling under pressure then neutralising the acids contained in the resultant liquid and converting the same into alcohol by fermentation with yeast or

ferments, substantially as described. 2nd. A process for producing alcohol from cellulose, alone or cellulose, lignin and cell-juice consisting in first mashing up the said substances with water having 1-10 to 2 parts per thousand of sulphuric acids and 1-10 to 2 grammes per litre superphosphate of lime or 1-50 to 1 gramme per litre of phosphorous salt then boiling under pressure, decanting and again boiling under pressure, neutralising the acids and fermenting with yeast or ferments of vegetable juices and destilling, substantially as described.

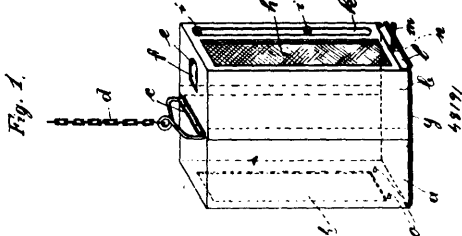
**No. 48,190. Evaporating Apparatus. (Evaporateur.)**



Thomas Craney, Bay City, Michigan, U.S.A., 11th February, 1895; 6 years.

*Claim.*—1st. In an evaporating apparatus, the combination of a multiple of evaporating pans, each complete and capable of independent operation, of a connecting trunk, into which the vapour pipes from each pipe pan connects, and connections from such trunk to the steam chambers of the pans, with valves in the trunk and connections, whereby the pans may be connected for double or triple expansion in any series, substantially as described. 2nd. In an evaporating apparatus, the combination of a battery of three evaporating pans, each complete in itself and capable of independent operation, of valved connections from the discharge pipe of each pan of the heating chamber of both the other pans, a condenser for the discharge from each chamber, and a vale to close such discharge between the connecting pipes, substantially as described.

**No. 48,191. Match-Box. (Boîte à allumettes.)**



Jean Marie Heimann, Sandfield, Dornap, Germany, 11th February, 1895; 6 years.

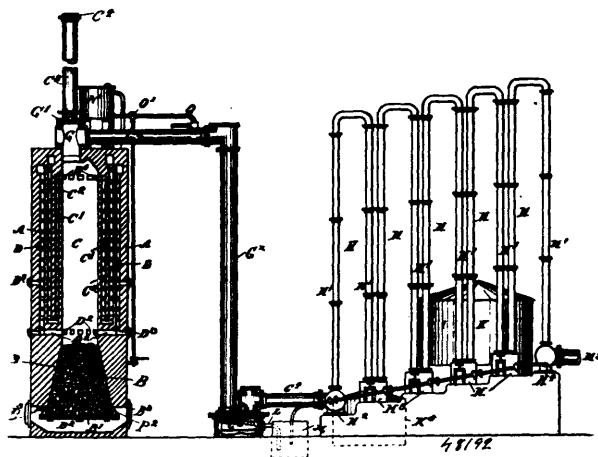
*Claim.*—A suspendable match-box, consisting of the two parts *a* and *b*, hinged together and slightly overlapping when closed, spring *c*, and catch *f*, wide slits *h* at the sides of said parts *a* and *b*, a further guide slit *k*, guide bar *l*, with guide buttons *i*, handle *m*, and pin *n*, in part *b*, and catches *o* in part *a*, substantially for the purposes herein described, with reference to the accompanying drawing.

**No. 48,192. Method of and Apparatus for Producing Illuminating Gas. (Méthode et appareil pour la production du gaz d'éclairage.)**

William Young, Priorsford, Scotland, 11th February, 1895; 6 years.

*Claim.*—1st. The method of producing illuminating and heating gases from liquid hydrocarbons by means of the improved gas producing apparatus shown by the accompanying drawings and used

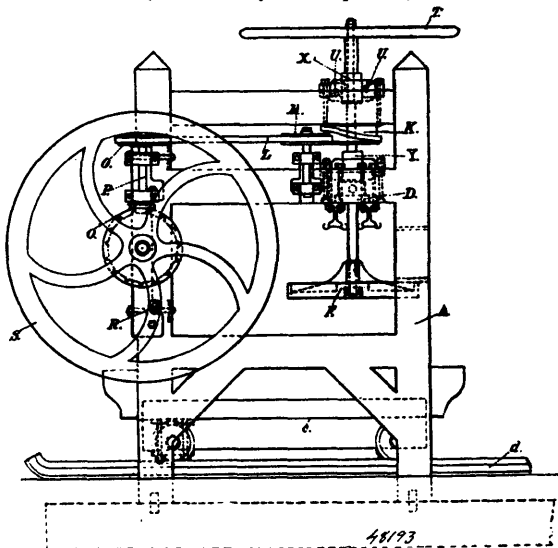
and operated as described whereby the carbon present in the liquid hydrocarbon in excess of what can be gasified by destructive distillation is isolated and deposited in such a form and under such conditions as render it directly available as the source of heat by the



partial combustion with air to effect the destructive distillation of the liquid hydrocarbons and to produce water gas sufficient to wash out the apparatus, and if the carbon is largely in excess to produce a further quantity of water gas, all as described. 2nd. The improved method of decomposing or gasifying liquid hydrocarbons in a gas producing apparatus, consisting in producing water gas and decomposing the liquid hydrocarbons alternately, instead of both at the same time, whereby the stored up heat in the decomposing chamber is rendered more effective and better applied to the decomposition of the liquid hydrocarbon, substantially as described. 3rd. The improved method of treating the condensable liquid products leaving the gas producer whilst passing through the seal box and condensing and washing arrangement, and also the fresh liquid hydrocarbons on their way through the condensing and washing arrangement to the producer whereby they are denuded of water and rendered fit for re-use or use in the producer and by which such water and accompanying valuable hydro-carbons are isolated, substantially as described. 4th. The improved method of decomposing liquid hydrocarbons requiring different temperatures for their decomposition, which consists in running the liquid hydro-carbon difficult of decomposition into the gas producer to be acted on by the heat of the high temperature stored up in the decomposing chamber of the producer, and thereafter on the heat falling to a lower temperature, running the more easily decomposed liquid hydro-carbons into the producer to be decomposed, substantially as described. 5th. The improved construction and combination of apparatus and accessories for producing illuminating and heating gases from liquid hydro-carbons consisting of a gas producer formed with annular flue spaces surrounding a decomposing chamber for the purposes set forth, condensing and washing apparatus charged with fluid hydro-carbon for scrubbing the gas and oil vapour passing from the gas producer and means for conveying said hydrocarbon to vessels above the level of the decomposing chamber and for discharging it thereinto against the the out-flowing gas and vapour in gradually decreasing volume, substantially as described. 6th. The improved construction of gas producer in which the decomposing chamber is placed vertically over the combustion chamber, without any intervening brickwork so that the carbon and dense hydrocarbons liberated during the decomposition of liquid hydro-carbons may fall back from the decomposing chamber direct upon the carbon in the producer, such decomposing chamber being surrounded with annular flue spaces and the secondary air being admitted over the carbon in the combustion chamber for the combustion of carbonic oxide gases which are made to heat internally the walls of the producer and walls of the annular space, the heat so stored up being entirely devoted to the decomposition of the liquid hydro-carbon, substantially as described. 7th. The improved construction of gas producer in which the combustion and gas generating chamber is surmounted by a vertical retort or decomposing chamber in which the carbon deposited from the liquid hydro-carbon is allowed to collect and becomes not only heated by the hot products of combustion coming from the combustion and gas generating chamber but also by the heat resulting from the combustion of the carbonic oxide gas in the flue spaces external to the walls of the decomposing chamber whereby more of the stored up heat is devoted to the production of a larger quantity of water gas, substantially as described. 8th. The improved construction of gas producer in which two or more producers are combined, and in each of which the processes of producing water gas and decomposing liquid hydrocarbons may be carried on independently at the same time, and in sequence, substantially as described. 9th. The improved construction of gas producer consisting of a combustion and gas generating chamber surmounted by a series of inclined decomposing chambers or retorts to deal with liquid hydrocarbons which have a tendency to foam or

sponge up during volatilization, substantially as described. 10th. The improved construction of gas producing apparatus applied to the production of water gas whereby the carbon used to decompose the water is not only heated by the primary products of the combustion from the producer, but also in considerable part by the combustion of the carbonic oxide gases by a secondary supply of air around the walls of the chamber or decomposing vessel containing such carbon, substantially as described.

**No. 48,193. Stone Dressing Machine.**  
(Machine à ajuster la pierre.)



Nils Petter Ostberg, Lund, Sweden, 11th February, 1895; 6 years

*Claim.*—1st. In a stone grinding and polishing machine, the combination with the frame, the parallel rack bars journaled therein arranged in pairs with the teeth of one bar of each pair at right angles to the other bars, the rotatable shaft having pinions adapted to engage with said teeth, substantially as described. 2nd. In a stone grinding and polishing machine, the combination with the frame, the rack bars journaled therein arranged in pairs with the teeth of one bar of each pair at right angles to the teeth of the other bar, and the pivotal yoke connecting said bars together, of the rotatable shaft and the pinions carried thereby adapted to engage with said teeth, substantially as described. 3rd. In a stone grinding and polishing machine, the combination with the frame, the rack bars journaled therein arranged in pairs one above the other, with the teeth of the bar of one pair at right angles with the teeth of the other bar, the pivotal yoke connecting said bars together and the curved lugs at opposite ends of said bars, of the rotatable shaft, the pinions carried thereby, and the arm fixed to said shaft and adapted to engage with said lugs, substantially as described. 4th. In a stone grinding and polishing machine, the combination with the frame, the rotatable shaft carrying the grinding and polishing head, and the rotatable shaft provided with pinions, of the connected rack bars pivoted in said frame, and the removable and interchangeable plates adapted to be secured thereto, substantially as described. 5th. In a stone dressing and polishing machine, the combination of the frame, with the rails or irons fixed thereto, the rotatable spindle and the collar carried thereby, substantially as described. 6th. In a stone dressing machine, the combination with the frame, the spindle and the dressing tool, of the guide rule secured to said frame, substantially as described. 7th. In a machine for dressing cylindrical stone articles, the combination with the frame and the rotatable spindle, of the screw having a centre point adapted to engage with one end of said article, the plate adapted to engage with the other end thereof, provided with a spindle and a driving pulley, substantially as described.

**No. 48,194. Multiple Gear.** (Engrenage multiple.)

Frederick C. Robinson, East Freumont, Michigan, U.S.A., 12th February, 1895; 6 years.

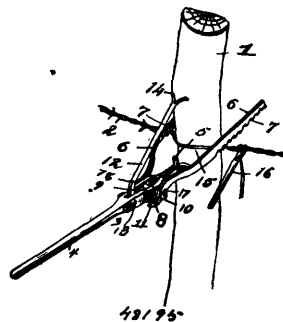
*Claim.*—In a bicycle, the combination with a framework, a driving-wheel axle fitted in seats in the framework, means for adjusting the axle in a horizontal plane, a driving wheel mounted upon said axle, and a chain wheel carried by the driving wheel, of a crank-shaft provided with a cylindrical enlargement or boss 10 having a flattened side in which are formed duplicate spaced sockets 12 and 13, a double gear having a common hub fitted upon the enlargement of the crank-shaft and provided at one side of its bore with a flat surface to correspond with the similar surface on said enlargement, a chain connecting one of the members of the double gear with the chain wheel on the driving wheel, a locking pin fitting in a radial opening in the hub of the double gear and adapted to engage one of the sockets in the enlargement of the crank-shaft to secure either

member of the double gear in the plane of the chain-wheel on the driving wheel, a pivotal lever arranged between the members of the double gear and connected to said locking pin, and a spring for



holding the lever in its normal position, said lever being provided at its free end with a guide opening fitted upon a guide pin fixed to the hub of the double gear, and said spring being coiled upon the guide-pin, substantially as specified.

**No. 48,195. Wire Stretcher.** (Tendeur de fil de fer.)

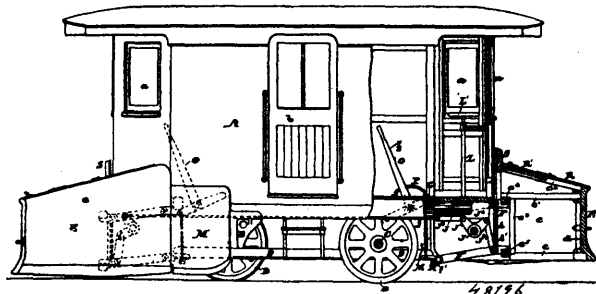


William H. Beal, Anson, Kansas, U.S.A., 12th February, 1895; 6 years.

*Claim.*—1st. In a wire stretcher, the combination with a lever provided with a foot for engagement with a post, pivotal straining arms connected to an intermediate point of the lever and provided with notches for engagement with a fence wire or runner upon opposite sides of the post, and stop-fingers carried by the straining-arms and arranged to engage the lever to limit the movements of said arms, substantially as specified. 2nd. In a wire stretcher, the combination of a lever having a pronged foot which is sharpened or reduced to an edge at its inner or concave side and having an intermediate cut-away portion or slot, straining arms pivotally connected to an intermediate point of the lever and provided with notches for engagement with a fence wire or runner, and a brace bar pivotally connected to the lever and provided with a pronged foot having sharpened or reduced inner edges, substantially as specified.

**No. 48,196. Snow Plow for Railways.**

(Charrue à neige.)



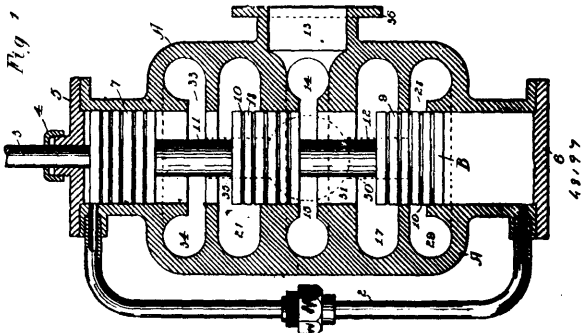
The Taunton Locomotive Manufacturing Company, Taunton, assignee of Francis Winthrop Dean, Cambridge, and William Edwin Mathews, Boston, all in Massachusetts, U.S.A., 12th February, 1895; 6 years.

*Claim.*—1st. In combination with a car or vehicle fitted to, and adapted to be propelled upon, the tracks of a street railway a V-shaped plow constructed and arranged to partially inclose the lower portion of one end of the vehicle body and connected to said vehicle body by a system of parallel motion links, and means having provision for raising and lowering said plow from the vehicle platform,



without changing the substantial parallelism of said plow relative to the railway track. 2nd. In combination with a car or vehicle fitted to and adapted to be propelled upon the tracks of a street railway, a pair of V-shaped plows arranged one at each end of said vehicle with their points in opposite directions, a system of parallel motion links connecting each of said plows to said vehicle body, mechanisms arranged at or near each end of the body of said vehicle and each having provision for raising and lowering one of said plows, connections between said hoisting mechanisms whereby said plows are made to balance each other, and either plow may be raised and the other lowered by operating the hoisting mechanism at either end of the vehicle. 3rd. The combination with a car or vehicle fitted to and movable on a street railway track, of the plow E, the links F F<sup>1</sup> fulcrumed on the vehicle body and pivoted to the plow as set forth, the rocker shaft J, the elbow levers J<sup>1</sup>, J<sup>1</sup>, and links J<sup>2</sup> and J<sup>3</sup>, the rack J<sup>4</sup>, the pinion J<sup>5</sup>, the shaft L, and hand wheel L<sup>1</sup>, all constructed, arranged and operating, substantially as described. 4th. In combination, with a car or vehicle fitted to and movable on a street railway track, a pair of V-shaped ploughs E arranged one at each end of said vehicle body with their points facing in opposite directions, two sets or systems of parallel motion links F, F<sup>1</sup> fulcrumed upon opposite ends of said vehicle body, and each set pivoted to one of said ploughs, two shafts J, J, two elbow levers J<sup>1</sup>, J<sup>1</sup> mounted on each of said shafts, two pairs of links J<sup>2</sup> connecting said elbow levers to said ploughs, two racks J<sup>4</sup> mounted in suitable guideways at opposite ends of the vehicle body, the pinions J<sup>5</sup> engaging said racks, the shafts L, L, the hand wheels L<sup>1</sup>, L<sup>1</sup>, the links J connecting said racks to one of the elbow levers on each of the shafts J, and the two connecting rods j each connecting one of the links J<sup>2</sup>, to one of the elbow levers J<sup>1</sup>, on the shaft J at the opposite end of the vehicle body. 5th. In combination, with a car or vehicle fitted to and movable on a street railway track, a V-shaped plough connected to said vehicle by a system of parallel motion levers, and a pair of supplemental wings pivoted to the rear end of said plough, one at each side of the vehicle body, and means having provision for raising and lowering said wings and moving them about their pivotal connection to said plough, independently of the rise and fall of said plough. 6th. The combination of a car or vehicle fitted to and movable upon a street railway track, a V-plough in front of and partially inclosing the end of said vehicle, a system of parallel motion levers fulcrumed upon said vehicle body and pivoted to said plough, the rods k, k, mounted in fixed bearings on said plough one on each side of the vehicle body, the two supplementary wings M, M, hinged to said rods so as to be movable vertically thereon, the rods o, o attached in fixed positions to said vehicle one on each side, the two sleeves n<sup>2</sup>, n<sup>2</sup> fitted to and movable vertically on said rods, the links p, p connecting said sleeves to said wings, the rocker shaft N, the hand lever O, and the two two-armed levers n, n firmly secured on said shaft, the chains m, m connecting one arm of said levers n, n, to said wings M, and the links n<sup>1</sup>, n<sup>1</sup> connecting the other ends of said levers n, n, to said sleeves n<sup>2</sup>, n<sup>2</sup>, substantially as described. 7th. In combination, with a car or vehicle fitted to and movable upon a street railway track, two V-shaped ploughs adjustably connected one to each end of said vehicle and movable vertically relative thereto, a system of levers, links or rods connecting said ploughs together whereby said ploughs are made to balance each other and maintain a substantial parallelism with the railway track in all positions to which they may be adjusted, and means having provision for raising one plough while the other is being depressed.

**No. 48,197. Piston Valve. (Tiroir cylindrique.)**

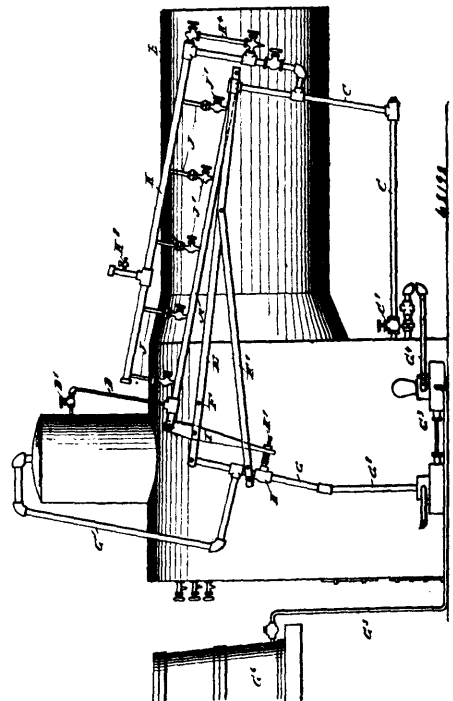


Samuel Otis Jones and George Henry Atwood, both of Stillwater, Minnesota, U.S.A., 12th February, 1895; 6 years.

*Claim.*—1st. The combination with the piston valve made up of three substantially similar discs connected by similar cylindrical necks, of the valve chest therein having a centrally arranged lateral inlet steam port, lateral outlet steam ports, symmetrically arranged one on each side of said inlet port, a circumferential groove communicating with each of said ports, and circumferential grooves beyond the other groove toward the ends of the chest, each having an exhaust opening, substantially as described. 2nd. A piston valve chest having a lateral inlet steam port, and a circumferential conduit communicating with said port and also with said cylinder

through a narrow circumferential slot, substantially as described. 3rd. A piston valve steam chest having lateral ports, circumferential conduits communicating with said ports, and with the valve cylinder through circumferential slots, said conduits being substantially circular in cross section. 4th. The combination of the piston valve, made up of three similar discs, connected by similar cylindrical necks, and the steam chest having a centrally arranged lateral steam inlet port, the circumferential conduit communicating with said port and with the interior of the valve chest through a narrow circumferential slot, the lateral outlet steam port on each side of said inlet port, the circumferential groove communicating with each of said outlet ports, the circumferential conduit between each said last named grooves and the end of the steam chest communicating with the chest by means of a narrow circumferential slot, and with an exhaust opening, substantially as described. 5th. The combination of the piston valve, made up of three similar discs connected by similar necks, and the steam chest having a centrally arranged lateral steam inlet port, a lateral steam outlet port on each side of the inlet port and equi-distant therefrom, an exhaust opening beyond and equi-distant from each of said outlet steam ports, circumferential grooves or conduits for each of said ports and exhaust openings, said disc and grooves being so arranged that when the valve is in mid position, the inlet of steam is entirely cut off, while both the exhaust openings are in communication with the outlet steam ports, and when the valve is at the point of opening to admit steam to one end of the chest, the exhaust at the other end of the chest is full open, substantially as described. 6th. A piston valve chest having a centrally arranged steam inlet port, a circumferential conduit communicating with said port, a circumferential slot arranged centrally with reference to said conduit and connecting the same with the interior of the chest, a circumferential groove on each side of said conduit full open to the chest, a conduit beyond each groove having a circumferential slotted opening to the chest arranged in the side of the conduit next the adjacent groove, steam pipes connected to said grooves and leading to the ends of the steam cylinder and the exhaust port communicating with said conduits beyond said groove, substantially as described. 7th. A piston valve chest having lateral inlet and outlet steam ports, an exhaust port, circumferential grooves or conduits for each of said ports, the area in cross section of said inlet port and exhaust port being greater than the area in cross section of each outlet steam port, and double the area in cross section of the conduit communicating with the inlet steam port together with the area of that part of its slotted opening which communicates directly with said inlet port, being substantially equal to the area in cross section of each of the other conduits or grooves being equal to or greater than that of said first-named, substantially as described.

**No. 48,198. Feed Water Regulator. (Régulateur de l'eau d'alimentation.)**

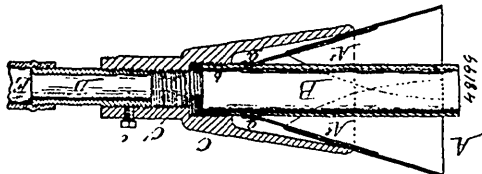


Charles A. Straub and Henry F. Straub, both of Rouseville, Pennsylvania, U.S.A., 12 February, 1895; 6 years.

*Claim.*—1st. A feed water regulator comprising an expansion pipe connected to the boiler, outlets through which the steam can escape

from the said expansion pipe and mechanism for controlling the supply of feed water by the movement of the expansion pipe, substantially as described. 2nd. A feed water regulator comprising an expansion pipe inclined relative to the boiler, and connected at its lower end with the water compartment and at its upper end with the steam compartment, a lever connected with the expansion pipe and controlling a valve for regulating the admission of the feed water to the boiler, and a condenser pipe connected by branch pipes with the said expansion pipe, substantially as shown and described. 3rd. A feed water regulator comprising an expansion pipe, inclined relative to the boiler, and connected at its lower end with the water compartment and at its upper end with the steam compartment, a lever connected with the expansion pipe and controlling a valve for regulating the admission of the feed water to the boiler, branch pipes extending upward from the said expansion pipe, and each provided with a pet cock, and a condenser pipe connected with the feed pipe for the boiler, the said branch pipes extending a distance into the said condenser pipe, substantially as shown and described.

**No. 48,199. Flue Cleaner.** (*Nettoyeur de tubes.*)



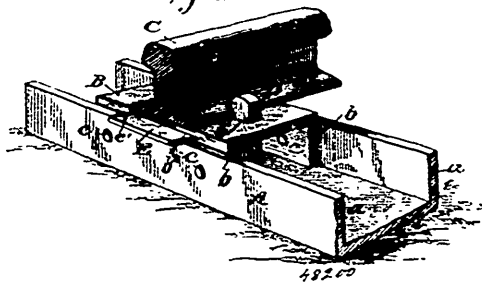
Charles E. Davey and Edgar F. Reeve, both of Detroit, Michigan, U.S.A., 12th February, 1895; 6 years.

*Claim.*—1st. A combined flue scraper and blower having in combination a tapering body C, tapering spring actuated blades A A', are-shaped in cross section, having their smaller ends projecting into said body, a steam pipe B having an adjustable connection with said body and projecting forward on the interior of said blades, and a steam pipe E connected with the body, said body and blades rotatable the one with respect to the other, to contract and expand the diameter of said blades, substantially as described. 2nd. A combined flue scraper and blower having in combination a tapering body C, tapering spring actuated blades A A' having their smaller ends projecting into said body, and steam pipes B and E engaged with said body, one of said steam pipes projecting forward within said blades, substantially as and in the manner described. 3rd. A combined flue scraper and blower, having in combination a tapering body, tapering spring actuated blades having their smaller ends projecting into said body, and a steam pipe B engaged within said blades and body, said body attachable to a handle, and to an additional steam pipe, substantially as described.

**No. 48,200. Tie and Fastening for Railway Rails.**

(*Traverse et lien pour rails de chemin de fer.*)

Fig. 2.

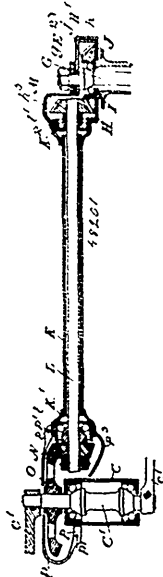


Ellery Cowin Davis, Crookston, Minnesota, and Edmund Davis, Hyde Park, Massachusetts, both in the U.S.A., 12th February, 1895; 6 years.

*Claim.*—1st. The improved tie and rail fastening composed of the channelled tie, the flanged inverted chair permanently secured thereto, and both provided with coincident bolt holes and one of them with lateral slots, as specified, the flanged and notched clamping bolts, and a detachable locking device adapted to engage said bolts, substantially as shown and described. 2nd. As an improved article of manufacture, the metallic tie and chair, the same being composed of a tie and chair proper both having vertical parallel flanges, and the chair being riveted to the tie, and also provided with lateral slots and vertical bolt holes which are coincident with other bolt holes in the base of the tie, as shown and described. 3rd. The combination, with the chair having vertical bolt holes and lateral slots of flanged and notched rail-clamping bolts and a fastening device which is inserted in said slots and engages the notches in the bolts, as shown and described. 4th. The combination, with the

tie and chair secured together, and the latter having bolt holes and lateral slots, of rail clamping bolts having flanged heads and side notches, of a fastening which is in the form of a thin tapered or wedge-shaped plate adapted to enter said slots and the notches in the bolts and thereby lock the same in place, as shown and described.

**No. 48,201. Bicycle.** (*Bicycle.*)



The Wanderer Cycle Company, assignee of Henry Cutler, both of Toronto, Ontario, Canada, 12th February, 1895; 6 years.

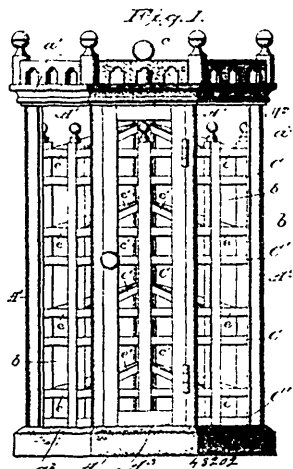
*Claim.*—1st. The combination, with the pedal axle and bevel wheels secured thereto and the main axle and hub and bevel wheels secured on the end of the hub and the bevel pinion shaft with bevel pinion secured at each end meshing with the bevel wheels on the pedal axle and rear wheel hub, of a sleeve supporting the bevel pinion axle and provided with front and rear forked ends, the members of the front fork being secured to lugs forming part of the journal bracket of the pedal axle and the member of the rear fork being secured to the flattened lower end of the member of the frame through which the axle of the main drive wheel extends, as and for the purpose specified. 2nd. The combination with the pedal axle C', journaled in the bracket C, and provided with pedals c', the bevel gear wheel O, secured on the same, the shaft L, with pinions M and N, the axle C, hub I, and bevel pinion J, secured to same, and the sleeve K, provided with forked ends K<sup>1</sup> and K<sup>2</sup>, secured to the lugs c, and flattened lever end E<sup>2</sup>, of the member E, respectively, of the cup H, secured to the hub and provided with a rim h, the cap H<sup>1</sup>, provided with cylindrical portion h<sup>1</sup>, to fit over the rim h, of the cup H, and having the opening h<sup>2</sup>, and hole h<sup>3</sup>, and the supplemental cap h<sup>3</sup>, secured to the forked end and enclosing the opening h<sup>2</sup>, as and for the purpose specified. 3rd. The combination with the pedal axle C', journaled in the bracket C, and provided with pedals c', the bevel gear wheel O, secured on the same, the shaft L, with pinions M and N, the axle G, hub D, and bevel pinion J, secured to same, and the sleeve K, provided with forked ends K<sup>1</sup> and K<sup>2</sup>, secured to the lug c, and flattened lower end E<sup>2</sup>, of the member E, respectively, of the casing P, made in two parts secured together through lugs p, by screws p', and having an opening P<sup>1</sup>, to the inside which fits over the forked end K<sup>1</sup>, a hole in the centre of the convex outer side through which the pedal axle extends and the cap P<sup>2</sup>, secured to the members of the fork and enclosing the opening P<sup>1</sup>, as and for the purpose specified. 4th. The combination with the bevel wheels on the pedal axle and main wheel hub, and the sleeve K<sup>3</sup>, having the forked ends K<sup>1</sup> and K<sup>2</sup>, secured on the lug c, and lower end, E<sup>2</sup>, of the member E, respectively, of the pinion shaft, provided with bevel pinions M and N, and journaled in ball bearings l and l', constructed as specified, and the nuts n and n', screwed on the threaded end of the shaft L, and the D-washer n', situated between them, the straight side of the D being upon the flattened side of the shaft, as and for the purpose specified.

**No. 48,202. Grocer's Cabinet.** (*Cabinet Epicier.*)

Jacob G. Schumm, La Porte, Indiana, U.S.A., 12th February, 1895; 6 years.

*Claim.*—In a grocer's cabinet, the combination of an outer or enclosing case consisting of top and bottom octagonal shaped boards

A and A', connecting posts or uprights A', between which are glass plates b, and mouldings a' and a" for securing the panels in place, together with an inner revoluble case made up of a centre post C, bearing in the top and bottom boards of the inclosing case and pro-



vided with longitudinal grooves, octagonal shaped shelves C' rigidly secured to the post, vertical pieces or posts C' connecting the shelves to each other at their corners, glass plates d' inclined at their upper edges and extending between the centre post and vertical pieces C', and narrow glass plates d extending between the vertical pieces, the plates d and d' forming compartments or bins, and reinforcing strips c and c', grooved to lie over the upper edges of the glass plates d and d', the centre post C extending through the top and provided with a turning-knob on its upper end, the parts being organized, substantially as shown and for the purpose set forth.

**No. 48,203. Car Attachment. (Attache pour chars.)**

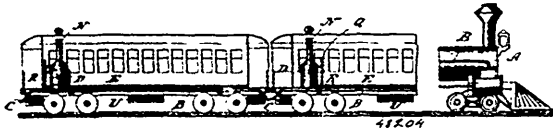


Charles K. Sherwood, Brooklyn, New York, U.S.A., 12th February, 1895; 6 years.

*Claim.* - 1st. In combination with the car, the depending apron, and the dust collecting and conveying conduit carried thereby, substantially as described. 2nd. In combination with the car, the depending apron, and the dust collecting and conveying conduit carried thereby and communicating with the space beneath the car throughout its length. 3rd. In combination with the car, the depending apron, and the dust collecting and conveying conduit carried thereby and the funnel at the front of the conduit, substantially as described. 4th. In combination with the car, the depending apron having the channel or conduit, and the funnel consisting of the inclined plates depending from the car at the front end, substantially as described.

**No. 48,204. Railway Car Heater.**

(Appareil de chauffage pour chars de chemin de fer.)

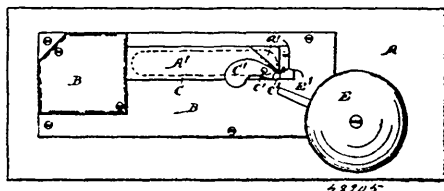


Henry R. Towne, Stamford, Connecticut, U.S.A., 12th February, 1895; 6 years.

*Claim.* - 1st. The combination with a car, of a circulatory system within said car, and two heaters, one an emergency heater, both in operative contact with said circulatory system or with branches thereof, and adapted to be operated simultaneously or separately for imparting heat thereto, substantially as set forth. 2nd. In a car heating system, the combination with a circulatory system within the car, of a suitable heater in contact with said circulatory system, or a branch thereof, mechanism for supplying said heater with steam as a primary means of heating said circulatory system, and a secondary heater also in operative contact with said circulatory system and adapted to heat the same, substantially as set forth. 3rd. The combination of a car, a circulatory system carried thereby, and two

heaters in operative contact but not in communication with the said system, one of the heaters having a pipe for supplying it with heat from a generator borne by another vehicle, substantially as set forth. 4th. The combination of a car, a circulatory system carried thereby, and two heaters in operative contact but not in communication with the said system, one of the heaters having a pipe for supplying it with steam from a generator borne by another vehicle, substantially as set forth. 5th. The combination of a car, a circulatory system carried thereby, a heater in operative contact but not in communication with the said system, a pipe for supplying the said heater with steam from the steam generator of the locomotive, and means for supplying heat to said system when the car is disconnected from the locomotive, substantially as set forth. 6th. In car heating system, the combination with a system of water circulating pipes within a car, of a water heating device provided with a heating coil, one portion of which is located within the combustion chamber of said heater, and the other portion within a transfer chamber arranged external to said combustion chamber, and said heating coil connected to and forming a part of the said water circulating system, substantially as and for the purpose set forth. 7th. In a car heating system, the combination with a system of water circulating pipes within a car, of a water heating device provided with a heating coil, one portion of which is located in the combustion chamber of said heater, and the other portion in a transfer chamber arranged external to said combustion chamber, said coil connected to said water circulating system, a main steam pipe connected to the source of steam, and a branch pipe connected to said main pipe and said transfer chamber, substantially as and for the purpose set forth. 8th. In a car heating system, the combination with a system of water circulating pipes within a car, of a water heating device provided with a heating coil, one portion of which is located within the combustion chamber of said heater and the other portion within a transfer chamber arranged independently of and separated from that portion of the device containing the combustion chamber, and said coil connected to the said water circulating system, substantially as and for the purpose set forth. 9th. In a car heating system, the combination with a system of water circulating pipes within a car, of a water heating device provided with a heating coil, one portion of which is within the combustion chamber of said heater and the other portion within an independently arranged transfer chamber, said coil connected to the water circulating system, a gas heating device in said combustion chamber, a main steam pipe connected to the source of steam, and a branch pipe connected to said main pipe and to said transfer chamber, substantially as and for the purpose set forth.

**No. 48,205. Lock. (Serrure.)**



Ferdinand Cunrad, Detroit, Michigan, U.S.A., 12th February, 1895; 6 years.

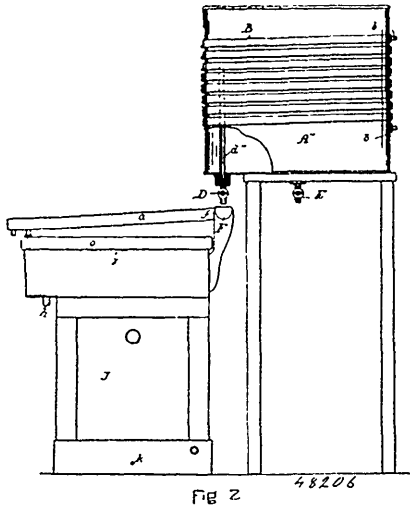
*Claim.* - 1st. In combination, an oscillatory latch, an oscillatory disc constructed with a cam shaped slot engaging said latch, and an operating spindle or key to oscillate said disc, substantially as set forth. 2nd. In combination, a latch pivoted at one end and having a free oscillatory movement at the opposite end provided with a pin or stud intermediate its extremities, an oscillatory disc constructed with a cam-shaped slot engaging said pin or stud, and an operating spindle or key having an eccentric engagement with the disc to oscillate the free end of said latch, substantially as set forth. 3rd. The combination of a latch pivoted at one end and having a free oscillatory movement at the opposite end and provided with a pin or stud intermediate its extremities, an oscillatory disc constructed with a cam shaped slot engaging said pin or stud, and an operating spindle or key having a direct eccentric engagement with the disc to oscillate said latch, the center of the oscillation of said disc being eccentric to said slot, substantially as set forth. 4th. In combination, a letter box provided with a receiving orifice, an oscillatory latch to close and open said orifice, an oscillatory disc to operate latch, and an operating spindle or key to operate the disc, substantially as set forth. 5th. In combination, a letter box provided with a receiving orifice, an oscillatory latch to close and open said orifice, an oscillatory disc to operate the latch, a spindle or key to operate the disc, and a bell operated by the movement of the latch, substantially as set forth.

**No. 48,206. Creamery Apparatus. (Crèmeuse.)**

George Thomas McLaughlin, Boston, Massachusetts, U.S.A., 12th February, 1895; 6 years.

*Claim.* - 1st. In a creamery apparatus the combination with the

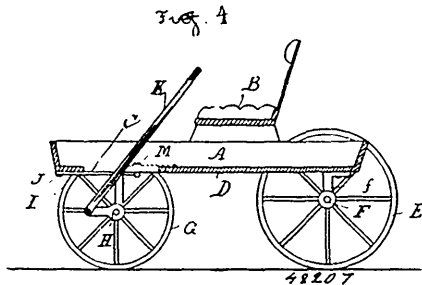
milk cans of different capacity having outlets to a connecting trough, said trough having discharges for cream and a separate discharge for skim milk, of the shallow cream pans, as shown and described. 2nd. The cream pans arranged upon a cabinet, having an extending part of said pans over the front edge of said cabinet so that the outlets



may clear the front of cabinet, in combination with the sliding covers *a, a*, and the means for providing artificial heat under said pans, as shown and described. 3rd. In a creamery apparatus for ripening cream, the combination with the cream pans having sliding covers *a, a*, and arranged upon a cabinet, of a coil or lamp and the pipe *L* arranged within said cabinet, as and for the purpose set forth. 4th. In a creamery apparatus the combination with connecting troughs having common inlet from the milk cans, a single outlet to each cream pan and an outlet outside the edge of the cabinet, of the deep setting milk cans and the shallow cream pans, as shown and described. 5th. In a creamery apparatus the combination with the deep setting milk cans supported upon a frame, and the shallow cream pans supported by the cabinet at a lower elevation than the milk cans, of the supported connecting trough provided with an outlet into each pan, and a like outlet over the edge of the cabinet, as herein set forth.

**No. 48,207. Hand Propelled Vehicles.**

(*Propulseur à main pour voiture.*)



Louis Adolphe Frigon, Montreal, Quebec, Canada, 12th February, 1895; 6 years.

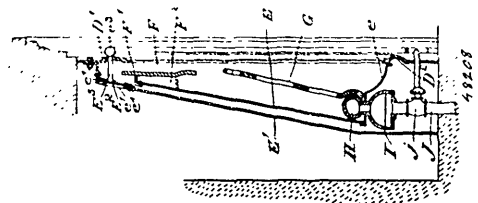
*Claim.*—In a hand propelling vehicle, the combination, with the cranked axle *H* carrying wheels at either end, of the bearings *i* on the lower ends of the down turned bifurcated extremities of the fifth wheel *I*, the fifth wheel *I* having down-turned bifurcated extremities, the pitman rod *K* engaging the cranked portion of the said axle, and passing up through a slot in the bottom of the body of the vehicle, a cross bar *L* secured to the upper end of the said pitman rod and stops *M* engaging the ends of said fifth wheel, substantially as set forth.

**No. 48,208. Gas Heater. (Calorifere à gaz.)**

Edward Gurney, Toronto, Ontario, Canada, 12th February, 1895; 6 years.

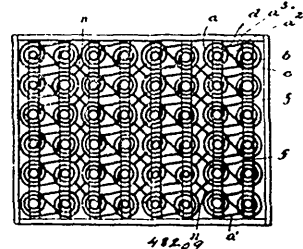
*Claim.* 1st. In combination, the summer front, the fire place moulding within which it fits, the central opening in the front to permit of forward radiation, the inner and outer casings attached to the summer front and extending rearwardly from the same, the inner casing being provided with a burner as specified, the open work beneath the central opening and the level of the bottom

diaphragm of the inner casing, the bottom opening, and the open work above the top of the central opening, as and for the purpose specified. 2nd. In combination, the summer front, the fire place



moulding within which it fits, the central opening in the front to permit of forward radiation, the inner and outer casings attached to the summer front and extending rearwardly from the same, the inner casing being provided with a burner as specified, the open work bead beneath the central opening and the level of the bottom diaphragm of the inner casing, the bottom opening, the open work bead above the top of the central opening, and the slide damper at the top of the outer casing provided with a stem extending outwardly through a slot in the upper bead and having a suitable knob, as and for the purpose specified.

**No. 48,209. Bed Spring. (Resort de lit.)**

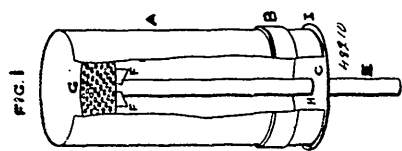


La Fayette Wildermuth, Columbus, Ohio, U.S.A., 12th February, 1895; 6 years.

*Claim.* 1st. A double bed spring formed of a single piece of wire and consisting of two coiled springs *a* and *b*, the upper coil of the spring *a* being extended to and looped around and into engagement with the upper coil of the spring *b*, thence returned and looped around and into engagement with the upper coil of the spring *a*, from which point said extension is continued as described to form the coil *b*, substantially as specified. 2nd. A double bed spring formed wholly of one piece of wire and consisting of the two springs *a* and *b*, and an intermediate bridge portion consisting as described, of extensions of the top coils of said springs which pass back and forth between said top coils and are looped around as described at points *c* and *d* to the top coils at which points said bridge portions are bent downward, substantially as and for the purpose specified.

**No. 48,210. Lobster Can Packer.**

(*Appareil pour mettre le homard en boîtes.*)



Francis Gallant, Tiginish Township, Number One, Prince Edward Island, Canada, 13th February, 1895; 6 years.

*Claim.*—1st. In a can packer having a gauge and strainer and a cylinder provided with a flange, as shown and described.

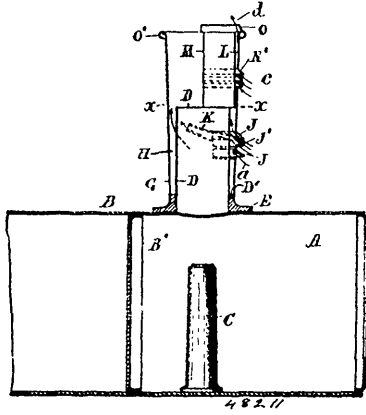
**No. 48,211. Draft Device for Chimney Stacks.**

(*Appareil de tirage pour cheminées.*)

The Taylor Improved Draught Company, assignee of Benjamin Franklin Taylor, both of Newark, New Jersey, U.S.A., 13th February, 1895; 6 years.

*Claim.*—1st. In a device for improving the draft in stacks, the combination with the smoke pipe *D*, of the casing *G*, surrounding the same and extended above the smoke pipe, and provided with air inlets below the top of the pipe, as herein set forth. 2nd. The combination, with the smoke pipe *D*, and the casing *G*, extended above the top of the same, and provided with air inlets arranged above one another below the top of the smoke pipe, of means of deflecting air from the lower inlet to the rear side of the pipe within the cas-

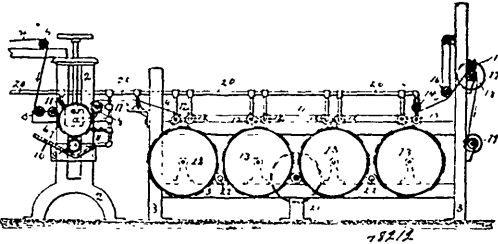
ing, as set forth. 3rd. A chimney stack provided near the top with a chamber having an air inlet upon its front side, the air which enters such inlet and emerges from the top of such chamber operating to deflect upwardly the horizontal current above the stack, sub-



stantially as herein set forth. 4th. In a locomotive stack designed for movement in opposite directions, the combination with the smoke-pipe, of a rotatable casing having air inlets, and means for turning the casing with the air inlets at the front or back of the stack at pleasure, substantially as herein set forth. 5th. The method herein described for promoting draft and relieving the atmospheric pressure at the top of moving smoke stacks, as upon locomotive smoke stacks, which consists in directing an annular current of air upwardly upon the outer side of the smoke pipe within a surrounding casing, and also directing a supplemental current upward upon the front side of the stack at the top of the casing, substantially as herein set forth.

**No. 48,212. Cloth Sizing and Drying Machine.**

(Machine pour coller et sécher le drap.)



The Montreal Cotton Company, Valleyfield, Quebec, Canada, assignee of Richard Partington, Taunton, Massachusetts, U.S.A., 13th February, 1895; 6 years.

Claim.—1st. In a machine for coating textile fabrics, the combination of the carrying drum and the coating roll, and means, substantially as herein shown and described, for cooling and sweating the said drum and roll. 2nd. The combination, in a coating machine, of the feed rolls, the carrying drum, the guide roll, the coating roll and the doctors, the said drum, guide roll, coating roll and doctors having inlet and outlet pipes connected with them for circulating cooling liquid through the same so that during the operation the parts in contact with the fabric are being cooled and caused to sweat, substantially as and for the purpose herein described. 3rd. The combination of the feed rolls 6, 6, the drum 7, the guide roll 8, the coating roll 9, the pan 10, the doctors 11, 11<sup>1</sup>, and the pipe 20, with its branches, by means of which cold water can be conducted to the said drum, guide roll, coating roll and doctors, substantially as herein shown and described. 4th. The combination of the feed rolls 6, 6, the drum 7, the guide roll 8, the coating roll 9, the pan 10, the doctors 11, 11<sup>1</sup>, 11<sup>2</sup>, one or more steam drums 13, with a set of guide rolls 12, 12, and the pipe 20, for supplying cold water to the said drum, guide roll, coating roll, doctors and guide rolls 12, 12, and means for revolving the said drum 7, guide roll 8, coating roll 9, steam drum or drums 13, and guide rolls 12, 12, substantially as herein shown and described. 5th. The combination of the feed rolls 6, 6, the drum 7, the guide roll 8, the coating roll 9, the pan 10, the doctors 11, 11<sup>1</sup>, 11<sup>2</sup>, the guide rolls 12, 12, 15, the nip roll 14, the steam drums 13, 13, the pipe 20, connected to the several parts of the machine for the purpose described, and the take-up rolls 17, 17<sup>1</sup>, the said drum 7, rolls 8, 9, 12, 12, 15, and steam drum 13, being revolved substantially as herein shown and described.

**No. 48,213. Carpet Beater.**

(Appareil pour battre les tapis.)

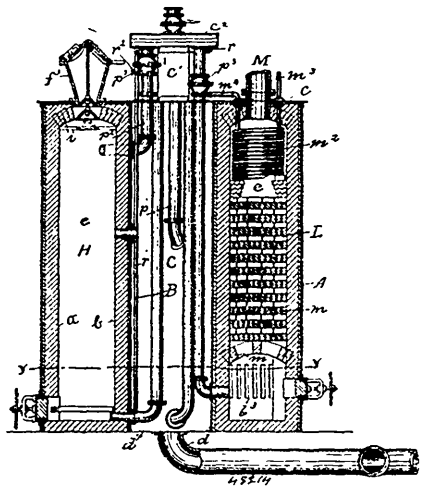


George H. Fernald, assignee of Judson Josiah Hilton, both of North East, Pennsylvania, U.S.A., 13th February, 1895; 6 years.

Claim. 1st. A carpet beater comprising a whipping hoop, a handle secured to one end thereof and an elastic connection between the hoop and handle. 2nd. A carpet beater comprising a hoop constructed from a piece of wire, first bent centrally thence bent adjacent to its ends to form a coil or eye and the ends secured to the handle. 3rd. A handle for a carpet beater, provided with substantially parallel openings adapted to be compressed for the purpose of gripping the end of the hoop, as set forth.

**No. 48,214. Method of and Apparatus for Manufacturing Gas.** (Méthode et appareil pour fabriquer le gaz.)

Fig. 2



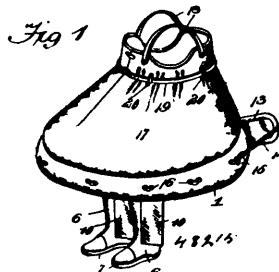
Charles D. Hank, Chicago, Illinois, assignee of James L. Hastings, Philadelphia, Pennsylvania, both in the U.S.A., 13th February, 1895; 6 years.

Claim.—1st. The herein described process of making gas, consisting in generating water gas, and without superheating the gas introducing oil or like hydro-carbons into water gas generated in the first part of the run and carrying the combined gas and vapours through a body of fixing materials and generating water gas in the latter part of the run, superheating the same and introducing the oil into

the resultant superheated water gas, and carrying such combined gas and vapour through a body of fixing material, substantially as and for the purposes set forth. 2nd. The herein described process of making gas, consisting in generating water gas, and without superheating the gas introducing oil or like hydro-carbons into the water gas generated, and carrying the combined gas and vapours through a body of heated refractory fixing material and then through a body of heated carbon, and, in the later part of the run in generating water gas and superheating the same, introducing oil into the resultant superheated water gas and carrying such combined gas and vapour first through a body of heated refractory material and then through a body of heated carbon, substantially as and for the purposes set forth. 3rd. The herein described process of making gas, consisting in generating gas from a mass of carbon, superheating the gas so generated, introducing hydro-carbons into the superheated gas, and carrying the combined superheated gas and vapor, and any fixing gases formed thereby, through a body of heated carbon, substantially as and for the purposes set forth. 4th. The herein described process of making gas, consisting in blowing up two or more generators, burning the gases formed to heat bodies of refractory material, and then carrying the heated products of combustion through a mass of carbon and thereby heating the same, and subsequently introducing steam into one of said generators, introducing hydrocarbons into the water gas formed, and carrying the same through a body of heated carbons, and, at a latter part of the run, introducing steam into the other generator carrying the water gas formed through a body of heated checker work to superheat the same, introducing hydrocarbons into such superheated water gas and carrying the same through the body of heated carbon, substantially as and for the purposes set forth. 5th. The herein described process of making gas, consisting in blowing up two or more cupola generators, burning the gas formed to heat bodies of checker work, or like loose material, and carrying the heated product through a fixing chamber containing refractory material, and then downwardly through a mass of carbon to heat the same, then admitting steam to one of the cupola generators, carrying the products through the fixing chamber containing refractory material, and during their passage introducing hydrocarbons into the same and carrying the combined gas and vapor through the body of heated carbon, and at the later part of the run introducing steam into the other cupola generator, carrying water gas formed through the heated bodies of checker work and the superheated water gas through the fixing chamber containing refractory material, and during their passage introducing hydrocarbons into the same, and the resultant superheated water gas and vapor through the heated carbon, substantially as and for the purposes set forth. 6th. The herein described process of making gas, consisting in burning suitable gas and passing the heated products of complete combustion thereof through a body of carbon, and thereby heating the same to (but not beyond) redness, and subsequently passing gas containing hydrocarbons through said red hot carbon, substantially as and for the purposes set forth. 7th. A gas making apparatus having a vertical furnace containing a fixing chamber or chambers, an outlet passage leading from the lower end thereof, a vertical steam superheater with which such passage communicates at the base, said superheater containing a coil of steam pipes, and a mass of checker work, and an outlet passage leading from the upper end of such steam superheater, substantially as and for the purposes set forth. 8th. A gas apparatus formed of a central circular air tank, and a circular casing around the same, the space between the tank and casing having suitable gas generating and fixing chambers formed therein, and having air pipes leading from the upper part of said air tank, through the tank to the gas generating chamber, substantially as and for the purposes set forth. 9th. A gas apparatus formed of a central circular air tank, and a circular casing around the same, the space between the tank and casing having suitable gas generating and fixing chambers formed therein, and having air pipes leading from said air tank to the gas generating chambers, said air pipes having valves outside of said air tank, and leading thence through the tank to the gas generating chambers, substantially as and for the purposes set forth. 10th. A gas apparatus formed of a central circular air tank, and a circular casing around the same, the space between the tank and casing having suitable gas generating and fixing chambers formed therein, the upper end of said tank having a neck of less diameter than the tank, and a hollow head of greater diameter than the neck, and an air pipe communicating with the hollow head and leading outside of the hollow neck into the tank, and to one of the gas generating chambers, the valve for controlling the air pipe being located outside of the tank, substantially as and for the purposes set forth. 11th. A gas apparatus formed of a central circular air tank, and a circular casing around the same, the space between the tank and casing having suitable gas generating chambers, one or more air pipes leading to one or more gas generating chambers, and a steam super-heater in the course of the gases, and having a pipe leading from said steam superheater to a ring pipe around the tank, and valve controlled pipes leading from said ring pipes within the tank to the gas generating chambers, substantially as and for the purposes set forth. 12th. A gas making apparatus formed of two circular casings forming an annular structure and having formed therein, a series of cupola generators communicating with each other at the top, and air and steam supply pipes communicating with the generators, and

a gas fixer with the upper end of which the adjoining cupola generator communicates, said fixer having in the upper part thereof, a mass of checker work and an oil entrance pipe, and in the lower part thereof, a coke chamber, and having an eduction port leading from the base thereof, substantially as and for the purposes set forth. 13th. A gas making apparatus having in the lower part thereof, a cold chamber and in the upper part thereof, mass of checker work, a central passage through the checker work communicating with the coal chamber, and a solid brick work funnel above said central passage, but within the chamber, and having a coal feeder in the top wall above said furnace, substantially as and for the purposes set forth.

#### No. 48,215. Boat. (Vaisseau.)



Hiram D. Layman, Little Rock, Arkansas, U.S.A., 13th February, 1895; 6 years.

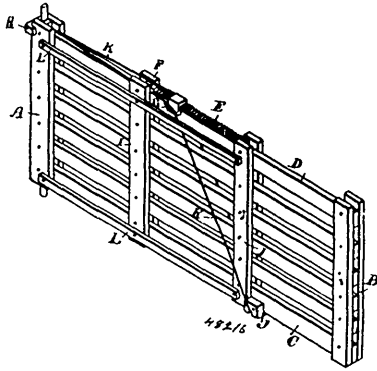
*Claim.*—1st. A boat having a continuous tubular inflatable oval shaped body, substantially as set forth. 2nd. A boat having an oval shaped inflatable body, substantially as set forth. 3rd. A boat having a continuous tubular inflatable oval shaped float body of a greater diameter at the wide stern end than at the narrow prow end, substantially as set forth. 4th. In a boat, a continuous tubular inflatable body enclosing a central open space, and a water tight bottom piece attached to the bottom of said body and provided with water tight leggings or boots depending therefrom, substantially as set forth. 5th. In a boat, a tubular inflatable body of a greater diameter at its rear end than at the front end, a water tight bottom piece enclosing the bottom of the central open space of said body and having depending water tight leggings or boots extended below the same, and an inflatable cushion seat arranged on said bottom piece within the wide end portion of said body, substantially as set forth. 6th. In a boat, a tubular inflatable oval shaped body of a greater diameter at its rear end than at the narrow prow end, a water tight bottom piece enclosing the bottom of the central open space of the body, and having depending water tight leggings or boots provided with weighted shoes, and an inflatable cushion seat arranged on the bottom piece in rear of the leggings or boot openings within the wide end portion of the body, substantially as set forth. 7th. In a boat, a tubular inflatable oval shaped body provided with a water tight bottom piece having a cushion seat and water tight leggings or boots depending from the same in front of said boots, a rudder attached to the rear end of said body, and rudder straps connected to the said rudder and to the body at opposite sides of the rudder, substantially as set forth. 8th. In a boat, the combination of a tubular continuous inflatable float body provided with a water tight bottom piece having depending flexible leggings or boots, opposite feathering paddles attached at their front edges to opposite sides of said leggings or boots and provided at their upper and lower ends with triangularly shaped folding end flaps also attached to the sides of the legs or boots, and limiting straps attached to the leggings or boots and to the moving edges of said paddles, substantially as set forth. 9th. In a portable boat, a tubular inflatable body provided at the top with a breakwater, substantially as set forth. 10th. In a portable boat, a tubular inflatable body provided at the top with a water tight breakwater cape having shoulder straps and an encircling body strap below the shoulder straps, substantially as set forth.

#### No. 48,216. Gate. (Barrière.)

Moses E. Myers, Cambridge, Indiana, U.S.A., 13th February, 1895; 6 years.

*Claim.*—1st. In a gate, the combination, substantially as set forth, of a wire receiving attachment directly secured to the upper portion of the hinge-stile and disposed in the vertical central plane of the gate as set forth, a wire receiving attachment at an intermediate part of the base of the gate and having a width greater than the thickness of the gate, a shifting saddle, mounted upon the upper portion of the gate between said two wire-receiving attachments and having a width less than the attachment at the base of the gate, and a continuous truss-wire engaging said two attachments and said saddle, said saddle deflecting the two side-portions of said wire vertically and horizontally out of direct lines between its points of engagement with said two wire-receiving attachments. 2nd. In a gate, the combination, substantially set forth, with a continuous truss-wire engaging the gate at the hinged stile and at a point between the hinged stile and latch-stile, of a saddle mounted for

adjustment on the gate to deflect the two side portions of said trans-wires and provided with wire receiving ledges extending lengthwise of the saddle in a plane substantially parallel with a line cutting



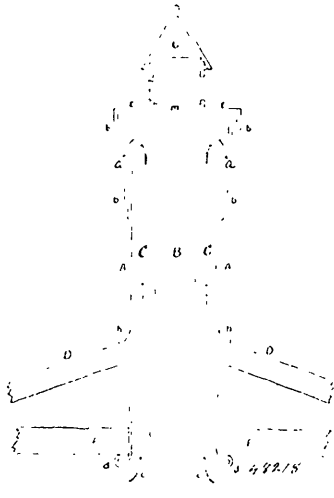
said two points of engagement of the wire with the gate, whereby the wire receives two slight bends at its engagement with a saddle-ledge.

**No. 48,217. Treatment of Precious Ores.**  
(*Traitement des mineraux.*)

Henry Livingstone Sulman, London, England, 13th February, 1895; 6 years.

*Claim.*—1st. The process of recovering float gold by the addition to the milling water of substances which diminish the surface of the water, so as to cause the float gold to leave the surface and deposit. 2nd. The process of recovering finely divided gold in suspension in the milling water by dissolving therein substances capable of being precipitated in the form of a curd or coagulum and precipitating the same, so as to cause them to bring down with them the gold in suspension. 3rd. The use of soaps or saponaceous matter for the purpose of recovering float gold as above described. 4th. The use of soaps or saponaceous matter for the purpose of recovering finely divided gold in suspension as above described. 5th. In a process for recovering float gold by means of soaps or saponaceous matter as above described softening the water and in the milling process previously to adding the soap or saponaceous matter thereto. 6th. In a process for recovering finely divided gold in suspension by means of soaps or saponaceous matter as above described, the employment of lime water or salts of lime for the purpose of subsequently precipitating the same. 7th. The herein described process for recovering gold in milling operations consisting of the following steps 1, (if necessary), softening the water to be used in milling 2, adding soap or saponaceous matter to precipitate the float gold 3, precipitating the soap or saponaceous matter by the additions of lime water or salts of lime to bring down the finely divided gold in suspension.

**No. 48,218. Chimney and Stove Pipe.**  
(*Cheminee et tuyau de poele.*)

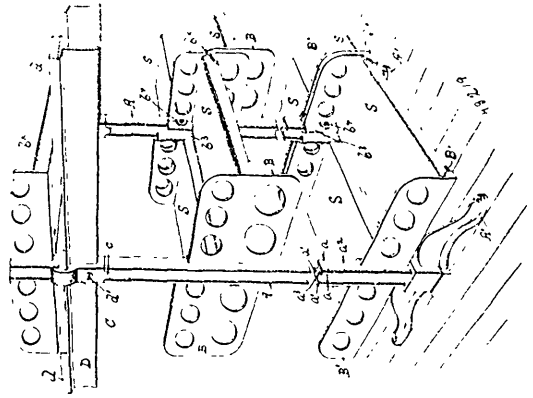


Alfred E. Gilpin, Halifax, Nova Scotia, Canada, 13th February, 1895; 6 years.

*Claim.*—In stove pipes and chimneys the plan of surrounding the

stove pipe by a case composed of sheet metal with an air space between the pipe and case kept cool by the passage of air through the same, and protected from the weather by a cover and cowl at the top, substantially as set forth.

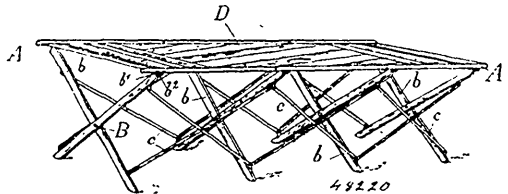
**No. 48,219. Shelf Support.** (*Support de tablettes.*)



Charles Boker Godfrey, Milford, Massachusetts, U.S.A., 13th February, 1895; 6 years.

*Claim.*—1st. A standard, and a shelf-supporting bracket provided at one side only with one or more projections engaging said standard, and means to clamp-aid bracket to said standard substantially as described. 2nd. The combination, with a flanged standard of a bracket provided at one side with a hook lip to engage said flange, and means to clamp said bracket in vertically adjusted position on said standard, substantially as described. 3rd. The combination, with a standard having a vertical flange, of a bracket adapted to stand in a line at right angles to said flange and provided at one side with a hooked lip engaging said flange, and a clamping screw threaded in said lip, to act upon said flange, and retain said bracket in vertically adjusted position, substantially as described. 4th. The combination, with two standards, of shelf brackets vertically adjustable thereon, an interposed strut sustained by said brackets, and means to clamp said brackets upon said standards and against the ends of said struts, substantially as described. 5th. Two standards, shelf-supporting brackets applied thereto, and an interposed shelf, clamped by and between said brackets and preventing lateral movement and removal of said brackets, substantially as described. 6th. The combination, with a shelf bracket sustaining standard, of a header resting upon the top thereof and adapted to receive and hold a second supporting standard, substantially as described. 7th. The combination, with a shelf bracket sustaining standard, of a header resting upon the top thereof and sustaining a second supporting standard, and a floor-supporting girder held by said header, substantially as described. 8th. A shelf bracket, consisting of a shelf-support having an upwardly extended guard at one side, and the stop *b* at the end of the shelf-support, substantially as described. 9th. The combination, with two standards, of shelf carrying brackets carried thereby, each provided with a shelf-support having an upwardly extended guard, and a shelf carried at its ends by said brackets and cut away at its underside to receive the said shelf-supports, and stops as *b* concealing the said cuts and serving to prevent the withdrawal of the shelf, substantially as described. 10th. A series of like standards, shelf-supporting brackets arranged thereon, one such bracket on each of the end standards, and two such brackets on opposite sides of the intermediate standards, and shelves carried by said shelf brackets, substantially as described.

**No. 48,220. Folding Bedstead.** (*Lit pliant.*)

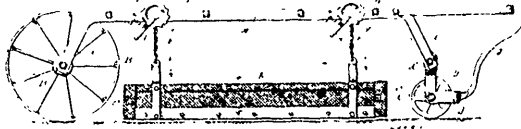


Carl Johan Pehrsson, Lundswall, Sweden, 13th February, 1895; 6 years.

*Claim.*—The improved folding bedstead frame herein shown and described, comprising the crossing arms *b b*, with hooks *b'*, at their upper ends and provided with hinges *E E'*, in combination with the folding side cross-pieces *c c*, which are movable fastened at their upper and lower ends *c c'*, to the named hinges *E E'*, and siderails

A A, with mails *b*, adapted to fit into the hooks *b'*, on the upper ends of the middle cross-pieces *b b*, substantially as and for the purpose set forth.

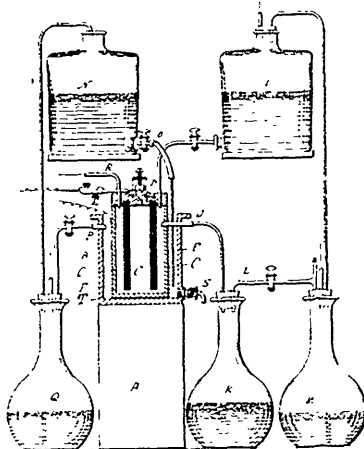
**No. 48,221. Apparatus for Repairing Asphalt Pavements.** (*Appareil pour réparer les pavages en asphalte.*)



James Rawlins Penberthy, Buffalo, New York, U.S.A., 13th February, 1895; 6 years.

*Claim.*—1st. In a heating apparatus for softening asphalt pavement, the combination with a portable supporting frame, of an open fuel basket adapted to contain a bed of solid, incandescent fuel, and having a perforated bottom through which the lower surface of the bed is exposed, and adjustable suspension devices which permit the fuel basket to be lowered in close proximity to the surface of the pavement, or raised to clear ridges of the pavement in transporting the apparatus, substantially as set forth. 2nd. In an apparatus for repairing asphalt pavement, the combination with a supporting frame composed of arched side bars and transverse connecting bars, of rear supporting wheels, a front steering wheel, a fuel basket arranged between said front and rear wheels, and having a perforated bottom, transverse shafts, journaled on said supporting frame, and suspension chains connecting the fuel basket with said shafts, substantially as set forth.

**No. 48,222. Method of Producing Caustic, Etc.** (*Méthode de production de soude caustique, etc.*)



Thomas Drake, New Street, Huddersfield, York, England, 13th February, 1895; 6 years.

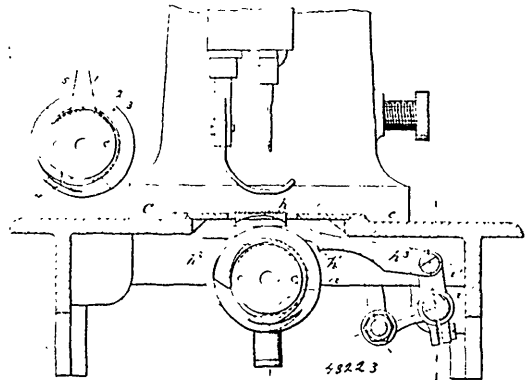
*Claim.*—1st. The manufacture of caustic soda and chlorine gas or caustic potash and chlorine gas by having the cell *C* wrapped or surrounded with fine wire, wire-gauze or perforated sheet of gold, silver, copper, brass, zinc, platinum, or other metal of suitable electrical conductivity arranged and operated in the manner and by the means herein described and shown in the drawings. 2nd. In manufacturing caustic soda and chlorine gas or caustic potash and chlorine gas the use therein of a cell, namely the cell *C*, wrapped or surrounded with any of the metals in the manner as herein mentioned, immersed or treated with a salt of mercury for purposes described herein. 3rd. In manufacturing caustic soda and chlorine gas or caustic potash and chlorine gas the use or employment of water within space *F*, formed between the two vessels *B* and *C*, for purposes described. 4th. In manufacturing caustic soda and chlorine gas or caustic potash and chlorine gas the connecting of the cathode *E*, directly to the wire, wire-gauze or perforated sheet metal *F*, wrapped around the porous pot *C*, substantially as shown and described. 5th. I claim the porous pot *C*, closely and firmly wrapped or surrounded with a very fine wire, wire gauze or finely perforated sheet of gold, silver, copper, brass, zinc, iron, platinum, or other metal of suitable electrical conductivity treated or not treated with mercury.

**No. 48,223. Sewing Machine.** (*Machine à coudre.*)

Harrey Moore, Wellingborough, Northampton, England, 13th February, 1895; 6 years.

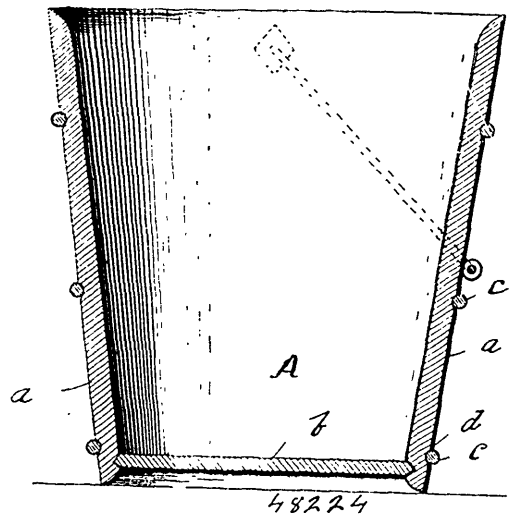
*Claim.*—1st. In lock stitch sewing machines a hook adapted to be

rotated, a point on the hook and having its throat inclined from front to back, a conical shaped front for the hook, and a bobbin or thread case adapted to be supported within the hook, the inclined throat being so situated with respect to the thread case that as the



hook rotates carrying the loop, the part of the thread within or inside the hook is thrown towards the back of the thread case, and that the part of the thread outside the hook is thrown on to the cone part and so over the front, substantially as set forth. 2nd. In a lock stitch sewing machine a hook adapted to be rotated and provided internally with a central groove and made in two parts and having its front conical shaped, a thread case having an external flange with opening at top and adapted to work within the groove of the hook, the point on the hook having its throat inclined so that the inner part is at the back of the flange of the thread case and its outer part to the front of the back edge of the conical part of the hook, substantially as set forth. 3rd. In a lock stitch sewing machine, a hook, a hollow shaft on which the hook is mounted, a countershaft mounted eccentrically to and adapted to drive the hollow shaft and be driven from the main shaft, a stop shaft bearing within the hollow shaft and adapted to bear against an internal circular flange on the countershaft, a bobbin or thread case mounted within the hook and adapted to be maintained stationary by the stop shaft, substantially as set forth. 4th. In a lock stitch sewing machine, a rotary hook consisting of a main body and of a point adapted to be secured to the main body, substantially as set forth. 5th. In a sewing machine, the mechanism for driving the feed, consisting of an eccentric on a shaft driven from the main shaft of an eccentric strap connected to the feed plate and having an elongated hole, of a countershaft driven from the main shaft and of an arm mounted on the countershaft and pivoted to the feed plate, substantially as set forth.

**No. 48,224. Manufacture of Cooped Vessels.** (*Fabrication de vaisseaux de tonnelliers*)



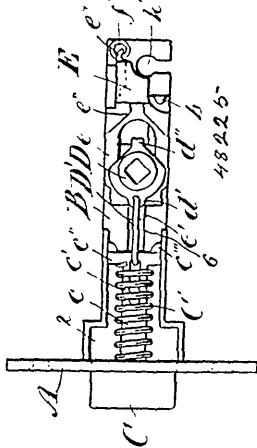
Thomas Kirkpatrick Parrish, Richmond, Virginia, U.S.A., 13th February, 1895; 6 years.

*Claim.*—1st. The method of hooping cooped or staved vessels which consists in forming a groove in the vessel for the reception of



the hoop, forcing on the vessel and into said groove a metallic hoop and causing said hoop, while being so forced, to compress the staves and sufficiently diminish the diameter of the groove to admit the hoop. 2nd. The method of hooping coopered or staved vessels which consists in forming a circumferential, concave groove in the vessel, and then forcing over the vessel a round wire hoop, said hoop being caused to compress the staves, while being so forced, sufficiently to gain entrance to the groove. 3rd. The method of manufacturing staved wooden vessels which consists in forming continuous circumferential grooves on the outside of the vessel and then forcing a round wire welded hoop of less diameter than the part of the vessel adjacent to the grooves upon the vessel with such force as to compress the vessel sufficiently to allow the hoop to seat in the groove. 4th. A staved wooden vessel having a welded wire hoop seated in a continuous circumferential groove, the material at the lower edge of the groove being compressed and the hoop applied after its ends have been welded together.

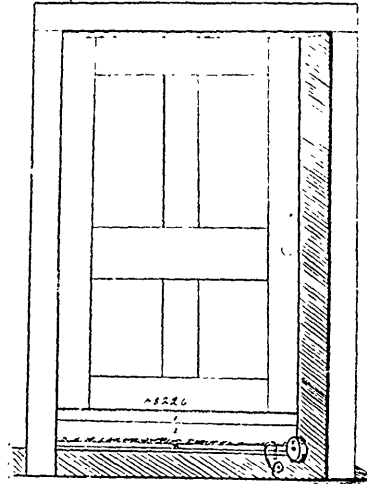
**No. 48,225. Mortise Lock. (Serrure à mortaiser)**



Richard Chappell, Moosomin, Northwest Territories, Canada, 14th February, 1895; 6 years.

*Claim.*—1st. In a mortise lock, the combination of a face plate, a portion of a cylindrical barrel D, rigidly connected to said face plate, a complementing portion of said barrel forming a cover D', removably secured to said face plate and fixed barrel section, a bolt C, having stem e, with slotted end and cross-head e', with bearing point e'', adapted to slide longitudinally in said barrel, a spring coiled upon the stem of said bolt and adapted to project the head, a spindle hub D, journaled transversely in said barrel and provided with two opposite lugs, a link connecting one of said lugs with the cross head of said bolt stem, a yoke E, adapted to slide longitudinally upon the neck of said hub and provided with jaws e', adapted to engage a lug on said hub and prevent the same from being turned and provided with a tail adapted to be engaged by the bit of the key for the purpose of causing it to travel longitudinally, and a tumbler F, pivoted at the tail end of the barrel and adapted to abut against the end of said yoke and be lifted by the key bit into a recess of said yoke, substantially as set forth. 2nd. In a lock, the combination of a face plate provided with a slot for the bolt, the back of a casing fast on said face-plate, a front or cover removably secured to said back and completing said casing, a spindle hub journaled transversely in said casing and provided with a lug, a bolt-head removable in the slot of the face-plate and provided with stem having a cross-head adapted to be guided longitudinally in said casing, a spring coiled upon said stem adapted to shoot said bolt, a cross ridge in said slideway against which said spring abuts on one side and the cross-head of the bolt on the other, and a link connecting said cross head by a slot in the stem to the spindle hub by the lug, substantially as set forth. 3rd. In a lock, the combination of a casing, a spindle hub journaled transversely in the same and adapted to operate the bolt, a lug on said hub adapted to fit in a jaw to prevent said hub from turning, a yoke having a slot adapted to travel upon the journal bearing of said hub and be guided in the casing to prevent lateral deviation and provided with jaws adapted to engage said lug on said hub and having its tail end adapted to be operated by a key, substantially as set forth. 4th. In a lock, the combination of a casing, a spindle hub journaled transversely in the same and adapted to operate a bolt, a lug on said hub, a yoke having jaws adapted to engage said lug and adapted to slide upon the neck of said hub and be guided in the casing to prevent deviation from a straight path, a hooked tail and adapted to be engaged by a key bit to cause it to travel in a straight line, a tumbler pivoted at the tail end of said casing and adapted to lie in a recess in said yoke to fall and abut against the end of said yoke, and adapted to be lifted by the key bit before operating on the tail end of the yoke, substantially as set forth.

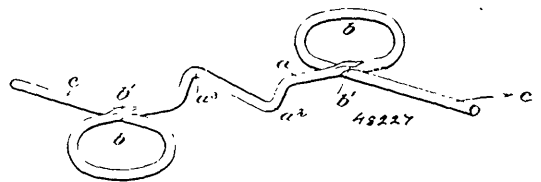
**No. 48,226. Weather Strip. (Bourrelet de porte)**



Wallace Simpson, Brighton, Ontario, Canada, 14th February, 1895; 6 years.

*Claim.* The combination of the bars 1, 2, and 3, with the spring 6, and the revolving block 5, or the wire spring 4, substantially as and for the purpose hereinbefore set forth.

**No. 48,227. Wall Tie. (Tirant pour murs.)**



Jesse Prescott, Webster, Massachusetts, U.S.A., 14th February, 1895; 6 years.

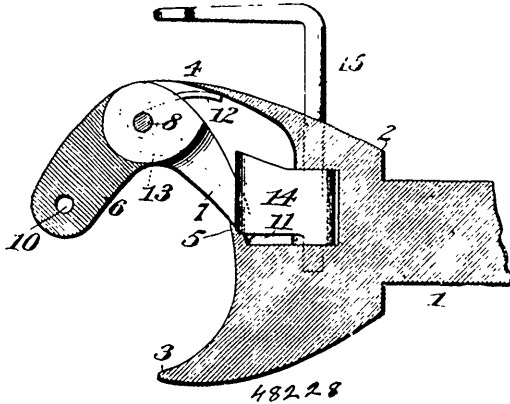
*Claim.*—1st. As an article of manufacture, a wall-tie of wire having a central shank portion, one end being bent to form a loop the extremity projecting in the plane of the loop, and at right angles to the length of the shank, the other end being bent in a plane at right angles to the plane of the loop and at right angles to the length of the shank, substantially as described. 2nd. In a wall-tie, the combination, with a wire having a central shank portion and one end bent to form a loop, the extremity being at right angles to the length of the shank, the opposite end being bent downward at right angles to the plane of the loop and at an angle to the length of the shank, of a staple or other anchor device into which the downward bent end is inserted, substantially as described. 3rd. As an article of manufacture, a wall-tie having a central shank-portion which bends downward toward the inner end of the tie, and then upward, substantially as described. 4th. As an article of manufacture, a wall-tie having a central shank-portion which bends downward toward the inner end of the wall-tie and then upward above the level of the axis of the shank, substantially as described. 5th. As an article of manufacture, a wall-tie having a central shank-portion bent downward toward the inner end, and thence upward and downward, the outer portion being bent to form a loop and the outer end projecting laterally at right angles to the shank-axis, the inner end of the wall-tie being bent at an angle to the plane of the loop and to the axis of the shank, substantially as described.

**No. 48,228. Car Coupler. (Attelage de chars.)**

Dennis Wholey, Lowell, Massachusetts, U.S.A., 14th February, 1895; 6 years.

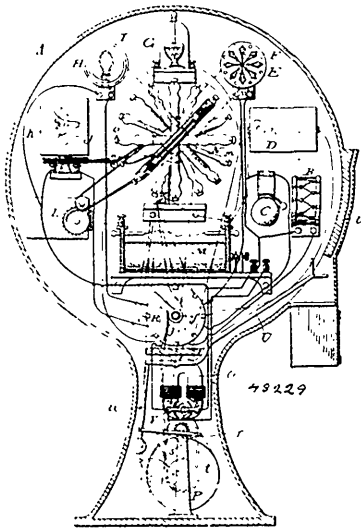
*Claim.*—1st. In a coupler, the combination, with the coupling head, knuckle and recess, of a spring actuated jaw pivoted in the knuckle, a tongue on the inner end of the jaw, a pivoted gravity dog adapted to be interposed between the end of the tongue and the wall of the recess, one side of the dog being bevelled to conform to the inclination of the tongue, and the flange upon the head adapted to limit the movement of the tongue under the impulse of the spring when the gravity dog is lifted, substantially as specified. 2nd. In a coupler, the combination, with the coupling head, knuckle and recess, of a jaw pivoted in the knuckle, a tongue on the inner end

of the jaw, a pivoted dog adapted to be interposed between the end of the tongue and the wall of the recess, one side of the dog being bevelled to conform to the inclination of the tongue, substantially as



specified. 3rd. The combination, with the coupler head 2, provided with the recess 5, and flange 11, jaw 6, coil spring 12 adapted to actuate the jaw, tapered dog 14, and shaft 15, substantially as specified.

**No. 48,229. Electrical Display Apparatus.**  
(Appareil d'étalage électrique.)

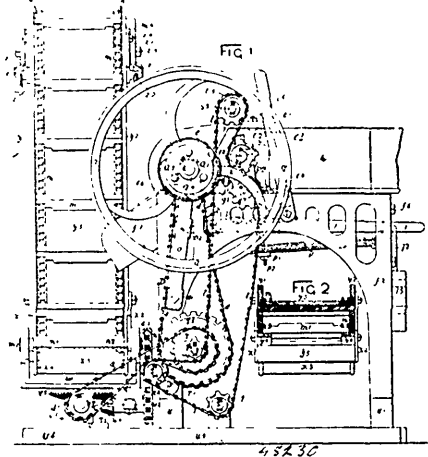


Joseph L. Ketcher, New York, State of New York, U.S.A., 14th February, 1895; 6 years.

*Claim.*—1st. In an electric display apparatus, the combination of a source of electric energy, a series of translating devices for utilizing the current so supplied, a switch adapted to direct the current to, and divert it from the translating devices in series or succession, a motor for actuating said switch, and a locking device for holding the motor out of action, adapted to be moved or released by the introduction of a coin, substantially as set forth. 2nd. In an electric display apparatus, the combination of an actuating motor, an electric generator driven by said motor, a detent for said motor, and a coin-actuated lever connected with and serving to withdraw the detent and thereby to permit the motor to operate. 3rd. In an electric display apparatus, the combination of an electric generator, a motor for operating said generator, a series of translating devices, a switch interposed between the generator and the translating devices and adapted to bring said devices successively into circuit with the generator, and a coin-controlled detent adapted to hold the motor out of action until a coin is deposited and then to permit the motor to operate to a predetermined extent. 4th. In combination, with a source of electric energy, a series of translating devices, rotatable transparencies adapted and arranged to co-operate with the translating devices, a switch for directing the current to the translating devices in predetermined order, and a motor connected with and serving to actuate said rotatable devices and the switch. 5th. In a display device such as described, the combination of an electrically

lighted tube or bulb, and mirrors arranged in proper relation thereto and to each other to produce kaleidoscopic effects, or reproductions of the light.

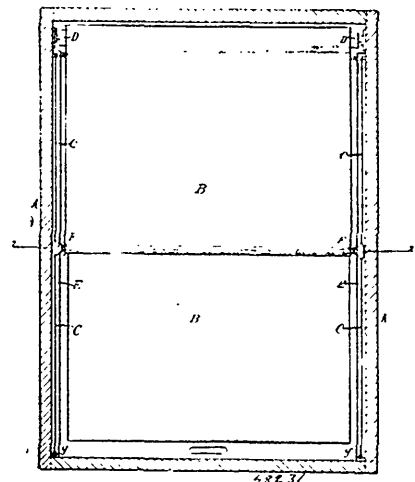
**No. 48,230. Feed Cutter.** (Coupe-paille.)



William Stafford, Arthur Stafford, and William John Stafford, all of Lancaster, Ontario, Canada, 14th February, 1895; 6 years.

*Claim.*—1st. In a feed cutter, the combination of rotary cutters  $c^3$ , and movable cutter bar  $k$ , for the purpose hereinbefore set forth. 2nd. The combination of rotary cutters  $c^3$ , cutter bar  $k$ , links  $j^1$ , trip lever  $j$ , and weight  $j^2$ , (or spring), for the purpose hereinbefore set forth. 3rd. The combination of rotary cutters  $c^3$ , cutter heads  $c^1$ , and  $c^2$ , shaft  $e$ , feather  $e^2$ , clutch  $e^3$ , pulley  $a^1$ , spring  $o$ , fork  $o^2$ , and finger  $o^2$ , for the purpose hereinbefore set forth. 4th. The combination of rotary cutters  $c^3$ , cutter heads  $c^1$ , and  $c^2$ , bolts  $e^4$ , and safety washers  $e^5$ , for the purpose hereinbefore set forth. 5th. The combination of rotary cutters  $c^3$ , cutter heads  $c^1$ , and  $c^2$ , shaft  $e$ , driving pulley  $a^1$ , fly-wheel  $a$ , plate  $a^2$ , and bolts  $a^3$ , for the purpose hereinbefore set forth. 6th. The combination of feed roller  $g^2$ , sliding roller bearings  $g^1$ , connecting links  $p^2$ , slots  $p^3$ , fingers  $i^2$ , equalizing shaft  $i$ , and lever  $i^1$ , for the purpose hereinbefore set forth. 7th. The combination of sprocket-wheel  $r$ , sprocket-wheel  $r^1$ , friction plate  $r^1$ , and bolts  $r^2$ , for the purpose hereinbefore set forth. 8th. The combination of the elevator sides  $y^1$ , and  $y^2$ , with checks  $x^1$ , and  $x^2$ , and enclosing piece  $x^3$ , for the purpose hereinbefore set forth.

**No. 48,231. Window and Curtain Fixture.**  
(Ajutage des stores de fenêtres.)

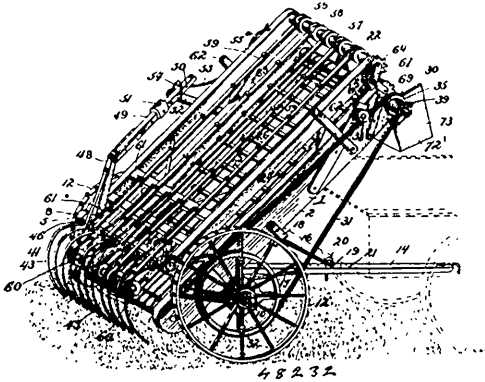


George Anderson Crisson, Tarrytown, New York, U.S.A., 14th February, 1895; 6 years.

*Claim.*—1st. The combination of a window frame and curtain with a tube carried by the curtain and two cords, each connected to diagonally opposite corners of the window frame and passing through the said tube and crossing the other cord, substantially as and for

the purpose set forth. 2nd. The combination of a window frame and curtain having a tube at its lower end with funnels, or guide pieces at the ends of the tube and two cords, each connected to diagonally opposite corners of the window frame, and passing through the tube and crossing the other cord, substantially as and for the purpose described. 3rd. The combination of a window frame having vertical grooves, and a curtain having a tube with its ends guided in said grooves and two cords, each connected to diagonally opposite corners of the window frame, and passing through the tube, and crossing the other cord, substantially as and for the purpose described.

**No. 48,232. Hay Loader and Rake.**  
(Monte-foin et rateau.)

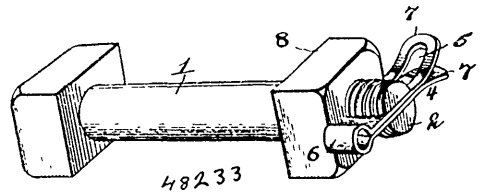


John Martin, Belview, Minnesota, U.S.A., 14th February, 1895; 6 years.

*Claim.* - 1st. In a hay rake and loader, the combination with the wheeled inclined carrier frame and the carrier apron therein, of an adjustable rake having an oscillating rake-bar supported over the lower end of said carrier frame, a rock arm attached to said rake bar, a weight arm pivotally connected at one end to the upper extremity of said rock arm, a weight block adjustably mounted on said weight arm, a swinging adjusting arm pivoted at one end to one side of the carrier frame and adjustably at its other end to said weight arm, the adjustment of said adjusting arm being compensated for by a corresponding adjustment of said weight block and an adjusting cord or wire connected with the connection between the adjusting arm and the weight arm, substantially as set forth. 2nd. In a hay rake and loader, the combination with the carrier frame and the upper and lower apron rollers, of the chain wheels loosely mounted on the shaft extremities of the upper apron roller and provided at one side with clutch faces, the drive chains arranged to pass over said chain wheels, clutch collars feathered on the shaft, extremities at one side of the chain wheels and provided with spring sockets, catch-pins fitted in the shaft extremities, springs arranged in the sockets of said collars and bearing at one end against said catch-pins, and a suitable catch or lock attached directly to said collars and adapted to engage with said catch-pins to hold the collars out of engagement with the clutch-faces of the chain wheels, substantially as set forth. 3rd. In a hay rake and loader, the combination with the carrier frame and the upper and lower apron rollers, of the chain wheels loosely mounted on the shaft extremities of the upper apron rollers and provided at one side with clutch faces, the drive chains arranged to pass over said chain wheels, spring-actuated clutch-collars feathered on the shaft extremities at one side of said chain wheels, catch-pins fitted in the shaft extremities, and U-shaped lock-bails pivotally connected with said clutch collars and adapted to be temporarily engaged with said catch-pins, substantially as set forth. 4th. In a hay-rake and loader, the combination with the main carrier frame, and the endless carrier apron travelling therein, of opposite guide arms secured at opposite sides of the main carrier frame, a self-adjusting supplemental carrier frame pivoted at one end over the lower end of the main carrier frame, a belt roller journaled at the upper end of the self-adjusting frame and carrying a series of spaced flanged belt pulleys, a series of spring-wire supporting arms attached to the lower pivoted end of the self-adjusting frame and extending beyond such end, belt pulleys journaled at the outer unattached extremities of said supporting arm, a longitudinal series of separate and independent auxiliary carrier belts arranged on the belt pulleys of said belt roller and on said wire arms, and adjustable gearing between said upper belt roller and the upper apron roller of said carrier apron, substantially as set forth. 5th. In a hay rake and loader, the combination with the inclined main carrier frame and the apron travelling therein, of the self-adjusting supplemental carrier frame pivotally supported at one end over the main carrier frame, a longitudinal series of auxiliary carrier belts arranged to travel on the self-adjusting frame, spring supports for the lower portions of each separate carrier belt, an operating pinion mounted on one

shaft extremity of the upper apron roller of said carrier apron, a fixed lower gear pinion meshing with said operating pinion, an upper gear pinion mounted on one shaft extremity of the upper belt roller of said self adjusting frame, separate pairs of gear links respectively connected pivotally at one end at both sides of said upper and lower gear pinions, and an intermediate adjustable pinion meshing with both the upper and lower gear pinions and journaled on the connection between the separate pairs of gear links, substantially as set forth.

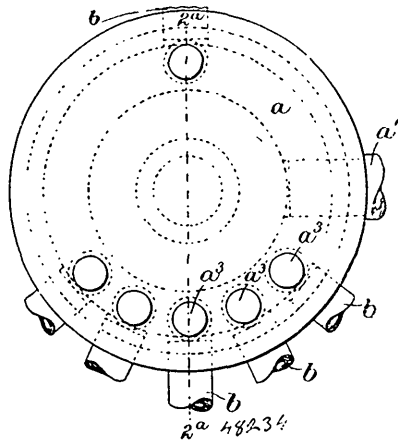
**No. 48,233. Nut Lock.** (Arrêe-écrou.)



Frank P. Johnson, Danville, Pennsylvania, U.S.A., 14th February, 1895; 6 years.

*Claim.* - The combination, with a bifurcated shank, of a spring key constructed of a single piece of resilient metal, dov' led to form the loop or bend 6, and having divergent sides arranged in the bifurcation of the shank, and provided with longitudinal slots, and a fastening device arranged in the slots of the sides and securing the key to the shank, said divergent sides frictionally engaging the shank and securing the key, substantially as described.

**No. 48,234. Lubricator.** (Lubricateur.)

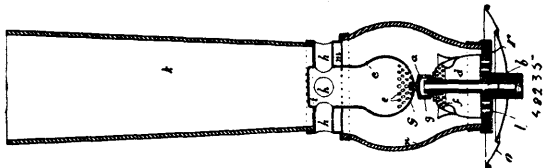


John Medway, Cambridge, Massachusetts, U.S.A., 14th February, 1895; 6 years.

*Claim.* - 1st. A force-feed lubricator comprising an oil reservoir, an oil measuring chamber having an oil-receiving inlet communicating with said reservoir, and an oil outlet connected with a part to be lubricated, a piston in said chamber, a valve connected with said piston and normally held thereby in position to close the outlet of the measuring chamber, a pressure supply-pipe communicating with said chamber whereby pressure may be introduced into the chamber to displace the piston and valve, a check-valve which is caused by said pressure to close the inlet of the measuring-chamber and prevent the pressure from entering the oil reservoir and is normally open to permit the free entrance of oil to the measuring-chamber, and means whereby a flow of oil is permitted from the reservoir by or around the piston when the latter is in its normal position. 2nd. In a force-feed lubricator, comprising an oil reservoir, an oil-measuring chamber communicating with said reservoir and having an oil outlet communicating with a part to be lubricated, a piston in said chamber, a valve connected with said piston and normally held thereby in position to close the outlet of the chamber, and manually operated means whereby the valve may be displaced to open the valve and release a charge of oil. 3rd. A force feed lubricator comprising an oil reservoir, a plurality of oil-measuring chambers communicating with said reservoir, each having an outlet communicating with a part to be lubricated, pistons in said chambers, valves connected with said pistons and adapted to close the outlets of the chambers, a yoke connecting the said pistons, a spring whereby the pistons and valves are normally held in position to close the outlets of the chambers, and a manually operated lifting device whereby the yoke may be raised to simultaneously displace the pistons and valves. 4th. A force feed lubricator, comprising an air reservoir, a plurality of oil measuring chambers communicating with said

reservoir, each having an outlet communicating with a part to be lubricated, pistons in said chambers, valves connected with said pistons and adapted to close the outlets of the chambers, a yoke connecting the said pistons, a spring whereby the pistons and valves are normally held in position to close the outlets of the chambers, and a yoke lifting cam within the reservoir provided with an operating handle or lever outside the reservoir whereby the yoke, pistons, and cams may be simultaneously displaced. 5th. A force-feed lubricator, comprising an oil reservoir, a plurality of oil-measuring chambers each having an oil-inlet communicating with said reservoir and an oil-outlet communicating with a part to be lubricated, pistons in said chambers having outlet-closing valves, said pistons being normally in position to close said valves, a pressure reservoir, a plurality of pipes connecting said reservoir with said chambers, normally closed valves controlling said pipes and adapted to be manually operated to admit pressure to the chambers, and check-valves in the oil-inlets of the measuring-chambers adapted to be closed by the pressure admitted to the chambers and prevent the pressure from entering the oil-reservoir, whereby each chamber is adapted to be independently discharged. 6th. A force-feed lubricator, comprising an oil-reservoir, an oil-measuring chamber which receives a charge of oil from the oil-reservoir, a piston in said chamber provided with a valve which normally closes the outlet of the chamber, a pressure reservoir, a pressure supply-pipe connecting the pressure reservoir with the chamber, and a normally closed valve controlling said pipe and adapted to be manually operated to admit pressure to the measuring-chamber, said valve having means for liberating air from the said pipe when the valve is closed.

**No. 48,235. Gas Burner. (Bec à gaz.)**



Jacob Haessler, Berlin, Germany, 14th February, 1895; 6 years.

*Claim.*—1st. The combination with a burner *a*, of a lower air chamber *d*, encircling the burner and concentric therewith and having perforations at its upper part around the said burner and an upper chamber *c*, having its lower part hemispherical in form and provided with perforations *e*, said chamber being also arranged concentric to the burner and communicating at its upper part with the outer air, a base plate *r*, having perforations *l*, and closing the lower end of the lower air chamber, and a globe *n*, enclosing the burner and both chambers, and suitable chimney *k*, above the upper chamber, substantially as described. 2nd. The combination of a burner *a*, having gas inlet pipe *b*, a lower conoidal chamber concentric with and enclosing the lower part of the same, perforations around the burner in the upper part of the chamber *d*, a base plate *r*, having perforations *l*, to support said chamber, an upper chamber *c*, having lower hemispherical part and concentric with the said burner, upper air inlet pipes *h*, to the said chamber and lower air outlet perforations *e*, around the burner of the same, a ring *m* to carry the said chamber and air inlet pipes, a chimney *k*, on the said ring, and a globe *n*, extending from the base plate to the said ring *m*, and enclosing the burner and both chambers, substantially as described. 3rd. The combination of a burner *a*, having gas inlet pipe *b*, and circularly arranged gas outlet perforations *g*, arranged horizontally around the said burner head, a lower conoidally formed air chamber concentric with and enclosing the lower part of said burner, perforations in the upper part of said chamber around the burner, a base plate *r*, having perforations *l*, to support said chamber an upper chamber *c*, having lower rounded part and arranged concentric with the said burner, upper air inlet pipes *h*, to the said chamber and lower air outlet perforations to the same, a ring *m*, to carry the said chamber and air inlet pipes, a chimney *k*, on the said ring, and a globe *n*, extending from the base plate to the said ring *m*, and enclosing the burner and both chambers, substantially as described. 4th. The combination of a burner *a*, having gas inlet pipe *b*, a lower conoidally formed chamber *d*, concentric with and enclosing the lower part of the said burner, perforations in the upper part of the said chamber around the burner, a base plate *r*, having perforations *l*, to support said chamber, an upper chamber *c*, having lower rounded part and concentric with the said burner, a pin *s*, on the said burner to centre the said upper chamber, upper air inlet pipes to the said chamber and lower air outlet perforations *e* around the burner, a ring *m*, to carry said burner and the inlet pipe thereto, a chimney *k* on said ring, a globe *n*, extending from the said ring *m*, to the base plate and enclosing both chambers and the burner, and a plate or saucer *o*, under said burner for the purpose, substantially as described and shown.

**No. 48,236. Device for Preventing Sea-Sickness.**

(Appareil pour empêcher le mal de mer.)

Frederick W. Kimball, New York, State of New York, U.S.A., 14th February, 1895; 6 years.

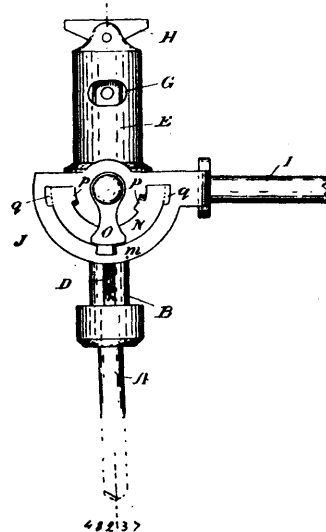
*Claim.*—1st. The herein described method of preventing sea-sick-

ness, which consists in covering the stomach with a shield shaped so as to prevent anything from touching the stomach. 2nd. The herein device for preventing sea-sickness, which consists of a convex



shield or guard adapted to bear at its edges against the body, and means for fastening the shield or guard to the body, substantially as described. 3rd. The herein described device for preventing sea-sickness, comprising a perforated convex shield or guard, and fastening straps to secure the said shield or guard to the body, substantially as described. 4th. The herein described device for preventing sea-sickness, comprising a convex perforated shield or guard having curved edges to bear against the body, and fastening straps to secure the shield or guard to the body, substantially as described.

**No. 48,237. Ratchet Drill. (Foret à rochet.)**

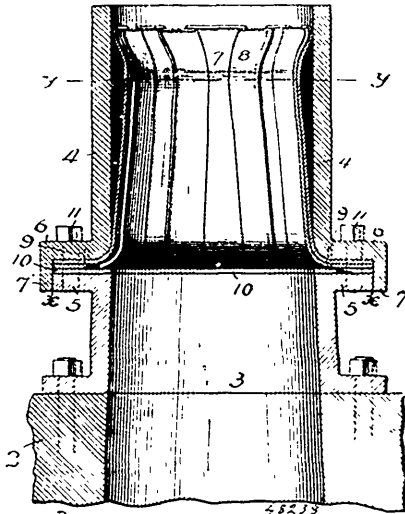


Napoléon Samson, Rivier-du-Loup, Quebec, Canada, 14th February, 1895; 6 years.

*Claim.*—1st. In a ratchet drill, a body chambered, to receive a bit socket, a handle having its end bifurcated to span said body and pivoted to it at opposite points, two circular toothed racks held by springs and lugs in openings formed in the divided end of said handle, said racks, arranged to engage alternately with opposite sides of a toothed pinion held to the end of the aforesaid body by collars secured to said body. 2nd. In a ratchet drill a saw-toothed pinion centred on a bit socket and arranged to be operated on alternately by two circular racks set in the wings of a bifurcated handle, pivoted on opposite sides of a chambered body. 3rd. In a ratchet drill, a vibrating handle having one of its ends bifurcated to span a chambered body, and carrying two saw-toothed circular racks engaging in opposite sides of a toothed pinion centred on a bit socket held in said chambered body. 4th. In a ratchet drill, a bit socket having a chamber bored lengthways through it, and screw-threaded to receive a feed screw, the outer end of which holds against the top

of a chamber formed in the body of the drill. 5th. A ratchet drill in which the working handle has its pivoted end divided to form two wings in which one pivoted to the body E by pins J screwed into it, said wings having openings in them, and the circular toothed-racks held in said openings by the lugs p on said racks, and the springs O secured to said wings, substantially as described. 6th. A ratchet drill in which the bit socket is turned by a saw-toothed pinion engaging alternately with two circular toothed racks held in the wings of a bifurcated working handle, on opposite sides of said pinion working in opposite directions. 7th. In the above described ratchet drill, the circular toothed racks N set in openings in the wings m of the working handle, pivoted with the lugs p, having sloping faces, and lips q, and held in place by springs O, substantially as and for the purposes described.

**No. 48,238. Automatic Exhaust Nozzle.**  
(*Lance d'évacuation automatique.*)



John T. McLellan, Bozemon, Montana, U.S.A., 14th February, 1895; 6 years.

*Claim.*—1st. The combination, with the exhaust sleeve or pipe, of the annular spring lining arranged therein and adapted to be distended by pressure of the exhaust steam, and to contract automatically and in a definite degree corresponding to the steam pressure, substantially as and for the purpose set forth. 2nd. The combination, with the exhaust sleeve, of the bow springs arranged therein to form a spring lining, the lower ends of said springs being secured to the sleeve and the upper ends being in free engagement therewith, whereby said spring lining is adapted to expand and contract automatically, substantially as described. 3rd. The combination with the exhaust sleeve or pipe, bow springs arranged therein in two courses, one overlapping the other to form a spring lining, the lower ends of said spring being secured in the lower end of said sleeve, and the upper end being in free engagement with the upper part of said sleeve to prevent the automatic action of the spring lining constituted by said spring, substantially as and for the purpose specified. 4th. The combination with the sleeve, of the bow springs arranged therein, in overlapping courses to form a spring lining therefor, the bend in said springs being arranged near the tops thereof, the lower end of said springs secured in the lower part of the said sleeve, and the upper ends in free engagement therewith, substantially as described. 5th. The combination with the sleeve of the bow spring arranged in overlapping courses therein, the lower ends of said springs being bent outwardly and secured to the lower end of said sleeve, and the outwardly bent upper ends of said springs being in free engagement with one another and with the upper end of said sleeve, substantially as described. 6th. The combination, with the sleeve 4, of the bow springs arranged in overlapping courses therein, each of said springs having the lower end bent outwardly beneath the lower edge of said sleeve 4, the studs 9, whereby said ends are secured to said sleeve, the lower part of the nozzles, packing arranged between the lower ends of said springs and of said sleeve, and the lower part of the nozzle, and bolts for securing said parts together, substantially as described and for the purpose set forth.

**No. 48,239. Rubber-Soled Foot Wear.**  
(*Semelles de caoutchouc pour chaussures.*)

Charles Leander Higgins, Montreal, Quebec, Canada, 14th February, 1895; 6 years.

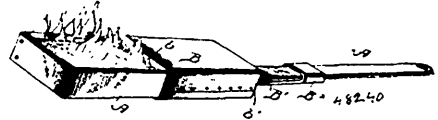
*Claim.*—1st. The manufacture of rubber soled foot wear, first

attaching to the outer surface of the unlasted vamp or upper of the boot or shoe, a connecting strip of frictional stock, then lasting the upper to the usual insole of the boot or shoe, securing an insole of rubber to the insole proper and lasting said connecting strip to the



rubber insole, applying an outer finishing strip over the connecting strip, and finally attaching the rubber outsole. 2nd. In the manufacture of rubber soled foot wear, first attaching by stitching to the outer surface of the unlasted vamp or upper of the boot or shoe, a connecting strip of frictional stock, then lasting the upper to the usual insole of the boot or shoe, securing an insole of rubber to the insole proper and lasting said connecting strip to the rubber insole, applying an outer finishing strip over the connecting strip, and finally attaching the rubber outsole. 3rd. A boot or shoe having the usual upper or vamp and insole, a rubber outsole and an intermediate waterproof connection extending upward from the sole and being stitched at its upper edge to said vamp for the purpose set forth. 4th. A rubber soled boot or shoe having an intermediate waterproof retaining or connecting strip secured to and extending upward from the sole and being stitched at its upper edge to the vamp of the boot or shoe, for the purpose set forth. 5th. A boot or shoe having the usual upper or vamp and insole, a rubber outsole and an intermediate waterproof retaining section, for the purpose set forth.

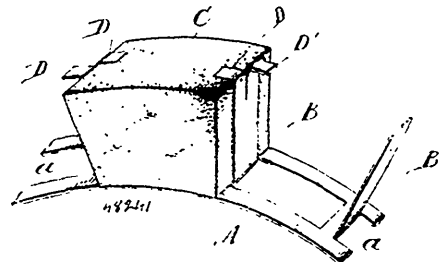
**No. 48,240. Fire Kindler.** (*Allumoir.*)



Fletcher R. Pearson, Vancouver, Washington, U.S.A., 14th February, 1895; 6 years.

*Claim.*—An improved fire kindler consisting of a pan A, formed of a single piece of sheet metal, and provided with a metallic handle A', an enveloping sleeve B, formed also of a single piece of sheet metal, and provided with an arm B', carrying a guide B'', which slides upon the handle A', the sleeve B, being open at each end to slide upon the pan A, said sleeve having a depression b, in its upper face, and a crimp or bend b', in its side at the rear end, whereby the movements of said sleeve upon the pan are limited, substantially as shown and described.

**No. 48,241. Device for Fastening Covering Strips on Boilers.** (*Appareil pour assujétir les bandes de recouvrement des chaudières.*)

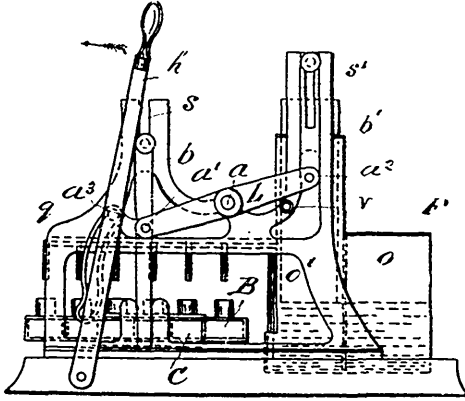


Philip Cary, Cincinnati, Ohio, U.S.A., 14th February, 1895 6 years.

*Claim.*—1st. A fastening for covering-strips, consisting of a series of flat metal strips adapted to be secured upon a boiler or other object, and carrying retaining pieces to project between and beyond and be bent over the outer sides of the covering-strips, substantially

as described. 2nd. A fastening for covering strips, consisting of a series of flat metal strips adapted to be secured to a boiler or other object, and having integral retaining pieces to project between and beyond and be bent over the outer sides of the covering strips, substantially as described. 3rd. The herein described fastening hoop A, having the cut portion B, split at their ends to form the retaining ends D, D', substantially as and for the purpose specified.

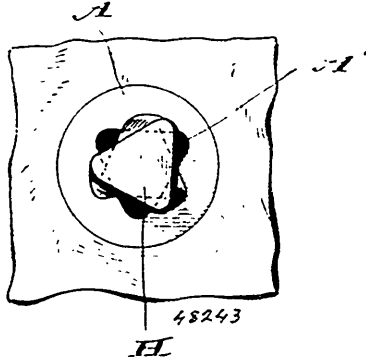
**No. 48,242. Machine for Filling Bottles, Etc.**  
(Appareil à embouteiller.)



William Alexander Bowie, Streatham Hill, Surry and Ernest James Dodd, New Barnet, Hertford, both in England, 14th February, 1895; 6 years.

*Claim.*—1st. A bottle filling machine comprising a bed plate, a frame, a bottle tray sliding within the sides of a carrier adjustably suspended to a horizontal bar carried by the frame, a perforated pipe plate, and syphon pipes proceeding from a tank where-in acts, a displacer adjustably suspended to a horizontal bar carried by the frame, these two horizontal bars being raised or lowered by a lever fulcrumed to an axis carried by the frame, and operated by a hand lever pivoted to the bed plate of the machine, substantially as herein described and shown and for the purpose set forth. 2nd. In a bottle filling machine, the combination of a tank, an adjustable displacer, a perforated syphon pipe plate, and a tray containing bottles of similar size with lever mechanism for depressing the displacer, and causing the liquid in the tank to simultaneously fill the bottles to a fixed and uniform level, and for raising the tray in order to receive the said liquid, substantially as herein described and shown and for the purpose set forth. 3rd. In a bottle filling machine, the combination of a tank, an adjustable displacer, a perforated syphon pipe plate, and two perforated plates forming a tray for holding bottles of different girth and depth, with lever mechanism for depressing the displacer, and causing the liquid in the tank to simultaneously fill the bottles to a fixed and uniform level, and for raising the tray to receive the said liquid, substantially as herein described and shown and for the purpose set forth.

**No. 48,243. Device for Securing Carriage Curtains.**  
(Appareil pour assujétir les rideaux de voiture.)

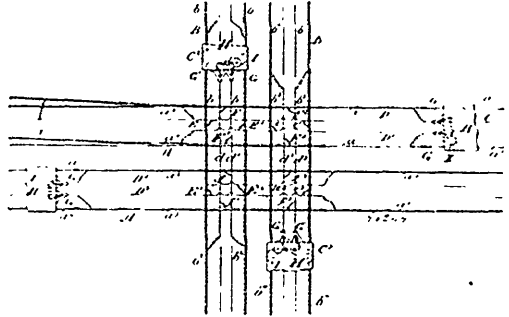


Mortimer Otis Turner, Marquette, Michigan, U.S.A., 14th February, 1895; 6 years.

*Claim.*—The improved carriage curtain fastening herein described, consisting of a plate with attaching means and an angular opening, and a button having a shank, a base portion beveled outwardly and

an angular head beyond the base portion and provided with spirally disposed ribs extending from the corners of the angle of the head inward and joining with the beveled base, whereby in engaging the parts the plate is automatically turned to admit the passage of the head and, when engaged, the level of the base will prevent undue movement of the curtain, substantially as herein shown and described.

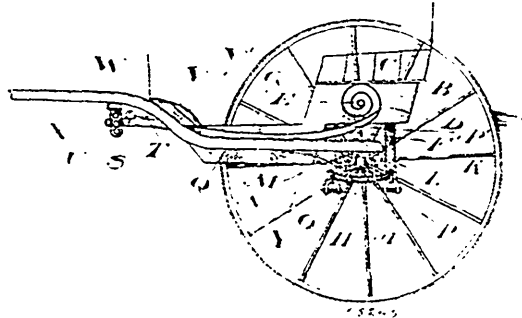
**No. 48,244. Railway Signal.** (Signal de chemin de fer.)



William Henry Walsh, Albany, New York, U.S.A., 14th February, 1895; 6 years.

*Claim.*—1st. Electrical signalling apparatus, comprising crossing insulated track sections, electric conductors extending along said insulated crossing track sections and connected with adjacent insulated track sections but not with the track sections along which they extend, electric conductors between the electric conductors of one track section and the rails of a crossing track section and circuit closers, including batteries and signals carried by trains passing along the tracks, substantially as set forth. 2nd. In combination, a main track, a shunt track branching therefrom, the main track at the point where the shunt track branches therefrom being insulated from adjacent portions of the main track and the shunt track having its portion adjacent to the main track insulated from an adjacent portion, the shunt track being at the same time insulated from the main track at the point where it crosses it, conductors extending along the insulated main track section and electrically connected with an adjacent section and connections between the rails of the insulated shunt track section and said conductors, substantially as set forth. 3rd. In combination, a main track separated into consecutive insulated sections, a shunt track branching from one of said sections and insulated from said section at the point where one of its rails crosses it, the said shunt track having its section adjacent to the main track insulated from an adjacent section, conductors extending along the main track and electrically connected with the rails of an adjacent section, connections between the rails of the shunt track and said conductors and a carriage adapted to move along the track and provided with brushes in position to engage the said conductors and in circuit with a battery and signal, substantially as set forth.

**No. 48,245. Road Cart.** (Désobligeante.)



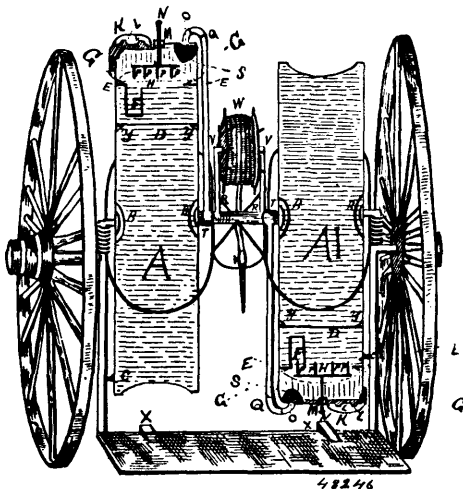
Aloysius Brohmann, Mildmay, Ontario, Canada, 14th February, 1895; 6 years.

*Claim.* 1st. In a vehicle or cart, the body of the vehicle, in combination with springs pivotally attached to bars adapted to swing beneath the axle, the bars being pivotally connected with the shafts and suspended therefrom by suitable means on either side of and in juxtaposition to the axle, substantially as described and the for purpose specified. 2nd. In a vehicle or cart, the body of the vehicle, in combination with springs pivotally attached to bars adapted to swing beneath the axle, the bars being pivotally connected with the shafts and suspended therefrom by suitable means, on either side of and in juxtaposition to the axle, and spring side bars adjustably

connected at their forward ends to the shafts, and at their rear ends to the body of the vehicle, substantially as described and for the purpose specified. 3rd. In a vehicle or cart, the body of the vehicle, in combination with springs pivotally attached to bars adapted to swing beneath the axle, the bars being pivotally connected with the shafts and suspended therefrom by suitable means on either side of and in juxtaposition to the axle, spring side bars adjustably connected at one end to the shafts, and at the other to the body of the vehicle, and straps connecting a cross bar on the side bars to the body of the vehicle, substantially as described and for the purpose specified. 4th. In a vehicle or cart, the combination of side bars, coil springs, and means for connecting the ends of the side bars, and the coil-springs with the shafts and the body of the vehicle respectively, substantially as described and for the purpose specified. 5th. In a vehicle or cart, the combination of the side bars G, adjusting holders U, connected with the shafts, coil-springs D, body B, cross bar S, and straps T, loosely connecting cross bar S, with the body B, substantially as described and for the purpose specified. 6th. In a vehicle or cart, the shaft Q, in combination with iron plate M, provided with hooks M<sup>1</sup>, the bolts L L, axle A, clip plate Y<sup>1</sup>, and brace Y, substantially as described and for the purpose specified. 7th. In a vehicle or cart, the hooked iron plates M, resting on the axle A, and rigidly attached to the shafts Q, in combination with clevises K K, clevises N N, clevises O O, swinging bars H, and elliptical springs P P, connected to the body of the vehicle B, substantially as described and for the purpose specified. 8th. In a vehicle or cart, the hooked iron plates M, resting on the axle A, and rigidly attached to the shafts Q, by bolts L L, which pass on either side of the axle through the clip plates Y<sup>1</sup>, in combination with clevises K K, clevises N N, clevises O O, swinging bars H, elliptical springs P P, connected to the body of the vehicle B, by the bolsters P<sup>1</sup>, side bars G, and the straps T, connecting the cross bar V, with the body B, substantially as described and for the purpose specified. 9th. In a vehicle or cart, the combination with the side of the vehicle B, of the bracket a, bolt E, provided with head H, the nut F, and the coil spring D, on the side bar G, substantially as and for the purpose specified. 10th. A vehicle or cart, comprising the following elements, shafts Q, cross bar X, straps T, adjusting holders U, adjustable side bars G, coil-springs D, body B, movable seat C, brackets a, bolts E, bolster P<sup>1</sup>, elliptical springs P P, clevises K K, clevises N N, swinging bars H, clevises O O, iron plates M, provided with hooks M<sup>1</sup> M<sup>1</sup>, bolts L L, axle A, clip plates Y<sup>1</sup>, and braces Y, substantially as described and for the purpose specified.

**No. 48,246. Chemical Fire Engine.**

(*Extincteur d'incendie chimique.*)

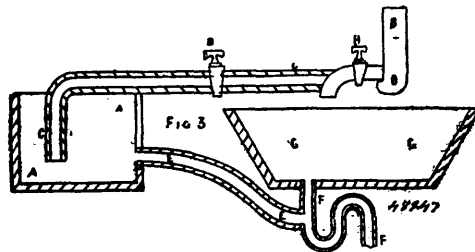


Daniel D. Wilson, Toronto, Ontario, Canada, 16th February, 1895; 6 years.

*Claim.*—1st. In a chemical fire engine the combination of the main tank with the floating crown sheet and the lugs by which the said floating crown sheet is attached to the main tank and with a ring placed within the said main tank, substantially as and for the purposes hereinbefore described. 2nd. In a chemical fire engine the combination of the main tank with the floating crown sheet and the lugs by which the same is attached to the main tank and on inner ring above said floating crown sheet and a pocket or case in said inner ring, substantially as and for the purposes hereinbefore described. 3rd. In a chemical fire engine the combination of the main tank with the floating crown sheet and the lugs by which the same is attached to the main tank and with the inner ring placed within said main tank and with the plunger and pins attached to said plunger, substantially as and for the purposes hereinbefore described. 4th. In a chemical fire engine the combination of the main tank which contains the liquid with the floating crown sheet therein and thereto attached, and with the inner ring in said main tank

secured and the pocket or case in said ring secured and with the method of covering said inner ring and closing the opening therein, substantially as and for the purposes hereinbefore described. 5th. In a chemical fire engine the combination of the use of the main tank having a lower portion for containing the liquid and a case or pocket for containing the acids and a ring or diaphragm securely separating the upper from the lower parts of said main tank and having the upper portion kept dry for properly keeping the sodas in powder form and the plunger or breaker rod passing through the stuffing box from the outside of said main tank and having on the end of said plunger rod within said main tank breaker pins, substantially as and for the purposes hereinbefore described. 6th. In a chemical fire engine the main tank for containing the liquids in combination with the pocket for containing the acids and with the screen so placed over the outlet of said main tank and with the automatic valve for allowing the exit of the contents of the said main tank, the said valve automatically opening when the machine is brought into use and closing again when the machine is out of use, substantially as and for the purposes hereinbefore described. 7th. In a chemical fire engine the combination of the main tank with the gudgeons or trunions on which said main tank is hung so as to allow it to revolve freely on its longitudinal axis, and with the outlet pipe from the said main tank having at the gudgeon when said outlet pipe is attached to said gudgeon an automatic valve, and with said automatic valve in said gudgeon, substantially as and for the purposes hereinbefore described. 8th. In a chemical fire engine the combination of one or more main tanks hung by their several central axes so that either tank may be made to separately revolve or reciprocate on its said axis, and having within such of said main tanks a portion of the space reserved to be filled with water or brine, and a second portion of the space in which for securely isolating the acid, and a third portion of the space, if so desired, the soda may be securely kept in a dry and powdered state, said main tank or tanks being carried on a waggon or truck with a spring catch secured to the platform of said truck to separately hold each of said main tanks in an upright or reversed position, as may from time to time be desired, and with a screen or projection placed over the outlet from each of said main tanks and with an automatic valve in said outlet pipe, said valve for each tank being situate at or near the axes of said tank and with a hose reel, substantially as and for the purposes hereinbefore described. 9th. In a chemical fire engine the combination of the main tank hung by its axis so as to revolve or reciprocate thereon having an acid pocket or case placed in said main tank, with an acid pocket, and with a plunger passing through a stuffing-box from the exterior thereof, and with the breaker pin or pins attached to, or being part of said plunger, said plunger pins being in the inside of said main tank, and with the platform of the waggon or truck on which said tank or tanks is carried, and with a screen over the outlet from said main tank into the pipe which leads to the hose, and with an automatic or self opening valve in said pipe which leads to the said hose, and with the spring catch attached to the said platform of the said waggon or truck, substantially as and for the purposes hereinbefore described.

**No. 48,247. Device for Disinfecting Water Closets. Etc.** (*Appareil pour désinfecter les latrines à eau, etc.*)



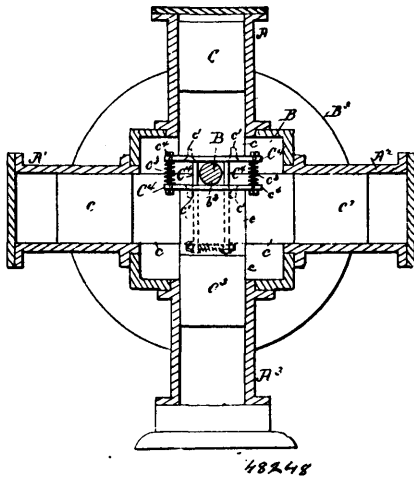
George Turner Orton, Winnipeg, Manitoba, Canada, 16th February, 1895; 6 years.

*Claim.*—1st. In a disinfecting apparatus, the combination of a flush or water pipe, a tank or receptacle adapted to contain a disinfectant, and a pipe connecting the flush or water pipe, and a disinfectant tank or receptacle, and adapted to receive a portion of the water as it passes through the flush or water pipe, and convey it to the tank or receptacle, substantially as and for the purpose set forth. 2nd. In a disinfecting apparatus, the combination of a flush or water pipe, a tank or receptacle adapted to contain a disinfectant, and a pipe connecting the flush or water pipe and the disinfectant tank or receptacle, and adapted to receive a portion of the water as it passes through the flush or water pipe, and convey it to the tank or receptacle, and also adapted, when the passage of water from the flush or water pipe has ceased, to convey a portion of the disinfectant from the tank or receptacle to the flush or water pipe, substantially as specified. 3rd. In a disinfecting apparatus, the combination of a water conduit, a tank or receptacle adapted to contain a disinfectant, a pipe connecting the conduit and the disinfectant tank or receptacle, and adapted to receive a portion of the water as it passes through the conduit, and convey it to the tank or receptacle, and a

pipe connecting the tank or receptacle and the conduit, and adapted to convey disinfectant from the former to the latter, substantially as specified. 4th. In a disinfecting apparatus, a combination of a flush pipe, a tank or receptacle adapted to contain a disinfectant, a pipe connecting the flush pipe, and the disinfecting tank or receptacle, and adapted to receive a portion of the water as it passes through the flush pipe, and convey it to the tank or receptacle, and a pipe connecting the tank or receptacle and the flush pipe, and adapted to convey disinfectant from the former to the latter, substantially as specified. 5th. In a disinfecting apparatus, the combination of a faucet spout or its equivalent, a sink having a waste pipe, a tank or receptacle adapted to contain a disinfectant, a pipe connecting the faucet spout and a disinfectant tank or receptacle, and adapted to receive a portion of the water as it passes through the faucet and convey it to the tank or receptacle, and a pipe connecting said tank or receptacle with the waste pipe of the sink, substantially as and for the purpose set forth. 6th. In a disinfecting apparatus, the combination of a flush or water pipe, a tank or receptacle adapted to contain a disinfectant, and a pipe connecting the flush or water pipe, and a disinfecting tank or receptacle, and having a lip at its end which extends into the flush pipe, whereby it is adapted to receive a portion of the water which flows down said flush pipe, substantially as specified. 7th. In a disinfecting apparatus, the combination of a flush or water pipe, a tank or receptacle adapted to contain a disinfectant, and a pipe connecting the flush or water pipe, and a disinfecting tank or receptacle, and having a lip at its end which extends into the flush pipe, whereby it is adapted to receive a portion of the water which flows down said pipe, an automatic flush tank connected with a waste pipe, a service pipe with a stop cock adapted to regulate the frequency of the automatic flush and subsequent after flush of water charged with disinfectant and deodorizer to be trickled over the urinal or urinals, substantially as specified.

**No. 48,248. Multiple Cylinder Steam Engine.**

(Machine à vapeur à cylindre multiple.)

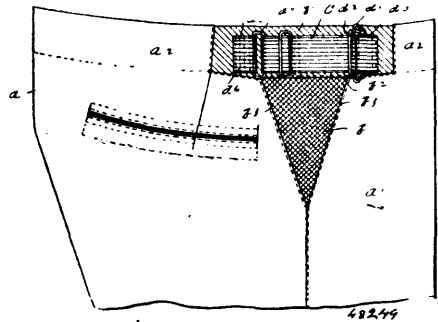


Hamilton Jay Combes, New York, assignee of August W. Ofeldt, Nyack, both of the State of New York, U.S.A., 16th February, 1895; 6 years.

*Claim.*—1st. In a multiple cylinder engine in which the cylinders are arranged radially about a common crank-shaft in pairs with the cylinders of each pair diametrically opposite to each other, the combination with the cylinder pistons of each pair, of arms rigid on the pistons, respectively, and extending inwardly and oppositely to each other, and with the faces of their inward ends abutting and bearing directly upon the common crank pin, and a loose or yielding connection between the opposed inward ends of said arms, substantially as and for the purpose set forth. 2nd. In a multiple cylinder engine in which the cylinders are arranged radially about a common crank-shaft, in pairs with the cylinders of each pair diametrically opposite to each other, the combination with the cylinder-pistons of each pair, of arms, rigid on the pistons, respectively, and extending inwardly and oppositely to each other toward the common crank-pin, and bearing plates attached to the inward ends of said arms, and abutting respectively directly upon said crank-pin, together with a loose or yielding connection between said bearing plates on each said pair of arms, substantially as and for the purpose set forth. 3rd. In a multiple cylinder engine having cylinders arranged radially about a common crank-shaft, in pairs, with the cylinders of each pair diametrically opposite to each other, and with the cylinder-pistons of each pair thereof provided respectively with arms rigid on the pistons and extending inwardly to and abutting at the faces of their inward ends directly upon the common crank-pin, and a loose or yielding connection uniting the opposed inward ends of the arms of each pair of pistons, the combination with said pistons and their cylinders and the parts thereof, of a

valve composed of a channelled and apertured disc fixed on and rotating with the crank-shaft, a circular valve seat on the engine body to which said disc valve works, and an annulus resting to the outward face of said disc together with set screws through the wall of the valve chamber and impinging upon the outward face of said annulus, substantially as and for the purpose set forth.

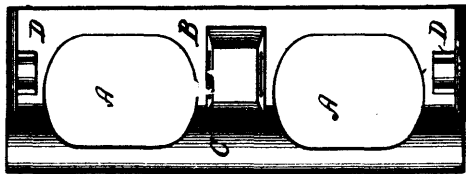
**No. 48,249. Trousers. (Pantalon.)**



John Edgar Leavitt and James Leonard Wesson, both of Boston, Massachusetts, U.S.A., 16th February, 1895; 6 years.

*Claim.*—1st. A pair of trousers having an elastic gore secured in the waist-band and body-portion thereof, said gore having an adjustable elastic strap secured at its ends to one of the faces of the said gore, substantially as described. 2nd. A pair of trousers having an elastic gore secured in the waist-band and body-portion thereof, said gore having co-operating with it an adjustable elastic strap extended over the gore in the direction of the length of the waist-band and secured at its ends, for the purpose specified. 3rd. An elastic gore for trousers and the like consisting of a substantially V-shaped piece of elastic fabric having an adjustable elastic strap secured at its ends to one of the faces of the base of the gore, substantially as described.

**No. 48,250. Brake Shoe. (Sabot de frein.)**



William Durham Sargent, Chicago, Illinois, U.S.A., 16th February, 1895; 6 years.

*Claim.*—1st. A brake-shoe having continuous wearing surfaces to bear upon those portions of the wheel which do not make contact with the rail, that portion of the shoe between such continuous wearing surfaces being recessed or cut out so as to leave a reduced and substantially uniform wearing surface over the area of maximum wear of the rail upon the wheel, approximately from  $y$  to  $y'$ , and gradually increasing wearing surfaces between said reduced portion and the said continuous wearing surfaces, approximately from  $y$  to  $x'$  and  $y'$  to  $x$ , substantially as and for the purpose described. 2nd. A brake-shoe adapted to work upon both the tread and flange of a car wheel, provided with irregularly shaped recesses or openings extending between the points of minimum wear of the rail upon the wheel, approximately from  $x$  to  $x'$ , so as to leave continuous wearing surfaces beyond or at each side of said openings, a reduced and substantially uniform wearing surface over the area of maximum wear of the rail upon the wheel, and gradually increasing wearing surfaces between such reduced portion and the continuous side portions, substantially as described. 3rd. A brake-shoe having continuous wearing surfaces to bear upon those portions of the wheel which do not make contact with the rail, that portion of the shoe between such continuous wearing surfaces being recessed or cut out so as to leave a reduced and substantially uniform surface over the area of maximum wear of the rail upon the wheel, approximately from  $y$  to  $y'$ , and a gradually increasing wearing surface between said reduced portion and the continuous wearing surface at the inner edge of the shoe, approximately from  $y'$  to  $x$ , substantially as and for the purpose described.

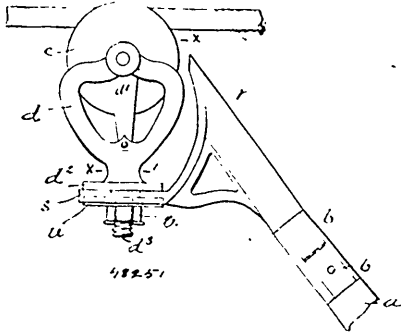
**No. 48,251. Trolley Pole. (Perche de trolley.)**

Alexander Stewart McBean, Montreal, Quebec, Canada, 16th February, 1895; 6 years.

*Claim.*—1st. A trolley pole, the mounting for the upper end of which is formed of two parts, one being connected with the pole and the other carrying the trolley wheel or runner, with a swivel ring connection between the two for the purpose set forth. 2nd. A



trolley wheel support composed of a metal section rigidly secured to the trolley pole, an adjusting platform and a frame piece, the latter carrying the trolley wheel or runner, with a swivelling connection between the adjusting platform and the frame piece, for the purpose set forth. 3rd. A trolley wheel support composed of a



metal section rigidly secured to the trolley pole, a swinging platform pivotally connected to such fixed section with means acting upon and having a tendency to maintain it in a normal horizontal position and the trolley carrying frame piece supported by said platform and having a swivelling connection with same, for the purpose set forth. 4th. A trolley wheel support composed of a metal section rigidly secured to the trolley pole and formed to present a guard front of the trolley wheel and a platform on a plane below such guard, a frame piece carrying the trolley wheel or runner, and a swivelling connection between the platform and the frame piece, for the purpose set forth. 5th. A trolley wheel support composed of a triangular metal section rigidly secured to the trolley pole and presenting an inclined guard in front of the trolley wheel, and a platform on a plane below such guard, a frame piece carrying the trolley wheel or runner, and a swivelling connection between the platform and the frame piece for the purpose set forth. 6th. In a trolley pole, the combination with the pole *a*, of the mounting for the upper end of same composed of the fixed tubular part *b*<sup>2</sup>, secured to such pole and containing the coiled spring *j*, with means for regulating the tension thereof, the frame *d*, carrying the trolley wheel, the intermediate swinging platform *c*, pivotally connected with said fixed part *b*, as and for the purpose set forth. 7th. In a trolley wheel support, the combination of the triangular metal section presenting guard *r*, and perforated platform *s*, of the frame *d*, carrying the trolley wheel, and having spindle and *d'*, passing through such platform disc or ring *u*, and retaining devices for the purpose set forth. 8th. A trolley wheel support composed of a triangular metal section rigidly secured to the trolley pole and presenting an inclined guard in front of the trolley wheel and a platform on a plane below such guard, a frame piece carrying the trolley wheel or runner, a swivelling connection between the platform and the frame piece, and a device for limiting the rotation of said frame piece, having a swivelling connection with same, for the purpose set forth.

**No. 48,252. Process of Refining Petroleum.**

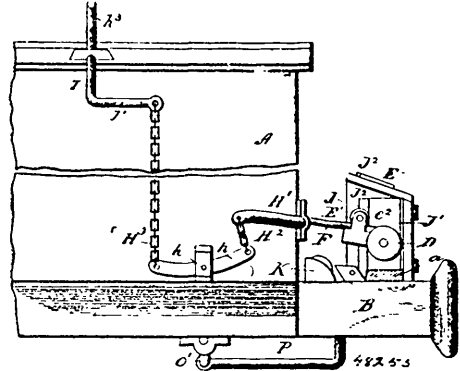
(*Procédé pour raffiner le pétrole.*)

George H. Moore, London, Ontario, Canada, 16th February, 1895; 6 years.

*Claim.*—1st. In the process of purifying Canadian, Lima and similar petroleum, the application to the distillate, of fuming sulphuric acid, substantially as and for the purposes set forth. 2nd. In the process of purifying Canadian, Lima and similar petroleum, the application to the distillate of 66° beaume acid supplemented by the addition of anhydrous SO<sub>2</sub>, substantially as and for the purposes set forth. 3rd. In the process of purifying Canadian, Lima and similar petroleum, the application to the distillate of commercial sulphuric acid, supplemented by the addition of anhydrous sulphuric acid, substantially as and for the purposes set forth. 4th. In the process of purifying Canadian, Lima and similar petroleum, the re-distilling of the distillates of said petroleum with freshly precipitated hydrate, carbonate or other salts of barium, substantially as and for the purposes set forth. 5th. The process of purifying Canadian, Lima and similar petroleum, by first treating the distillate with fuming sulphuric acid, and then re-distilling said distillate with fresh hydrate, carbonate or other salts of lime and barium, substantially as and for the purposes set forth. 6th. The process of purifying Canadian, Lima and similar petroleum, by first treating the distillate with fuming sulphuric acid, and then re-distilling said distillate with freshly precipitated hydrate, carbonate or other salts of barium, substantially as and for the purposes set forth. 7th. In the process of purifying Canadian, Lima and similar petroleum, the application to the petroleum distillate, of fuming sulphuric acid, and then re-distilling said distillate with fresh hydrate, carbonate or other salts of lime and barium, substantially as and for the purposes set forth. 8th. In the process of purifying Canadian, Lima

and similar petroleum, the application to the petroleum distillate, of fuming sulphuric acid, and then re-distilling said distillate with freshly precipitated hydrate, carbonate or other salts of barium, substantially as and for the purposes set forth.

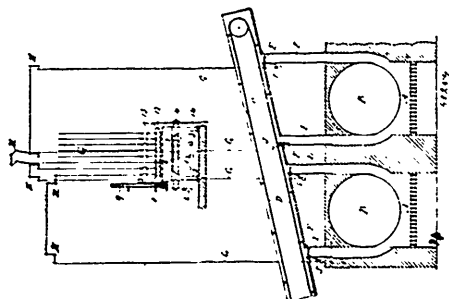
**No. 48,253. Car Coupler. (Attelage de chars.)**



William McNames, Scatterwood, South Dakota, U.S.A., 16th February, 1895; 6 years.

*Claim.*—1st. A coupling pin formed with a bifurcated head provided with rollers, as set forth. 2nd. The combination with a coupling pin, of a pivoted guide thereon, as set forth. 3rd. The combination with a coupling pin, of a grooved guide pivotally connected therewith, as set forth. 4th. The combination with a coupling pin, of a grooved guide pivotally connected therewith and carrying a grooved roller, as set forth. 5th. The combination with a coupling pin provided with rollers, of a grooved guide pivotally connected with the pin, and a grooved roller on the guide, as set forth. 6th. The combination with the coupling pin, of the lift-bar, the crank shaft to which it is connected, and the pivoted guide on the coupling pin and upon which said lift-bar slides, as set forth. 7th. The combination with the drawhead, of the pivoted roller, the vertical block pivotally connected therewith, and the roller at the lower end of said block within the mouth of the drawhead, as set forth. 8th. The combination with the drawhead and the plunger at the rear thereof, of the coupling pin, the crank shaft connected therewith, and the latch having a notch and connected with the plunger, substantially as specified. 9th. The combination with the pivoted latch, and the plunger, of the crank shaft connecting the same, and the cam lever pivoted on the side of the car to engage said crank shaft, substantially as specified. 10th. The combination with the crank shaft on the end of the car, of the pivoted latch, the pivoted lever, the spring connected therewith, and the cam lever, all substantially as shown and described. 11th. The combination with the crank shaft, the coupling pin connected therewith, the latch having a notch to engage a portion of said crank shaft, of the lever connected with the crank shaft and the spring connecting the said lever with the side of the car, as set forth.

**No. 48,254. Machine for Operating the Valves of Feed Spouts of Conveyers of Saw Dust to Furnaces. (Machine pour actionner les soupapes des augets d'alimentation des transports à sciure.)**



Thomas Manley, Prince Albert, Northwest Territory, Canada, 16th February, 1895; 6 years.

*Claim.*—1st. The combination, with the main frame 2, of a series of cams 11, keyed on a shaft 4 journaled to said frame, and a series of elbow levers 13, sleeved on an axle or rod 12, supported parallel and vertical to said shaft, said cams arranged to engage one arm of

the levers, and driving gear to rotate said shaft, as and for the purpose set forth. 2nd. The combination, with the main frame, of a series of cams keyed on a shaft journaled to said frame, and a series of levers sleeved on an axle or rod supported parallel and vertical to said shaft, the cams arranged to engage one end of the levers alternately or consecutively, a sprocket wheel keyed on said shaft to rotate the same, a cog-wheel having pins or pegs inserted in holes in the rim to engage said sprocket wheel and a pinion driving said cog wheel, as set forth. 3rd. The combination, with a series of ropes or pull cables G, connected to feed valves F, of a saw-dust conveyor C, as described for feeding boiler furnaces with fuel, of a series of elbow levers sleeved at the angle on an axle or rod 12, and having one end connected to one end of said ropes or cables, and a series of cams 11, keyed on a shaft, said cams engaging the opposite or free end of said levers, and gear to rotate said shaft, whereby a feed valve connected to said rope or cable is automatically and systematically opened when a cam engages a lever, and when disengaged the valve closes by gravitation, as set forth for the purpose described. 4th. The combination, with the main frame A, of a plurality of cams 11, and a plurality of elbow levers 13, engaged by said cams, said cams carried on a shaft 4, and said levers on a rod or axle 12, a sprocket wheel 6 keyed on said shaft, a cog-wheel 9 having removable pins or pegs 8, engaging said sprocket wheel, and a hand wheel or crossed levers 14 keyed on said shaft, as and for the purpose set forth.

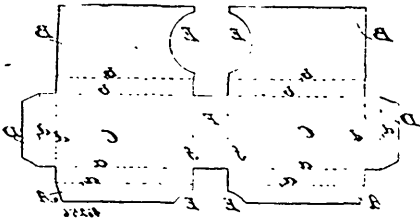
#### No. 48,255. Process of Refining Petroleum.

(*Procédé pour raffiner le pétrole.*)

George H. Moore, London, Ontario, Canada, 18th February, 1895; 6 years.

*Claim.*—1st. The process of purifying Lima and Canadian petroleum oils, and petroleum of that class, by removing the nitrogenous compounds and traces of the phenylic and naphthaline series by means of porous soda lime, previous to the removal of the sulphur, substantially in the manner described. 2nd. The process of purifying Lima and Canadian petroleum oils, and similar petroleum, by vaporizing the same, and passing the vapours through a heated chamber or vessel containing soda lime, rendered porous by the dehydratable neutral salt formed therein as a bi-product, and condensing the vapour so treated previous to the removal of the sulphur, substantially as described. 3rd. The process of treating Lima and Canadian petroleum oils, and similar petroleum, by vaporizing the oil, passing the vapours through a heated vessel charged with porous soda lime, condensing the vapour so treated, washing the resulting distillate with sulphuric acid, redistilling such distillate with hydrate of lime or its equivalent, and finally treating it with sulphuric acid and alkali and washing with water, as and for the purposes described. 4th. In the process of purifying Lima and Canadian petroleum oils, and similar petroleum, the application to petroleum vapours of soda lime rendered porous by the dehydratable neutral salt formed therein, as a bi-product, which admits of intimate mechanical and chemical union with the soda lime, previous to the removal of the sulphur, substantially as and for the purposes described.

#### No. 48,256. Paper Box. (*Boîte en papier.*)

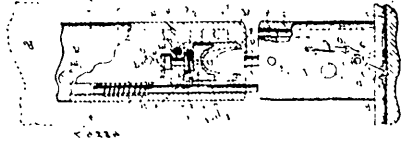


William Stone, Toronto, Canada, 18th February, 1895; 6 years.

*Claim.*—1st. A box having two separate and complete compartments so constructed that each compartment has its own top bottom sides end and cover, substantially as described. 2nd. The box having two separate and complete compartments so constructed that one compartment may be separated from the other compartment, and used alone as a complete box having its own top bottom sides and covers for both ends, substantially as described. 3rd. A box having two separate and complete compartments, each compartment having its own top bottom sides end and cover so constructed that the whole box is made from one piece of material, substantially as described. 4th. A box having two separate and complete compartments, each compartment having its own top bottom sides end and cover so constructed that two joints only are required one for each compartment, substantially as described. 5th. A box having two separate and complete compartments so constructed that the two compartments are sealed with one adhesive label or government stamp, substantially as described. 6th. A box having two separate and complete compartments so constructed that it can be pressed flat after the box is made up and the joints fastened, substantially as described.

2—8

#### No. 48,257. Car Coupler. (*Attelage de chars.*)



Duncan J. Sinclair, Caledonia, New York, U.S.A., 18th February, 1895; 6 years.

*Claim.*—1st. In a car coupler, a draw-head formed with an opening in its exposed end, in combination with a longitudinal rotary cylinder in the draw-head, formed with a flat, longitudinal cavity co-acting with the opening in the draw-head, a spring to turn the cylinder, a vertical rod to control the cylinder, held by the draw-head, gearing connecting said rod with the cylinder, held by the draw-head, gearing connecting said rod with the cylinder, and a detent for the cylinder, substantially as shown and described. 2nd. A car-coupling device comprising a draw-head having a horizontal, longitudinal opening in its exposed end, in combination with a rotary cylinder in the draw-head, formed with a flat, longitudinal cavity opposite the opening in the draw-head, a spring to turn the cylinder, an operating rod held by the draw-head to control the cylinder, gearing connecting said rod and the cylinder, and a detent for the rod, as described. 3rd. A car-coupling device comprising a draw-head, open at its outer end, in combination with a rotary cylinder in the draw-head, formed with a flat, longitudinal cavity opposite the opening in the draw-head, a spring to turn the cylinder, a vertical rod held by the draw-head to control the cylinder, gearing connecting said rod and the cylinder, and a trip rod constituting a detent for the cylinder, for the purpose set forth. 4th. In a car-coupling device, a draw-head formed with an opening *b*, a cylinder in the draw-head formed with a cavity opposite said opening, a spring to turn the cylinder, a rod held by the draw-head to control the cylinder, and gearing connecting said rod with the cylinder, the latter being formed with a semi circular rib, in combination with a trip rod to control the cylinder, and a stop for the latter. 5th. In a car-coupling device, a draw head formed with an end opening, a cylinder formed with a backward projection in the draw-head, having a cavity opposite said end opening, and means for controlling the cylinder, in combination with the two-part trip rod for the cylinder in the draw head, projecting forward of the latter. 6th. A car-coupling device comprising a draw head having an end opening, a cylinder in the draw-head having a cavity opposite said end opening, a spring to turn the cylinder and a vertical rod and gearing held by the draw-head to control the cylinder, in combination with a detent for said rod, and a horizontal shiftable rod upon the car for operating said lever, substantially as set forth. 7th. In a car-coupler, a draw-head open at its outer end, a cylinder in the draw head having a cavity opposite said opening, a spring to turn the cylinder, and a vertical rod with gearing held by the draw-head to control the cylinder, in combination with a spring-pressed pawl to control said rod, and a holding pin for said pawl, as and for the purpose specified. 8th. In a car-coupler, a draw-head open at its outer end, a cylinder in the draw-head having a flat, longitudinal cavity opposite said opening, and means to control the cylinder, in combination with a draw-link formed with flat herds to enter said cavity in the cylinder, the heads being connected by a shaft, and one adapted to turn upon said shaft, as shown. 9th. In a car-coupler, a draw-head open at its outer end, a cylinder in the draw-head having a cavity opposite said opening, and means to control the cylinder, in combination with a draw-link formed with heads connected by a shaft adapted to enter said cavity in the cylinder, one head being movable on the shaft and a friction spring for the parts, substantially as and for the purpose hereinbefore set forth.

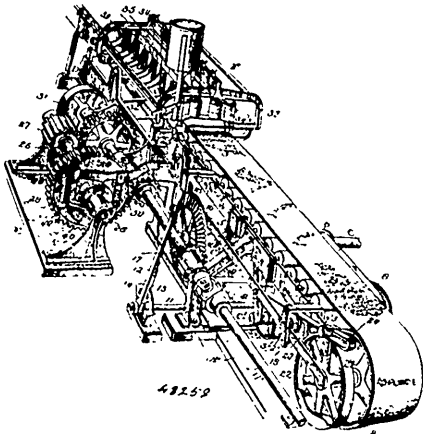
#### No. 48,258. Brick and Tile Cutting Machine.

(*Machine à couper les briques et tuiles.*)

John Thompson, Bucyrus, Ohio, U.S.A., 18th February, 1895; 6 years.

*Claim.*—1st. In a brick and tile cutting machine, a guide for the column or slab of clay consisting of a plurality of opposing sides or walls each of which is continuous and integral throughout its length, and is provided with slits or slots for the passage of cutting devices. 2nd. In a brick and tile cutting machine, a guide for the column or slab of clay, consisting of a plurality of opposing sides or walls each of which is of a single continuous piece having slots or opening for the passage of cutting devices, and a platen forming a bottom for the guide. 3rd. In a brick and tile cutting machine, a guide for the column or slab of clay, consisting of opposing parallel walls each formed as an integral whole, and jointly forming a guide or channel, each of said walls having a base with slots whereby either one or both of the walls may be adjusted to increase or decrease the width of the channel between them, and each wall having slits for the passage of the cutting devices. 4th. In a brick and tile cutting machine, a guide for the column or slab of clay, consisting of a plurality of opposing sides or walls each formed of an integral

whole and slotted transversely for the passage of cutting devices, said sides being adjustably mounted so that either one or both may be moved laterally with relation to the opposing wall to regulate the width of the channel between them with relation to the width of the slab or column of clay to pass through the same. 5th. In a brick and tile cutting machine, a guide for the slab or



column of clay, formed of opposing sides, each consisting of a single-casting having a vertical wall slotted at intervals for the passage of the cutting devices, and a base flange having transverse slots at its ends, a platen forming a bottom for the guide and bolts, whereby the independent continuous sides are adjustably secured so that they may be moved towards and from each other to regulate the distance between the walls. 6th. In a brick and tile cutting machine, a guide for the slab of clay composed of parallel opposing sides and a bottom, each of said sides and also the bottom being composed of a single structure slotted coincidentally for the passage of cutting devices for severing the clay into lengths. 7th. In a brick and tile cutting machine, the combination, with the apron carrying frame, the apron and means for operating the same, and a longitudinally movable cutting table frame, of a reciprocating bar, one end of which is adjustably connected with the cutting table frame while the opposite portion is adjustably connected with one of the drums around which the apron passes. 8th. A brick and tile cutting machine having an apron-carrying frame and a reciprocating cutting table frame, means for driving the apron and reciprocating the cutting table frame, and means for moving the cutting appliances transversely during the longitudinal reciprocations of the cutting table frame and the feed of the slab of clay comprising a stationary shaft with long fixed pinion and loose continuously rotating gear, a slidable clutch between said shaft and gear for giving motion to the former, and means operated by the reciprocating rod for withdrawing the clutch to disconnect said shaft and gear. 9th. In a brick and tile cutting machine, the combination of an apron carrying frame, a reciprocating cutting table frame, a means for connecting the cutting table frame with the mechanism for operating the apron, a shaft and means interposed between the same and the cutting table frame for moving the latter transversely, a gear or wheel loose on said shaft and continuously rotatable by power from the drive shaft, a sleeve fixed on the shaft of the loose gear or wheel, a slidable spring actuated clutch device carried by the sleeve and adapted to lock it to the gear to rotate the shaft, a lever having means engaging said devices to normally hold it retracted to disconnect the gear with its shaft, and means for periodically withdrawing the lever from its contact with the clutch device to enable it to connect the gear with the shaft. 10th. In a brick and tile cutting machine, the combination, with an apron or belt, a reciprocating cutting table frame, means for operating the apron and a connection between the power devices for operating the apron and said reciprocating frame, of a shaft having a long fixed gear, a loose gear or wheel also on said shaft and continuously rotatable by power derived from a power shaft, a sleeve fixed on said gear shaft, a spring actuated bolt mounted in said sleeve and adapted to engage the loose gear, a lever fulcrumed contiguous to the sleeve having one end in the path of a driver from the apron actuating mechanism and its opposite portion connected with a spring, and an inclined plane or wedge portion on the lever adapted to be forced into contact with the bolt to withdraw the same and release the continuously rotatable gear from its engagement with the gear shaft.

**No. 48,259. Process of Preserving Yeast.**

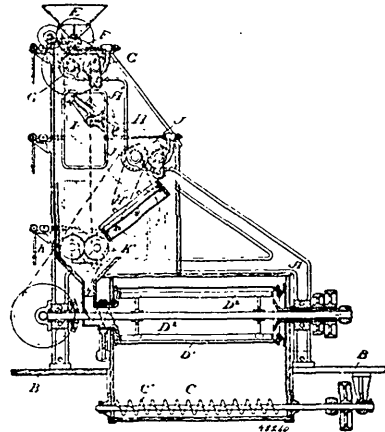
(*Procédé pour préserver le levain.*)

August Collette, Scélin, France, 18th February, 1895; 6 years.

*Claim.*—1st. The process of preserving yeast, vegetable, animal and other alimentary substances, which contain water which consists in the incorporation thereof with of de-hydrated fecula, at a low tem-

perature, for the purpose set forth. 2nd. A package of yeast comprising powdered yeast inclosed in an envelope and surrounded by dried fecula, as set forth. 3rd. The mode of putting up yeast in packages which consists in powdering the yeast, adding thereto dried fecula and inclosing the same in a bag or envelope coated with an adhesive material to prevent evaporation and exclude moisture and air, as set forth. 4th. A package of yeast comprising powdered yeast inclosed in a bag or envelope of paper or linen coated with an adhesive material to increase the strength of the bag or envelope, as set forth.

**No. 48,260. Middlings Separator. (*Séparateur des gruaux.*)**

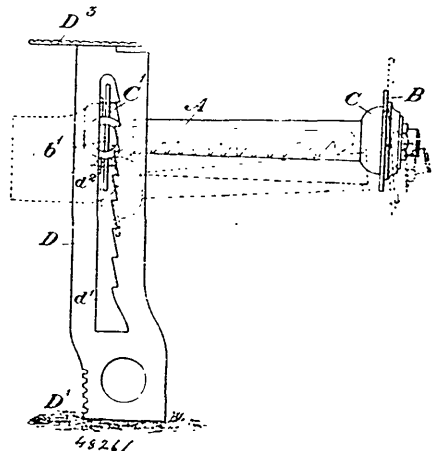


Alfred Rishworth Tattersall, London, England, 18th February, 1895; 6 years.

*Claim.*—1st. The production from grain in one machine, of flour, bran and middlings, the two former in a finished or marketable condition by the combination in the same machine of rolls, sieves and centrifugal, arranged so that the material passing between the rolls falls on to sieves and is sifted, the throughs from the sieve passing to one outlet and the overtails from the sieves to the further rolls and centrifugal, substantially as described without the use of elevators or conveyors. 2nd. In apparatus such as described, the combination with three sets of differentially-rotating rolls G, G', J, J' and K, K', of sieves H, H' to receive the material passing through the two sets of rolls G, G' and J, J', a centrifugal D' for receiving the material from the rolls K, K', and a second centrifugal D for receiving the throughs from the sieves, substantially as described, and illustrated in the accompanying drawing. 3rd. In an apparatus such as described, the combination with three sets of differentially rotating rolls G, G', J, J' and K, K', of sieves H, H' to receive the material passing through the two sets of rolls G, G' and J, J', the shoot L, centrifugal bran duster D', chamber C, and worm C', for conducting the flour to an outlet, substantially as described.

**No. 48,261. Step Rest Pedal for Bicycles.**

(*Support de marche de pédale pour bicycles.*)

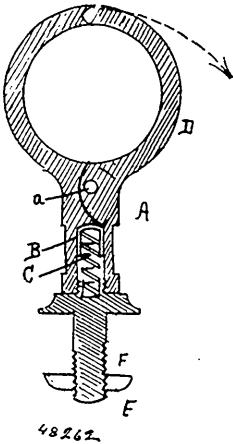


Arthur Cox, Toronto, Ontario, Canada, 21st February, 1895; 6 years.

*Claim.*—1st. In a bicycle, in combination with the wheels, the

pedal axle, crank and pedal, of a sliding frame supported upon the end plates of the pedal, and designed to be tilted so as to drop to the perpendicular from the outer end of the pedal, and means for clamping it in the position in which it is, will drop of its own gravity, as and for the purpose specified. 2nd. In a bicycle, in combination with the wheels the pedal axle, crank and pedal, of a rectangular frame having the outer end extending out beyond the outer end of the pedal proper, and the inner end loosely supported upon the inner end of the pedal, slots formed in the sides of the rectangular frame, and the ends of the outer plates extending through the slots, so as to support the outer end of the rectangular frame, as and for the purpose specified. 3rd. The combination with the sleeve and end plates of the pedal, of a rectangular frame having slots in the sides, and the ends of the outer plates extending through the slots, the outer end of the frame extending beyond the outer end of the pedal, and the inner end of the frame having a raised extension supported on the inner end of the pedal constructed as shown to form a step, as and for the purpose specified. 4th. The combination with the pedal crank, axle and the wheels of a bicycle, of a rectangular frame having the inner end loosely supported upon the end plate of the pedal, slots formed in the sides of the frame with right angular upper outer corners, rectangular projections extending out from the end plates to fit into such corners, and the enlarged ends *b*, with flat outer faces against which the sides fit and slide, as and for the purpose specified. 5th. The combination with the pedal crank, axle and the wheels of a bicycle, of a rectangular frame having the inner end loosely supported upon the end of the pedal, slots formed in the sides of the frame with right angular upper outer corners, rectangular projections extending out from the end plates to fit into such corners, and ratchet notched edges of the slots designed to engage the rectangular projections when the frame is tilted to the perpendicular, as and for the purpose specified.

**No. 48,262. Snap Hook for Harnesses.**  
(*Crochet à ressort pour harnais.*)



Joseph Warren Calef, North Easton, Massachusetts, U.S.A., 21st February, 1895; 6 years.

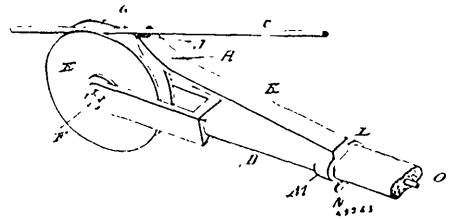
*Claim.*—1st. A snap hook for horse harness and other purposes consisting of a hollow post a stationary jaw made a part thereof, and a movable jaw articulated thereto, the moveable jaw held in place by means of a cap pressed against the cam shaped end of the moveable jaw by means of the helical spring, substantially as and for the purposes set forth. 2nd. In a snap hook for horse harness and other purposes, the combination with the post and jaw A, of the moveable jaw D, articulated to the post and stationary jaw by means of the pin *a*, the moveable jaw held firm when moved to place by means of the cap B and spring C, substantially as and for the purposes set forth. 3rd. As an article of manufacture the herein described snap hook ring or row-lock, substantially as set forth.

**No. 48,263. Ice Scraper for Trolley Wires.**  
(*Grattoir à glace pour fils de trolley.*)

The Homestead Manufacturing Company, assignee of William Hoston, all of Homestead, Pennsylvania, U.S.A., 21st February, 1895; 6 years.

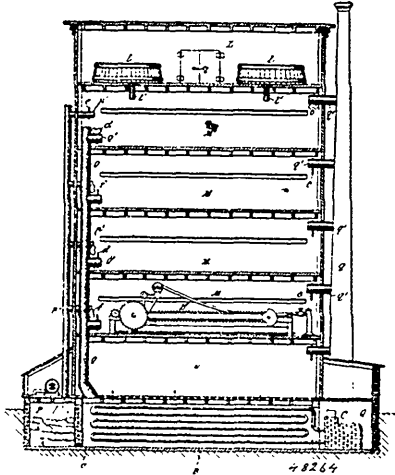
*Claim.*—1st. The combination with a railway car, having an electric motor mounted thereon, actuated by a current of electricity from an over-head conducting wire, of a trolley pole, supported on and secured to said car, a trolley supported by said pole in engagement with said over-head conducting wire, a wire to connect said trolley wire with the motor, and a scraper to remove ice or other accumulation from the over head wire, substantially as described and for the purpose set forth. 2nd. In combination with an over-

head conductor, a trolley pole, and trolley, of a scraper having a yielding support, substantially as described and for the purpose set forth. 3rd. The combination of a trolley pole and trolley, of a scraper adjustably secured to said pole, substantially as described



and for the purpose set forth. 4th. In combination, an over-head conductor, a trolley pole supporting a trolley in engagement with said conductor, a wire connecting said trolley with a motor, and a scraper, the free end adapted to scrape said conductor, the other end thereof connected with said wire, whereby the electric fluid may flow through said trolley and scraper, simultaneously or separately, substantially as described and for the purpose set forth. 5th. The combination with a trolley pole and trolley, of a scraper-support having at one of its ends a loop M to embrace the pole, and a set screw N to secure the loop and scraper in desired adjustment, the scraper-support being yielding and the scraper being grooved to straddle the conductor, substantially as described and for the purpose set forth.

**No. 48,264. Apparatus for Malting Grain.**  
(*Appareil pour le maltage du grain.*)



John W. Free, New York, State of New York, assignee of Hubert C. Baker, Hartford, Connecticut, both in the U.S.A., 21st February, 1895; 6 years.

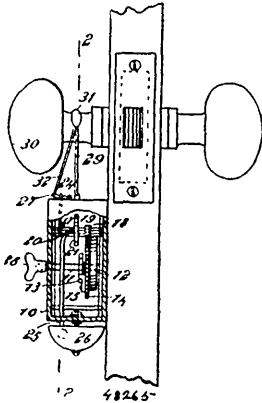
*Claim.*—1st. The combination with the malting chambers, of an air heater, an air cooler, an air flue leading from the said heater to the malting chambers, another air flue leading from the said cooler to the malting chambers, a ventilating flue, and controlling valves, whereby either heated or cooled air may be admitted to any one of the said chambers independently of every other one, substantially as described. 2nd. The combination with the malting chambers, of a hot air flue *a*, with branches entering the lower portion of each chamber, the cold air flue *p*, with branches entering the upper portion of each chamber, the draught or take-up flue *q*, with the branches from the upper portion of each chamber, and controlling valves or dampers in each of the branches of the several flues, as set forth.

**No. 48,265. Portable Burglar Alarm.**  
(*Détecteur de voleur portatif.*)

Lars G. Larson, and Claus Lundquist, both of Moscow, Idaho, U.S.A., 21st February, 1885; 6 years.

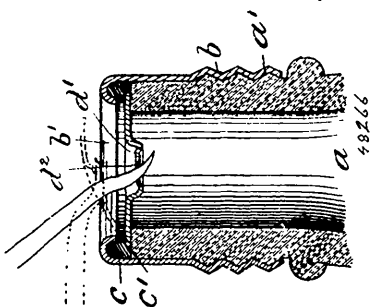
*Claim.*—1st. In an alarm bell, the combination with a portable case, a bell thereon, and spring-actuated accelerating gearing within the case, of a rock shaft in the case, a pallet engaging an escapement-wheel of the gearing, a detent arm on said said shaft projecting through a slot in the case, a clapper on the rock shaft, extending through another slot in the case to engage the bell, a hinged locking plate having detachable contact with the detent arm, and a hanger loop having a connection with the locking plate to lift said plate,

and adapted to frictionally engage a door-latch knob, substantially as described. 2nd. In an alarm bell for doors, the combination with a case, and a suitable alarm bell mechanism in the case, and a vibratile detent arm controlling the action of said mechanism and pro-



jecting through a slot in the case, of a hinged locking plate loosely engaging the detent arm to prevent its vibration, a frictional hanger loop, and a tripping cord extending from the loop to the locking plate, substantially as described. 3rd. In a portable alarm bell for doors, the combination with a case, accelerating gearing within the case, a spring arranged to rotate the gearing, and means for winding said spring, of a rock shaft within the case, a pellet engaging an escapement-wheel of the gearing, a detent arm on said shaft, loosely projecting through a slot in the top of the case, a hinged locking plate, a hanger loop, a tripping cord, a bell on the case, and a clapper arm extending from the rock shaft through a slot in the case to the bell, substantially as described.

**No. 48,266. Bottle Stopper. (Bouchon.)**



Frederick Boot; Thatcher, Providence, Rhode Island, U.S.A., 21st February, 1895; 6 years.

*Claim.*—1st. In a bottle stopper, in combination, with a removable socket piece having an returned flange or holding edge and secured to the bottle, a packing underlying such flange, and a thin metallic expansible stopple expanded into place against the packing, all substantially as described. 2nd. In combination, with a bottle having an exterior thread at the mouth, a threaded socket piece fitting the thread on the bottle and having an edge reinforced by an returned flange, a packing ring underlying the flange on the socket piece, and an expanded thin metallic disc with its edge extending underneath the flange or shoulder on the socket piece and compressing the packing, all substantially as described. 3rd. In combination, with a bottle having a packing socket at its mouth, an annular packing ring located in the socket, a reinforced stopple greater in diameter than the mouth of the bottle expanded into place by the flattening of the stopple and with its edge underlying the upper part of the packing socket, all substantially as described. 4th. In a bottle stopper, in combination, with a packing socket, an annular packing located in the socket, a thin metallic stopple expanded into a seat against the packing and having a central portion thinner than the body of the stopple, all substantially as described.

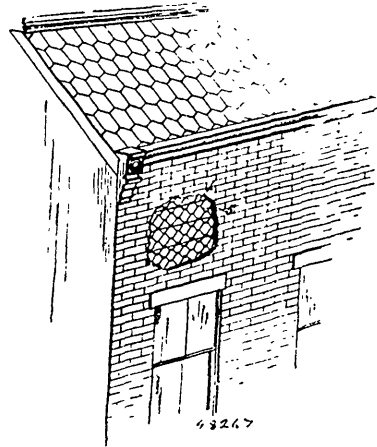
**No. 48,267. Exterior Finish for Frame Structures.**

*(Fini extérieure pour charpentes d'édifice.)*

Theophile Gironard, St. Catharines, Ontario, Canada, 21st February, 1895; 6 years.

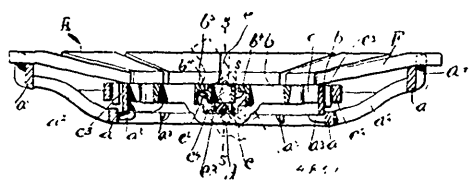
*Claim.*—1st. An exterior finish for frame structures comprising a wire netting secured to the overlapping clap-boards or shingles forming the exterior of the structure, and an outer layer of plastic material applied to said netting and forced through the meshes

thereof, substantially as described. 2nd. An exterior finish for frame structures, consisting of a wire netting secured to the overlapping clap-boards or shingles forming the exterior of the structure,



an outer layer of plastic material applied to said netting and forced through the meshes thereof, and a final coating of coloured plastic material applied to said plastic layer and scored in imitation of brick or tile work, substantially as described.

**No. 48,268. Grate. (Grille.)**

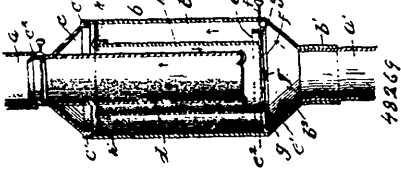


George Alfred Watson, Toronto, Ontario, and John Barclay, Montreal, Quebec, both in Canada, 21st February, 1895; 6 years.

*Claim.*—1st. In a grate, the combination with a rotatable central grate section, of a series of wing-sections surrounding the same, pivotally connected at their inner ends with the central section and loosely connected at their outer ends with a stationary part of the frame, substantially as described and for the purpose set forth. 2nd. In a grate, the combination with a rotatable central grate section, of a series of wing sections surrounding the same pivotally connected at their inner ends with the central section and loosely connected at their outer ends with a stationary part of the frame and a shaking slide in said central section, for the purpose set forth. 3rd. The combination with a rotatable central grate section, of a series of wing-sections arranged side by side around said central section with a space between adjacent edges thereof, said sections being pivotally connected with the central section at their inner ends and loosely connected with a stationary part of the frame at their outer ends, and means for rotating said central section, thereby causing the adjacent edges of the wing sections to approach or recede from each other, substantially as described. 4th. The combination with a rotatable central grate section, of a series of wing sections arranged side by side around said central section with their adjacent edges approximately parallel and separated from each other by a space, said wing sections being loosely connected at their outer ends to a stationary part of the frame, and tapering towards their inner ends, where they are pivoted to the central section, substantially as described. 5th. The combination with a rotatable central grate section, of a series of wing sections surrounding and overlapping the same at their inner edges, depending pins on the inner ends of the wing-sections engaging in openings in the central section, and pins projecting upwardly from a stationary part of the frame engaging in slots at the outer ends of the wing sections. 6th. The combination with a rotatable central grate section, of a series of wing sections surrounding and overlapping the same at their inner edges, depending pins on the inner ends of the wing sections engaging in openings in the central section, and pins projecting upwardly from a stationary part of the frame engaging slots at the outer ends of the wing sections, such wing sections having outward extended corner portions, for the purpose set forth. 7th. In a grate, the combination with a rotatable central grate section, of a series of wing sections surrounding the same, pivotally connected at their inner ends with the central section and connected at their outer ends with a stationary part of the frame and a dumping portion in said central section, substantially as described. 8th. In a grate, the combination with a rotatable central grate section, of a series of wing sections surrounding

the same, pivotally connected at their inner ends with the central section and connected at their outer ends with a stationary part of the frame, a shaking slide in said central section and a dumping portion in said central section, substantially as described. 9th. The combination with the central grate section having the transverse open space and side bars furnishing ledgers *b'*, of a shaking slide adapted to work in said open space, and having projecting lugs to engage beneath said ledgers, and an operating lever for supporting and actuating such slide as described. 10th. The combination of the supporting frame formed of inner and outer rings, the former having inward projections and the latter upward projections, of a rotatable central grate section resting on said inward projections, and a series of wing-sections surrounding the same, pivotally connected at their inner ends with the central section and connected at their outer ends with a stationary part of the frame, and outer extended corner portions. 11th. The combination with a rotatable central grate-section of a series of wing-sections arranged side by side around said central section with their adjacent edges corrugated and approximately parallel and separated from each other by a space, said wing-sections tapering towards their inner ends and being movably connected respectively to a stationary part of the frame, and to the central section, for the purpose set forth. 12th. The combination of the supporting frame formed of inner and outer rings, the former having inward projections and the latter upward projections, of a rotatable central grate section resting on said inward projections, and a series of wing-sections surrounding the same, pivotally connected at their inner ends with the central section and connected at their outer ends with a stationary part of the frame, substantially as described.

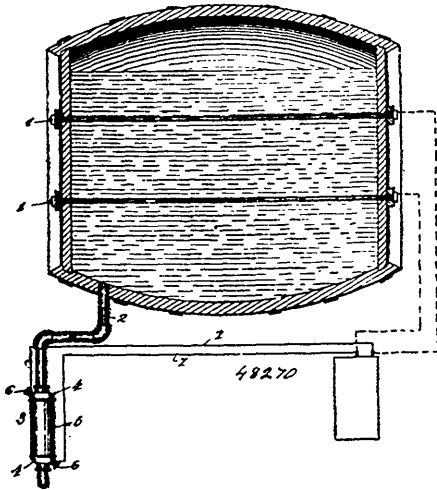
**No. 48,269. Fuel Saver. (Calorifere à air.)**



William Henry Bruce Lyons, Goshen, Indiana, U.S.A., 21st February, 1895; 6 years.

*Claim*—A heating-drum comprising in its construction an enlarged cylindrical body-portion having a tapering lower end and an open upper end, a circular rim provided with legs projecting downwardly therefrom, and engaging the conical lower end of the body-portion, a damper in said rim and capable of opening and closing the same, a tube resting on the rim and extending up the body-portion, said tube having its upper end provided with outwardly projecting arms adapted to engage the interior of the body and to hold the tube in place, a cap fitting over the open upper end of the body-portion, a second pipe secured to the cap and projecting downwardly into the first pipe, and a damper commanding the second pipe, substantially as described.

**No. 48,270. Method of Manufacturing Beer. (Méthode de fabrication de la bière.)**

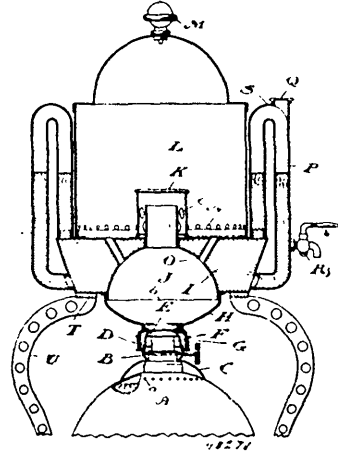


Paul Kropp, and August Gruell, both of Chicago, Illinois, U.S.A., 21st February, 1895; 6 years.

*Claim*.—1st. The herein described method for manufacturing beer

which consists in subjecting the liquor to the first fermentation, and then passing a current of electricity through the partially fermented beer, substantially as described. 2nd. The herein described method for manufacturing beer, which consists in subjecting the liquor to the first fermentation, and then passing a current of electricity through the partially fermented beer, and at the same time keeping the partially fermented beer at a low temperature, substantially as described.

**No. 48,271. Apparatus for Lighting, Heating and Cooking. (Appareil pour éclairer, chauffer et cuire.)**

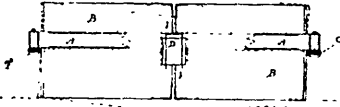


James Grey Pennycook, Toronto, Ontario, Canada, 21st February, 1895; 6 years.

*Claim*.—1st. A lamp provided with a glass forming one-half of the chimney, in combination with a water chamber having a concave funnel-shaped flue extending through it, which forms the upper half of the chimney, and a cover resting on the top of the water chamber and provided with a series of holes to permit of the escape of the heated air from the lamp, substantially as and for the purpose specified. 2nd. In an apparatus of the class specified, a water chamber having a funnel-shaped flue extending through it, in combination with a cover resting on the top of the water chamber and provided with a series of holes near its lower edge, substantially as and for the purpose specified. 3rd. In an apparatus of the class specified, a water chamber having a funnel-shaped flue extending through it, in combination with a cover resting on the top of the water chamber and provided with a series of holes near its lower edge, and a ring provided with legs for supporting said water chamber, substantially as and for the purpose specified. 4th. A lamp provided with a glass forming one-half of the chimney, in combination with a funnel-shaped flue forming the upper half of the chimney and extending into a chamber having a removable cover and suitable outlets for the heated air, substantially as and for the purpose specified. 5th. A lamp for lighting, heating or cooking purposes, having a series of holes made in its bowl near the top, in combination with a collar secured to the bowl below the said holes, forming a chamber over said holes to collect the oil which may trickle from the wick, substantially as and for the purpose specified. 6th. A lamp for lighting, heating or cooking purposes, having a series of holes made in its bowl near the top, in combination with a collar secured to the bowl below the said holes and so shaped as to direct any gases rising from the oil into the burner, substantially as and for the purpose specified. 7th. In a lamp for lighting, heating or cooking purposes, the combination of the bowl A, the collar C, the holes *a*, the burner B, the lower perforated plate D, and the upper supplemental plate E, substantially as and for the purpose specified. 8th. In an apparatus of the class specified, the water chamber I, having a funnel-shaped flue J, extending through it, in combination with the cover L, resting on the said water chamber and provided with a series of holes N, and the deflector K, placed over the said flue, substantially as and for the purpose specified. 9th. In an apparatus of the class specified, the combination of the water chamber I, having a funnel-shaped flue J, extending through it, the deflector K, the water tubes P, the water inlet Q, the tap R, and the cover L, held in place by the flange *d*, and provided with holes N, substantially as and for the purpose specified. 10th. In an apparatus of the class specified, the combination of the water chamber I, having a funnel-shaped flue J, extending through it, the deflector K, flues O, the water tubes P, the water inlet Q, the tap R, and the cover L, provided with holes N, substantially as and for the purpose specified. 11th. In an apparatus of the class specified, the combination of the lamp bowl A, the collar C, the holes *a*, the burner B, the glass H, the water chamber I, having a funnel-shaped flue J, extending through it, the deflector K, the water tubes P, the water inlet Q, the tap R, and the cover L, provided with holes N, substantially as and for the

purpose specified. 12n. In an apparatus of the class specified, the combination of the lamp bowl A, the collar C, the holes a, the perforated plate D, the supplemental plate E, the burner B, the glass H, the water chamber I, having a funnel-shaped flue J, extending through it, the ring T, provided with legs U, the deflector K, the water tubes P, the water inlet Q, the tap R, the cover L, provided with holes N, substantially as and for the purpose specified.

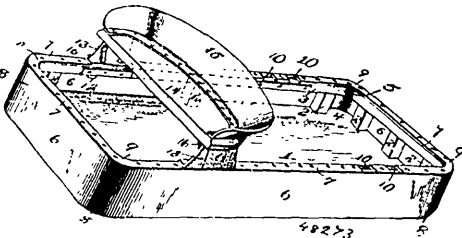
**No. 48,272. Land Roller. (Rouleau d'agriculture.)**



David File, Cainsville, Ontario, Canada, 21st February, 1895; 6 years.

*Claim.*—The combination of the rollers B, with the central bar D, having therein the vertically slotted box E, and the rolling boxes F, secured by eye bolts, to the frame A, substantially as and for the purposes hereinbefore set forth.

**No. 48,273. Waggon Body. (Boite de wagon.)**

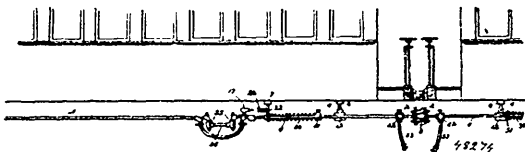


Charles A. Erickson, Red Wing, Minnesota, U.S.A., 21st February, 1895; 6 years.

*Claim.*—1st. A vehicle body, consisting of a horizontal wood bottom, studs disposed at intervals around the margin of the wood bottom, a continuous wooden top rail secured to the upper ends of the studs, and a sheet-metal sheathing closing the spaces between the studs, and continuously lapped over the top rail having a series of recesses to receive seat-supporting standards, one of which at each end of the seat is hooked, substantially as described. 2nd. A vehicle body, consisting of a horizontal wood bottom having curved corner portions, studs disposed at intervals around the margin of the wood bottom, a continuous top rail secured to the upper ends of the studs and having curved corner portions, and a series of recesses along each longitudinal portion, a sheet-metal sheathing closing the spaces between the studs, continuously lapped over the top rail and crimped and bent at the corners to fit the curved corner portions of the wood bottom and top rail, and a seat having one of its supporting standards at each end of the seat provided with pendent hooks which can be engaged with any of the recesses in the said top rail, substantially as described. 3rd. A vehicle body, consisting of a horizontal wood bottom having curved corner portions, studs disposed at intervals around the margin of the wood bottom and widely separated along the sides thereof but closely arranged at the ends of the same, a continuous wooden top rail secured to the upper ends of the studs and having curved corner portions corresponding to the curved corner portions of the wood bottom, and a sheet-metal sheathing closing the spacing between the studs, continuously lapped over the top rail and crimped and bent at the corners to fit the curved corner portions of the wood bottom and top rail, substantially as described.

**No. 48,274. Air Brake Coupler.**

(Joint de frein atmosphérique.)

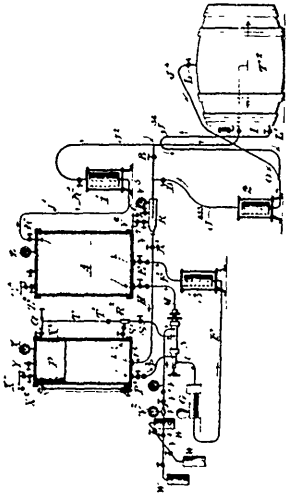


Leonidas Sennett, Russell, Kentucky, U.S.A., 21st February, 1895; 6 years.

*Claim.*—1st. In an air-brake mechanism, the combination of a longitudinally movable brake-pipe, an escape or exhaust valve communicating therewith, a button or stop arranged in the path of the stem of the escape or exhaust valve and adapted to engage said stem and open the valve when the brake-pipe is advanced, and means for advancing the brake-pipe, substantially as specified. 2nd. The combination, with a longitudinal movable brake-pipe, an escape or

exhaust valve communicating therewith, a button or stop arranged in the path of the stem of said valve and adapted to engage the same and open the valve when the brake-pipe is advanced, an actuating spring for advancing the brake-pipe, and means whereby the pipe is repressed against the tension of the actuating spring when the brake pipes of adjoining cars are coupled, substantially as specified. 3rd. The combination of a longitudinally movable brake-pipe, an escape or exhaust valve communicating therewith, a button or stop, means for adjusting the button or stop to occupy a position in the path of the stem of said valve, and means for advancing the pipe, automatically, to bring the stem of the valve in engagement with said button or stop when the brake pipes carried by adjoining cars are uncoupled, substantially as specified. 4th. The combination of longitudinally movable brake-pipe, means for advancing the same when released, an escape or exhaust valve communicating with the brake-pipe, a button or stop, a slidable bar carrying said button or stop and capable of movement transverse to the length of the brake-pipe, and a slotted guide adapted to receive the stem of the button or stop and hold the same in the path of the stem of the valve, substantially as specified. 5th. The combination of longitudinally movable brake and signal pipes, means for advancing the same when released, escape or exhaust valves communicating, respectively, with said pipes, a button or stop, a slidable rod carrying said button or stop and capable of movement transverse to the length of the said pipes, and a slotted guide to receive the stem of the button or stop and having an opening for the insertion of the same, the button or stop being capable of movement sufficient to occupy a position in the path of either of the stems of the valves which communicate with the pipe, substantially as specified. 6th. The combination of a brake-pipe having an independent longitudinally movable section carrying a coupling head and an interposed flexible union or joint, means for advancing said section independently of the main section of the pipe, an escape valve communicating with the pipe, and a button or stop arranged in the path of the stem of said valve when the movable section is advanced, substantially as specified. 7th. The combination, with a brake-pipe having a longitudinally movable section, of a flexible union or coupling interposed between the movable and main section of the pipe, and comprising a connecting or link pipe, connected at its extremities to the contiguous ends of the brake pipe sections by swivel joints having casings carried by and in communication with one of the sections, and plugs carried by and in communication interiorly with the other section, said plugs having lateral openings and exterior continuous channels or cavities to secure permanent communication between the interior of the plugs and the casings, irrespective of the relative positions of said parts, substantially as specified. 8th. The combination of a longitudinally movable brake-pipe section carrying a coupling-head, supporting brackets adapted to be attached to a car, and a spring-supported stem attached to the front bracket, or that which is adjacent to said coupling-head, and connected to the pipe, substantially as specified. 9th. The combination of a longitudinally movable brake-pipe, means for advancing the same, said brake-pipe being provided with a terminal coupling head, an adjustable bracket for supporting the brake pipe adjacent to its coupling-head, and a spring supported rod connected to said bracket and capable of vertical and lateral movement, and provided at its extremity with a collar through which the brake-pipe extends and in which it is slidably fitted, substantially as specified. 10th. The combination of longitudinally movable brake, signal and steam pipes, a cored coupling head attached to the front ends of said pipes, spring-actuated valves arranged in the coupling-head and adapted to normally close said pipes, said valves having projecting stems adapted to be repressed to unseat the valves by an opposing coupling-head, escape valves communicating respectively with the brake and signal pipes, means for advancing the said pipes when released, and stops arranged contiguous to said escape-valves and adapted for adjustment to occupy a position in the path of the stem of either of said valves, substantially as specified. 11th. An air-brake coupling-head provided with diametrically opposite interlocking fingers arranged in a given position with relation to a central vertical line, whereby the coupling-heads are interchangeable, substantially as specified. 12th. An air-brake coupling-head, having a plurality of seats arranged with their axes in a vertical line embracing the axis or centre of the head, substantially as specified. 13th. An air-brake coupling-head provided with diametrically opposite fingers for engaging the fingers of an opposing head, and one or more seats arranged upon a line connecting the diametrically opposite corresponding side edges of the fingers, substantially as specified. 14th. An air-brake coupling-head, having diametrically opposite fingers arranged with corresponding side edges upon a vertical line embracing the axis of the head, and a series of seats arranged with their centres upon said line, substantially as specified. 15th. An automatic hose or fluid pipe coupling-head having three or more forwardly projecting fingers for engagement with an opposing coupling head, said head being cored and provided with a plurality of seats arranged with their centre upon a line connecting the lateral edges of two of said fingers, said lateral edges being arranged upon a vertical line embracing the centre of the coupling-head, and spring-actuated valves arranged to fit said seats and provided with stems having a plurality, from two to four, of webs or flukes, said stems projecting forward beyond the face or front side of the coupling-head to engage the corresponding stems of an opposing coupling-head, substantially as specified.

**No. 48,275. Method of Charging and Combining Liquids with Carbonic Acid Gas.** (*Méthode de charger et combiner les liquides avec du gaz d'acide carbonique.*)



Edwin Adam, Philadelphia, Pennsylvania, U.S.A., 21st February, 1895; 6 years.

*Claim.* -1st. The process of charging and treating a malt or other liquid with carbonic acid gas, consisting in forcing the liquid from a tank and releasing it of pressure, then charging the same with carbonic acid gas, subjecting the charged liquid to a high pressure, then reducing the pressure and returning it thus reduced to said tank from which the liquid was forced, substantially as described. 2nd. The process of charging and treating a malt or other liquids with carbonic acid gas, which consists in forcing liquid from a tank, releasing the liquid thus forced of pressure, then passing the same into and through a gas-charging apparatus where it is mixed with a small portion of liquid highly charged with carbonic acid gas, and subjecting the whole to a high pressure, and then reducing the pressure on said liquids, substantially as described. 3rd. An apparatus consisting of a releasing tank, a gas charging apparatus, combined mixers and strainers, a high pressure combining tank, and pipes connecting said apparatus, combined mixers and strainers and tanks, a low pressure combining vessel, and a pipe having a pressure reducing valve leading from said high pressure tank to said low pressure vessel, substantially as described. 4th. An apparatus for the purpose set forth, having a releasing tank, a gas charging apparatus, high and low pressure combining vessels, combined mixers and strainers, and pipes connecting said devices with suitable attachments for regulating both high and low pressure in said vessels, and means for creating the said pressures in said vessels, substantially as described. 5th. The process of treating fermented or unfermented liquid, consisting in charging or fortifying such liquid with carbonic acid gas, and thoroughly combining the liquid and gas by a hydraulic pressure in a closed vessel which is supplied with mixed liquid and gas more rapidly than the same is discharged, substantially as described. 6th. A process of charging or fortifying a fermented or unfermented liquid with carbonic acid gas, consisting in charging a small stream of liquid with carbonic acid gas in a charging device, and immediately spraying the said liquid and gas into a stream of liquid passing through said charging device, and then leading the whole into the suction end of a pump, substantially as described. 7th. In a process of charging a fermented or unfermented liquid with carbonic acid gas, supplying liquid from a partially filled tank, charging the same with carbonic acid gas, straining and mixing the same, then combining the liquid and gas by a hydraulic pressure created in a tank filled to its capacity, substantially as described. 8th. In a process of charging or fortifying fermented or unfermented liquid with carbonic acid gas in a charging device, leading the charged liquid from said charging device into the suction end of a pump or its equivalent, and by the same forcing the said charged liquid through a combined mixer and strainer into a compressing tank for the purpose of combining the charged liquid and gas by a hydraulic pressure, substantially as described. 9th. In a process of charging or fortifying a fermented or unfermented liquid with carbonic acid gas, charging the liquid with carbonic acid gas and combining the liquid and gas by a hydraulic pressure by continually forcing charged liquid into charged and hydraulic compressed liquid in motion, substantially as described. 10th. In a process of charging or fortifying fermented or unfermented liquid with carbonic acid gas, charging the liquid with carbonic acid gas, combining the liquid and gas by a hydraulic pressure, and releasing the same of said pressure, and subsequently recharging the same with gas, substantially as described. 11th. In a process of charging or fortifying fermented or unfermented liquid with carbonic

acid gas, charging the liquid with carbonic acid gas, and combining the liquid and gas by a hydraulic pressure, then forcing the hydraulic compressed liquid from one vessel to a second vessel by said pressure, and simultaneously reducing or increasing the pressure on said liquid in the second vessel, substantially as described. 12th. In a process of charging or fortifying fermented or unfermented liquid with carbonic acid gas, charging liquid with carbonic acid gas, and combining the liquid and gas in a tank by a hydraulic pressure, then forcing the charged and combined liquid through a combined mixer and strainer into a releasing tank having a gas and air space, and a vent valve above the liquid, substantially as described. 13th. In a process of charging or fortifying a fermented or unfermented liquid with carbonic acid gas, charging liquid with carbonic acid gas and combining the liquid and gas in a tank by a hydraulic pressure, then forcing the charged and combined liquid into a releasing vessel and carrying-off and utilizing the uncombined and released gas for recharging, substantially as described. 14th. In a process of charging or fortifying fermented or unfermented liquid with carbonic acid gas, combining the said liquid and gas by a hydraulic pressure and displacing the liquid from one vessel to another by said pressure, substantially as described. 15th. In a process of charging fermented or unfermented liquids with carbonic acid gas, charging two or more liquids with carbonic acid gas, and spraying the resultant scented liquid into a separate passing stream of liquid, and combining the whole by a hydraulic pressure, substantially as described. 16th. In a process of charging fermented or unfermented liquids with carbonic acid gas, charging two or more streams of the liquid with gas, uniting the streams, bringing the resultant stream into a vessel, and then combining the liquid and gas by a hydraulic pressure in said vessel, substantially as described. 17th. In a process of charging or fortifying a fermented or unfermented liquid with carbonic acid gas, combining separate streams coming from separate vessels, charging the resultant stream with carbonic acid gas, and combining the liquid and gas by a hydraulic pressure, substantially as described. 18th. In a process of charging or fortifying a fermented or unfermented liquid with carbonic acid gas, releasing the hydraulic compressed liquid of said pressure, charging the same with carbonic acid gas, creating and maintaining a hydraulic pressure on said liquid after charging, substantially as described. 19th. The process of charging and treating a malt or other liquid with carbonic acid gas consisting in leading a small stream of liquid into a charging apparatus where it is highly charged with carbonic acid gas, and simultaneously leading a large stream of liquid released of pressure, also into said charging apparatus where it is mixed with the highly charged small stream, then subjecting the whole to a pressure, substantially as described. 20th. An apparatus having a releasing and expanding vessel, a gas-charging device, and a pipe connecting the same with said vessel, a compressing and combining vessel suitably connected to said charging device, and a tank for carbonic acid gas, substantially as described. 21st. An apparatus having a releasing and expanding vessel, a gas charging device, and a pipe connecting the same with said vessel, a compressing and combining vessel suitably connected to said charging device, and means for creating a hydraulic pressure in said compressing and combining vessel, substantially as described. 22nd. An apparatus for the purpose set forth, consisting of a releasing vessel, a gas charging device, a pipe connecting said vessel and said device, a compressing and combining vessel also suitably connected to said device, and an injector for carrying-off the uncombined gas after charging, substantially as described. 23rd. The shell, and pipes therein with intervening chambers, branches on the shell communicating with said chambers, respectively, in combination with a tubular plug which is connected with the shell at the discharge end of said pipes, and has a chamber between the same and the discharge nozzle of said shell, and the branch connected with said nozzle and communicating with the latter named chamber, substantially as described. 24th. In an apparatus for the purpose named, the shell having tubes therein with intervening chambers, and having respectively inlet branches, means substantially as described for adjusting said pipes in said shell, an inlet pipe, a plug on the front end of said shell, a discharge nozzle forming a chamber surrounding said plug, and a valve for said plug having its stem in said nozzle, said parts being combined, substantially as described. 25th. In an apparatus substantially as described, a shell with pipes, and a tubular plug therein, means for adjusting said pipes relatively to the discharge end thereof, and to said plug, a nozzle connected with the discharge end of the shell, and a valve in said nozzle, the seat of the same being in the discharge end of said plug, substantially as described. 26th. An apparatus for the purpose described consisting of a shell, the pipes therein, means for adjusting said pipes at their discharge end, a tubular plug at the discharge end of the shell, chambers between the pipes, a discharge nozzle with a valve thereon, a chamber between said plug and nozzle, a valve in said nozzle, and branches connected with said chambers, a branch on the nozzle leading into said chamber and connected pipes, substantially as described. 27th. In an apparatus for the purpose described, a combined strainer and mixer, in combination with a compressing and combining vessel, substantially as described.

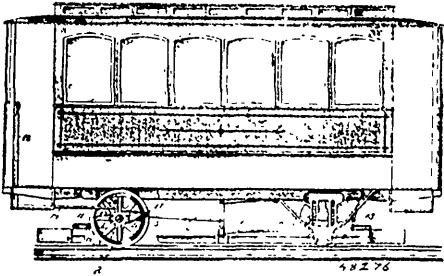
**No. 48,276. Brake Clutch.** (*Manchon de frein.*)

David Leon Winters, Pueblo, Colorado, U.S.A., 21st February, 1895; 6 years.

*Claim.* - The combination, with a brake-rod and connections, of a

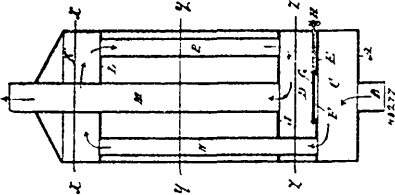


drum, flexible connections between the drum and the brake-rod, an annular friction plate removably secured to and carried by a wheel, clutch arms secured to the drum and provided with clutch shoes to



engage the friction plate, and means for operating the clutch-arms to bring their shoes into frictional contact with said friction plate, substantially as specified.

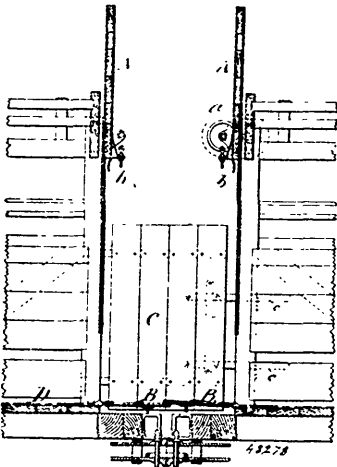
**No. 48,277. Stove Drum. (Dôme de poêle.)**



Christian A. Henrich, New Hamburg, Ontario, Canada, 21st February, 1895; 6 years.

*Claim.*—A stove drum having a bottom chamber C, an upper chamber D, divided from said top chamber by a plate E, having a hole F, provided with a damper G, and a top chamber K, connected by a series of pipes N, to the bottom chamber C, and another series of pipes P, connecting the upper and top chambers D, K, and a central pipe M, leading from the upper chamber through the top chamber and out through the exterior top of the drum, as set forth.

**No. 48,278. Cattle Car. (Char à bestiaux.)**



Harry Livesey, London, England, 21st February, 1895; 6 years.

*Claim.*—A railway cattle car, having at each end a vertically sliding portullis door, a flap hinged at its lower edge and a door hinged at its one side arranged and operating in conjunction with other similar cars constituting a train, substantially as and for the purpose set forth.

**No. 48,279. Manufacture of White Lead, &c.**

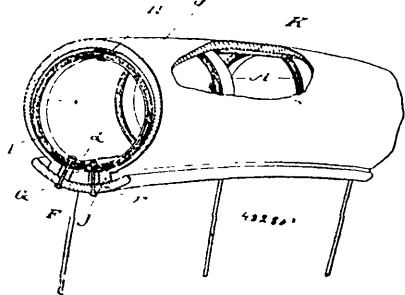
(Fabrication de blanc de plomb, etc.)

Rowland Matthews, Forest Hill, and James Noad, East Ham, both in England, 22nd February, 1895; 6 years.

*Claim.*—1st. In the manufacture of white lead and coloured pigments from lead oxide, treating said oxide with an aqueous solution

of acetic acid and glycerine, as hereinbefore described. 2nd. The improved process of manufacturing white lead, consisting in the successive steps of subjecting lead oxide to the solvent action of an aqueous solution of acetic acid and glycerine, freeing the solution of lead acetate from all undissolved matters suspended therein, by settlement, running off the clear solution of lead acetate and precipitating the white lead therefrom by carbonic acid, running off the solution from which the white lead has been precipitated, and finally washing the precipitated white lead, neutralizing any free acid mixed therewith with ammonium or other suitable alkaline carbonate and again washing the white lead, prior to drying the same, substantially as described. 3rd. The improved process of manufacturing coloured pigments, consisting in producing a precipitated white lead by the successive steps set out in Claim 2, then running off the solution from which the white lead has been precipitated, adding to the white lead suitable colouring agents, and finally washing the precipitate or pigment, and if required, neutralizing any free acid mixed therewith with ammonium or other suitable alkaline carbonate, and again washing the precipitate or pigment, prior to drying the same, substantially as described.

**No. 48,280. Tire. (Bandage.)**



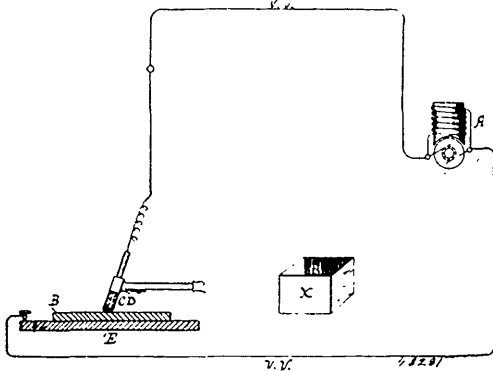
Edward E. Horton, Toronto, Ontario, Canada, 22nd February, 1895; 6 years.

*Claim.*—1st. A tire for wheels consisting of a series of annular metallic springs, a pedestal for each spring, of the series located between the spring and the rim of the wheel, substantially as specified. 2nd. A tire for a wheel consisting of a series of annular metallic springs, a pedestal for each spring, of the series located between the spring and the rim of the wheel, and a tread band connecting together all of the series of springs, substantially as specified. 3rd. In a wheel, the combination of the rim, a tire for the wheel consisting of a series of detached independent annular springs, a pedestal for each of the springs located between its respective spring and the rim of the wheel, a tread band connected to each spring of the series, and an impervious covering for the tire, substantially as specified. 4th. In a wheel, the combination of the rim, a series of detached independent annular springs arranged at regular intervals around the rim, the ends of each spring separated from each other, each end of each spring mounted on a pedestal located between the spring and the rim, substantially as specified. 5th. In a wheel, the combination of the rim, a series of detached independent annular springs arranged at regular intervals around the rim, the ends of each spring separated from each other, each end of each spring mounted on a pedestal located between the spring and the rim, and a tread band connected to each of the series of springs, substantially as specified. 6th. In a wheel, the combination of the rim, a series of detached independent annular springs arranged at regular intervals around the rim, the ends of each spring separated from each other, each end of each spring mounted on a pedestal located between the spring and the rim, a tread band connected to each of the series of springs, and an impervious covering for the tire, substantially as specified. 7th. A tire for a wheel consisting of a series of detached independent annular springs, each spring comprised of a series of leaves, the innermost leaf and the outermost leaf having enlargement or flanges at the sides of the spring, rivets passing through the flanges of the said leaves on each side of the spring and bearing against the intermediate leaves, and a pedestal in which each spring is mounted, substantially as specified. 8th. In a wheel, the combination of the rim, a tire comprised of a series of detached independent annular springs, each spring consisting of a series of independent leaves the ends of which are separated, each end of each spring mounted on and riveted to pedestal fastened to the rim, and a rivet passing through each spring substantially diametrically opposite the pedestal, substantially as specified. 9th. In a wheel, the combination of the rim, a tire comprised of a series of detached independent annular springs, each spring consisting of a series of leaves, the inner leaf and

the outer leaf provided with a flange extending beyond each side of the coil, rivets passing through the said flanges on each side of the spring and bearing against the intermediate leaf, each end of each spring riveted to a pedestal fastened to the rim, and an impervious covering enclosing the tire, substantially as specified. 11th. A tire for a wheel consisting of a series of detached independent annular springs, each spring comprised of a series of leafs, the innermost leaf and the outermost leaf having enlargements or flanges at the said leafs on each side of the spring and bearing against the intermediate leafs, a pedestal in which each spring is mounted, and a tread band connected to each spring of the series, substantially as specified. 12th. In a wheel, the combination of the rim, a tire comprised of a series of detached independent annular springs, each spring consisting of a series of independent leafs, the ends of which are separated, each end of each spring mounted on and riveted to a pedestal fastened to the rim, a rivet passing through each spring substantially diametrically opposite the pedestal, and a tread band connected to each spring of the series, substantially as specified.

**No. 48,281. Method of Electro-Plating Metals.**

(Méthode d'argenture galvanique des métaux.)



Edward R. Johns, assignee of James Bennett, both of New York, State of New York, U.S.A., 22nd February, 1895; 6 years.

*Claim.*—1st. In the method of electro-plating or the depositing of metals or minerals on a plate or other object, the process of electro-depositing hereinbefore described, which consists in depositing a metal or alloy from an absolute solution of such metal with water or other flux, or by a mixture of insoluble salts of any metal or metals by passing an electric current through the same, in connection with an electrode covered by felt or other homogeneous substance. 2nd. The process hereinbefore described of electro-plating or electro-depositing, consisting of the repeated application of the plate or the object which it is desired to electro-plate, of a solution of the metal, metals or alloys to be deposited with water or other flux, or of a mixture of insoluble salts of such metals in water and in causing the same to be operated upon by means of an electric current, as set forth. 3rd. The hereinbefore described process of electro deposition which consists in simultaneously depositing two or more metals or alloys from a solution of water or other flux, or from a mixture of insoluble salts of such metals with the metals or alloys to be deposited, by causing an electric current to pass through the same. 4th. The hereinbefore described process of electro-deposition, which consists in the deposition of metals and minerals from a solution of the metals and minerals to be deposited, by painting or spreading the same upon the plate or other object to be electro-plated, by means of an electrode covered with felt or other homogeneous substance, through which an electric current is passed so as to cause a flow of the solution or by the use similarly, of the insoluble salts of any metal or combination of metals in place of such solution to produce such plating.

**No. 48,282. Process of Refining Nickel, Etc.**

(Procédé de raffinage de nickel, etc.)

Charles Gordon Richardson, Charles Riordon, both of Toronto, and John Roaf Barber, Georgetown, assignees of Arthur Law Grant, Toronto, all in Ontario, Canada, 22nd February, 1895; 6 years.

*Claim.*—1st. The above described process of refining nickel and copper mattes which consist essentially in first converting the matte into a finely divided mixture of metallic nickel and copper, and then subjecting the mixture to the action of sulphuric acid, substantially as and for the purpose specified. 2nd. The above described process of refining nickel and copper mattes which consists essentially in first converting the matte into a finely divided mixture of metallic nickel and copper, then in subjecting the mixture to the action of a sufficient quantity of sulphuric acid to combine with the whole of the nickel, and then in treating the solution with a further portion

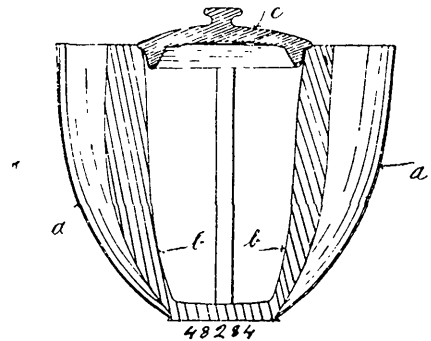
of the mixed metals to precipitate any traces of copper sulphate, leaving nickel sulphate in solution, substantially as and for the purpose specified. 3rd. The above described process of refining nickel and copper mattes which consists essentially in first oxidizing the matte, then in reducing it to a finely divided mixture of nickel and copper by heating it in the presence of hydrogen, carbon mon-oxide or other suitable reducing gas, and then in subjecting the mixture to the action of sulphuric acid, substantially as and for the purpose specified. 4th. The above described process of refining nickel and copper mattes which consists essentially in first oxidizing the matte then in reducing it to a finely divided mixture of nickel and copper by heating it in the presence of hydrogen, carbon mon-oxide, or other suitable reducing gas, then in subjecting the mixture to the action of a sufficient quantity of sulphuric acid to combine with the whole of the nickel, and then in treating the solution with a further portion of the mixed metals to precipitate any traces of copper sulphate leaving nickel sulphate in solution, substantially as and for the purpose specified. 5th. The above described process of refining nickel and copper mattes which consists essentially in first oxidizing the matte, then in reducing it to a finely divided mixture of nickel and copper by the heating it in the presence of hydrogen, carbon mon-oxide, or other suitable reducing gas and then in subjecting the mixture to the action of sufficient quantity of sulphuric acid to combine with the whole of the nickel, and then in treating the solution with a further portion of the mixed metals to precipitate any traces of copper sulphate leaving nickel sulphate in solution, which solution after being decanted from the resulting slimes is subjected to the action of chlorine gas or atmospheric air in order to peroxidize the iron and cobalt, if any be present, which latter is then precipitated by any of the usual methods, and the remaining nickel solution used for the preparation of nickel salts or metallic nickel, substantially as and for the purpose specified.

**No. 48,283. Artificial Stone, &c. (Pierre artificielle, etc.)**

Ludwig Grote, Landberg on Leeb, Germany, 22nd February, 1895; 6 years.

*Claim.*—1st. A composition of matter for making artificial stone, consisting of chloride of magnesium, acetate of lead diluted in water, calcin d magnesite, and a filling material, such as sand, gravel, saw-dust, clay, paper, wood-pulp, or earthy matter, substantially as set forth. 2nd. A composition of matter for making artificial stone, &c., consisting of chloride of magnesium, acetate of lead diluted in water, a caustifying ingredient such as plumbate of lime, calcined magnesite, an oleaginous substance, and a filling material such as sand, gravel, or earthy matter, substantially as set forth.

**No. 48,284. Slop Basin. (Bol à rinçures.)**

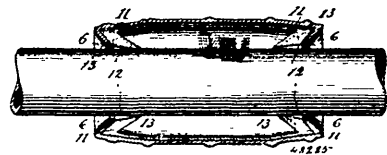


Frank William Buntall, Essex, England, 22nd February, 1895; 6 years.

*Claim.*—In slop basins, in combination, a slop basin having projections or supports formed integral with or attached to same and forming a holder or receptacle for the reception of a strainer or infuser, a lid for use with same, substantially as and for the purpose hereinbefore set forth.

**No. 48,285. Device for Stopping a Leak in Hose.**

(Appareil pour arrêter les fuites d'eau dans les boyaux)

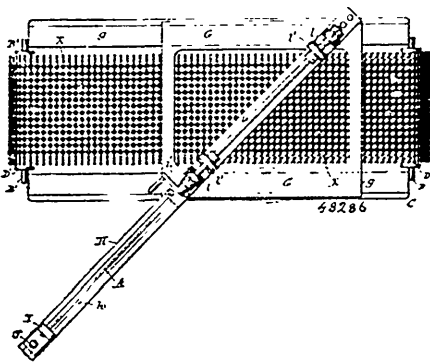


James Brooks Cooper, Minneapolis, Minnesota, U.S.A., 22nd February, 1895; 6 years.

*Claim.* 1st. In a device of the class described, the combination,

with the longitudinally divided sleeve or barrel, of the thin inclined flexible lips or flanges arranged on opposite parts and adapted to be forced together by pressure from within the sleeve, substantially as described. 2nd. The combination, in a hose or pipe leak stop, of a retaining sleeve or barrel, with the inwardly inclined flexible lips arranged to be acted upon by pressure from within, substantially as described. 3rd. In a pipe or hose leak stop, of the retaining parts in combination with the inwardly flared end lips adapted to be closed upon a pipe or hose by pressure from within, substantially as described. 4th. A leak stop, consisting in a sleeve adapted to be closed about a pipe or hose and considerably larger than the same, and said sleeve provided with the flexible and inwardly flared lips or flanges adapted to be forced against and around the hose or pipe by their own elasticity and by pressure of air or water within the sleeve, substantially as described. 5th. The sleeve or barrel divided longitudinally, in combination, with means for securing the two parts about a hose or pipe, the ends of said sleeve being provided with the inwardly flared flexible annular lips or flanges adapted to be forced against and around the pipe or hose by pressure of air or water within the space between the sleeve and the pipe or hose, substantially as described. 7th. The combination, with the metal sleeve or jacket provided with the inwardly flared metal flanges, of the flexible packing flanges or rings held in place by the metal banges, and themselves being flared inwardly, whereby said rings are adapted to be forced against a pipe or hose by pressure of air or water within the sleeve, substantially as described. 7th. The combination, with the flexible sleeve, or jacket having the inflexible internal flanges, of the flexible lining provided with inwardly extending and inwardly flared beveled lips or flanges, substantially as described and for the purpose set forth. 8th. The combination, with the divided sleeve arranged to be locked upon a pipe or hose, of the acute-angled and inwardly flared flexible packing flanges, and the longitudinal packing flanges adapted to close together and all flanges adapted to be compressed by pressure from within the sleeve, substantially as described. 9th. The combination with the metal sleeve composed of the hinged parts arranged to be locked about a hose or pipe, and considerably larger than the same, of the two-part flexible lining for said jacket, the edges of said lining being substantially flush with those of the sleeve and in the form of flanges, whereby the longitudinal edges of the lining are pressed together upon closing the jacket, and said lining provided with the acute-angled inwardly flared flexible flanges or lips to engage a pipe or hose, substantially as described. 10th. The combination with the divided sleeve, with the hooks or clasps extending from one part and adapted to engage shoulders on the other part of the sleeve, the rotatable wings to lock the clasps, and the cams for unlatching the same as wings are withdrawn, substantially as described and for purpose set forth.

**No. 48,286. Machine for Inserting Threads Into Woven Fabrics.** (*Machine pour insérer des fils dans les tissus.*)

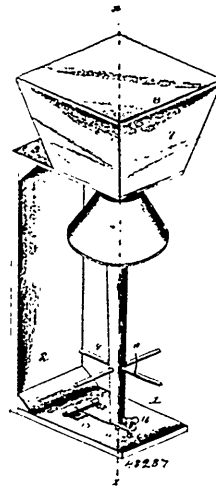


Edmund Morris, Michigan City, Indiana, U.S.A., 22nd February, 1895; 6 years.

*Claim.*—1st. The combination, substantially as hereinbefore set forth, with means for supporting a woven fabric, of guides on opposite sides of the fabric, forming a sinuous passage over and under the strands of which fabric is composed. 2nd. The combination, substantially as hereinbefore set forth, with means for supporting a woven fabric, of guides on opposite sides of the fabric forming a sinuous passage over and under the strands or threads thereof, and a needle or thread-carrier having a flexible portion adapted to pass through the sinuous passage formed by the guides. 3rd. The combination, substantially as hereinbefore set forth, of the table, means for supporting a woven fabric carried thereby, upper and lower guide-bars mounted on the table, arranged diagonally as described, and having opposing recesses forming a sinuous passage over and under the threads of which the fabric is composed. 4th. The herein described crossing needle having a stiff shank, a stiff front end or tip, and a flexible portion uniting the tip with the shank. 5th. The combination, substantially as hereinbefore set forth, of the upper and lower guide-bars having opposing recesses forming a sinuous

passage on opposite sides of the threads of the fabric to which they are applied, and positioning pins on one of the guide-bars which extend through the meshes of the fabric.

**No. 48,287. Poultry Feeder.** (*Alimentateur de poulailler.*)

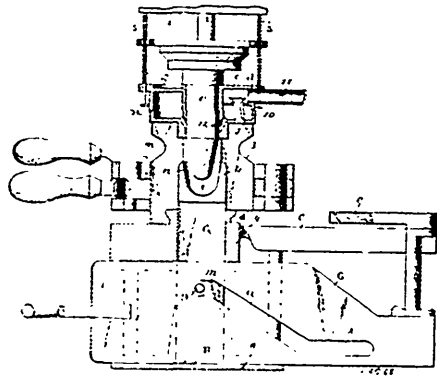


John G. Whitten, Genoa, New York, U.S.A., 22nd February, 1895; 6 years.

*Claim.* 1st. In a poultry feeder, the combination of a supply hopper, a rotary upright or standard having roosts thereon, a deflector on the upper portion of said upright or standard, and a feed disc upon said upright and within the hopper, substantially as described. 2nd. In a poultry feeder, the combination of a rotary upright or standard, a hopper, and a feed disc connected to the upper end of said upright or standard and coacting with the hopper, said upright or standard having impelling means thereon, substantially as described. 3rd. In a poultry feeder, the combination of an upright or standard adapted to be rotated, and having roosts or rests thereon, a base supporting the lower end of said standard or upright, having a lower feed opening, a feed disc on the upper end of the upright or standard and located in the lower portion of the hopper, and a conical deflector secured to the upper portion of the said upright under the hopper, substantially as described. 4th. In a poultry feeder, the combination of a rotary upright or standard having a feed disc on the upper end thereof, and a hopper in which said feed disc is located, having a lower feed opening, and an adjustable arm engaging the lower end of said upright or standard for regulating the position of the feed disc relatively to the feed opening of the hopper, substantially as described.

**No. 48,288. Mould for Glassware.**

(*Moule pour la verrerie.*)

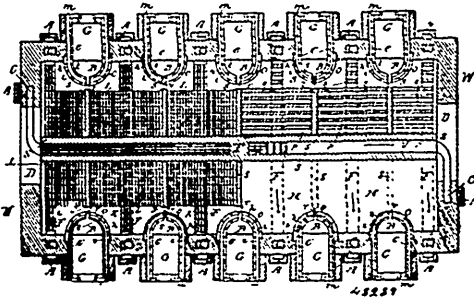


Charles Edwin Blue, jr., Wheeling, West Virginia, U.S.A., 1895; 6 years.

*Claim.* 1st. A mould comprising a mould body, a vertically movable primary bottom, a horizontally movable secondary bottom, and a direct communication between said bottoms, for the purpose described. 2nd. A mould comprising a mould body, a movable primary bottom therein, a movable secondary bottom adapted to take its place, and a slide connected with the said bottom for moving them simultaneously, substantially as set forth. 3rd. A mould

comprising a mould body, a movable primary bottom within the same, a movable secondary bottom for taking the place of the primary bottom, and a slide carrying said secondary bottom and operatively connected with said primary bottom, substantially as set forth. 4th. A mould comprising a mould body, a vertically movable primary bottom, a horizontally movable secondary bottom and handle operatively connected with both of said bottoms. 5th. A mould comprising a mould body, a movable primary bottom for the same, a sliding rod having a secondary bottom connected thereto, and a cam carried by said rod adapted to engage and operate the said movable primary bottom. 6th. A mould comprising a mould body, a movable primary bottom within the same, a rod moving transverse the said mould and operatively connected with the primary bottom, a secondary bottom moving transverse the mould and adapted to take the place of the primary bottom, and operative connections between the said rod and the secondary bottom, substantially as described. 7th. A mould comprising a mould body, a movable primary bottom within the same, the mould body having a transverse opening, a movable rod or bar within the opening, a movable secondary bottom adapted to take the place of the said primary bottom, and operative connections between the bottoms and the rod, whereby the rod simultaneously operates both bottoms, for the purpose set forth. 8th. A mould comprising a mould body, a movable primary bottom within the same, the mould body having a transverse opening below the main portion of the mould, an endwise moving rod within the same, the said primary bottom having a vertical opening for the movement of said rod, the rod having a cam adapted to operate said primary bottom, and a movable secondary bottom adapted to be operated by the rod simultaneously with the operation of the primary bottom for the purpose set forth. 9th. A mould comprising a mould body, a movable air chamber above the same having a vertical plunger opening the wall of said opening having an air inlet, the wall of said chamber having a valve air inlet, the said valve adapted to engage the upper wall of said mould, and a plunger within the said vertical opening and adapted to close the air inlet. 10th. A mould comprising a mould body, a movable air chamber above the same having a vertical plunger opening, the walls of said opening having an air inlet, a valved air inlet for said air chamber, and means for opening said valve when the air chamber is in its downward position, substantially as described. 11th. A mould comprising a mould body, a movable air chamber above the same having an air inlet in the said mould, a vertically moving plunger adapted to close the said inlet, and a valved air inlet to the said chamber, and an air supply, substantially as specified. 12th. A glass-mould comprising a mould, a movable combined ring and air-chamber having a plunger opening, the wall of which is provided with an air inlet, a plunger movable in said opening and adapted to open and close said air inlet, in combination with a press and its head, the plunger having a firm connection with said head, and the ring and air-chamber, a yielding connection with the same head, whereby a single upward movement of the head, first lifts the plunger and admits air, and a continuation of the same movement of the head lifts the combined air-chamber and ring, substantially as described.

**No. 48,289. Brick Kiln. (Four à briques)**



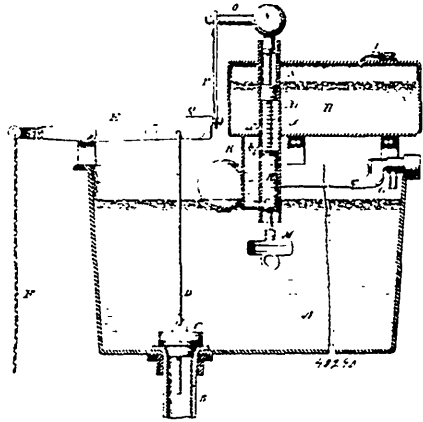
William A. Eudaly, Cincinnati, Ohio, U.S.A., 22nd February, 1895; 6 years.

*Claim.* 1st. A down-draft kiln having its bags or combustion chambers situated wholly within the kiln, the inner side of said chamber being formed by double walls, said walls inclosing an air chamber, said air chamber being closed at the top and connected at the bottom with the external air by means of air flues, and with the lower or middle portion of the combustion chamber by means of openings through the inner side of the double wall, substantially as described. 2nd. In a down draft kiln, hollow bag walls, in combination with furnaces having double crowns adapted to admit heated air to both sides of the combustion chamber in cross-sections, as and for the purposes set forth. 3rd. A down draft kiln having air inlet flues leading into the upright combustion chamber from opposite sides of the same and transverse to the length thereof. 4th. A down-draft kiln having furnaces with double crowns, vertical air flues in the main wall of the kiln connecting the air chamber in the double crown with the combustion chamber at various points. 5th. A kiln having its upright combustion chamber pro-

vided with air inlet openings through opposite sides thereof below the upper end thereof, and air heating flues discharging heated air through said openings from opposite sides of the chamber.

**No. 48,290. Disinfecting Apparatus.**

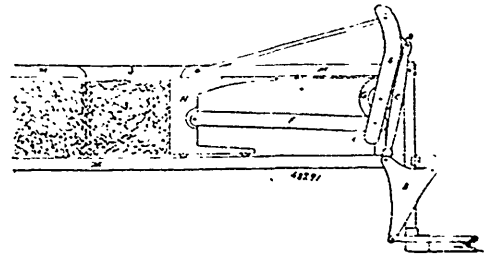
(Appareil à désinfecter.)



George Philip Kato, jr., Jersey City, New Jersey, and Ringgold Washington Carman, Flushing, New York, both in the U.S.A., 22nd February, 1895; 6 years.

*Claim.* 1st. The receptacle for disinfectant, having the measuring and discharge tubes J, K, the former open at its lower end and having an inlet within the receptacle, and the tube K being closed at its ends and communicating by ports at its upper and lower portions with the tube J, combined with the valve R, within the tube J, and adapted when in its lower position to close the outlet from the tube K, and when in its upper position to open said outlet and close the inlet to said tube K, substantially as set forth. 2nd. The flushing cistern or tank for water, combined with the main receptacle for the disinfectant, the tube for discharging the disinfectant into said cistern, a receptacle constituting a measure of predetermined capacity receiving the disinfectant from said main receptacle previous to its discharge into said cistern, and the valve controlling both said discharge tube and said measuring receptacle and having its rod connected with the lever mechanism discharging the water, substantially as set forth. 3rd. The flushing cistern having the outlet valve, valve rod, operating lever and chain, combined with the receptacle for disinfectant, the discharge tube therefrom and containing a valve rod, the valve carried by the rod within said tube, and the measure communicating with said tube and controlled by said valve on said rod, substantially as set forth. 4th. The flushing cistern having the outlet valve, valve rod, operating lever and chain, combined with the receptacle for disinfectant, the discharge tube therefrom containing the valve rod, and having an inlet within said receptacle, the valve carried by the rod within said tube and the measure communicating at its upper and lower portions by inlet and outlet ports with said tube, said inlet and outlet ports of the measure being controlled by the valve within the discharge tube, substantially as set forth.

**No. 48,291. Hay Press. (Presse à foin.)**



Joseph Charest, St. Rémis, Quebec, Canada, 26 Fevrier, 1895; 6 ans.

*Resumé.* Y. Le combinaison des bras T, E, D, C, A, avec le levier triangulaire R, et le rouleau C, faisant mouvoir le foulon H tel que décrit et pour les fins indiquées.

**No. 48,292. Typewriter Ribbon.**

(Ruban pour clavigraphes.)

Lebbens Harding Rogers, New York, State of New York, U.S.A., 26th February, 1895; 6 years.

*Claim.*—1st. As an article of manufacture, a typewriter ribbon

composed of several layers or plies of fabric united as specified, the several plies being charged with ink and having their adjacent surfaces in contact, substantially as described. 2nd. As an article of



manufacture, a two-ply type-write ribbon composed of a seamless tube of suitable fabric flattened to bring the adjacent surfaces of the layers or plies into contact, both layers or plies being charged with ink, substantially as described.

**No. 48,293. Wire. (Fil de fer.)**



John White, London, Ontario, Canada, 26th February, 1895; 6 years.

*Claim* 1st. The improved method of making indented wire, consisting of drawing, for the purpose of forming the wire to the required shape, and to form lateral indentations in the outside surface or area thereof in longitudinal rows at one operation, substantially as and for the purpose set forth. 2nd. The improved method of making indented wire, consisting of drawing, for the purpose of forming the wire to the required shape, and lateral indentations therein over the whole outside surface or area at one operation, substantially as and for the purpose set forth. 3rd. The improved method of making indented wire, consisting of drawing, for the purpose of forming the wire to the required shape, and the faces E, B and D, therein at one operation, the face E, being formed laterally and angularly to the body of the wire, and to meet the face B, the face B formed laterally, angularly to and extending within and beyond the body of the wire, and a face D, formed laterally, angularly to, and extending outward from the body of the wire to meet the face B, substantially as and for the purpose set forth. 4th. As a new article of manufacture, wire having the faces E, B and D, formed therein, the face E, being formed laterally and angularly to the body of the wire, and to meet the face B, the face B formed laterally, angularly to, and extending within and beyond the body of the wire and a face D, formed laterally, angularly to, and extending outward from the body of the wire, to meet the face B, substantially as shown and described.

**No. 48,294. Process of Manufacturing Labels.**

(Procédé pour la fabrication des étiquettes.)

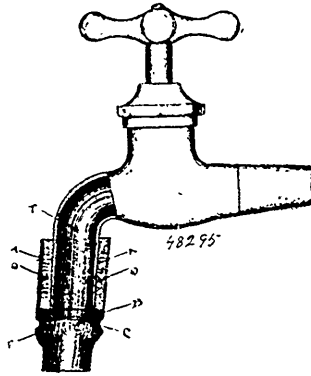


Richard Ray Lansing, Detroit, Michigan, U.S.A., 26th February, 1895; 6 years.

*Claim* 1st. The process of making pyrovolime labels herein described and shown. 2nd. A label for bottles consisting of a sheet of transparent pyrovolime compound, a gilt border secured therein by waterproof sizing or varnish, lettered within the border, and a coat of paint covering the border and letters, substantially as described.

**No. 48,295. Water Tap Attachment.**

(Attache pour robinets d'eau.)

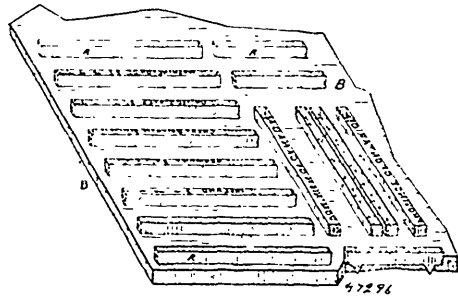


Alexander Schram, Toronto, Ontario, Canada, 26th February, 1895; 6 years.

*Claim*. The combination of the fine screen B, and the counter screen C, resting upon and supported by the shoulder F, constructed in the tube or pipe A A, substantially as and for the purposes hereinbefore set forth.

**No. 48,296. Device for Holding Type for Printing.**

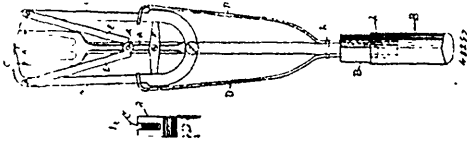
(Appareil pour tenir les caractères d'imprimerie.)



William B. Hamilton, Toronto, Ontario, Canada, 26th February, 1895; 6 years.

*Claim* 1st. In a device or instrument for holding type in position ready for printing, the combination with a flexible base of type-receptacles having respectively side and end walls but not having a bottom formed integrally with the said walls, the bottoms of the said type-receptacles being the surface of the base to which the said bottomless type-receptacles are attached, substantially as and for the purpose specified. 2nd. In a device or instrument for holding type in position ready for printing, the combination with a quadrilateral plane bed or base of independently locatable type-receptacles, the said type-receptacles being attachable to the said bed or base parallel lengthwise with any of its sides or edges, substantially as and for the purpose specified. 3rd. In a device or instrument for holding type in position ready for printing, the combination with a cork-carpet bed or base of independently locatable and bottomless type-receptacles having type-engaging walls and attaching prongs, said prongs being adapted to be driven into the said base, substantially as and for the purpose specified. 4th. In a device or instrument for holding type in position ready for printing, the combination with a base of a type-receptacle composed of a strip of sheet metal having a series of V-shaped prongs projecting from one of its edges, said strip being bent to form a quadrangle of which the projecting V-shaped prongs are adapted to be driven into the said base, substantially as and for the purpose specified. 5th. The herein described means for holding type in position ready for printing comprised of a quadrilateral plane bed or base of flexible grainless material to which is attached independently locatable type-receptacles of which the type-supporting bottoms are parts of the surface of the quadrilateral bed or base, substantially as and for the purpose specified. 6th. The herein described bottomless rectangular type-receptacle adapted to receive and hold together a line of type, said type-receptacle being formed from a strip of sheet metal having a series of V-shaped prongs projecting from one of its sides or edges said prongs being adapted to be driven into a base or bed, substantially as and for the purpose specified. 7th. The herein described bottomless type-receptacle comprised wholly of side and end walls and of attaching prongs adapted to be driven into a bed or base, and capable of securing the side and end walls firmly to said base, substantially as and for the purpose specified.

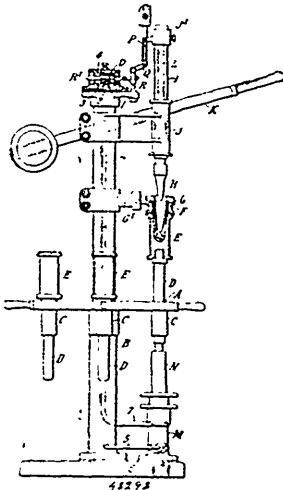
**No. 48,297. Fish Spear. (Harpon.)**



Josiah H. Gardiner, Detroit, Michigan, U.S.A., 26th February, 1895; 6 years.

*Claim.* 1st. The herein described fish spear consisting of the spear head shaft A, with the tines A', to which shaft is pivoted the jaws C, with the prongs C', and the trip bar E, and also having rigidly attached thereto the springs D, and the striking bar F, substantially as specified and for the purpose set forth. 2nd. In the fish spear, the combination of a spear head with tines having pivoted thereto hooked jaws actuated by springs rigidly attached to said spear head and a trip bar hinged in the centre and pivoted at each end to the jaws, substantially as specified. 3rd. In a fish spear, the combination of a spear head, of actuating springs D, and the hooked jaws C, substantially as specified.

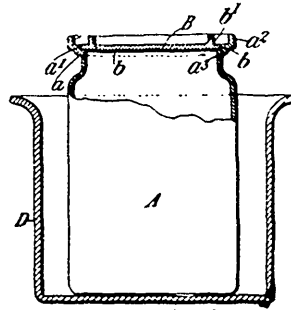
**No. 48,298. Machine for the Manufacture of Glass Bottles, Jars, &c. (Machine pour la fabrication de bouteilles en verre, jarres, etc.)**



Charles Enmet, Sheffield, England, 26th February, 1895; 6 years.

*Claim.* 1st. In bottle and jar making machinery, the combination with a rotating table, of one or more parason moulds, each of which consists of three parts namely, a lower or body portion, a divided and hinged shoulder and mouth portion, and a fixed lip portion, the two first named portions being carried on the rotating table and the last named portion being carried on a cantilever arm, substantially as and for the purposes specified. 2nd. In a bottle and jar making machinery, the combination with a rotary table, of one or more parason moulds, the lower parts of said moulds being movable vertically, a manually reciprocated plunger H and a balanced slide valve in operative connection with the said plunger, which slide valve opens and closes the compressed air supply pipe, substantially as and for the purposes specified. 3rd. In bottle and jar making machinery, the combination with a rotary table, of one or more parason moulds, each consisting of three parts, a manually reciprocated plunger H, and a balanced slide valve operatively connected to the said plunger and a hydraulic ram N placed beneath the parason mould, the ram being controlled by the said slide valve, substantially as and for the purposes specified. 4th. In bottle and jar making machinery, the combination with blowing moulds made in three parts the lowest one of which is capable of upward and downward movement, of a mould cover k carried by a cantilever and provided with means whereby it can be moved up and down when required, substantially as and for the purposes specified. 5th. In bottle and jar making machinery, the combination with the blowing moulds, of a mould cover k, a rod n on which said mould cover is mounted, a cantilever m in the end of which the rod n can move vertically, a sliding block p connected to said rod, and an eccentric shaft q having an operating handle t, substantially as and for the purposes specified.

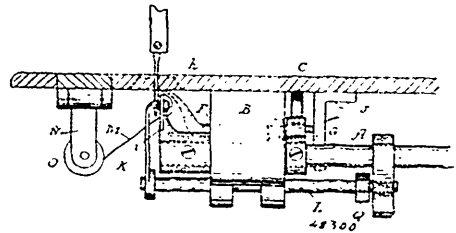
**No. 48,299. Bottles, Jars and Method of Sealing the Same. (Méthode de sceller les bouteilles et les jarres.)**



Charles Enmet, Sheffield, England, 26th February, 1895; 6 years.

*Claim.* 1st. The combination of a jar, a cover for the same, an india rubber ring or band forming the junction of the cover and the mouth of the jar, and a sealing composition placed outside the said ring, substantially as and for the purpose specified. 2nd. The combination of a jar, a cover for the same, an india rubber ring or band round the mouth of the jar forming the junction of the cover and the mouth of the jar, and a sealing composition placed outside said ring, substantially as and for the purpose specified. 3rd. The combination of a jar, a cover for the same, an india rubber ring or band around the junction of the cover and the mouth of the jar, an outer envelope surrounding the cover and the mouth of the jar, the wall of said envelope forming with the mouth of the jar, a recess in which is placed the sealing composition, substantially as and for the purpose specified. 4th. The combination of a jar, a cover for the same, an india ring or band placed around the junction of the cover and the jar, a second similar ring between the cover and the mouth of the jar, and a sealing composition placed outside the first mentioned ring, substantially as and for the purpose specified. 5th. The combination of a jar having an annular groove or recess round the mouth thereof, a cover for said jar having a rim loosely fitting the annular groove therein, an india rubber ring or band interposed between the cover and the bottom of the said groove, and a sealing composition placed outside said ring in the space between the cover and the outer edge of the aforesaid groove on the mouth of the jar, substantially as and for the purpose specified. 6th. The combination of a jar, a cover for the same portion of which is received inside the mouth of the jar, an india rubber or other flexible band placed round the outside of the same, and a sealing composition placed between a downwardly extending portion of the cover and the outside of the mouth of the jar, substantially as described. 7th. The method of sealing jars which consists in first heating the jar and its contents, then temporarily closing the jar by means of a flexible elastic ring, and finally sealing the jar by means of a sealing composition, substantially as and for the purpose specified.

**No. 48,300. Sewing Machine. (Machine à coudre.)**



James Newbigging, Ewan Morrison and Mrs. Sophia Hall, all of Victoria, British Columbia, Canada, 26th February, 1895; 6 years.

*Claim.* 1st. In a sewing machine, a lock stitch forming device to act as a substitute for a shuttle, and consisting essentially of a swinging thread hook fixed on a main rocking shaft to take the thread from the needle, and under thread loop i attached to the heel of said hook to carry the under thread, a pick off and an outside hook to take the thread from the thread hook and draw it across the under thread. 2nd. In a sewing machine, the rock shaft A, having fixed on it the swinging thread hook E, operating the pick off h, on the shaft F, by the cams G, and an outside hook k, on the shaft L, by the crank Q, and hollow cam S, all substantially as shown and described. 3rd. In a sewing machine, a hinged plate in the table having attached to it the spool which carries the under thread, substantially as shown and for the purpose set forth.



*CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO THE FOLLOWING PATENTS.*

3843. JOHN WALLACE PAGE AND CHARLES MOREHOUSE LAMB, 2nd five years of Patent No. 33,673, from the 11th day of February, 1895. Improvements in Wire Fence Machines, 1st February, 1895.
3844. THE BOSTON CASH INDICATOR AND RECORDER COMPANY, 2nd five years of Patent No. 33,592, from the 4th day of February, 1895. Improvements in Cash Register Indicators, 4th February, 1895.
3845. GEORGE DICKSON AND DAVID ALANSON JONES, 2nd five years of Patent No. 33,558, from the 4th day of February, 1895. Apparatus for Extinguishing Fire, 4th February, 1895.
3846. GEORGE DICKSON AND DAVID ALANSON JONES, 2nd five years of Patent No. 33,578, from the 4th day of February, 1895. Improvements in Drinking Fountains or Water Tanks, 4th February, 1895.
3847. GEORGE DICKSON AND DAVID ALANSON JONES, 2nd five years of Patent No. 33,579, from the 4th day of February, 1895. Method whereby flowing water in a pipe or hose, or in the fixed pipes of any ship or building may be rendered more effective for Extinguishing Fire, 4th February, 1895.
3848. LIZZIE PICKARD, 2nd five years of Patent No. 33,599, from the 6th day of February, 1895. Improved Detachable Strainer, 4th February, 1895.
3849. JACOB NEFF BARR, 2nd five years of Patent No. 33,613, from the 7th day of February, 1895. Improvement on Chills, 4th February, 1895.
3850. PIERRE LUCIEN BRAULT, 2ème 5 ans du No. 33,639, du 8ème jour de février, 1895. Préparation médicale nouvelle et utile pour favoriser et activer la disposition et prévenir et guérir la dyspepsie, 4ème jour de février, 1895.
3851. GOTTLIEB BETTSCHEN, 3rd five years of Patent No. 21,343, from the 13th day of March, 1895. Improvements in Cultivators, 6th February, 1895.
3852. THE NOXON BROS MANUFACTURING CO., (Ld.) 2nd five years of Patent No. 33,957, from the 18th day of March, 1895. Improvements in Grain Binders, 6th February, 1895.
3853. THOMAS HENRY NOXON, 2nd five years of Patent No. 33,983, from the 26th day of March, 1895. Cultivator Teeth, 6th February, 1895.
3854. THE NOXON BROS MANUFACTURING CO., (Ld.) 2nd five years of Patent No. 34,060, from the 5th day of April, 1895. Improvement in Grain Binders, 6th February, 1895.
3855. JAMES LECKIE MORRISON, 2nd five years of Patent No. 33,716, from the 14th day of February, 1895. Improvements in Machines for Numbering Paper, 6th February, 1895.
3856. JAMES LECKIE MORRISON, 2nd five years of Patent No. 34,024, from the 1st day of April, 1895. Improvements in Printing Machines, 6th February, 1895.
3857. ANTOINE RACICOT, 2nd five years of Patent No. 33,721, from the 15th day of February, 1895. Medicinal called Magic Oil or Anti-Venereal Oil, 6th February, 1895.
3858. ANTOINE RACICOT, 2nd five years of Patent No. 33,736, from the 17th day of February, 1895. Medicinal Compound, called Royal Drops, 6th February, 1895.
3859. ANTOINE RACICOT, 2nd five years of Patent No. 33,738, from the 17th day of February, 1895. Medicinal called Magic Pills, 6th February, 1895.
3860. ANTOINE RACICOT, 2nd five years of Patent No. 33,739, from the 27th day of February, 1895. Medicine, called Pectorial Syrup, 6th February, 1895.
3861. ANTOINE RACICOT, 2nd five years of Patent No. 33,740, from the 17th day of February, 1895. Medicine, called Tonic Powder, 6th February, 1895.
3862. HERMAN BARKER, 2nd five years of Patent No. 34,169, from the 23rd day of April, 1895. Improvements in Methods of Obtaining Gluten and Starch, 11th February, 1895.
3863. WILLIAM B. PURVIS, 3rd five years of Patent No. 21,084, from the 12th day of February, 1895. Improvements in Paper Bag Machines, 12th February, 1895.
3864. DAN RYLANDS, 2nd five years of No. 33,904, from the 14th day of March, 1895. Improvements in Machines for Forming Bottles by the Pressing and Blowing Process, 12th February, 1895.
3865. ELMER NATHAN BACHELDER and FRED EMMONS LOVEJOY, 2nd five years of Patent No. 34,261, from the 6th day of May, 1895. Improvements in Measuring Tanks, 18th February, 1895.
3866. THOMAS McAVITY, JOHNA. McAVITY and GEORGE McAVITY, 2nd five years of Patent No. 33,819, from the 28th day of February, 1895. Improvements in Boiler Feeders, 21st February, 1895.
3867. BENJAMIN FLETCHER, 2nd five years of No. 33,809, from the 27th day of February, 1895. Improvements in Dust Pans, 21st February, 1895.
3868. BENJAMIN GRIGGS HARRIS, 2nd five years of Patent No. 33,786, from the 25th day of February, 1895. Improvements in Car Brakes, 21st February, 1895.
3869. HATTIE CLARINDA NEUERT, 2nd five years of Patent No. 33,807, from the 27th day of February, 1895. Improvements in Washing Machines, 22nd February, 1895.
3870. JAMES ALLEN BUCHANAN and ROBERT NEELY, 3rd five years of Patent No. 21,164, from the 25th day of February, 1895. Improvements in Hay Forks, 25th February, 1895.
3871. GEORGE HAY, 2nd five years of Patent No. 33,844, from the 1st day of March, 1895. Improvements in Tailor's Heating Stoves, 25th February, 1895.
3872. WILLIAM HENRY EVANS WHITING, 2nd five years of Patent No. 33,783, from the 25th day of February, 1895. Improvements in Stove Service Apparatus, 25th February, 1895.
3873. PETER BRADFORD BRAZEL, 3rd five years of Patent No. 21,206, from the 4th day of March, 1895. Improvements in Snow Plows, 28th February, 1895.
3874. SAMUEL VISSOT 3e 5 ans du No. 21,208 du 4e pour de Mars 1895 nouvelles et utiles améliorations aux machines à moulu le grain 28e Février 1895.





## TRADE - MARKS

Registered during the month of February, 1895, at the Department of Agriculture—  
Copyright and Trade-Mark Branch.

5179. THOMAS GEORGE MASON, Bowmanville, Ont. Fresh Eggs, 4th February, 1895.
5180. WALTER S. HILL, Montreal, Que. A Cleaning and Scouring Material (Mona-Stone Soap). 4th February, 1895.
5181. CHARLES B. BERNARD, Yokohama, Japan. Tea, 4th February, 1895.
5182. SAMUEL SHOBAL RYCKMAN, Hamilton, Ont. Baking Powder, 7th February, 1895.
5183. JOHN M. GIBBS, Park Hill, Ont. AS AN EXECUTOR OF THE ESTATE OF THE LATE JOHN HARRISON, of the same place. Flour, 9th February, 1895.
5184. THE GEO. E. TUCKETT & SON CO., LD., Hamilton, Ont. Tobacco, Cigars and Cigarettes, 11th February, 1895.
5185. THOMAS JONES & IRA FRENCH, Woodstock, Ont., trading as JONES & FRENCH. Cigars, 11th February, 1895.
5186. HENRY WADE, Kingston, Ont. A Medicinal Compound for the cure of Cold in the Head, Headache and Catarrh, 13th February, 1895.
5187. THE E. B. EDDY CO., LD., Hull, Que. Tubs and Kegs, 13th February, 1895.
5188. ECLIPSE BICYCLE CO., Beaver Falls, Pennsylvania, U.S.A. Bicycles, 15th February, 1895.
5189. CHARLES B. BERNARD, Yokohama, Japan. Tea, 19th February, 1895.
5190. EASTWOOD WIRE MANUFACTURING CO., Belleville, New Jersey, U.S.A. Valves and Pipe Fittings, 19th February, 1895.
5191. DAVID J. BARNETT, Toronto, Ont. Bicycles, 19th February, 1895.
5192. OLIVER C. EDWARDS, Ottawa, Ont. A Remedy for the cure of Inebriety, 22nd February, 1895.



# COPYRIGHTS

Entered during the month of February, 1895, at the Department of Agriculture—  
Copyright and Trade-Mark Branch.

7752. CIRCULAR OF THE YORK COUNTY LOAN AND SAVINGS CO. FOR WEEKLY INVESTMENT STOCK. (Form.) Joseph Phillips, Toronto, Ontario, 1st February, 1895.
7753. McCORMICK'S CHAMPION BUFF COCHINS. (Glendale Poultry Farm). (Lithograph.) Geo. G. McCormick, London, Ont., 2nd February, 1895.
7754. PARKER'S MODERN STUDIES FOR THE BANJO OR BANDOLA. John H. Parker, Montreal, Que., 4th February, 1895.
7755. MASQUERADE IN THE RIDEAU RINK. OTTAWA CARNIVAL, 1895. (Lithograph.) J. A. Phillips, Ottawa, Ont., 4th February, 1895.
7756. STORMING OF THE ICE CASTLE. OTTAWA CARNIVAL, 1895. (Lithograph.) J. A. Phillips, Ottawa, Ont., 4th February, 1895.
7757. JUST AS I AM. (Sacred Song.) Words by Charlotte Elliott, Music by R. S. Ambrose. A. & S. Nordheimer, Toronto, Ont., 4th February, 1895.
7758. GOLDEN TINTS WALTZ. For the Piano. By F. J. Hatton. Whaley, Royce & Co., Toronto, Ont., 5th February, 1895.
7759. THE HIGH SCHOOL DRAWING COURSE. No. 3. Projection, Orthographic and Perspective. By A. C. Casselman. The Canada Publishing Co. (L'd.), Toronto, Ont., 5th February, 1895.
7760. LITTLE ONE, SLEEP. (Lullaby.) Words by Frederick B. Hodgins. Music by Genevieve E. Canniff. The Anglo-Canadian Music Publishers' Association (L'd.), London, England, 5th February, 1895.
7761. REVUE CANADIENNE, FEVRIER 1895. C. O. Beauchemin et Fils, Montreal, Que., 6 fevrier 1895.
7762. BUST OF SIR JOHN A. MACDONALD. (With Pedestal.) Henry Beaumont, Montreal, Que., 7th February, 1895.
7763. G. DWYER, K. W. By Paul Tsyre. (Book.) John Lovell & Son, Montreal, Que., 8th February, 1895.
7764. THE MONTREAL WEEKLY RAILWAY AND STEAMBOAT GUIDE, February 9th, 1895. Alfred S. Wigmore, Toronto, Ont., 8th February, 1895.
7765. BENEDICT'S COMBINED INTEREST INDICATOR AND BOOK OF DAYS. Charles L. Benedict, Peterborough, Ont., 8th February, 1895.
7766. HAND BOOK ON PATENT AND TRADE MARK LAW OF CANADA AND THE UNITED STATES. Charles H. Riches, Toronto, Ont., 8th February, 1895.
7767. MIGNONETTE. (Song.) Words by W. A. Keizer, Music by William Bohrer. The Anglo-Canadian Music Publishers' Association (L'd.), London, England, 8th February, 1895.
7768. SHE'S MY LITTLE LAUNDRY GIRL. Song (from the Comedy: "The New Age.") By B. Hall. Music by Arthur M. Cohen. Whaley, Royce & Co., Toronto, Ont., 12th February, 1895.
7769. EXTENDED NOTES OF AN ADDRESS ON THE GEOGRAPHY OF MANITOBA. By Hugh McKellar, Winnipeg, Man., 12th February, 1895.
7770. LA REVUE NATIONALE. Vol. I, No. 1, février 1895. Joseph Damase Chartrand, Montréal, Qué., 14 février 1895.
7771. THE OFFICE AND WORK OF ELDERS. By Principal D. H. MacVicar, D.D., LL.D. W. Drysdale & Co., Montreal, Que., 16th February, 1895.
7772. THE SHIP I LOVE. (Song.) Words and Music by Felix McGlemon. Whaley, Royce & Co., Toronto, Ont., 16th February, 1895.
7773. A COVER FOR ARCHITECTURAL SPECIFICATIONS. (Advertising Cover.) John Z. & David D. Long St. Thomas, Ont., 16th February, 1895.

7774. LODGE BOOK-KEEPING. Suggestions and Instructions for Recording Secretaries, Permanent Secretaries and Treasurers. By R. H. Shanks, Winnipeg, Man., 16th February, 1895.
7775. A REGISTRY BLANK FOR KEEPING CHECK OF ADVERTISEMENTS IN WEEKLY NEWSPAPERS. (Form.) W. F. Carrier, Toronto, Ont., 18th February, 1895.
7776. A REGISTRY BLANK FOR KEEPING CHECK OF ADVERTISEMENTS IN DAILY NEWSPAPERS. (Form.) W. F. Carrier, Toronto, Ont., 18th February, 1895.
7777. REPORTS OF CASES DECIDED IN THE COURT OF APPEAL FOR ONTARIO DURING THE YEAR 1894. Volume XXI. Reported under the Authority of the Law Society of Upper Canada. The Law Society of Upper Canada, Toronto, Ont., 19th February, 1895.
7778. APPLICATION AND CONTRACT WITH THE YORK COUNTY LOAN AND SAVINGS COMPANY FOR WEEKLY INVESTMENT STOCK. (Form.) Joseph Phillips, Toronto, Ont., 20th February, 1895.
7779. CERTIFICATE OF THE YORK COUNTY LOAN AND SAVINGS COMPANY'S WEEKLY INVESTMENT STOCK. (Form.) Joseph Phillips, Toronto, Ont., 20th February, 1895.
7780. MADRIGAL. (Song.) French Words by Georges Van Ormelingen, English version by Clifton Bingham. Music by C. Chamnade. The Anglo-Canadian Music Publishers' Association (Ld.), London, England, 20th February, 1895.
7781. YEAR BOOK AND CLERGY LIST OF THE CHURCH OF ENGLAND IN THE DOMINION OF CANADA, 1895. Joseph P. Clougher, Toronto, Ont., 21st February, 1895.
7782. STREET GUIDE OF THE CITY OF TORONTO, 1895. The Might Directory Co., (Ld.), Toronto, Ont., 22nd February, 1895.
7783. STOVELS POCKET DIRECTORY, WINNIPEG, FEBRUARY, 1895. The Stovel Co., Winnipeg, Man., 23rd February, 1895.
7784. OLD TIME TRAGEDIES: CELEBRATED CASES BEFORE THE COURTS IN ST. JOHN, N.B. William Kilby Reynolds, St. John, N.B., 25th February, 1895.
7785. BENEVOLENT SOCIETY ADVERTISING CARD AN INVITATION FROM THE CANADIAN ORDER OF FORESTERS. George Hill Wheeler, Toronto, Ont., 28th February, 1895.
7786. ORAL LESSONS IN FRENCH FOR JUNIOR CLASSES. Teacher's Manual, Part II. By H. H. Curtis, Montreal, Que., 28th February, 1895.
7787. ORAL LESSONS IN FRENCH FOR JUNIOR CLASSES. Part III. By H. H. Curtis, Montreal, Que., 28th February, 1895.
7788. THE DOMINION SHORT HORN HERD BOOK. Volume X. The Dominion Short Horn Breeders' Association, Toronto, Ont., 28th February, 1895.
7789. L'AVENIR, TOWNSHIPS DE DURHAM ET WICKHAM. Temporary Copyright book which is now being preliminarily published in separate Articles in L'Echo des Bois-Francs. A weekly newspaper of Arthabaskaville, Que. Joseph Charles St. Amant, L'Avenir, Que., 28th February, 1895.