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The Canadian Patent Office RECORD

Vol. XXV.—No. 11. NOVEMBER 30th, 1897.

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INVENTIONS PATENTED.

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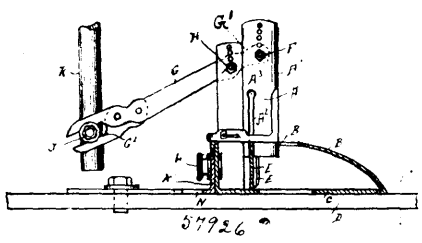
No. 57,926. Sewing Machine. (*Machine à coudre.*)



Francis M. Batchelor, Portland, Oregon, U.S.A., 2nd November, 1897; 6 years. (Filed 28th July, 1897.)

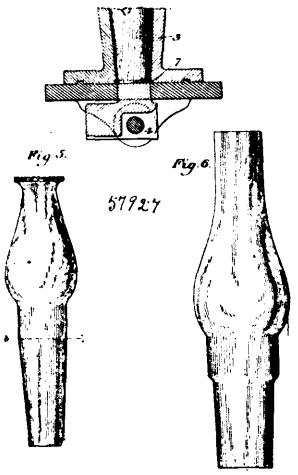
Claim.—1st. In a ripping device, a slotted rest extending horizontally on each side of a vertically reciprocating knife, said rest being adapted to support the material and the operator's hands, and having the slots in the rest extending from front to rear, to allow the knife to reciprocate therethrough without exposing the lower end above the surface of the rest. 2nd. In a ripping device provided with a reciprocating knife and stationary guards engaging said knife, substantially as described. 3rd. In a ripping device provided with a reciprocating knife and stationary guards engaging said knife, the guards being adjustable with relation to the edge of the knife. 4th. In a ripping device provided with a reciprocating knife having a vertical series of holes in its upper part, whereby it may be differentially adjusted, substantially as described. 5th. A ripping device provided with a post fixed to a base plate and having a vertical series of independent holes in its upper part, and an oscillating lever having one end connected with the knife, and the other with a vertically reciprocating needle-bar, the lever fulcrum pin vertically adjustable in the holes in the post, as described. 6th. A sewing machine ripping attachment provided with a reciprocating knife and an operating lever therefor one end of the lever being forked or slotted, and having one of its forked members or jaws adjustable relatively to the other by means of slots and set screws, substantially as described. 7th. A knife having a straight cutting edge, and a slot spaced therefrom and parallel to the cutting edge, the slot extending from the bottom edge of the knife and terminating at its upper end in a widened aperture, substantially as described. 8th. A knife having a straight cutting edge and a slot located immediately in the rear of said edge, the slot extending from the bottom edge of the knife upwardly and parallel with the cutting edge, substantially as described. 9th. A ripping attachment for sewing machines comprising a reciprocating knife provided with a slot parallel to the direction of its reciprocating motion, a stationary guide adapted to be secured to the sewing machine and extending transversely through the knife at the slot thereof, and means for imparting a reciprocating motion to the knife, substantially as described. 10th. A ripping attachment for sewing machines comprising a reciprocating knife, provided with a slot parallel to the direction of its reciprocating motion, a stationary guide adapted to be secured to the sewing machine and extending transversely through the knife at the slot thereof and provided with flanges at each side or face, and means for imparting a reciprocating motion to the knife, substantially as described. 11th. In a sewing machine ripping attachment, consisting in the combination of the reciprocating needle-bar, the vertically reciprocating ripping-knife, an actuating lever engaging the needle-bar and the knife and a stationary support for the lever, said support being adjustable longitudinally and transversely on the frame of the machine, as and for the purpose set forth. 12th. A ripping attachment for sewing machines consisting in the combination, with a reciprocating knife fitted to slide in a table secured to the table of the sewing machine, of a lever pivotally connected with the said knife and adapted to receive an oscillating motion from a moving part of the sewing machine, and a vertically adjustable post carrying the pivot for the said lever, substantially as shown and described. 13th. In a sewing machine ripping attachment, consisting in the combination of the reciprocating needle-bar, the vertically reciprocating ripping-knife, an actuating lever engaging the needle-bar and the knife, a stationary support for the lever, the support being adjustable upon the frame of the machine in the direction of the lever's length and also in a direction parallel to the lever's pivot, substantially as described. 14th. In a sewing machine ripping attachment, consisting in the combination of the reciprocating needle-bar, the vertically reciprocating ripping-knife, an actuating lever engaging the needle-bar and the knife, a stationary support for the lever, a table carrying said support and adjustable upon the frame of the machine in a direction parallel to the lever's pivot, and a plate carrying said table and adjustable therewith in the direction of the lever's length, substantially as described. 15th. In a ripping attachment for sewing machines, a vertically reciprocating knife having a series of vertically disposed independent holes in the upper end, a fulcrum post with similar holes, a lever with a fulcrum pin adjustable to either of the holes in the post and having a pin connection with either of the holes in the knife, a slotted support for the material and the hands of the operator, through which the knife reciprocates, said support extending horizontally upon each side of the knife, and vertical guards having their front edges converging upon each side of the knife, said guards being adjustable forward and back with relation to the edge of the knife.

No. 57,927. Glassware. (*Verrerie.*)

William Butler, Redkey, Indiana, U.S.A., 2nd November, 1897; 6 years. (Filed 6th September, 1897.)

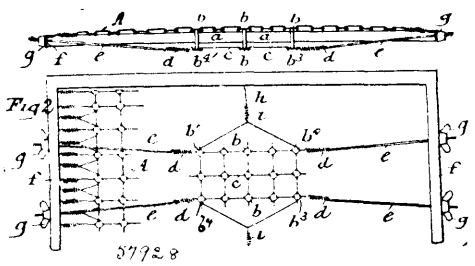
Claim.—1st. A glass mould for forming compound blanks, consisting of two longitudinally divided halves hinged together at one end thereof and swinging substantially in a vertical plane, each half being divided transversely and the two parts removably secured together so as to swing as a unit. 2nd. A glass mould for forming compound blanks, consisting of two longitudinally divided halves hinged together at one end and swinging in a substantially vertical plane, each half being divided transversely and the two parts removably secured together, said mould having a paste lining. 3rd. A mould for blowing hollow glass articles having bottoms, said mould having at the bottom end of the matrix cavity proper a small peripheral groove opening into the matrix cavity proper and arranged to square up the bottom end of the article. 4th. A mould

for blowing hollow glass articles, having at the end portion a peripheral groove opening into the mould cavity for squaring the end of



the article blown therein, and having a movable bottom plate or block. 5th. A mould for forming hollow glass articles having bottoms, said mould having a movable bottom, and means for moving said bottom upwardly during the blowing, to square up the bottom of the article. 6th. The method of forming hollow glass articles having bottoms, consisting in blowing the same and moving the bottom of the article upward during the blowing, to square up the same. 7th. The method of forming hollow glass articles having bottoms, consisting in blowing the same, rotating the article to shape it exteriorly, and moving the bottom of the article upwardly during the blowing, to square up the same.

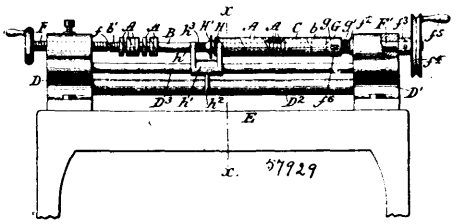
No. 57,928. Mattress of Steel Wire. (*Matelas en fil d'acier.*)



Theodor Wilhelm Svane, Faestningen, Christiania, Norway, 2nd November, 1897; 6 years. (Filed 20th October, 1897.)

Claim.—1st. A support for spring mattresses, stretchers or the like, consisting of a number of vertical bars or supports, the upper ends of which are connected with the mattress, and the lower ends of which are connected together and are provided with suitable means which tend to stretch or pull them outwards, substantially as and for the purpose hereinbefore described. 2nd. A support for spring mattresses, stretchers or the like, of the kind described in claim 1, wherein the upper ends of the bars or supports are provided with plates attached to the mattress, and the lower ends to plates connected together by means of wire and to bars by means of spiral springs, the said bars being advantageously arranged longitudinally and provided with adjusting nuts, substantially as and for the purpose hereinbefore described. 3rd. In supports for spring mattresses, stretchers and the like, of the kind described in claims 1 and 2, forming the bars or supports angular in shape so that they carry two upper plates and one lower plate, substantially as and for the purpose hereinbefore described. 4th. In supports for spring mattresses, stretchers or the like, of the kind described in claims 1 and 2, replacing the bars by straps and the wire by chains, substantially as and for the purpose hereinbefore described. 5th. The manufacture and use of the improved spring mattress hereinbefore described and illustrated in figures 1 to 11 of the accompanying drawing. 6th. The manufacture and use of the improved stretcher hereinbefore described and illustrated in figures 12, 13, 14 and 15 of the accompanying drawing.

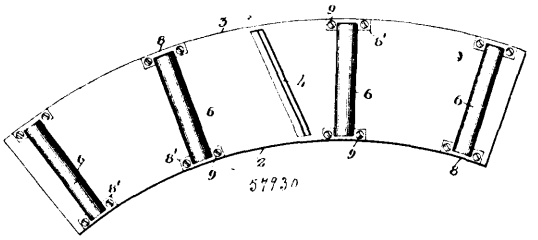
No. 57,929. Index Ring. (*Anneau ou roue pour cyclomètres.*)



Curtis Hussey Veeder, Hartford, Connecticut, U.S.A., 2nd November, 1897; 6 years. (Filed 22nd May, 1897.)

Claim.—In the art of making index rings, the method which consists in assembling two or more separate rings so that their edges shall abut, coating said rings peripherally with a suitable cement or other adhesive substance, wrapping the peripheries of said rings so coated with a strip of flexible material so as to form a cylinder of said rings, and then severing said cylinder into the separate rings of which it is composed.

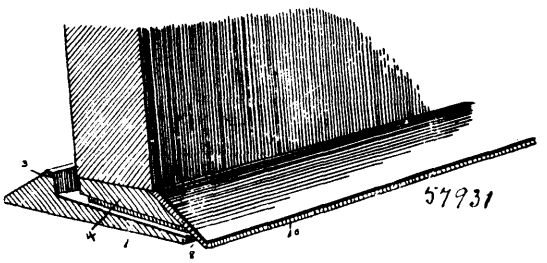
No. 57,930. Cooper's Plane. (*Rabot de tonnelier.*)



Isidore J. Cocayne, St. Louis, Missouri, U.S.A., 2nd November, 1897; 6 years. (Filed 9th August, 1897.)

Claim.—A cooper's plane, having a suitable body portion or stock, a plane sole therefor having inner and outer lateral bounding walls forming a part of the stock, said walls being described along concentric arcs, a series of rollers disposed along the sole at right angles to the curved surfaces of the lateral walls, bearing plates for the spindles of the rollers embedded in the lateral walls flush with the outer surfaces thereof, and having inwardly deflected portions or arms embedded flush with the surface of the sole, substantially as set forth.

No. 57,931. Door Saddle. (*Selle de porte.*)

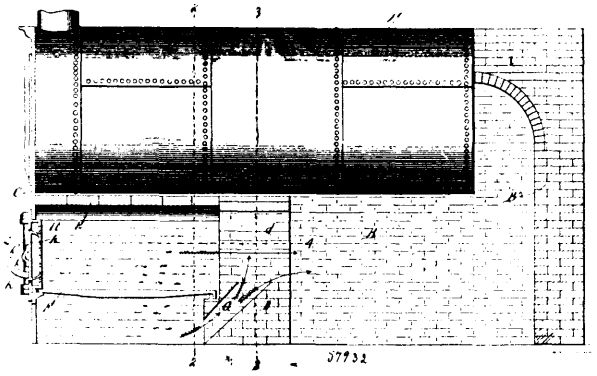


Thomas Vogal, Iowa Park, Texas, U.S.A., 2nd November, 1897; 6 years. (Filed 18th October, 1897.)

Claim.—1st. A door-saddle consisting of two parts, the lower part being recessed to removably receive the other, and having opposite end heads with front bevelled surfaces extending slightly beyond the front termination of the recessed portion, a removable top having a series of transversely arranged grooves on the underside thereof, and a projecting flange or eave applied to the bevelled surfaces of the heads and covering the front portions of said grooves, the lower termination of said flange or eave being in a plane parallel with the bottom of said lower part, substantially as described. 2nd. In a door-saddle, the combination of a saddle proper having a recess in the upper side thereof with an inclined surface and heads at the opposite ends, a removable top mounted in the said recess and heads and having heads extending transversely across the underside of the same, a flange or eave projecting over the front portions of the said grooves, and braces interposed between the said grooves at the front portion of the under part of there movable top, substantially as and for the purposes specified. 3rd. The combination with a door-saddle having a rear vertical wall to form one portion of a longitudinal groove, of a removable top having transversely arranged grooves on the underside thereof communicating with the said longitudinal groove, a flange or eave projecting over the front por-

tions of the said grooves and braces attached to the said flange or eave and removable top at the underside thereof and interposod between the said grooves, substantially as and for the purposes described. 4th. In a door-saddle, the combination of the saddle proper having an inner longitudinally disposed groove, a removable top provided with transversely arranged grooves in the underside thereof, an eave or flange projecting dowardly over the front portions of said transversely-arranged groo es, and braces interposed at regular intervals between the said grooves and secured to the under portion of the flange to obviate the formation of a longitudinal passage, substantially as and for the purposes described.

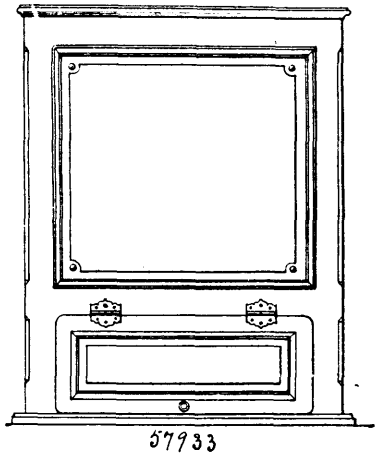
No. 57,932. Steam Boiler Furnace.
(*Fournaise de chaudières à vapeur.*)



James McMillan, Chicago, Illinois, U.S.A., 2nd November, 1897; 6 years. (Filed 9th October, 1897.)

Claim.—1st. In a steam boiler furnace, the combination with a fire-box covered by an arch, of a bridge wall at the back of the fire-box, vertical piers extending from the top of the bridge wall to the arch and dividing the space therebetween into a plurality of flues, the bridge wall having air ducts opening into such flues. 2nd. The combination, in a steam boiler furnace having a fire-box, an ash-pit below the fire-box, and an arch covering the fire-box, of a bridge wall back of the fire-box and leaving a flue space below the arch, and having a plurality of air ducts leading from the ash-pit through the top surface of the bridge wall, and vertical piers located between such ducts and extending from the top of the bridge wall to the arch, whereby the flue space is divided into a plurality of combustion flues. 3rd. The combination in a steam boiler furnace, with a fire-box covered by an arch, a bridge wall having air ducts opening through its top, and piers extending from the bridge wall to the arch and located between the air ducts, of a furnace door having a tilting panel, and means for holding such panel in the position to which it is adjusted.

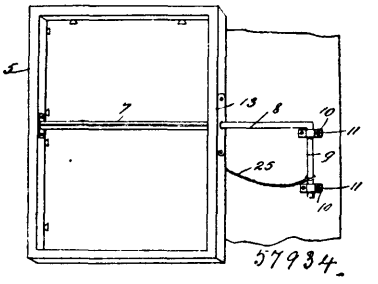
No. 57,933. Case for Printed Matter, Manuscripts, etc. (*Casse pour journaux, manuscrits, etc.*)



Servatius von Gerlach, 9 Derfflinger-Strasse, Berlin, Germany, 2nd November, 1897; 6 years. (Filed 13th March, 1897.)

Claim.—1st. A case or chest for temporarily containing or storing newspapers, periodicals, etc., having an opening or aperture A at its upper side through which the recent periodicals are inserted and having a suitable closing lid or cover, aud having also a second aperture B located in the front of side wall of the case at or near its lower side through which the old newspapers, periodicals, etc., can be removed and having a suitable cover or lid, constructed and arranged substantially as hereinbefore described. 2nd. A case or chest for temporarily containing or storing newspapers, periodicals, etc., having an aperture or opening A at its upper side through which the recent periodicals are inserted and having a suitable closing lid or cover, and having also a second aperture B located in the front or side wall of the case at or near its lower side through which the old newspapers, periodicals, etc., can be removed and having a suitable closing lid or cover, and having also a second aperture B located in the front or side wall of the case at or near its lower side through which the old newspapers, periodicals, etc., can be removed and having a suitable closing cover or lid, in which the two side walls *h* and *k* are movably fastened to the front and rear walls *g. i*, constructed and arranged substantially as hereinbefore described. 3rd. A case or chest for temporarily containing and storing newspapers, periodicals, etc., having an aperture or opening A at its upper side through which the recent periodicals are inserted and having a suitable enclosing lid or cover, and having also a second aperture B located in the front or side wall of the case at or near its lower side through which the old newspapers, periodicals, etc., can be removed and having a suitable closing cover or lid, in which the side walls are fixed either to the front or rear wall and the remaining fourth wall is made capable of being moved, constructed and arranged substantially as hereinbefore described. 4th. A chest or case for temporarily containing or storing newspapers, periodicals, etc., having an aperture or opening A at its upper side through which the recent periodicals are inserted and having a suitable lid or cover and also a second aperture B located in the front or side wall of the case at or near its lower side through which the old newspapers, periodicals, etc., can be removed and having a suitable closing cover or lid, in which one of the four walls of the case is made removable or is capable of turning on hinges for the purpose of enabling one or more magazines, papers, etc., to be taken out of the middle of the bulk, constructed and arranged substantially as hereinbefore described. 5th. A case or chest for temporarily containing or storing newspapers, periodicals, etc., having an aperture or opening A at its upper side through which the recent periodicals are inserted and having a suitable closing lid or cover, and having also a second aperture B located in the front or side wall of the case at or near its lower side through which the old newspapers, periodicals, etc., can be removed and having a suitable closing cover or lid, in which the bottom is made with a step-down part *m* for the purpose of facilitating the removal of the old periodicals, constructed and arranged substantially as hereinbefore described.

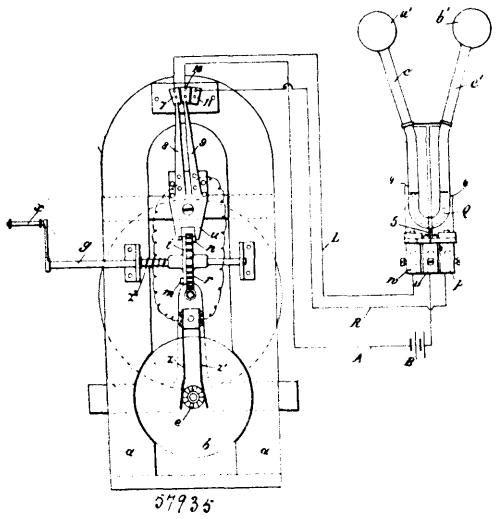
No. 57,934. Mirror. (*Miroir.*)



Henry Bader and Harry Dudley Cartwright, both of San Francisco, California, U.S.A., 2nd November, 1897; 6 years. (Filed 23rd September, 1897.)

Claim.—1st. A mirror, which is provided transversely of the back thereof with a friction tube, which is secured between the sides of the frame, and the ends of which register with openings formed in said sides, and a rod, which is passed through the sides of the frame and into said tube, and which is adapted to turn therein, and one end of which projects and is provided with an arm at right angles thereto, which is adapted to be passed through the keepers or brackets secured to a support, substantially as shown and described. 2nd. A mirror, which is provided transversely of the back thereof with a friction tube, which is secured between the sides of the frame, and the ends of which register with openings formed in said sides, and a rod which is passed through the sides of the frame and into said tube, and which is adapted to turn therein, and one end of which projects and is provided with an arm at right angles thereto, which is adapted to be passed through keepers or brackets secured to a support, and the sides of the mirror frame being provided with spring-operated clamps which bear upon said rod, substantially as shown and described. 3rd. A mirror, which is provided transversely of the back thereof with a friction tube, which is secured between the sides of the frame, and the ends of which register with openings formed in said sides, and a rod which is passed through the sides of the frame and into said tube, and which is adapted to turn therein, and one end of which projects and is provided with an arm at right angles thereto, which is adapted to be passed through keepers or brackets secured to a support, and the sides of the mirror frame being provided with spring-operated clamps which bear upon said rod, the spring by which the clamps are operated being mounted in chambers longitudinally of the sides of the frame above and below said rod, substantially as shown and described.

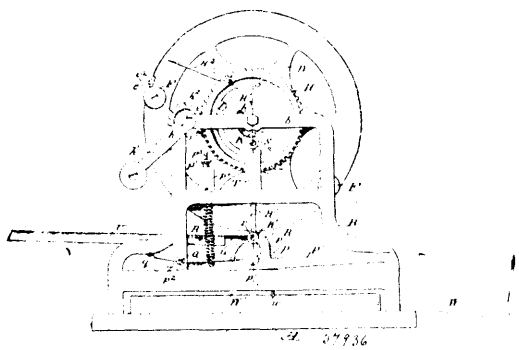
No. 57,935. Apparatus for Raising and Lowering Blinds. (*Appareil pour lever et baisser les stores.*



Hella Actien-Gesellschaft für Automatische Sonnenschutz-Vorrichtungen, Kurfürsten-Strasse, Berlin, assignee of Eugen Roth, 38 Loh-Strasse, Osnabrück, both in the Kingdom of Prussia, Germany, 2nd November, 1897; 6 years. (Filed 26th June, 1897.)

Claim.—1st. Apparatus for automatically lowering and raising of blinds characterized by the arrangement of the two transparent bulbs a^1, b^1, exposed to the sun, of which the one b^1 is provided with a dark coat of varnish or paint, or better partly filled with a non-transparent substance, as for example wadding wool or similar material for the purpose of enabling the sun to warm the air in this darkened bulb, whereas it passes through the transparent bulb without warming the air contained therein, so that the warmed air presses upon the mercury column and effects the closure of the circuit and upon the disappearance of the sun's rays the contact is, however, interrupted and another circuit closed, both in connection with an electric motor, which effects the motion of the blind. 2nd. In the apparatus, the arrangement by which the motion of the electric motor upon the interruption of the latter always closes the connection of the wires, which in the sun contact is open, so that when the contact under the influence of the sun closes the circuit at its place the motor is rotated in a reverse direction. 3rd. An arrangement of the apparatus set forth in such a manner that the electro-motor for lowering and raising the blinds is switched on, off or reversed by means of a contact apparatus controlled by the hand.

No. 57,936. Duplicator. (*Duplicateur.*)

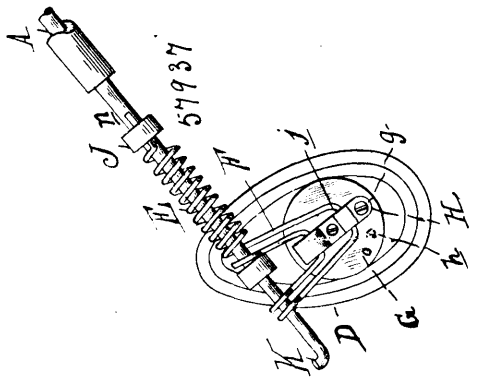


John G. Cortelyon, Omaha, Nebraska, and George H. Roose, St. Louis, Missouri, assignee of Harry W. Lowe, Omaha, Nebraska, both in the U.S.A., 2nd November, 1897; 6 years. (Filed 18th June, 1897.)

Claim.—1st. In a duplicator, the combination with a base, of a rotary open work carrier thereon, comprising two wheels, bars connecting the wheels, a perforated stencil carrier and pressure plate fixed to the wheels, and means for applying and forcing ink to and through the inner face of the plate. 2nd. In a duplicator, the combination, with a supporting frame, of a rotary open work carrier mounted thereon, comprising end supporting members, a segmental perforated stencil supporting, and pressure plate secured to the supporting members, and means for securing a stencil on the plate, an inking device within the carrier, and means for rotating the carrier. 3rd. In a duplicator, the combination with a rotary carrier, consisting of an open frame, of means for rotating the carrier, a perforated stencil carrier and pressure plate secured to the carrier and extending around the same a distance substantially equal to the length of the stencil sheet to be used, and an ink distributing and forcing device within the carrier. 4th. In a duplicator, the combination with a rotary frame, of a perforated stencil carrying and supporting plate on the frame, a pad clamp, and an independent stencil clamp at the edge of the plate. 5th. In a duplicator, the combination with a rotary frame comprising end sections and channelled bars connecting the end sections at different points, of a perforated stencil carrying and supporting plate on the frame, removable clamping bars located in the channels, and means for retaining the bars in place. 6th. In a duplicator, the combination with a rotary frame comprising end sections and channelled bars connecting the sections, of two independent clamping bars in one of the channelled bars, and a single clamping bar in the other channelled bar. 7th. In a duplicator, the combination with a feed roll, of a pivoted carrier, a perforated or open work stencil supporting section on the carrier, the same serving as a compression roll or member acting in conjunction with the feed roll to produce the impression, and an ink distributing and forcing device within the carrier. 8th. In a duplicator, the combination with a rotary carrier, of a gearing for rotating the same, means for adjusting the gearing, comprising a crank and pinion and means for securing the gear in adjusted positions, a feed roll, and means associated with the roll actuated by said gearing to vary the relative positions between the carrier and roll. 9th. In a duplicator, the combination with a rotary carrier, of a feed or impression roll yieldingly supported beyond the carrier, a cam carried by the carrier, an adjustable connection between the cam and roll, means for rotating the carrier, and means for locking the roll in an inactive position. 10th. In a duplicator, the combination with a rotary carrier, of a yieldingly supported roll beyond the carrier, an adjustable extension on the roll support, a locking device for holding the roll in an inactive position, and means on the carrier for engaging said extension for moving the roll outward. 11th. In a rotary duplicator, the combination with a rotary carrier, of spring supported arms below the carrier, a roll carried by the arms, a lock for the arms, a projection on an arm, a cam on the carrier, and an adjustable extension on the projection arranged to be engaged by the cam. 12th. In a rotary duplicator, the combination with a rotary carrier, of spring supported arms below the carrier, a roll carried by the arms, a projection on an arm, a cam on the carrier, an adjustable extension on the projection arranged to be engaged by the cam, and a crank for simultaneously moving both arms. 13th. The combination with the carrier, of the spring actuated arms below the same, a roll carried by the arms, and a crank loosely engaging the ends of the arms having a handle thereon. 14th. In a rotary duplicator, the combination with the stencil carrier, of arms pivotably supported below the carrier, springs for maintaining the arms in position, an extension on one of the arms, a slotted projection on the extension, a link adjustably secured in the slot, a block on the link, an antifriction roll on the block, and a cam on the carrier engaging the roll, substantially as described. 15th. In a duplicator, the combination with a rotary carrier, and means for rotating the same, of a perforated stencil holding plate on the carrier, an impression roll or device, and an inking roll, a stationary support for the inking roll, and means for moving the roll out of the path of the holding plate, substantially as described. 16th. In a duplicator, the combination with a rotary carrier consisting of an open frame, of means for rotating the carrier, a segmental stencil holder on the carrier, an impression device and an inking roll stationarily mounted relative to the carrier, means for adjusting the inking roll to engage the stencil holder at different points, and means for moving the roll radially, substantially as described. 17th. In a duplicator, the combination with a rotary carrier, of a stencil holder mounted thereon, an impression roll, means for driving the carrier, and an adjustable yieldingly supported inking device arranged to engage the inner face of the stencil holder, substantially as described. 18th. In a duplicator, the combination with a rotary carrier, of a perforated stencil holder secured on the carrier, means for securing a stencil on the holder, means for applying the ink to the inner face of the perforated holder comprising a radially adjustable roll, and an impression roll. 19th. In a duplicator, the combination with a rotary carrier having a stencil holding section, of a yielding inking device and a yielding impression device, and means on the carrier for moving the inking and impression devices out of the path of the stencil carrrier section of the carrier. 20th. In a duplicating machine, the combination with a frame, of a rotary carrier, a stationary shaft on which the carrier is mounted, tracks on the carrier, adjustable brackets on the shaft, rods yieldingly supported on the brackets, and an inking roll mounted on a shaft and held in engagement with the tracks by the rods. 21st. In a duplicator, the combination with a rotary carrier, of a stationary shaft on which the same is mounted, brackets on the shaft, rods slidingly engaging with the brackets, springs on the brackets engaging the rods, and an inking device carried by the rods. 22nd. The combination with the frame, the rotary carrier and

feed roll, of a horizontal support on the frame in advance of the roll, inverted U-shaped brackets on the frame in the rear of the support, set screws passing through the brackets, and a table loosely mounted on the supports and having transverse pins normally resting on the brackets. 23rd. The combination with a carrier, and feed or impression device, of U-shaped guide rods below the same extending from front to rear of the machine, and a tray loosely connected to said guides.

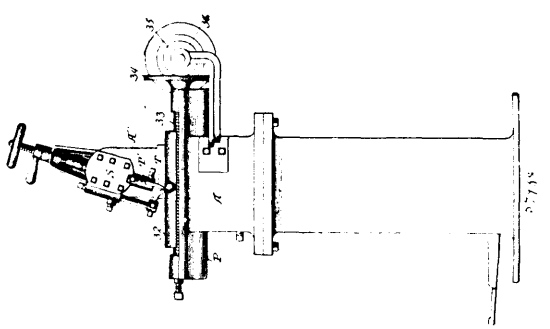
No. 57,937. Truss. (*Bandage herniaire.*)



The Oscillating Truss Co.,
2nd November, 1897; 6 years. (Filed 10th June, 1897.)

Claim.—1st. In a truss, the combination with the girth of a spring arm extending laterally from said girth, and a pad carried by said arm free to tilt from or towards said arm, substantially as shown and described. 2nd. In a truss, the combination with the girth of a spring arm extending laterally from said girth, and a pad hinged to the end of said spring arm, substantially as shown and described. 3rd. In a truss, the combination with the girth comprising the C-shaped frame A and strap B, of a coil sleeved upon the frame A and secured thereto at one end, and arm projecting laterally from the other end of said coil spring, and a pad secured to the end of said arm, substantially as shown and described. 4th. In a truss, the combination with the girth, comprising the C-shaped frame A and connecting strap B, of the collar J longitudinally, adjustably secured upon the forward arm of said frame, the coil spring E sleeved upon said arm and rotatably, adjustably secured to the collar J, the looped arm F formed at the opposite end of said coil, and the pad hinged to the end of said loop, substantially as shown and described. 5th. In a truss, the combination with the girth and the pad, of a lateral spring arm secured to said girth and hinged to said pad, and the folding brace I connecting said girth and pad, substantially as shown and described. 6th. In a truss, a girth comprising the C-shaped frame A, having the hook K at the end of its forward arm, the part *a* longitudinally, adjustably secured to the back arm of said frame, the back pad C swivelled upon said part, and the strap B secured at one end to said pad and adapted to engage with the hook K, substantially as shown and described. 7th. In a truss, the back-pad C comprising a disc, having the central aperture *e*, the front plate *c* secured to said disc, the transversely-apertured post *a* swivelled in the plate *c* and adapted to be sleeved upon the girth, and the set screw *d* in said post in line with the aperture, substantially as shown and described.

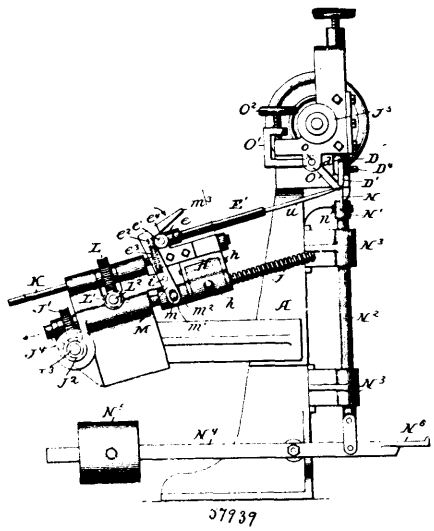
No, 57,938. File Cutting Machine.
(*Machine à tailler les limes.*)



The Kearney & Foot Company, New York, State of New York, assignee of James Turner, Paterson, New Jersey, both in the U.S.A., 2nd November, 1897; 6 years. (Filed 12th April, 1897.)

Claim.—1st. The combination, with the carriage, of a file or rasp cutter, of a feed screw engaging said carriage, a disc connected therewith, a driving friction-wheel bearing with its periphery upon the said disc, a movable pattern plate, and connections between the said pattern plate and the driving disc, whereby the latter may be shifted upon the disc against which it bears, substantially as and for the purpose set forth. 2nd. The combination, with the carriage, of a file or rasp cutter, of a feed-screw, disc 34, a driving disc 35 engaging the disc 34 with its periphery, a pattern plate and devices interposed between the pattern plate and the disc 35, whereby the latter is shifted as the carriage travels, substantially as set forth. 3rd. The combination, with the carriage and feed-screw, of a rasp or file cutter, of friction discs 34, 35 for driving the feed-screw, a shaft supporting one of the discs, a pattern plate connected with one of the moving parts of the machine, and devices interposed between the pattern plate and the shaft, whereby the latter is shifted as the carriage moves forward, substantially as set forth.

No. 57,939. File Cutting Machine.
(*Machine à tailler les limes.*)

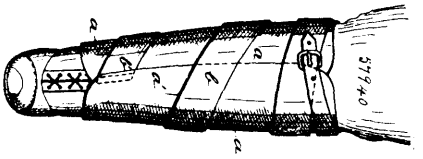


The Kearney & Foot Company, New York, State of New York, assignee of James Turner, Paterson, New Jersey, both in the U.S.A., 2nd November, 1897; 6 years. (Filed 12th April, 1897.)

Claim.—1st. The combination in a machine for cutting files or rasps, of a reciprocating cutter, a carriage, a holder for supporting a round file blank, devices for imparting a forward movement to the said carriage, means for rotating the holder during said movement, and devices for diminishing the extent of this forward movement at the beginning of operations, and thereafter gradually increasing the movement, substantially as set forth. 2nd. The combination in a machine for cutting files or rasps, of a reciprocating cutter, a carriage, a screw for moving the carriage forward, and means whereby the screw is permitted to move backward with a diminishing action at the beginning of operations, substantially as described. 3rd. The combination in a machine for cutting files or rasps, of a reciprocating cutter, a carriage, devices for feeding the carriage forward, and means whereby the said devices are permitted to have an independent backward movement at the beginning of operation, substantially as shown and for the purpose described. 4th. The combination in a machine for cutting files, etc., of a reciprocating cutter, an inclined screw and means for rotating the same, a carriage engaging said screw, a lever pivoted to a stationary part of the frame and having bearings upon the screw, and with an inclined end bearing upon the carriage, substantially as set forth. 5th. The combination with the reciprocating cutter and carriage, of pivoted supports *e*, holders E^1 turning in said supports, and means for turning the holders in the supports, substantially as set forth. 6th. The combination with the carriage H, pivoted supports *e*, holders E^1 turning therein, shaft K and means for rotating the same, and gears between the shaft K and the holders E^1, substantially as set forth. 7th. The combination in a machine for cutting files, etc., of a reciprocating cutter holder D, a cutter consisting of a blade D^1, a bearing D^3 for the upper edge of the cutter, and means for securing the cutter frictionally in the holder, substantially as set forth. 8th. The combination in a machine for cutting files, etc., of supports for two parallel file blanks, and means for feeding the same, a reciprocating cutter holder, and a cutter secured in said holder and having a single bearing point D^3, substantially as and for the purpose set forth. 9th. The combination in a machine for cutting files, etc., of a reciprocating holder and cutter, and an anvil consisting of a blade and a slotted holder therefor having a single bearing point for said anvil upon which the same may rock in the slot, substantially as and for the purpose set forth. 10th. The combination of the anvil holder N^1, the anvil N having a single bearing point so as to rock

in said holder, and a counterweighted support for the holder, substantially as set forth. 11th. The combination in a machine for cutting files, of a reciprocating cutter, an anvil, having a single bearing point, an anvil holder, and means for depressing the same, a carriage and a file blank holder pivoted to said carriage, substantially as and for the purpose set forth.

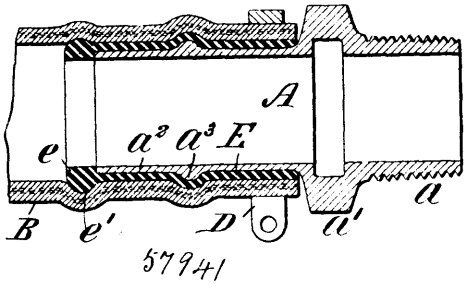
No. 57,940. Gaiters. (*Guêtre.*)



George Bertchnell Winter and Francis Joseph Stohwasser, both of 39 Conduit Street, assignees of John Pullman, all of London, Middlesex, England, 2nd November, 1897; 6 years. (Filed 13th September, 1897.)

Claim.—The combination of a gaiter *a*, one vertical edge of which overlaps the other, with a band or "puttie" *b*, wound round the leg outside the gaiter *a*, and fastened at or near the upper edge of the latter, substantially as set forth and illustrated.

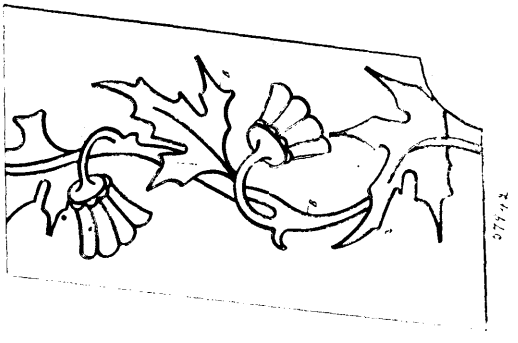
No. 57,941. Connecting Hose to Nipples.
(*Joint de boyaux.*)



Jennie L. Dale, assignee of Charles H. Dale, both of New York, State of New York, U.S.A., 2nd November, 1897; 6 years. (Filed 22nd September, 1897.)

Claim.—1st. A hose nipple, the end to which the hose is to be attached being provided with a yielding facing or cap piece of soft, yielding material interposed between the nozzle and hose to prevent injury by bending or abrasion, substantially as described. 2nd. A hose nipple, the end to which the hose is to be attached being provided with a yielding facing or cap piece having a flange or transverse portion overlapping the end of the nipple, substantially as described. 3rd. A hose nipple, the end to which the hose is to be attached being provided with a yielding facing or cap piece having an exterior circumferential rim, substantially as described. 4th. A hose nipple, the end to which the hose is to be attached being provided with a yielding facing or cap piece having a flange or transverse portion overlapping the end of the nipple and having an exterior circumferential rim, substantially as described.

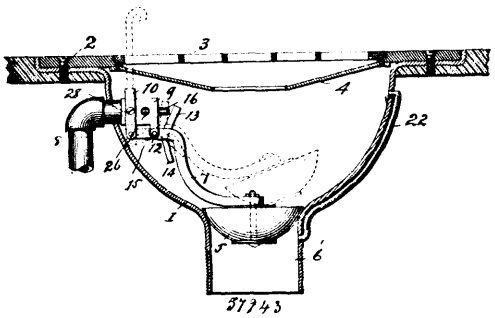
No. 57,942. Cloisonné Work. (*Ouvrage cloisonné.*)



Theophil Pfister and Emil Barthels, Mattapoisette, Bedford Park, London, England, assignees of Amédée Navarein, Paris, France, 2nd November, 1897; 6 years. (Filed 22nd June, 1897.)

Claim.—1st. As a new article of manufacture, the herein described decorative article consisting of a transparent base, a plurality of metal strips bent to form the outlines of a design and attached to said base by an adhesive, a granular filling material disposed in the interstices between the bent metallic strips and bound together by fish-glue and bichromate of potash, and a backing cemented air-tight to the edges of the transparent base, substantially as described. 2nd. A decorative panel consisting of a glass plate, a plurality of polished brass strips bent to form the outlines of the design and attached at their edges to said plate by an adhesive, broken glass of contrasting colours disposed in the interstices between said strips and bound together by fish-glue and bichromate of potash, and a glass plate superposed upon the edges of the metallic strips and cemented air-tight to the edges of the first named plate, substantially as described.

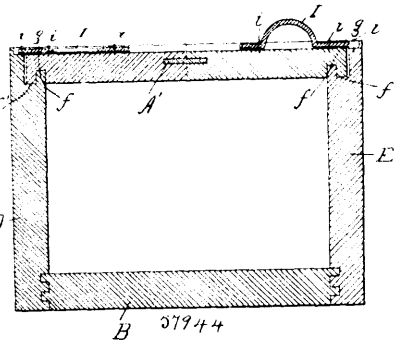
No. 57,943. Self-Cleaning Cuspidor. (*Crachoir.*)



Elie Benoit, St. Césaire, Quebec, Canada, and Thomas W. Corbett, New Haven, Connecticut, U.S.A., 2nd November, 1897; 6 years. (Filed 19th October, 1897.)

Claim.—1st. In a cuspidor, the combination of the basin provided with a bottom outlet and a movable bottom adapted to open and close said outlet, substantially as set forth. 2nd. In a cuspidor, the combination of the basin or body portion constructed with an open bottom, a movable bottom adapted to fit into said opening, with mechanism for operating said movable bottom and the water supply mechanism synchronously, substantially as set forth. 3rd. In a cuspidor, a basin or body portion, a grating adapted to cover the top of said basin, a movable bottom within said basin, mechanism for operating said movable bottom, water supply mechanism for filling and flushing said basin, all constructed and operating substantially as set forth. 4th. In a cuspidor, a basin or body portion having a movable bottom, in combination with a flaring diaphragm covering the top opening of said basin, substantially as set forth. 5th. In a cuspidor, a basin or body portion having a movable bottom, a stop cock to regulate the supply of water within said basin, the said bottom and the said stop-cock being united by a suitable lever, substantially as set forth. 6th. In a cuspidor, a stop-cock and bottom mechanism, comprising a body portion in which the cock plug operates, one end of which projects outside of said body portion, a bottom and trip lever mounted upon said body portion, a yoke secured to one end of said trip lever so that by depressing said yoke the bottom lever is raised and the stop-cock opened synchronously, substantially as set forth. 7th. A stop-cock for a cuspidor, comprising the body portions, integral ears 25, plug 17, stem 16, spring 20, trip lever provided with the three arms 13, 14, 15, and the yoke 10, all constructed and operating substantially as set forth. 8th. In a cuspidor, the combination of the basin 1, outlet 6, movable bottom 5, a suitable stop cock for the water supply, lever 7 connecting said movable bottom and said stop-cock, and diaphragm 4 covering said basin, substantially as set forth.

No. 57,944. Butter Box. (*Boite à beurre.*)



François-Xavier Ovide Trudel, St. Prosper, et Télesphore Piché et Siméon Piché, tous deux de Ste. Anne de la Pérade, dans la Province de Quebec, Canada 2e novembre 1897; 6 ans. (Déposé le 26 Avril, 1897.)

Claim.—In a butter box, the combination with the sides provided with grooves, of a cover formed in two parts connected by a tongue

and groove and provided with tongues *k* for engaging with the said grooves in the sides and groove *g* in its underside, and a back and front provided with tongues *f* and grooves f^1 in their tops, said tongues *f* being adapted to engage with the said grooves *g*, substantially as set forth.

No. 57,945. Manufacture of Explosives.

(*Fabrication des explosifs.*)

Ernest August George Streel, Paris, France, 2e novembre 1897 ; 18 ans. (Déposé le 30 juillet 1897.)

Résumé.—1° Le procédé de fabrication des explosifs chlorates consistant : (*a*) A dissoudre préalablement, à chaud, dans une huile végétale ou animale, soit un dérivé nitré, soit un dérivé azotique, en proportion telle, qu'en se refroidissant, le mélange huileux prenne par cristallisation, une consistance solide ou pâteuse ; (*b*) A mélanger cette dissolution avec un ou plusieurs chlorates ou perchlorates alcalins finement pulvérisés, avec ou sans ajouter de corps carbonés ou hydrocarbonés, en ayant soin de maintenir la chaleur à la fluidité du mélange huileux, pendant toute la durée du malaxage. 2° Lorsque le dérivé nitré ou le dérivé azotique est peu soluble à chaud dans les huiles, le procédé de fabrication des explosifs chlorates consistant : A combiner préalablement le corps difficilement soluble (dérivé nitré ou dérivé azotique) avec un dérivé nitré, ou un dérivé azotique, formant une combinaison soluble : et (*a*) à dissoudre ce combiné binaire à chaud dans une huile végétale ou animale, en proportions telles, qu'en se refroidissant, le mélange huileux prenne par cristallisation, une consistance solide ou pâteuse. (*b*) à mélanger ensuite cette dissolution, avec un ou plusieurs chlorates ou perchlorates alcalines finement pulvérisés, avec ou sans adjonction de corps carbonés ou hydrocarbonés, en ayant soin de maintenir par le chaleur, la fluidité du mélange huileux pendant toute la durée du malaxage. 3° Le procédé de fabrication des explosifs chlorates consistant à utiliser la solubilité, à chaud, de quelques dérivés azotiques, tels que : l'azobenzol, l'oxyazobenzol, dans une huile minérale et consistant : à traiter le dissolution du dérivé azotique dans l'huile minérale, comme les dissolution (de ces dérivés, dans les huiles végétales ou animales. 4° Le procédé de fabrication des explosifs chlorates consistant : (*a*) A imbiber simplement à chaud, l'huile animale, végétale ou minerale, soit des dérivés nitrés, soit de dérivés azotiques, soit des combinaisons des deux dérivés nitrés, ou de deux dérivés azotiques, ou d'un dérivé nitré, et d'un dérivé azotique ; (*b*) à mélanger le pâte ainsi obtenue, avec un ou plusieurs chlorates ou perchlorates alcalins finement pulvérisés, avec ou sans adjonction de corps carbonés ou hydrocarbonés. 5° Les explosifs obtenus par ces divers procédés. 6° Les explosifs dont l'élément combustible est constitué par un dérivé azotique ou une combinaison de deux dérivés nitrés ou de deux dérivés azotiques, ou d'un dérivé nitré, et d'un dérivé azotique.

No. 57,946. Metallic Alloy.

(*Alliages métalliques.*)

John Andrews Birmingham, Warwick, England, 2nd November, 1897; 6 years. (Filed 20th April, 1897.)

Claim.—1st. The metallic alloy composed of copper, mixed nickel, spelter, regulus of antimony and copper flux, combined together in the proportions or thereabout herein specified. 2nd. The metallic alloy composed of copper, mixed nickel, spelter, regulus of antimony, and copper flux, produced by melting together the copper and mixed nickel, then adding a suitable flux composed of common salt, borax and sal-enixon, and finally adding the spelter, regulus of antimony and copper flux, substantially as described.

No. 57,947. Method of Photo-Collographic Printing on Ceramic, Metallic, etc. (*Méthode à imprimer sur surfaces céramique, métallique, etc.*)

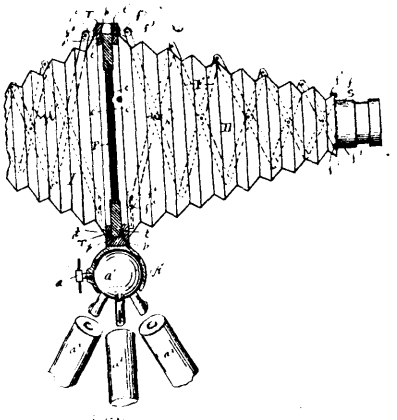
George Henry Grundy, 27 Duffield Road, Derby, and George Arthur Lingard, Mount Pleasant, Old Normanton, both in England, 2nd November, 1897 ; 6 years. (Filed 28th April, 1897.)

Claim.—1st. In the method of direct collotype printing on ceramic, metallic and other rigid surfaces, the employment of an elastic support substantially such as described for the photo-collographic film. 2nd. The herein described method of collotype printing directly on ceramic, metallic, and other rigid surfaces, by repeated impressions from a photo-collographic film carried by an elastic support substantially as specified.

No. 57,948. Camera. (*Camera.*)

Margaret C. Booth, Haverford College, Pennsylvania, U. S.A., 2nd November, 1897 ; 6 years. (Filed 6th May, 1897.)

Claim.—1st. The combination in a camera, of a plate-holder frame having apertures in two adjoining sides to admit a plate-holder, and having longitudinal and vertical grooves leading from the apertures, the whole being arranged substantially as specified, and so that the plate-holder frame will inclose a plate-hol ler placed therein both at the front and back, whereby a plate can be presented both vertically and horizontally in the camera, and all danger from the improper leaking of light may be prevented. 2nd. The combination in a camera plate-holder frame, having apertures in two adjoining sides to admit a plate-holder, and having longitudinal and vertical outwardly-bevelled grooves leading from the apertures, the whole



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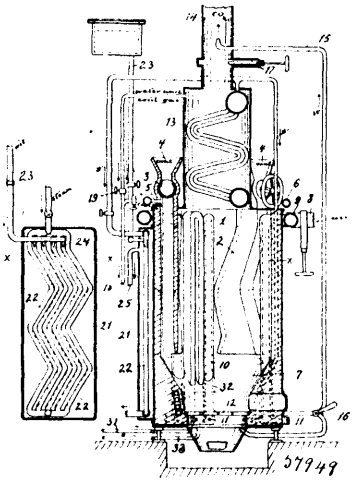
being arranged substantially as specified, and so that the plate-holder frame will inclose a plate-holder placed therein both at the front and back, whereby a plate can be presented both vertically and horizontally in the camera, and all danger from the improper leaking of light may be prevented. 3rd. The combination in a camera, of a plate-holder frame having apertures in two adjoining sides to admit a plate-holder, and having longitudinal and vertical outwardly-bevelled grooves leading from the apertures, the whole being arranged substantially as specified, and so that the plate-holder frame will inclose a plate-holder placed therein both at the front and back, and a plate-holder having correspondingly-bevelled edges, adapted to slide in the grooves in the plate-holder frame, whereby a plate can be presented both vertically and horizontally in the camera, and all danger from the improper leaking of light be prevented.

No. 57,949. Gas Apparatus. (*Appareil à gaz.*)



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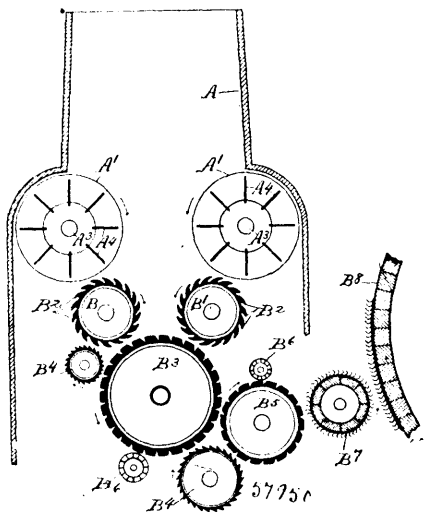
Henry Anwyl Jones, Brooklyn, New York, U.S.A., 2nd November, 1897 ; 6 years. (Filed 14th June, 1897.)

Claim.—1st. In a gas-producing apparatus, a generator consisting of a main chamber provided with suitable inlets and outlets, in combination with a zigzag retort flaring downward and provided with an outlet for coal-gas and a charging device and a valve at its upper end, and a discharge at its lower end into the main chamber, substantially as described. 2nd. In a gas-producing apparatus, a generator consisting of a main chamber provided with suitable inlets and outlets, in combination with a zigzag retort provided with an outlet for coal-gas and a charging device and a valve at its upper end, and having its lower end opening at the fuel line into the main chamber, whereby the latter is automatically fed with fuel from the retort, substantially as described. 3rd. In a gas-producing apparatus, a generator consisting of a main chamber provided with suitable inlets for steam and fuel and outlets for gas, an oil-vaporizing apparatus consisting of zigzag steam-pipes contained therein and located so that the sections of the zigzags of adjoining pipes alternate under each other, means for supplying oil to the surface of the pipes, and means for mixing the gases from the generator and oil-

vaporizing apparatus, substantially as described. 4th. In a gas-producing apparatus, a generator consisting of a main chamber provided with suitable inlets for steam and fuel and outlets for gas, an oil-vaporizing apparatus with zigzag steam-pipes contained therein and located so that the sections of the zigzags of adjoining pipes alternate under each other, means for supplying oil to the surface of the pipes, and a fixing retort, and connections for mixing the gases from the main chamber and from the oil-vaporizing apparatus and passing them through the fixing retort, substantially as described. 5th. In a gas-producing apparatus, a generator consisting of a main chamber provided with suitable inlets for steam and fuel and outlets for gas, and means for passing steam through the main chamber to produce water-gas, and oil-vaporizing apparatus with zigzag steam-pipes contained therein and located so that the sections of the zigzags of adjoining pipes alternate under each other, each section having a groove formed in its upper side which will permit the oil to drop from one groove to another until vaporized, and an oil-inlet for dripping oil into the upper grooves, and a fixing retort, and connections for mixing the gases from the main chamber and from the oil-vaporizing apparatus in suitable quantities and passing them through the fixing retort, substantially as described. 6th. In a gas-producing apparatus, a water-gas generator consisting of a main chamber with inlets for air and steam at one end and outlets for the products of combustion and water-gas at its opposite end, in combination with a steam boiler connected with and heated from the main chamber, a steam-jet located in the outlets for the products of combustion, a steam-jet located in the inlet into the fire chamber, and means for changing the steam exhaust from the jet in the outlet to the jet in the inlet into the fire chamber, substantially as described. 7th. In a gas-producing apparatus, an oil-vaporizing chamber, in combination with a series of zigzag steam-pipes contained therein and located so that the sections of the zigzags of adjoining pipes alternate under each other, and an oil-inlet for dripping oil onto the the zigzag pipes, substantially as described. 8th. In a gas-producing apparatus, an oil-vaporizing chamber, in combination with the zigzag steam-pipes contained therein and located so that the sections of the zigzags of adjoining pipes alternate under each other, each section being provided with a groove on its upper side which will permit the oil to drop from one groove to another until vaporized, and an oil-inlet for dripping oil into the upper grooves, substantially as described.

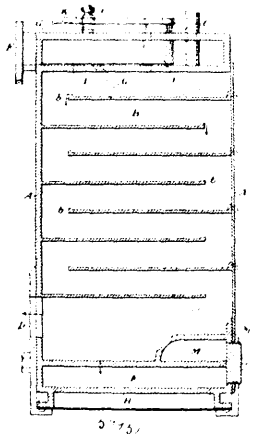
No. 57,950. Feeding Mechanism for Carding Machines. (*Mécanisme d'alimentation pour machines à carder.*)



James Hogg, Amsterdam, New York, U.S.A., 2nd November, 1897; 6 years. (Filed 21st June, 1897.)

Claim.—1st. In a feeding mechanism for carding machines, the combination with a gravity-feed chute, of a toothed drafting roll, and one or more pairs of co-operating resisting rolls interposed between the drafting roll and the chute-outlet, the individual rolls of each pair being located on opposite sides of such outlet, substantially as described. 2nd. In a feeding mechanism for carding machines, the combination with a gravity-feed chute, a pair of rotary feed-regulators oppositely disposed at the outlet of the chute, and a pair of subjacent toothed resisting rolls, of a toothed drafting roll co-operative with the resisting and regulating rolls, and means for imparting rotary movements to the regulators and rolls, the speed of the rotary movements being greatest in the rolls farthest removed from the chute, substantially as described. 3rd. In a feeding mechanism for carding machines, the combination with a gravity-feed chute, and a series of drafting rolls, of a pair of feed-regulators co-operating with the drafting rolls and rotary in the outlet of the chute, one on one side of the chute and the other on the opposite side, substantially as described.

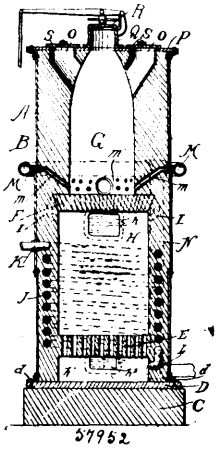
No. 57,951. Carburetor. (*Carburateur.*)



Daniel Best, San Leandro, California, U.S.A., 2nd November, 1897; 6 years. (Filed 21st July, 1897.)

Claim.—1st. An apparatus for producing an explosive vapour from hydrocarbons, consisting of a rectangular chamber having trays or shelves extending from side to side in one direction and having openings or passages at alternate ends in a direction at right angles thereto, a passage by which hydrocarbon oil is admitted upon the uppermost of the trays, an exterior passage extending continuously down upon the two sides of the chamber against which the sides of the trays abut, and beneath the bottom of the chamber, having one end in communication with the exhaust from the engine and the opposite end communicating with the interior of said chamber, whereby the liquid and air will move in the same direction from top to bottom of the apparatus, and a passage at the bottom through which the vapour is withdrawn. 2nd. An apparatus for producing an explosive vapour from hydrocarbons, consisting of a rectangular chamber having trays or shelves with passages that alternate at opposite ends, a passage by which hydrocarbon oil is admitted upon the uppermost of the trays a continuous passage surrounding the chamber on two of its sides and bottom, said passage communicating at one of said sides with the exhaust from the engine and at the opposite side with the interior of the chamber, whereby the hot products from the engine are carried around the vaporizing chamber and are then delivered into the same to mix with the liquid, and a passage below the lowermost tray from which the mingled air and vapour are withdrawn. 3rd. An apparatus for producing an explosive vapour consisting of a rectangular chamber having shelves or trays with passages that alternate at opposite ends, openings through which hydrocarbon liquid and air are delivered upon the uppermost of the shelves, a passage below the lowermost shelf from which the mingled air and vapour are withdrawn, a continuous passage surrounding the chamber on two of its sides and bottom, having one end connecting with the exhaust from the engine and the opposite end with a discharge passage following the course of the exhaust passage and whereby the hot products from the engine are carried around the vaporizing chamber, and an exterior passage through which the air admitted to the interior chamber passes in contact with the exhaust passage so as to be heated thereby. 4th. An apparatus for the production of an explosive vapour, consisting of a rectangular chamber having shelves or trays arranged from top to bottom with openings at alternate ends, a passage by which the hydrocarbon liquid and air are admitted above the uppermost shelf, a passage below the lowermost shelf through which the vapour thus produced is withdrawn, a passage surrounding the sides and the bottom of the chamber, one end of said passage connecting with the discharge and the other receiving the exhaust products from the engine, an exterior passage enclosing this heat passage, one end of which connects with the interior vaporizing chamber and the other is open to the outer air, whereby the air is drawn in and heated before being admitted to the vaporizing chamber, a damper arranged within the exhaust passage and adapted to divert the hot exhaust products around the generator, or directly to the discharge passage, or partially in each direction.

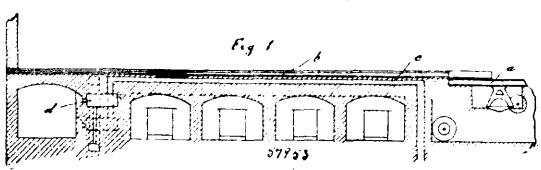
No. 57,952. Furnace for Reducing Ores.
(*Fourneau à réduire le minerai.*)



Emil August Ferdinand Schultze, Baltimore, Maryland, U.S.A., 2nd November, 1897; 6 years. (Filed 9th June, 1897.)

Claim.—1st. The furnace herein described, comprising the structure A, a fuel-chamber in the lower part thereof provided with a grate and an ash-pit below the grate, a coil of steam-pipe about the fuel-chamber located within the furnace-wall, and having its inlet at the upper coil and its exit at the lower coil beneath the grate, a transverse partition over the fuel-chamber and constituting the floor of the ore-chamber, an ore-chamber above the fuel-chamber, charging-chutes opening into the ore-chamber, a blast-pipe opening into the ash-pit, a blast-pipe surrounding the ore-chamber and having branch blast-pipes leading therefrom through the walls of the ore-chamber and opening into the base thereof, and lateral passages leading from the top of the fuel-chamber into the base of the ore-chamber. 2nd. The furnace herein described, comprising the structure A, a fuel-chamber in the lower part thereof, provided with a grate and an ash-pit below the grate, a coil of steam-pipe about the fuel-chamber located within the wall thereof and having its inlet at the upper coil and its exit at the lower coil beneath the grate, a transverse partition over the fuel-chamber and constituting the floor of the ore-chamber, an ore-chamber above the fuel-chamber, charging-chutes opening into the ore-chamber, a blast-pipe opening into the ash-pit, a blast-pipe surrounding the ore-chamber and having branch blast-pipes leading therefrom through the walls of the ore-chamber and opening into the base thereof, lateral passages leading from the top of the fuel-chamber into the base of the ore-chamber, and a vertical pipe N connecting the blast-pipes of the fuel-chamber and the ore-chamber.

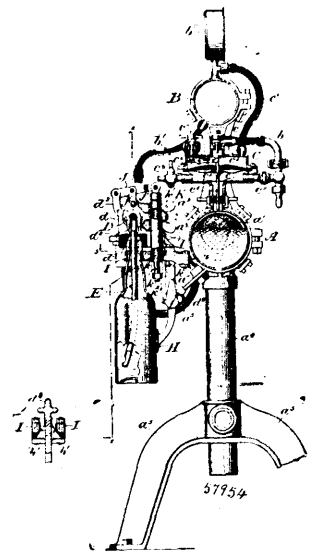
No. 57,953. Method of and Apparatus for Producing Coal from Wood, Sawdust, etc. (*Méthode et appareil pour la fabrication de charbon de bois, etc.*)



Werther Anders Gustaf V. Heidenstam, Skowick, Medelpad, Sweden, 2nd November, 1897; 6 years. (Filed 9th June, 1897.)

Claim.—1st. The method of producing charcoal from wood, chips of wood, peat or other suitable material, which consists in feeding or pressing the prepared raw material in and through heated charring-tubes or channels in such a manner that the material is charred and compressed while moving through said tubes or channels. 2nd. The method of producing charcoal from wood, peat or other suitable material, which consists in feeding or pressing the prepared raw material into heated charring-tubes or channels in such a manner that the said material moves through said tubes or channels, where it is charred and compressed, and leading off the bye-products at the places and stages where they are generated. 3rd. The method of producing charcoal from wood, peat or other suitable material, which consists in feeding or pressing the raw material in and through suitably-heated charring-tubes or channels in such a manner that the said material is charred and compressed while moving through, leading off the different bye-products at the places where they are formed, and finally cooling off the charcoal.

No. 57,954. Apparatus for Bottling Liquids.
(*Appareil pour mettre en bouteilles les liquides.*)

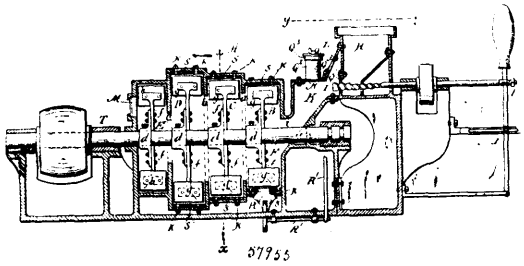


John Henes, Menominee, Michigan, and Frank Charles Keller, Milwaukee, Wisconsin, both in the U.S.A., 2nd November, 1897; 6 years. (Filed 19th May, 1897.)

Claim.—1st. In apparatus for bottling liquids, the combination of a closed liquid reservoir having a supply connection, a filling tube or nozzle having a valve-controlled connection with said reservoir, a gas reservoir having a supply connection, a pressure regulating device in said connection controlled by the pressure in said liquid reservoir, a valve-controlled connection with the gas reservoir adapted to be put in communication with a bottle or vessel to be filled while liquid is being admitted thereto from said liquid reservoir, and means for operating the valves in said connections, whereby the liquid may flow into the bottle or vessel against a counter pressure approximately equal to the pressure in the liquid reservoir, substantially as and for the purposes set forth. 2nd. In apparatus for bottling liquids, the combination with closed liquid and gas reservoirs having supply and delivery connections, of a movable head with which the delivery connections of said reservoirs communicate, a valve in the delivery connection of the gas reservoir adapted to be automatically opened by the operation of said head, and a valve in the delivery connection of the liquid reservoir adapted to automatically open when the pressure of gas in the bottle reaches a certain point, substantially as and for the purposes set forth. 3rd. In apparatus for bottling liquids, the combination with liquid and gas reservoirs, of a movable filling head, having valve-controlled connections with said reservoirs and provided with a cap to receive and close the mouth of the bottle, and jaws adapted to be engaged with the shoulder on the neck of the bottle by the movement of the bottle into filling position and to hold its mouth in engagement with said cap, substantially as and for the purposes set forth. 4th. In apparatus for bottling liquids, the combination of a closed liquid reservoir having supply and delivery connections opening into the lower part thereof, a gas reservoir having one or more delivery connections, and a pressure regulating device consisting of a diaphragm chamber provided with a flexible diaphragm and communicating on opposite sides thereof with said reservoirs, gas supply and waste connections with the part of the diaphragm, chamber in communication with the gas reservoir and valves in said connections arranged to be operated be the movenent of said diaphragm, substantially as and for the purposes set forth. 5th. In apparatus for bottling liquids, the combination of gas and liquid reservoirs having supply and delivery connections, an oscillatory filling head in communication with the delivery connections of said reservoirs, and a valve in the delivery connection of the liquid reservoir, adapted to be opened by a counter gas pressure against the liquid pressure and to be closed by the turning of the filling head to remove a bottle therefrom, substantially as and for the purposes set forth. 6th. In apparatus for bottling liquids, the combination of gas and liquid reservoirs having supply and delivery connections, an oscillatory head having a filling nozzle in communication with a delivery connection of the liquid reservoir and a separate passage in communication with a delivery connection of the gas reservoir, a valve in the delivery connection of the liquid reservoir adapted to be released by turning said head in one direction and opened by counter gas pressure and to be closed by turning the head in the opposite direction, and a valve in the delivery connection of the gas reservoir adapted to be opened by turning said head into position for filling a bottle, substantially as

and for the purposes set forth. 7th. In apparatus for bottling liquids, the combination of gas and liquid reservoirs, having supply and delivery connections, an oscillatory head having separate passages communicating with the delivery connections of the liquid and gas reservoirs respectively, and a valve in the delivery connection of the liquid reservoir arranged to open towards said reservoir and having a yielding operating connection with said head whereby the initial movement of said head in one direction closes said valve, and a further movement thereof for the disengagement and removal of the bottle is permitted after said valve is closed, substantially as and for the purposes set forth. 8th. In apparatus for bottling liquids, the combination of gas and liquid reservoirs having supply and delivery connections, an oscillatory head provided with a filling nozzle in communication with the delivery connection of the liquid reservoir, a cap around said nozzle for closing the mouth of a bottle, and a passage in communication with the delivery connection of the gas reservoir opening into said cap outside of said nozzle, jaws arranged to embrace the neck of a bottle and to engage with the shoulder thereon, and valves in said delivery connections, said jaws being connected with said head and arranged to be closed upon the neck of a bottle and forced upwardly against the shoulder thereon by initial movement of said bottle in turning it into position to be filled, the valve in the gas delivery connection being arranged to be opened by the further movement of a bottle in the same direction, and the valve in the liquid delivery connection being arranged to be closed by the initial movement of said head in the opposite direction, substantially as and for the purposes set forth.

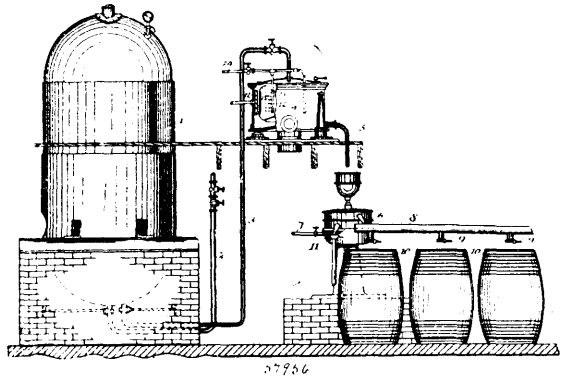
No. 57,955. Pulverizer. (*Pulvérisateur.*)



Jacob Jones Storer, Newton, Frank Martin, Medford, both in Massachusetts, and George Oscar Eaton, New York, State of New York, all in the U.S.A., 2nd November, 1897; 6 years. (Filed 14th May, 1897.)

Claim.—1st. A cylindrical ore pulverizer constructed substantially as herein shown and described, with two or more pulverizing chambers communicating with each other through axial openings in the separating diaphragms, said chambers being of increasing diameters from the feed end toward the discharge end of the cylinder, as set forth. 2nd. A horizontal cylindrical ore pulverizer constructed substantially as herein shown and described, with two or more revoluble pulverizing spiders, the diameters of which are successively increased from the feed end toward the discharge end of the cylinder, as set forth. 3rd. An ore pulverizer constructed substantially as herein shown and described, with a horizontal cylinder or shell interiorly divided by annular diaphragms into two or more working or pulverizing chambers and an exhaust-fan chamber, the pulverizing chambers being of successively increasing diameters from the feed toward the discharge end of the cylinder, and all of them being made to communicate with each other by means of axial openings through the diaphragms, said cylinder being provided with a revoluble shaft extending through its axis and having fixed upon it pulverizing spiders arranged to work in the pulverizing chambers, and a fan-spider to operate in the fan-chamber, said pulverizing spiders being of successively larger diameters, as are the chambers, and being provided with suitable peripheral working paddles, the fan spider being provided with suitable fan plates, substantially as set forth. 4th. An ore pulverizer constructed substantially as herein shown and described, with a horizontal fixed cylinder or shell interiorly divided by annular diaphragms into two or more communicating pulverizing chambers and an exhaust-fan chamber having a paripheral delivery, the diameter of the first working chamber and the fan chamber being alike, while the diameters of the other working chambers increase successively toward the discharge end of the cylinder, as set forth. 5th. In an ore pulverizer constructed substantially as herein shown and described, provided with an axial feed opening, with two or more pulverizing chambers and a fan chamber communicating with each other through axial openings, and an attached feed chute between said axial feed opening and feed hopper, an air-tight hood or cover covering the opening in the top of said chute and extending to and covering the discharge opening of the feed hopper, as set forth, whereby all excess of air is prevented from entering the cylinder along with the material fed into it. 6th. In an ore pulverizer of the character herein shown and described, the combination with an adjustable air-supply register connected with but beyond the feed end of the machine, of an adjustable counter-air register in the discharge end of the machine, as set forth, whereby the volume and force of the air entering through the axial opening into the machine may be regulated.

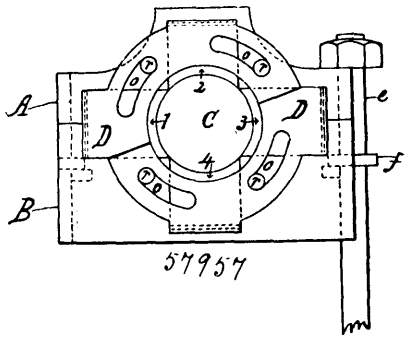
No. 57,956. Manufacture of Fatty Matter from Certain Fatty Animal Tissues. (*Fabrication de matières grasses des tissus adipeux.*)



James Davidson, Sydney, New South Wales, Australia, 2nd November, 1897; 6 years. (Filed 19th November, 1896.)

Claim.—1st. The process of manufacturing fats from fatty tissues, which consists in boiling the tissue under pressure in a digester; then hot washing and straining the soups and fats drawn from the digester in a basket-centrifugal; and finally separating the soup and fats in a centrifugal separator, substantially as and for the purpose specified. 2nd. The process of manufacturing fats from fatty tissues, which consists in boiling the tissue under pressure in a digester; continuously withdrawing from the digester the liquid products of such boiling as they are formed; then hot washing and straining the soups and fats drawn from the digester in a basket-centrifugal; and finally separating the soup and fats in a centrifugal separator, substantially as and for the purpose specified. 3rd. The process of refining and separating fats, which consists in subjecting them to the action of steam or hot water in a basket-centrifugal; and then in separating the soups and fats in a centrifugal separator, substantially as and for the purpose specified.

No. 57,957. Stamp Guide. (*Guide pour bocards.*)



Edmund H. Horne, Enfield, Nova Scotia, Canada, 2nd November, 1897; 6 years. (Filed 2nd October, 1896.)

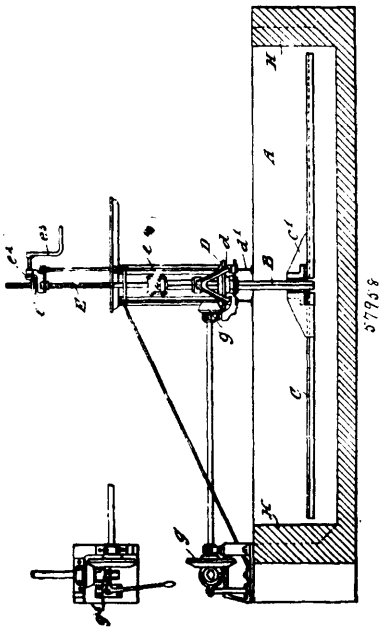
Claim.—1st. In an ore stamp-guide, the divided adjustable cap-ring D D, substantially as and for the purpose hereinbefore set forth and described. 2nd. The combination of the base B, the cap A, and the adjustable bearings 1, 2, 3, 4, with the lines *x*, and the divided, adjustable cap-ring D D, substantially as and for the purpose hereinbefore set forth and described.

No. 57,958. Machine for use in the Extraction of Gold from Auriferous Material by the aid of Chemical Solvents. (*Machine en usage dans l'extraction de l'or des matières aurifères à l'aide de dissolvents chémiques.*)

Joel James Deeble, Bendigo, Victoria, Australia, 2nd November, 1897; 6 years. (Filed 8th September, 1896.)

Claim.—1st. A machine for the extraction of gold from auriferous material by the aid of chemical solvents, consisting of a vat or pan, the inner sides of the wall of which is provided with a series of projections, an agitator or stirrer carried on a vertical shaft, means for rotating and raising or lowering the said shaft, a vertically-sliding draw-off valve, and a waste-discharge valve, substantially as set forth. 2nd. In a machine for the extraction of gold from auriferous material, the combination with the

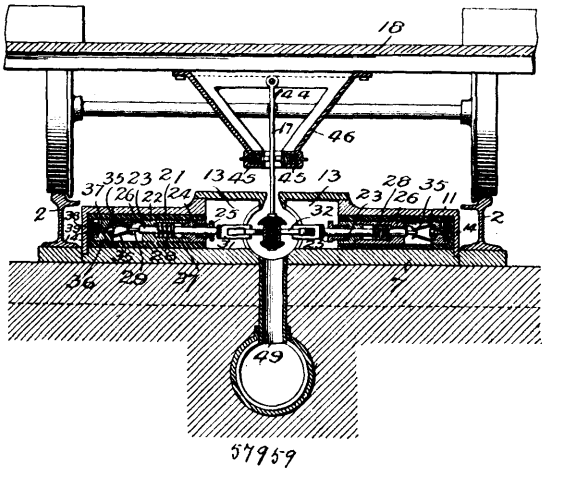
vertical shaft B, having stirrers or agitators C at its lower end, and means for rotating the said shaft, of the shackle e connecting the



said shaft B to a screw-threaded rod E, the screw-threaded rod E, a threaded pinion e^1 on the said rod E, a pinion e^2 in gear with the said pinion e^1, and operated by a cranked handle, substantially as set forth. 3rd. In a machine for use in the extraction of gold from auriferous material by the aid of chemical solvents, a vat having projections H around the inner side of its walls, substantially as and for the purposes specified. 4th. In a machine for use in the extraction of gold from auriferous material by the aid of chemical solvents, a valve I, together with means whereby it may be adjusted vertically in the side of the vat, substantially as and for the purpose specified.

No. 57,959. Electric Street Railway Conduit.

(Conduit pour chemins de fer électriques.)



John Henry Munson, Chicago, Illinois, U.S.A., 2nd November, 1897 ; 6 years. (Filed 27th March, 1895.)

Claim.—1st. In a conduit of the class described, the combination of the slotted pipe-sections, the opposite pairs of lateral parts or extensions whereto the ends of said pipes or sections are secured, said parts or extensions comprising upper and lower portions and surface plates, lateral recesses in said extensions, slidably arranged contact arms provided therein and suitably insulated, a circuit-closing device in connection with each arm, a binding block or post in connection therewith and a heel plate removable to permit access to said binding block, substantially as described. 2nd. The combination with a lateral extension of a conduit provided with a suitable recess, a suitable barrel and a binding block arranged therein and insulated therefrom, contact-springs connected with said block, a contact-arm slidably arranged in said barrel, a spring provided in said barrel to act upon said arm, an insulated part of said arm having an outer end to engage said contact spring or switch, and a contact wheel horizontally arranged upon the inner end of said insulated part to be engaged by a contact shoe, substantially as described. 3rd. The combination, with a lateral extension, of a conduit provided with a suitable recess, a suitable barrel and binding block arranged therein and insulated therefrom, contact springs connected with said block, a contact arm slidably arranged in said barrel, a spring provided in said barrel to act upon said arm, and an insulated part of said arm having an outer end to engage said contact spring or switch, a contact wheel horizontally arranged upon the inner end of said insulated part to be engaged by said contact shoe, a water-tight outer end for said recess, and a packing gland provided about the inner end of the slidable contact arm and in the head of said barrel, substantially as described. 4th. The combination with the track, of the conduit, a contact shoe or collector movable in said conduit, contact devices provided in said conduit at intervals along the same, said devices arranged in pairs to be operated by the entrance of said shoe between the same, said shoe having an overhanging top or water shed and being of considerably greater width or depth than the faces of said contact devices to permit vertical movement of the shoe, as and for the purpose specified. 5th. The combination with a conduit provided with a surface slot, of a contact shoe or collector movable within the conduit and to be carried by a car, pairs of contact devices arranged within said conduit at intervals along the same and to be engaged by said shoe, electric feeders or supply wires, electric switches or circuit closers connected therewith and arranged in water-tight chambers, said switches or circuit closers being adapted to be operated by the shoe through the medium of said contact devices, and said circuit closers being normally out of engagement with said contact devices, and said shoe being of a length to engage two of the pairs of contact devices simultaneously, substantially as described. 6th. The combination with the track, of a conduit arranged between the same and having a surface slot, the lateral extensions or containing-boxes projecting upon opposite sides of said conduit, laterally operative contact devices provided in said extensions or boxes and having suitable bearings therein in which they are adapted to slide, the outer part of said boxes provided with water-tight chambers, a switch provided in each to be engaged by an insulated part of the contact device when the same is projected outwardly, supply and return connections upon opposite sides of the conduit, the same connected with respective switches within said boxes, said connections being made water-tight, means to normally project the contact devices inwardly, and a movable contact-shoe provided within the conduit to engage said contact devices and whereby circuit is closed, substantially as described. 7th. The combination with the track, of the conduit proper, lateral parts or containing boxes extending from opposite sides of the conduit and having recesses opening into the same, laterally operative contact and circuit closing switches provided in said lateral parts or boxes and adapted to be operated by the shoe moving within the conduit, all of said parts being between the rails and above the ties of the track, substantially as described. 8th. The lateral extension or containing box of a slotted conduct having a recess or chamber, an insulating-lining therefor, a metallic lining or barrel, and contact and switch devices provided in connection with said plunger, substantially as described. 9th. The lateral extension or containing box of a slotted conduit having a recess or chamber, an insulating-lining therefor, a metallic lining within the same, a plunger slidable within said metallic lining or barrel, and contact and switch devices provided in connection with said plunger, the ends of said recess being closed by water-tight means, substantialy as described. 10th. The slotted conduit sections, in combination with opposite laterally-extending parts whereto the conduit sections are joined, a collector shoe to operate within the conduit, and circuit closing devices provided in said laterally-extending parts and adapted to be operated by said shoe, substantially as described. 11th. The combination with the metal pipes forming the conduit sections and having surface slots, of the pairs of metallic lateral extensions or castings arranged upon opposite sides of the conduit and whereto said sections are joined, the conduit being continued through the same, said lateral extensions or castings provided with cavities or recesses, circuit closers provided therein, and a shoe to travel in the conduit and to actuate the circuit closers substantially as described. 12th. The combination with the conduit sections having surface slots, of the horizontal lateral extensions upon opposite sides of the conduit, said extensions being metallic and provided with recesses which at their inner ends open into the conduit and are closed at their outer ends, supply and return conductors having insulated terminals within the outer ends of opposite extensions, laterally operative contact devices provided within said extensions, the same having their inner ends projecting into the conduit, surface plates upon the inner and outer ends of said lateral extension and upon the removal of which access may be had to said contact devices and to said terminals, and a shoe movable in the conduit and adapted to project said contact devices, which when so projected make electrical connections with said terminals, substantially as described. 13th. The combination with the conduit having a surface slot, of metallic lateral extensions through which the conduit and slot are continued, a shoe or collector to operate within the conduit and circuit closers provided in said lateral extensions, each said circuit closer comprising a plunger laterally operative in metallic bearings in the lateral extension, a conductor insulated within the plunger, a contact-wheel

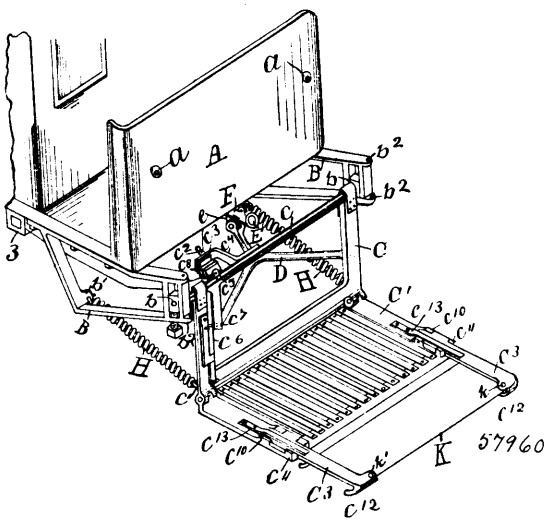
wherewith the conductor is connected, said wheel being carried by said plunger but insulated therefrom, means for returning the plunger inwardly, and an electric circuit closer or switch proper provided in the outer end of the lateral extension and by means of which circuit is closed through said conductor and wheel when said parts are projected outwardly by said shoe, substantially as described. 14th. The combination with a slotted conduit, of laterally operative contact devices arranged therein at intervals along the same and adapted to be actuated by a collector or shoe, each said contact device comprising a reciprocating plunger held in suitable metallic bearings, a conductor insulated within said plunger, a contact wheel connected with said conductor at the inner end thereof, said wheel being carried by said plunger but insulated therefrom, means to prevent rotation of the plunger in its bearings, a water-tight chamber at the outer end of said plunger, electric terminals or switches provided therein to be engaged by said conductor when the same is projected outwardly by the contact of the shoe with said wheel, substantially as described. 15th. The combination with the slotted conduit, of the metallic lateral extensions or parts, each having a recess opening into the conduit, a metallic plunger having metallic bearings within each extension, a contact wheel carried upon the outer end of said plunger but insulated therefrom, a conductor extending from the wheel through the end of said plunger and insulated therefrom, a contact provided upon the outer end of said plunger, a chamber in the outer end of said extension, a switch provided therein, an electric conductor or feed-wire, and means whereby the same is connected to the switch within the said extension, substantially as described. 16th. The combination with the slotted conduit, of the metallic lateral extensions or parts, each having a recess opening into the conduit, a metallic plunger having metallic bearings within each extension, a contact wheel carried upon the outer end of said plunger, a chamber in the outer end of said extension, a switch provided therein, an electric conductor or feed-wire, means whereby the same is connected to the switch within the said extension, and removable surface plates upon each extension, upon the removal of which access may be had to said contact wheel, to said switch and to the electrical connections. 17th. The combination with the conduit, of the metallic lateral extensions or parts, the plunger laterally operative therein, contact devices insulated from the plunger and at opposite ends thereof, said devices being connected, a shoe to travel within the conduit to engage the inner contact device, the electrical connections provided in the outer end of the lateral extension, two springs forming the terminal thereof, and the outer contact device carried by said plunger adapted to enter between said springs, said connections and said springs being wholly insulated from said lateral extension and part, substantially as described. 18th. The combination with the slotted conduit, of metallic lateral extensions thereof, each extension being provided with a chamber or recess, a plunger having metallic bearings therein, in which the same is adapted to operate laterally with respect to the conduit, a contact wheel and a conductor carried by said plunger and insulated therefrom, a water-tight chamber in the outer end of the extension, contact springs provided therein, means for connecting electric wire therein, said springs being supported in a body of insulating material and thereby insulated from surrounding parts, and the outer end of said conductor adapted to engage said springs when the plunger is projected outwardly, substantially as described. 19th. The combination with the metallic lateral extension of a slotted conduit, of an open ended chamber or cylinder provided therein, a metallic plunger, thereby provided with bearings at its opposite ends, the inner portion of said chamber or cylinder being enlarged between said bearings, a contact wheel carried by said plunger, a conductor extending through the plunger, said conductor and wheel both insulated from the plunger, means to prevent the rotation of the plunger, and a water-tight chamber provided in the outer end of said extension, and a switch device provided therein to engage an extension of said conductor, substantially as described. 20th. The combination with the metallic lateral extension of a slotted conduit, of an open ended chamber or cylinder provided therein, a metallic plunger thereby provided with bearings at its opposite ends, the inner portion of said chamber or cylinder being enlarged between said bearings, a contact wheel carried by said plunger, a conductor extending through the plunger, said conductor and wheel both insulated from the plunger, means to prevent the rotation of the plunger, and a water-tight chamber provided in the outer end of said extension, and a switch device provided therein to engage an extension of said conductor, and means to prevent the entrance of moisture to the switch chamber through the plunger chamber, substantially as described. 21st. A contact-shoe for employment in a slotted conduit, said shoe comprising a body of insulated material, the same being of considerable length and provided with sharp wedge-like ends 41, and oppositely arranged contact plates of equal length provided upon the sides of said body, substantially as described. 22nd. A contact-shoe for employment in a slotted conduit, said shoe comprising a body of insulated material, the same being of considerable length and provided with sharp wedge-like ends 41, contact plates of equal lengfh provided upon the sides of said body, said plates being arranged opposite each other upon opposite sides of the body of insulating material, and horizontal strengthening ribs provided upon the upper and lower edges of said body, substantially as described. 23rd. A contact-shoe for employment in a slotted conduit, said shoe comprising a body of insulating material, the same being of considerable length and provided with sharp pointed or wedge-like ends 41, a contact plate or plates provided upon one or both sides of said body, horizontal strengthening ribs provided upon the upper and lower edges of said body and the upper rib provided with convexed top, as and for the purpose specified. 24th. The combination in a circuit closer to be actuated by a traveling shoe, of a metallic plunger or tube, a conductor provided therein and having an end to engage said switch, a contact wheel carried upon the outer end of said conductor, bearings for said plunger, the inner surface of said plunger and the surface of said conductor being rough and a compressed filling of insulating material between said parts whereby the same are locked together and the conductor insulated from the plunger, substantially as described. 25th. The combination with the lateral projection of an underground conduit, of a contact wheel to be engaged by a contact shoe, a horizontally and laterally movable plunger whereby said wheel is carried and from which the same is insulated, a conductor extending through said plunger, a water-tight chamber provided at the outer end of said plunger and containing a switch to be engaged by said conductor, and bearings intermediate between said chamber and the inner end of said plunger, said bearings being distant from one another and separated by a chamber, substantially as described. 26th. The combination with the lateral projection of an underground conduit, of a contact wheel to be engaged by a contact shoe, a horizontally and laterally movable plunger whereby said wheel is carried and from which the same is insulated, a conductor extending through said plunger, a water-tight chamber provided at the outer end of said plunger and containing a switch to be engaged by said conductor, bearings intermediate between said chamber and the inner end of said plunger, said bearings being distant from one another and separated by a chamber, and a spring provided in said chamber to act upon said plunger, substantially as described. 27th. The combination with the slotted conduit, of lateral extensions, said extensions comprising lower parts 7 and upper parts 8, said lower parts having broad flanges or bases, means for securing said parts together, a chamber or recess within said lateral extension so formed, longitudinal flanges provided upon said extensions at their inner ends to facilitate joining the same with the conduit sections, removable surface plates and circuit closing said switch devices provided in said lateral extension, substantially as described. 28th. The combination with the slotted conduit, of lateral extensions, said extensions comprising lower parts 7 and upper parts 8, said lower parts having broad flanges or bases, means for securing said parts together, a chamber or recess within said lateral extension so formed, longitudinal flanges provided upon said extensions at their inner ends to facilitate joining the same with the conduit sections, removable surface plates, a removable heel plate 11 provided with a depending part forming the outer end of the lateral extension, circuit closing and switch devices provided in each lateral extension, the same being normally insulated from one another and at all times insulated from the extension or containing box, substantially as described. 29th. The combination with a conduit having lateral extensions, of laterally operative circuit closing devices provided therein and adapted to be operated by a moving shoe, a switch device provided in the lateral extension and wherewith the contact device is adapted to be engaged, electrical connections with said switch device, and said switch device and said connections being entirely inclosed in hard insulating material with the exception of the part to be engaged by said concact device, substantially as described. 30th. The combination with a slotted conduit, of a shoe to move therein, laterally operative contact devices to be engaged by said shoe, means whereby circuit is closed through said contact devices when the same are projected outwardly, each said contact device comprising a plunger, a conductor insulated within the same, a yoke secured upon the end of said conductor and also insulated from said plunger, and a contact wheel arranged in said yoke, substantially as described. 31st. The combination with a slotted conduit, of a shoe to move therein, laterally operative conduit devices to be engaged by said shoe, means whereby circuit is closed through said contact devices when the same are projected outwardly, each said contact device comprising a plunger, a conductor insulated within the same, a yoke secured upon the end of said conductor and also insulated from said plunger, a contact wheel arranged in said yoke, and a spring 33 interposed between the yoke and said wheel, as and for the purpose specified.

No. 57,960. Car Fender. (*Défense de chars.*)

Paul Jones, Cincinnati, Ohio, U.S.A., 2nd November, 1897; 6 years. (Filed 1st May, 1896.)

Claim.—1st. The combination, substantially as hereinbefore set forth, of the front platform, fender-supporting hangers secured thereto, the pivoted fender-frame supported by said hangers, means substantially as shown to sustain the fender in its elevated position against force applied to throw it to its lower position, an electromagnet in the main or line circuit, and tripping mechanism such as described to close the circuit, release the fender-sustaining device, and permit the fender to drop to its lowest position. 2nd. The combinaation of the front platform, the hangers secured thereunder at each side, the fender-frame pivoted in said hangers, the coil-springs connected with the hangers and fender-frame and exerting their tension to throw the fender to its lowest position, a support fitted to slide in guides secured underneath the car platform, a bar connecting said support to the fender-frame, a lever having a detent to

hold said support in its forward position and the fender elevated, and means, such as shown, actuated by the line-current to release



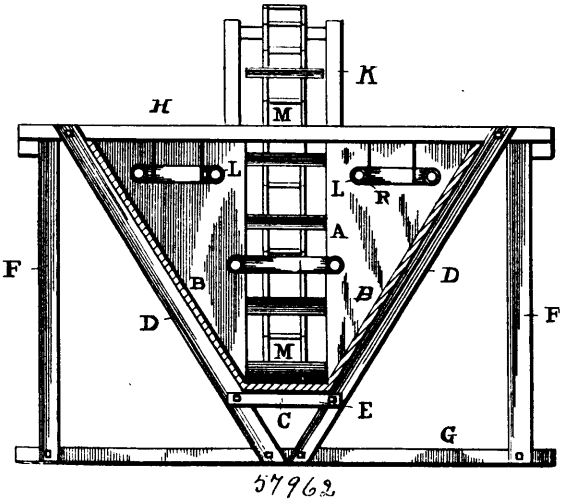
the support and allow the spring to snap the fender to its lower position, substantially as shown and described. 3rd. The combination of the front platform, the fender-frame pivoted in hangers secured to said platform, a guide secured underneath the platform, a piston or follower fitted to slide in said guide, a link connecting said follower to the pivoted fender-frame, a pivoted lever having a detent to pass back of the follower and hold it in its forward position, the end of the lever extending rearwardly and having an armature under the influence of an electro-magnet, an electro-magnet secured underneath the platform and in the circuit of the line-current, contact-surfaces secured to the fender-frame and held separately by spring pressure, arms on each side of the fender scoop extending in front thereof, and a wire secured at one end to one of the arms passing around a pulley journalled in the opposite arm and having its opposite end connected to the movable contact-surfaces, whereby pressure on the wire in front of the fender closes the circuit through the magnet, retracts the detent and releases the fender-frame, substantially as shown and described.

No. 57,961. Insecticide. (*Poudre à insectes.*)

Andrew H. Danforth, Leominster, Massachusetts, U.S.A., 2nd November, 1897; 6 years. (Filed 17th April, 1897.)

Claim.—As an improved article of manufacture, a bug exterminator consisting of a composition of zinc oxide and ammonium chloride, the zinc oxide being in excess of the ammonium chloride, substantially as and for the purpose specified.

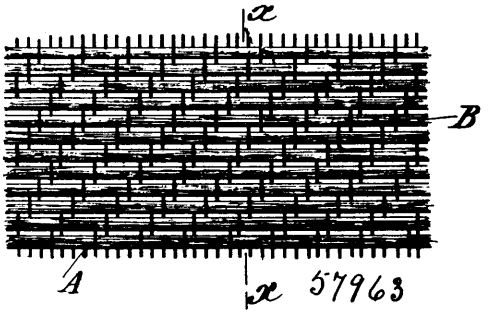
No. 57,962. Salt Evaporator. (*Appareil à évaporer le sel.*)



Nathan S. Beardslee, Warsaw, New York, U.S.A., 2nd November, 1897; 6 years. (Filed 28th June, 1897.)

Claim.—1st. The pan having inclined sides and a flat bottom and a spout or chute at one end extending above the height of the sides, the endless conveyer extending along the flat bottom and up the inclined spout, the heating pipes, and the cradle inclosing and supporting the sides so that the condensed salt may pass down such sides, and not stop in pockets therein, all combined substantially as described. 2nd. The evaporating pan having inclined sides and a flat bottom, and the conveyer, the heating pipes, the heating chamber having pipe coils therein to which the heat passes from the evaporating chamber, and the crib supporting the walls of the heating and evaporating chambers, all combined substantially as described.

No. 57,963. Stiffening Fabric. (*Tissu à doublure.*)



Nathan Hirsh, New York, State of New York, U.S.A., 2nd November. 1897; 6 years. (Filed 12th July, 1897.)

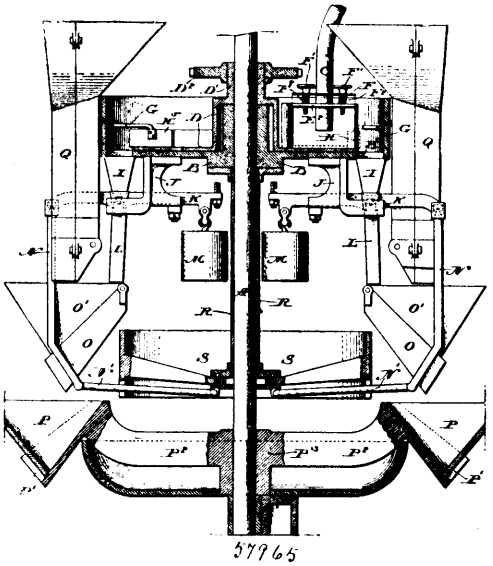
Claim.—1st. A twill woven stiffening fabric the fibres of which are free from oil, impregnated with sizing and free adhesion, the weft threads of the fabric being of loosely-spun fibres and the warp-threads of relatively tightly-spun fibres, substantially as described, 2nd. The process of making stiffening fabrics, which consists in subjecting a twill fabric to the action of an oil-extracting solution, then impregnating the same with size, drying, and then subjecting it to a treatment to separate the threads connected by the sizing, whereby the fabric is rendered resilient and pliable, substantially as specified.

No. 57,964. Manufacture of a Substitute for Horse-hair. (*Fabrication d'un substitut pour le crin.*)

Hugh Waldemar Langbeck, Loughton, England, 2nd November, 1897; 6 years. (Filed 23rd July, 1897.)

Claim.—1st. The described manufacture of a substitute for horse-hair, such manufacture consisting in heating suitable vegetable fibres (such as cocoanut fibres or Mexican fibres) at about the boiling point in an alkaline solution for about an hour and in then washing, dyeing, varnishing and drying the fibres, all substantially as hereinbefore described. 2nd. Vegetable fibres treated substantially in the manner hereinbefore described.

No. 57,965. Feeding Mechanism for Granulated or Powdered Substances. (*Mécanisme d'alimentation de substances granulées et pulverisées.*)

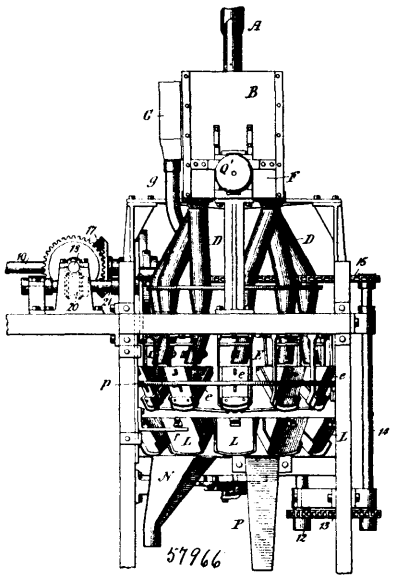


H. E. Smyser, Brooklyn, New York, U.S.A., 2nd November, 1897; 6 years. (Filed 28th September, 1897.)

Claim.—1st. A feeding device, consisting of a plate or table in combination with a device for spreading material upon it, and a plurality of obliquely-set scrapers extending over the edge of the

table and reaching to different distances from the centre of the table, the scrapers and table being movable, the one relatively to the other, to scrape off a layer of material from the table and deliver it in a plurality of streams off the edge thereof. 2nd. A feeding device, consisting of a plate or table in combination with a device for spreading material upon it, and a series of obliquely-set scrapers extending over the edge of the table, and each extending further over its surface than the one in front of it, and the scrapers and table movable relatively to one another. 3rd. A feeding device, consisting of a movable table D, in combination with a spreading device consisting of a stationary box E resting upon said table and having a gate or scraper F on one side, a feed-spout leading into said box, and a series of obliquely-set scrapers H^1, H^2, etc., extending over the edge of the table, all substantially as and for the purpose specified. 4th. A feeding device, consisting of a circular rotating table in combination with a scraper F arranged to spread material on its face in a uniform layer as the table revolves, and a series of obliquely-set stationary scrapers arranged around the periphery of the table and each extending further toward the centre of the table than the one preceding it. 5th. The combination with a scale-pan and a spout leading into it of a feeding device, consisting of a movable table arranged with its edge over the mouth or hopper of the spout, a device for spreading material on its surface in a uniform layer, and a scraper extending obliquely over the edge of the table and over the mouth or hopper of the spout. 6th. The combination with a scale-pan, of a movable spout arranged to lead to the pan when in one position and to a point beyond the pan when the scale-beam is moved down, a hopper opening into said spout, a movable table, the edge of which extends over said hopper, a device for spreading material on said table in a uniform layer, and an obliquely-set scraper extending over the edge of said table and over the hopper, substantially as and for the purpose specified. 7th. The combination with a series of scales, of pivoted spouts actuated by the movement of the beams to deliver into or exterior to the scale-pans, hoppers communicating with the respective spouts, a movable table, the edge of which exteds over the series of hoppers, a device for spreading material in a uniform layer on said table, and a series of obliquely-set scrapers extending over the hoppers and over the edge of the table, substantially as and for the purpose specified.

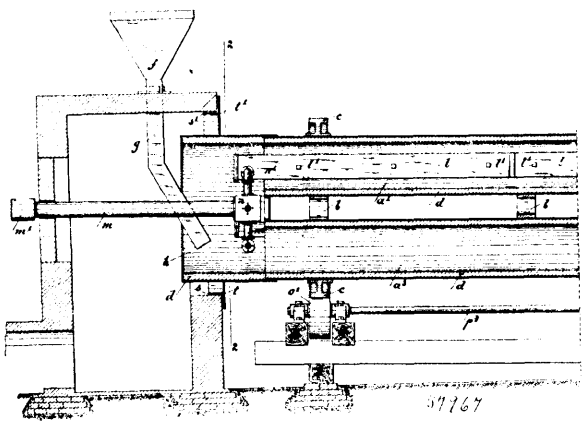
No. 57,966. Feed Mechanism for Weighing Machines.
(*Mécanisme d'alimentation pour bascules.*)



Henry Eyster Smyser, Brooklyn, New York, U.S.A., 2nd November, 1897; 6 years. (Filed 28th September, 1897.)

Claim.—1st. In a weighing machine, the combination with its scale pan and beam of a measuring apparatus adapted to measure a given bulk of material and dump it into the scale to be weighed, comprising a measuring box having an open top, a supply chute for directing the material into said box, terminating near to, and of less area than, the top of the box, so that material entering the box by gravity from said chute may assume its natural slope in the box without running over, a slide working beneath said chute for cutting off the pile of material, a movable bottom for the box adapted to open and dump its contents, a delivery chute leading thence to the scale pan, and driving mechanism for operating said slide and bottom, adapted to first close said bottom, then open said slide and leave it open long enough for the material to flow from the chute into the box and to fill the latter and cease flowing, standing in a pile under said chute, then to close said slide to cut off said pile, and finally to open said bottom. 2nd. In a weighing machine having a plurality of scales, the combination of a measuring apparatus comprising a reservoir B, for the material to be weighed, formed with a series of supply chutes *a*, *a*, slides *c*, *c*, working beneath said chutes for cutting off the supply, stationary measuring boxes C, C, arranged beneath said chutes, having open tops of larger area than the bottoms of the chutes, bottom slides *b*, *b*, movable to close or open the bottoms of said boxes, a casing F, inclosing said boxes and slides, having bottom openings under the respective boxes, and chutes D, D, leading from said bottom openings to the respective scale pans. 3rd. In a weighing machine of the described class, a supplemental feed mechanism consisting of a feed box comprising an outer wall which is stationary with relation to the scales, and a relatively revolving bottom plate projecting beneath it with means for directing the material outwardly over said plate toward said wall, said wall having a series of openings, a series of scraping blades projecting diagonally through said openings to remove material from the portion of the plate adjacent to the said wall, and direct it through the openings and over the edge of the plate, and a series of chutes arranged to conduct the streams of material from said blades to the respective scales. 4th. In a weighing machine of the described class, a supplemental feed mechanism consisting of a feed box H, comprising a stationary wall *h*, having bottom openings *i*, *i*, and a revolving feed plate I, coned to direct the material outwardly toward said wall and projecting beneath said wall, a series of scraping blades K, K, projecting diagonally through said openings to direct material through the openings and over the edge of the plate, and a series of chutes j^1, j^1, arranged to conduct the streams of material to the respective scales. 5th. In a weighing machine of the described class, a supplemental feed mechanism consisting of a feed box H, comprising a stationary wall *h*, having bottom openings *i*, *i*, and a revolving feed plate I, with means for directing the material outwardly toward said wall, a series of scraping blades K, K, projecting diagonally through said openings, fastening devices for said blades constructed to permit adjustment of the blades in direction parallel with said wall *h*, so as to increase or reduce the effective area of the openings, and a series of chutes arranged to conduct the streams of material from said blades to the respective scales. 6th. In a weighing machine of the described class comprising a circularly arranged series of scales E, E, and mechanisms for feeding material to the scale pans, the combination therewith of means for dumping the scale pans at intervals, and means for preventing any sudden upward movement of the scale pans on being discharged of their load, the latter means consisting of a vertically movable lifter M, arranged beneath the counterweights *w*, of the scales, mounted upon a vertically movable slide, with a cam and intervening connections adapted to raise the lifter against the counterweights immediately before the dumping of the scale pans, and to lower it slowly after the dumping of the pans.

No. 57,967. Apparatus for Roasting and Drying Ores. (*Appareil de grillage et séchage de minerais.*)

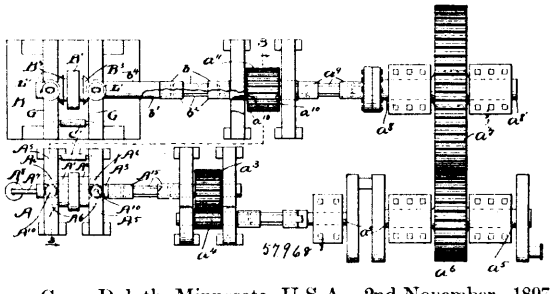


Philip Argall, Denver, Colorado, U.S.A., 2nd November, 1897; 6 years. (Filed 30th August, 1897.)

Claim.—1st. In a roasting or drying furnace, the combination of a plurality of independent, non-communicating cylindrical tubes, symmetrically arranged around a common axis, mounted in an inclined position and so as to be rotated as one, with a combustion chamber sending its products of combustion through all the tubes at once, when all are charged with the material to be operated upon in balanced charges, in conjunction with means provided in each tube for sending pure, hot, dry air through the said charges of ore during rotation, substantially as described and specified. 2nd. In a roasting or drying furnace, a revoluble cylinder or tube in combination with a hollow rabble fixed relatively thereto, and means for supplying air in conjunction with the said rabble to the charge during the process of roasting or drying, substantially as specified. 3rd. In a roasting or drying furnace, a revoluble cylinder or tube in combination with a hollow rabble comprising an air-tube having

adjacent, communicating, direct and return flues with air-outlet passages leading into the said cylinder, said rabble being fixed relatively to the said revoluble tube to the interior thereof, and means for supplying air to the said rabble during the process of roasting, substantially as specified. 4th. In a roasting or drying furnace, a revoluble cylinder or tube in combination with a hollow rabble fixed relatively thereto to the interior thereof, said rabble comprising an air-tube having adjacent, communicating, direct and return flues with air-outlet passages leading into said cylinder, with means for preventing the air passages from becoming clogged, and means for supplying air to the said rabble while the cylinder is revolving, substantially as specified. 5th. In a roasting or drying furnace, a revoluble cylinder or tube in combination with a hollow rabble fixed relatively thereto, the said rabble comprising an air-tube having air-outlet passages leading into the said revoluble tube, and provided with a projecting ledge or flange whereby the a r passages are prevented from becoming clogged, and means for supplying air to the said rabble, substantially as specified. 6th. In a furnace for roasting or drying ores, the multiple, revoluble group of independent cylinders terminating in a single large tube or hood at the feed end of the apparatus, and terminating also in a single tube at the discharge end, in combination with means for revolving said cylinders, means for sending heated gases simultaneously through the same while in revolution, means for feeding ore to the same, and means for sending pure, hot, dry air through the said ore while being simultaneously agitated and heated, substantially as specified. 7th. In a furnace for roasting or drying ores, a multiple, revoluble group of cylinders provided both at the feed end and at the discharge end with an enlarged terminal tube or extension, in combination with a feeding hopper and chute, means for revolving the said tubes, and means for supplying air to the ore under treatment therein during the process of roasting or drying through a hollow rabble located in each cylinder, substantially as specified. 8th. In a furnace for roasting or drying ores, the multiple, hollow, revoluble group of tubes or cylinders a^1, a^2, a^3, a^4, in combination with the hollow rabbles l fixed relatively thereto, one in each tube, having return passages and outlet perforations, and means for supplying air, in conjunction with the said rabbles, to the ore during the process of drying or roasting, substantially as specified. 9th. In a furnace for roasting or drying ores, the multiple, hollow, revoluble group of tubes or cylinders a^1, a^2, a^3, a^4, in combination with the hollow rabbles l, one in each tube, fixed to the inside thereof, closed at both ends, having passages l^2, l^3, and perforations l^4, the supply-pipe m, air-box n, distributing-pipes n^1, n^2, n^3, n^4, and means for supplying air through the supply-pipe m and the distributing pipes while the furnace is in operation, substantially as specified. 10th. The combination of a multi tubular, revoluble cylinder, having a single terminal tube or extension at each end, hollow rabbles located one in each tube, fixed to the inside thereof, having direct and return passages and outlet perforations, means for revolving said cylinder, means for sending heated products ot combustion through all the tobes simultaneously during rotation, and means for supplying air through the said rabbles and their outlet perforations to the ore during its agitation while being revolved and heated, all substantially as and for the purposes specified. 11th. In a furnace for roasting or drying ores, a discharge end or hood provided with a conical end, said hood being also provided with discharge holes located around its periphery and near the point where the conical end is joined thereto, and means for covering said discharge holes, substantially as described. 12th. In a furnace for roasting and drying ores, the multiple revoluble group of independent cylinders terminating in a single large tube or hood provided with a conical end, said hood being also provided with discharge holes located around its periphery and at the point where the conical end is joined to the hood, and a band for covering said discharge holes, substantially as described.

No. 57,968. Apparatus for Rolling Metallic Beams, Columns, Girders, etc. (*Laminoir pour poutres métalliques, colonnes, etc.*)



Henry Grey, Duluth, Minnesota, U.S.A., 2nd November, 1897; 6 years. (Filed 20th September, 1897.)

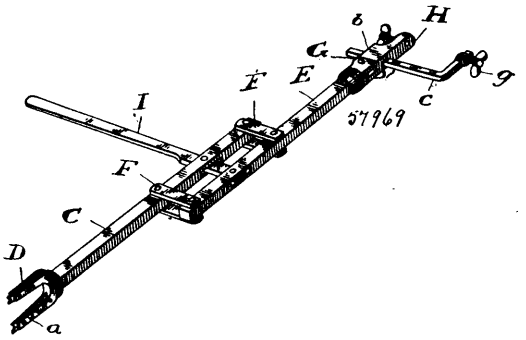
Claim.—1st. In rolling-apparatus of the character indicated, the combination of the positively driven top and bottom rolls, the friction-discs operatively connected with one of said rolls, the two vertical or upright side-rolls arranged at opposite ends, respectively, of the top and bottom rolls and centrally between the axes of said last mentioned rolls, the sliding friction-discs operatively connected with the upright side-rolls, and means acting continuously during the operation of the machine upon said last mentioned discs and maintaining them in frictional engagement with the first mentioned discs. 2nd. In rolling-apparatus of the character indicated, the combination of the positively driven top and bottom rolls, the friction-discs operatively connected with the top roll, the two vertical or upright side-rolls arranged at opposite ends, respectively, of the top and bottom rolls, and centrally between the axes of said last mentioned rolls, the friction-discs operatively connected with the upright side rolls, and means bearing upwardly upon said last mentioned discs and retaining them in frictional engagement with the first mentioned friction-discs, substantially as and for the purpose set forth. 3rd. In rolling-apparatus of the character indicated, the combination of the positively driven top and bottom rolls, the upright side-rolls arranged at opposite ends, respectively, of the top and bottom rolls and centrally between the axes of said last mentioned rolls, the two driving vertical friction-discs B^3, B^3, operatively connected with the different trunnions, respectively, of the top roll, and arranged with their diametrically larger ends vis-a-vis, the driven horizontally arranged bevelled or conical friction-discs operatively connected with the different upright rolls, respectively, and arranged below the different vertical friction-discs, respectively, and with their diametrically smaller ends uppermost, and means bearing upwardly upon the horizontal friction-discs and retaining their bevelled or conical surfaces in frictional engagegent with the bevelled or conical surfaces of the vertical discs, substantially as and for the purpose set forth. 4th. In rolling apparatus of the character indicated, the combination of the two positively driven horizontal top and bottom rolls, the two upright side rolls arranged at opposite ends, respectively, of the top and bottom rolls and centrally between the axes of said last mentioned rolls, a horizontal friction-disc transmitting motion to each upright roll, interlocking lugs formed upon said last mentioned roll and the friction-disc instrumental in transmitting motion to said roll, verticall friction-discs frictionally engaging the horizontal friction-discs and operatively connected with one of the aforesaid horizontal rolls, means acting to lift the horizontal friction-discs and re-, tain them in frictional engagement with the vertical friction-discse and the parts being so arranged that all of said rolls shall participat- in the feeding of the work. 5th. In rolling apparatus of the chare acter indicated, the combination of the lower horizontal roll B^2, th- upper horizontal roll B^1 adjustable vertically, mechanism for posi tively driving said rolls in opposite directions, respectively, two suitably supported vertical or upright side-rolls arranged at opposite ends, respectively, of the top and bottom rolls and centrally between the axes of said last mentioned rolls, and each of said upright rolls having a centrally located bore and the surrounding wall of said bore being provided with vertical lugs, a suitably supported horizontally arranged friction-disc within said bore and provided with vertical lugs interlocking with the lugs formed upon the surrounding wall of the bore, another friction-disc having frictional contact with said horizontal friction-disc and operatively connected with the top roll, and means acting to retain the aforesaid horizontal friction-disc in frictional contact with the engaging friction-disc, substantially as and for the purpose set forth. 6th. In rolling apparatus of the character indicated, the combination of the two positively driven top and bottom rolls, the two upright side-rolls adjustable apart and arranged at opposite ends, respectively, of the top and bottom rolls and centrally between the latter's axes, driving friction-discs operatively connected with or formed upon the trunnions of the top roll, other friction-discs operatively connected with the upright side-rolls and frictionally engaging and driven by the friction-discs upon the aforesaid trunnions, pistons supporting said driven friction-discs and passage-ways for conducting fluid under pressure to the lower end of said pistons, and the arrangement of parts being such that all of said rolls shall participate in the feeding of the work, substantially as and for the purpose set forth. 7th. In rolling-apparatus of the character indicated, the combination of the two suitably driven top and bottom rolls and arranged one above the other in the same vertical plane, the two vertical or upright side rolls adjustable apart and arranged at opposite ends, respectively, of the horizontal rolls, and centrally between the latter's axes, friction-discs operatively connected with or formed upon the trunnions of the top roll, horizontally arranged friction discs operatively connected with the upright rolls and frictionally engaging the friction-discs upon the aforesaid trunnions, pistons supporting the horizontal friction discs, chambers formed around the lower ends of said pistons, passage-ways for conducting fluid under pressure to said chambers, and the arrangement of parts being such that all of said rolls shall participate in the feeding of the work, substantially os and for the purpose set forth. 8th. In rolling apparatus of the character indicated, the combination of the two suitably driven top and bottom rolls arrauged one above the other in the same vertical plane, two vertical side-rolls arranged at opposite ends, respectively, of the first-mentioned rolls and centrally between the latter's axes; friction-discs operatively connected with or formed upon the top roll; horizontally-arranged friction-discs operatively connected with the upright rolls and frictionally engaging the first-mentioned friction-discs; hollow upright cylinders arranged centrally within the upright rolls; pistons supporting the horizontal friction-discs and extending into the said cylinders; the stuffing boxes at the upper ends of the cylinders; passage-ways for conducting fluid under pressure to the cylinders' chambers, and the arrangement of parts being such that all of said rolls shall participate in the feeding

of the work, substantially as and for the purpose set forth. 9th. In rolling-apparatus of the character indicated, the combination of the two suitably driven top and bottom rolls arranged one above the other in the same vertical plane; two vertical or upright side-rolls arranged at opposite ends, respectively, of the first-mentioned rolls and centrally between the latter's axes; friction-discs operatively connected with or formed upon the trunnions of the top roll; horizontally-arranged friction-discs operatively connected with the upright rolls and frictionally engaging the friction-discs upon the aforesaid trunnions; upright hollow cylinders affording bearing for the upright rolls and each cylinder having an external annular shoulder formed upon its lower end, and antifriction balls interposed between the opposing surfaces of said shoulder and the roll supported upon said shoulder; pistons extending into the chambers of the cylinders and bearing the horizontal friction-discs; passage-ways for conducting fluid under pressure to said cylinder chambers, and the arrangement of parts being such that all of said rolls shall participate in the feeding of the work, substantially as and for the purpose set forth. 10th. In rolling apparatus of the character indicated, the combination of the two suitably-driven top and bottom rolls arranged one above the other in the same vertical plane; two suitably supported vertical or upright side-rolls adjustable apart and arranged at opposite ends, respectively, of the first mentioned rolls and centrally between the latter's axes; friction-discs operatively connected with or formed upon the trunnions of the top roll; horizontally-arranged friction-discs operatively connected with the upright rolls and frictionally-engaging the friction-discs upon the aforesaid trunnions; pistons supporting the horizontal friction-discs; chambers formed around the lower ends of said pistons; passage-ways for conducting fluid under pressure to said chambers; ports extending upwardly through the pistons from and in open relation with said chambers and terminating at their upper ends, in nozzles or nipples arranged to discharge upwardly, and the arrangement of parts being such that all of said rolls shall participate in the feeding of the work, substantially as and for the purpose set forth. 11th. In rolling apparatus of the character indicated, the combination of the two suitably driven horizontal and parallel rolls arranged one above the other in the same vertical plane; two positively driven vertical or upright side-rolls arranged at opposite ends, respectively, of the horizontal rolls and centrally between the latter's axes; the suitably supported upright segmental thrust-plates for said upright rolls, and said plates being arranged on edge and opposite to the place of rolling, and any suitable number of suitably-supported upright anti-friction rolls interposed between said plates and the rolls, substantially as and for the purpose set forth. 12th. In rolling-apparatus of the character indicated, the combination of the two suitably driven horizontal and parallel rolls arranged one above another in the same vertical plane; upright housings at opposite ends, respectively, of said rolls and supporting the lower roll; two suitably-driven vertical or upright side-rolls arranged at opposite ends, respectively, of the horizontal rolls and centrally between the latter's axes; two blocks bearing the different side-rolls, respectively, and supported from the different housings, respectively, and means for adjusting the upper horizontal roll vertically; two sides secured to the different roll-bearing blocks, respectively, and supported from the different housings, respectively, and means for adjustiag said slides toward and from each other, substantially as set forth. 13th. In rolling-apparatus of the character indicated, the combination of the two suitably-driven horizontal and parallel rolls arranged one above the other in the same vertical plane; upright housings at opposite ends, respectively, of said rolls and supporting the lower roll; two positively driven vertical or upright side-rolls arranged at opposite ends, respectively, of the horizontal rolls and centrally between the latter's axes; two blocks bearing the different side-rolls, respectively, and supported from the different housings, respectively; means for adjusting the upper horizontal roll vertically; two slides secured to the different roller bearing blocks, respectively, and supported from the different housings, respectively, means for adjusting said slides toward and from each other, a pair of guide-bars arranged at opposite sides of the work's path leading to the rolls; another pair of guide-bars arranged at opposite sides, respectively, of the work's path leading from the rolls, and the members of each pair of guide-bars being rigidly secured to the adjacent roll-bearing block and the slide connected with said block, and shoulders or seats formed upon the said blocks for the guide-bars, substantially as and for the purpose set forth. 14th. In rolling-apparatus of the character indicated, the combination of the positively driven horizontal rolls arranged to operate upon the inside of the flanges and both sides of the web; positively driven vertical or upright rolls arranged to work on the outside of flanges; and positively driven horizontal rolls arranged to operate upon the edges of the flanges, and mechanism or apparatus for working all of said rolls in unison in a like direction, and said rolls having furthermore such relative arrangement that all of them simultaneously operate upon the piece of work under manipulation during every pass of said work.

No. 57,969. Car Mover. (*Impulseur de chars.*)

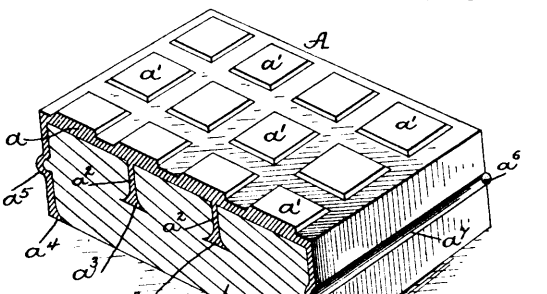
Paul Wise and Nichols Wise, both of Germania, Ontario, Canada, 3rd November, 1897; 6 years. (Filed 11th October, 1897.)

Claim.—1st. A device for moving cars and other heavy bodies comprising two bars pivotably connected by two or more links and adapted respectively to engage a fulcrum and the body to be moved in combination with a lever pivoted to the said bars so that they may be moved longitudinally with respect to one another, substantially



as and for the purpose specified. 2nd. A device for moving cars and other heavy bodies, comprising two bars pivotally connected by two or more links, one bar being adapted to engage a fulcrum and the other provided with jaws adapted to engage a car sill and hinged to the said bar, in combination with a lever pivoted to the said bars so that they may be moved longitudinally with respect to one another, substantially as and for the purpose specified. 3rd. In a device for moving cars and other heavy bodies the combination of two bars, two or more links pivotally connecting the said bars, jaws connected to one of the said bars and adapted to grasp the top of a rail, jaws of adjustable width hinged to the upper end of the other bar, and a lever pivoted to the said bars so that they may be moved longitudinally with respect to one another, substantiallly as and for the purpose specified, 4th. In a device for moving cars and other heavy bodies, the combination of two bars, two or more links pivotably connecting the said bars, jaws swivelled to the lower end of one of the said bars and adapted to grasp the top of a rail, jaws of adjustable width hinged to a piece swivelled to the upper end of the other bar, and a lever pivoted to the said bars so that they may be moved longitudinally with respect to one another, substantially as and for the purpose specified. 5th. In a device for moving cars and other heavy bodies, the combination of two bars, two or more links pivotally connecting the said bars, a jaw connected to the lower end of one of the said bars and made V shaped to grasp the top of a rail, jaws one half of which slides through and is adjustable with respect to the other, a set-screw threaded through one part of the said jaws, a hinged connection between the jaws and the upper end of the upper bar, and a lever pivoted to the said bars so that they may be moved longitudinally with respect to one another, substantially as and for the purpose specified. 6th. In a device for moving cars and other heavy bodies, the combination of two bars, two or more links pivotally connecting the said bars; a jaw swivelled to the lower end of one of the said bars and made V-shaped to grasp the top of a rail, jaws one half of which slides through and is adjustable with respect to the other, a set-screw threaded through one part of the said jaws, a swivelled and hinged connection between the jaws and the upper end of the upper bar, and a lever pivoted to the said bars so that they may be moved longitudinally with respect to one another, substantially as and for the purpose specified.

No. 57,970. Combination Paving Block and System of Paving. (*Système de bloc de pavage.*)

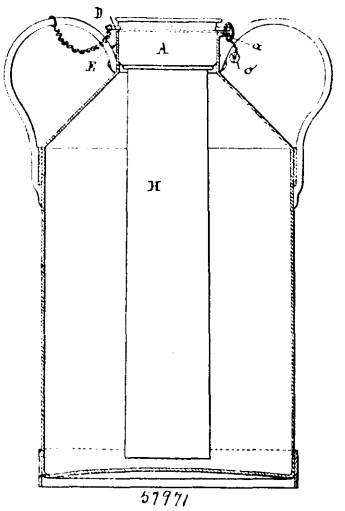


William Hance Northcutt, Troy, and Robert Macy Pearson, Pleasant Hill, both in Ohio, U.S.A., 3rd November, 1897; 12 years. (Filed 9th July, 1897.)

Claim.—1st. A paving block having a metallic shell, comprising a top of raised or roughened design, formed with internal depending locking flanges, four sides or walls provided on the inside with continuous tongues on two sides and continuous grooves on two sides or walls, open bottom with continuous inwardly projecting flange around its four walls, all formed integral, and a hard heavy interior

filling, substantially as set forth and described. 2nd. A paving block having a metallic shell, comprising a top of raised or roughened design, formed with internal locking flanges depending from the top, four sides or walls provided with continuous tongues on two sides and continuous grooves on the remaining two sides or walls, angular ledge or extension extending outwardly along one side near the bottom, open bottom with continuous flange at the bottom projecting inwardly around its four walls, all formed integral, and a hard heavy interior filling, substantially as set forth and described. 3rd. An improved paving block consisting of a metallic shell, having a top of raised or roughened design formed with internal depending locking flanges; four sides or walls provided with a tongue on one side, a half tongue on one side, two continuous grooves on two sides, bottom angular ledge or extension along one side, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as and for the purposes specified. 4th. An improved paving block for lock rows of pavements, consisting of a metallic shell, having a top of raised or roughened design, formed with internal depending locking flanges, four sides or walls provided with tongue on one side, a continuous groove as to three sides, an angular groove on bottom of two sides, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as described. 5th. An improved paving block for lock rows of pavements, consisting of a metallic shell, having a top of raised or roughened design, formed with internal depending locking flanges, four sides or walls provided with continuous grooves as to three sides, angular grooves on bottom of two sides, one side or end perfectly smooth, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as and for the purposes specified. 6th. In a key block for pavements, consisting of a metallic shell, having a top of raised or roughened design, having screw-threaded holes to receive screw-threaded shanks of lifters, and formed with internal depending locking flanges, four sides or walls, two opposite ones of which are smooth, in the bottom of other two along their entire length an angular groove, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as and for the purposes specified. 7th. An improved paving block consisting of a metallic shell, having a top of raised or roughened design, formed with internal depending locking flanges, four sides or walls provided with tongues continuous on three sides, groove on one side, angular ledge or extension along bottom of one side, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as and for the purposes indicated and described. 8th. An improved paving block consisting of a metallic shell, having a top of raised or roughened design, formed with internal depending locking flanges; four sides or walls provided with tongues, continuous on two sides, a tongue along half of one side, groove on one side, angular ledge or extension along bottom of one side, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as and for the purposes indicated and described. 9th. A paving block having a metallic shell, comprising a smooth top formed with internal depending locking flanges, four sides or walls provided with a tongue on one side and grooves continuous on three sides, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as shown and described. 10th. An improved paving block for gutters, consisting of a metallic shell, having a smooth top or surface, formed with internal depending locking flanges, four sides or walls provided with continuous tongues as to two sides, continuous, groove as to two sides, open bottom with continuous flange around its four walls, all formed integral, a hard heavy interior filling, substantially as and for the purposes set forth and described. 11th. An improved paving block for curbs, consisting of a metallic shell having internal locking flanges, a tongue and ledge in a straight line across its face, a groove on its two opposite edges, open back with continuous flange around the four walls or edges, all formed integral, a hard heavy interior filling, substantially as and for the purpose described. 12th. An improved paving block for curbs, consisting of a metallic shell, having internal locking flanges, a tongue and ledge at an incline or slant across its face, when a summit is needed, a groove or tongue on its two opposite edges, open back with continuous flange around the four walls or edges, all formed integral, a hard heavy interior filling, substantially as and for the purposes set forth and described. 13th. An improved paving block for curbs, consisting of a metallic shell having internal locking flanges, a tongue and ledge on its face, a tongue on its two opposite edges, open back with continuous flange around its four walls or edges, all formed integral, a hard heavy interior filling, substantially as and for the purposes indicated and described. 14th. In a pavement, the combination of a row of paving lock blocks, rows of interlocking blocks on each side of the lock blocks, a row of gutter blocks and curb blocks on the outside of the interlocking blocks, a key block D in the middle of the row of lock blocks for holding all the blocks intact, substantially as set forth. 15th. A solid wooden block for ornamental or inlaid work, comprising a continuous tongue on two sides or ledges, a groove on two opposite sides or ledges, each block so formed that when laid, the grain of one block will impinge against and crosswise the grain of alternating or abutting blocks, thus preventing warping, substantially as specified.

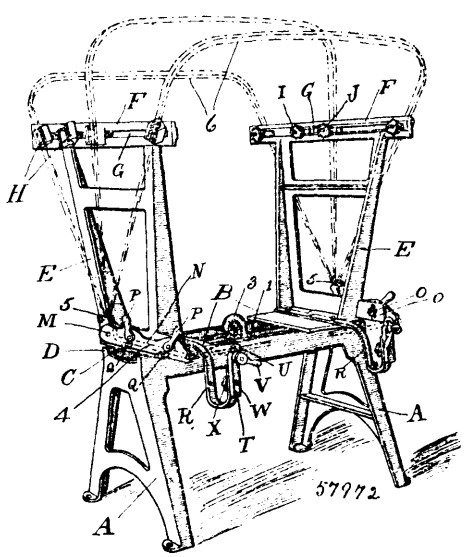
No. 57,971. Apparatus for the Preservation and Conveyance of Milk. (*Appareil pour la preservation et transport du lait.*)



Ernest Wiart, Paris, France, 3rd November, 1897; 6 years. (Filed 22nd October, 1897.)

Claim.—An improved receptacle for the conveyance of milk to long distances, and for the preservation of the same, by means of a central ice-holder or refrigerator which maintain a sufficiently low temperature to prevent any deterioration of the constituents of the milk, said ice-holder being fixed hermetically under pressure inside the throat of the milk-container, as herein described and set forth.

No. 57,972. Adjustable Forms for Setting and Building Carriage Tops. (*Forme pour la fabrication de capotes de voitures.*)

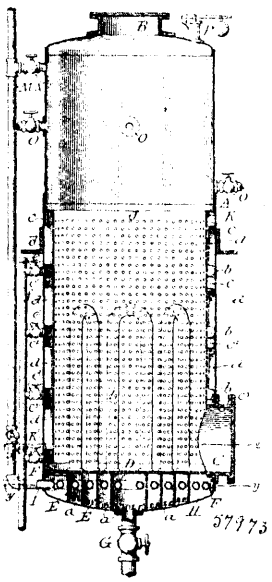


Judson E. Oakes, Newport, Maine, U.S.A., 3rd November, 1897; 6 years. (Filed 22nd October, 1897.)

Claim.—1st. In an adjustable form for building and setting carriage tops, in combination, a stand, base blocks adapted to slide laterally thereon, vertical uprights rigidly attached to said base blocks and provided on their upper extremities with cross bars provided with longitudinal slots, blocks adapted to slide therein, said blocks being provided with a rubber lining containing one or more indentations, means for holding the carriage top rail in position and means for causing said uprights to be moved in a longitudinal direction, substantially as and for the purposes set forth. 2nd. In an

adjustable form for building and setting carriage tops, in combination, a stand, base blocks adapted to slide thereon, uprights rigidly attached to said base blocks, said uprights being provided with cross bars, said cross bars provided with slots, blocks lined with rubber adapted to slide in said slots, indentations in said rubber, plates pivotally attached to the lower end of said uprights, said plate being provided with cams and lugs, a bent iron rigidly attached at one end to said base blocks and capable of a vertical adjustment at its outer end, ears in said base blocks, a right and left screw rigidly attached to said base and meshing with ears in the bottom of said base blocks for causing said uprights to be brought near together or extended farther apart, substantially as and for the purposes set forth. 3rd. In an adjustable form for building and setting carriage tops, in combination, a stand, base blocks adapted to slide thereon, a carriage top rail holder attached to said base blocks, consisting of a plate provided with lugs and cams, a drop iron provided with a slot in one end thereof, a movable plate provided with means for holding the carriage top rail, a bolt on said plate adapted to register in said slot so as to allow said plate a vertical adjustment, substantially as and for the purposes set forth. 4th. In an adjustable form for building and setting carriage tops, in combination, an adjustable rail supporter connected with the base and form consisting of a plate provided with lugs, cam levers pivotally mounted on said plate and over said lugs, a plate provided with a hooked end and cam lever pivoted thereto, said plate being attached to said bent iron by means of a suitable thumb nut, said thumb being adapted to register with the slot in said iron to allow said plate a vertical adjustment, substantially as and for the purposes set forth.

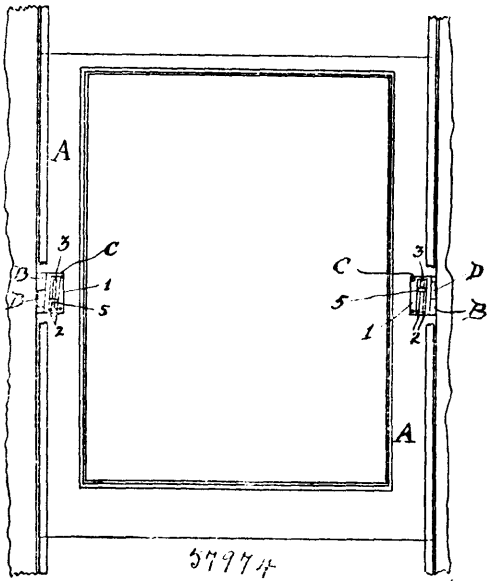
No. 57,973. Procss of an Apparatus for Separating Liquids and Solids. (*Procédé et appareil pour la séparation de liquides des solides.*)



The Detroit Liquid Separating Co., assignee of Marvin H. Chamberlain, both of Detroit, Michigan, U.S.A., 3rd November, 1897 ; 6 years. (Filed 18th June, 1897.)

Claim.—1st. The process of treating garbage, distillery slops, and the like, which consists in suspending such material upon a perforate surface in a closed vessel ; passing a cooking agent through said material and allowing its escape from the vessel when a determinate pressure is obtained ; shutting off the cooking agent when the material is sufficiently cooked ; allowing the grease, water, etc., to drain from the material ; and finally admitting fluid pressure above the material for compression and expulsion of the remaining liquid therein. 2nd. The process of treating garbage, distillery slops, and the like, which consists in suspending such material upon a perforate surface in a closed vessel ; passing a cooking agent through said material at a comparatively low pressure ; shutting off said agent when the material is sufficiently cooked ; allowing the contained liquid to drain from the material ; and finally admitting fluid under high pressure, above the material for compression and expulsion of the remaining liquid. 3rd. The process of treating garbage, distillery slops and the like, which consists in sustaining such material by an extended perforate surface ; and applying fluid pressure to a comparatively small surface of the material from above. 4th. The combination with the shell or casing, of a perforated grid ; a series of annular supports for said grid, having openings or spaces formed on their lower edges, and an opening in the bottom of the tank. 5th. The combination with the shell or casing, of a perforated false bottom or grid ; a series of supports for the grid, having openings or passages in their lower edges ; an opening in the tank beneath the grid ; and an annular screen or sieve secured at a distance from the shell or casing above the false bottom. 6th. The combination with the shell or casing, provided with the filling and discharge openings ; of the perforated grid or bottom secured near the base of the tank ; supports for the grid ; an opening in the tank bottom below the grid ; a perforated coil in proximity to the grid ; a pipe connected to the coil extending toward the upper end of the tank ; a pipe entering at or near the top of the tank, and an adjustable blow-off valve.

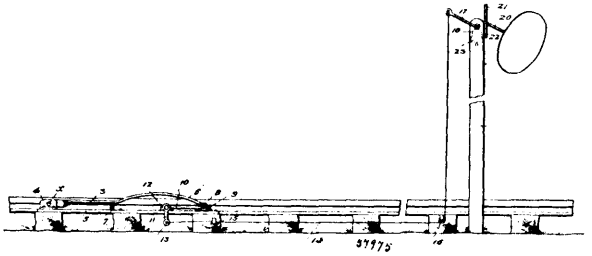
No. 57,974. Sash Fastener. (*Arrête-croisée.*)



George Francis Stansbury, Clarence E. Travers, both of Weedsport, and Ezra W. W. Smith, Albany, all in New York, U.S.A., 3rd November, 1897 ; 6 years. (Filed 18th October, 1897.)

Claim.—A sash-fastener consisting of a plate C, bent longitudinally to form members 1 and 6 ; each of said members having a slotted opening formed in it, a bearing plate D, of a wedge-like form and having a lug 8, formed to project from its inner face and fitted to move in a slotted opening, 7, in the member 6, and a screw 4, which engages in said lug and is fitted to move in a slot 3, formed in the member 1, as specified.

No. 57,975. Danger Signal for Railway Crossings.
(*Signal de danger pour traverses de chemins de fer.*)



Oscar Putman Bonner, Crawfordville, Georgia, U.S.A., 3rd November, 1897 ; 6 years. (Filed 21st October, 1897.)

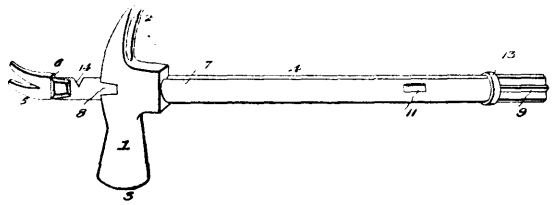
Claim.—An automatic railway crossing signal, comprising the lever 3, fulcrumed on the bracket 4, fixed to the plate five, and having its curved portion six projecting into the path of the car-wheels, the spring 7 arranged to project said lever into the path of the car-wheels the pin 8, fixed in the free end of said lever and extending through the guide-bracket, 9, the bell-crank lever 11, having its horizontal arm pivoted to said pin, in combination with the shaft 18, formed with a crank-arm 17, connected to the vertical arm of said bell-crank lever by a flexible rod, an alarm bell mounted on said shaft, and a signal vane mounted on an approximately horizontal arm of the shaft, and a guide-bracket 22, adapted to limit the motion of the horizontal arm of said shaft, substantially as shown and described.

No. 57,976. Fence Tool. (*Outil pour clôtures.*)

John Hardenbrook Brown, Malta, Illinois, U.S.A., 3rd November, 1897 ; 6 years. (Filed 23rd October, 1897.)

Claim.—1st. A fence tool comprising a handle and hammer, said handle being provided with a longitudinal rib and a series of sockets,

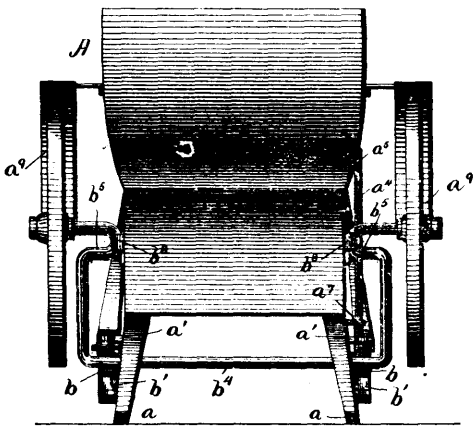
a claw having a sliding engagement with the head of the hammer, and provided with a shank having a groove to engage said handle



rib, and a spring stud to engage said sockets, substantially as set forth. 2nd. A fence tool comprising a handle and hammer, said handle being provided with a longitudinal rib and a series of sockets, a claw having a shoulder adapted to engage a recess formed in the head of the hammer, and having a shank provided with a groove adapted to receive the longitudinal rib of the handle, and a spring stud to engage the sockets in the handle, substantially as set forth. 3rd. A fence tool comprising a hammer and handle, and a claw and shank having a sliding connection therewith, said shank having a wire cutter adapted to act in conjunction with the head of the hammer for severing a wire, substantially as set forth.

No. 57,977. Sleigh and Carriage Combined.

(*Traineau et carrosse combinés.*)



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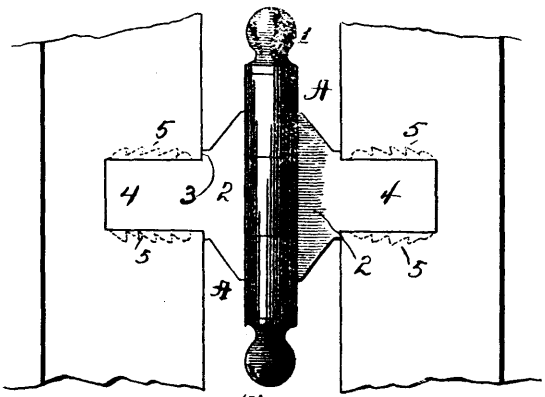
Jean Louis Phillippe Houde, Montreal, Quebec, Canada, 3rd November, 1897; 6 years. (Filed 23rd October, 1897.)

Claim.—1st. The combination with a sleigh, of a running gear connected thereto, said gear being adapted to be moved to an operative or inoperative position. 2nd. The combination with a sleigh, of an axle provided with wheels pivotally connected thereto and adapted to be moved into and out of of an operative position, and means for rigidly securing said axle in its operative position. 3rd. The combination with a sleigh, of a running gear connected thereto, said gear being adapted to be moved into and out of an operative position, and being rigidly affixed and yieldingly mounted to said sleigh when in an operative position. 4th. The combination with a sleigh, having a running gear connected thereto, said gear being adapted to be moved into and out of an operative position, of shafts pivotally connected to said sleigh, and means for forming a rigid connection between said shafts and said sleigh, when said running gear is in an operative position. 5th. A combined sleigh and wagon comprising a sleigh body having runners and foot boards, an axle provided with wheels, pivotally connected to said sleigh-body and adapted to be moved into and out of an operative position, bearings yieldingly connected to said sleigh-body for said axle when the same is in its operative position, shafts pivotally connected to said runners, and bolt connected to said shaft adapted to be removably connected to said runners when said axle is in its operative position, substantially as described. 6th. The combination with a sleigh, of a brake comprising a bar pivotally mounted on the runner of said sleigh, said bar having one end adapted to be passed through an opening in saidrunner, a handle pivotally connected to said bar, said handle being provided with notches, a clip mounted on said sleigh adapted to engage with said notches, and a spring for holding said clip in engagement with said notches, substantially as described.

No. 57,978. Hinge. (*Gond.*)

Richard W. Hubbard, Ashtabula, Ohio, U.S.A., 3rd November 1897; 6 years. (Filed 23rd October, 1897.)

Claim.—1st. A hinge comprising two sections of members, the shanks of which have flat inner faces, said shanks bent outwardly so that they lay parallel and slightly placed apart when the hinge is closed, the shanks provided with fin-shaped toothed projections on their upper and lower edges, said fins inclining slightly outward, and



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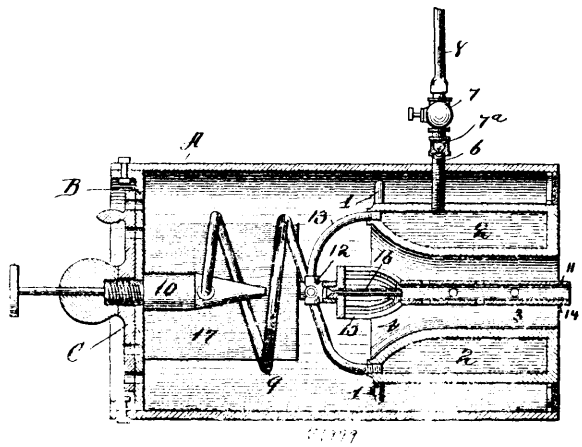
their teeth extending inward from the end of the shank. 2nd. The comination with a hinge, the sections of which are provided with a shank, of a centreing plate adapted to be temporarily interposed between said shanks, substantially as and for the purpose described.

No. 57,979. Device for Thawing Earth for Placer Mining. (*Appareil pour dégeler la terre pour l'exploitation des mines.*)



Frank Kraemer, Chicago, Illinois, U.S.A., 3rd November, 1897; 6 years. (Filed 21st October, 1897.)

Claim.—1st. A heater of the kind specified, comprising an outer cylinder provided with a perforated head controlled by a valve, a cylinder concentrically mounted within said outer cylinder and provided with a central opening, pipes connecting said cylinder with a burner rearwardly of the same, connection between said pipes and a burner situated in said central opening, a valve controlling said last named burner, a pipe connecting said inner cylinder with a source of supply of oil, and a valve in said pipe, substantially as described. 2nd. A heater of the kind specified, comprising an outer cylinder provided with a perforated head controlled by a valve, a cylinder concentrically mounted within said outer cylinder and provided with a central opening, having a flaring rear end, a screen closing the mouth of the concentric space between said cylinders, pipes connecting said cylinder with a burner rearwardly of the same, connection between said pipes and a burner situated in said central opening, a valve controlling said last named burner, a pipe connecting said inner cylinder with a source of supply of oil, and a valve in said pipe, substantially as described.

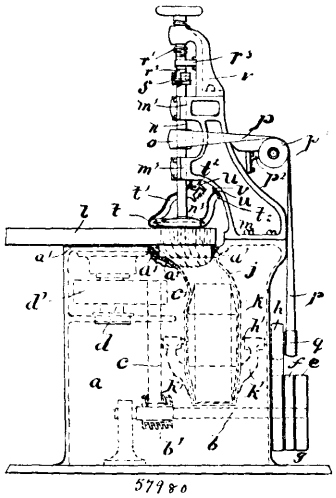
No. 57,980. Sole Splitting Machine.

(*Machine à fendre les semelles.*)

Francis Joseph Freese, Lowell, Mass., U.S.A., 3rd November, 1897; 6 years. (Filed 23rd October, 1897.)

Claim.—1st. In a sole splitting machine, the combination with the cutter or knife, of a feed device in the form of a horizontally rotating perforated table or carrier adapted to carry a series of blanks, a yielding resistance device in the form of a plain roller with spring controlled support therefor adapted to bear upon said blanks as they approach the cutter and a section device acting upon a limited number of the perforations in the table with means for operating the cutter and feed, for the purpose set forth. 2nd. In a sole

splitting machine, the combination with the cutter and means for adjusting same, of a feed device in the form of a horizontally rotat-



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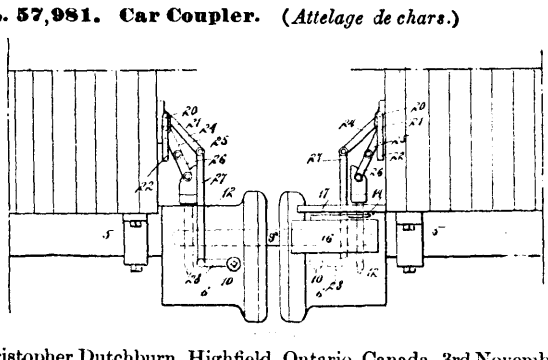
ing perforated table or carrier adapted to carry a series of blanks, a yielding resistance device in the form of a plain roller with spring controlled support therefor adapted to bear upon said blanks as they approach the cutter, and a suction device acting upon a limited number of the perforations in the table, with means for operating the knife and feed, for the purpose set forth. 3rd. In a sole splitting machine. the combination of the cutter, a perforated travelling table or carrier for the blanks, a suction device having a single tube, the mouth of which acts directly beneath the perforations in said table, and means for operating same, for the purpose set forth. 4th. In a sole splitting machine, the combination of the cutter, a perforated table or carrier revolving in a horizontal plane capable of carrying a number of blanks, a suction device having a single tube, the mouth of which acts directly beneath the perforations in said table and means for operating same, for the purpose set forth. 5th. In a sole splitting machine, the combination of the cutter, means for adjusting same, a perforated travelling table or carrier for the blanks, a suction device having a single tube, the mouth of which acts directly beneath the perforations in said table communicating only with a limited number of the perforations at a point in advance of the cutter and means for operating same, for the purpose set forth. 6th. In a sole splitting machine, the combination of the cutter, a perforated travelling table or carrier for the blanks, a suction device having a single tube, the mouth of which acts directly beneath the perforations in said table, communicating only with a limited number of the perforations at a point in advance of the cutter, a yielding pressure device and means for operating the cutter, table and suction device, for the purpose set forth. 7th. In a sole splitting machine, a feed device in the form of a perforated travelling table and a suction device having a single tube the mouth of which acts directly beneath the perforations in said table and only upon a limited number of the perforations therein. 8th. In a sole splitting machine, the combination with the inclosing casing having an opening in its upper side, of the cutter, the means for adjusting same, the revolving perforated feed table above said casing and travelling across the opening in the upper side of the casing, the suction conduit communicating at its upper end with said opening and at its lower end with the outer air, the suction fan within said conduit, the yielding pressure device adapted to bear upon the blanks carried by the table as they approach the cutter, and means for operating the whole, as and for the purpose set forth.

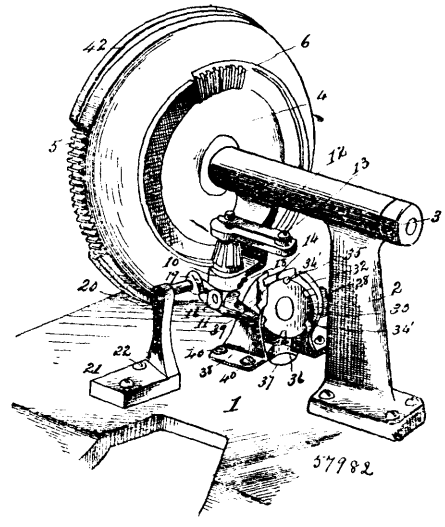
No. 57,981. Car Coupler. (*Attelage de chars.*)



Christopher Dutchburn, Highfield, Ontario, Canada, 3rd November, 1897; 6 years. (Filed 22nd October, 1897.)

Claim.—1st. The combination with a coupling head having a throat, and a ledge extending out from one side of the throat, of a plate sliding horizontally through the coupling head and serving to support a pin out of the throat, a wing attached to the plate and having a lug projecting into the throat, the wing being located beneath the ledge of the coupling head, and a spring pressing the wing inward and also located beneath the ledge. 2nd. In a car coupling, the combination of a coupling head having a vertical passage run therethrough to receive the pin, and having a horizontal passage intersecting in the vertical passage, a plate sliding through the horizontal passage and capable of supporting a pin in the vertical passage, a wing pivoted to the outer side of the coupling head and attached to the plate, and a spring pressing the wing to hold the plate inward, the coupling head having a ledge overhanging the wing to protect the same.

No. 57,982. Knotter Mechanism for Grain Binders, etc. (*Appareil à nouer pour lieuses à grain, etc.*)



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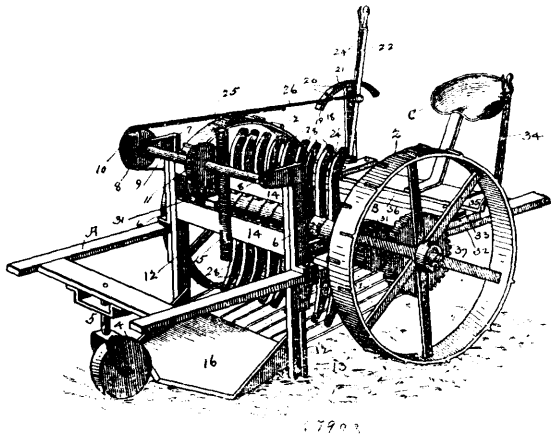
Thomas Measures, Ogden Centre, Michigan, U.S.A., 3rd November, 1897; 6 years. (Filed 21st October, 1897.)

Claim.—1st. In a knotter machanism for grain-binders, knotter-bills and means for revolving the same intermittently, a spindle carrying the knotter-bills journalled in a bearing secured to the base, a spring having one end secured to the bearing and the opposite free end engaging with the pindle for exertnig an upward pull thereon to normally hold the knotter-bills against the underside of the bearing and to take up the wear incident to the revolution of the knotter-bills. 2nd. In a knotter mechanism for grain-binders, knotter-bills and means for revolving the same intermittently, a spindle carrying the knotter-bills journalled in a bearing secured to the base, a spring having one end secured to the bearing and the opposite end engaging with the spindle for exerting an upward pull thereon to normally hold the knotter-bills against the underside of the bearing and to take up the wear incident to the revolution of the knotter-bills, cam-faces upon opposite sides of one of the knotter-bills, one of said cam-faces normally bearing against the underside of the bearing, due to the tension of the spring, the opposite cam-face extending beyond the bills, a recess in the bearing in the path of the first-mentioned cam-face, and a projection secured to the base of the path of travel of the latter-mentioned cam-face, whereby the bills are forced open against the tension of the spring to receive the binding-twine. 3rd. In a knotter mechanism for grain-binders, a drive-wheel, a twine holding and cutting mechanism operated thereby, comprising bearings secured to the base and extending upwardly therefrom, a spur-gear journalled in one of the bearings, a holding-disc secured upon the gear to turn therewith, a bolt passing through the bore of the spur-gear and the opposite bearing for assembling the several parts together, a depression in the upper face of one of the bearings, a like depression in the holding-disc around its periphery, and means for intermittently presenting successively the depressions of the holding-disc in alignment with the depression in the bearing, and a flange extending upwardly from the bearing to embrace the holding-disc. 4th. In a knotter mechanism for grain-binders, knotter-bills and means for revolving the same intermittently, a spring for exerting an upward pull upon the knotter-bills, cam-faces upon opposite sides of one of the bills, one of which projects beyond the bills, and a projection secured to the base in the path of travel of the said projecting cam-face for forcing open the knotter-bills for receiving the twine, said projection being mounted upon the base through the intervention of screws, whereby the arm can be adjusted vertically to open the knotter-bills to any desired angle, and to compensate for wear of the knotter-bills. 5th.

In a knotter mechanism for grain-binders, knotter-bills and means for revolving the same, a removable stud upon one of the bills projecting above the same, and a recess in the opposite bill to receive the end of the stud. 6th. In a knotter mechanism for grain-binders, the drive wheel provided with peripheral cam groove, a pin in the path of said groove secured to the end of the stripper blade supported directly under said drive wheel, said cam imparting an intermittent reciprocating motion to said stripper blade, for the purpose substantially as described. 7th. In a knotter mechanism for grain-binders, in combination with the knotter-bills, drive wheel, cutting and holder discs, the twine guide for guiding the twine into position upon the knotter-bills and to prevent displacement of same, substantially as described.

No. 57,983. Potato Digger. (*Arrache-patates.*)

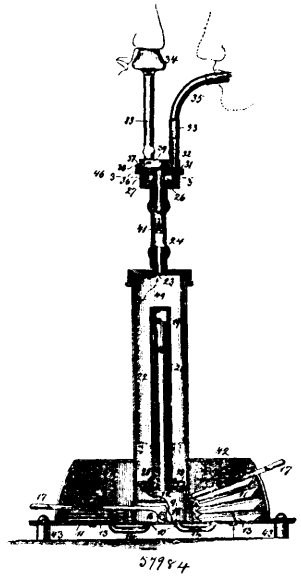


George Willard Johnson, Council Bluffs, Iowa, U.S.A., 3rd November, 1897; 6 years. (Filed 15th October, 1897.)

Claim.—In a potato digger, the combination of a rectangular frame A, of ground-wheels journalled thereto and having gear-wheels thereon, a frame B, situated upon frame A, said frames so arranged as to slide upon the pins 32, a drum-like shaft having radial fingers journalled to said frame B, gear-wheels 31 situated on the outside of the axle 29 and engaging with gear-wheels situated upon the ground-wheels, substantially as described.

No. 57,984. Air-injector and Mixer.

(*Injecteur et mélangeur d'air.*)



Bradford McGregor, Covington, Kentucky, U.S.A., 3rd November, 1897; 6 years. (Filed 6th October, 1897.)

Claim.—1st. In an air-injector, the combination of an air-chamber, a double-acting air-compressor supplying it with air in a manner that a continuous current of it is caused to leave therefrom, a mixing-chamber which the air so compressed is caused to enter, and in which it is brought in contact with certain substances which it is adapted to take up, said two chambers connected by a conduit which has an ascending and descending branch and air-discharge-pipes having their outer ends provided with suitable nozzles fitted for insertion into the outer openings of the respiratory ducts. 2nd. In an air-injector, the combination of an air-chamber, a double-acting air-compressor supplying air in a manner that a continuous current of it is caused to leave the former, a distributing-chamber receiving the compressed air from the air-chamber first mentioned, air-discharge-pipes communicating with said distributing-chamber and a cut-off device controlling all air-outlets and whereby the air may be entirely cut off from the discharge-pipes, or be permitted to pass out through certain ones only. 3rd. In an air-injector, the combination of an air-chamber, an air-compressor supplying air to it, a mixing-chamber 22, a connecting conduit through which it receives the air from the air-chamber, said conduit having an ascending and descending branch whereby the air is caused to enter the mixing-chamber near the bottom thereof, the outlet thereat being constructed to cause the air to discharge in jets and air-discharge-pipes having their outer ends provided with suitable nozzles adapted for insertion into the parts and openings where the air is to be applied. 4th. In an air-injector, the combination of an air-chamber, an air-compressor supplying air to it, a mixing-chamber 22, a connecting conduit through which it receives the air from the air-chamber, which conduit is formed by a tube 18 extending upwardly from the outlet of the air-chamber and a tube 19 of larger diameter, closed at its upper end, surrounding tube 18, the air passing up in the latter, and down in the space between the tubes, the outer tube having a flange 28 around its lower end with downwardly extending lugs, whereby such end is elevated to permit the air to pass out, dividing it at the same time in numerous jets and air-discharge-pipes having their outer ends provided with suitable nozzles adapted for insertion into the parts and openings where the air is to be applied. 5th. In an air-injector, the combination of an air-compressor, an air-chamber receiving air from it, a mixing-chamber superimposed upon and in communication with the air-chamber from which it receives the compressed air, a distributing-chamber above the mixing-chamber which receives the compressed and medicated air after it has passed through the two chambers first mentioned, a neck 24 provided with a check-valve connecting it with the mixing-chamber, air-discharge pipes communicating with the said distributing-chamber and a cut-off device whereby the air may be entirely cut off from the discharge-pipes or be permitted to pass out through certain ones only. 6th. In an air-injector, the combination of an air-compressor, an air-chamber receiving air from it, a distributing-chamber receiving the air from the air-chamber, air-discharge-pipes mounted upon the top of the latter and communicating with the interior thereof, a pivotally-supported cut-eff plate with openings controlling the outlet from the distributing-chamber through said air-discharge-pipes, and capable of adjustment to cut off such outlet entirely or limit it, and stops indicating certain positions of said cut-off plate for certain purposes. 7th. In an air-injector, the combination of an air-chamber, two bellows connected to each other in a manner which causes them to act simultaneously, one for receiving, the other for discharging air, so that one is always supplying air to the air-chamber, whereby an uninterrupted current is caused to leave the latter, air-conduits 14 connecting the bellows with the air-chamber, receiving- and discharge-valves for both, a mixing-chamber 22, a connecting conduit through which it receives the air from the air-chamber, said conduit having an ascending and a descending branch whereby the air is caused to enter the mixing-chamber near the bottom thereof, the outlets thereat being constructed to cause the air to discharge in jets, a distributing-chamber receiving the air from the mixing-chamber, three air-discharge-pipes mounted upon the top of the distributing-chamber and having their ends fitted with suitable nozzles for application and a pivotally-supported cut-off plate with openings controlling the outlet from the distributing-chamber through said air-discharge-pipes, and capable of adjustment to cut off such outlet entirely, or limit it, and stops indicating certain positions of said cut-off plate for certain purposes.

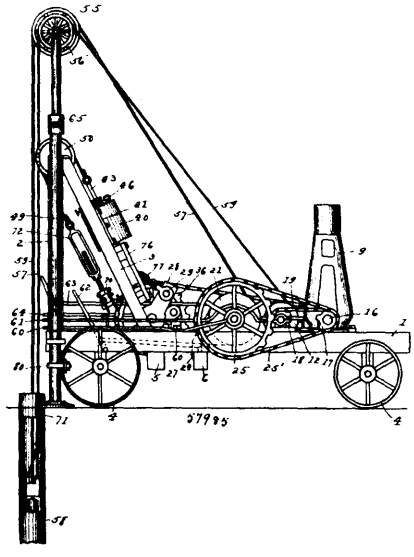
No. 57,985. Well Drilling Apparatus.

(*Appareil pour creuser les puits.*)

Frank M. Kennedy, Celina, Ohio, U.S.A., 3rd November, 1897; 6 years. (Filed 25th October, 1897.)

Claim.—1st. In a well-drilling apparatus, a feed mechanism for the drilling tool consisting of a rotatable crank-shaft mounted in suitable bearings on the main frame and having a fixed radial arm, as shown; a sleeve loosely mounted on said shaft, having at its inner end a fixed arm adapted to engage the said radial arm during one-half of each revolution thereof, as described, and provided with a fixed sprocket-wheel adapted to be actuated from the engine-shaft; an air-cylinder arranged between the said crank-shaft and the temper-screw, having a reciprocating piston adapted to cushion the shock to the main frame; and a flexible connection between said crank-shaft and the drilling tool, substantially as described. 2nd. A feed mechanism for well-drilling apparatus, comprising a crank-shaft rotatably mounted on the main frame, having a fixed arm thereon to actuate the same; and a sleeve 33 rotatably mounted on said shaft, and carrying a fixed arm at its inner end adapted to engage the said fixed arm in the crank-shaft during one-half of each revolution thereof for the purpose of permitting a free drop of the drilling tool, as described; means for actuating the said sleeve; and the air-cylinder 40 arranged as shown, and adapted to relieve the

main frame from the shock and vibration incident to the fall of the drilling tool. 3rd. In a feeding mechanism for a well-drilling

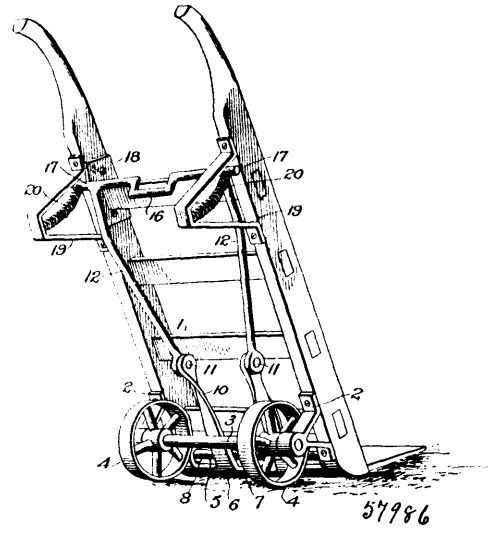


apparatus, a means for cushioning the shock of the drilling tool, consisting of an air-cylinder 40 fixed on the main frame, as shown and provided with a proper inlet and safety valves, a piston 42 arranged in said cylinder upon the piston-rod 43, whose projecting ends are respectively connected to the actuating crank-shaft and to the temper-screw, all substantially as described. 4th. In the feeding mechanism of a well-drilling apparatus, a flexible connection between the actuating shaft and the drilling cable or temper-screw, consisting of a belt or cable 49, and a carrying pulley or sheave 50 on the main frame on which the said belt is mounted. 5th. In a well-drilling apparatus, a cable-severing device, comprising a pair of triangular knives pivotally suspended between containing plates, having at their lower end a pair of fixed wedge-shaped blocks, as shown, adapted to actuate the said knives in the opposite directions. 6th. In a cable-severing device for well-drilling apparatus, the plates 82 united, as shown, adapted to loosely receive the drilling cable, and provided upon its lower ends with the oppositely-arranged wedge-shaped blocks, whose adjacent inclined faces are adapted to receive and actuate the cutting knives; and a pair of oppositely-arranged knives 81 pivotally suspended between said plates, adapted for a limited vertical play therein, for the purpose specified. 7th. A severing device for drilling cables, comprising a pair of rigidly-united plates in parallel arrangement, provided at their lower ends with the fixed wedge-like blocks whose oppositely-inclined and adjacent sides are adapted to actuate the cutting knives; and a pair of triangular knives pivotally mounted between said plates and upon opposite sides of the cable, having a limited vertical play therein, and adapted to sever said cable by the elevation of said plates, all substantially as described. 8th. In a well-drilling apparatus, a feed mechanism for the drilling tool, consisting of a rotatable crank-shaft mounted in suitable bearings on the main frame, and having a fixed radial arm, as shown; a sleeve loosely mounted on said shaft, having at its inner end a fixed arm adapted to engage the said radial arm during one-half of each revolution thereof, all substantially as described. 9th. The combination in a feed mechanism for well-drilling apparatus, of a rotatable crank-shaft mounted in suitable bearings on the main frame, and having a fixed radial arm, as shown; a sleeve loosely mounted on said shaft, having at its inner end a rigid arm adapted to engage the said radial arm during one-half of each revolution thereof, as described; and a pulley or sheave loosely mounted on the said crank-shaft arm, and adapted to receive the drilling cable for the purpose specified, all substantially as described.

No. 57,986. Truck. (*Camion.*)

Ernest Clifford Atwood, Golden Gate, California, U.S.A., 3rd November, 1897; 6 years. (Filed 25th October, 1897.)

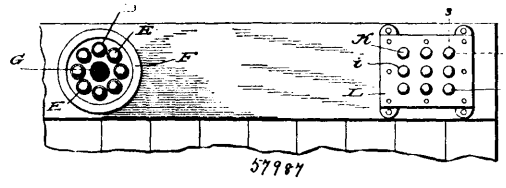
Claim.—1st. The combination in a truck, of a hinged lip or support at its front end, and means for supporting said lip or support at different angles to the side bars of the truck. 2nd. The combination with a truck, of a shaft extending across the front end thereof, a liy or support pivotally mounted on said shaft, angle levers pivotally mounted at the forward end of the truck and having their ends extending beneath the hinged lip or support for the purpose described, and means for locking said levers to support the lip or support, substantially as and for the purpose set forth. 3rd. The combination with a truck, of a shaft extending across the end thereof, a lip or support pivotally mounted on said shaft, angle levers fulcrumed at the forward end of the truck and having their



ends connected by a cross bar, said cross bar extending beneath the lip or support, a two-armed lever pivoted to the angle levers, and means for supporting and locking said two-armed lever, substantially as and for the purpose set forth. 4th. The combination with a truck, of a shaft extending across the end thereof, a lip or support pivoted to said shaft, angle levers pivotally mounted at the forward end of the truck and having their ends connected by a cross bar extending beneath the hinged lip or support for the purpose described, a two-armed lever having its arms pivoted to the rearwardly extending arms of the angle levers, a cross bar connecting said two-armed lever and having an off-set forming a handle, the plates secured to the rear portion of the truck adapted to be engaged by the rear portion of the two-armed lever to lock the same and the angle levers, and springs for supporting the two-armed lever, substantially as and for the purpose set forth. 5th. The combination with a truck, of a shaft extending across the forward end thereof, angle levers fulcrumed upon said shaft and having their forward ends extended to form a lip or support, a two-armed lever pivoted to the angle levers, notched plates secured to the rear portion of the truck adapted to be engaged by the two-armed lever to lock the same and the angle levers, and means for supporting said two-armed levers, substantially as described. 6th. The combination with a truck, of a shaft extending across the front end thereof, angle levers fulcrumed upon said shaft and having their forward ends extended to form a lip or support adapted to be inserted beneath the body to be carried, said levers having their ends connected by a cross bar, a two-armed lever pivotally connected to the rearwardly extending arms of the angle levers, and means carried at the rear portion of the truck for locking the two-armed lever and the angle levers, substantially as and for the purpose set forth. 7th. The combination with a truck, of a shaft extended across the front end thereof, angle levers fulcrumed upon said shaft and having their forward ends connected by a cross-bar, a two-armed lever pivotally connected with the rearwardly extending arms of the two levers, hinged plates upon the side bars of the truck adapted to be engaged by the two-armed lever to lock the same and the angle levers, springs having bearings in the truck legs and having their upper ends in engagement with the two-armed lever to keep the same normally elevated, substantially as and for the purpose set forth.

No. 57,987. Fifth-Wheel for Railway Cars.

(*Roue d'avant-train pour chars.*)

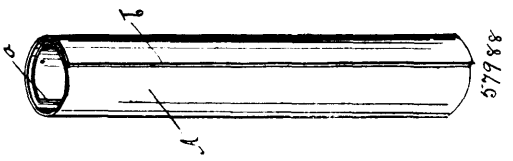


Levi B. Perry and James C. Mitchell, both of Lewiston, Maine, U.S.A., 3rd November, 1897; 6 years. (Filed 25th October, 1897.)

Claim.—1st. The herein described fifth-wheel, comprising upper and lower parts or members provided with annular flanges and

central coincident reduced portions, a sand-band surrounding said reduced portions, removable cups secured to the lower face of said upper member, and balls carried by said cups and adapted to bear upon the top face of said lower member, substantially as shown and described. 2nd. The herein described fifth-wheel, comprising upper and lower parts or members provided with annular flanges and central coincident reduced portions, a sand-band surrounding said reduced portions between said flanges, a series of holes or openings being formed in the face of the reduced portion of said upper member, cups provided with threaded stems working in said openings, and balls carried by said cups and adapted to bear on the top face of said lower member, substantially as shown, and for the purpose set forth. 3rd. The combination with a car-body having its sill provided with a bearing-plate carrying ball-bearings, of a fifth-wheel comprising upper and lower parts or members provided with annular flanges and central coincident reduced portions, a sand-band surrounding said reduced portions, removable cups secured to said upper member, and balls carried by said cups and adapted to bear on said lower member, substantially as set forth. 4th. The combination with a car-body having a fifth-wheel, of a plate secured to the sill of said car having a series of chambers or recesses therein, balls located in said chambers or recesses, smaller balls located in recesses or offsets leading in from said former chambers or recesses and against which said former balls are designed to bear, and a keeper-plate adapted to retain said balls in position, as and for the purpose set forth. 5th. A swivel for the purpose set forth, comprising two parts, one having a depending annular flange forming a depressed surface, said surface being provided with a concentric series of concave recesses, and the other part having a central raised portion fitting within the flange, together with balls seated within the recesses and interposed between the parts, substantially as shown and described. 6th. A swivel for the purpose set forth, comprising two parts having registering central openings to receive a king-bolt or pivot-pin, one of the parts presenting an annular flange forming a depressed surface surrounding the opening, said surface being provided with concave-recesses, balls seated within the concave-recesses, and a retaining-plate fitting within the flange and having openings through which the balls project slightly beyond said plate, together with the other part having a central raised portion fitting within the flange and presenting a surface provided with a circular groove or runway, substantially as shown and described. 7th. A swivel for the purpose set forth, comprising two circular plates, one having a depending annular flange forming a central depressed portion and surrounding web, the depressed portion being provided with a concentric series of concave-reecsses, bearing surfaces located in said recesses, balls bearing within the recesses, and a retaining-plate fitting within the flange and having openings through which the balls pass, together with the other plate having a surrounding web and a central raised portion forming a circular shoulder, the upper surface of the raised portion being provided with a circular groove, both of the aforesaid plates having central openings through which pass a king-bolt or pivot-pin, substantially as shown and described. 8th. In a swivel for the purpose set forth, the combination of a circular plate having a depending annular flange near its outer edge forming a depressed surface surrounding a central opening in the plate, said surface being provided with a concentric series of concave-recesses, bearing-posts extending into said recesses centrally, balls seated within the recesses upon the posts, a retaining-plate fitting within the flanges and having openings through which the balls project slightly beyond said plate, and means for holding the retaining-plate in place, together with a circular plate presenting a surrounding web and a central raised portion forming a circular step or shoulder, the upper face of the raised portion having a circular groove surrounding a central opening in the plate which registers with the central opening in the other plate, the raised position of the last mentioned plate fitting within the flange of the first mentioned plate, as herein shown and described. 9th. The rub-plates for the purpose set forth, comprising a member having a series of concave recesses and projecting ears, bearing-posts extending into the centre of the concave-recesses, a retaining-plate having openings through which the balls project, and means for holding the retaining-plate in place, together with a second member having a plain upper surface and projecting ears, as shown and described.

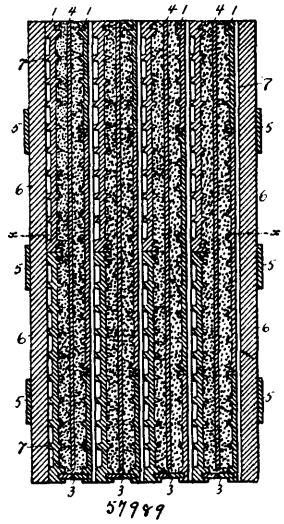
No. 57,988. Cathode. (*Cathodes pour l'électrolyse des corps produisant un dépôt solide sur l'électrode négative.*)



The Electro-Metallurgical Company, London, England, syndic de Ernest Auguste George Street, Paris, France, 3 novembre 1897; 6 ans. (Déposé le 12 juillet 1897.)

Résumé.—Je revendique comme ma propriété exclusive, une cathode pour l'électrolyse des corps produisant un dépôt solide sur l'électrode négative, caractérisée en ce que, une fois le dépôt effectué, elle puisse diminuer de dimensions, en vue de permettre un dépôt de former dépouille et des enlever avec la plus grande facilité, la dite cathode étant constituée dans ce but par une feuille mince, préférablement de métal enroulée une ou plusieurs fois sur elle-même, la diminution de dimension de la cathode étant obtenue après la formation du dépôt, en enroulant sur elle-même la feuille qui constitute la cathode dans un sens contraire à son de enroulement.

No. 57,989. Secondary or Storage Batteries and in the mode of making the same. (*Mode de fabrication de piles secondaires.*)



James Philip Clare, assignee of George E. Hatch, all of Quincy, Massachusetts, U.S.A., 3rd November, 1897; 6 years. (Filed 23rd June, 1897.)

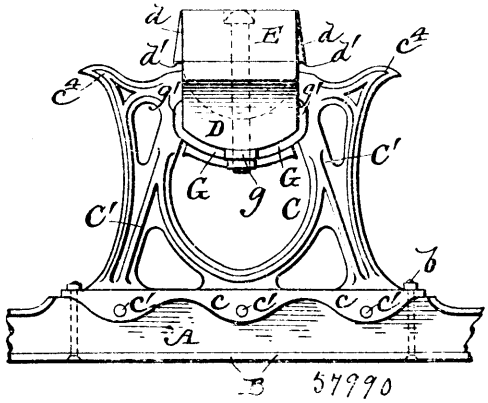
Claim.—1st. The mode herein described of preparing a secondary battery element, said mode consisting in autogenously forming active material from the metal of an electrode by electrolytic action, then loosely confining against the coated face of the plate thus produced, granular or pulverulent active material, or material to become active, and continuing the electrolytic action so as to effect the union of this mass with the autogenously produced material on the plate, substantially as specified. 2nd. A secondary battery consisting of a conducting electrode and a receptacle therefor providing spaces between the electrode and the walls of the receptacle, said receptacle consisting of opposite plates having their inner faces grooved in proximity to the edges, and packing strips inserted in said grooves into which they fit snugly so as to be laterally confined and thereby held in place when the side plates are detached from each other, substantially as specified. 3rd. The within described plate for supporting active material, in contact with the electrodes of an electric battery, said plate having a surface recessed for the reception and retention of said active material, having in proximity to its edges, grooves for the reception of the packing strip or strips, which grooves extend from side to side of the plate and cross each other at the corners of said plate, substantially as specified. 4th. A secondary battery consisting of one or more pairs of plates, the inner faces of which are provided with pockets to which the active material is applied and by which it is sustained in contact with the interposed conducting electrode, each of said plates being composed of a number of sections of stiff porous earthenware disposed edge to edge, substantially as specified. 5th. A secondary battery consisting of one or more pairs of plates, the rear faces of which are provided with projecting rib and their inner faces with pockets to which the active material is applied and by which it is sustained in contact with the interposed conducting electrode, each of said plates being composed of a number of sections of stiff porous earthenware disposed edge to edge, substantially as specified. 6th. A secondary battery in which are combined a series of pairs of supports each having active material applied to its inner face and sustained thereby in contact with the interposed conducting electrode, each of said supports being composed of a number of stiff porous earthenware plates disposed edge to edge, the horizontal joints between the plates of one support being out of line with the horizontal joints between the plates of the adjacent support, substantially as specified.

No. 57,990. Sleigh Knee. (*Courbe pour traîneaux.*)

Allan L. McGregor, Virginia, Minnesota, U.S.A., 4th November, 1897; 6 years. (Filed 23rd October, 1897.)

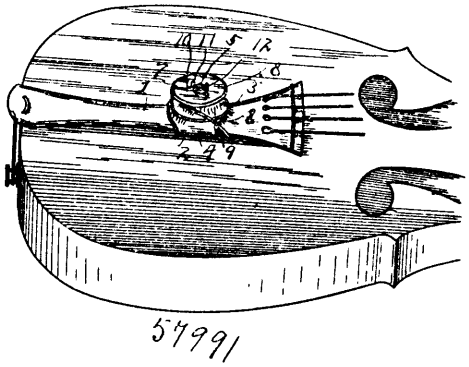
Claim.—1st. In a sleigh-knee, the combination with a runner, of a standard having a socket at its upper end, a bearing secured to the

sleigh-knee and having depending ribs forming a groove between them for receiving the socket, and a clip adapted to bridge the said



groove for accuring the two members together to form a knuckle-joint, substantially as described. 2nd. In a sleigh-knee, the combination of inclined standards having bolting-flanges upon their lower ends for engaging the sleigh-runner and having a socket at their upper ends, an upper knuckle member secured to a beam of the sleigh, and having parallel depending ribs forming a bearing-groove for receiving the said socket and a clip adapted to bridge the said groove and having its ends secured to the said ribs for movably holding said knuckle-member in said socket, and skid-supports upon said standards, substantially as described. 3rd. A sleigh-knee consisting of upright standards having a socket at their upper ends, said socket forming one member of a knuckle-joint, an upper knuckle member secured to the under side of the cross-beam, said member adapted to engage the socket in the standards and having limiting-shoulders to limit the oscillation of the members of said knuckle-joint, substantially as described. 4th. A sleigh-knee consisting of a standard suitably secured to the sleigh-runner and a knuckle bearing member having upwardly extending vertical lugs adapted to embrace the cross-beam and to engage recesses in the said beam, said member being bolted or otherwise secured to said cross-beam, and forming the upper portion of the knuckle, the said standard being provided with a socket consisting of a segmental bearing-bar to receive the said member and forming the other member of said knuckle, substantially as described. 5th. A sleigh-knee consisting of two member, the upper member being secured to the cross-beam and having a segmental bearing-face and the lower member secured to a sleigh-runner and having a segmental bearing-bar at its upper and provided with an upper and lower bearing-surface struck from the same centre and a segmental clip secured to the upper member and adapted to embrace a portion of the lower member and engage the lower concentric bearing-surface of the said segmental bearing-bar for holding them together, substantially as described. 6th. A sleigh-knee comprising in its construction a standard secured at its lower end to a sleigh-runner and having a socket in its upper end forming one member of a knuckle, an upper member secured to a cross-beam and adapted to work in said socket, a clip for movably holding the said members together, said clip being provided with vertical flanges for engaging the upper member of the knuckle and flanges whereby it may also be bolted to the said upper member, substantially as described.

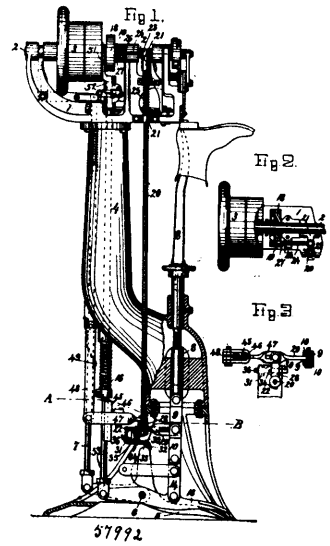
No. 57,991. Violin. (*Violon.*)



Albert Filsoro, Winston, Montana, U.S.A., 4th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. The combination with the tail-piece of a stringed musical instrument, of a reel attachment therefor consisting of a base-plate having arms or extensions thereon adapted to embrace said tail-piece for securing said attachment thereto, a post or spindle rising centrally from said base-plate, having a laterally sliding pin in its outer end, a reel or drum mounted to rotate on said post or spindle having recesses therein adapted to be engaged by said stop pin, substantially as and for the purpose described. 2nd. The combination with the tail-piece of a stringed musical instrument, of a reel attachment therefore consisting of a base-plate having arms or extensions thereon adapted to embrace said tail-piece for the purpose of securing said attachment thereto, a post or spindle rising centrally from said base plate having a peripheral groove thereon, and a dovetailed grooved in its outer end, a reel or drum mounted to rotate on said post or spindle having radially disposed recesses in its upper surface adjacent to the opening through said reel and engaging the peripheral groove in said post or spindle, and a stop-pin mounted to slide in the dovetailed groove in the upper end of said post or spindle and adapted to fit within the recesses in the top surface of said reel, substantially as and for the purposes described.

No. 57,992. Nailing Machine. (*Machine à cheviller.*)

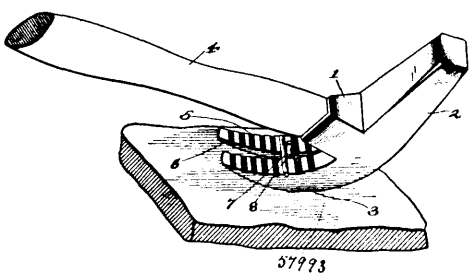


Solomon Marcella Cutter, Montreal, Quebec, Canada, 4th November, 1897; 6 years. (Filed 12th October, 1897.)

Claim.—1st. A stock support movable up and down, a driving shaft, a cam on said shaft driven thereby, and connections between said cam and stock support operated by said cam, whereby the support is automatically raised by the first movement of the driving shaft when the machine is started and held in its raised position until the machine is stopped, for the purpose set forth. 2nd. A stock support, and toggles to raise and lower said support, a driving shaft, a cam on the driving shaft driven thereby, and connections between the cam and said toggles operated by said cam, whereby the support is raised automatically by the first movement of the driving shaft when the machine is started and held in its raised position, until the machine is stopped, for the purpose set forth. 3rd. In a nailing machine, a stock support, means to periodically depress it to allow the feeding of the stock, a driving shaft, and independent mechanism automatically operated by said shaft to depress the support as the machine stops, for the purpose set forth. 4th. In a nailing machine, a stock support, means to periodically depress it to allow feeding of the stock, a driving shaft, an independent mechanism automatically operated by said shaft to depress the support as the machine stops, and a device controlling and preventing the operation of said independent mechanism except at the completion of the operation and stopping of the machine, for the purpose set forth. 5th. A stock support, a spring to force said support upward with a yielding pressure, and mechanism to raise and lower said support independent of said spring, combined with mechanism operated by the driving shaft of the machine on which the stock support is used to cause said stock support to rise at the first movement of the driving shaft when the machine is started, and to lower at the time the driving shaft is stopped, and a lock to lock said spring from exerting its upward pressure on said support when said support is lowered by said mechanism, for the purpose set forth. 6th. A stock support, a starting and stopping treadle for the machine on which said stock support is used, mechanism operated by the driving shaft of the machine to automatically raise said support at the commencement of the rotation of said driving shaft when the machine is started by the operation of the starting treadle and to automatically lower said support when the machine is stopped by the operation of the said treadle, and a locking device brought into operating position to lock said automatic

support raising and lowering mechanism by the operation of the starting treadle when starting the machine, and to unlock said mechanism when said treadle is operated to stop the machine, for the purpose set forth. 7th. A stock support, mechanism operated by the driving shaft of the machine on which said support is used, whereby the stock support is automatically raised and lowered respectively by the starting of the driving shaft and the st pping of the same, and a lock to hold said support in its raised position until the driving shaft has been stopped, for the purpose set forth. 8th. A stock support, mechanism operated by the driving shaft of the machine on which said support is used, whereby the stock support is automatically raised and lowered respectively by the starting of the driving shaft and the stopping of the same, a lock to prevent the automatic stock support lowering mechanism from lowering said support until the driving shaft is stopped, and a treadle connected with the stock support, whereby the stock support can be lowered or allowed to raise independent of its automatic operating mechanism or said lock, for the purpose set forth.

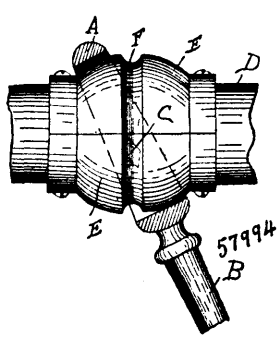
No. 57,993. Hammer. (*Marteau.*)



Edward Copland Clark, Lebanon Springs, New York, U.S.A., 4th November, 1897; 6 years. (Filed 15th October, 1897.)

Claim.—1st. In a hammer, the combination with the claw members thereof provided with grooves or openings therein, of a friction bar adapted to be passed through said grooves or openings and connected between the two claw members, substantially as described. 2nd. A hammer provided with a claw, comprising two members, each having coincident openings or grooves, and a friction bar adapted to be inserted through said openings or grooves and project across the space between the claw members, substantially as described. 3rd. A hammer, comprising a hammer head having a handle-receiving socket and two claw members having an opening between them, the said two claw members being provided with a series of coincident grooves or openings, and a friction bar adapted to be inserted through said grooves or openings so as to project across the space between the two claw members, substantially as and for the purpose described. 4th. A nail or spike-drawing device provided with claw members having grooves or notches, and a removable friction bar adapted to be inserted in said grooves or notches and project across the space between the claws, substantially as and for the purpose described.

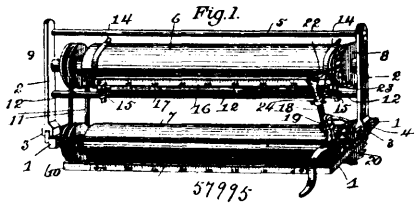
No. 57,994. Oar-Lock. (*Tolet.*)



Andrew Smith, Chicago, Illinois, U.S.A., 4th November, 1897; 6 years. (Filed 27th September, 1897.)

Claim.—1st. The combination of the oar-lock, having inwardly projecting lugs on its opposite sides and beneath the transverse centre thereof, the circumferentially grooved sleeve adapted to rotate within the lock and to oscillate upon the lugs, but held by the lugs from longitudinal movement, the sleeve being adapted to embrace the oar to which it is secured, substantially as shown and described. 2nd. The combination of the oar lock, the vertically elongated lugs projecting inward from opposite sides of the same; and beneath the transverse centre of the lock, the sleeve adapted to rotate within the lock and to oscillate upon said lugs, but held from longitudinal displacement by the lugs, the sleeve being adapted to embrace the oar to which it is secured, substantially as shown and described. 3rd. The combination of the closed oar-lock, the pintle-lugs upon its opposite inner sides beneath the transverse centre of the lock, the sleeve adapted to fit snugly within the closed lock and grooved circumferentially to turn upon said lugs and also divided longitudinally, whereby with one section of the sleeve within the lock and embracing both pintle-lugs, the other sleeve section may be adjusted to position, the sleeve when thus positioned being adapted to be secured around the oar, substantially as shown and described. 4th. The combination of the lock, the quadrilateral lugs on opposite sides thereof, the circumferentially grooved sleeve embracing the oar and adapted to turn within the lock upon said lugs, substantially as shown and described.

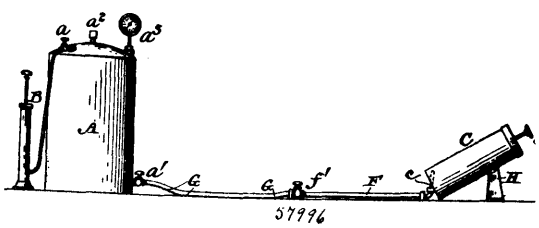
No. 57,995. Copy Holder for Typewriting Machines.
(*Porte-copie pour clavigraphes.*)



Eli B. Bingham, Wellston, Ohio, U.S.A., 4th November, 1897; 6 years. (Filed 27th September, 1897.)

Claim.—1st. In a copy holder and feeder for typewriting machines, the frame adapted to be applied to the carriage of the machine, the rollers in the frame, and a pawl connected to the line space lever of the machine to operate said rollers, as set forth. 2nd. The combination with the copy holder frame adapted to be applied to the carriage of a typewriting machine and the rollers in the frame, of a lever secured to the line space lever of the machine, and a pawl to operate the said frame rollers automatically with the platen of the machine, as set forth. 3rd. The combination with a copy holder frame adapted to be secured to the carriage of a typewriting machine, and the rollers in said frame, of the lever having a scale and secured to the line space lever of the machine, a pawl, a clamp on the scale lever, and a controlling rod connected to the pawl and to the said clamp, as set forth. 4th. The combination with the platen of a typewriting machine having a pulley, a copy roller suspended from the carriage of the machine and having a pulley, and a belt connected to the pulleys, of means for varying the movement of the copy rollers relative to the movement of the platen, comprising a scale lever fixed to the line space lever of the machine, a pawl pivoted to the scale lever, a clamp adjustably secured to the scale lever, and a controlling rod connected to the pawl and to the said clamp, as set forth.

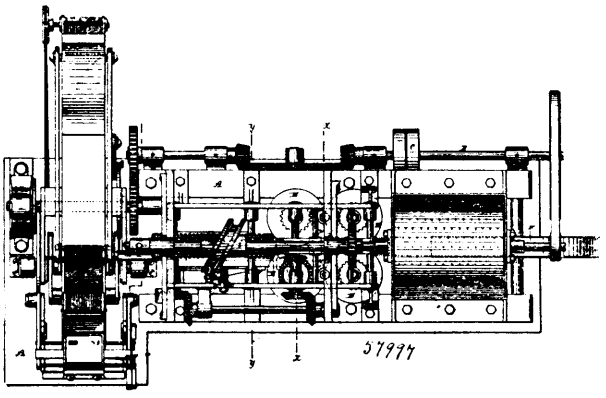
No. 57,996. Apparatus for Thawing Frozen Earth.
(*Appareil pour dégeler la terre.*)



Ferdinand Newman Bergen, Tacoma, Washington, U.S.A., 4th November, 1897; 6 years. (Filed 30th September, 1897.)

Claim.—1st. A gas generator for an apparatus for thawing frozen earth of the type described, comprising in its construction an outer enclosing casing, a coil pipe within said casing, and an injector burner secured to one end of the pipe and extending within the coil, the construction and arrangement being such that oil is conducted through the coil pipe and air commingled therewith under pressure and the atomized oil caused to pass from the injector burner within the generator, out at the end of the generator in the form of flame, substantially as described. 2nd. A gas generator for an apparatus for throwing frozen earth of the type described, comprising in its construction an outer enclosing casing and a pipe arranged in a cylindrical manner within said casing and extending practically the entire length of the same, and an injector burner secured to one end of the pipe and extending and terminating within the coil, the construction and arrangement being such that oil is conducted through the coil pipe and air commingled therewith under pressure and the atomized oil caused to pass from the injector burner within the generator, out at the end of the generator in the form of flame, substantially as described.

No. 57,997. Cigarette Machine. (*Machine à cigarettes.*)



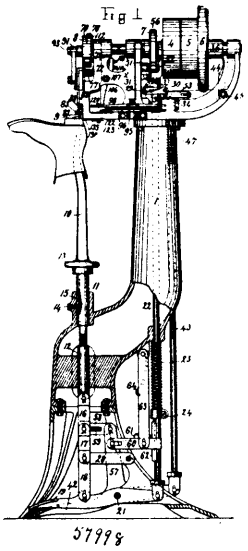
James A. Bonsack, Philadelphia, Pa., U.S.A., 4th November, 1897. (Filed 1st October, 1897.)

Claim.—1st. In a cigarette machine, the combination substantially as set forth, of a filler-setting channel, an endless travelling chain or belt provided with spring-actuated pins adapted to be inserted into and withdrawn from the filler-setting channel and constructed to be actuated in one direction by their springs, and a guide constructed to move the spring-actuated pins in the other direction, whereby the pins are caused to enter the filler and be withdrawn therefrom at the proper time. 2nd. In a cigarette machine, the combination substantially as set forth, of a filler-setting channel, a guide as P, an endless travelling chain or belt provided with spring-actuated pins to engage with the filter and with projections as R, and means for withdrawing the pins and operating the belt, whereby the belt is caused to move in the desired path of travel relatively to the filler-setting channel by the engagement of its projections with the guide P, and to advance the filler through the channel by the engagement of the pins therewith. 3rd. In a cigarette machine, the combination substantially as set forth, of a filler-setting channel, spring-actuated pins adapted to engage with filler, means for advancing the pins through the setting channel, and withdrawing them therefrom, a cutting off device located beyond the setting channel for severing the continuous filler into individual fillers, a wrapping device located beyond the cutting-off device and means for delivering the individual fillers from the cutting-off devices to the wrapping device. 4th. In a cigarette machine, the combination substantially as set forth, of a filler forming device, a filler-setting channel, means adapted to engage with and positively convey the filler through the setting-channel, a cutting-off device located beyond the forward end of the filler-setting channel, and a wrapping device located beyond the cutting-off device, whereby tobacco is formed into a continuous filler which is conveyed through the setting-channel to the cutting-off device and is set in its course thereto and is severed into cigarette lengths which are subsequently wrapped with the wrappers. 5th. In a cigarette machine, the combination, substantially as set forth, of a tobacco-feeding device, a filler-forming device, a filler-setting channel, means adapted to engage with and positively convey the filler through the settting channel. a cutting-off device located beyond the forward end of the filling-setting channel, and a wrapping device located beyond the cutting-off device, whereby tobacco is fed and formed into a continuous cigarette filler which is conveyed to the cutting-off device, and is set in its course thereto and is severed into cigarette length which are subsequently wrapped with wrappers. 6th. In a cigarette machine, the combination substantially as set forth, of a cutting-off device, a delivering device provided with a moving part arranged to move in the direction of the length of the cigarette filler, and a wrapping device, whereby a continuous filler is severed into cigarette lengths which are then delivered to a wrapping device to be wrapped. 7th. In a cigarette machine, the combination, substantially as set forth, of two grooved forming-surfaces arranged to travel in substantially the same plane, means for moving such surfaces towards each other, and two flat surfaces arranged on opposite sides of the grooved forming surfaces and means for moving each of the flat surfaces toward and into close proximity to both of the forming-surfaces, whereby tobacco is fed forward and compressed to form a cigarette filler. 8th. In a cigarette machine, the combination, substantially as set forth, of shaping wheels arranged to rotate in substantially the same plane and toward each other, and two endless belts arranged upon opposite sides of the shaping wheels, whereby tobacco is fed forward and compressed to form a cigarette filler. 9th. In a cigarette machine, an endless carrier-belt and top or presser endless belt above the carrier-belt, combined with shaping-wheels mounted to revolve between the said belts, whereby the tobacco is formed into a filler-rod substantially as set forth.

No. 57,998. Nailing Machine. (*Machine à cheville.*)

Solomon Marcella Cutter, Montreal, Quebec, Canada, 4th November, 1897; 6 years. (Filed 12th October, 1897.)

Claim.—1st. In a nailing machine, a driver and operating mechanism to reciprocate the driver, an awl, an awl-carrying lever 79, a

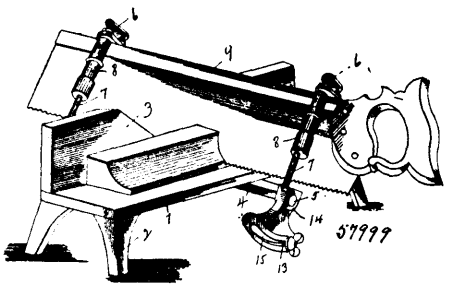


cam and connected mechanism to move said lever both vertically and toward and from the drivers as set forth, a block 65 having a nail tube therein, guided within guides in the frame of the machine held against said awl-carrying lever, and moved laterally in one direction by engagement with said awl-carrying lever during the lateral movement of said lever, to allow the feeding of the stock by the awl, as set forth. 2nd In a nailing machine, a driver and operating mechanism to reciprocate the driver, an awl, an awl-carrying lever 79, a cam and connected mechanism to move said lever both vertically and toward and from the driver, to cause the awl to both puncture and feed the stock, an adjustable stop to limit the amount of the movement of said lever from the driver to vary the feeding of the stock combined with a block 65 having a nail-tube therein, guided within guides in the frame of the machine, held against said said awl-carrying lever and moved laterally ic one direction by the lateral movement of the awl-carrying lever, to allow the awl to be moved into line under driver, when feeding the stock for the purpose set forth. 3rd. In a nailing mechanism, a driver and operating mechanism to reciprocate the driver, an awl, an awl-carrying lever 79, a cam and connected mechanism to move said lever both vertically and toward and from the driver as set forth, a block 65, having a nail-tube therein guided within guides in the frame of the machine, held against said awl-carrying lever and moved laterally in one direction by engagement with said awl-carrying lever during the lateral movement of said lever, to allow the feediag of the stock by the awl, a cam and a lever operated thereby to return said block to normal position with its contained nail-tube in line with the driver, for the purpose set forth. 4th. In a nailing machine, a driver and operating mechanism to reciprocate the driver, an awl, an awl-carrying lever, a cam and connected mechanism to move said lever both vertically and toward and from the driver, to puncture and feed the stock, a laterally movable block having a nail-tube therein, said block held against said awl-carrying lever and moved out of line with the driver by the movement of the awl-carrying lever toward the driver, to allow the feeding of the stock by the awl, a nail supply operated independently of the driver or awl-operating mechanisms, whereby nails are delivered from the nail-supply to the nail-tube while said tube is directly in line with the driver, substantially as set forth. 5th. In a nailing machine, a driving-shaft, a cam on said shaft, a lever pivoted to the frame of the machine, having a pin or roll acted upon by said cam, a bolt adjustably but securely mounted in the free end of said lever, a pin on said bolt arranged eccentric thereto, an awl carrying level pivotally hung on said pin, an awl attached to the awl-carrying lever moved up and down by the action of the cam on said lever to pierce and withdraw from the stock, the distance said awl pierces the stock being determined by the adjustment of the eccentric-bolt within the end of the lever, for the purpose set forth. 6th. In a nailing machine, a driving-shaft, a cam on the shaft, two levers operated by said cam, the free end of one lever being moved vertically by said cam and the free end of the second lever being moved laterally by said cam, an awl-carrying lever being hung to the vertically-moving lever having its free end moved laterally by the laterally-moving lever and an awl attached to the awl-carrying lever, said awl being given a vertical and lateral movement by said levers, for the purpose set forth. 7th. In a nailing machine, a driving-shaft, a cam on the shaft, an awl and operating mechanism whereby the awl is intermittenly reciprocated vertically to pierce and withdraw from the stock, combined with a lever fulcrumed to the frame and acted upon by said cam to move the awl

laterally in one direction when the awl is in the stock to feed the stock, and a spring to move said awl laterally in the opposite direction for the purpose set forth. 8th. In a nailing machine, a reciprocating driver and mechanism to reciprocate the same, the plates 66 and 100 having the nail-tube formed therein through which the nails are driven by the driver, the perforation in the plate 100, the feed-pawl 104 and mechanism to operate said pawl to intermittently feed a comb-shaped nail-strip through the perforation in the plate 100 and into the nail-tube, the knife 121 having upper cutting edge and guided within guides on the plate 100, mechanism to move said knife laterally within the guides across the perforation in the plate and through the comb-teeth shank-forming portions of the nail-strip, the end nail of the strip being severed from the strip against the cutting edge of the knife by the downward movement of the driver as set forth. 9th. A vertically adjustable stock-support, the cam 7 having cam-groove 28, the perforated block 26 having an inclined surface as described and the pin and roll 27 engaging the cam, the block 25 movable loosely within the perforation in the block 26, the clamp-roll 31 engaging the block 25 and the inclined surface on the block 26, and connections between the vertically movable stock-support and the block 25, whereby ths stock-support is automatically adjusted downward for increased thickness of stock to be nailed on the machine as set forth. 10th. A spring-pressed verticaily-adjustable stock-support, the cam 7 having cam-groove 28, the perforated block 26 having an inclined surface as described and the pin and roll 27 engaging said cam, the block 25 movable loosely within the perforation in the block 26, the clamp-roll 31 engaging the block 25 and the inclined surface on the block 26, automatic mechanism to disengage said roll from the blocks 25 and 26, and connections between the vertically-movable spring-pressed stock-support and the block 25 whereby the stock-support is automatically adjusted downward or allowed to be pressed upward by its spring-pressure, to compensate for various thicknesses of stock to be nailed on the machine as set forth. 11th. A vertically-adjustable stock-support, a block moved vertically and positively, a tapering perforation in the block a rod having bearing in the block in which it is longitudinally movable, a clamp-roll in said tapering perforation clamping the block and rod firmly together when the block is moved in one direction but allowing the block to move freely on the rod when the block is moved in the opposite direction, levers having bearings for the clamp-roll, a stop to engage said levers to move the clamp-roll and to disengage the block and rod during a desired part of the movement of the block, and connections between the rod and stock-support whereby the height of the stock-support is automatically adjusted for various thicknesses of stock and slightly withdrawn to allow the stock to be moved on the support, for the purpose set forth. 12th. A vertically adjustable stock support, a block moved vertically and positively, a tapering perforation in the block, a rod having in the block in which it is longitudinally movable, a clamp-roll in said tapering perforation, clamping the block and rod firmly together whenever the rod is moved in one direction, but allowing the block to move freely on the rod when the block is moved in the opposite direction, a releasing mechanism to automatically release the block and rod during a desired part of the movement of the block, and an adjustable stop to operate said releasing mechanism, whereby the distance and the time that the stock-support is withdrawn are adjusted, for the purpose set forth. 13th. A vertically-movable stock-support, two independent treadles and independent connections between each of said treadles and the stock-support, whereby the stock-support is raised or lowered by either treadle independent of the other treadle, for the purpose set forth. 14th. A vertically-movable stock-support, a starting and stopping treadle, connections with said treadle to start or stop the machine, and connections between said treadle and the stock-support to automatically raise and lower suid support respectively by the starting or stopping of the machine, combined with a second treadle, and connections between second treadle and the stock-support, whereby the stock-support may be lowered independent of the starting or stopping treadle for the purpose set forth. 15th. A vertically-movable stock-support, toggles to raise and lower said support, a starting and stopping treadle, mechanism operated thereby to start or stop the machine, a connection between the treadle and the toggles whereby said stock-support is automatically raised when the treadle is operated to start the machine, and automatically lowered when the treadle is operated to stop the machine for the purpose set forth. 16th. A vertically movable stock-support, toggles to raise and lower said support, a starting and stopping treadle mechanism operated thereby to start or stop the machine, a yielding connection between the treadle and the toggles, whereby the stock-support is automatically raised when the treadle is operated to start the machine and automatically lowered when the treadle is operated to stop the machine, said yielding connection allowing the treadle to be further operated provided the stock-support is raised as far as possible before the treadle has caused the starting of the machine, for the purpose set forth. 17th. A vertically-movable stock-support, mechanism connected with said support to press it upward with a yielding pressure, a treadle independent of said mechanism and a lock operated by said treadle and acting on said mechanism whereby said support is released of its upward pressure at any of the various positions of the support, for the purpose set forth. 18th. A vertically-movable stock-support, mechanism connected with said support to press it upward with a yielding pressure, a starting and stopping treadle independent of said mechanism to start and stop the machine, mechanism connected with said treadle and governed thereby to raise and lower the stock-support, and a lock operated by said treadle acting on the mechanism which presses the stack upward to release said support of its upward pressure, for the purpose set forth. 19th. A vertically-movable and upwardly-pressed stock-support, toggles to raise and lower said support, a treadle to operate said toggles, and a lock attached to said treadle and operated thereby to lock said support against its upward pressure, for the purpose set forth. 20th. A vertically-movable stock-support, a spring to press said support upward with a yielding pressure, toggles to raise and lower said support, a treadle connected to said toggles to operate the same, a rack on the mechanism moved by said spring in pressing said stock-support upward, a link pivotally attached to said treadle having teeth to engage said rack when said treadle is operated to lower said stock-support prior to the lowering of the same to lock said stock-support against the pressure of said spring, for the purpose set forth. 21st. A vertically-movable stock-support pressed upward with a yielding pressure, mechanism substantially as described to raise and lower said support, a treadle connected to said mechanism to operate it, a rack on the parts moved in causing said upward pressure on said support, a link attached to said treadle having teeth thereon, a spring to force said link toward said rack so as to cause the teeth thereon to engage the teeth of said rack to lock said support against said upward pressure, the connection between said treadle and link allowing said treadle to be operated after said teeth engage said rack, whereby the support is first locked against the upward pressure and then lowered or whereby said support is first raised into position and then unlocked by and according to the movements of said treadle, for the purpose set forth. 22nd. In a nailing-machine, a driving-shaft, a stock-support, connecting mechanism between said shaft and support to periodically depress said support to allow the feeding of the stock, and independent mechanism operating on said support and governed by the starting and stopping of the machine respectively to raise and lower said support, for the purpose set forth. 23rd. In a nailing-machine, a stock-support, a starting and stopping mechanism, a driving-shaft, mechanism operated by said shaft to periodically depress said support to permit the feeding of the stock, and independent means controlled by said starting and stopping mechanism to finally depress the horn when the machine is stopped, for the purpose set forth. 24th. In a nailing-machine, a stock-support, a starting and stopping mechanism, a driving shaft, a connecting mechanism between said support and shaft to periodically depress said support to allow the feeding of the stock, a mechanism connected to the starting and stopping mechanism independent of the nail-driving mechanism, operating on said support and governed by the starting and stopping mechanism of the machine respectively so raise and lower said support when the machine is started or stopped, and a device controlling said independent mechanism and preventing its operation on said support until such time as will insure the complete operation of the machine, for the purpose set forth. 25th. In a nailing-machine, a driver and its accompanying mechanism to cause the driving of the nails, a starting and stopping mechanism to start and stop the machine, a stock-support and connecting mechanism between the stock-support and the starting and stopping mechanism automatically raising and lowering said support respectively by the starting and stopping of the machine, and mechanism engaging the starting and stopping mechanism preventing the stopping of the machine and consequently lowering of the stock-support prior to the completion of the operation of driving a nail for the purpose set forth. 26th. In a nailing-machine, a driver and its accompanying mechanism, to cause the driving of the nails starting and stopping mechanism to cause the starting and stopping of the machine, a lever contained within said support, and connecting mechanism between said support and the starting and stopping mechanism whereby said support is antomatically raised and lowered respectively by the starting and stopping of the machine, combined with a rotating sleeve and a recess in said sleeve, whereby said lever is prevented from moving to stop the machine and lower the stock-support, after the machine has been started, prior to the completion of the operation of driving a nail, for the purpose set forth. 27th. In a nailing-machine having a vertically reciprocating driver, a gage movable on the machine toward and from the time of the movements of said driver, a hand-lever fulcrumed to the machine and attached to said gage to adjust said gage in relation to the driver, a comb on the machine, a pawl on said hand-lever engaging said comb to hold said gage in its adjusted position, perforations in said comb, and stop-pins to be placed within the desired perforations in said comb to admit of a quick and positive changing of the gage when driving two rows of nails of different gage, substantially as set forth. 28th. In a nailing-machine, a driving-shaft, a driver operated thereby, a cam on said driving-shaft, a push-pin moved longitudinally in bearings in the frame of the machine by said cam, a lever turned on its fulcrum in one direction by said push-pin to cause the feeding of the nails to the driver, a spring to return said lever to its normal position, and a set-screw in said lever to engage such push-pin, the amount of the feeding of the nails being adjusted by the adjustment of the said set-screw in said lever, for the purpose set forth. 29th. In a nailing-machine, a driving-shaft, a driver operated thereby, a cam on said driving-shaft, a push-pin moved longitudinally in bearings in the frame of the machine by said cam, a lever turned on its fulcrum in one direction by said push-pin to cause the

feeding of nails to the driver, a spring to return said lever to its normal position, and a set-screw through said lever engaging the frame of the machine to limit and adjust the movement imparted to said lever by said spring so as to adjust the feeding of the nails, for the purpose set forth. 30th. In a nailing-machine, a driving-shaft, a driver operated thereby, and an intermittent nail-feeding device to feed nails to the driver, which device consists of the following instrumentalities: a grooved feed-block through which the nail-forming material is fed, a reciprocating slide, a pawl carried by said slide, a lever fulcrumed to the frame of the machine and acting on said slide, a cam on said driving-shaft, a push-pin mounted in bearing in the frame of the machine and moved longitudinally therein by said cam against said lever to move it upon its fulcrum in one direction causing the feeding of the nail-forming material toward the driver by said pawl, and a spring to return said lever to its normal position, for the purpose set forth. 31st. In a nailing-machine, a driving-shaft, a driver operated thereby, and an intermittent nail-feeding device to feed nails to the driver, which device consists of the following instrumentalities: a grooved feed-block through which the nail-forming material is fed, a reciprocating slide, a pawl carried by said slide, a lever fulcrumed to the frame of the machine and acting on said slide, a cam on the driving-shaft, a push-pin mounted in bearing in the frame of the machine and moved longitudinally therein by said cam against said lever to move it upon its fulcrum in one direction causing the feeding of the nail-forming material toward said lever by said pawl, a spring to move said lever in the opposite direction to its normal position, and a spring-actuated adjustable detent acting upon the nail-forming material to prevent its return when said lever is returned by said spring, for the purpose set forth.

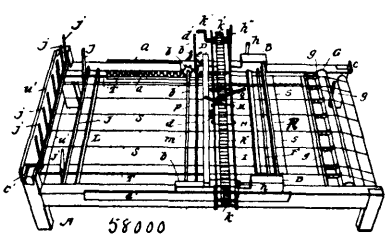
No. 57,999. Mitre Box. (*Boîte à onglet.*)



Thomas Bolig, Bellevue, Ohio, U.S.A., 4th November, 1897; 6 years. (Filed 18th October, 1897.)

Claim.—In a mitre-box, a horizontal adjustable radial bar pivotally mounted to a bed-plate and carrying, parallel to itself in journals supported from both ends, a bar radially adjustable mounted with saw-guides and vertically-adjustable saw-rollers to gage the depth of cut vertically, a sectant with a set-screw mounted upon the face to the bar carrying the standards for radial adjustment.

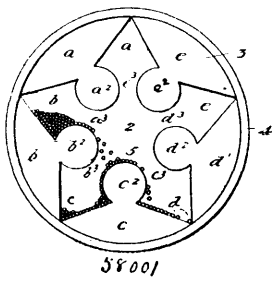
No. 58,000. Wire Weaving Machine.
(*Machine à tisser le fil de fer.*)



William Glen Phillips, Hopedale, Illinois, U.S.A., 4th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. In a wire weaving machine, an oscillating bar provided with an opening or openings through which the main wires pass, and are kinked by rocking the bar, or held more or less firmly, substantially as and for the purpose specified. 2nd. In a wire-kinking device, a fastening device to hold it at any angle, thereby creating a friction on main wires substantially by the means and for the purpose specified. 3rd. In a stay-wire-winding device, a plate supported at right angles to main wire, carrying on either side a wheel riveted one onto the other, one plain with a notch cut into it, and at the opposite side through both wheels a radial groove cut to receive the main wire through another radial groove cut through the aforesaid plate, and a spool feeding the stay-wire as the wheel carries it around the main wire, substantially as herein described and for the purpose specified. 4th. In a wire-weaving machine, having a stay-wire-tying device, levers and cross-bars alternating the operation of a single chain, when levers are rested alternately on corresponding cross-bars, by rocking the frame carrying the tying device, substantially as and for the purpose specified.

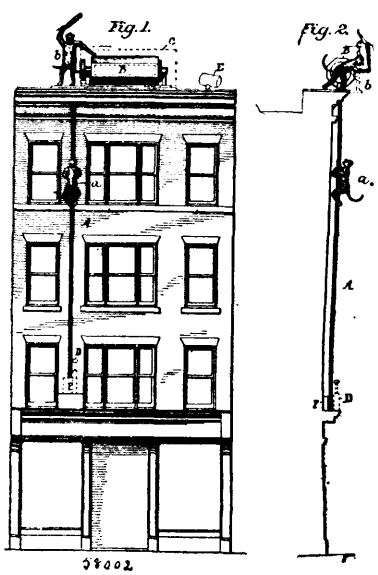
No. 58,001. Puzzle. (*Jeu de patience.*)



Joseph Herbert Stauber, Osbow, Missouri, U.S.A., 4th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. A puzzle comprising pockets having contracted throats formed by heads which are of greater breadth than the entrance of said pockets, the entrance to one pocket being diametrically opposite to the head of another pocket, and movable bodies adapted to pass from one pocket to the other, substantially as set forth. 2nd. A puzzle comprising a back, a transparent front or face, an interposed disk formed with a series of annularly arranged pockets having contracted throats formed by circular heads, the breadth of which is greater than the width of the throats, and the throat of one pocket being diametrically opposite the head of another pocket, substantially as set forth.

No. 58,002. Advertising Device. (*Appareil de publicité.*)

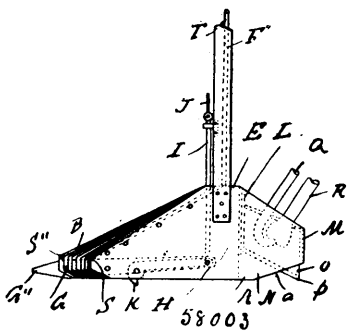


Paul Taylor Kenny, New York, State of New York, U.S.A., 4th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. The combination with a device for displaying advertisements, of the pole or rope adjacent to said device, the climbing figure movable on the pole or rope, the striking figure adjacent to the top of the pole or rope, and means for operating said figures, substantially as described. 2nd. The combination in an advertising device, of the pole, the climbing figure upon the pole, a striking figure adjacent to the top of the pole, means for raising the climbing figure and imparting a climbing movement thereto, means for operating the striking figure as the climbing figure reaches the top of the pole, and means for releasing and dropping the climbing figure simultaneous with the operation of the striking figure, substantially as described. 3rd. The combination in an advertising device, of the pole, the climbing figure upon the pole, a suspending wire or rope for said figure, a drum for winding said rope to raise the figure, a continuously operating motor, a clutch between the motor and the drum, and means for disengaging the clutch when the figure reaches the top of the pole, whereby the drum is permitted to unwind freely, and means for engaging the clutch members as the figure reaches the bottom of the pole whereby the drum is again set in motion to wind the rope and raise the figure, substantially as

described. 4th. The combination with the device for displaying advertisements, the perforated board placed in front of the drum containing advertisements and the pole, of a figure having movable limbs, a friction-wheel mounted in the figure and engaging the pole or rope, mechanism for moving the limbs of the figure and a pawl and ratchet device constructed and arranged to engage said mechanism with the friction wheel during the upward movement of the figure, whereby the limbs are given a climbing movement, and to disengage said mechanism from the friction-wheel as the figure descends the pole, substantially as described. 5th. The combination with the device for displaying advertisements, the pole, the climbing figure upon the pole, movable limbs upon the figure and mechanism for operating the same, the friction-wheel for operating said mechanism, the yoke surrounding the pole and means for varying the friction-wheel pressure upon the pole, the air cushion and whistle in the path of the falling monkey so that he appears to shriek or whistle, substantially as described. 6th. The combination with the pole and climbing figure, of the striking figure adjacent to the top of the pole and having its body movably mounted upon a pivot, the motor, the drum shaft and drum, the suspending rope connecting the climbing figure with the drum, the disc 44 operated periodically by the drum shaft through a suitable train of mechanism, and tappets upon said disc arranged to engage and move the striking figure, lamps and reflectors near the base of the pole, also near the striking figure and the drum and within the advertising drum, substantially as described. 7th. In an advertising device, the combination with a pole or rope and the climbing figure, of the motor shaft, the drum and the drum shaft, the rope connecting said figure with the drum, the clutch connecting the motor shaft with the drum shaft, the clutch lever for operating the clutch, the locking lever for locking the clutch and opening same, the worm on the drum shaft, the worm-wheel meshing with said worm, and the adjustable pins on the worm-wheel, said pins being arranged to engage alternately with the clutch lever and the locking lever, substantially as and for the purpose described.

No. 58,003. Submarine Plough and River Mining Machine. (*Dredge pour l'exploitation des mines.*)

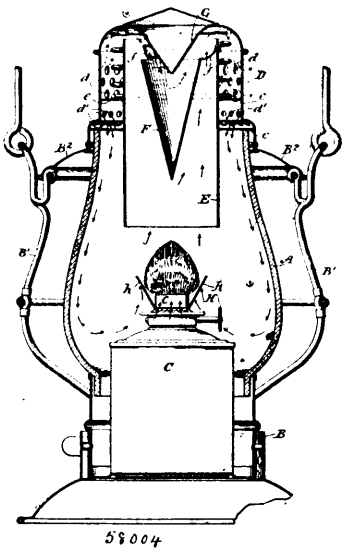


Charles Bell Emerson, San Francisco, California, U.S.A., 4th November, 1897; 6 years. (Filed 3rd September, 1897.)

Claim.—1st. In a submarine plough and excavator, the combination of a plough composed of a series of relatively rigid parallel plates, with a supplemental chamber carried by said plough and capable of vertical adjustment independent thereof, and a device for removing the spoil, as set forth. 2nd. In combination, an excavator constructed of a series of relatively rigid parallel plates forming excavating edges, with a plurality of bars or beaks fulcrumed longitudinally with said plates and projecting beyond the excavating edges thereof, said beaks being provided for oscillating movement independent of said parallel plates, and a device for removing the disintegrated spoil, as set forth. 3rd. In combination, an excavator composed of a series of relatively rigid plates assembled to work with a front feed and deliver the disintegrated spoil to a rear supplemental and vertically adjustable chamber, and an ejector pipe opening into said chamber, as set forth. 4th. In combination, an excavator constructed and arranged to work with a front feed and rear delivery and a plurality of projecting oscillating beaks in conjunction with a series of hydraulic nozzles directed toward the projecting extremities of said beaks, and a device for removing the spoil, as set forth. 5th. In combination, an excavator constructed and arranged to work with a front feed and delivering to a vertically adjustable chamber, the bottom of which is formed essentially of a series of parallel plates, and an ejector pipe opening into said chamber, as set forth. 6th. In combination, an excavator composed of a series of relatively rigid parallel plates forming excavating edges, and an independent vertically adjustable chamber carried by the excavator for the reception of spoil passed between said parallel plates, a plurality of longitudinally oscillatinn bars or beaks fulcrumed to said plates, and a series of hydraulic nozzles directed toward the forward extremities of said beaks, and a device for removing the spoil, as set forth. 7th. In a submarine plough and excavator, the combination of a plough composed of a series of relatively rigid parallel plates, with a supplemental chamber carried by said plough and capable of vertical adjustment independent thereof, one or more creepers pivoted to said plough and capable of independent oscillation, and a device for removing the spoil, as set forth.

No. 58,004. Ventilator for Lanterns, &c.

(*Ventilateur pour lanternes, etc.*)

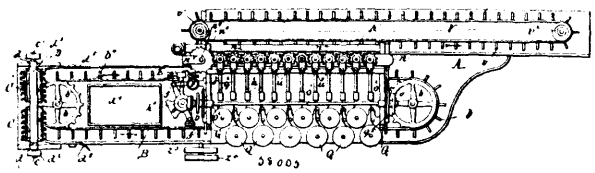


Willard Alger Bourne, New York, State of New York, U.S.A., 4th November, 1897; 6 years. (Filed 11th October, 1897.)

Claim.—1st. In a ventilator, the combination of an outer perforated shell, an inner imperforate tube or cylinder, having its upper edge above the perforations in the outer shell, and a deflector supported centrally within said cylinder and free therefrom, said deflector having its upper surface formed to deflect upwardly on the opposite side such currents of air as may pass over the edge of said tube or cylinder on the one side and strike the deflector, and having its under surface formed to divide the rising currents of heated air and gases, substantially as shown and described. 2nd. In a ventilator, the combination of an outer perforated shell, an inner imperforate tube or cylinder having its upper edge above the perforations in the outer shell, a deflector supported centrally within said tube or cylinder and free therefrom, said deflector having its upper surface formed to deflect upwardly on the opposite side such currents of air as may pass over the edge of the tube or cylinder on the one side and strike the deflector, and having its under surface formed to divide the rising currents of heated air and gases, and a substantially conical deflector supported above the first-named deflector in line therewith and with its smaller end downward, substantially as shown and described. 3rd. In a ventilator, the combination of an outer perforated shell, an inner imperforate tube or cylinder having its upper edge above the perforations in the outer shell, and a hollow deflector with flaring walls supported centrally within said tube or cylinder and free therefrom, with its apex downward and its open base upward and below the upper edge of said cylinder. 4th. In a ventilator, the combination of an outer perforated shell, an inner imperforate tube or cylinder having its upper edge above the perforations in the outer shell, a hollow deflector with flaring walls supported centrally within said tube or cylinder and free therefrom, with its apex downward and its open base upward and below the upper edge of said tube or cylinder, and a substantially conical deflector supported by said shell above the first-named deflector and in line therewith and with its smaller end downward, substantially as shown and described. 5th. In a ventilator, the combination of an outer perforated shell, an inner imperforate tube or cylinder having its edge above the perforations in the outer shell, and a hollow cone supported centrally within said tube or cylinder and free therefrom, with its apex downward and its open base upward and below the upper edge of said tube or cylinder, substantially as shown and described. 6th. In a ventilater, the combination of an outer perforated shell, an inner imperforate tube or cylinder having its edge above the perforations in the outer shell, a hollow cone supported centrally within said tube or cylinder and free therefrom, with its apex downward and its open base upward and below the upper edge of said tube or cylinder, and a second cone supported by said shell above the first-named cone and in line therewith and with its point downward, substantially as shown and described. 7th. In a lamp or lantern, the combination with the wick tube of a plate hinged to one side of said wick tube and cut out to fit around the edges of said wick tube, the end portions of said plate being turned upwardly to protect the edges of the flame from air rising from below, substantially as shown and described.

No. 58,005. Can Capping Machine.

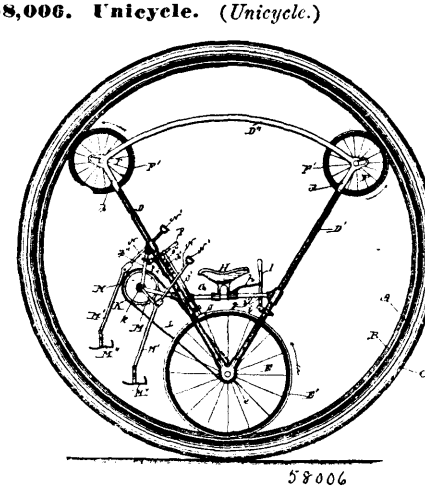
(*Machine pour fermer les boîtes métalliques.*)



Millard Jay Hawkins, Hoopeston, Illinois, U.S.A., 4th November, 1897; 6 years. (Filed 5th October, 1897.)

Claim.—1st. The combination with a horizontal endless can carrier, of two brushes arranged side by side over portions of the carrier, which move in opposite directions, and mechanism whereby said brushes are rotated in opposite directions, substantially as set forth. 2nd. The combination with an endless can carrier, of a yoke arranged over portions of the carrier which move in opposite directions, brushes mounted on separate shafts which are both journalled in said yoke in line with each other, and mechanism whereby said shafts are rotated in opposite directions, substantially as set forth. 3rd. The combination with a hollow arm or flux conduit and a brush holder secured to said arm, of a clamping disc provided on its back with grooves and secured in said holder, and an annular row of bristles clamped between said disc and holder, substantially as set forth. 4th. The combination with a can carrier, a rotatable fluxing device, a horizontal shaft to which said fluxing device is secured, and a driving device applied to said shaft, of a yoke in which said shaft is journalled and provided with a vertical stud, and a bearing or socket in which said stud can be raised and lowered and also turned, for adjusting said shaft horizontally and vertically, substantially as set forth. 5th. The combination with the horizontal feed belt and the soldering table, a shifting frame adapted to transfer the cans from the feed belt to the soldering table, mechanism whereby said frame is reciprocated longitudinally, and independent guide devices whereby a transverse movement toward and from the soldering table is imparted to the frame simultaneously with its longitudinal movement, substantially as set forth. 6th. The combination with the feed belt and the soldering table, of a shifting frame adapted to transfer the cans from the feed belt to the soldering table, mechanism whereby said frame is reciprocated longitudinally, an oblique front guide whereby the shifting frame is caused to move toward the soldering table during the first part of its forward stroke, and an oblique rear guide whereby the shifting frame is caused to move away from the soldering table during the subsequent part of its forward stroke, substantially as set forth. 7th. The combination with the feed belt and the soldering table, of a shifting frame adapted to transfer the cans from the feed belt to the soldering table, mechanism whereby said frame is reciprocated longitudinally, a pivoted oblique front guide whereby the shifting frame is caused to move toward the soldering table during the first portion of its forward stroke, a spring whereby said guide is held yieldingly in its normal position, an oblique rear guide whereby the shifting frame is caused to move away from the soldering table during the subsequent part of its forward stroke, and a longitudinal return guide whereby the shifting frame is caused to return longitudinally during its backward stroke, substantially as set forth. 8th. The combination with the feed belt and the soldering table, of a shifting frame adapted to transfer the cans from the feed belt to the soldering table, mechanism whereby said frame is reciprocated longitudinally, an oblique front guide whereby the shifting frame is caused to move toward the soldering table during the first part of its forward stroke, an oblique rear guide whereby the shifting frame is caused to move away from the soldering table during the subsequent part of its forward stroke, a retaining pawl whereby the shifting frame is compelled to move longitudinally during its return stroke, and means whereby said pawl is released when the shifting frame has reached the oblique front guide, substantially as set forth. 9th. The combination with a vertically movable soldering tool, of an actuating cam provided with a lifting section which is circumferentially adjustable, and mechanism connecting the cam with the soldering tool, whereby the beginning of the lifting movement of the tool can be regulated, substantially as set forth. 10th. The combination with a soldering tool, of a downwardly projecting rod or bar arranged therein and capable of vertical movement independently of the same, a releasable solder-feed device and a releasing device connected with said rod or bar and controlling said solder-feed device, whereby when said rod or bar comes in contact with the cap of a can, the releasing device is prevented from affecting the solder-feed device, while when the rod or bar does not come in contact with a cap, the releasing device shifts the solder-feed to an inoperative position, substantially as set forth. 11th. The combination with a vertically movable soldering tool, of a downwardly projecting rod or bar arranged therein and capable of vertical movement with the same and also independently of the same, a solder-feed device, and a releasing device connected with said rod or bar and controlling said solder-feed device, whereby when said rod or bar encounters the cap of a can as it descends with the soldering tool, it is arrested and the releasing device is thereby prevented from affecting the solder feed device, while when no cap is encountered, said rod or bar continues to descend until the releasing device shifts the solder-feed device to an inoperative position, substantially as set forth. 12th. The combination with a vertically movable soldering tool, of a downwardly projecting rod arranged therein and capable of vertical movement with the same and also independently of the same, a solder wire guide, a reciprocating feed pawl and a releasing plate arranged over said pawl and connected with said rod or bar by a depending rod, substantially as set forth. 13th. The combination with a soldering tool, of a feed bar capable of movement toward and from said tool, a feed pawl pivoted to said feed bar, and a telescopic solder wire feed tube composed of a section connected with said feed bar and a section supported adjacent to the soldering tool, substantially as set forth. 14th. The combination with a soldering tool, of a solder wire feed tube, a solder feed device, a support to which the inlet end of said tube is loosely connected, and means whereby the delivery end of said tube is swung away from the soldering tool after the solder has been fed against the soldering tool, substantially as set forth. 15th. The combination with a vertically movable soldering tool and a cross-head whereby the tool is lifted, of a solder-wire feed tube, a support on which the delivery portion of said tube rests, and a lever and rod whereby a laterally ascending movement is imparted to said feed tube from said cross head, substantially as set forth. 16th. The combination with a vertically movable soldering tool and a cross-head whereby the tool is lifted, of a solder wire feed tube composed of of an inlet portion and a delivery portion connected by a telescopic joint, means whereby the delivery portion is connected with said cross-head and swung away from the tool after the solder has been fed against the same, a feed bar with which the inlet portion of the tube is loosely connected, and a feed pawl mounted on said feed bar, substantially as set forth. 17th. The combination with a solder wire feed tube composed of a stationary delivery section and an inlet section capable of longitudinal telescopic movement with reference to said delivery section, of a detent pawl attached to the delivery section of said tube, a feed bar connected with the inlet section of said tube, and a feed pawl mounted on said feed bar, substantially as set forth. 18th. The combination with the soldering table and the delivery belt, of a transversely reciprocating shifting frame, whereby the cans are transferred from the soldering table to the delivery belt, and mechanism whereby the frame is elevated during its effective stroke and lowered during its return stroke, substantially as set forth. 19th. The combination with the soldering table and the delivery belt, of a transversely reciprocating shifting frame, whereby the cans are transferred from the soldering table to the delivery belt, and switch rails and tilting switch levers, whereby said frame is elevated during its effective stroke and lowered during its return stroke, substantially as set forth. 20th. The combination with the soldering table provided with transverse oblique guide ribs and slots, and the delivery belt, of a shifting frame composed of transverse oblique bars and longitudinal bars, the rear bar of which is provided with pins which are adapted to project through said slots, and transverse oblique guide devices, whereby the rear ends of said transverse bars are raised during their forward stroke and lowered during their return stroke, substantially as set forth. 21st. The combination with the soldering table, the delivery belt, and the shifting frame whereby the cans are transferred from said table to said belt, of a driving shaft, an actuating cam adjustably secured thereto and effecting the forward stroke of said shifting frame, a tappet whereby the return stroke is effected, and a rock shaft and rock arm which are actuated by said adjustable cam and tappet, and which actuate said shifting frame, substantially as set forth.

No. 58,006. Unicycle. (*Unicycle.*)

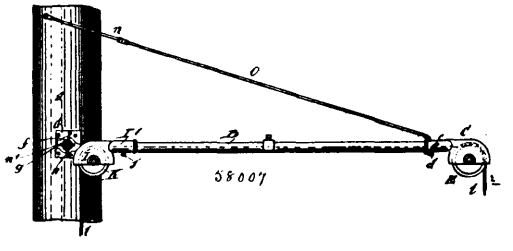


Thomas Tolson, Boston, Mass., U.S.A., 4th November, 1897; 6 years. (Filed 26th October, 1897.)

Claim.—1st. The herein described unicycle consisting of an outer wheel ring combined with a frame arranged within the same, the driving wheel E, E^1, and guide wheels F, F^1, journalled in said frame and adapted to roll against the interior of the wheel ring and means for propelling the driving wheel E, E^1, and thereby imparting a rotary motion to the wheel ring, substantially as and for the purpose set forth. 2nd. In a unicycle an outer wheel and an internal frame having driving wheel and guide wheels arranged within and guided on the interior of said wheel ring combined with a crank shaft having cranks, pedal rods provided with pedals pivoted to said cranks and arm rods pivoted to said cranks or pedal rods and intermediate connecting mechanism to the driving wheel, substantially as and for the purpose set forth. 3rd. In a unicycle a frame having a saddle supporting bar G, combined with a saddle H, longitudinally adjustable thereon, a lever pivotally connected to the frame and having a tooth or projection adapted to interlock in teeth on the saddle bar, and a spring for holding said lever and saddle in the adjusted locked position, substantially as and for the purpose set forth. 4th. In a unicycle, in combination, an outer wheel ring and a propelling wheel arranged to be frictionally rotated against the interior of said wheel ring and a brake device consisting of a brake rod, provided with a brake shoe and having teeth adapted to interlock with a projection on the interior frame and a spring-pressed lever for operating said brake and to hold it in locked position after being set or released, substantially as described. 5th. In a unicycle or velocipede, the herein described combined foot and hand driving device consisting of a crank shaft with cranks diametrically secured thereto, combined with pedal and arm rods pivoted together and to said cranks, substantially as and for the purpose set forth. 6th. In combination, in a unicycle or velocipede driving device, a crank shaft, cranks secured thereto, pedal and arm rods pivoted to said cranks, the pedal rod having a socket *m* for the purpose of limiting the oscillating motion of the arm rod, substantially as herein set forth and described.

No. 58,007. Mast Arms for Electric Lamps.

(*Bras de mât pour lampes électriques.*)



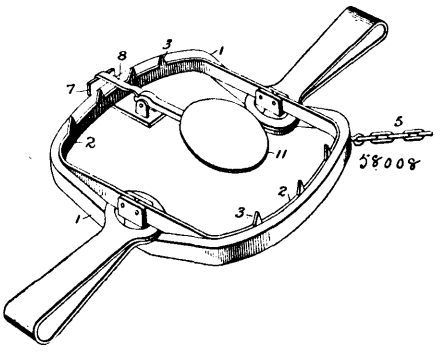
Joseph Jo Mary Shickluna, Buffalo, New York, U.S.A., 4th November, 1897; 6 years. (Filed 29th March, 1897.)

Claim.—1st. A mast arm for electric lamps, consisting of a pair of converging side members, an outer pulley casing provided on its rear side with rearwardly diverging sockets which receive the front ends of said side members, an inner pulley casing arranged at the rear end of the side member which is in line with the outer pulley casing and provided on its front side with a socket which receives the rear end of said side member and on its rear side with a bearing eye, and a socket secured to the rear end of the other side member and provided on its rear side with a bearing eye, said bearing eyes being adapted to receive journals arranged on opposite sides of the post to which the mast arm is attached, substantially as set forth. 2nd. A mast arm for electric lamps, consisting of a pair of converging side members, a head or casing connecting the outer ends of said members, eyes or bearings arranged at the rear ends of said members, and a yoke or bridge connecting the side members between said head or casing and said eyes or casing and said eyes or bearings and composed of sections made lengthwise adjustable on each other, substantially as set forth. 3rd. A mast arm for electric lamps, consisting of a pair of converging side members, a head or casing connecting the outer ends of said members, eyes or bearings arranged at the rear ends of said members, and a yoke of bridge connecting the side members between said head or casing and said eyes or bearings and composed of adjustable sections, one of which is provided with a longitudinal slot and the other with a clamping-bolt passing through said slot, substantially as set forth.

No. 58,008. Steel Trap. (*Piège.*)

John G. McLeod and Fred G. Abbey, both of Lookout, Washington, U.S.A., 4th November, 1897; 6 years. (Filed 15th October, 1897.)

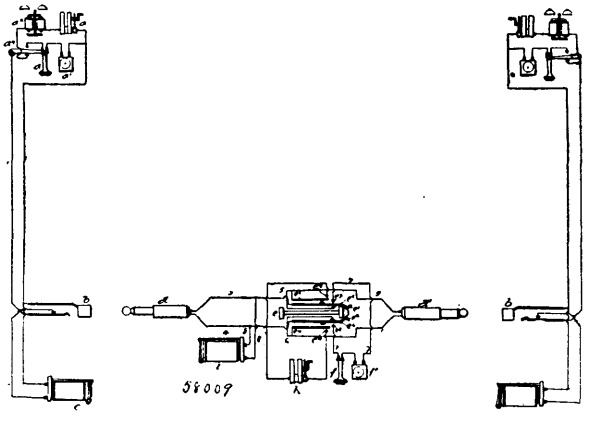
Claim.—In a trap, the combination of a support or bed having a clear opening in the centre thereof, spring-actuated jaws mounted on



said support or bed, and an independent pan and trigger adapted to be applied to either side of said trap, substantially as and for the purpose specified.

No. 58,009. Keyboard Apparatus.

(*Appareil commutateur.*)



The Bell Telephone Co. of Canada, Limited, Montreal, Quebec, Canada, assignee of Frank Robert McBerty, Downers Grove, Illinois, U.S.A., 5th November, 1897; 6 years. (Filed 5th November, 1896.)

Claim.—1st. The combination with a plug, of a telephone circuit associated therewith, a generator of signalling-currents, a key constructed to interrupt said telephone circuit and to connect said generator with the plug, and an instrument through which the severed portion of the telephone-circuit is closed by said key, substantially as described. 2nd. The combination with an answering-plug, of a calling plug, a plug-circuit for the plugs, a generator of signaling-currents, a telephone and a combined listening and calling key constructed to connect the generator with the calling-plug and the telephone with the answering-plug, substantially as described. 3rd. The combination with the answering-plug having a telephone associated therewith, of a calling-plug having a generator of calling-currents associated therewith, a plug circuit for the plugs, and a key constructed to sever the connection between the plugs and to connect the generator with the calling-plug and the telephone with the answering-plug, substantially as described. 4th. In combination two telephone-lines, one provided with a telephone and the other with a signal-bell, a conductor uniting the lines, an operator's telephone and a generator of signal-current, a key connecting said telephone with said first mentioned line and said generator of signalling-current with said second mentioned line, and switch-contacts in the key operated in disconnecting the generator in the telephone adapted to complete the conductor uniting the lines, substantially as described.

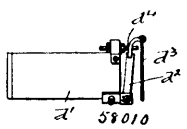
No. 58,010. Circuit for Annunciator Telephone Lines.

(*Circuit pour annonciateurs de lignes de telephones.*)

The Bell Telephone Co. of Canada, Limited, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 5th November, 1897; 6 years. (Filed 20th February, 1897.)

Claim—1st. The combination with a telephone-line having at its substation means for producing in the line a momentary signalling-current, and at a central station a spring-jack connected with a line,

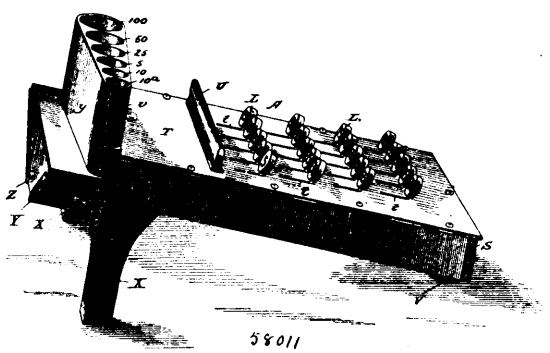
of an annunciator in the line-circuit adapted to display its indicator when traversed by current, a shunt or parallel circuit of the annun-



ciator including a source of current, normally-separated switch-contacts interposed in said shunt controlled by an electromagnet in the line-circuit, and other switch-contacts in the spring-jack interposed in the shunt-circuit adapted to be separated when connection is made with the spring-jack, substantially as described. 2nd. The combination with a telephone-line provided at its substation with a generator of signalling-current and including at a central station a spring-jack switch and an annunciator adapted to give its indication when traversed by current, of a shunt or parallel circuit of the annunciator including a source of current controlled by normally-separated contacts adapted to be closed by the armature of the annunciator when attracted, one terminal of said shunt being applied to the telephone line between the spring-jack and the substation apparatus and the other terminal being applied to the line-circuit between the spring-jack and some portion of the winding of the annunciator, substantially as described. 3rd. The combination with a telephone-line equipped at its substation with a generator of signalling-current, and at its central station including a spring-jack switch and the magnet of an annunciator adapted to display its indicator when traversed by current, of a local circuit including the winding of the annunciator or a portion thereof and separable contacts of the spring-jack together with a source of current, and switch-contacts controlling said local circuit adapted to be closed together when the armature of the annunciator is attracted, substantially as described.

No. 58,011. Coin Changing Machine.

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

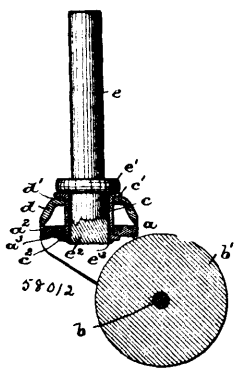


Cortlandt E. Palmer, Colorado Springs, assignee of Adolph Leonard Levin, Denver, both in Colorado, U.S.A., 5th November, 1897; 6 years. (Filed 11th October, 1897.)

Claim.—1st. In a coin-delivering device the combination with coin-receptacles, of coin-ejecting slides adapted to enter the receptacles, and reciprocating frames in different horizontal planes but in pivotal connection with said slides, substantially as described. 2nd. In a coin-delivering device the combination with coin-receptacles, of coin-ejecting slides adapted to enter the receptacles in a common plane, and a series of superposed reciprocating frames each bearing a pilot-arm in different planes having pivotal connection with said slides, substantially as described. 3rd. In a coin-delivering device the combination with coin-receptacles, of coin-ejecting slides adapted to enter the receptacles, a series of reciprocating frames in pivotal connection with said slides, and a series of operating-bars arranged to directly engage one or more of the frames, substantially as described. 4th. In a coin-delivering device the combination with coin-receptacles, of coin-ejecting slides adapted to enter the receptacles, a series of reciprocating frames in pivotal connection with said slides, a co-acting series of operating-bars arranged to engage one or more of said frames, and suitable means common to all the frames for returning them to normal position after each forward thrust, substantially as described. 5th. In a coin-delivering device, the combination with coin-receptacles, of reciprocating frames adapted to eject coins therefrom, operating-bars of skeleton form having supporting-shoes, and arranged to impinge against one or more of the frame for the purpose of advancing same, and a yieldingly retained reciprocating yoke bearing upon each of said frames to return them to their normal positions, substantially as described. 6th. In a coin-delivering device, the combination with coin-receptacles, coin-ejecting frames and their operating-bars of skeleton form having depending supporting-shoes, of a yoke yieldingly connected with a fixed support and having a buffer-arm projecting in the path of said frames for the purpose of returning them to their normal position, substantially as described. 7th. In a coin-delivering device the combination with coin-receptacles, coin-ejecting frames and their operating-bars of skeleton form having front and rear supporting-shoes, of a skeleton yoke having an adjustable spring connection with a fixed support and a buffer-arm projecting in the path of said frames to return them to their normal position, substantially as described. 8th. In a coin-delivering device the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of a yoke bearing a buffer-arm projecting in the path of said frames, and a tension-spring having an adjustable connection with the yoke and a link connection with a fixed support, substantially as described. 9th. In a coin-delivering device the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of a skeleton yoke bearing a buffer-arm projecting in the path of said frames, a slotted fixed lug affording a guide for said arm, and a tension device having an adjustable connection with the yoke and a link connection with the lug aforesaid, substantially as described. 10th. In a coin-delivering device the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of a skeleton yoke bearing a buffer-arm projecting in the path of said frames, a notched tongue extending into the yoke, a slotted lug affording a guide for the arm, and a tension-spring interposed between said tongue and lug, being connected to the latter by a slotted link, substantially as described. 11th. In a coin-delivering device the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of a skeleton yoke bearing a buffer-arm with an angular cushioned shoulder projecting in the path of said frames, a slotted fixed lug affording a guide for the buffer-arm, and a tension-spring interposed between said yoke and lug, being connected with the latter by an embedded slotted link, substantially as described. 12th. In a coin-delivering device the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of a shift lever, adapted to interlock at suitable intervals with one of said frames, and suitable means interposed between said bars and levers whereby the latter together with its interlocked coin-ejecting frame is advanced, substantially as described. 13th. In a coin-delivering device, the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of an oscillating lever bearing a surface-tooth adapted to interlock at suitable intervals with one of said frames, and suitable means interposed between all of said bars and the lever whereby the latter together with its interlocked coin-ejecting frame is advanced, substantially as described. 14th. In a coin-delivering device the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of an auxiliary shift-lever adapted to interlocked at suitable intervals with one of said frames, and a yieldingly supported yoke for engaging the shift-lever to advance it and subsequently return all of the parts to their normal positions, substantially as described. 15th. In a coin-delivering device, the combination with coin-receptacles, coin-ejecting frames and their operating-bars, of an auxiliary shift-lever adapted to interlock at suitable intervals with one of said frames, and a spring-retained yoke for returning the parts to their normal positions having an advance spur for engaging the shift-lever to actuate it, substantially as described. 16th. In a coin-delivering device, the combination with a casing having coin-receptacles at one end and a transversely-located cushion at the other, of reciprocating coin-ejecting frames, operating-bars engaging the frames, a return yoke also engaging the frames, bearing an advance spur, an auxiliary shift-lever, and means for interposing the lever in the path of said spur on the yoke, substantially as described. 17th. In a coin-delivering device the combination with a casing having coin-receptacles, coin-ejecting frames and their operating bars, of an auxiliary shift-lever normally located below the plane of said frames, a vertically movable arm for elevating the shift-lever into engagement with one of the frames, and a return-yoke bearing a spur on its leading end for impinging upon the shift-lever to advance it, substantially as described. 18th. In a coin-delivering device, the combination with casing having coin-receptacles, coin-ejecting frames and their operating-bars, of an auxiliary shift-lever transversely located in the casing and normally occupying a plane below that of the frames, a vertically movable arm for elevating the lever into engaging with one of the frames, a return yoke bearing a spur on its leading end for impinging upon the shift-lever to advance it, and a raised track onto which the lever moves, substantially as described. 19th. In a coin-delivering device, the combination with a casing having coin-receptacles, coin-ejecting frames and their operating bars, of an auxiliary shift-lever transversely located in the casing and normally occupying a plane below that of the frames, a vertically movable weighted arm for elevating the lever into engagement with one of the frames, and a return-yoke bearing a spur on its leading end for actuating the lever together with its interlocked frame simultaneously with a movement of any other frame or frames, substantially as described. 20th. In a coin-delivering device the combination with a casing having coin-receptacles, coin-ejecting frames and operating bars, of an auxiliary shift-lever transversely located in the casing and normally occupying a plane below that of the frames, a vertically-movable weighted arm bearing a shoe for elevating the lever into engagement with one of the frames, and a return-yoke bearing a spur on its leading end for impinging upon the shift-lever to advance it, substantially as described. 21st. In a coin-delivering device the com-

bination with a casing having coin-receptacles, coin-ejecting frames and their operating-bars, of an auxiliary shift-lever, transversely located in the casing and normally occupying a plane below that of the frames, an angular vertically movable arm terminating in a shoe which penetrates the casing for elevating the lever aforesaid into engagement with one of the frames, and a return-yoke bearing a spur on its leading end for impinging upon the shift-lever to advance it, substantially as described. 22nd. In a coin-delivering device the combination with coin-receptacles, of suitable means for ejecting coins therefrom, a coin-chute in common communication with the receptacles, and a counter located between said receptacles and chute finished in horizontal escallops the edges whereof are bevelled in opposite directions from centre of the counter, substantially as described. 23rd. In a coin-delivering device the combination with a graduated series of coin-holders, suitable means for ejecting coins therefrom, coin-chute in common communication with the holders, and a counter located between said holders and chute finished in a series of escallops in register with the coin-holders the edges whereof are bevelled in opposite directions from centre of the counter, substantially as described. 24th. A casing for a coin-delivering device having a top plate or keyboard crossed transversely by a thumb support and broken by a series of key-stem slots, in combination with a corresponding series of tapering key-stems protruding from said slots, and an equal number of controlling-keys detachably secured upon their respective key-stems, substantially as described.

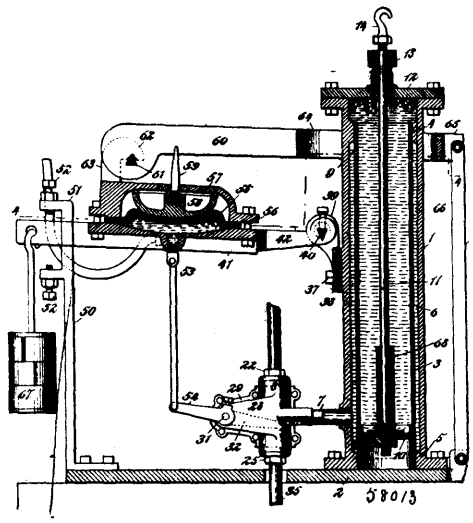
No. 58,012. Caster. (*Roulette de meuble.*)



Henry Ill, assignee of George E. Neuberth, both of Newark, New Jersey, U.S.A., 5th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. In a caster, the combination, with a caster frame, consisting essentially of a flat top-plate a^2 having a central perforation, and a pair of downwardly extending horns or brackets, of a tubular sleeve or bearing arranged in said perforation and secured on the under side of said plate a^2 and extending through the perforation in said top-plate and above the same, a cup-shaped plate having a central opening, whereby said plate is arranged over said sleeve and is placed upon the upper surface of said plate a^2, means connected with said sleeve for tightly drawing said cup-shaped plate down upon the top of said plate a^2, and a pintle rotatively arranged in said sleeve or bearing, substantially as and for the purpose set forth. 2nd. In a caster, the combination, with a caster frame, consisting essentially of a flat top-plate a^2, having a central perforation, and a pair of downwardly extending horns or brackets, of a tubular sleeve or bearing c arranged in said perforation and having a bead c^2 for securing it against the under side of said plate a^2, said sleeve c extending through said perforation in said top-plate and above the same, a cup-shaped plate d having a central opening d^1, whereby said plate d is arranged over said sleeve and is placed upon the upper surface of said plate a^2, an annular bead c^1 on the upper portion of said sleeve c adapted to be closed down upon said cup-shaped plate d for tightly drawing the same down upon the top of said top-plate a^2, and a pintle rotatively arranged in said sleeve or bearing, substantially as and for the purposes set forth. 3rd. In a caster, the combination, with the caster frame having a perforated top-plate a^2, and a downwardly extending annular ridge a^4 surrounding the opening in said top-plate, a cup-shaped plate on said top-plate having a central opening, a sleeve or bearing in said openings in said top-plate and the said cup-shaped plate, and a pintle rotatively arranged in said bearing, substantially as and for the purposes set forth. 4th. In a caster, the combination, with the caster frame having a perforated top-plate a^2, and a downwardly extending annular ridge a^4 surrounding the opening in said top-plate, a cup-shaped plate d on said top-plate having a central opening d^1, a sleeve or bearing c in the opening in said top-plate of the caster frame and said plate d, said sleeve or bearing having annular beads c^1 and c^2 for securing the several parts together, and a pintle rotatively arranged in said sleeve or bearing, substantially as and for the purposes set forth.

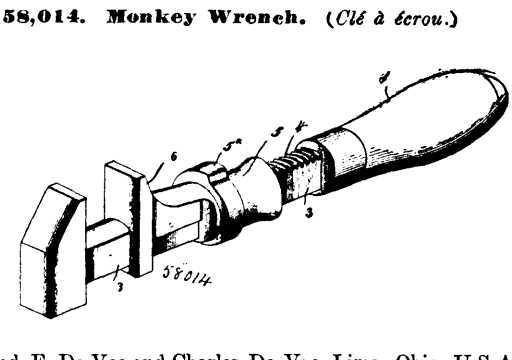
No. 58,013. Damper Regulator. (*Régulateur de régistre.*)



Frederick T. Mueller and Timothy J. Kieley, both of New York, State of New York, U.S.A., 5th November, 1897; 6 years. (Filed 25th October, 1897.)

Claim.—1st. In a damper regulator, the combination, with a fluid pressure motor, of a valve for governing the supply of fluid to the motor, a lever pivoted to the support and adapted to actuate the valve, a second lever pivoted to the free end of said former lever and fulcrumed at its other end, and a suitably-supported motor in communication with the boiler and operatively connected with the two levers, and adapted to change their positions relatively to each other, substantially as described. 2nd. In a damper regulator, the combination with a fluid pressure motor for operating the damper, of a valve for controlling said motor, and means for operating the vaive, said means consisting of two levers, one end of each being pivoted to a stationary support, and the movable end of one of the levers being pivotally connected with the movable end of the other lever, a motor in communication with the boiler and carried by one of the levers and operating against the other lever, and tending to separate them, and means for transmitting motion from some part of the lever system to said valve, substantially as described. 3rd. In a damper regulator, the combination, with a damper and motor for operating the same, of a valve connected with and controlling the motor, a movable support for operating said valve, a pressure motor supported thereby, a lever pivotally secured at one end to a stationary support, and at its opposite end supported by said motor, and connected to said movable support, substantially as described. 4th. In a damper regulator, the combination, with a motor for operating the damper, of a valve for controlling said motor, the pivoted support 41 provided with a water chamber 43 communicating with the boiler, a diaphragm located in said chamber, a lever pivoted at one end to a stationary support, and connected at its opposite end to said movable support, and a piston resting upon said diaphragm and against said lever for raising the latter and said movable support when the excess of pressure in the boiler is exerted upon said diaphragm, substantially as described.

No. 58,014. Monkey Wrench. (*Clé à écrou.*)

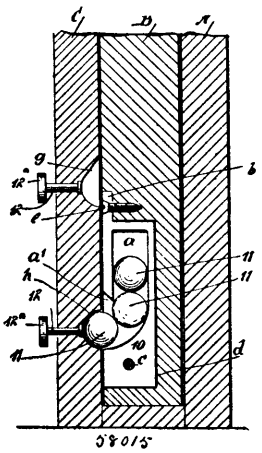


Friend F. De Voe and Charles De Voe, Lima, Ohio, U.S.A., 5th November, 1897; 6 years. (Filed 16th September, 1897.)

Claim.—A monkey-wrench, comprising a stock toothed upon one side, a fixed jaw on said stock, a movable jaw slidingly mounted thereon, a stop projection on the inner end of said sliding jaw, and a partially-rotatable collar mounted on said stock and provided with

a tooth which is movable laterally into and out of engagement with the teeth on the stock, said collar also embodying an enlarged portion formed with an internal segmental groove or recess terminating in abrupt, radial or transverse shoulders, which co-operate with the stop projection on the sliding jaw to limit the rotative movement of the collar, substantially as described.

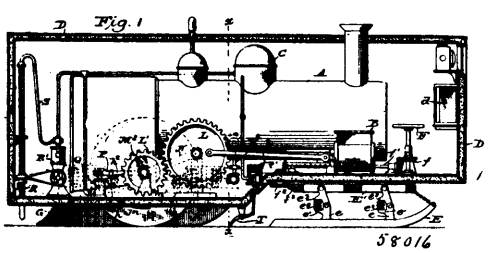
No. 58,015. Sash Support and Lock. (*Arrête-croisée.*)



William Wesley Dwigans, Askadelphia, Arkansas, U.S.A., 5th November, 1897 ; 6 years. (Filed 23rd October, 1897.)

Claim.—1st. A sash lock and holder, comprising a chambered casing on a slidable sash, a plurality of balls loose in said casing, the lower ball being adapted to project partially from the chamber of the casing and enter a pocket in a keeper strip for the sash, and means to push said ball from the pocket for release of the sash, as specified. 2nd. A sash lock and holder, comprising a casing having a chamber therein which is curved at the lower end and open at said end, a plurality of balls loosely occupying the chamber of the casing, the lowermost ball being adapted to project partially from the lower end of the chamber and enter a registering pocket in a keeper strip for the sash and means to push said ball from the pocket for release of the sash, as specified. 3rd. A sash lock holder, comprising a casing bedded in the side bar of the sash and secured therein, the said casing having a chamber therein curved and open at the lower end, a plurality of balls in said chamber, a plurality of pockets in a keeper strip of the sash which may separately register with the open lower end of the casing chamber as the sash is moved, and a pusher rod for each pocket adapted to remove a ball that enters therein from the casing, as specified. 4th. In a device of the described construction, the ball-holding casing comprising a two part box having a chamber therein that curves laterally near the lower end and is open at said end, a securing ear on the upper end of the two-part casing perforated to receive a screw, both sections of said casing being securable together near the lower end, as specified. 5th. In a device of the described construction, the ball-holding casing, comprising an oblong box, having a chamber therein that curves laterally near the lower end, and is open at said end, the box being provided with a perforated securing ear at the upper end, which ear is flush with the side of the casing that is apertured near the opposite end by the chamber, as specified. 6th. In a device of the desired construction, a cap plate for each pocket in the keeper strip for the sash, said plates being adapted to conceal said pockets, as specified.

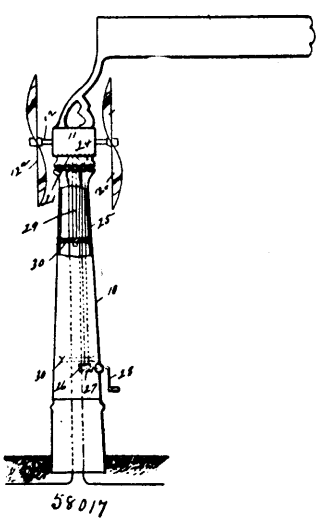
No. 58,016. Ice and Snow Locomotive.
(*Locomotive à neige et glace.*)



Charles M. Coen, New York, State of New York, assignee of Levi S. Bacon, Washington, Columbia, both in the U.S.A., 5th November, 1897 ; 6 years. (Filed 26th October, 1897.)

Claim.—1st. In a snow and ice locomotive, the combination with the frame and motor, of driving wheels loosely mounted to have an independently upward and downward movement, adjustable runners located adjacent to and in proximity to said driving wheels, and means for adjusting the runners, substantially as described. 2nd. In a snow and ice locomotive, the combination with the motor and frame, of independently movable driving wheels, runners arranged at the sides of the driving wheels, and means for adjusting the runners to vary the degree of penetration of the driving wheels, substantially as described. 3rd. The combination with the adjustable runners, of yieldingly supported driving wheels adjacent thereto and arranged at the sides of the runners, substantially as described. 4th. The combination with adjustable rear runners and means for lowering the same, of yieldingly supported driving wheels arranged at the sides of the runners and provided with penetrating peripheries, substantially as described. 5th. The combination with the motor, of adjustable runners for supporting the motor at the rear, yieldingly supported driving wheels, and means for forcing the wheels downward comprising a lever mechanism, substantially as described. 6th. In a snow and ice locomotive, the combination with the motor and driving mechanism, of an ice-drill carried by the locomotive and mechanism for actuating the drill, substantially as described. 7th. In a snow and ice locomotive, the combination with the motor and driving mechanism, of an ice-drill, connected mechanism for driving the drill, and a flexible connection between the drill and the motor mechanism, substantially as described. 8th. In a snow and ice locomotive, the combination with propelling instrumentalities, of an ice-drill associated therewith, substantially as described. 9th. In a snow and ice locomotive, the combination with a boiler and propelling mechanism, of an ice-drill, means for driving the drill, and a connection between said means and the boiler, substantially as described. 10th. In a snow and ice locomotive, the combination with the boiler and driving mechanism, of a hollow ice-drill, mechanism for actuating the same, and a flexible connection between the boiler and the hollow centre of the ice-drill, substantially as described. 11th. In a snow and ice locomotive, a driving wheel having a laterally inclined periphery and a series of transverse teeth arranged on the periphery having inclined sides, substantially as described. 12th. In a snow and ice locomotive, a driving wheel having an inclined periphery and a series of inverted V-shaped teeth arranged transversely across the periphery having their sharp edges substantially on a plane with the outer edge of the periphery, substantially as described. 13th. A driving wheel for snow and ice locomotives having an inclined periphery the outer edge of which is horizontally formed, and a series of inclined ribs or projections on the periphery, substantially as described. 14th. In a snow and ice locomotive, the combination with the motor and driving mechanism, of driving wheels arranged on opposite sides of the machine each formed with inclined peripheries the inclination of which is from the upper inner edge to the lower outer edge thereof, and a series of teeth on the periphery, substantially as described. 15th. In a snow and ice locomotive, the combination with the frame and motor, of forward runners, and yielding connection between the runners and the frame comprising yielding pivotal knees, substantially as described.

No. 58,017. Electric Fan for Ventilating Streets or Alleys. (*Éventail électrique.*)

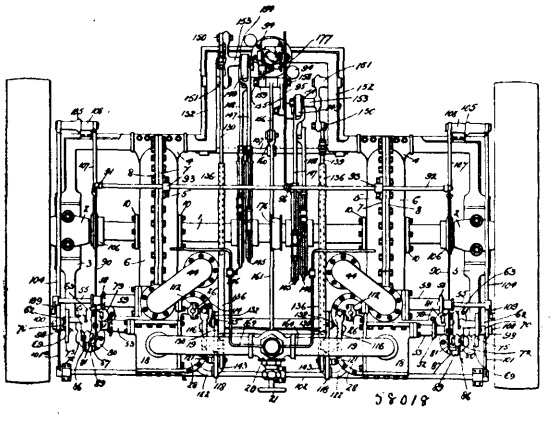


Vespasian V. Hedges, Coffeyville, Kansas, U.S.A., 5th November, 1897 ; 6 years. (Filed 27th February, 1897.)

Claim.—1st. In an electric fan, a motor, a casing for the same, a shaft driven by the motor, fans carried by the shaft, a support upon which the motor casing is revolubly mounted, a source of electric supply, a connection between said source and motor, and means for making and breaking the circuit by the rotation of the motor-casing

on its support, as and for the purposes set forth. 2nd. In an electric fan, a casing, a support upon which the casing is revolubly mounted, a motor located within the casing, a shaft driven from the motor, fans secured to said shaft, a vane attached to the casing, contact points connected with the motor and located within the casing, contact points located within the support and connected with a source of electrical supply, and means, substantially as described, for rotating the casing to bring one set of points in contact with the opposing set, as and for the purpose set forth. 3rd. An electric fan for ventilating streets and alleys, consisting of fans mounted on a shaft, a head in which the said fan-shaft is journaled, a motor mounted in the said head, a connection between the motor and the fan-shaft, a post on which the head is mounted, pins in the head with which the wires from the motor are connected, pins in the post with which the wires from the source of supply of power are connected, a driving-shaft operating to turn the head, and a driving mechanisn for the said shaft, whereby the head may be revolved to bring the pins therein in contact with the pins in the post and close the circuit, substantially as described. 4th. The combination of a support, a head-block mounted to turn thereon, a motor carried by the head-block, a fan carried on the head-block and operatively connected to the motor, two contact pins mounted on the head-block and connected with the terminals of the motor circuit, four contact-pins equally spaced apart and mounted on the support, said last-mentioned contact-pins being connected in pairs, line conductors leading from a source of electrical supply and connected with the respective pairs of contact-pins on the support, and means for turning the head-block to bring the contact-pin thereon in contact with either of the two pins of the respective pairs on the support, substantially as set forth.

No. 58,018. Rotary Engine. (*Machine rotatoire.*)



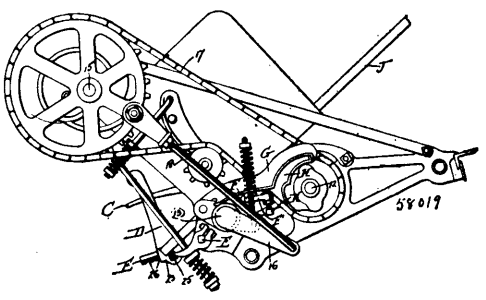
William Samuel Colwell, Chicago, Illinois, U.S.A., 5th November, 1897; 6 years. (Filed 28th October, 1897.)

Claim.—1st. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an exhaust port on each side of said abutment, an inlet port between each of said exhaust ports and abutment, means for closing one of said exhausts when the other is open, a valve for controlling each of said inlet ports and a valve gear having means of operative temporary connection with both of said valves alternately but not simultaneously whereby one of said inlet valves remains at rest while the other is active, substantially as set forth. 2nd. A rotary engine having in combination a revoluble piston head; a steam space therefor having inlet and exhaust ports; a movable abutment; a member movable back and forth; means for moving said member back and forth having operative relation to said piston; means having operative connection with said abutment located at substantially the extremity of the stroke of said member and adapted to be engaged by said member for withdrawing said abutment, and means for returning said abutment, substantially as set forth. 3rd. A rotary engine having in combination a revoluble piston head; a steam space therefor having inlet and exhaust ports; a movable abutment; a reciprocating member having operative connection with said piston; means having operative connection with said abutment and being located at the extremity of the stroke of said reciprocating member and adapted to be engaged thereby for withdrawing said abutment; a trip for automatically releasing said means from its connection with said reciprocating member, and means for returning said abutment, substantially as set forth. 4th. A rotary engine having in combination a revoluble piston head, a steam space therefor having inlet and exhaust ports, a movable abutment, positive means of operation connected with said piston for withdrawing said abutment, a trip for releasing said means from its connection with the abutment, means operating independently of the piston for instantly returning the abutment, and an automatic lock for holding the abutment from premature withdrawal, substantially as set forth. 5th. A rotary engine having in combination a revoluble piston head, a steam space therefor having an exhaust port and an admission valve, means operatively and positively connected with the piston for opening said valve, a governor for releasing the valve from its operative connection with the piston, means acting independently of said piston for closing the valve, a movable abutment, means for withdrawing said abutment co-operatively connected with said valve opening means, and means acting independently of the piston and of said valve opening mechanism for returning said abutment, substantially as set forth. 6th. A rotary engine having in combination a revoluble piston head; a steam space therefor having an exhaust port and an admission valve, means operatively and positively connected with the piston for opening said valve, a governor for releasing said valve from its operative connection with said piston, means acting independently of the piston for closing said valve, a movable abutment, means for withdrawing said abutment, co-operatively connected with said valve opening means, and means acting independently of said piston and of said valve opening means and exerting a continual tendency to return said abutment to a position across the steam space, substantially as set forth. 7th. A rotary engine having in combination a movable abutment, a revoluble piston head, a steam space therefor having a valved exhaust port and an inlet valve on each side of said abutment, a valve gear for opening said inlet valves having operative connection with said piston, a reversing device having connection with the exhaust valves for alternately opening and closing them respectively and also having operative connection with said valve gear for alternately bringing the valve gear into active and inactive relation to the inlet valves, said valve gear being without permanent connection with either of said inlet valves, and means for operating said abutment, substantially as set forth. 8th. A rotary engine having in combination a pair of revoluble piston heads connected together and set at different degrees of the circle which they describe whereby one will receive direct pressure of steam while the other acts solely under the expansive force of the steam admitted behind it, an annular steam space for each of said pistons, each provided with an exhaust port and an inlet port, a valve for controlling each of said inlet ports, means for alternately opening said inlet valves, a movable abutment extending across each of said steam spaces, oppositely reciprocating members for alternately withdrawing said abutments, each of said members being provided with means for becoming detachably connected with one of said abutments, and the last said means being located substantially at the extremities of the movements of said members respectively, and means for returning said abutments, substantially as set forth. 9th. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet and an exhaust valve on both sides of said abutment, said inlet valves being independent and disconnected, a valve gear having a link arranged in operative relation to both inlet valves for opening either of them, a second link operating in unison with the piston and having means of connection with said abutment for withdrawing it, and means for returning said abutment, substantially as set forth. 10th. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet and an exhaust valve on both sides of said abutment, a valve gear having a link arranged in operative relation to both of said inlet valves for opening either of them, a second link operating in unison with the piston and having means of connection with said abutment for withdrawing it, said links being operatively connected together whereby they will shift in unison, and means for returning the abutment substantially as set forth. 11th. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet and an exhaust valve on both sides of said abutment, a valve gear having a link arranged in operative relation to both of said inlet valves for opening them, a second link operating in unison with said piston and having means of connection with said abutment for withdrawing it, a reversing lever, a shaft to which said lever is secured, a crank arm on said shaft, a rod pivoted to said crank arm and supporting the link of said valve gear, a second rock shaft rotatively connected with said reversing lever, a crank arm secured on said rock shaft and supporting said second link, whereby said links will be shifted in unison, and means for returning said abutment, substantially as set forth. 12th. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet and an exhaust valve on both sides of said abutment, said exhaust valves being connected together whereby the opening of one will close the other, a valve gear having a link arranged in operative relation to both inlet valves for opening them, a second link operating in unison with the piston and having means of connection with said abutment for withdrawing it, said links being operatively connected together whereby they will shift in unison, and a reversing device having operative connection with said links and also with said exhaust valves, substantially as set forth. 13th. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet and an exhaust valve on both sides of said abutment, said exhaust valves being provided with crank arms, a rod connecting said crank arms together, whereby the opening of one exhaust valve will close the other, a valve gear having a link arranged in operative relation to both inlet valves for opening them, a second link operating in unison with the piston and having means of connection with said abutment for withdrawing it, a rocker shaft, a reversing device or lever secured to said shaft, a crank arm on said rocker shaft, a rod pivoted to said crank arm and supporting said valve gear link, the said rod which connects the crank arms of the

exhaust valves being also pivoted to the crank arm on said rocker shaft, a second rocker shaft operatively connected with said reversing device and having a crank arm supporting said second link, substantially as set forth. 14th. A rotary engine having in combination a revoluble piston head, an abutment, an inlet valve and exhaust port on both sides of said abutment, a movable portion or lug having operative connection with each of said inlet valves, and the valve gear for opening said inlet valves having a portion provided with a contraction adapted to engage with either of said movable portions or lugs and the diverging or inclined portion leading from said contraction, substantially as set forth. 15th. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet valve and exhaust port on both sides of said abutment, a movable stud or lug having operative connection with each of said inlet valves, and a valve gear for opening said inlet valves, having a link provided with a contracted portion adapted to engage with either of said studs or lugs and a widened portion incapable of engagement with said studs or lugs, substantially as set forth. 16th. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet valve and an exhaust port on both sides of said abutment, a crank arm on each valve stem of said inlet valves having a stud or lug, a valve gear for opening said inlet valves having a link provided with a contracted portion adapted to engage with either of said studs or lugs and a widened portion incapable of engaging with said studs or lugs, substantially as set forth, 17th. A rotary engine having in combination a revoluble piston, a steam space therefor, a movable abutment, an inlet valve and an exhaust port on both sides of said abutment, a movable stud or lug having operative connection with each of said inlet valves and a valve gear for opening said inlet valves, having a link provided with a contracted portion adapted to engage with either of said studs or lugs, and two widened portions incapable of engaging with said studs or lugs, substantially as set forth. 18th. A rotary engine having in combination a revoluble piston, a steam space therefor, a movable abutment, an inlet valve and an exhaust port on both sides of said abutment, a movable stud or lug having operative connection with each of said inlet valves, and a valve gear for opening said inlet valves, having a link provided with a contracted portion adapted to engage with either of said studs or lugs, and a widened portion converging towards said contracted portion and being incapable of engaging with said studs or lugs, substantially as set forth. 19th. A rotary engine having in combination a revoluble piston, a steam space therefor, a movable abutment, an inlet valve and an exhaust port on both sides of said abutment, a movable stud or lug having operative connection with each of said inlet valves, and a valve gear for opening said inlet valves, having a link whose opposite extremities are widened and incapable of engagement with said lugs, and gradually converging towards a contracted portion at the mid-length of said link, and which contracted portion is adapted to engage with either of said lugs or studs, substantially as set forth. 20th. A rotary engine having in combination a revoluble piston, a steam space therefor, a movable abutment, an inlet valve and an exhaust port on both sides of said abutment, a movable stud or lug provided with a flanged head and having operative connection with each of said valves, and a valve gear for operating said inlet valves, having a link provided with a contracted portion adapted to engage with either of said studs or lugs and a widened portion incapable of engaging with said studs or lugs, said flanged heads being lapped over the edges of said link, substantially as set forth. 21st. A rotary engine having in combination a revoluble piston, a steam space therefor, a movable abutment, an inlet valve and an exhaust port on both sides of said abutment, each of said inlet valves being provided with a stem, a bell crank loose on each of said valve stems, a second crank fixed on each of said stems and having a tooth, a stud carried by one arm of each of said bell cranks, a pivoted dog carried by the other arm of each of said bell cranks and adapted to engage one of said teeth, a cam for each of said dogs for crowding the same off said tooth, a pivoted lever having opposite ends operatively connected to said cams respectively, a governor connected with said lever for oscillating the same, means connected with each of said valve stems and exerting a normal tendency to carry said teeth away from said pivoted dogs, a valve gear having a link provided with a contracted portion adapted to engage said studs and widened portions incapable of engagement with said studs, substantially as set forth. 22nd. A rotary engine having in combination a revoluble piston head, a steam space therefor, a movable abutment, an inlet valve and an exhaust port on each side of said abutment, a movable stud having operative connection with each of said inlet valves, a link embracing both of said studs and having a widened portion for the freedom of each of said studs and a contracted portion for engaging with either of said studs alternately, a yoke secured to said link, a support for said link connected to said yoke and having operative connection with the reversing lever of the engine, and means connected with said yoke and with a moving part of the engine for vibrating said link, substantially as set forth. 23rd. A rotary engine having in combination a revoluble piston head, a shell having an annular steam space for said piston head and being provided with a continuous surrounding steam jacket, one side of said shell being provided with a section removable independently of the balance of said side the shell and also having formed therein a steam jacket, and the said section and main portion of the shell having registering cross-over of passages whereby said section will constitute a part of the said continuous steam jacket, and means for admitting steam to and exhausting it from said steam space, substantially as set forth. 24th. A rotary engine having in combination a revoluble piston head, a steam space therefor provided with inlet and exhaust ports, an abutment movable independently of said piston, a bodily movable catch having operative connection with said abutments, a reciprocating pull-rod having operative connection with said piston and being provided with a hook for pulling said catch in one direction and withdrawing said abutment, means for automatically disconnecting said hook and catch, means for returning said catch and abutment in the opposite direction, and means for controlling the supply and exhaust to and from said steam space, substantially as set forth. 25th. A rotary engine having in combination a revoluble piston head, a steam space therefor provided with inlet and exhaust ports, an abutment movable independently of said piston, a bodily movable independently rotatable catch having operative connection with said abutment, a reciprocating pull rod having operative connection with said piston and provided with n hook for pulling said catch in one direction and thereby withdrawing said abutment, a lug or trip arranged in operative reiation to said pull rod and adapted to disengage said hook and catch, means for returning said abutment and catch to their normal positions, and means for supplying and exhausting steam to and from said steam space, substantially as set forth. 26th. A rotary engine having in combination a revoluble piston head. a steam space therefor provided with inlet and exhaust ports, means for controlling the admission and exhaust steam to and from said steam space, an abutment movable independently of said piston, a bodily oscillatory independently rotatable catch having operative connection with said abutment, a reciprocating pull-rod having operative connection with said piston and provided with a hook for pulling said catch in one direction and thereby withdrawing said abutment, a lug or trip revolving bodily with said catch for engaging a portion thereof and crowding said hook and catch out of engagement, and means for returning said catch and abutment to their normal positions, substantially as set forth. 27th. A rotary engine having in combination a revoluble piston head, a steam space therefor provided with inlet aud exhaust ports, means for controlling the admission of steam to and exhausting it from said space, an abutment movable independently of said piston, a bodily movable catch having operative connection with said abutment, a reciprocating pull-rod having operative connection with said piston and provided with a hook for pulling said catch in one direction and thereby withdrawing said abutment, means for automatlcally disconnecting said hook and catch, a lock for holding said abutment against premature withdrawal and being arranged in the line of movement of and adapted to be disengaged by said rod, and means for returning said catch and abutment to their normal positions, substantially as set forth. 28th. A rotary engine having in combination a revoluble piston head, a steam space therefor provided with inlet and exhaust ports, means for controlling the admission of steam to and exhausting it from said steam space, an abutment movable independently of said piston, a bodily movable catch having operative connection with said abutment, a reciprocating pull-rod having operative connection with said piston, and being provided with a hook for pulling said catch in one direction and thereby withdrawing said abutment, a second rod supporting said first rod and having one end movable with said catch, means for automatically disconnecting said hook and catch, and means for returning said catch and abutment to their normal positions, substantially as set forth. 29th. A rotary engine having in combination a revoluble piston head, a steam space therefor provided with inlet and exhaust ports, means for controlling the admission of steam to and exhausting it from said space, an abutment movable independently of said piston, a movable catch having operative connection with said abutment, a reciprocating pull-rod having operative connection with said piston, and provided with a hook for pulling said catch in one direction and thereby withdrawing said abutment, a second rod having a telescopic connection with said first rod and the two co-operating to support each other at their meeting ends, means for automatically disconnecting said hook and catch, and means for returning said catch and abutment to their normal positions, substantially as set forth. 30th. A rotary engine having in combination a movable abutment, a rotary portion, a pivoted catch carried by said rotary portion, a reciprocating pull-rod adapted to engage said catch and pull it in one direction for withdrawing said abutment, means for holding said catch against independent rotation after it is engaged by said pull rod, and means for returning said catch and abutment to their normal positions when the catch is released from the pull-rod, substantially as set forth. 31st. A rotary engine having in combination a movable abutment, a rotary portion having a shoulder and being operatively eonnected with said abutment, a dog adapted to fall into engagement with said shoulder, a pivoted catch carried by said rotary portion and having a projecting end, a reciprocating pull rod adapted to engage said catch and release said dog, a trip or lug revolving with said catch and adapted to engage said projecting end and prevent independent rotation of said catch, and means for returning the abutment and catch when the latter is released, substantially as set forth. 32nd. A rotary engine having in combinatiou a movable abutment, a rotary portion having operative connection therewith, a pivoted catch carried by said rotary portion, a sleeve having one end supported by said rotary

portion, a pull-rod reciprocating in said sleeve and having means of engagement with said catch, means for crowding said rod out of engagement with said catch, and means for returning said abutment when the catch is released from said rod, substantially as set forth. 33rd. A rotary engine having in combination a movable abutment, a rotary portion having operative connection therewith, a sleeve having one end supported by but movable transversely independently of said rotary portion, a pivoted catch carried by said rotary portion, a pull-rod reciprocating in said sleeve and having means of engagement with said catch, means for crowding said rod out of engagement with said catch, and means for returning the abutment and catch when the latter is released, substantially as set forth. 34th. A rotary engine having in combination a movable abutment, a rotary portion having operative connection therewith, a sleeve having one end provided with a transverse slot, a pivoted catch carried by said rotary portion, and the pivot of which catch passes through said slot and supports said sleeve upon said rotary portion, a pull rod reciprocating in said sleeve and having means of engagement with said catch, means for crowding said rod out of engagement with said catch, and means for returning said abutment and catch when the latter is released, substantially as set forth. 35th. A rotary engine having in combination a movable abutment, a rotary portion operatively connected with said abutment and having a plain edge terminating in a shoulder, a dog arranged to engage said shoulder and having a projecting lip, a catch engaged under said projecting lip and carried by said rotary portion, a reciprocating pull-rod arranged to project between said catch and lip for simultaneously releasing said dog and engaging said, catch and means for returning said abutment and catch when the latter is released, substantially as set forth. 36th. A rotary engine having in combination a movable abutment, a rotary portion operatively connected with said abutment and having two shoulders and a plain edge extending between said shoulders, a pivoted dog arranged to engage one of said shoulders, a stop arranged to be struck by the other of said shoulders, a catch carried by said rotary portion, a reciprocating pull-rod arranged to be projected between said catch and pivoted dog for simultaneously releasing said dog and engaging said catch, and means for returning said abutment and catch when the latter is released, substantially as set forth. 37th. A rotary engine having in combination a movable abutment, a rotary disc operatively connected with said abutment and having a plain edge terminating in two shoulders, a pivoted dog arranged to gravitate into engagement with one of said shoulders, a fixed stop arranged to be struck by the other of said shoulders, a catch pivoted to the side of said disc and having a projection, a trip or lug secured to the side of said disc and adapted to engage under the projection on said catch, a sleeve having a bifurcated end supported over said catch and said pivoted dog being provided with a lip depending into said bifurcation, a reciprocating pull-rod having a hook adapted to be projected through said sleeve between said catch and depending lip and to engage with said catch, and a dash pot connected with said disc and exerting a normal tendency to rotate it in the opposite direction to the pull of said rod, substantially as set forth. 38th. A rotary engine having in combination a revoluble piston, a steam space therefor, a movable abutment, inlet and exhaust valves on each side of said abutment, a valve gear having means of operative connection with said inlet valves alternately as the engine is reversed, a link mechanism operated by said piston, a pull-rod reciprocally connected with said link mechanism, means for operatively connecting said rod with said abutment for withdrawing the latter, means for releasing said abutment from its connection with said rod, and a reversing device operatively connected with said link and valve mechanism, substantially as set forth. 39th. A rotary engine having in combination a revoluble piston, a steam space therefor, a movable abutment, inlet ond exhaust valves on each side of said abutment, a valve gear having means of operative connection with the inlet valves alternately as the engine is reversed, a link mechanism operated by the piston, a lever having a stud engaging in the link of said link mechanism, a pull-rod connected to one end of said lever, means for operatively connecting said pull-rod with said abutment for withdrawing the latter, means for releasing said abutment from its connection with said pull-rod and a reversing device operatively connected with said link mechanism and valve gear, substantially as set forth. 40th. A rotary engine having in combination a revoluble piston, a steam space therefor, having two sets of exhaust and inlet valves, a movable abutment arranged between said sets of valves, a valve gear having means of operative engagement with said inlet valves alternately as the engine is reversed, a pair of eccentrics operated by the piston, a link connected with said eccentrics, a pull-rod operatively connected with said link, means for operatively connecting said rod with said abutment for withdrawing the latter, and a reversing device operatively connected with said link and valve gear, said eccentrics being so set with relation to said abutment withdrawing means that the rod will begin the rapid part of its return stroke as soon as it engages with said abutment withdrawing means, substantially as set forth. 41st. A rotary engine having in combination a revoluble abutment, a catch having operative connection with said abutment, a reciprocating pull rod having means of engagement with said catch, means for releasing said catch from said rod, the extremity of the advancing stroke of the rod being limited to the normal position of the catch whereby the rod will engage the catch substantially at the commencement of its return stroke, and means for returning said catch and abutment to their normal positions, substantially as set forth. 42nd. A rotary engine having in combination a removable abutment, a crank arm having a ball wrist secured thereto for oscillating said abutment, a rotary portion arranged in a plane at an angle to the plane of said abutment and having a ball wrist, a pitman connecting said ball wrists, and means for intermittently imparting partial rotation to said rotary portion alternately in opposite directions, substantially as set forth. 43rd. A rotary engine having in combination a revoluble piston head, a steam space therefor having an inlet valve and an exhaust port, an abutment interposed between said valve and port and being movable independently of said piston head, means for periodically opening said valve, means acting independently of said piston and exerting a continual tendency to move said abutment in one direction, and means having positive operative connection with the piston, having a reciprocating portion, means operatively connected with the abutment and adapted to be engaged by the reciprocating portion, and also being located at the beginning of the stroke of such reciprocating portion, substantially as set forth.

No. 58,019. Grain Binder. (*Lieuse à grain.*)



Maurice Kane, Chicago, Illinois, U.S.A., 5th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—1st. In a grain binder, the combination with the needle, packers respectively arranged on opposite sides of said needle, and operating mechanism therefor, of a trip-arm having a portion thereof arranged to co-operate with one of the packers, and another portion arranged to co-operate with the other packer, as and for the purpose set forth. 2nd. In a grain binder, the combination with the needle, and the packers respectively arranged on opposite sides thereof, and operating mechanisms therefor, of a trip-arm having one portion arranged adjacent to the plane in which one of the packers operates, and another portion arranged adjacent to the plane in which the other packer operates, as and for the purpose set forth. 3rd. In a grain binder, the combination with the needle, and the packers and operating mechanisms therefor, of a trip-arm having a lateral bend or offset, whereby one portion thereof co-operates with one of said packers, and another portion thereof co-operates with the other of said packers, as and for the purpose set forth. 4th. The combination with the needle, packers and compressor hook, of a trip-arm mounted at a point grainward with respect to the needle support, and provided with a lateral bend or offset, whereby one portion thereof co operates with one of the packers, and another portion thereof co-operates with the other packer, and means actuated by said trip-arm for throwing said needle into action, as and for the purpose set forth. 5th. The combination with the needle, packers and compressor hook, of a trip-arm mounted at a point grainward with respect to the needle support and to one side of the plane in which the needle operates, said trip-arm arranged to project above the binder deck and to extend stubbleward with respect to the needle, and having one portion thereof arranged on one side of the plane in which the needle operates, and adjacent to the plane in which one of the packers operates, and having another portion arranged on the opposite side of the plane in which the needle operates, and adjacent to the plane in which the other packer operates, as and for the purpose set forth.

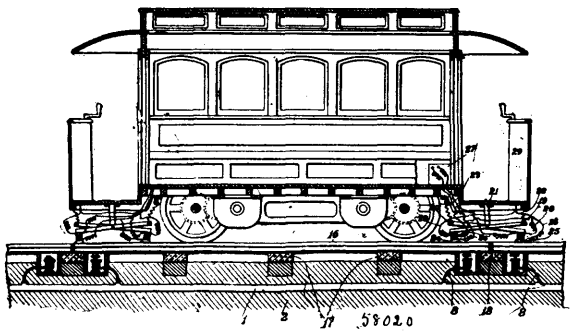
No. 58,020. Electric Railway.

(*Chemin de fer électrique.*)

Eben C. Crocker, Bridgeport, Connecticut, U.S.A., 5th November, 1897; 6 years. (Filed 15th March, 1897.)

Claim.—1st. The combination with a railway system, comprising bonded rails, and cars capable of travelling thereon, each car carrying a suitable motor and controller-box, of a continuous length of insulated rails between the first-mentioned rails laid and secured in position with their abutting ends insulated from each other, magnets carried in pairs at each end of the car, and having their cores normally depressed with a spring action against said insulated rails, the coils of said magnets being electrically connected respectively with said cores and controller-box, the insulated line wire, the insulated solenoids located in the roadbed beneath the insulated rails, the armatures immediately beneath the latter and within the field

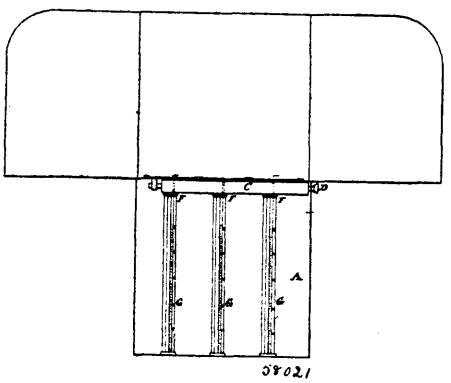
of said magnets, and carrying insulated contacts, and connections between the solenoid cores and said armatures whereby the elevation



of the latter will bring the former within the magnetic field of the solenoids, the coils of said solenoids being electrically connected respectively with said contacts and line wire, substantially as set forth. 2nd. The combination of the insulated rails, the car carrying the controller-box and the pivoted levers, which in turn carry magnets at their lower diverging ends, springs attached to said car, and levers whereby the cores of said magnets are normally depressed against said rails, the insulator-box sunken in the roadbed beneath said rails, and having solenoids mounted therein, the insulated line wire to which the lower ends of the solenoid coils are electrically connected, the armatures supported by said solenoids within the field of said magnets, and carrying insulated contacts with which the upper ends of the solenoid coils are electrically connected, rigid connections between said armatures and the cores of the solenoids whereby the elevation of the armatures will bring said cores within the magnetic field of the solenoids, and electrical connections between the lower ends of the magnet coils and the magnet cores, and between the upper ends of said coils and the controller-box, substantially as set forth.

No. 58,021. Ballot Boxes and Method of Voting.

(*Urne de scrutin et méthode de voter.*)



John L. Weller, Cornwall, Ontario, Canada, 5th November, 1897; 6 years. (Filed 31st March, 1897.)

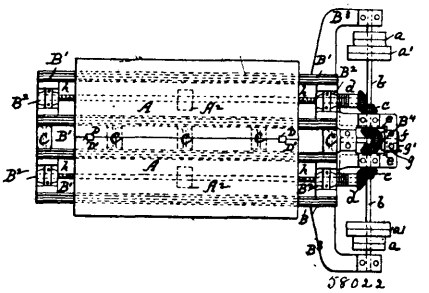
Claim.—1st. In a ballot box, the combination with the top of the box having slots E, of separate receivers for the ballots, substantially as and for the purpose hereinbefore set forth. 2nd. In a ballot box, the combination with the top of the box having slots E adapted to receive the ballots, separate tubes or receptacles for such ballots and a sliding bar C, containing slots, substantially as and for the purposes hereinbefore set forth. 3rd. In a ballot box, the combination with the top of the box having slots E, adapted to receive the ballots, separate tubes or receptacles for such ballots, a sliding bar C, containing slots, and a thin partition F, with slot, substantially as and for the purpose hereinbefore set forth. 4th. In a ballot box, the combination with the top of the box having slots adapted to receive the ballots, of the tubes G, having narrow slits, substantially as and for the purposes hereinbefore set forth. 5th. In a ballot box the transparent or partly transparent tubes G, with a scale attached, substantially as and for the purpose hereinbefore set forth.

No. 58,022. Planer for Dressing Stone.

(*Machine à planer la pierre.*)

Joseph Gilmour, Brooklyn, New York, U.S.A., 5th November, 1897; 6 years. (Filed 27th October, 1897.)

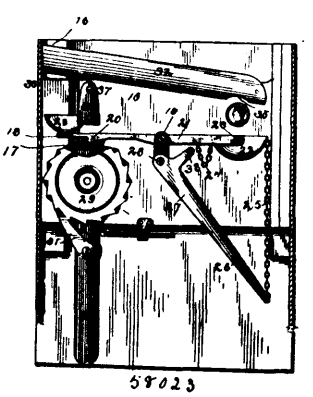
Claim.—1st. In a machine of the character set forth, a bed or frame having two sets of parallel ways, two sections forming the platen, arranged side by side in the same plane, to travel each on one of said sets of ways, and means for reciprocating said sections either



separately or in unison, in combination with means for joining the sections and locking them together when required to be reciprocated as a unitary whole, whereby either one large stone carried by the two sections as one may be planed, or two stones each on a section may at the same time be planed independently on said sections, all substantially as herein specified. 2nd. In a machine of the character set forth, two sections, composing a platen, arranged side by side to travel in parallel lines, and an independent reciprocating mechanism for each consisting of a nut A^2, screw h, gears d and c, and the independently driven shafts b, for driving either section in either direction independently of the other, in combination with means for joining the sections and holding them locked relatively to each other while permitting them to be reciprocated together as a unitary whole, all substantially as herein specified. 3rd. In a planer or similar machine, a platen comprising two or more sections arranged to move side by side in parallel lines, and an independent reciprocating mechanism for each, in combination with tapering keys matching to corresponding notches in the adjacent edges of the sections for locking the latter together, all substantially as herein specified. 4th. In a planer, the sections A, having slides A^1, travelling in ways B^1, formed in the framing, arranged side by side and parallel with each other, the nut A^2, screw h, and its driving means for each, in combination with the keys D^1, tapered as shown and matching the dovetailed notches D, formed in the adjacent edges of the sections for locking the latter together, and means for coupling the said driving mechanisms together to act as one to reciprocate the sections as a unitary whole, all substantially as herein specified. 5th. The sections A, having slides A^1, travelling in ways B^1, formed in the framing, arranged side by side and parallel to each other, nuts A^2, on the under faces of the sections, screws h, engaging said nuts and held against longitudinal movement, bevel-gears d, on the screw shafts, in combination with the shafts b, and means for driving them, bevel-gears c and e thereon, the coupling-gear f, and its sliding shaft f^1, arranged between said gears e, to mesh with both and thereby transfer the motion from one to the other, and the dogs g, g^1, arranged to hold the said coupling-gear into or out of engagement, all substantially as herein specified.

No. 58,023. Coin-operated Vending Machine.

(*Appareil de vente actionnée par une pièce de monnaie.*)

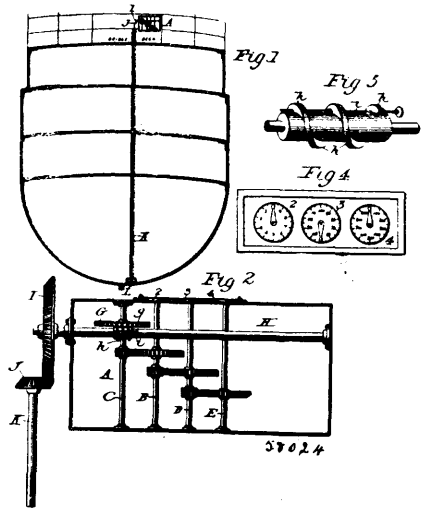


Herman Carper Vierkant, Tarrytown, New York, U.S.A., 5th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. In a coin-operated vending machine, the feed shaft, a series of feed wheels fixed on said shaft, a ratchet wheel fixed on said shaft, a coin-lever provided with a locking pawl adapted to travel to and from said ratchet-wheel, a tilting coin receptacle mounted on said lever, a second ratchet-wheel fixed on said feed shaft, and a hand lever mounted on said feed shaft and adapted to simultaneously operate said feed shaft and tilt said coin

receptacle to discharge its contents, substantially as shown and described. 2nd. In a coin-operated vending machine, a fixed case, a gravitating feed shaft adapted to deliver a newspaper or analogous article of merchandise, a ratchet-wheel fixed on said shaft, a coin-lever travelling simultaneously with said feed shaft and provided with a locking pawl projecting into the path of said ratchet-wheel, and means substantially as described for operating said coin-lever, substantially asshown and described. 3rd. A coin-operated vending machine, comprising a fixed case, a vertically sliding front provided with a horizontal delivery slot, a feed shaft mounted on said front and travelling with it, a ratchet-wheel fixed on said feed shaft, a coin lever provided at one end with a tilting coin-receptacle and at the other with a locking pawl adapted to be projected into the path of said ratchet-wheel, and means substantially as described for operating said feed shaft and simultaneously tilting said basket, as and for the purpose set forth. 4th. A coin-actuated vending machine, the case 1, provided with the shelf 2, the vertically sliding front 3, provided with the horizontal slot 6, the brackets 9-9 fixed to said front, the feed shaft 10, journalled in said brackets, the hubs 11, fixed on said shaft, and the radiating arms 12, fixed in said hubs, the ratchet wheel 17, fixed on said feed shaft, the coin-lever 18, fulcrumed in the bracket 19, fixed to movable plate 15, and provided with the locking pawl 20 adapted to be projected into the path of the teeth of said ratchet-wheel 17, a coin receptacle 22 pivoted in the inner end of said lever and a fixed counterbalance receptacle 28 at the outer end, the bell-crank lever 27, fulcrumed in the bracket 19, and connected by the chain 25 to the edge of said pivoted receptacle 22, in combination with the ratchetw-heel 29, fixed on said shaft 10 and the hand 30 fulcrumed on said shaft and provided with a spring-actuated pawl 31 engaging the teeth on said ratchet-wheel 29, and having its shorter arm 36 provided with a lateral pin 37, projecting into the path of the arm 38 of the bell-crank lever 27, substantially as shown and described.

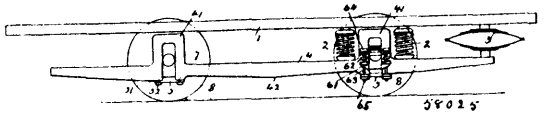
No. 58,024. Speed Recorder. (*Compteur de vitesse.*)



William Smith, Victoria, British Columbia, 5th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. In a speed recorder for vessels, the combination with the motor wheel and the power gearing driven thereby, of register gearing driven by the power gearing through the intermediacy of a worm having an adjustable thread, and an indicator for the register, whereby an adjustment of the thread may be made to establish the correct rate of transmission between the power gearing and register gearing and thus standardize or calibrate the register, substantially as described. 2nd. A speed recorder for vessels, comprising a register, power-transmitting gearing therefor, and a motor wheel for actuating said gearing, the motor wheel being mounted upon a shaft extending fore and aft of the ship and having blades revolving partly within a dead-water chamber or pocket formed in the ship's bottom; substantially as desbribed.

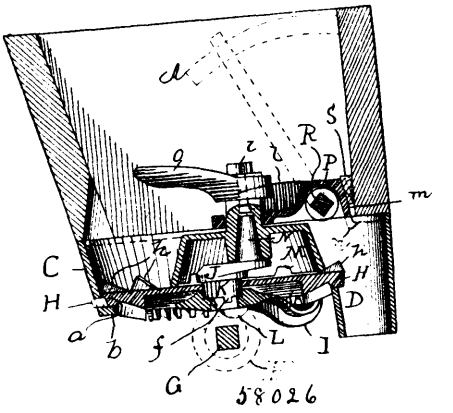
No. 58,025. Car Truck. (*Chassis de chars.*



Kennet W. Blackwell, Montreal, Quebec, Canada, 5th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—A car truck consisting of the frame made as described, supporting the car body on a series of springs and suspended from a quadruple series of spiral springs upon lugs surrounding the axle boxes.

No. 58,026. Fertilizer Distributer.
(*Distributeur d'angrais.*)



Edwin D. Mead, Phelps, New York, U.S.A., 5th No ember, 1897 6 years. (Filed 28th October, 1897.)

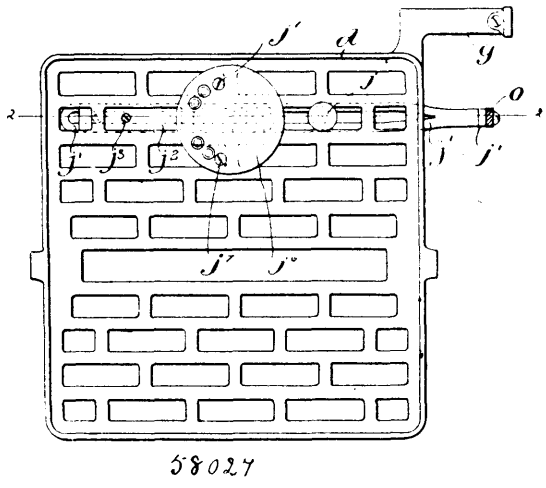
Claim.—1st. In a fertilizer-distributer, the combination of the feed-cup, a feed-wheel seated within said cup, and a packing interposed between said parts. 2nd. In a fertilizer-distributer, the combination of the feed-cup, a feed-wheel seated within the cup and provided with a recess formed on its periphery, and a packing-ring seated within said recess. 3rd. In a fertilizer-distributer, the combination of the feed-cup provided with an inwardly-projecting flange, a feed-wheel seated within said cup and provided with a recess on its periphery, and a packing-ring fitting within said recess and bearing against the cup. 4th. In a fertilizer-distributer, the combination of the feed-cup provided with a discharge-opening, a feed-wheel mounted within the cup, a scraper-wheel secured above the feed-wheel, a gate, a guard-plate above the discharge-opening, and a wedge fitting between said plate and the hopper. 5th. In a fertilizer-distributer, the combination of the feed-cup provided with a discharge-opening, a feed-wheel mounted within said cup, a scraper-wheel mounted above said feed-wheel, a gate, and a guard-plate secured above the feed-opening, and provided with a projection *k* to fit between the scraper-wheel and the periphery of the cup, substantially as and for the purpose set forth. 6th. In a fertilizer-distributer, the combination of the feed-cup provided with a discharge-opening, a feed-wheel mounted within said cup, a scraper-wheel mounted above said feed-wheel, a gate, and a guard-plate secured above the feed-opening, and having toes *n* adapted to fit into openings in the bottom of the hopper or plate B, and a lug *o* also adapted to fit within the base of the hopper or plate B. 7th. In a fertilizer-distributer, the combination of the feed cup provided with a discharge-opening, mechanism for causing the material to travel toward said opening, a gate, and a guard-plate provided with a lip *l* designed to fit against the side of the gate, substantially as described. 8th. In a fertilizer-distributer, the combination of the feed-cup, a spider-frame extending across the lower end of said cup, provided with an opening having seats or sockets formed in the side thereof, a feed-wheel seated within the cup, and also provided with a central opening, and a crank-axle provided with a downwardly-projecting arm, a curved finger L secured to the lower end thereof, and lugs or ears *f*, *f*, the parts being designed to fit together substantially as described when the arm is passed through the openings aforesaid, and brought into a vertical position.

No. 58,027. Treadle Attachment. (*Attache de pédale.*)

John Frank Wilkinson, East Pepperell, Mass., U.S.A., 5th November, 1897; 6 years. (Filed 14th October, 1897.)

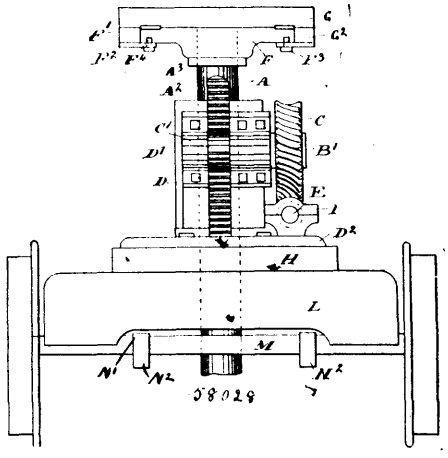
Claim.—1st. The combination with a driving-wheel, a crank, a pitman, and a main treadle, forming a treadle mechanism, of a clutch on the crank-shaft, a supplemental treadle connected to the said clutch and located over the forward or toe end of the main treadle, so that both treadles can be moved simultaneously by the same foot or feet, and a spring connection between the supplemental and main treadles, whereby the supplemental treadle is yieldingly raised and separated from the main treadle and permitted to move toward the latter by downward pressure of the operator's foot, while the main treadle is being operated, the yielding support of the supplemental treadle relieving the jar on the operator's feet. 2nd. The combination with a driving-wheel, a crank, a pitman, and a main treadle, of a clutch on the crank-shaft, a rod connected with

said clutch, a supplemental treadle located above the main treadle, a bar supporting said supplement treadle and connected with said



rod, a spring yieldingly supporting said bar, and means for securing the spring to the main treadle.

No. 58,028. Motor Jack. (*Moteur à cric.*)



Harrison Gates Taylor, Montreal, Quebec, Canada, 5th November, 1897 ; 6 years. (Filed 27th, October 1897.

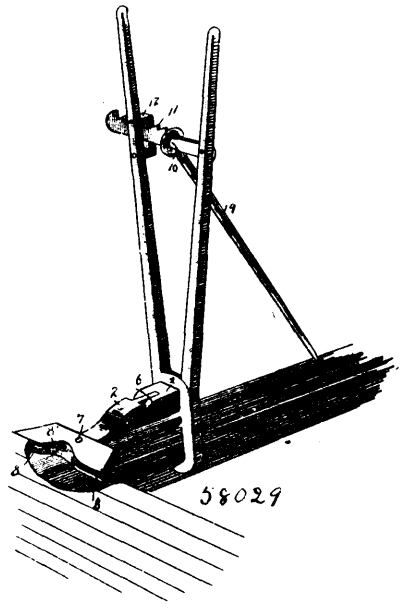
Claim.—1st. In a motor jack, the combination with a truck of a vertical shaft provided with a rack, a pinion operated by a worm gear and a sliding platform adapted to revolve on the top of the shaft. 2nd. In a motor jack, the combination with a vertical racked shaft, meshing with a pinion on a horizontal spindle, of a worm gear, and a crank shaft operating worm. 3rd. In a motor jack, the combination of a platform sliding horizontally on a flanged plate, which is pivoted on a vertical racked shaft, and pinion, operated by worm gear supported on the base of pedestal of vertical shaft by means of cranks; the whole mounted on a truck for the purposes described.

No. 58,029. Joiner's Floor-clamp.

(*Serre-joint pour planchers.*)

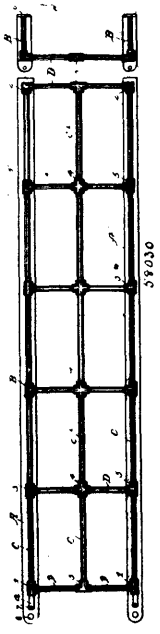
Able M. White, Tilmon, Texas, U.S.A., 6th November, 1897 ; 6 years. (Filed 29th October, 1897.)

Claim.—1st. The combination, in a joiner's floor-clamp, a pair of gripping tongs and a clamp-block, and adjustable and reversible arm connecting the tongs and clamp-block and having the intermediate knuckle-joint 6, whereby to maintain the clamp-block in an extended relation to the tongs, and to reverse its position thereon to facilitate applying the device to the flooring or ceiling-board. 2nd. In a joiner's floor-clamp, the combination of a pair of gripping-tongs and a clamp or bearing-block, a connecting arm therefor screw-nutted to the tongs, pivot-jointed to the bearing-block and knuckle-jointed between the tongs and the bearing-block, in the way and for the purpose stated. 3rd. The combination, in a joiner's floor-clamp, of the gripping-tongs, a latch-bar for securing the handles



when gripped, and a driving clamp-block for the board, with a take-hold brace mounted to swing freely upon the latch bar, whereby the resistance upon the brace in driving and holding the clamp-block, serves to securely hold the latch in locking relation to the tongs. 4th. In a joiner's floor-clamp, the combination with the gripping-tongs, of the clamp-block for the board mounted upon said tongs by a knuckle-jointed arm by which the clamp-block may also be reversed in position, a pivotal connection of said arm with the tongs, and means for clamping said arm when set.

No. 58,030. Sled. (*Traîneau.*)



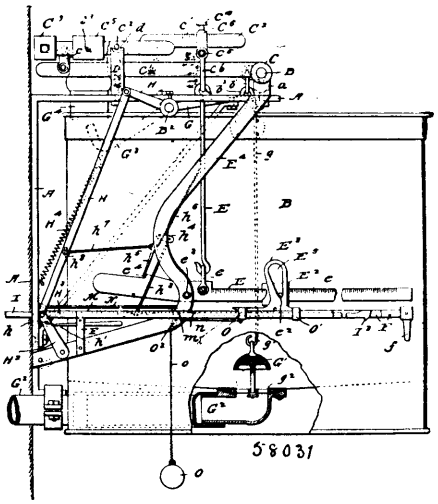
John Courtwaite, Ballard, Washington, U.S.A., 6th November, 1897 ; 6 years. (Filed 29th October, 1897.)

Claim.—1st. A separable sled comprising shoes with threaded apertures, metallic legs of tubular cross-sections screwed therein, threaded sections of similar tubing longitudinally and transversely the sled and suitable fittings to form threaded juncture of said parts at the ends thereof, substantially as described. 2nd. A separable sled comprising shoes with threaded apertures and a forward upper curve, legs of tubular cross-section fitting said apertures, threaded sections of similar tubing longitudinally and transversely said sled, suitable threaded fittings to join said members at the abutting ends and short sections to connect to the upper ends of said shoes, sub-

stantially as described. 3rd. A separable sled comprising an upper framework of threaded metallic sections of tubular cross-section extending longitudinally and transversely and connected at the ends by threaded fitting of suitable form, shoes thereunder with a curved forward end, tubular legs threaded to said shoes and to said fittings and short sections connecting the frame and said curved end, substantially as described. 4th. A separable sled comprising a frame formed of threaded sections of hollow metallic tubing connected by suitably formed and threaded fittings and shoes having threaded connection with pendent legs of said frame, substantially as described.

No. 58,031. Liquid Weigher.

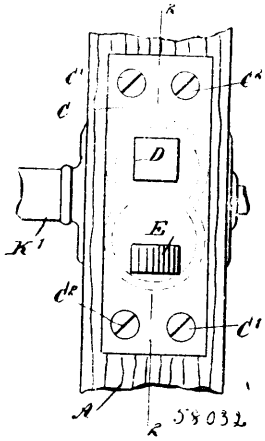
(*Machine à peser les liquides.*)



George Arthur Hanna and Theodore Axel Swanson, both of Whittemore, Iowa, U.S.A., 6th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. In an automatic liquid weigher, the combination with a supporting frame, of a rocking shaft mounted thereon, a vessel counterpoised on said shaft and having an outlet valve in its lower part, a scale or weighing beam adjustably secured on and suspended from the counterpoise or adjusting beam, a movable weight on the weighing beam, a sliding bar having means to engage and move said weight, the latter adapted to be operated by checks of variable lengths, substantially as described. 2nd. In an automatic liquid weigher, the combination with the supporting frame, of a rocking shaft mounted thereon, a vessel counterpoised on said shaft and having an outlet valve in its lower part, a scale or weighing beam adjustably secured on and suspended from the counterpoise or adjusting beam, a movable weight on the weighing beam, a grooved sliding bar having means to engage and move said weight, the latter adapted to be operated by checks of variable lengths, and a mechanism to alternately and simultaneously open and close the inlet and outlet valves, substantially as described. 3rd. In an automatic liquid weigher, the combination with the supporting frame, of a rocking shaft mounted thereon, a vessel counterpoised on said shaft and having an outlet valve in its lower part, a scale or weighing beam adjustably secured on and suspended from the counterpoise or adjusting beam, a movable weight on the weighing beam, a sliding bar having a longitudinal V-shaped groove and means to engage and move the said weight, the latter adapted to be operated by V-shaped checks of variable lengths, substantially as described. 4th. The combination with the supporting frame, of a rocking shaft mounted thereon, and having arms or projections, a vessel pivotally secured on said arms, and having an outlet valve in its lower part, a counterpoise beam rigidly connected to the rocking shaft, a scale or weighing beam adjustably secured on the counterpoise beam and suspended therefrom, a movable weight on the weighing beam, an inlet valve located above the vessel, a second rocking shaft journalled on the supporting frame, levers on said shaft to raise the inlet and outlet valves alternately and simultaneously, a grooved sliding bar having means to engage and move the weight on the weighing beam, the weight adapted to be operated by checks of variable lengths, a connection uniting the sliding bar, and the second rocking shaft, substantially as described. 5th. The combination in an automatic liquid weigher, of a counterpoised vessel, with a weighing beam suspended from the counterpoise beam, a movable weight on the weighing beam, a sliding bar having a longitudinal groove in its upper surface and means to move said weight, the latter adapted to be operated by checks of variable lengths, and an ejector for the controlling check pivotally secured so as to rest on the upper surface of the sliding bar, substantially as described. 6th. The combination with a weighing beam, of a movable weight thereon, a grooved sliding bar located near the weighing beam, and having means to move the weight thereon, the weight adapted to be operated by checks of variable lengths, substantially as described. 7th. The combination with a weighing beam, of a movable weight thereon, a grooved sliding bar located near the weighing beam, and having means to move the weight on said beam, the weight adapted to be operated by checks of variable lengths, and an ejector to remove the check from the groove of the sliding bar, substantially as described. 8th. The combination with a weighing beam, of a movable weight thereon, a grooved sliding bar located near said beam, and having means to move said weight, the latter adapted to be operated by grooved checks of variable lengths, and a guard pivotally secured so as to rest on the upper surface of the sliding bar, and having a projection to correspond in shape with and fit into the groove of the controlling check or piece, substantially as described. 9th. The combination with a weighing beam, of a movable weight thereon, a grooved sliding bar having means to engage and move said weight, the latter adapted to be operated by ground checks of variable lengths, an ejector and a guard pivotally secured so as to rest on the upper surface of the sliding bar, the said guard having a projection to correspond in shape with and to fit into the groove of the controlling piece, substantially as described.

No. 58,032. Door Lock. (*Serrure de porte.*)



John Gerrard Baker, Cannington Manor, Assiniboia, North-west Territories, Canada, 6th November, 1897; 6 years. (Filed 28th October, 1897.)

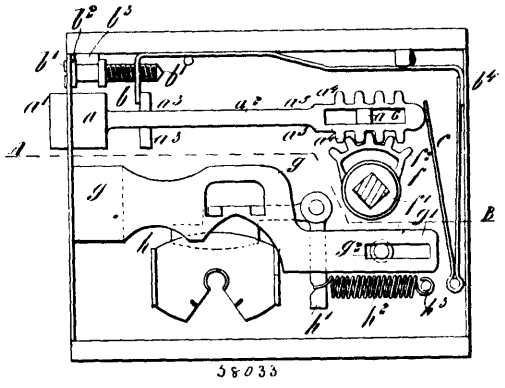
Claim.—1st. A mortice lock, having a casing with a cross sectional outline of two contacting cylinders and divided in two parts upon their common axial plane. 2nd. A door lock, comprising a latch bar having a yoke or hook on one end provided with notches upon each side thereof, and a lever pivoted between the side of the yoke having its ends engaging with notches in said yoke, and means for oscillating said lever, substantially as described. 3rd. A door lock, comprising a latch bar having a hook upon its inner end and notches upon each side of said hook facing toward its opposite end, a spring engaging the latch bar to keep it projected and a lever mounted upon the knob or handle shaft within the curve of said hook and having toes engaging the notches in the hook, substantially as described. 4th. A door lock, comprising a latch bar having a yoke or hook provided with notches upon each side thereof facing toward the outer end of the latch bar, a cup-shaped lug projecting from the latch bar and facing toward the yoke, a casing having a cup facing the above cup, a spiral spring with its ends in said cups, a knob or handle bar passing between the sides of the yoke, and a lever mounted on said bar having toes engaging notches in said yoke, substantially as described. 5th. A door lock, comprising a casing having a lock bar slidable longitudinally therein, said lock bar having a longitudinal slot and a locking tooth projecting inward from one side of this slot and having also a side opening notch adjacent to the keyhole and adapted to be engaged by the key, a catch bar pivoted to the casing alongside the lock bar having a side projecting arm adapted to enter the slot in the lock bar and engaging either side of the lock tooth thereof, said catch bar normally extending through the top of the notch in the lock bar, and adapted to be engaged and lifted by the key to free the lock bar, subtantially as described. 6th. A door lock, comprising a slidable locking bar, a catch bar normally engaging the same to hold it in either position, said lock bar having a notch adapted to be engaged by the key to throw it and the catch bar extending across the top of said catch whereby it is raised to disenengage the lock bar before the lock bar is shifted, substantially as described.

No. 58,033. Lock for Doors, etc. (*Serrure pour portes, etc.*)

William Barnley Bust, Dunedin, Otago, New Zealand, 6th November, 1897; 6 years. (Filed 28th October, 1897.)

Claim.—1st. In a lock, a bolt operated by a spring and provided with a check pin stop and adjusting screw whereby the bolt may be

adjusted to project from the lock as required, substantially as and for the purposes set forth herein. 2nd. In a lock, a bolt operated by



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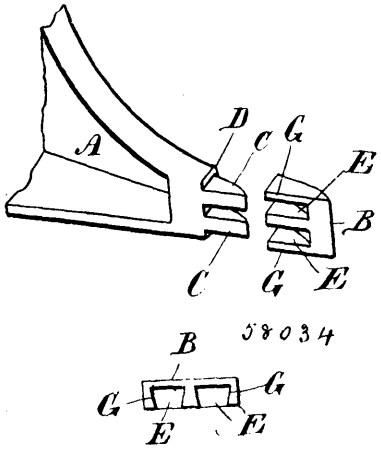
a spring and provided with a check pin stop adjusting screw whereby the bolt may be adjusted to project from the lock as required and a rack whereby the bolt may be operated by a toothed segment fitted upon the spindle of the handle, substantially as and for the purposes set forth herein. 3rd. In a lock, a bolt operated by a spring and provided with a check pin stop adjusting screw and rack, said check pin and rack being duplicated so that the bolt may be reversed, substantially as and for the purposes set forth herein. 4th. The improvements in locks for doors and the like consisting of parts constructed, arranged and operating, substantially as and for the purposes set forth herein.

No. 58,034. Plough-Point. (*Soc de charrue.*)



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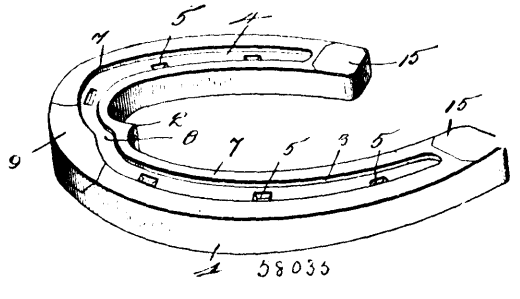
Francis Culham, Princeton, Ontario, Canada, 6th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—A plough-share A, having the front end thinned and tapered at the top and bevelled at the sides and end forming a dovetail prong or prongs C, and an attaching point B, having dovetail grooves E, at the bottom and flanges G at the sides, and receiving said prongs, said parts fitting closely together, the point flush with the share on all sides, as set forth.

No. 58,035. Horse-Shoe. (*Fer à cheval.*)



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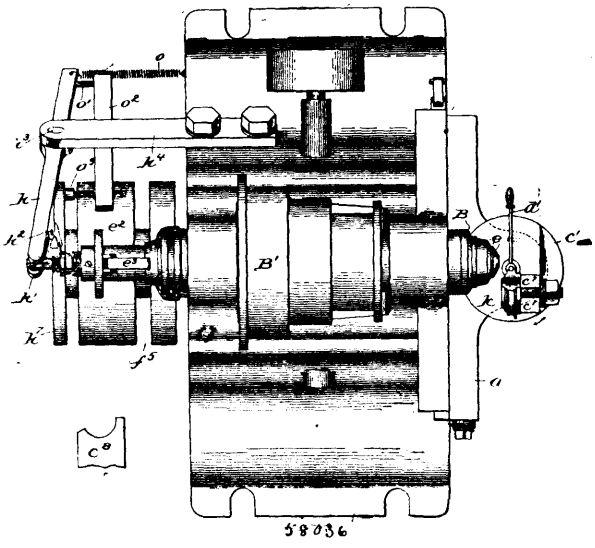
Philander Halsey Greaves, Chicago, Illinois, U.S.A., 6th November, 1897; 6 years. (Filed 15th October, 1897.)

Claim.—1st. A horse-shoe composed of rubber or analogous material, provided on its underside with a groove, in combination with a metal strip or frame located within said groove and provided with openings for nails, and wear plates at the toe and heel of the shoe having their outer surfaces practically flush to the surface of the body portion of the shoe. 2nd. A horse-shoe composed of rubber and provided upon its underside with a groove extending continuously from heel to heel, in combination with a metal strip or frame of less depth than the groove and located therein, the bottom surface of said strip or frame being located in a higher place than the bottom surface of the shoe and being provided with openings to receive the nails, substantially as described. 3rd. A horse-shoe composed of rubber and having at its toe portion a rearwardly projecting V-shaped extension giving increased width and bearing surface to said toe portion, said shoe being provided in its underside with a groove extending from heel to heel, in combination with a metal strip or frame having a central V-shaped offset and located in said groove which is of corresponding shape and provided with openings for the reception of attaching means, substantially as described. 4th. A horse-shoe composed of rubber and provided in its underside with a groove, in combination with a metal strip or frame located in said groove and having openings for the reception of attaching means, and a toe plate formed from sheet metal and embracing the portion of the shoe, said toe plate extending around the underside of the shoe and having its edge curled or rolled and embedded in the rubber, substantially as described. 5th. A horse-shoe provided in its underside with a groove, in combination with a metal strip or frame located in said groove and provided with openings for the attaching means, and a toe plate formed of sheet metal bent around the underside of the shoe and having its front edge curled or rolled and embedded in the rubber, said plate being also deflected or curved in the plane of the base of the groove so as to form a seat or bearing surface for the metal strip or frame, substantially as described. 6th. A horse shoe composed of rubber and provided along its underside with a groove, in combination with a metal strip or frame fitted in said groove and provided with openings for the attaching means, and a pair of heel plates each consisting of a piece of sheet metal having its corners or edges rolled and embedded in the rubber, said heel plates being flush with the underside of the shoe, substantially as described. 7th. A horse-shoe composed of rubber and provided in its underside with a groove, in combination with a metal strip or frame arranged in said groove and having openings for the attaching means, and bearing plates on the upper side of the shoe arranged at the toe and heel end thereof, said plates having their edge portions rolled and embedded in the rubber, substantially as described.

No. 58,036. Ball-turning Machine.
(*Machine à tourner les boules.*)



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Edward Rivett, Boston, Mass., U.S.A., 6th November, 1897; 6 years. (Filed 11th October, 1897.)

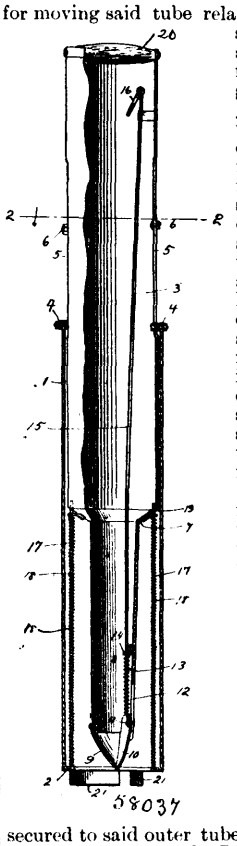
Claim.—1st. In a ball turning machine, a rotating chuck carrying the rod to be turned, combined with a reciprocating carriage, an oscillating tool holder mounted thereon and a cutting tool borne by said oscillating tool holder having a semi-circular cutting edge concentric to the axis upon which said tool holder oscillates, substantially as described. 2nd. In a ball turning machine, a rotating chuck carrying the rod to be turned, a tool holding carriage, means for moving it in and out, an oscillating tool holder mounted on said reciprocating carriage, and a tool carried by said tool holder having a semi-circular cutting edge concentric to the axis upon which said tool holder oscillates, and automatic means for oscillating said tool holder, substantially as described. 3rd. In a ball turning machine, a rotating chuck carrying the rod to be turned, a tool holding car-

riage, automatic means for moving it in and out, an oscillating tool holder mounted on said reciprocating carriage, and a tool carried by said tool holder having a semi-circular cutting edge concentric to the axis upon which said tool holder oscillates, and automatic means for oscillating said tool holder, substantially as described. 4th. In a ball turning machine, a rotating chuck carrying the rod to be turned, combined with a reciprocating carriage, an oscillating tool holder mounted thereon, means for moving the carriage inward to bring the axis of the tool holder coincident with the axis of the ball being turned, and means for then turning the tool holder on its axis to sever the ball from the rod, substantially as described. 5th. In a ball turning machine, a rotating chuck carrying the rod to be turned, a cutting tool having a semi-circular cutting edge, for forming the ball, an oscillating tool holder carrying it, and means for oscillating said tool holder to cause the cutting tool to sever the ball from the rod on an arc concentric to the axis of the tool holder, substantially as described. 6th. In a ball turning machine, a rotating chuck carrying the rod to be turned, a sliding carriage, an oscillating tool holder borne by it, and a cutting tool having a semi-circular cutting edge concentric to the axis of said tool holder, a pivoted lever adjustably connected with said sliding carriage, and a cam for actuating said lever, substantially as described. 7th. In a ball turning machine, a tool holder, a sliding carriage bearing it, an adjustable pin a^3, screwed into one end of said carriage having a circumferential groove, an opening at the bottom of the carriage beneath the circumferential groove of said pin, a pivoted lever b, one end of which projects up through said opening and enters the circumferential groove of said pin, and the opposite end of which bears upon a cam by which it is operated, substantially as described. 8th. The cutting tool having a semi-circular cutting edge, an oscillating tool holder bearing it, and a gauge for setting said tool concentric to the axis of said tool holder, substantially as described. 9th. The cutting tool having a semi-circular cutting edge, and oscillating tool holder bearing it, and a gauge for setting said tool concentric to the axis of said tool holder, and at a predetermined elevation, substantially as described. 10th. An oscillating tool holder, a cutting tool carried by it having a semi-circular cutting edge, a gauge for setting said tool concentric to the axis of said tool holder, and at a predetermined elevation, consisting of a circular pin movable vertically in a recess provided for it at the centre of the oscillating tool holder, substantially as described. 11th. Feeding mechanism consisting of the tube or carrier g, means for causing it to engage a rod and for thereafter releasing it, means for moving said tube or carrier axially while the rod is engaged by it, and a torsional spring for returning it to its normal position after it has released the rod, substantially as described. 12th. Feeding mechanism consisting of the tube or carrier g, having a screw-threaded portion g^2, a rotating nut g^3, a clamping device for engaging said tube or carrier to restrain it from rotation causing the nut to move it axially, means for operating said clamping device, and means for thereafter returning said tube or carrier to its normal position, substantially as described. 13th. Feeding mechanism consisting of the tube or carrier g, having a screw-threaded portion g^2, a rotating nut g^3, means for restraining rotation of the tube or carrier, causing said nut to move it axially, and a torsional spring for thereafter returning said tube or carrier to its normal position, substantially as described. 14th. Feeding mechanism consisting of the tube or carrier g, having a screw-threaded portion g^2, a rotating nut g^3, means for restraining rotation of the tube or carrier causing the nut to move it axially, and an adjustable stop for limiting such axial movement, and means for thereafter returning it to its normal position, substantially as described. 15th. Feeding mechanism consisting of the tube or carrier g, having a split end and a screw-threaded portion g^2, a rotating nut g^3, a clamping device for engaging said split end of the tube causing it to grip the rod and restraining it from rotation while the nut moves it axially, and means for thereafter returning said tube or carrier to its normal position, substantially as described. 16th. Feeding mechanism consisting of the tube or carrier g, having a split end, and a screw-threaded portion g^2, the rotating nut g^3, clamping device for engaging said split end of the tube causing it to grip the rod and restraining it from rotation while the nut moves it axially, and a torsional spring for thereafter returning said tube or carrier to its normal position, substantially as described.

No. 58,037. Planting Implement. (*Plantoir.*)

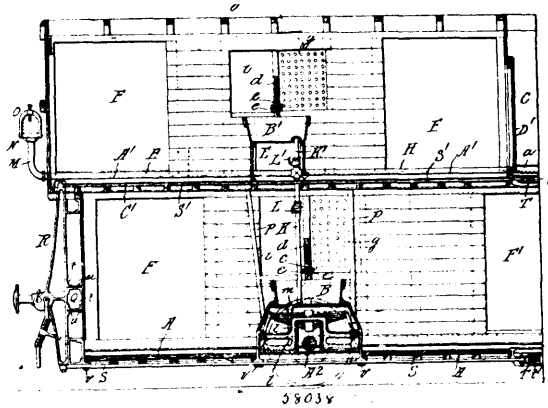
William S. Blaisdell, Victoria, Florida, U.S.A., 6th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—1st. A planting implement consisting of an outer and an inner tube secured together and movable longitudinally with relation to each other, a rigid movable shovel upon the lower end of said inner tube and which serve to close the said inner tube when in contact with each other, devices for moving said movable shovel with relation to said rigid shovel to open the lower end of said tube (inner), and devices for moving said tubes relatively. 2nd. A planting implement consisting of an outer and an inner tube secured together and movable longitudinally with relation to each other, adjusting devices to limit the relative movement of said tubes, a rigid and movable shovel upon the lower end of said inner tube and which serves to close the said inner tube when in contact with each other, devices for moving said movable shovel with relation to said rigid shovel to open the lower end of said inner tube, and devices for moving said tube relatively. 3rd. A planting implement consisting of an outer and an inner tube secured together and movable longitudinally with relation to each other, a longitudinal slot in said inner tube, an adjustable block situated within said slot, projections upon said outer tube that extend into said slot, a movable and a rigid shovel upon the lower end of said inner tube and which serve to close the said inner tube when in contact with each other, devices for moving said movable shovel with relation to said rigid shovel to open the lower end of said inner tube, and devices for moving said tubes relatively. 4th. A planting implement consisting of an outer and an inner tube secured together and movable longitudinally with relation to each other, said inner tube having a contracted lower end, a rigid and a longitudinally movable shovel upon the lower contracted end of said inner tube, and which serve to close the said inner tube when the said movable shovel is at the lower limit of its movement, a spring for depressing said movable shovel, a connecting piece connected with said shovel and an operating finger-piece near the upper end of said inner tube, and devices for moving said tubes relatively. 5th. A planting implement consisting of an outer tube, a relatively sliding inner tube provided at one end with a handle and with a sliding finger-piece, a stationary shovel at the other end of said tube, a sliding shovel adapted to come in contact with said stationary shovel, a spring for moving said sliding shovel outwardly, a connection between said sliding shovel and said finger-piece, and springs for moving said outer and inner tubes relatively, said springs being situated between rods secured to said outer tube and extending through a shoulder upon said inner tube. 6th. In a planting implement, the relatively movable outer and inner tubes, the shovels and means for operating the same, and downwardly projecting blades at the lower end of said outer tube. 7th. In a planting implement, the relatively movable outer and inner tubes, the shovels and means for operating the same, and blades projecting downwardly from the lower end of said outer tube and situated at an angle to said shovels. 8th. In a planting implement the relatively movable outer and inner tubes, the shovels and means for operating the same, and downwardly projecting blades at the lower end of said outer tube. 9th. In a planting implement, the relatively movable outer and inner tubes, the shovels and means for operating the same, an inwardly-projecting flange upon the lower end of said outer tube, and downwardly projecting blades upon said inwardly-projecting flange.



No. 58,038. Railway Cars for Cattle.

(*Char à bétail.*)



Eugraphus Rykowskoff, Moscow, Russia, 6th November, 1897; 6 years. (Filed 9th October, 1897.)

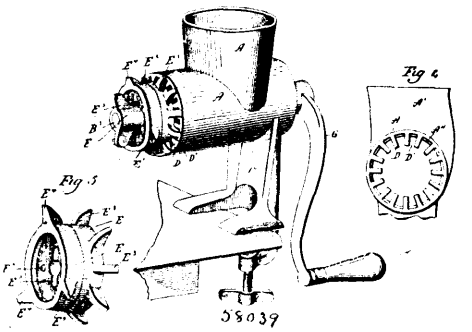
Claim.—1st. A double-deck stock car, feed troughs dividing both decks transversely into separate stock compartments, and means for preventing stock on one side of the troughs from interfering with the stock on the opposite side thereof, substantially as described. 2nd. A double-deck stock car, feed troughs dividing both decks transversely into separate stock compartments, cross partitions

immediately above and dividing the troughs longitudinally, and means for tying stock to said partitions, substantially as set forth. 3rd. A double-deck stock car, feed troughs dividing both decks transversely into separate stock compartments, a storage chamber beneath some of the feed troughs accessible from without, and means for preventing stock on one side of the feed troughs from interfering with stock on the opposite side thereof, substantially as set forth. 4th. A double-deck stock car, feed troughs dividing both decks transversely into separate compartments, and means for preventing interference of stock on one side of the troughs with the stock on the opposite side thereof, said compartments accessible through separate doors from without only, substantially as set forth. 5th. A double-deck stock car, feed troughs dividing both decks transversely into separate stock compartments, means for preventing stock on one side of the troughs from interfering with stock on the opposite side thereof, and an attendant's compartment extending across the car about its longitudinal centre, from which compartment access is had to adjacent stock compartments, said attendant's compartments having an opening in its floor, for the purpose set forth. 6th. A double-deck stock car having the lower deck floor below the wheel axles, both decks of a clear height to accommodate cattle and horses, feed troughs dividing both decks transversely into separate stock compartments, and means for preventing stock on one side of the troughs from interfering with stock on the opposite side thereof, substantially as set forth. 7th. A double-deck stock car having the lower deck floor below the wheel axles, both decks of a clear height to accommodate cattle and horses, feed troughs dividing both decks transversely into separate stock compartments, and storage chambers beneath some of said troughs accessible from without, substantially as set forth. 8th. A double-deck stock car having both decks divided transversely into separate stock compartments, each of said compartments provided with sliding doors movable towards one another in opening, and means for locking together the doors of two such stock cars when open, for the purpose set forth. 9th. A double-deck stock car divided transversely into separate stock compartments, and means for draining the liquid manure from both decks, for the purpose set forth. 10th. A double-deck stock car divided transversely into separate stock compartments, and means for draining the liquid manure from each compartment separately, for the purpose set forth. 11th. A double-deck stock car divided transversely into separate stock compartments, having perforated floors for the eduction of liquid manure, a collecting chamber for such manure beneath each upper deck stock compartment, and drain pipes leading therefrom and having their outlet below the lower deck floor, for the purpose set forth. 12th. The combination with the feed or watering troughs of a stock car, of water mains extending longitudinally of the car on opposite sides, distributing pipes tapped to said mains and leading to said troughs, flexible hose coupling for coupling a line of mains of a train of cars, an air vent at the terminal of the main of the last car, and a hose coupling at the initial of the main of the first car adapted to be coupled to a source of supply of water under pressure, for the purpose set forth. 13th. In a double-deck stock car, feed and watering troughs located at different points of both decks, a water supply duct extending longitudinally of the car on each side thereof, and distributing pipes each of which supplies a trough in both decks, said pipes serving also as drain pipes for the upper deck troughs, for the purpose set forth. 14th. A double-deck stock car, feed troughs and partitions above the same dividing both decks transversely into separate stock compartments, and an opening in one corner of the floor of each compartment, the openings in the lower deck floor registering with the openings in the upper deck floor, for the purpose set forth. 15th. A double-deck stock car, feed troughs and partitions above the same dividing both decks transversely into separate compartments, ventilating openings in the car sides on opposite sides of said partitions above the troughs, and suitable registers for said openings, for the purposes set forth. 16th. A double-deck stock car, feed and watering troughs dividing both decks transversely into separate stock compartments, a water supply duct extending longitudinally of the car on opposite sides thereof, intercommunicating distributing pipes leading from said mains upwards into the upper deck trough and downward into the lower deck trough, each of said pipes provided with a stop-cock and a drain for the lower deck troughs for the purpose set forth. 17th. A double-deck stock car, feed and watering troughs dividing the decks transversely into separate stock compartments, a water main arranged longitudinally of the car on each side thereof, distributing pipes rising from the mains into the upper deck troughs slightly above the bottom thereof, like pipes extending downwards from said mains into the lower deck troughs and having their inlet in line with the inlet of the upper deck trough supply pipes, a stop-cock for said pipes, and a drain for the lower deck troughs, for the purpose set forth. 18th. The combination with a stock car, of draft devices consisting of a vertical draw-beam at each end of the car provided with a coupling device, said beam having motion in the direction of the length of the car, two-part connecting rods connecting the draw-beams at opposite ends of the car, and a spring coupling for said rods arranged to compress the spring when the draft is applied to one of the draw-beams, for the purpose set forth.

No. 58,039. Food Chopper. (*Hachoir.*)

Levi Tracy Snow, New Haven, Connecticut, U.S.A., 6th November, 1897; 6 years. (Filed 11th October, 1897.)

Claim.—1st. In a food chopper, the combination with a case provided with a circular series of cutting ribs, the outer ends of



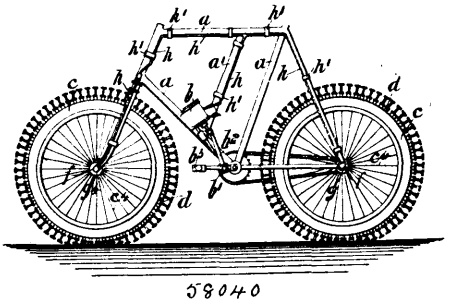
which project beyond its outer end and the spaces between which form discharge openings, of a rotatable forcer located within the case, and a cutter provided with teeth which are extended rearward back of the outer end of the forcer and which co-act with the projecting outer ends of the said ribs to cut the material at a point within that where the outer end of the forcer ceases to exert feeding pressure upon the material. 2nd. In a food chopper, the combination with a case having a screw-like forcer located within it, and a double or reversible cutter having radially arranged teeth applied to the outer end of the forcer, located entirely without the case and having more teeth at one end than at the other. 3rd. In a food chopper, the combination with a case provided with a circular series of cutting ribs, the outer ends of which project beyond its outer end, and have their outer faces rearwardly bevelled, and form a circular series of wedge-shaped discharge openings the outer ends of which are larger than their inner ends, of a forcer located within said case, and a cutter removably applied to the outer end of the forcer, located entirely without the case and furnished with cutting-teeth having their inner faces bevelled to conform to the bevel of the outer faces of the projecting ends of the ribs. 4th. In a food chopper, the combination with a case provided with a circular series of cutting-ribs, the outer ends of which project beyond its outer end, and the spaces between which form discharge openings, and having its outer end formed with a clearance bevel which virtually enlarges the said openings, of a forcer located within the said case, and a cutter applied to the outer end af the forcer and furnished with teeth conforming to and co-acting with the outer faces of the projecting outer ends of the said ribs for chopping the food. 5th. In a food chopper, the combination with a case provided with a circular series of cutting ribs, the outer ends of which project beyond its outer end and having their inner faces bevelled, of a forcer located within the case and bearing at its outer end upon the said bevelled faces of the said ribs, and a cutter applied to the outer end of the forcer, and furnished with cutting teeth extending rearward back of the outer end of the forcer and co-acting with the projecting outer ends of the said ribs. 6th. A double or reversible cutter, said cutter being composed of two independently formed discs furnished with radially arranged cutting teeth, rigidly secured together, and adapted to be removably coupled to the outer end of the forcer of a food chopper, the said discs being differentiated as to the number of their cutting teeth, so that the cutter may be used for chopping coarse or fine. 7th. In a food chopper, the combination with a case provided with a circular series of cutting ribs, the outer ends of which project beyond its outer end, and having their inner faces bevelled, of a screw-like forcer located within the case, having its forward end furnished with a bevel bearing upon said bevelled inner faces of the ribs, and also having its forward end formed with a circular shoulder, and a cutter connected with the outer end of the forcer, located entirely without the case, co-acting with the outer faces of the projecting outer ends of the said ribs, and having a recess for receiving said circular shoulder of the forcer.

No. 58,040. Method of and Mechanism for Propelling Vehicles. (*Méthode et mécanisme pour la propulsion des voitures.*)

Henry Symes, Alexandra South, Otago, New Zealand, 8th November, 1897; 6 years. (Filed 23rd June, 1897.)

Claim.—1st. A tire wherein the air is compressed by pumps arranged around its periphery and operated by the weight of the vehicle and rider, said air being then conveyed to a motor to assist it in propelling the machine, substantially as and for the purpose set forth herein. 2nd. A tire wherein the air is compressed by pumps arranged around its periphery and operated by the weight of the vehicle and rider, said air being conveyed to a motor through pipes and unions provided with ball bearings to reduce friction, and a stuffing box to prevent escape of air, substantially as and for the purposes set forth herein. 3rd. In mechanism for propelling vehicles, a union provided with ball bearings to reduce friction upon an axle revolving under pressure in combination with a stuffing box to prevent escape of compressed air, substantially as and for the purposes set forth herein. 4th. A tire wherein the air is compressed

by pumps arranged around its periphery and operated by the weight of the vehicle and rider in combination with a motor acting by such



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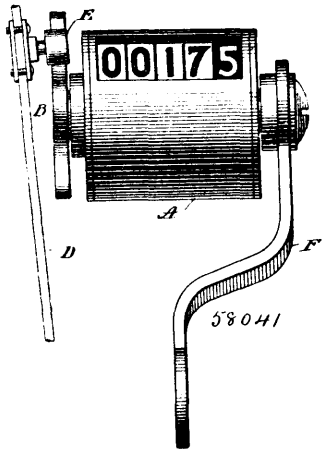
compressed air upon the pedal crank which is provided with a journal for the connecting rod of the motor and carries a pedal for the rider's foot, substantially as and for the purposes set forth herein. 5th. A tire wherein the air is compressed by pumps arranged around its periphery and operated by the weight of the vehicle and rider, such compressed air forming a cushion and thus facilitating propulsion substantially as and for the purposes set forth herein. 6th. The improved method of and mechanism for propelling vehicles consisting of parts constructed, arranged and operating substantially as and for the purposes set forth herein.

No. 58,041. Bracket for Cyclometers.
(*Support pour cyclomètres.*)



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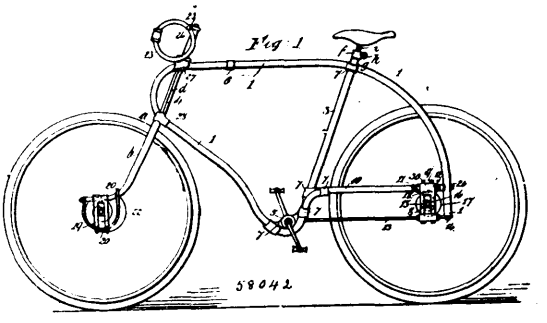
William Clifford Homan, Meriden, Connecticut, U.S.A., 8th November, 1897 ; 6 years. (Filed 13th October, 1897.)

Claim.—1st. A combination of a cyclometer casing, having a stem-receiving opening therein, with a fixture carrying a laterally-directed, tubular-supporting stem adapted to enter said opening, the free end of said stem being split, and locking means carried within said stem whereby the inner end of the stem may be expanded to secure the casing in the desired position. 2nd. The combination of a cylindrical cyclometer casing, having an internal stem-receiving recess therein concentric with its axis, with a fixture carrying a laterally-directed tubular stem adapted to enter said opening, the free end of said stem being split, and provided with internal shoulders, the opposite end being internally threaded, a screw for entering said threaded end of the stem, the free end of said screw being bevelled or tapered, and adapted to co act with the shouldered, split inner ends of said stem, to expand the inner end of the same, and lock said parts in the desired position.

No. 58,042. Bicycle. (*Bicycle.*)

Arthur John Cuming, Canterbury, New Zealand, 8th November, 1897 ; 6 years. (Filed 6th October, 1897.)

Claim.—1st. A bicycle frame, the main portion of which is formed of two continuous tubes bent to the required shape, arranged opposite each other, and connected by bridge pieces and also by brackets upon the steering-head and seat-pillar tube, which are arranged between them and to which they are connected, substantially as herein described and illustrated in the drawings. 2nd. In combination with a bicycle frame, slide blocks upon the ends of the driving wheel spindle working in guides upon the frame, springs secured at each end of the spindle having their opposite ends secured to fixed parts of the frame, substantially as specified and illustrated. 3rd. In combination with a bicycle frame, tooth-wheels upon the ends of the wheel-spindle working in toothed guides upon the frame, springs secured at each end of the spindle, having their opposite ends secured to fixed parts of the frame, substantially as specified and illustrated. 4th. In combination with a bicycle frame, tubular



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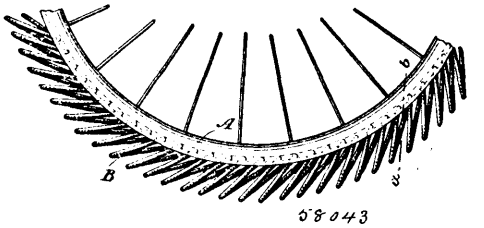
guides depending therefrom upon each side, having sockets sliding telescopically over them, which receive the opposite ends of the wheel-spindle, springs surrounding the guides between said sockets, and flanges fixed upon the guides, substantially as and for the purposes herein described and illustrated, particularly in figures 4 and 5. 5th. In combination with front forks of a bicycle, bifurcated brackets fixed at the lower end of each leg of the fork forming guides for motion blocks upon the ends of the wheel-spindle, springs at each end of said spindle having one end secured thereto, and the other end secured to the fork, substantially as specified and illustrated. 6th. In combination with a bicycle frame, guide-brackets formed upon sockets sliding upon the rear portions thereof and adjustable by nuts thereon, said brackets forming guides for motion blocks upon the ends of the wheel-spindle, springs being interposed between said spindle and the frame, substantially as and for the purposes specified and illustrated. 7th. In combination, the bicycle frame, composed of the two correspondingly-bent tubes 1, 2, arranged upon opposite sides of the steering-head and seat-pillar-tube to which they are secured, guide-brackets adjustable by nuts upon the screwed lower rear portions of the frame upon either side, receiving motion blocks carrying the ends of the wheel-spindle, springs being interposed between said spindle and the framing, substantially as herein specified and illustrated. 8th. In combination with the forks of a bicycle, a bifurcated bracket at the lower end of each leg thereof, each bracket being formed upon a socket fixed upon the leg and stayed by a curved tube fixed at each end to said leg, and forming a support for the lower portion of the bracket, motion blocks upon the ends of the wheel-spindle guided by the brackets, and springs interposed between said spindle and the forks, substantially as specified and illustrated. 9th. The improved cycle fork, constructed of two tubes, each tube being bent to form a side of the fork, and the upper portion of one tube fitted and secured within the upper portion of the other to form a steering-stem, substantially as specified and illustrated. 10th. Means for adjusting the height of the handle-bar and seat of a cycle, consisting of a screwed socket fixed upon the steering-stem or seat-pillar-tube, which receives the similarly-threaded handle-bar stem or seat-pillar stem, the socket being divided and provided with means for clamping the stem within it, substantially as specified and illustrated. 11th. The improved handles for a bicycle, consisting of circular grip loops upon the ends of, and nearly at right angles to, the handle-bar, substantially as specified and illustrated. 12th. In combination, circular grip loops upon the ends of the handle-bar of a bicycle, and reticular material secured to each loop and extending from one to the other, whereby a receptacle for parcels is formed, substantially as specified and illustrated.

No. 58,043. Bicycle Tire. (*Bandage de bicycles.*)



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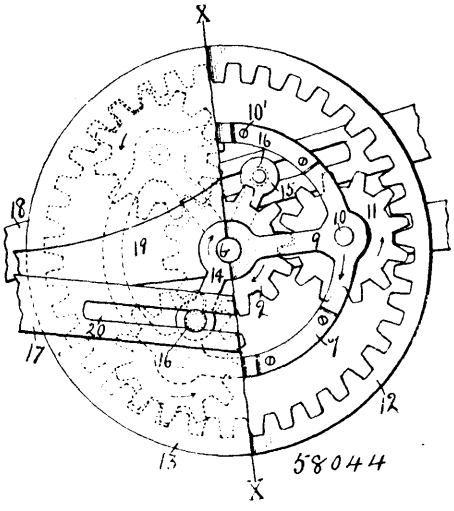
Francis Gossler, Korrumburra, Victoria, Australia, 8th November, 1897 ; 6 years. (Filed 28th June, 1897.)

Claim.—1st. In tires for vehicles, in combination, a spiral spring, the convolutions of which are set tangentially to a wheel rim, and at an oblique angle to the plane of its travel, and an annular band D, substantially as and for the purposes set forth. 2nd. In tires for vehicles, in combination, a spiral spring set tangentially to the wheel rim and at an oblique angle to the plane of its travel, an annular protecting strip E, an annular band D, and an outer cover F, substantially as and for the purposes set forth. 3rd. In tires

for vehicles, a spiral spring, the convolutions of which are set tangentially to the wheel rim and at an oblique angle to the plane of its travel and embedded in a tube of rubber or analogous material so as to form a part of such tube, substantially as and for the purposes set forth.

No. 58,044. Bicycle Gearing. (*Engrenage de bicycles.*)



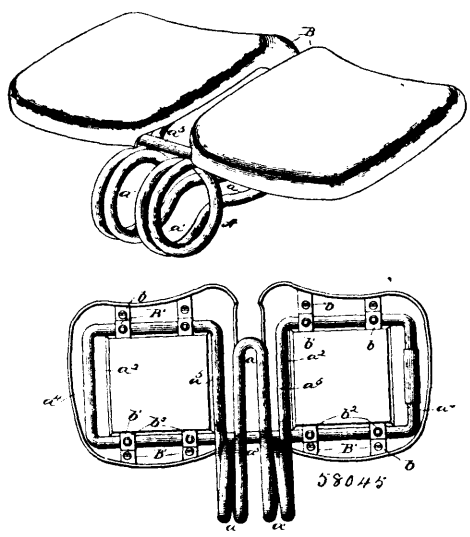
John A. Caldwell, Vancouver, British Columbia, Canada, 8th November, 1897; 6 years. (Filed 22nd October, 1897.)

Claim.—1st. In a bicycle gearing, the combination with a rotatable axle, of cranks connected thereto, pivoted pedal-levers having slots adapted to loosely receive the free ends of cranks, a rotatable wheel hub having a pinion, a stationary internal toothed gear rim, and pinions carried by the axle and engaging with the gear rim and the pinion of the hub, all substantially as set forth. 2nd. In a bicycle gearing, the combination with a rotatable axle, of cranks secured thereto and having roller wrist-pins, pivoted pedal-levers having slots which loosely receive said pins, rings secured to said axle, screws fastening the rings together, also pins and pinions journalled thereon, a stationary internalled toothed gear with which the said pinions mesh, a wheel hub rotatable independent of the axle, and a pinion carried by the said hub which engages with the aforesaid pinions, substantially as and for the purposes specified. 3rd. In a bicycle gearing, the combination with a bicycle frame, of a rotatable axle having screw-threaded ends, balls interposed between the axle and the frame, cranks secured and keyed on said ends, and having roller wrist-pins, pivoted pedal levers having slots which loosely receive the pins, rings, one of which is connected by arms to one of the ends of axle and fastened thereto, screws and pins connecting said rings together, pinions journalled loose on pins and located between the rings, a rotatable hub having a pinion that is in line and meshing with the aforesaid pinions, balls interposed between said hub and the axle, a stationary internal toothed gear rim, in mesh with the pinions carried by the rings, and casing plates located on opposite sides of said internal toothed rim and secured thereto, all substantially as and for the purposes set forth.

No. 58,045. Velocipede Saddle. (*Selle de vélocipèdes.*)

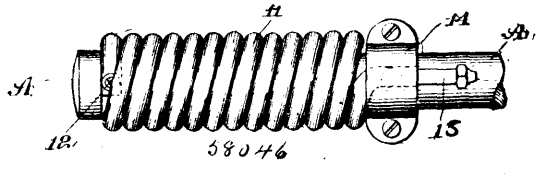
Martin Luther Deitzler, Harrisburg, Pennsylvania, U.S.A., 8th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—1st. A frame for velocipede-seats comprising the forwardly-extending attaching-tongue, coils at opposite sides of the rear ends of the tongue, arms extending forwardly from said coils parallel with each other and entirely disconnected from end to end, and open horizontally-extending seat-supports at the outer sides, the said arms terminating in front of said coils, substantially as described. 2nd. A frame for bicycle-seats comprising a forwardly-extending attaching-tongue formed of wire or similar material, coils at opposite sides of the rear end of said tongue, independent seat-supports formed of wire or similar material, the inner sides of said supports extending forwardly from the coils, and having a space between them and a cross or binding wire or rod connecting the independent seat-supports and resting upon the inner sides of said supports, substantially as described. 3rd. The combination with the seat-supporting frame comprising a forwardly-extending attaching-tongue formed of wire or similar material, coils at opposite sides of the rear end of said tongue, independent seat-supports formed of wire or similar material, the inner sides of said supports extending forwardly from the coils and having a space between them and a cross or binding wire or rod connecting the independent seat-supports and adapted to rest upon the inner sides of said supports, and independent seats adjustably secured on said supports, substantially as described. 4th. A frame for bicycle-seats, formed of a single length of wire bent to form the horizontal attaching-tongue a, terminating at the rear end of its two members in the outwardly-



extending forwardly-coiled springs a^1, a^1, the spaced parallel forwardly-projecting arms a^5 a^5, extending from the upper members of said coils disconnected throughout their length, the wires at the front ends of said arms a^5 being bent outwardly, then rearwardly as at a^4, a^4, and then inwardly and across the arms a^5 in front of the coils as at a^3, substantially as described. 5th. The combination with the seat-support having a horizontal attaching-tongue, oppositely-projecting coil-springs integral with the rear ends thereof and from the upper ends of the outer coils of which project the spaced parellel, disconnected members or arms a^5, a^5, and the open rectangular seat-supports at the outer sides of the arms a^5, a^5, and terminating in front of said coils, of the separate and independent seats provided on their under sides with front and rear adjusting clamps or retainers engaging the front and rear members of the respective seat-supports, whereby the width of the unobstructed open space in the middle of the seat may be varied, substantially as described. 6th. A frame for velocipede-seats comprising a forwardly-extending attaching-tongue, coils at opposite sides of the rear end of the tongue, arms extending forwardly from the upper ends of said coils, parallel with each other and entirely disconnected from end to end, open horizontally extending seat supports at the outer sides of said arms terminating in front of said coils, and a separate and independent seat on each of said supports, each seat being provided on its under side with front and rear clamps sliding on the front and rear bars or sections of said supports, and set screws passing through said clamps into engagement with the bars or sections, substantially as described. 7th. A frame for velocipede seats comprising an attaching-tongue, and two independent spring seat-supports upon opposite sides of the central line of the tongue, and a continuous cross or binding wire extending between said supports and attached to and forming a part of said seat-supports, each seat being adjustably clamped upon said continuous cross or binding wire, substantially as described.

No. 58,046. Handle for Tools and Bicycle Handle-Bars. (*Manche d'outil et poignée de barres de bicycles.*)



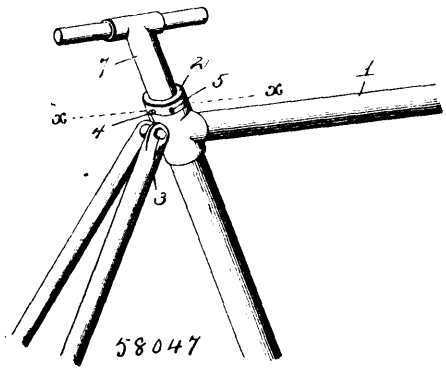
Karle Henry Grainger, South Weymouth, Massachusetts, U.S.A., 8th November, 1897; 6 years. (Filed 16th August, 1897.)

Claim.—1st. A handle for a tool or handle-bar for a bicycle provided with a coiled inflatable cushion, the said cushion serving as a grip for the operator, substantially as shown and described. 2nd. The combination with the handle of the handle-bar for a bicycle or the handle of a tool, of an inflatable tube wound around the said handle and provided with a valve at one of its ends, whereby the said tube may be inflated, as and for the purpose specified. 3rd. The combination with the handle of the handle-bar of a bicycle or the handle of a tool, of a tube attached at one end to the said handle

and wound spirally thereon, the opposite end of the tube being provided with a valve, and a clamp holding the valved end of the tube to the said handle, as and for the purposes set forth. 4th. The handle of a handle-bar for a bicycle or the handle of a tool, having a reduced surface and an inflatable tube secured to the said reduced surface near one end and wound spirally around said reduced surface, the opposite end of the tabe terminating in a valve and a clamp engaging with the valved end of the tube and with the handle, holding the valved end of the tube upon said handle in a fixed position, as and for the purpose specified.

No. 58,047. Bicycle Seat Post.

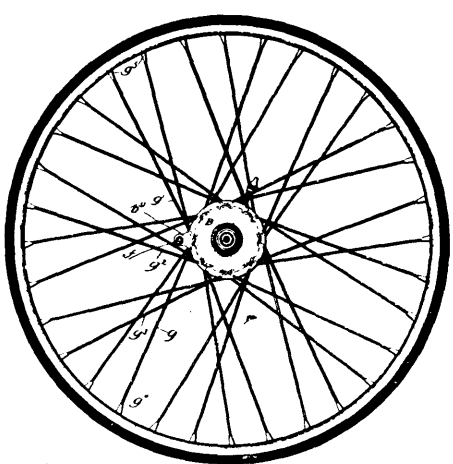
(Pilier pour selles de bicycles.)



Bruce Walker Ravenel, Columbia, South Carolina, U.S.A., 8th November, 1897; 6 years. (Filed 25th October, 1897.)

Claim.—1st. The combination of a bicycle frame, a socket or support for a post provided with spring bolts, and means for operating said bolts, and a post provided with recesses or perforations, substantially as described. 2nd. The combination of a post socket, a pair of spring bolts, and a finger or thumb lever for each member of the pair of bolts, substantially as described. 3rd. The combination of a post provided with recesses or perforations, a socket provided with spring bolts for interlocking with the seat-post, and means for withdrawing said bolt to release the seat-post, substantially as described.

No. 58,048. Vehicle Wheel. (*Roue de voitures.*)



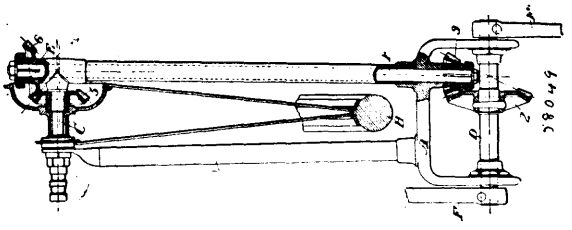
Harry R. Collins, South Bethlehem, Pennsylvania, U.S.A., 8th November, 1897; 6 years. (Filed 20th August, 1897.)

Claim.—1st. In a wheel, the combination of a hub, a pneumatic tube encircling the same, a spoke-ring encircling the said tube, and a radius bar or link pivotally connected at one end with the hub and at the other end with the spoke-ring, thus rotatively connecting these parts while permitting relative radial movement thereof without a change of leverage in the connections between them, substantially as described. 2nd. In a wheel, the combination of a hub having side flanges, a pneumatic tube encircling the hub between its side flanges, a spoke-ring encircling said tube, and a radius bar or link pivotally connected at one end with the side flanges of the hub and at the other end with the spoke-ring, substantially as and for the purpose described. 3rd. In a wheel, the combination of a hub having side flanges and a pull-bar extending across between said flanges and fastened in the same, a pneumatic tube encircling said hub between its side flanges, a spoke-ring encircling said tube and having an outwardly protecting stud or pedestal fastened to it, and a link pivotally mounted at one end on the pull-bar and pivotally connected at the other end with the pedestal, substantially as and for the purpose described. 4th. In a wheel, the combination with the hub, of the concentric spoke-ring and the pneumatic tube interposed between the hub and spoke-ring, a stud or pedestal and pull-bar carried by the spoke-ring, a link connecting the pedestal and pull-bar with the hub, and ball-bearings at the end of the link connecting with the pedestal and pull-bar, substantially as described. 5th. In a wheel, the combination with the sleeve of the hub provided with centrally disposed exterior right and left-handed screw threads and an annular collar at one terminus of one set of threads, of the annular saddle sections, one of which is interiorly correspondingly screw-threaded and which have their adjacent ends constructed with interlocking portions, one of said sections abutting against said collar and engaging the right hand screw-thread, while the other section is locked in engagement with the first mentioned section, and a collar bearing against the latter section and engaging the left hand screw-thread, substantially as described. 6th. In a wheel, the combination with the hub having the axle sleeve provided with right and left-handed screw-threads thereon, of the saddle sections placed on said hub and having recesses or cut out portions in the engaging end of one section adapted to receive correspondingly formed extensions or projections on the engaging end of the other section, the annular part of one saddle section being interiorly screw-threaded and adapted to be screwed on said sleeve while the other section is smooth, and a screw-threaded collar for holding the latter section on the sleeve, substantially as described. 7th. In a wheel, the combination with the hub, the saddle sections carried by said hub, the spoke-ring, a pneumatic tube interposed between the spoke-ring and saddle sections and annular auxiliary saddle seats or thimbles interposed between the seats of the saddle sections and said tube, substantially as described. 8th. In a wheel, the combination with the hub, the saddle sections carried thereby, the spoke-ring, and the pneumatic tube interposed between the spoke-ring and saddle sections, of the auxiliary saddle seats or thimbles carried by the seat portions of the saddle sections and interposed between said sections and the pneumatic tube, said thimbles being adapted to be maintained stationary relatively to the tube when the saddle sections are locked in position on the hub so as to prevent the tube from being worn by contact with the saddle sections, substantially as described. 9th. In a wheel, the combination with a hub having a saddle and a pneumatic tube thereon, of a spoke-ring provided with vertical annular flanges each having a series of apertures, spokes having their ends bent and fitted in said apertures, and packing rings interposed between the said flanges of the spoke-ring and the sides of the saddle and engaging the ends of the spokes, substantially as described. 10th. In a wheel, the combination with a hub having a saddle and a pneumatic tube thereon, of a spoke-ring provided with vertical annular flanges each having a series of apertures, spokes having their ends bent, fitted in said apertures, and upset, and packing rings interposed between the said flanges of the spoke-ring and the sides of the saddle, and socketed for engagement with the upset ends of the spokes, substantially as described. 11th. In a wheel, the combination with a hub having a saddle with side flanges, and a pneumatic tube on said saddle, of a spoke-ring provided with vertical annular flanges inside the said flanges of the saddle, and each having a series of apertures, and spokes extending on the inner sides of the flanges of the spoke-ring and having their ends bent outwardly and fitted in said apertures. 12th. In combination with the wheel hub, the saddle sections adapted to afford a bearing for a pneumatic tube, said sections being formed from sheet steel pressed into the required shape and provided with strengthening ribs or corrugations, substantially as described. 13th. In a wheel, the combination with the hub of the saddle sections carried thereby, said sections being formed from sheet steel having strengthening ribs or corrugations stamped therein, substantially as described. 14th. In a wheel, the combination with the hub, spoke-ring and the wheel rim, of the spokes secured at one end to the spoke-ring and at the other end to the wheel rim, said spokes being interlaced so that each spoke passes alternately over and under the several spokes intercepted in passing from the spoke-ring to the rim, substantially as described. 15th. In a ball bearing, the combination of a cone having a projecting lipped or grooved flange, and a groove at right angles to the axis of the cone, packing in the latter groove, a ball-race having a projecting portion adapted to overlie the packing and enter the groove in said projecting flange, so that the packing is not affected by the relative adjustment of the cone and ball-race, and balls interposed between the ball-race and cone, substantially as described. 16th. A vehicle tire consisting of an elastic body or ring having a base portion provided with outwardly inclined flanges or ribs on the inner surface thereof, and an annular centrally disposed opening above said ribs, whereby the tire is adapted to be locked to a suitably grooved rim and to afford a pneumatic effect without being subject to the defects and disadvantages of a pneumatic tire, substantially as described. 17th. In a vehicle wheel, the combination with the rim having outwardly inclined circumferential grooves in the upper or outer surface thereof, and an intermediate circumferential rib having its sides bound by said grooves, of a cushion tire consisting of an elastic body or ring having a base portion adapted to be seated upon said rim, and provided with ribs or flanges on its inner surface shaped to fit the grooves of the rim, and an annular opening extending therethrough above said ribs, whereby

the two parts are adapted to be interlocked and secured together so as to prevent disconnection by pressure thereon in use while giving the effect of a pneumatic tire, substantially as described. 18th. In a vehicle wheel of substantially the character specified, the combination of the hub, the pneumatic tube and spoke-ring, with the saddle centrally held on said hub, said saddle being formed from two similar parts, each part being composed of a curved annular seat, the annular seats of the two parts when they are in position on the hub forming a seat for the pneumatic tube of greater curvature than the diameter of the pneumatic tube, whereby the tube may freely expand or flatten against and in the saddle, substantially as described. 19th. In a wheel, the combination of the hub and the saddle sections carried thereby, formed with vertical flanges, the spoke-ring fitting between said vertical flanges, and the pneumatic tube interposed between the spoke-ring and saddle sections, said spoke-ring formed with annular recesses or pockets in its outer faces or sides, and packing rings fitting said recesses so as to provide smooth contacting surfaces between the spoke-ring and the vertical flanges of the saddle sections, adapted to lessen friction and exclude dust, substantially as described. 20th. The toggle connection between the hub and spoke-ring substantially as shown in figures 4, 7 and 8 of the drawings and described with reference thereto. 21st. The cushion rim and tire for wheels constructed subtantially as shown and described with reference to figures 20 and 25, inclusive.

No. 58,049. Variable Speed Geared Bicycle.

(*Engrenage variable de vitesse pour bicycles.*)

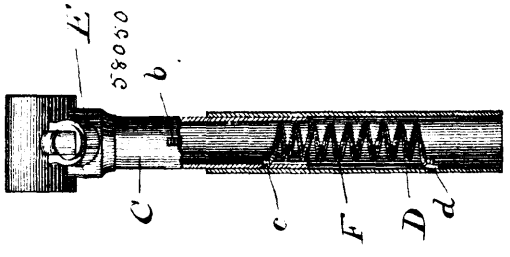


Francis Henry Richards, Hartford, Connecticut, U.S.A., 8th November, 1897 ; 6 years. (Filed 27th September, 1897.)

Claim.—In a variable-geared bicycle, the combination of a driving-wheel, a pedal-shaft, and a side shaft having its ends adjacent to said driving-wheel and pedal-shaft, and two-to-one train of gears disposed on said pedal-shaft and the end of said side shaft adjacent to said pedal-shaft, a one-to-one train of gears comprising an eccentrically disposed gear on the driving-wheel having its diameter at right angles to the rotating axis of said wheel and an obliquely-disposed gear on that end of the side shaft adjacent to the driving-wheel, said gears meshing with each other, and cranks, one at each end of the crank-shaft, having their longitudinal axes in horizontal planes coinciding with the plane of the longer radii of the gears of the one-to-one train at each complete rotation of said one-to-one train, whereby the speed of the pedal-cranks is accelerated as they approach the dead-centres of their movements and is reduced at the mid-stroke portions of their ascending and descending movements.

No. 58,050. Handle-Bar Stems for Bicycles.

(*Tige de poignées de barres de bicycles.*)



James Irwin Shields, Woodstock, Ontario, Canada, 8th November, 1897 ; 6 years. (Filed 13th August, 1897.)

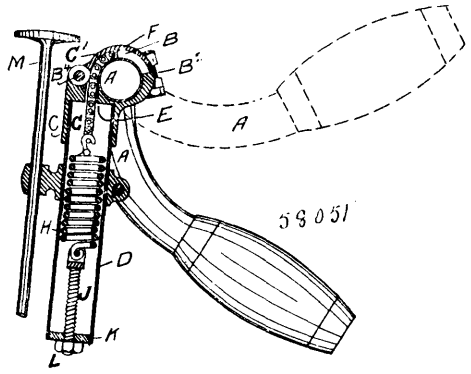
Claim.—In a bicycle, a handle bar stem comprising the part D, provided with the key-way *a*, and the part C, slidable within the part D, and provided with a key *b*, to fit the said key-way in combination with the spring F, the ends of which are secured respectively to the parts D, and C, substantially as and for the purpose specified.

No. 58,051. Bicycle Handle Bar.

(*Poignée de barres de bicycles.*)

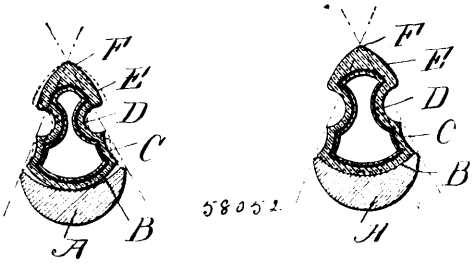
Edmund Sidney Clark, Adelaide, South Australia, 8th November, 1897 ; 6 years. (Filed 6th October, 1897.)

Claim.—1st. In improvements in and connected with handle bars of bicycles and the like, a revolubly mounted handle bar (such as A) having a lug or slotted segment plate B thereon, a flexible wire or bell chain G, a tension spring H, and an adjustable screw and nut J and



L, all substantially as described and illustrated, as and for the purposes set forth. 2nd. In improvements in and connected with handle bars of bicycles and the like, a trigger (such as N) provided with a thumb press N^1 and controlling spring N^2, constructed and arranged substantially as described and as illustrated in figs. 4 and 5 of the drawings, in combination with the parts above claimed. 3rd. In improvements in and connected with handle bars of bicycles and the like, a socket (such as C) secured to the handle-bar stem, and the detachable cover C^1 thereon, together with means whereby the two are held together. 4th. The herein specified improvements in and connected with handle bars of bicycles and the like, substantially as described and illustrated, as and for the purposes set forth, as a combination of parts.

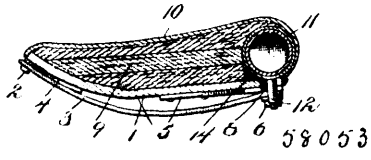
No. 58,052. Pneumatic Tire. (*Bandage pneumatique.*)



Edwin George Van Zandt, St. Louis, Missouri, U.S.A., 8th November, 1897 ; 6 years. (Filed 18th September, 1897.)

Claim.—1st. A pneumatic tire formed with a single opening, the sides of which are adapted to move inwardly toward each other, when the tire strikes an obstacle, or when an abnormal pressure is brought to bear upon the outside of the tread, substantially as described. 2nd. A pneumatic tire, the sides of which are concaved, the lines of said concavities beginning at a point at or near the tread, and ending at or near the rim to which the tire is attached, substantially as described. 3rd. A pneumatic tire formed with a thickened tread, and reduced concaved sides, whereby, when, an abnormal pressure is brought to bear upon the outside of said tread, the sides will move inwardly toward each other, substantially as described. 4th. A pneumatic tire formed with reduced concaved sides, and strengthening fabric embedded in said reduced sides, substantially as described. 5th. A tire composed of a base wall, a tread, and oppositely recurved portions D located almost entirely within lines drawn from the tread to the lateral extremities of the base wall, tubstantially as described.

No. 58,053. Bicycle Saddle. (*Selle de bicycles.*)

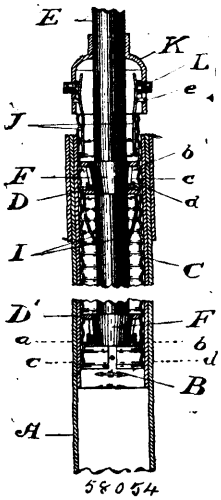


Alfred Cooper Drury and Ernest Sims, both of Canton, New York U.S.A., 8th November, 1897 ; 6 years. (Filed 9th October, 1897.)

Claim.—1st. A saddle for cycles comprising a suitable base, a flexible cover secured to and extending over said base, padding inserted between the base and its cove and terminating in rear of the front edge of the saddle base, and an inflatable tube or sack located at the front edge of the saddle, between the base and its

cover and in the hollow or cavity made by the termination of the padding, substantially as described. 2nd. A saddle for cycles, comprising a base curving upward toward its rear edge and having the reinforcing strips at its front and rear edges, the front strip being formed with an offset and having a notch therein, a flexible cover extending over the base of the saddle, the padding interposed between the base and cover and terminating short of the front edge of the saddle, and the inflatable tube or sack arranged in advance of the padding and between the base and cover and having its valve stem arranged in the notch of the front reinforcing-strip, all arranged substantially as and for the purpose described.

No. 58,054. Saddle Post Adjustment for Bicycles.
(*Ajustage de pilliers de selles pour bicycles.*)

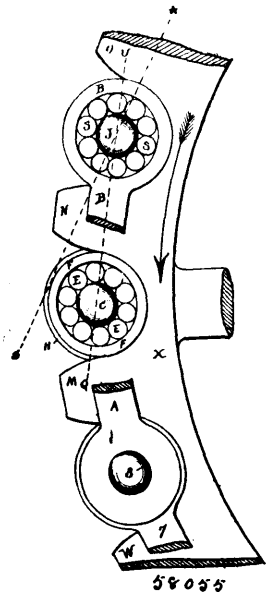


58054

William Knox Magee, Toronto, Ontario, Canada, 8th November, 1897; 6 years. (Filed 30th September, 1897.)

Claim.—1st. In a bicycle, a seat standard, in combination with a split tube located within the said seat standard, a saddle post supported by the said split tube and mechanism for expanding the said split tube within the seat standard to hold the said tube and saddle post at any desired height, substantially as and for the purpose specified. 2nd. In a bicycle, a seat standard having ribs or projections formed on or connected to its inside surface, in combination with a split tube ribbed to engage with the ribs or projections within the said standard, a saddle post supported by the said split tube and mechanism for expanding the said split tube within the seat standard to hold the said tube and saddle post at any desired height, substantially as and for the purpose specified. 3rd. In a bicycle, a seat standard, in combination with a split tube located within the said seat standard, and a saddle post having inclined surfaces formed on or connected thereto and adapted to expand the split tube which is suitably shaped for engagement with the inclined surfaces of the saddle post, substantially as and for the purpose specified. 4th. In a bicycle, a seat standard having ribs or projections formed on or connected to its inside surface, in combination with a split tube ribbed to engage with the ribs or projections within the said standard, and a saddle post having inclined surfaces formed on or connected thereto and adapted to expand the split tube which is suitably shaped for engagement with the inclined surfaces of the saddle post, substantially as and for the purpose specified. 5th. In a bicycle, a seat standard, in combination with a split tube located within the said seat standard, wedge-shaped projections on opposite sides of said split tube, and a saddle post having inclined surfaces formed on or connected thereto and adapted to engage with the wedge-shaped projections of the split tube, substantially as and for the purpose specified. 6th. In a bicycle, a seat standard, in combination with a split tube located within the seat standard, wedge-shaped projections on opposite sides of said split tube, a saddle post having inclined surfaces formed on or connected thereto and adapted to engage with the wedge-shaped projections of the split tube, and means to limit the downward motion of the saddle post by engaging with the split tube, substantially as and for the purpose specified. 7th. In a bicycle, a seat standard, in combination with a split tube located within the said seat standard, wedge-shaped projections on opposite sides of said split tube, a saddle post having inclined surfaces formed on or connected thereto and adapted to engage with the wedge-shaped projections of the split tube, means to limit the downward and upward motion of the saddle post by engaging the split tube, and springs located between the saddle post and the halves of the split tube to normally press the latter apart, substantially as and for the purpose specified. 8th. In a bicycle, a seat standard in combination with a split tube located within the said seat standard, wedge-shaped projections on opposite sides of said split tube, a saddle post having inclined surfaces formed on or connected thereto and adapted to engage with the wedge-shaped projections of the split tube, means to limit the downward and upward motion of the saddle post by engaging the split tube, and a cap connected to the saddle post, and spring catches connected to the halves of the split tube and adapted to engage with the said cap, substantially as and for the purpose specified. 9th. In a bicycle, a seat standard in combination with a split tube located within the said seat standard, wedge-shaped projections on opposite sides of said split tube, a saddle post having inclined surfaces formed on or connected thereto and adapted to engage with the wedge-shaped projections of the split tube, and means to limit the downward and upward motion of the saddle post by engaging the split tube, substantially as and for the purpose specified.

No. 58,055. Drive Chain. (*Chaîne de transmission.*)

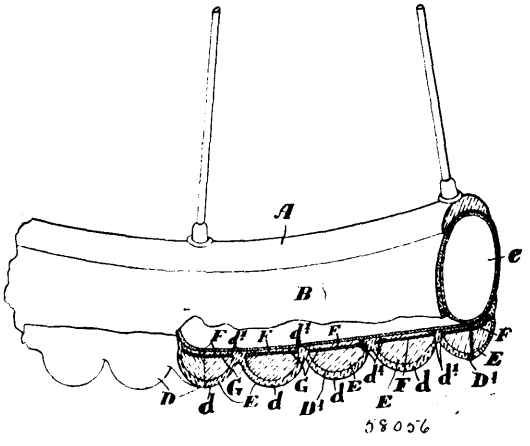


58055

John Cousins Garrood, Lynn, Mass., U.S.A., 8th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. The combination of the axle or pin C, outside link G, set of rollers E, hollow roller bearing roller F, outside link A, inside links H and B, in a drive chain, substantially as described. 2nd. The combination of the inside link H, set of rollers L, set of rollers K, inside link B, outside link G, axle or pin C, outside link A, hollow roller F, substantially as described. 3rd. The combination of the axle or pin C, outside link G, set of rollers L, washer Z, set of rollers E, washer Y, set of rollers K, outside link A, hollow roller bearing roller F, inside roller bearing link H, and inside roller bearing link B, all substantially as illustrated and described.

No. 58,056. Bicycle Tire. (*Bandage de bicycles.*)

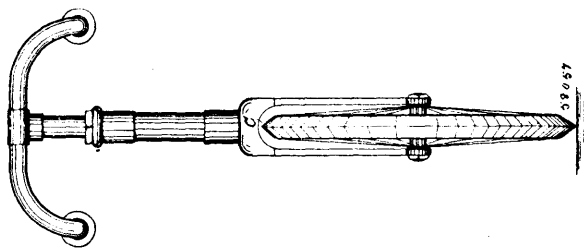


Robert Thompson Randall and Robert Ritson Randall, both of St. George, Ontario, Canada, 8th November, 1897; 6 years. (Filed 6th October, 1897.)

Claim.—1st. In a pneumatic tire for wheels, the combination with the tire, of a ring attached to or forming part of the tire and encircling the entire periphery of the tire, and substantially hemispherical projections attached to or forming part of such ring, as and for the

purpose specified. 2nd. In a pneumatic tire for wheels, in combination the tire, the air tube, the circumferential ring secured to or forming part of the tire and provided with hollow hemispherical projections and an internal non-puncturable filling for such projections, as and for the purpose specified. 3rd. In a pneumatic tire for wheels, in combination, the tire, the air tube, the circumferential ring secured to or forming part of the tire and provided with hollow hemispherical projections, bounding flanges on the inner edges of the walls of the projections and a non-puncturable filling secured in position in the hollow projections by such flanges, as and for the purpose specified. 4th. In a pneumatic tire for wheels, in combination, the tire, the air tube, the circumferential ring secured to or forming part of the tire and provided with hollow hemispherical projections, bounding flanges on the inner edges of the walls of the projections, and cork blocks situated in the interior of the hollow projections and held in position by the flanges, as and for the purpose specified. 5th. In a pneumatic tire for wheels, in combination, the tire, the air tube, the circumferential ring secured to or forming part of the tire and provided with hollow hemispherical projections, bounding flanges on the inner edges of the walls of the projections, cork blocks situated into the interior of the hollow projections, and aluminum plates located to the inside of the cork blocks and held in position by the flanges, as and for the purpose specified. 6th. In a pneumatic tire for wheels, in combination, the tire, the air tube, the circumferential ring secured to or forming part of the tire and provided with hollow hemispherical projections, bounding flanges on the inner edges of the walls of the projections, cork blocks situated into the interior of the hollow projections, aluminum plates located to the inside of the cork blocks and held in position by the flanges and independent fillings between the plates and the tire, as and for the purpose specified.

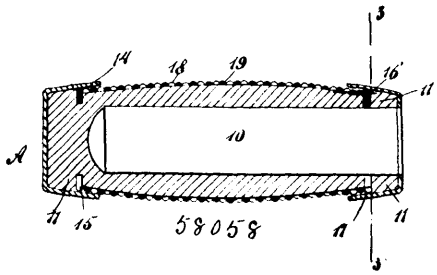
No. 58,057. Bicycle Tire, etc. (*Bandage de bicycles, etc.*)



Chas. Newman, Rundle Street, Adelaide, South Australia, 8th November, 1897; 6 years. (Filed 6th October, 1897.)

Claim.—In combination with a tire for bicycles and the like, a solid band or strip of india-rubber (or equivalent thereof), such band or strip being formed with straight sides which converge from the periphery or tread and meet the sides of the rounded part of the tire tangentially, the under part of such band or strip being formed concave so as to fit closely to the tire or cover, substantially as described and illustrated, as and for the purposes set forth.

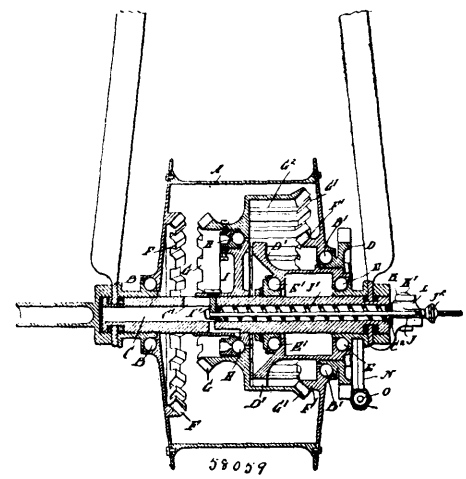
No. 58,058. Bicycle Handle Bar Grips.
(*Poignée de barres de bicycles.*)



Albert Stephen Noonan, Rome, New York, U.S.A., 8th November, 1897; 6 years. (Filed 14th October, 1897.)

Claim.—1st. A grip for the handle bars of bicycles, consisting of a body having apertures near each of its ends, and strips of a pliable material wound over the surface between the apertures, the ends of the strips being secured in said apertures, for the purpose set forth. 2nd. A grip for the handle bars of bicycles, consisting of a body having a flange at each of its ends and apertures near each flange, and strips of elastic material wound around the body between the flanges, the said strips being secured to the body as they are wound and the ends of the strips being fastened in the said apertures, as and for the purpose specified. 3rd. A grip for the handle bars of bicycles, consisting of a body having a flange at each of its ends and apertures near each flange, strips of elastic material wound around the body between the flanges, the said strips being secured to the body as wound and the ends of the strips being fastened in the said apertures, and caps secured at the flanged ends of the body, which caps extend over the end portions of the body wrapping, as and for the purpose specified. 4th. A grip for bicycle handle bars, consisting of a body having transversely aligning apertures near each end, the body between the apertures being provided with a coating of cement, and strips one of which is secured in each of the apertures at one end of the body, the said strips having a semi-circular cross-sectional shape, their inner faces being flat, and said strips being wound around the body in engagement with the cement and finally secured in the apertures at the opposite end of the body, and caps covering the ends of the body and the end portions of the wrapping for said body, as and for the purpose specified.

No. 58,059. Differential Bicycle Gear.
(*Engrenage differentiel de bicycles.*)

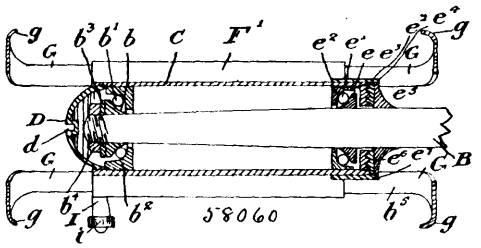


Guy Ralston Balloch, Centreville, New Brunswick, Canada, 8th November, 1897; 6 years. (Filed 20th October, 1897.)

Claim.—1st. A differential bicycle gear, comprising a hollow drive wheel hub provided with differential gear wheels, a double gear wheel laterally slidable for meshing with either of the said hub gear wheels, and a driven sprocket wheel in gear with the said double gear wheel, for rotating the latter within the hub and permitting lateral movement of the same, substantially as shown and described. 2nd. A differential bicycle gear, comprising a hollow drive wheel hub provided with differential gear wheels, a double gear wheel laterally slidable for meshing with either of the said hub gear wheels, a driven sprocket heel in gear with the said double gear wheel, for rotating the latter within the hub and permitting lateral movement of the same, and means, substantially as described, for shifting the said double gear wheel laterally in the said hub, as set forth. 3rd. A differential bicycle gear, comprising an axle, a slidable gear wheel mounted eccentrically on the said axle and formed with two gear wheels of different diameters, means for rotating the said slidable gear wheel from the driven sprocket wheel, and gear wheels on the hub of the drive wheel, adapted to be engaged by the gear wheels of the said slidable gear wheel, substantially as shown and described. 4th. A differential bicycle gear, comprising an axle, a slidable gear wheel mounted eccentrically on the said axle, and formed with two gear wheels, means for rotating the said slidable gear wheel, from the driven sprocket wheel, gear wheels on the hub of the drive wheel, and adapted to be engaged by the gear wheels, of the said slidable gear wheel, a disc slidably held on said axle and carrying a bearing for the said slidable gear wheel, and a spring pressed rod connected with the said disc and extending within the said hollow axle, substantially as shown and described. 5th. A differential bicycle gear, comprising an axle, a slidable gear wheel mounted eccentrically on the said axle, and formed with two gear wheels, means for rotating the said slidable gear wheel from the driven sprocket wheel, gear wheels on the hub of the drive wheel, and adapted to be engage by the gear wheels of the said slidable gear, a disc slidably held on the said axle and carrying a bearing for the said slidable gear wheel, a spring pressed rod connected with the said disc and extending within the said hollow axle, and means, substantially as described, for imparting movement to the said rod in one direction from the handle bar of the bicycle, as set forth. 6th. A differential bicycle gear, comprising a hollow axle, a hollow drive wheel hub concentric to the said axle, gear wheels secured to the inside of the said hub at the sides thereof, a double bevelled gear wheel fitted to slide laterally in the said hub, and adapted to mesh with either of the said hub gear wheels, a disc fitted to slide on the said axle, and carrying the said double bevelled gear wheel, and a sprocket wheel mounted to turn on the said axle, and having a gear wheel in mesh with an internal gear wheel formed on the said double bevelled gear wheel, substantially as shown and described. 7th. A differential bicycle gear, comprising a hollow axle, a hollow

drive wheel hub concentric to the said axle, gear wheels secured to the inside of the said hub at the sides thereof, a double bevelled gear wheel fitted to slide laterally in said hub, and adapted to mesh with either of the said hub gear wheels, a disc fitting to slide on the said axle and carrying the said double bevelled gear wheel, a sprocket wheel mounted to turn on the said axle, and having a gear wheel in mesh with an internal gear wheel formed on the said double bevelled gear wheel, and means, substantially as described, for moving the said disc laterally on the said axle, as set forth.

No. 58,060. Bicycle Pedal. (*Pédale de bicycles.*)



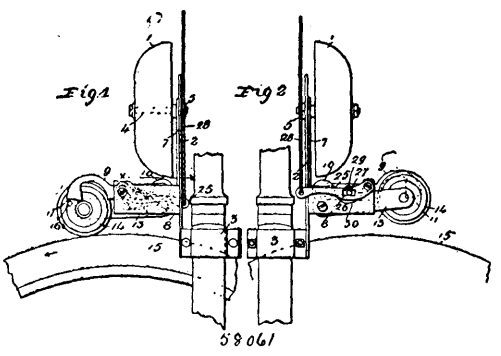
James Ernest Alexander Walker, Walkerton, Ontario, Canada, 8th November, 1897; 6 years. (Filed 26th October, 1897.)

Claim.—1st. The combination with the pedal and pedal spindle, the pedal frame suitably connected and journalled on the pedal spindle, end loops for the pedal provided with suitable gripping lips and held in suitable guide-ways in the frame, and means whereby when the foot is placed in position on the pedal the lips of the loops are thrown inwardly to grip the shoe, as and for the purpose specified. 2nd. The combination with the pedal and pedal spindle, the pedal frame suitably connected and journalled on the pedal spindle, end loops for ths pedal provided with suitable gripping lips and held in suitable guide-ways in the frame, toothed racks on the inner ends of the loops, quadrantal arms suitably pivoted in the frame and having the tail of one arm connected to the other arm proper, and means for turning such arms on their pivot-points, as and for the purpose specified. 3rd. The combination with the pedal and pedal spindle, the pedal frame suitably connected and journalled on the pedal spindle, end loops for the pedal provided with suitable gripping lips and held in suitable guide-ways in the frame, toothed racks on the inner ends of the loops, quadrantal arms suitably pivoted in the frame and having the tail of one arm connected to the other arm proper, a quadrantal formed on one arm around its pivot point and a supplemental arm provided with a quadrant concentric to its pivot point and having the upper end of the arm extending beyond the side of the pedal on which the foot rests, as and for the purpose specified. 4th. The combination with the pedal and pedal spindle, the pedal frame suitably connected and journalled on the pedal spindle, end loops for the pedal provided with suitable gripping-lips, rack-shaped ends for the loops, suitably pivoted quadrants meshing therewith, and means for turning such quadrants so as to throw the loops inwardly by the outward lateral pressure of the shoe, as and for the purpose specified. 5th. In combination the pedal spindle, the box-plates suitably connected thereto journalled thereon and provided with end slots, the end loops provided with gripping lips and arranged to extend through the end slot of the box plate, the racks on the inner ends of the loops, the spring situated between the inner ends of the loops to normally hold them in the outer position, the quadrantal arms suitably pivoted in the box plate, the rods connecting the tailless arm with the tail of the co-acting arm, the quadrant on one arm concentric to the pivot point, the supplemental arm suitably pivoted in the box plate and having a quadrant meshing with the concentric quadrant on one arm and the upper end extending beyond the side of the pedal on which the foot rests. as and for the purpose specified.

No. 58,061. Bicycle Alarm Bell. (*Sonnerie pour bicycles.*)

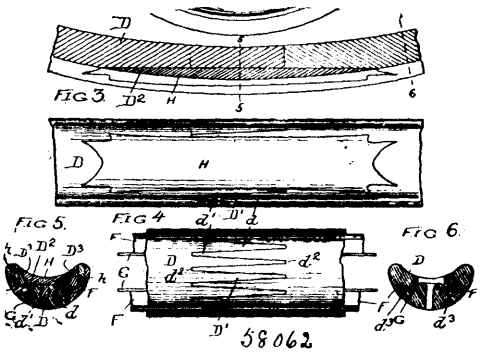
George P. McDonell and Wm. McCall Steele, both of St. Louis, Missouri, U.S.A., 9th November, 1897; 6 years. (Filed 21st October, 1897.)

Claim.—1st. In a bicycle alarm-bell, a suitable bell, means for securing the same to the frame of the machine, a roller-carrying arm, a frame to which said arm is pivoted, a hammer-lever carried by the frame, a spring for simultaneously keeping the roller normally in engagement with the tire of the wheel, and the hammer normally in contact with the bell, a pin projecting from the side of the roller and adapted during the travel of the machine to intermittently trip the hammer-lever, whereby the spring controlling the same successively brings the hammer forcibly against the bell, thus sounding an alarm, substantially as set forth. 2nd. In a bicycle alarm-bell, a suitable bell, means for securing the same to the frame of the machine, a roller-carrying arm, a frame to which said arm is pivoted, a hammer-lever carried by the frame, a spring for simultaneously keeping the contact roller normally in engagement with the tire of the wheel, and the hammer normally in engagement or contact with the bell, means carried by the roller for intermittently tripping the hammer-lever during the travel of the machine, whereby the spring controlling the same successively brings the hammer forcibly against



the bell, and means for disengaging the roller from the tire, substantially as set forth. 3rd. In a bicycle alarm-bell, a suitable bell, means for securing the same to the frame of the machine, a roller-carrying arm, a frame to which said arm is pivoted, a hammer-lever carried by the frame, a spring for simultaneously keeping the contact roller normally in engagement with the tire of the wheel, and the hammer in contact with the bell, means carried by the roller for intermittently tripping the hammer-lever during the travel of the machine, means for disengaging the roller from the tire, and suitable guide-ways or slits formed in the frame for the guiding of the hammer-lever and roller-carrying arm in their movements, substantially as set forth. 4th. In a bicycle alarm-hell, a suitable bell, means for securing the same to the machine frame, a frame located in proximity to the bell, a hammer-lever pivoted to one of the lateral walls of the frame along the inner surface of said wall and adjacent to the outer terminal wall of said frame, a hammer carried by the inner arm of the lever, a roller-carrying arm pivoted along the inner surface of the opposite lateral wall of the frame and adjacent to the inner terminal wall of said frame, a pin carried by the hammer-lever and located at a point between the pivotal point of the lever and the hammer, a pin located on the roller-carrying arm at a point removed from the pivotal point of said roller-carrying arm, a spring having a medial coil and oppositely extending arms, the free ends of the arms being respectively secured to the pin carried by the roller-carrying arm and the pin carried by the hammer-lever, whereby the hammer is normally kept in engagement with the bell, and the roller carried by the roller-carrying arm in engagement with the tire of the wheel, and means carried by the roller for intermittently tripping or oscillating the hammer-lever, the parts operating substantially as and for the purpose set forth. 5th. In a bicycle alarm-bell, a suitable bell, means for securing the same to the frame of the machine, a roller-carrying arm, a frame to which that arm is pivoted, a hammer-lever carried by the frame, a spring for simultaneously keeping the contact roller normally in engagement with the tire of the wheel, and the hammer in contact with the bell, a pin carried by the roller along the side thereof, a straight edge forming one end of the hammer-lever along which the pin intermittently rides during the travel of the machine, a disengaging lever pivoted to the frame, means for controlling the end of the lever, a slot formed in the disengaging lever, and a pin carried by the roller-carrying arm and operating within the slot, whereby upon movement of the free end of the disengaging lever the roller is disengaged from the tire, substantially as set forth.

No. 58,062. Composite Wood Rims for Bicycles.
(*Jante en bois pour bicycles.*)

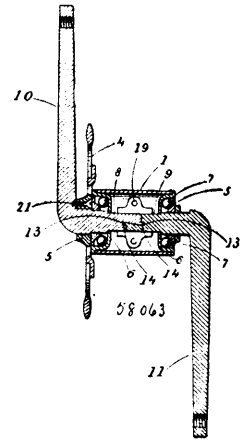


The Indiana Novelty Manufacturing Company, assignee of George W. Marble, both of Plymouth, Indiana, U.S.A,, 9th November, 1897; 6 years. (Filed 19th October, 1897.)

Claim.—1st. In a bicycle wheel, the combination with the pneumatic tire and suspension spokes, of a solid piece wood rim, crescent shaped or channelled in cross section to receive the pneumatic tire, having its meeting ends secured together by an interfitting tongue-glued joint, and provided with annular grooves extending around the rim, wire or metal rings fitting in said annular grooves, and supplemental annular strips or rings of wood fitted and glued in said annular grooves, said solid piece wood rim being further provided with a tangential dovetail groove extending lengthwise of said interfitting tongue joint, and a dovetail wood splice piece fitted and glued in said tangential groove, substantially as specified. 2nd. The solid piece wood rim provided with annular grooves and supplemental annular strips or rings of wood fitted and glued therein, substantially as specified. 3rd. The solid piece wood rim provided with annular grooves and supplemental annular strips or rings of wood fitted and glued therein, and wire or metal rings also fitting in said annular grooves in the wood rim, substantially as specified. 4th. The solid piece wood rim having its meeting ends secured together by an interfitting tongue-glued joint and provided with a tangential groove extending longitudinally of the joint, and a wood splice piece fitted and glued therein, substantially as specified. 5th. The solid piece wood rim having an interfitting tongue joint uniting its meeting ends, and a dovetail splice piece extending longitudinally of the joint, substantially as specified. 6th. The combination with a pneumatic tire and suspension spokes, of a wood rim having at its joint or meeting ends a series of interfitting tongues glued together, said rim being provided with annular grooves d^3 and supplemental wood strips or rings F secured and glued therein, substantially as specified.

No. 58,063. Bicycle Construction.

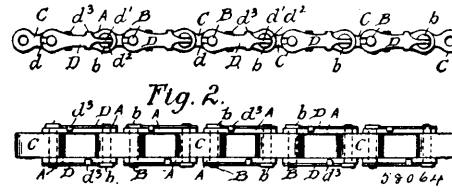
(*Construction de bicycles.*)



The Ellicott Manufacturing Co., assignee of Samuel Davidson, both of Buffalo, New York, U.S.A., 9th November, 1897; 6 years. (Filed 17th December, 1896.)

Claim.—1st. In a bicycle, the combination with the crank hanger thereof, of a shaft consisting of two parts, lapping ends, small centreing projecting teeth, and corresponding depressions for receiving the same on each of said parts, and a clamping device for rigidly locking the two parts together, as set forth. 2nd. As a new article of manufacture, a shaft portion and crank formed integral therewith, provided with a small projecting centreing tooth on its inner half-dovetailed end, as set forth. 3rd. The combination with a bicycle crank hanger and the ball-bearing mechanism, of a crank shaft formed in two parts and cranks formed integral therewith, and a clamping device consisting of two semi-circular portions for rigidly fastening the two parts of the said crank shaft together, as set forth. 4th. Crank shaft mechanism, consisting of the supporting hanger, ball-bearings, crank shaft divided into two parts dovetailed to each other, a small centreing projection on each dovetailed part, corresponding depressions in each part for receiving the said centreing projections and two semi-circular clamping portions, adapted to encompass and fasten the two parts of the shaft together. 5th. In a bicycle, a divided crank shaft, the two portions of which are provided with interlocking ends that prevent longitudinal displacement, in combination with a clamping device for rigidly securing the two parts together transversely, substantially as described. 6th. In a bicycle crank hanger, the combination therewith of a divided crank shaft, the two portions of which are dovetailed together, so as to be incapable of separation in a straight longitudinal direction and a clamping device for preventing separation in other directions and thus rigidly locking the two said portions in their dovetailed position, as set forth. 7th. The combination with a bicycle crank hanger and a ball-bearing mechanism, of a crank shaft formed in two parts incapable of juncture or separation in a straight longitudinal direction, and a clamping device consisting of two semi-circular portions for rigidly fastening the two parts of the said crank shaft together transversely, as set forth. 8th. Bicycle shaft mechanism, comprising a smooth surfaced shaft formed in two portions, with their meeting ends having portions cut away so that they cannot be locked together or disengaged from each other in a straight longitudinal direction, a divided sleeve or clamping devices fitting over the shaft ends and screw devices for drawing the portions of the divided sleeves to each other and against the shaft ends, and forcing the said ends more closely and rigidly into locking contact with each other and the clamping sleeve, as set forth. 9th. In a bicycle shaft mechanism, the combination of the shaft formed in separable divisions, each portion having its locking end formed with a reduced portion, the flat side of which extends diagonally in relation to the longitudinal direction of said shaft, and enlarges the reduced portion gradually from its beginning to its termination, a clamping device consisting of two separable portions, and screw devices for drawing said clamping portions to each other and around the shaft ends, the diminution of the interior circumference of the clamping device while being drawn around the shaft ends, causing the flat sides of the reduced end portions to slide upon each other and thus draw and lock the shaft ends closely and rigidly to each other and within the clamping device, as set forth. 10th. In a bicycle, a smooth surface crank shaft, the two portions of which are provided with interlocking ends that prevent longitudinal displacements, in combination with a circumferentially contracting or expanding clamping device for rigidly securing the two parts transversely, substantially as described. 11th. The crank arms, each provided with a short shaft in combination with a separable clamping device formed in two portions for securing the shaft portions transversely, and means connected with the shafts and clamping device for drawing the ends of the shafts together longitudinally while the clamping device is being secured transversely, as set forth. 12th. A bicycle crank shaft, comprising a smooth surfaced shaft formed in two portions and provided with means to prevent attachment or disengagement in a straight longitudinal direction, in combination with a clamping device capable of circumferential expansion or contraction for securieg the two portions transversely, as set forth.

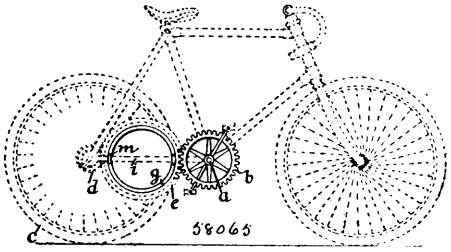
No. 58,064. Sprocket Chain. (*Roue dentée.*)



Harry Ernest Stahl, assignee of Frank Thomas Coryell, both of Trenton, New Jersey, U.S.A., 9th November, 1897; 6 years. (Filed 12th April, 1897.)

Claim.—1st. In a sprocket chain, the combination with a link-bar removable from its transverse pins or bars, of a key or latch located at the outside of said link-bar and engaging the ends of both transverse pins or bars for holding said link-bar in place, substantially as specified. 2nd. In a sprocket chain, the combination with a link-bar removable from its transverse pins or bars, of a key or latch located at the outside of said link-bar and engaging the ends of said transverse pins or bars for holding said link-bar in place and also to prevent one of said transverse pins or bars from turning, substantially as described. 3rd. In a sprocket chain, a link consisting of two parallel side bars and two connecting pins passed loosely through the said bars from opposite sides and having each a head at one end and a groove near its opposite end, and two removable spring-latch devices applied one to the outer face of each link-bar, each of said devices having an open slot at one end which engages the groove of one of the pins and a tail or extension at its opposite end which engages the head of the other pin, substantially as specified. 4th. In a sprocket chain, the combination with the links having the removable side bars and the removable pins which connect the said bars and which have each a slotted head at one end and a surrounding groove or depression near the opposite end, of removable latch devices, each of which engages the groove of one pin of each link and the slotted head of the other pin, substantially as specified. 5th. In a sprocket chain, the combination with the link-bars and their connecting pins, each of which has a head at one end and a groove near its opposite end, of spring metal latch devices for securing said link-bars, said devices having each at one end an open slot which engages the groove of one of the pins, and also inwardly bent lateral lugs adapted to catch over the upper and lower edges of one of the link-bars, said device also having means for preventing one of said pins from turning in said bars, substantially as specified.

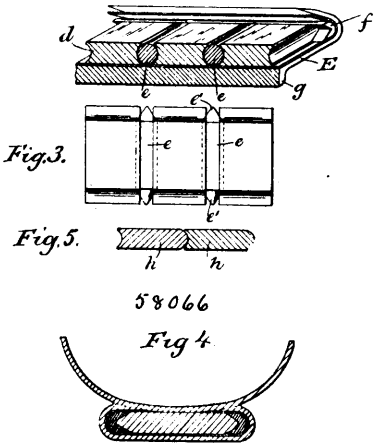
No. 58,065. Bicycle Driving Gear.
(*Roue de commande pour bicycles.*)



Oliver Howard Gentry, Brooklyn, and David C. Storr, New York, both in the State of New York, U.S.A., 9th November, 1897; 6 years. (Filed 23rd October, 1897.)

Claim.—1st. In a train of spur wheels gearing the driving crank with the axle of the hind wheel, the combination with a driving wheel on the crank shaft and a pinion on the axle, of an intermediate wheel consisting of a toothed ring mounted on a stationary ring with antifriction bearings in and movable along a race formed partly in each ring, said stationary ring being secured to the frame substantially as described. 2nd. In a bicycle driving gear, the combination with a spur driving wheel on the crank axle and a spur pinion on the driving wheel axle, of an intermediate transmitting spur wheel comprising a toothed ring gearing with said wheel and pinion, a stationary ring whereon said toothed ring is mounted with intermediate antifriction bearings in a race formed in the two rings and in the plane of the teeth of said toothed ring and confining said toothed ring on the stationary ring, and a support, said support consisting of a side bar of the lower hind fork of the bicycle frame and extending through the ring, said ring being placed sidewise to and clamped at two opposite points to said bar substantially as described. 3rd. In a bicycle driving gear, the combination with a spur driving wheel on the crank axle and a spur pinion on the driving wheel axle, of an intermediate transmitting wheel comprising a toothed ring gearing with said wheel and pinion, a stationary ring whereon said toothed ring is mounted with intermediate antifriction bearings confining said toothed ring on the stationary ring, and a support for said stationary ring consisting of a lower diverging fork bar extending diagonally through the ring, said ring being attached to the opposite sides of said bar substantially as described. 4th. In a bicycle driving gear, the combination with a spur driving wheel on the crank axle and a spur pinion on the driving wheel axle, of an intermediate transmitting spur wheel comprising a toothed ring gearing with said wheel and pinion and mounted on a stationary ring with rollers in a race formed in the two rings and confining said toothed ring on the stationary ring and spacing rings in which the rollers are pivoted, said spacing rings forming guards to the roller race substantially as described.

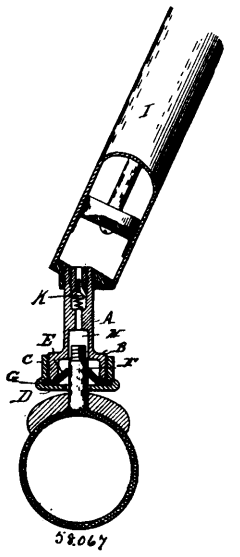
No. 58,066. Pneumatic Tire. (*Bandage pneumatique.*)



Charles A. Pettie, Brooklyn, and Frederick William Barker, New York, both in the State of New York, U.S.A., 9th November, 1897; 6 years. (Filed 30th October, 1897.)

Claim.—1st. In a pneumatic tire, an armour comprising a series of abutting members, the abutting edges of which flexibly interlock, and having an envelope surrounding said members. 2nd. In a pneumatic tire, an armour comprising a series of abutting flat members, the abutting edges of which flexibly interlock, and having an envelope surrounding said members. 3rd. In a pneumatic tire, an armour comprising a series of abutting interlocking members, the inner and outer sides of which are flush with one another, and an envelope surrounding said members. 4th. In a pneumatic tire, an armour comprising an envelope and a series of abutting interlocking members, said members being respectively concave and convex at their abutting edges. 5th. In a pneumatic tire, an armour having a central longitudinal rib upon its tread and a flat tread portion upon either side of the rib extending throughout the tread of the tire. 6th. In a tire, a tread portion comprising an envelope and a series of members therein having concaved sides, together with a series of rounded bodies which form pivots between the concaved sides of said members, substantially as set forth. 7th. In a tire, a tread portion comprising a series of members having concaved sides and tapered ends and placed side by side to form an endless band, a series of rounded bodies having pointed ends and arranged one between each pairs of members, a covering of textile fabric for said endless band and a bed of rubber within said covering, to form a socket for the tapered ends of the members and for the pointed ends of the rounded bodies, together with an outer envelope of rubber confining the aforesaid parts, the whole being adapted to be placed around the periphery of a pneumatic tire to form an impenetrable tread portion or shoe therefor, substantially as set forth.

No. 58,067. Bicycle Pump. (*Pompe de bicycles.*)

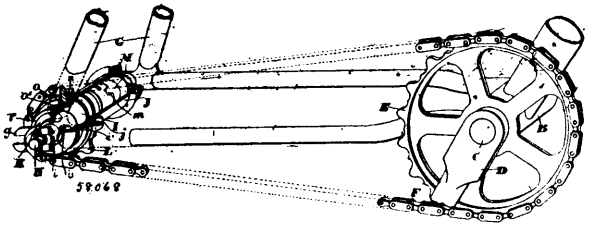


Cassius L. Hall, Ypsilanti, Michigan, U.S.A., and Charles S. Coryell, Toronto, Ontario, Canada, 9th November, 1897; 6 years. (Filed 30th October, 1897.)

Claim.—1st. In a coupling for pumps, the coupling-head, a centrally apertured conical, elastic diaphragm and means for securing it around its edges whereby when the nipple is forced in the internal pressure of the fluid will constantly tend to tighten the joint by tending to flatten the conical shape of the diaphragm against the nipple. 2nd. In a coupling, a coupling-head, a comparatively thin elastic diaphragm centrally apertured and of conical shape, and of means for clamping the edges of the diaphragm, substantially as described. 3rd. In a coupling for pumps, etc., the combination of a nipple provided with a head, an apertured cap adapted to be secured thereon, a corresponding apertured elastic diaphragm clamped between the two, substantially as described. 4th. In a coupling for pumps, etc., the combination of the nipple having an enlarged head, of a cap screwed thereon apertured in line with the nipple, and an elastic apertured diaphragm clamp d between the head and the cap near its edge, leaving an unclamped portion outside the clamping point, substantially as described. 5th In a coupling for pumps, etc., the combination of the coupling or head-band, a cap, of an elastic apertured conical diaphragm clamped between the two, the diaphragm having an unclamped portion outside the clamping point for the purposes described. 6th. In a bicycle pump, the combination with the cylinder of a coupling forming a foot therefor and rigidly connected thereto at such an angle to the cylinder as to clear the frame and while in the act of pumping for the purpose described. 7th. In a pump, the combination of the nipple A, the cap D, the conical elastic diaphragm secured between the two and centrally apertured, and the pump cylinder rigidly secured to the top of the nipple for the purpose described. 8th. In a pump for bicycles, the combination of the coupling comprising the nipple A, the pump secured at an angle thereto and the check valve K arranged in the coupling, substantially as described. 9th. In a bicycle pump, the combination of the cylinder of a nipple forming a rigid foot connected to the cylinder and having a recess adapted to receive the nipple of a pneumatic tire and permit the foot to rest directly upon

the rim of the wheel, and means for automatically effecting a tight joint around the nipple by the engagement thereon of the coupling, substantially as described. 10th. A bicycle pump comprising a cylinder, a coupling and an extension beyond the coupling adapted to bear on the rim of a wheel beside the nipple of the pneumatic tire, so that the thrust of pumping is applied to said rim.

No. 58,068. Bicycle Brake. (*Frein de bicycles.*)



The Massey-Harris Co., Limited, assignee of Harry Phillips, both of Toronto, Ontario, Canada, 9th November, 1897; 6 years. (Filed 15th October, 1897.)

Claim.—1st. In a brake for bicycles, in combination, the drum secured between the ends of the forks, the hub having bearings upon the drum, the sprocket wheel, the circumferential slot in the hub, a flat spiral spring extending within the hub and surrounding the drum, means for fastening it at one end to the hub and means for fastening it at the other end to the sprocket wheel through the slot in the hub, as and for the purpose specified. 2nd. In a sprocket wheel for bicycles, in combination, the axle, the drum located by the axle, the hub having bearings upon the drum, the sprocket wheel, the circumferential slot in the hub, a flat spiral spring extending within the hub and surrounding the drum, means for fastening it at one end to the hub, a pin connected to the sprocket wheel extending through the slot in the hub and secured in the end of the spiral spring, as and for the purpose specified. 3rd. In a brake for bicycles, in combination, the axle, the drum located by the axle, the hub having bearings upon the drum, the sprocket wheel, the circumferential slot in the hub, the flat spiral spring having enlarged end convolution with end recess, a ring secured within the hub to it and having projections fitting into the recess in the end convolution of the spiral, and means for fastening the opposite end convolution to the sprocket wheel through an opening in the hub, as and for the purpose specified. 4th. In a brake for bicycles, in combination, the axle, the drum located by the axle, the hub having bearings upon the drum, the sprocket wheel, the circumferential slot in the hub, a flat spiral spring extending within the hub and surrounding the drum, means for fastening it at one end to the hub, means for fastening it at the other end to the sprocket wheel through an opening in the hub, a circumferential recess in the sprocket wheel and a projection on the hub designed to co-act therewith, as and for the purpose specified. 5th. In a brake for bicycles, in combination, the axle, the drum located by the axle, the hub having bearings upon the drum, the sprocket wheel, the circumferential slot in the hub, a flat spiral spring extending within the hub and surrounding the drum, means for fastening it at one end to the hub, means for fastening it at the other end to the sprocket wheel through an opening in the hub, a circumferential recess in the sprocket wheel, a projection on the hub designed to co-act therewith and an adjusting screw extending through the hub of the sprocket wheel into the circumferential recess in the same, as and for the purpose specified. 6th. In combination, the axle, the drum located thereby, provided with end ball-bearing grooves, the cones, the hub into which the cones are screwed, the flat spiral spring surrounding the hub, means for fastening it at one end to the hub, the sprocket-wheel on the hub, the opening in the hub of the wheel beneath the hub of the sprocket wheel, the pin extending through the sprocket-wheel hub and opening into the end convolution of the flat spring, the flat ring fitting within the face groove in the sprocket, the sleeve and the retaining nuts at each end on the cone bearings, as and for the purpose specified.

No. 58,069. Air Pumps for Pneumatic Tires, for Bicycles, etc. (*Pompe à air pour bandages pneumatique de bicycles, etc.*)

James Harry Keighley McCollum, Remigius Elmsley and William Henry Brouse, all of Toronto, Ontario, Canada, 9th November, 1897; 6 years. (Filed 6th October, 1897.)

Claim.—1st. The combination with the tire having a central air space, of a passage located circumferentially outside of the central air space, a compressible tube located in said passage and extending circumferentially around the tire within the same, and a branch tube extending from one end of said tube obliquely through the tire, to the rim thereof and a suitable air valve connected to the end of such branch tube and communicating with the interior of the tire as and for the purpose specified. 2nd. The combination with the tire having a central air space, of a passage located circumferentially outside of the central air space, a compressible tube located in said passage and extending circumferentially around the tire within the same and a branch tube extending from one end of said tube obliquely through the tire to the rim thereof, and an obliquely shaped mush-

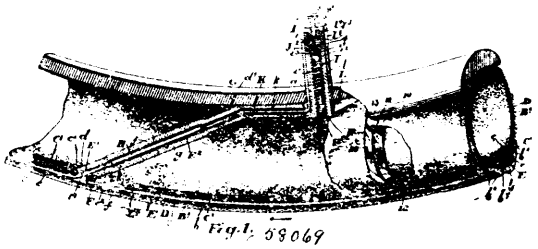


Fig. 1. 58069

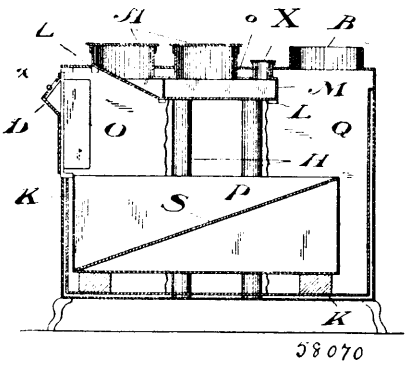
room having the base thereof hermetically secured to the outside of the air tube next the passage-way and a correspondingly obliquely arranged mushroom having the stem thereof abutting the stem of the outer mushroom and a base thereof hermetically secured to the outside of the central air tube and a suitable air valve connected to the end of such branch tube and communicating with the interior of the tire, as and for the purpose specified. 3rd. The combination with a tire having a central air space, of a passage located circumferentially outside of the central air space, a compressible tube located in said passage and extending circumferentially around the wheel within the same and a branch tube extending from one end of said tube obliquely through the tire to the rim thereof, an obliquely shaped mushroom having the base thereof hermetically secured to the outside of the air tube next the passage-way and a correspondingly obliquely arranged mushroom having the stem thereof abutting the stem of the outer mushroom and a base thereof, hermetically secured to the outside of the central air tube, and a supplemental mushroom surrounding the continuation of the branch passage-way and having its base suitably secured to the base of the inner obliquely arranged mushroom and the air valve connected to the end of such branch tube and communicating with the interior of the tire, as and for the purpose specified. 4th. In combination in a wheel, the rim, a tire having a central air space, a passage in the tread, a tube extending throughout the length of such passage, a mushroom at one end of the tube extending obliquely into the central air space, a mushroom on the inner periphery of the tire extending obliquely towards the outer mushroom and abutting the end of the same, a metal ferule extending into both mushrooms, a tubular communication between the end of the inner mushroom and the interior of the central air space and a suitable valve for same, as and for the purpose specified. 5th. In combination in a wheel, the rim, a tire having a central air space, a passage in the tread, a tube extending throughout the length of such passage, a mushroom at one end of the tube extending obliquely into the central air space, a mushroom on the inner periphery of the tire extending obliquely towards the outer mushroom and abutting the end of the same, a metal ferule extending into both mushrooms, a tubular communication between the end of the inner mushroom and the interior of the central air space, the valve casing provided with an enlarged upper end and chamber therein, a metallic bent tube extending from the end of the mushroom passage-way into the interior of the chamber, the valve casing mushroom surrounding the stem of the valve, the hollow plug at the lower end of the valve casing, the spring, the valve proper, the orifice at the top of the valve proper, and an operating means for such valve as and for the purpose specified. 6th. In combination in a wheel, the rim, a tire having a central air space, a passage in the tread, a tube extending throughout the length of such passage, a mushroom at one end of the tube extending obliquely into the central air space, a mushroom on the inner periphery of the tire extending obliquely towards the outer mushroom and abutting the end of the same, a ferule extending into both mushrooms, a tubular communication between the end of the inner mushroom and the interior of the central air space, the valve casing provided with an enlarged upper end and chamber therein, a metallic bent tube extending from the end of the mushroom passage-way into the interior of the chamber, the valve casing mushroom surrounding the stem of the valve, the hollow plug at the lower end of the valve casing, the spring, the valve proper, the orifice at the top of the valve proper, the valve cap, the screw pin provided with a central hole and lower disc and pin extending into the orifice opposite the valve proper, as and for the purpose specified. 7th. In a tire such as described and in combination with passage-way in the tread of the tire and pumping tube such as described, of the valve, a passage-way connecting the same to one end of the pumping tube, a suitable valve interposed between the branch passage-way and the interior of the air tube, an encompassing pair of bands for the air tube forming a passage-way between them, an opening between the latter passage-way and the atmosphere through the tire, and an opening between such latter passage-way and the atmospheric end of the pumping tube, as and for the purpose specified. 8th. In a tire in combination with the pumping tube connected at one end with the atmosphere, of a valve connected at the other end to the passage-way leading from the pumping tube, the said valve comprising the hollow stem portion, a plug with central passage-way, the spring, the valve proper, the enlarged

chamber at the upper end, the washer at the lower end of the chamber, the cap, the screw pin with central passage-way and disc-shaped end and pin depending from same, all arranged as and for the purpose specified. 9th. In a tire, in combination the tire proper, the passage located in the tread thereof, the pumping tube located in same, and the compressible circumferential rib formed on the exterior of the tire opposite the compressible passage-way, as and for the purpose specified. 10th. In a tire in combination, the tire proper, the passage located in the tread thereof, the pumping tube located in same and the compressible circumferential rib formed on the exterior of the tire opposite the compressible passage-way and the auxiliary compressible side ribs located at each side of the central compressible rib, as and for the purpose specified. 11th. In a tire in combination, the tire proper, the passage located in the tread thereof and formed in the rubber portion and the interior circumferential concentric brace for the passage, as and for the purpose specified. 12th. In a tire in combination, the tire proper provided with the interior fabric lining having a broad V-shaped interior circumferential groove formed throughout the centre of the tread, the rubber strip having a reverse broad V-shaped circumferential groove meeting the outer groove and forming a diamond-shaped passage-way, the said strip being tapered towards both sides and concentric on the inside, as and for the purpose specified. 13th. In a tire in combination, the tire proper provided with an interior fabric lining having a broad V-shaped interior circumferential groove formed throughout the centre of the tread, the rubber strip having a reverse board V-shaped circumferential groove meeting the outer groove and forming a diamond-shaped passage-way, the said strip being tapered towards both sides and concentric on the inside and an inner circumferential brace located to the inside of the circumferential passage way in the tread, as and for the purpose specified. 14th. In a tire in combination, the tire proper provided with the interior fabric lining having a broad V-shaped interior circumferential groove formed throughout the centre of the tread, the rubber strip having a reverse broad V-shaped circumferential groove meeting the outer groove and forming a diamond-shaped passage-way, the said strip being tapered towards both sides and concentric on the inside, the pumping tube located in the passage-way and having the ends provided with end flaps attached to or forming part of same and passed through openings in the fabric and suitably held therein so as to hold the tube in position, as and for the purpose specified. 15th. In a tire in combination, the tire proper provided with the interior fabric lining having a broad V-shaped interior circumferential groove formed throughout the centre of the tread, the rubber strip having a reverse broad V-shaped circumferential groove meeting the outer groove, and forming a diamond-shaped passage-way, the said strip being tapered towards both sides and concentric on the inside, the pumping-tube located in the passage-way and having the ends provided with end-flaps attached to or forming part of same and passed through openings in the fabric and suitably held therein so as to hold the tube in position, and the air-tube filling the concentric inside portion of the tire, as and for the purpose specified. 16th. The combination, with the tire having a central air-space, of a substantially diamond-shaped passage located circumferentially outside of the central air-space in the centre of the tread portion, and having flexible walls, as and for the purpose specified. 17th. The combination, with the tire having a central air-space, of a substantially diamond-shaped passage located circumferentially outside of the central air-space in the centre of the tread portion, and having flexible walls, and a suitably-formed compressible tube located in said passage, and communicating at one end with the atmosphere, and at the other end with the central air-space through the medium of a valve, as and for the purpose specified. 18th. The combination, with the tire having a central air-space, of a substantially diamond-shaped passage-way located circumferentially outside of the central air-space in the centre of the tread portion, a flat groove in the inner side of same, and a flat tube to fit such groove, as and for the purpose specified.

No. 58,070. Stove. (*Poêle.*)

Arthur Deadman, Fort William, and Joseph G. King, Port Arthur, both in Ontario, Canada, 9th November, 1897; 6 years. (Filed 30th October, 1897.)

Claim.—1st. In a heating stove, the combination with the body of the stove, of a hot air drum located within the body of the stove and near the top thereof immediately over the fire; one or more metallic pipes or flues communicating between the hot air drum and openings in the bottom of the stove, one or more discharge pipes leading from the hot air drum, a stove door suitably located, and a smoke-stack for conveying away the products of combustion, substantially as specified. 2nd. In a heating stove, the combination with the body of the stove, of the hot air drum M located within the body of the stove and near the top thereof, one or more metallic pipes or flues H communicating between openings in the bottom of the stove and the hot air drum, one or more discharge pipes A leading from the hot air drum, a removable fire-box P located in the lower portion of the stove, a stove door E located in the upper portion of the stove, means for conducting the draught through said door down to the fire-box P, a smoke-stack B for conveying away the products of combustion, substantially as specified. 3rd. In a heating stove, the combination with the body of the stove, of the hot air drum M located within the body of the stove and near the



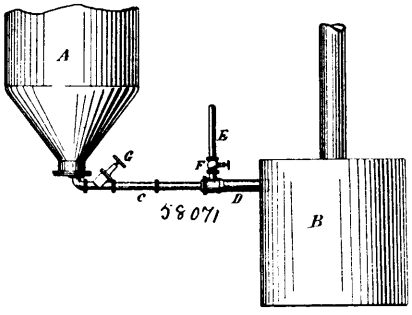
top thereof, one or more vertical metallic pipes or flues H communicating between openings in the bottom of the stove and the hot air drum, one or more discharge pipes A leading from the hot air drum through the top of the stove, a removable fire-box P located in the lower portion of the stove and provided with slanting bottom S, a stove door E located in the upper portion of the stove, a slide or damper D^1 in the door, an air pipe O leading down from the damper to the front portion of the fire-box, and a smoke-stack B, substantially as specified. 4th. In a heating stove, the combination with the body so constructed as to have an air chamber K on sides and bottom, of the hot air drum M so secured in position as to leave an air space *o* between the top of the drum and the top of the stove and provided within with heat distributing plate C, one or more vertical pipes or flues H communicating between openings in the bottom of the stove and the hot air drum, one or more discharge pipes A leading from the hot air drum, the steel linings Q forming with the sides an enclosure for the flues H, a removable fire-box P located in the lower portion of the stove with slanting bottom S, a stove door E located in the upper portion of the stove, a locking slide or damper D^1 in the door, an air pipe O leading down from the locking chamber to the front portion of the fire-box, and a smoke-stack B, substantially as specified. 5th. In a heating stove, the combination with the body thereof, of the hot air drum M held in position at the top of the stove immediately over the fire-box by means of iron bars L and vertical flues H, so as to have an air space *o* between the drum and the top of the stove, the metallic plate C for distributing the hot air within the drum, the air feeder pipe X for supplying outside air to the drum, and the discharge pipes A passing from the hot air drum through the top of the stove, substantially as specified. 6th. In a heating stove, the combination with the slide or damper D^1 provided with knob D^{11}, the bolt N, the notches *n*, and spring N^1 for holding the point of the bolt in one of the notches, and a key for raising the bolt out of a notch, the end of the bolt and the notches being so shaped as to permit of the damper D^1 being closed without the key, but not opened, substantially as specified. 7th. In a heating stove, the combination with the body so constructed as to leave an air chamber K on sides and bottom and with or without the removable fire-box P, provided with slanting bottom S, of the hot air drum M held in position within the stove body by iron bars L, and vertical pipes H, so as to form air space *o* at the top of the stove, the air feeder X for the drum, the steel lining Q, the discharge pipes A from the drum, the heat distributing plate C within the drum, the vertical metallic pipes H communicating between openings in the bottom of the stove and in the drum, the steel linings Q, the dampers X^{11}, the stove door E located in the upper portion of the stove, the locking damper D^1 provided with knob D^{11} and operated by means of spring N^1, the bolt N, the notches *n*, and a key adapted to pass through the key hole R, so as to raise the bolt from the notch when required, the air pipe O on the back of the stove door E leading downwardly from the locking damper, and the smoke-stack B for carrying off the products of combustion, substantially as specified.

No. 58,071. Digester. (*Digesteur.*)

Eugene Meurer, Grand Mére, Quebec, Canada, 9th November, 1897; 6 years. (Filed 13th October, 1897.)

Claim.—1st. In combination with the blow-off pipe of a pulp digester, a water-inlet communicating with the blow-off pipe at a point intermediate of its connection with the digester and its discharge end, whereby a supply of water is furnished to be mingled with the contents of the digester in their passage through the blow-off pipe, substantially as and for the purpose set forth. 2nd. In combination with a pulp digester, a blow-off pipe consisting of two sections arranged concentrically with an annular space between them, and

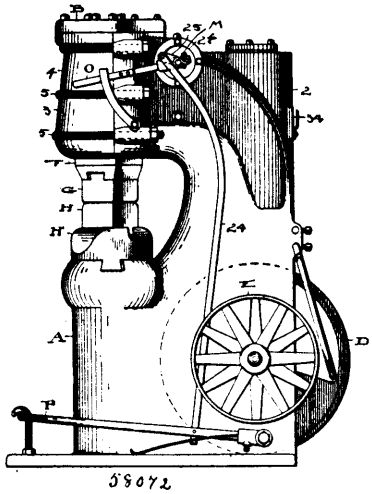
a water-inlet connected to the outer section of the blow-off pipe at a point intermediate of the free end of the inner section thereof and



its connection with the digester, substantially as and for the purpose set forth.

No. 58,072. Pneumatic Hammer.

(*Marteau pneumatique.*)

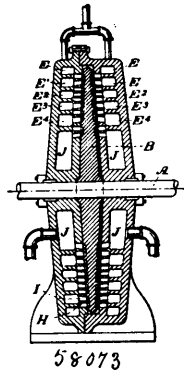


Melvin Albert Yeakley, Columbus, Ohio, U.S.A., 9th November, 1897; 6 years. (Filed 29th September, 1897.)

Claim.—1st. In pneumatic hammers, a hammer chamber and piston and a power chamber and piston, an air passage connecting one end of the power chamber with the corresponding end of the hammer chamber, a plurality of valves in said passage and separate means to operate said valves, substantially as described. 2nd. The hammer chamber and the power chamber and an air passage connecting said chambers, a valve chamber in said air passage, separate valves in said chamber and each of said valves having independent operating mechanism, substantially as described. 3rd. The hammer chamber and the power chamber, a passage connecting said chambers and a valve chamber in said passage, in combination with a shaft in said chamber, separate valves on said shaft and separate means connected with said valves to operate them, substantially as described. 4th. The hammer chamber and the power chamber and the pistons in said chambers, said chambers connected by an air passage, and a valve in said passage constructed to be opened by suction from the power chamber and to be closed by pressure from said chamber, whereby the hammer piston is held in suspension in its chamber while the power piston is at work, substantially as described. 5th. The hammer chamber and the power chamber and a passage connecting said chambers, a valve chamber interposed in said passage, and a valve over the entrance to said passage from said valve chamber to the hammer chamber and constructed to open under suction from the power chamber and to close under pressure therefrom, and means to hold said valve in its operative position, substantially as described. 6th. The hammer chamber and the power chamber and an air passage connecting said chambers, a valve chamber in said passage and a valve in said valve chamber over the entrance to said passage from said valve chamber to said power chamber and constructed to open under pressure from the power chamber and to close under suction from said chamber, substantially as described. 7th. In pneumatic hammers, the hammer chamber and hammer, the air compressing and exhausting cylinder and piston, a valved air passage between said chamber and cylinder, and a well in said passage, and a secondary valved air passage discharging directly into the top of the hammer chamber, substantially as described. 8th. The hammer described having a power piston and chamber and a hammer piston and chamber and a valved air passage from the power chamber to the compression end of the said hammer piston chamber, and a well and a valve in said passage, substantially as described. 9th. The hammer chamber and the power cylinder and the piston therein, and a valved air passage connecting said chamber and cylinder, and the said air passage branched at the hammer chamber to discharge into the same at two different points above the piston in said chamber, substantially as described. 10th. The power chamber and piston, the said chamber having a valved outlet at about the middle of the stroke of the piston in said power chamber, in combination with the hammer chamber and the piston therein and a valved air passage connecting the said chambers, substantially as described. 11th. The piston chamber, the power chamber having a valved outlet at or near its middle portion and an air passage connecting said chambers, and a valve in said passage constructed and arranged to close the passage to the hammer chamber by pressure from the power chamber and to open by motion or exhaust from said power chamber, substantially as described. 12th. In pneumatic hammers, the hammer piston and chamber, the power piston and chamber, a valved air passage connecting said chambers and an air well or pocket opening to said passage, substantially as described. 13th. In a pneumatic hammer, a body or frame formed with power piston and hammer piston chambers, an air passage connecting said chambers and a plurality of valves in said passage, substantially as described. 14th. In a pneumatic hammer, a hammer piston chamber formed in vertical sections and bands or straps to bind said sections together, substantially as described. 15th. The hammer described having a power piston chamber provided with an outlet at its top to the hammer piston chamber and a valved outlet near its top emptying into the open air, substantially as described. 16th. In a pneumatic hammer, a hammer piston chamber and a power piston chamber, an air passage connecting said chambers, a valve chamber in said passage, valves in said valve chamber and means to control said valves, substantially as described. 17th. In a pneumatic hammer, an air passage connecting the hammer piston chamber with the power piston chamber, a valve chamber in said passage, a well beneath said valve chamber and a pair of valves controlling said air passage and said well, substantially as described. 18th. In a pneumatic hammer, the respective pistons and chambers and the single air passage connecting the said chambers, a transverse barrel-shaped valve chamber in said passage, a pair of valves in said chamber, a shaft on which said valves are separately mounted and separate valves connected with the above said valves, substantially as described. 19th. In a pneumatic hammer, the power piston and chamber and the hammer piston and chamber, and an air passage connecting said chambers having a valve chamber and a compartmented well beneath said valve chamber and in communication therewith, substantially as described. 20th. The hammer chamber and the air compression chamber, a passage between said chambers having an air well divided into two compartments and valves in said passage to cut off the flow of air to and from the hammer chamber and to limit the flow of air to said compartments, substantially as described. 21st. The hammer chamber and an air passage leading to said chamber having a valve chamber, a well beneath said valve chamber having two compartments and valves in said valve chamber controlling the openings to said compartments, substantially as described.

No. 58,073. Multiple Expansion Steam Turbine.

(*Turbine à vapeur à détente multiple.*)



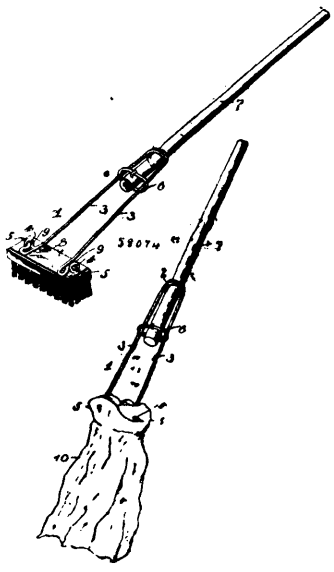
Robert Hewson, San Francisco, California, U.S.A., 9th November, 1897; 6 years (Filed 28th October, 1897.)

Claim.—1st. A wheel mounted upon a shaft adapted to rotate upon its axis, U-shaped buckets formed concentrically upon the faces of the wheel, and having central dividing webs, a casing having annular steam chambers corresponding in position with the annular buckets in the wheel, and separated therefrom by a closed diaphragm against which the face of the wheel rotates, inclined

passages made through said diaphragm from the steam chamber and adapted to deliver steam into the outer leg of the U-shaped bucket, correspondingly inclined discharge passages connecting the inner legs of the buckets with the next interior steam chambers whereby the steam delivered into the outer leg passes around the curvature with a reactionary force and is discharged from the inner leg. 2nd. A wheel mounted to rotate upon a central shaft, annular concentric series of U-shaped buckets formed in the face of the wheel, the legs of said buckets standing approximately parallel with intermediate webs and in the direction of rotation of the wheel, a casing against which the face of the wheel is adapted to rotate, an annular series of concentric chambers therein, corresponding in position with the rows of buckets in the wheel face, inclined passages opening through the sides of the chambers and coinciding with the outer leg of each bucket in the wheel as they pass, other inclined passages through the sides of the chamber connecting with the inner leg of each series and discharging into the next interior chamber of the casing, whereby the steam acts successively and expansively upon each set of buckets from the outside toward the centre of the wheel. 3rd. A wheel consisting of a disc mounted to rotate upon a central shaft, annular rows of U-shaped buckets formed upon opposite faces concentric with the axis and having central dividing webs, each row increasing in size over the next exterior one, a stationary casing fitting against the opposite faces of the wheel having annular chambers upon opposite sides, said chambers corresponding with the annular rows of buckets upon the wheel, inclined passages formed in the faces of the chambers so as to discharge into the outer arms of the U-shaped buckets, corresponding passages coinciding with the inner arms of said buckets in each annular row, and discharging therefrom into the next interior chambers of the case successively, an exhaust chamber surrounding the shaft or hub of the apparatus into which the steam is finally delivered, and means for discharging it therefrom, a steam pipe or pipes connecting with the exterior chambers of the case whereby steam is admitted thereto under a high and equal pressure and thence passes successively through each row of buckets and chambers, upon opposite sides of the wheel simultaneously. 4th. A disc mounted upon a shaft and revoluble between annular chambered casings which fit against its opposite faces and have steam passages made through them, said disc being made thickest at the centre, with its faces converging to the periphery, and having buckets coinciding with the steam passages and increasing in size from the periphery toward the centre.

No. 58,074. Scrubbing Brush and Mop Holder.

(*Porte-brosse et guipon.*)

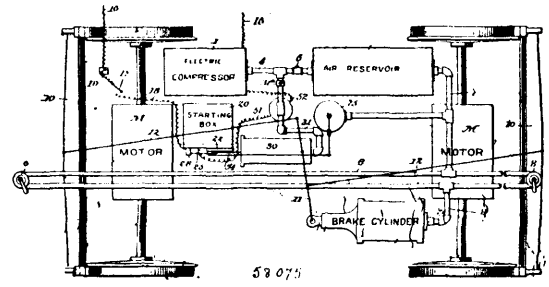


Francis Edgar Matthews, Emmanuel S. Rothman, and Frederick Woodhouse, all of Glouster, Ohio, U.S.A., 9th November, 1897; 6 years. (Filed 26th October, 1897.)

Claim.—1st. The combination with the handle, of the holder consisting of a spring metal rod bent at the centre into a coil or loop, through which said handle passes, forming two expanded spring arms, the ends of which are bent backwardly and then outwardly at approximately right angles to said arms and the extremities pointed, and the slide embracing said arms and movable on the handle, substantially as described. 2nd. As an improved article, a mop or scrubbing brush holder consisting of a spring metal rod bent at the centre in a coil adapted to be slipped onto a suitable handle, and forming two spring arms having their ends pointed and bent outwardly at approximately right angles to said arms, and the slide embracing said arms, substantially as described.

No. 58,075. Regulator for Electric Motor.

(*Régulateur pour moteurs électriques.*)

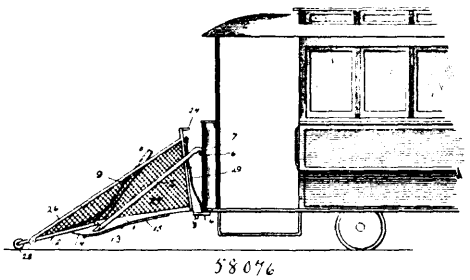


The Standard Air Brake Company, assignee of Henry P. Merriam, both of New York, State of New York, U.S.A., 9th November, 1897; 6 years. (Filed 22nd February, 1897.)

Claim.—1st. The combination of an electric motor, mechanism operated thereby, a variable resistance, a cut-out for the motor and means for operating said cut-out independent of said variable resistance controlled by the condition of pressure or work in said operated mechanism, substantially as set forth. 2nd. The combination of an electric motor, mechanism operated thereby, a variable resistance, means of cutting out said resistance operated by an increase of pressure of work in said operated mechanism, and means operated by the release of said pressure for restoring said resistance to the circuit of said motor, substantially as set forth. 3rd. The combination of an electric motor, mechanism operated thereby, a variable resistance, a cut-out or switch and means of cutting out said resistance operated by an increase of pressure of work in said operated mechanism. 4th. The combination of an electric motor, mechanism operated thereby, a variable resistance, a cut-out or switch and means of cutting out said resistance operated by a increase of pressure of work in said operated mechanism and means operated by the release of said pressure or decrease of work for restoring said resistance to the circuit of said motor, substantially as set forth. 5th. The combination of an electric motor, mechanism operated thereby, a variable resistance, means of cutting out said resistance operated by an increase os pressure or work in said operated mechanism, a cut-out for the motor circuit, means for operating the same at predetermined stages of pressure or work in the mechanism, and means operated by release of pressure for restoring the said resistance to the circuit substantially as set forth. 6th. The combination of a pump, an electric circuit including an electric motor, a variable resistance, a controlling arm or switch therefor controlling by the fluid pressure from said pump, a relief valve for said fluid pressure and means for releasing said arm and restoring said resistance to circuit controlled by the electric circuit when said pressure is relieved, substantially as set forth. 7th. The combination of an electric motor, a fluid pressure apparatus operated thereby including a reservoir for fluid pressure, a circuit controller for said motor controlled by the pressure in said fluid pressure apparatus, a check-valve for preventing back-flow of fluid from the pressure reservoir, and means for relieving the pressure in said apparatus in rear of said check valve, substantially as set forth. 8th. The combination of an electric motor, a fluid pressure apparatus operated thereby including a fluid receiver, a circuit controller for said motor controlled by the pressure in said fluid pressure apparatus, a check-valve for preventing the black-flow of fluid from the fluid receiver, and means for relieving the pressure in said apparatus in rear of said check-valve, substantially as set forth. 9th. The combination of an electrically driven fluid pressure apparatus, a fluid pressure reservoir communicating with the said apparatus, a check-valve between the reservoir and fluid pressure apparatus, means operated by the fluid pressure in the apparatus for making and breaking the electric circuit, and means controlled by the fluid pressure in the reservoir for locking and releasing the circuit making and breaking device, as set forth. 10th. In an automatic regulator for air compressors, the combination of an electrically driven air compressor, an electric circuit including the air compressor, an air reservoir communicating with the compressor, a check-valve between the reservoir and compressor, means operated by the pressure of the air in the compressor for making and breaking the electric circuit, and means controlled by the pressure of the air in the reservoir for locking and releasing the circuit making and breaking device, as set forth. 11th. The combination of an electric motor, a fluid pressure pump operated thereby, a fluid pressure reservoir supplied by said pump, a variable resistance, a cut-out for the motor, mechanism operated by increase of pressure in the pump, for throwing said resistance out of the motor circuit, means controlled by the pressure in the reservoir for cutting ont said motor, means operated by the fall of pressure in the fluid supply pipes, for restoring said resistance to the circuit, and means operated by the fall of pressure in the reservoir for cutting in the motor, all arranged and adapted to operate substantially as set forth. 12th. The combination of an electric motor, a fluid pressure pump operated thereby, a fluid pressure reservoir, a cut-out for said

motor, means operated by the fall of pressure in said reservoir for operating said cut-out to cut in said motor, means of locking the cut-out when so operated, and means for unlocking said cut-out and cutting out said motor operated by a predetermined rise of pressure in said reservoir, substantially as set forth. 13th. The combination of an electric motor, a fluid pressure pump operated thereby, a fluid pressure reservoir connected therewith, a variable resistance, a controlling device operated by rise of pressure in the fluid pressure apparatus to remove said resistance from the motor circuit and means, controlled by the fall or release of said pressure to restore said resistance to the circuit, substantially as set forth. 14th. The combination of an electric motor, fluid pressure apparatus comprising a fluid pressure pump operated by said motor, and a fluid pressure reservoir connected to said pump, a variable resistance, means operated by increase of pressure in said apparatus for removing said resistance from the motor circuit, a pressure relief device controlled by current in the motor circuit, and means for restoring said resistance to the circuit, all arranged and adapted to operate substantially as set forth. 15th. The combination of an electric motor, fluid pressure apparatus operated thereby, a variable resistance, a cut-out switch for said motor, means for locking said switch in closed position, means controlled by the fluid pressure for removing said resistance from the circuit, and means for unlocking and shifting said switch to cut-out the motor, substantially as set forth. 16th. The combination of the electric motor, the fluid pressure reservoir, the cylinder 30 connected to said pump and having plunger 33, 34 and spring 36, the variable resistance 21 having contact device 22 connected to said plunger, cut-out arm 25, spring 45, contact 28 and locking and unlocking lever 60, all arranged and adapted to operate substantially as set forth. 17th. The combination of an electric motor, fluid pressure apparatus operated thereby, a switch controlling the motor circuit, means controlled by the difference of pressure in said apparatus for setting said switch in either of two positions, means tending to throw said switch when so set in either position, and means for releasing the switch, substantially as set forth. 18th. The combination of an electric motor, fluid pressure apparatus operated thereby, a switch arm controlling the motor circuit, a spring adapted to throw said arm to either of two positions, means for holding and releasing said arm in said two positions, and means controlled by the fluid pressure for putting said spring under strain in either position, substantially as set forth. 19th. The combination of the electric motor, fluid pressure apparatus operated thereby, a regulator for said motor controlled by said fluid pressure, and means of varying the flow of fluid pressure to said regulator, substantially as set forth. 20th. The combination of an electric motor, fluid presure apparatus operated thereby, a variable resistance, a cut-out for said motor, means for throwing said resistance into circuit operated by the cut-out of said motor, and means controlled by the fluid pressure in the apparatus for cutting out said resistance, substantially as set forth. 21st. The combination of the electric motor, a fluid pressure apparatus operated thereby, a controllable resistance, an automatic release valve, and means for throwing said resistance into the motor circuit when said valve is released, substantially as set forth. 22nd. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically operated air compressor, an electric circuit, including the air compressor, means controlled by the air pressure for gradually turning the current on by decreasing the resistance in the electric circuit, and means controlled by the air pressure for automatically making and breaking the circuit, substantially as set forth. 23rd. In an automatic regulator for air compressors, the combination of the air reservoir, the electrically driven air compressor, a resistance box, an electric circuit, including the air compressor and resistance box, means controlled by the air pressure for gradually cutting out the resistance in the circuit, means controlled by the air pressure for breaking and making the circuit, and means controlled by the air pressure for throwing the resistance into circuit, substantially as and for the purpose herein set forth. 24th. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, a check valve for retaining the air pressure in the reservoir, a resistance box normally in circuit with the compressor, a device for gradually throwing the resistance out of circuit as the air pressure of the compressor increases, and an electric device actuated by the breaking of the electric circuit for throwing the resistances into circuit with the compressor, as set forth. 25th. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, a check valve for retaining the air pressure in the reservoir, a resistance box normally in circuit with the compressor, a device for gradually throwing the resistance out of circuit under control of the air pressure of the compressor, a circuit breaking and making device controlled by the air pressure of the reservoir, and an electric device actuated by the breaking of the electric circuit for throwing the resistance into circuit with the compressor, as set forth. 26th. In an automatic regulator for air compressors, the combination of an electrically driven air compressor, an electric circuit, including the air compressor, a resistance regulating device communicating with the air compressor and adapted to decrease and throw in resistance in the electric circuit under the control of the air pressure of the compressor, an air reservoir also communicating with the compressor, a check valve between the compressor and reservoir for retaining the reservoir pressure, and a circuit breaking and making devtce controlled by the reservoir air pressure, substantially as set forth. 27th. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, an air pipe leading from the compressor to the reservoir, a check valve in said air pipe, an electric circuit, including the air compressor, means controlled by the air pressure in the pipe between the compressor and check valve for decreasing and increasing the resistance in the electric circuit, and means controlled by the air pressure in the reservoir for breaking and making the circuit, substantially as set fort. 28th. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically operated air compressor communicating with the reservoir through a suitable air pipe, a check valve in said pipe for retaining the reservoir pressure, an electric circuit including the air compressor, an air controlled device communicating with the air pipe between the compressor and check valve and adapted to decrease or increase the resistance in the electric circuit, an automatic release valve for releasing the air pressure from the said resistance regulating device, and means controlled by the air pressure in the reservoir for breaking and making the circuit, substantially as set forth. 29th. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically operated air compressor communicating with the reservoir, a check valve between the compressor and reservoir, a resistance regulating device controlled by the air pressure of the compressor with which it communicates, an electrically controlled valve for releasing the air pressure from the resistance regulating device, an electric circuit including the compressor and releasing valve, and a circuit breaking and making device controlled by the pressure of the air in the reservoir, substantially as and for the purpose set forth. 30th. In an automatic regulator for air compressors, the combination of an air reservoir, an electri ally driven air compressor, a resistance box having a travelling contact arm, a device controlled by the air pressure for shifting said travelling contact arm, a circuit closing arm, an electric circuit including said circuit closing arm, the air compressor and the resistance box, a spring connection between the travelling contact arm and the circuit closing arm, and a device controlled by the air pressure holding the circuit closing arm in open or closed position and adapted to release said arm to the action of the spring when the air pressure reaches the maximum and minimum points, substantially as set forth. 31st. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, a resistance box having a pivoted contact arm or segment, a circuit closing arm pivoted to same centre as the contact segment of the resistance box and having a heel projecting beyond the pivot, a spring connecting the heel of the circuit closing arm to a lug on the contact segment, an electric circuit including the closing arm, compressor and resistance box, a device controlled by the air pressure for shifting the contact segment, and a device controlled by the air pressure for holding the circuit closing arm in position and adapted to release said arm to the action of the spring for breaking or making the circuit, as set forth. 32nd. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, a re-istance box provided with a pivoted contact segment, an air cylinder communicating with the compressor, a piston working in said cylinder, a piston rod extending from said piston and suitably connected to the contact segment for moving it positively in both directions, a spring surrounding the piston rod and confined between the piston and the head of the cylinder, a circuit closing arm suitably connected to the contact segment to be actuated by it, and means controlled by the air pressure for releasing the circuit closing arm at the proper time to make or break the circuit, substantially as set forth. 33rd. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, an air cylinder communicating with the compressor, a piston working in said air cylinder and connecting to a suitable device for decreasing or increasing the resistance in the electric circuit, a pressure releasing valve comprising a valve cylinder communicating with the compressor and resistance regulating cylinder, an electro-magnet and a valve provided with an armature and adapted to be opened and closed by the electro-magnet, and means controlled by the air pressure and operated by the resistance regulating devices for making and breaking the circuit at the proper time, substantially as set forth. 34th. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, an electric circuit including the air compressor, a circuit closing arm in said circuit, a spring-pressed bolt carried by said arm, a controlling lever formed with two engaging shoulders with which the spring-pressed bolt engages for locking the circuit closing arm in closed or open position, means controlled by the air pressure for rocking said controlling lever, and means also controlled by the air pressure for shifting the circuit closing arm for making and breaking the circuit, substantially as set forth. 35th. In an automatic regulator for air compressors, the combination of an air reservoir, an electrically driven air compressor, a circuit closing arm, means controlled by the air pressure for shifting said arm, a controlling lever adapted to lock the circuit closing arm in open or closed position, an air cylinder communicating with the air reservoir, a piston in said cylinder provided with a piston rod, a spring surrounding the piston rod and confined between the piston and cylinder head, and suitable connections between said piston rod and the controlling lever of the circuit closing arm, substantially as set forth.

No. 58,076. Car Fender. (*Défense de chars.*)

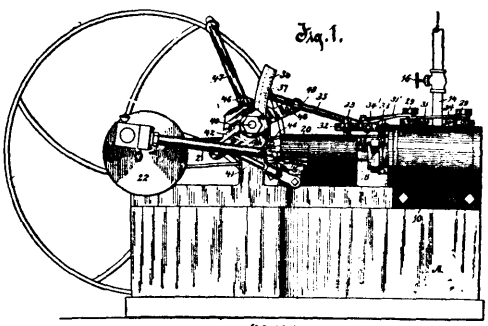


58076

John Wick and Fannie S. Lane, both of South Chester, Pennsylvania, U.S.A., 9th November, 1897; 6 years. (Filed 9th October, 1897.)

Claim.—1st. In a car-fender, the combination with a supporting frame having provision whereby it may be detachably connected to a car, of a scoop-frame pivotally mounted intermediate its ends on said supporting-frame, and adapted to tilt under the weight of the object received therein, and a spring-actuated bolt arranged to engage the rear end of said scoop-frame for holding the latter in its folded position substantially as described. 2nd. In a car-fender, the combination with a supporting-frame adapted to be detachably connected to a car, of a scoop-frame fulcrumed intermediate its front and rear ends on said supporting-frame and adapted to tilt backward on receiving an object, a catch for autimatically engaging direct with and holding the rear end of the scoop-frame when tilted, and a lever for releasing said catch, substantially as described. 3rd. In a car-fender, the combination with a supporting-frame adapted to be detachably connected to a car, of a scoop-frame fulcrumed intermediate its ends on said supporting-frame, an upright back frame or stop pivotally connected to said supporting frame, and rigid braces forming inflexible guards between the said upright frame and the scoop-frame whereby both are influenced by the weight of the object received in the fender, substantially as specified. 4th. In a car-fender, the combination with a supporting-frame of a scoop-frame fulcrumed intermediate its ends on said supporting-frame, an upright back frame or stock pivotally connected to said supporting-frame, and rigid braces forming inflexible braces connecting said upright frame and the front end of the scoop-frame, and forming non-collapsible side-guards, means for holding the front end of the scoop-frame depressed, and means for automatically engaging and holding the rear end of the scoop-frame depressed, substantially as described. 5th. In a car-fender, a supporting frame adapted to be detachably connected to a car, and comprising spaced and substantially parallel arms extending in advance of the car, in combination with a scoop-frame fulcrumed intermediate its ends between said arms, corresponding stops on said supporting-arms and scoop-frame for limiting the downward movement of the front end of the scoop and holding the same depressed, a pivoted back-stop and inflexible oblique braces connecting said back stop and scoop, and forming rigid side-guards, substantially as described.

No. 58,077. Engine. (*Machine à vapeur.*)



58077

John P. Doran, Lark, and August Franzke, Forest Junction, both in Wisconsin, U.S.A., 9th November, 1897; 6 years. (Filed 28th October, 1897.)

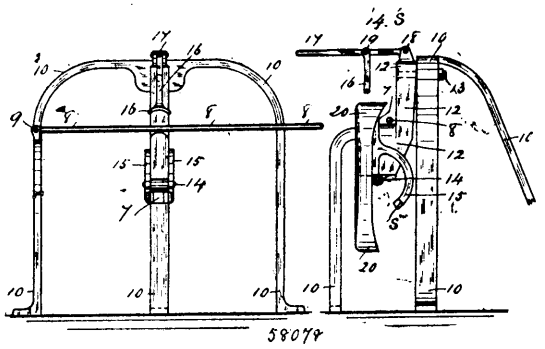
Claim.—1st. In an engine, the combination of a cylinder, a piston reciprocable therein, a piston-stem formed or provided with opposite bevels or inclines a rocking arm, said arm being acted upon and rocked in opposite directions by the inclines or bevels as the piston-stem is reciprocated, and means actuated by the rocking arm for opening and closing the medium supplying cut-off valves. 2nd. In an engine, the combination of a cylinder, a piston reciprocable therein and provided with a projectiug stem, said stem formed or provided with opposite bevels or inclines, a rocking arm, provided at opposite ends with rollers, said rollers being acted upon by the inclines or bevels as the piston-stem is reciprocated, to thereby cause a rocking of the arm in opposite directions, and means actuated by said rocking arm for opening and closing the medium supplying cut-off valves. 3rd. In an engine, the combination of a cylinder. a piston reciprocable therein and provided with a projecting stem, said stem formed or provided with opposite bevels or inclines, a rock-shaft, an arm fast thereon, said arm being acted upon and rocked in opposite directions by the inclines or bevels as the piston-stem is reciprocated, a curved arm fixed medially on the rock shaft and provided with a guideway, a block sliding in the guideway and connected to the medium supplying cut-off valves, and means for shifting said sliding block in its ways. 4th. In an engine for use with steam or analogous power medium, the combination with a member having induction and eduction ducts, of valves passing through and controlling one or more of the ducts, each of which valves consists of a revoluble tubular shell and a revoluble cylindrical plug having ports registering with each other and with a duct aforesaid, a crank arm on said tubular shell and on said plug respectively, and means adapted to oscillate the shell and the plug in opposite directions. 5th. In an engine, the combination of a piston containing cylinder, a member adjacent having induction ducts leading to the cylinder, and a reciprocable plug valve adapted to be pulled across or pushed out of the duct, and means, as a governor, for automatically actuating the valve. 6th. In an engine for using an expansive power medium, the combination with a cylinder, a piston reciprocable therein, a cross-head connected to the piston, permanent ways on which the cross-head is supported and travels, a rock-shaft, an oscillating arm loose on the rock-shaft and connected to the cross-head by a thereto pivoted connecting-rod, a tappet fixed on the rock-shaft disposed after lost motion to be contacted and actuated by the oscillating arm, and means actuated by the rock-shaft for opening and closing medium-supplying cut-off valves. 7th. In an engine for using an expansive power medium, the combination with a cylinder, a piston reciprocable therein, a cross-head connected to the piston, a rock-shaft, an oscillating arm loose on the rock-shaft and connected to the cross-head, a tappet fixed on the rock-shaft disposed after lost motion to be contacted and actuated by the oscillating arm, a curved arm fixed medially on the rock-shaft and provided with a way, a block sliding in the way and connected to medium-supplying cut-off valves, and means for shifting said sliding block in the way. 8th. In an engine for using an expansive power medium, a means for controlling the power-supply, comprising a rock-shaft provided with a tappet, an oscillating arm on the rock-shaft connected to the engine cross-head and adapted to contact with the tappet and oscillating the rock-shaft, a segmental arm on the rock-shaft having a way therein, a block sliding in the way, means connecting the sliding block with cut-off valves, and means for shifting the sliding block in the way. 9th. In an engine using a fluid power medium, the combination with a rock-shaft and means for oscillating it intermittently, of a segmental arm secured medially to the rock-shaft and having a way therein, an actuating rod provided with a block sliding in the way and pivoted at its other extremity to a reciprocating slide, the slide, ways in which the slide travels, rods connected to the slide and attached to the crank-arms of medium cut-off valves, and means for shifting at will the actuating rod in the way in the segmental arm. 10th. In an engine, a reciprocable cross-head, permanent ways on which the cross-head is supported and travels, a rock-shaft, a crank-arm fixed on the rock-shaft and connected with the cross-head, and a tappet on the rock-shaft adapted intermittently to be contacted by the crank-arm and oscillate the shaft. 11th. In an engine, a rock-shaft, a segmental arm fixed medially on the rock-shaft and provided with a way extending in both directions past the axis of the shaft, a block sliding in the way, a rod connected to the block and to a valve-shifting rod or rods, a pivoted lever arm connected movably to the block rod, and means for swinging the lever arm whereby the position of the block in the segmental arm may be shifted at will.

No. 58,078. Machine for Forming Seamless Shoes and Moccasins. (*Machine pour la confection de chaussures et mocassins sans couture.*)

Thomas Timock Marshall, John C. Bowes, Thomas W. Lester, James Davidson, James H. McColl, all of Hamilton, Ontario, Canada, and Richard T. Ritchie, Boston, Mass., U.S.A., 9th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—1st. A former or die of shoe shape construction, having a through vertical opening for a stripper to slide therein, said stripper secured to an upper covering of the die by means of springs acting therein in conjunction with each operation of the die by means of its upper slide bar in combination with a press machine, as described. 2nd. A block capable of receiving thereon the fore part of a seamless and crimped moccasin and conforming in shape thereto, and rounded at the toe part for crimping over the leather of said moccasin, the lower part of said block hinged to a rear block which is capable of oscillation on a frame, or table, a recess or set back in said rear block to form an opening for the operation of a lever pivoted to the frame, to crimp the overhang of the fore part of the mocassin to form a toe covering therefor, as described. 3rd. A block of the character described capable of receiving thereon, the

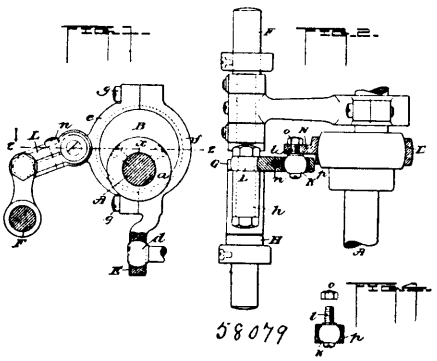
fore part of a crimped seamless moccasin or shoe and conforming in shape thereto, and rounded at the upper fore part for crimping over



the overhang of the leather of the shoe, the lower part of said block hinged to a rear block which is capable of oscillation on a frame or table, an offset in said rear block to form an opening between the two blocks for the operation of a lever to turn or crimp the overhang of the fore part of the moccasin as a covering, an upper concaved press operated by a lever to press and hold the moccasin in position whilst being crimped by said lever, as described. 4th. A moccasin toe crimping device of the character described, consisting of a rear block having lower projecting face, the upper rear part pivoted to a frame for side oscillation, a fore block to conform to the fore part of a seamless shoe or moccasin and its lower part hinged to said rear block, side guides having rear end connection on the fore block as a stop, a press to conform to the fore part of the rear block, and a crimping lever pivoted to the frame and capable of crimping over the fore part of the moccasin as a covering thereto, as described.

No. 58,079. Mechanism for Transmitting Motion.

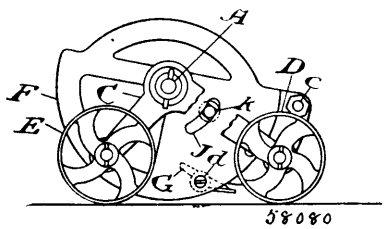
(*Mécanisme de transmission de mouvement.*)



The Union Special Sewing Machine Company, Chicago, assignee of Elias Calvin Holland, Austin, both in Illinois, U.S.A., 9th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—1st. In combination with a driving-shaft and a part to be vibrated, means for transmitting motion from said driving-shaft to the vibrating part comprising a ball eccentric on said driving-shaft, a strap or collar embracing the same and connected to the vibrating part, a rocking-crank, and a universal joint connection between said rocking-crank and the strap or collar, substantially as described. 2nd. The combination with the main shaft provided with a ball eccentric and a strap or collar embracing the same, of a vibrating part and connections between said strap or collar and the vibrating part, a shaft, a crank thereon, and a universal joint connection between said crank and the strap or collar, substantially as described. 3rd. The combination with the shaft and the eccentric thereon, a strap or collar embracing the same, and a part to be vibrated of an oscillating connection between said strap or collar and the part to be vibrated, a rocking-crank and a free joint connection between said rocking-crank and the strap or collar, substantially as described. 4th. As a means for transmitting motion in combination with the driving-shaft and a part to be driven, an eccentric on said driving-shaft, a strap or collar embracing the same, a ball joint connection between said strap or collar and the part to be driven, a rocking-crank, a stud on said strap or collar provided with a ball and a link connection between said rocking-crank and the ball, substantially as described. 5th. The driving-shaft, a part to be driven, the eccentric on said driving-shaft and the oscillating connection between said eccentric and the part to be driven, a shaft, a crank sleeved thereon having an upwardly extending portion, a stud passing through said upper portion, a link fixed at one end to said stud, a ball stud upon the strap or collar to which the opposite end of said link is secured, substantially as described. 6th. In the herein described mechanism, the driving-shaft, the spherical eccentric thereon, the concaved strap embracing the same and provided on its rear portion with a lug, a ball stud secured to said lug, a link provided with a socket for the reception of said ball, and a rocking-crank to which the opposite end of said link is fixed, substantially as described.

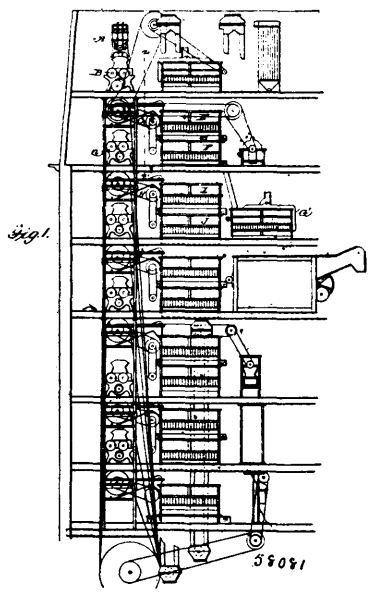
No. 58,080. Lawn Mower. (*Faucheuse pour pelouses.*)



Roxa Slaght, Waterford, Ontario, Canada, assignee of Lewis H. Slaght, same place, 9th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—1st. In a lawn mower, the running gear comprising an axle, a driving wheel journalled at one end thereof, a frame carried at the other end, and two ground wheels journalled thereon one in front of the axle, in combination with a knife frame journalled on the axle in front thereof, and means for adjusting the relative position of the knife frame and running gear, substantially as and for the purpose specified. 2nd. In a lawn mower, the running gear comprising an axle, a driving wheel journalled at one end thereof, a frame carried at the other end, and two ground wheels journalled thereon one in front of the axle and one behind, in combination with a knife frame journalled on the axle in front thereof, and means for adjusting the relative position of the knife frame and running gear, substantially as and for the purpose specified. 3rd. In a lawn mower, the running gear comprising an axle, a driving wheel journalled at one end thereof, a frame carried at the other end, and two ground wheels journalled thereon one in front of the axle and one behind, in combination with a knife frame journalled on the axle in front thereof, and a clamp screw and slot connection between the end of the knife frame and the wheel frame whereby the relative position of the knife frame and the running gear may be adjusted, substantially as and for the purpose specified. 4th. In a lawn mower, the running gear comprising an axle, a driving wheel journalled at one end thereof, a frame carried at the other end, and two ground wheels journalled thereon one in front of the axle, in combination with a knife frame journalled on the axle in front thereof, and a clamp screw and slot connection between the end of the knife frame and the wheel frame whereby the relative position of the knife frame and the running gear may be adjusted, substantially as and for the purpose specified. 5th. In a lawn mower, the running gear comprising an axle, a driving wheel journalled at one end thereof, a frame carried at the other end, and two ground wheels journalled thereon one in front of the axle and one behind, in combination with a knife frame, a stationary knife or shear plate connected thereto, a rotary knife journalled therein, a pinion on the axle of the rotary knife meshing with a gear formed within the driving wheel and means for adjusting the relative position of the knife frame and running gear, substantially as and for the purpose specified. 6th. In a lawn mower, the running gear comprising an axle, a driving-wheel journalled at one end thereof, a frame carried at the other end, and two ground wheels journalled thereon one in front of the axle and one behind, in combination with a knife frame, a stationary knife or shear plate connected thereto, a rotary knife journalled therein, a pinion on the axle of the rotary knife meshing with a gear formed within the driving-wheel, and a clamp screw and slot connection between the end of the knife frame and the wheel frame whereby the relative position of the knife frame and the running gear may be adjusted, substantially as and for the purpose specified. 7th. In a lawn mover, the running gear comprising an axle, a driving-wheel journalled at one end thereof, a frame carried at the other end and two ground wheels journalled thereon one in front of the axle and one behind, in combination with a knife frame, a stationary knife or shear plate connected thereto, a rotary knife journalled therein, a pinion on the axle of the rotary knife meshing with a gear formed within the driving-wheel, a handle pivoted at each side of the knife frame below the axle, and means for adjusting the relative positions of the knife frame and running gear, substantially as and for the purpose specified. 8th. In a lawn mower, running gear comprising an axle and suitable supporting wheels, in combination with a knife frame journalled on the axle in front thereof, and a clamp screw and slot connection between the end of the knife frame and the wheel frame whereby the relative position of the knife frame and the running gear may be adjusted, substantially as and for the purpose specified.

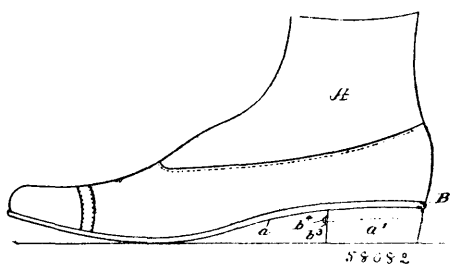
No. 58,081. Process of Milling.
(*Procédé pour moudre.*)



George Thomas Smith, Jackson, Michigan, U.S.A., 10th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—1st. As an improvement in the art of milling, the process herein described, consisting in reducing the grain by a series of reductions and separations, conveying the material in unusual bulk from one reducer and separator to another to prevent undue evaporation and loss of flour, and reducing the grain to the condition of a food product while in a heated condition, substantially as set forth and described. 2nd. As an improvement in the art of milling, the process herein described, of reducing the grain to the condition of a food product by a series of reductions and separations upon different machines, the material being moved from one machine to another in such bulk as to practically prevent cooling during its passage from one machine to another, substantially as described.

No. 58,082. Detachable Heels for Boots and Shoes.
(*Talon amovible pour chaussures.*)



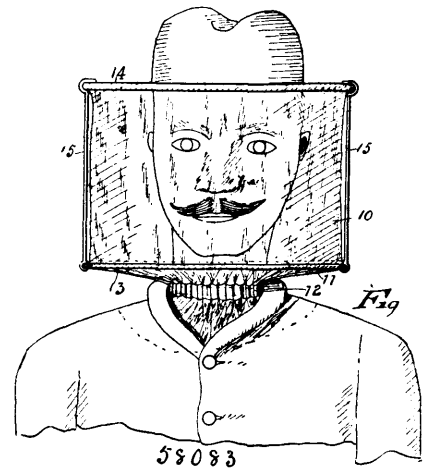
Frank McDonald, Medford, Massachusetts, U.S.A., 10th November, 1897; 6 years. (Filed 28th October, 1897.)

Claim.—1st. The combination of an article of foot-gear and a removable heel, with a coupler which grips the foot-gear and is permanently connected to the heel. 2nd. A detachable boot or shoe heel, having a permanently-attached coupler provided with means for removing and attaching the combined heel and coupler to the boot or shoe. 3rd. The combination of a metallic coupler formed with means for clamping it in place on a boot or shoe, and with an elastic heel moulded thereon. 4th. The combination, in a detachable heel, of a metallic coupler having an inwardly-turned upper edge and means for securing it in place, and an inward projection at its lower part, with a heel of elastic material moulded on said coupler.

No. 58,083. Mosquito Veil. (*Voile pour moustiques.*)

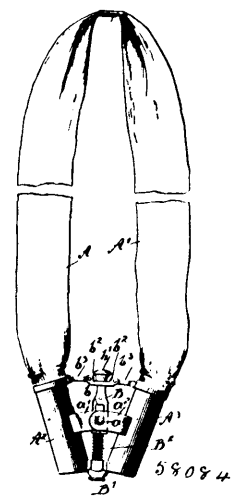
William Frederick Collins, Vancouver, British Columbia, Canada, 10th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—1st. In a mosquito-veil, having a netting 10 secured to the brim of a hat, the combination of a wire band 13 secured to the said netting at some distance below the hat-brim, a draw-string 12 arranged to contract the depending net below the band 13, and a frill or flap extending therefrom upon the shoulders of the wearer, as set forth. 2nd. In a mosquito-veil, having a net secured to a



hat-brim and depending therefrom, the combination of a band 13 and a contracted portion 12 with a linen flap or frill beneath, tie-wires 15 secured to the band 13 and detachably connected to the hat-brim, and means of securing the said netting to the hat-brim, substantially as set forth.

No. 58,084. Cartridge Carrier. (*Porte-cartouches.*)

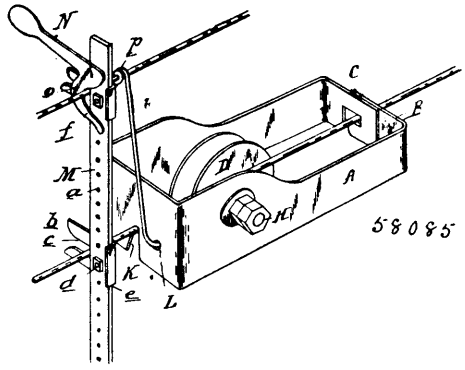


Robert Ferguson Walker, Limerick, Ireland, 10th November, 1897; 6 years. (Filed 10th September, 1897.)

Claim.—1st. A cartridge-carrier, comprising a receptacle for cartridges having an outlet tube at its end, a stop-head normally projecting into the tube, a push-bar and a connection between the push-bar and tube to cause a swinging apart of the head and tube when the bar is operated, substantially as described. 2nd. A cartridge-carrier, comprising sling-bags or receptacles having at their ends outlet tubes pivotally connected together, stops between the tubes and normally projecting into the same, a push-bar, and a connection between the push-bar and tubes for swinging the tubes apart when the push-bar is operated, substantially as described. 3rd. A cartridge-carrier, comprising sling-bags, tubes connected to the lower ends thereof and converging toward their lower ends, a pivotal connection between the tubes, a stop head supported by the pivot, a push-bar having link connections with the upper portions of the tubes, whereby on a downward movement of the push-bar the tubes will be swung apart, and a spring for returning the parts to a normal position, substantially as specified. 4th. In a cartridge-carrier, the combination with sling-bags or receptacles provided at their ends with tubes pivotally connected together, of a stop-head for retaining the cartridges in the tubes, and a sliding and spring-pressed push-bar pivotally connected with the said tubes, substantially as and for the purpose set forth. 5th. In a cartridge-carrier, the combination with sling-bags or receptacles provided at their ends with tubes pivotally connected together, of a spring-pressed push-bar pivotally connected with the said tubes and serving to

swing the lower ends of the tubes apart, and a stop-head connected with said push-bar, substantially as described. 6th. In a cartridge-carrier, the combination with sling-bags or receptacles provided at their ends with tubes pivotally connected together, of a spring-pressed push-bar, links pivotally connecting the upper end of the push-bar with the tubes, and a stop-head connected with the push-bar, substantially as described. 7th. In a cartridge-carrier, the combination with sling-bags or receptacles, of tubes secured to the ends of the bags or receptacles and provided with overlapping lugs pivoted together, a push-bar having a longitudinal bore and slotted to receive the pivot-pin of the said lugs, links pivoted to the upper end of the push-bar and to the tubes, a rod in the bore of the push-bar and having one end secured to the said pivot and projecting below the push-bar, a stop-head on the lower end of the said rod, and a spring between the push-bar and stop-head, substantially as described.

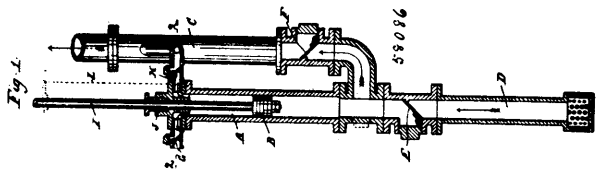
No. 58,085. Wire Stay Weaving Machine.
(*Machine à tisser les étais en fil de fer.*)



Charles A. Wilmarth, Sand Hill, Michigan, U.S.A., 10th November, 1897; 6 years. (Filed 30th October, 1897.)

Claim.—1st. In a stay wire weaving device of the character described, a frame comprising two spring side bars, an end bar uniting the side bars at one end and having an open slot for engagement with a fence wire and two overlapping ends on the opposite ends of the side bars and provided with L-shaped slots adapted to engage the fence wire and lock the frame thereto. 2nd. In a stay wire weaving device, the combination of a frame formed with two spring side bars and two end bars, one uniting the side bars at one end and provided with a slot for the fence wire and an eye for the stay wire and the other formed by the free ends of the side bars overlapping each other and provided with L-shaped slots, a shaft loosely journalled in the side bars transversely the frame, a reel loosely mounted upon said shaft and secured thereto by a spring pin passing through the reel and shaft, and means for frictionally clamping the reel to one of the side bars.

No. 58,086. Pump for Mining and other purposes.
(*Pompe pour mines, etc.*)



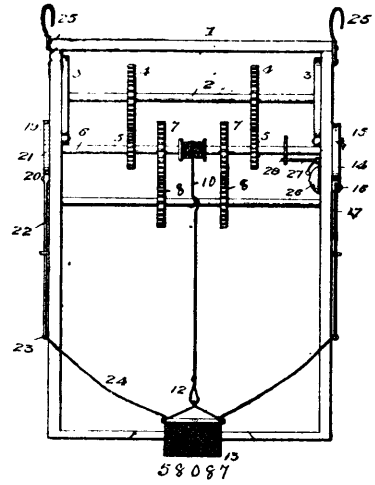
George Lausell, Bendigo, Victoria, 10th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—The herein described pump for mining and other purposes consisting essentially of a single cylinder (such as A) fitted with a piston (such as B), the whole being so arranged that the upper part of said cylinder serves as an air pump to force air into the uptake or delivery pipe whilst the lower part serves as a water pump to force water into said uptake or delivery pipe, substantially as and for the purposes herein described.

No. 58,087. Portable Fire Escape. (*Sauveteur d'incendie portatif.*)

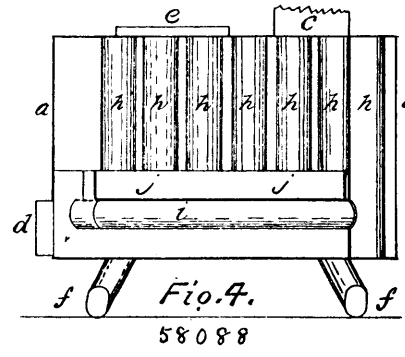
James Hamilton Bryan, Hutchinson, Kansas, U.S.A., 10th November, 1897; 6 years. (Filed 11th October, 1897.)

Claim.—1st. A portable automatic fire escape, comprising the frame 1, the parallel shafts 2, 6 and 9, journalled in said frame, the springs 3-3 fixed on said shaft and having their outer ends secured to the frame, the gear wheels 4-4 fixed on said shaft, the gear wheels 5-5 and 7-7 fixed on the shaft 6, the former wheels meshing with the



gears 4-4 on the shaft 2 and the latter with corresponding gear wheels 8-8 on the shaft 9, in combination with the cable 10 having its upper end fixed to and passing several times around the shaft 6 and its depending end encompassing the shaft 9 and provided with the snap hook 12, and the cage or basket 12, detachably secured to said hook, substantially as shown and described. 2nd. A portable automatic fire escape, comprising the frame 1, the parallel shafts journalled therein, a series of gear wheels fixed on said shafts, a rope secured to one of said shafts, a brake wheel and a ratchet wheel fixed to the same shaft, and means substantially as described for controlling said shaft through the medium of said brake and ratchet wheels, as and for the purpose set forth.

No. 58,088. Heater for the purpose of Burning Sawdust. (*Appareil pour brûler la sciure de bois.*)



Frederick Sheppard and John Alexander, both of Peterboro, Ontario, Canada, 10th November, 1897; 6 years. (Filed 21st October, 1897.)

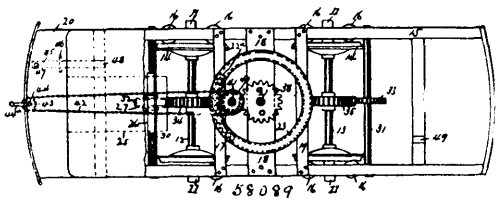
Claim.—1st. The perforated metal grate O, O, substantially as and for the purpose hereinbefore set forth. 2nd. The combination in a metal heater having an outside casing *a*, *a*, *a*, *a*, fuel opening *e*, smoke pipe *c*, damper opening *d*, legs *f*, *f*, *f*, *f*, vertical air flues *h*, *h*, *h*, *h*, horizontal air flues *i*, *i*, rim *j*, *j*, and fire clay filling *k*, *k*, *k*, *k*, with the perforated grate O, O, substantially as and for the purpose hereinbefore set forth.

No. 58,089. Reversible Street Car. (*Char de rue tournant*)

John James Thompson, Poughkeepsie, New York, U.S.A., 10th November, 1897; 6 years. (Filed 25th October, 1897.)

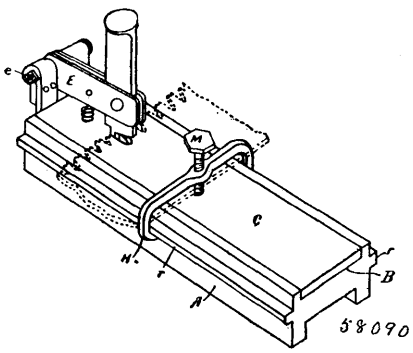
Claim.—1st. The combination with the motor-shaft mounted on the car-body and with a pair of auxiliary shafts and the two axles supported and mounted for rotation in the truck and in substantial parallelism with one another, means for rotating one of said axles from the motor-shaft, the king-bolt mounted concentrical to the axles and means for rotating the body of the car on the truck for the purpose set forth. 2nd. In a truck, the combination of two axles and two auxiliary shafts, all mounted in the truck and in substantial parallelism with one another, a king-bolt upon which the car-body is rotatably mounted, mechanism to rotate the body of the car upon the king-bolt, and mechanism whereby motion may be communicated

to one of the auxiliary shafts and to the axle, substantially as described. 3rd. In a truck, the combination of two axles and two



auxiliary shafts, all mounted in the truck and in substantial parallelism with one another, a king-bolt upon which the car-body is rotatably mounted, mechanism to rotate the body of the car upon the king-bolt, and mechanism whereby motion may be communicated to one of the auxiliary shafts and to the axle, substantially as described, and means to unlock and lock the car-body to the truck, all combined and operating substantially as described. 4th. The combination of a pivotally mounted car body and truck, a motor mounted upon one end of the car, means consisting of the auxiliary shaft and its gear, to transmit the power to the axle, the king-bolt upon which the car rotates, and means to rotate the body of the car on said king-bolt, consisting of the centre gear, pinion, sprocket wheels and chain, all combined and operating substantially as described. 5th. The combination of a pivotally-mounted car body and truck, a motor mounted upon one end of the car, means consisting of the auxiliary shaft and its gear, to transmit the power to the axle, the king-bolt upon which the car rotates, and means to rotate the body of the car on said king-bolt, consisting of the centre gear, pinion, sprocket wheels and chain, all combined and operating substantially as described, and means for unlocking and locking the car-body to the truck, all substantially as described. 6th. The combination of a pivotally-mounted car body and truck, a motor mounted upon one end of said car-body, means to transmit the rotary motion of the motor-shaft to the auxiliary shaft and to the axle, the king-bolt on which the car-body is pivotally mounted, the ball-bearing between the car-body and the truck, and means substantially as described, to unlock and lock the car body to the truck, substantially as set forth.

No. 58,090. Saw Gummer. (*Appareil pour affuter les scies.*)



William Jay Ellis, Winnsboro', Louisiana, U.S.A., 10th November, 1897; 6 years. (Filed 4th October, 1897.)

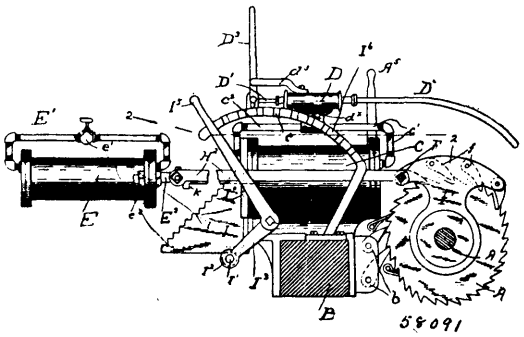
Claim.—1st. In a saw gummer, the combination with the main frame, a shearing-plate mounted upon said frame, and a plunger adapted to shear with said plate, substantially as described. 2nd. In a saw gummer, the combination with the main frame, of a shearing-plate, a bracket secured to one end of said frame, a lever pivoted upon said bracket, a plunger pivoted to the free end of said lever, adapted to shear with said plate, means for recovering said plunger and lever, and means for guiding the saw, substantially as described. 3rd. In a saw gummer, the combination with a main frame having a way formed in its upper surface, a shearing-plate adapted to fit said way, a bracket secured to one end of said frame, a lever pivoted to the said bracket, a plunger provided with an extended portion upon its lower end to form a guide, a shoulder to receive the shock of said plunger, and a cutting face to shear with said shearing-plate, and an adjustable guide for the saw, substantially as described.

No. 58,091. Saw-Mill Set Works.

(*Appareil à mettre les billots en place dans les scieries*)

Henry McDermott, Marinette, Wisconsin, U.S.A., 10th November, 1897; 6 years. (Filed 29th October, 1897.)

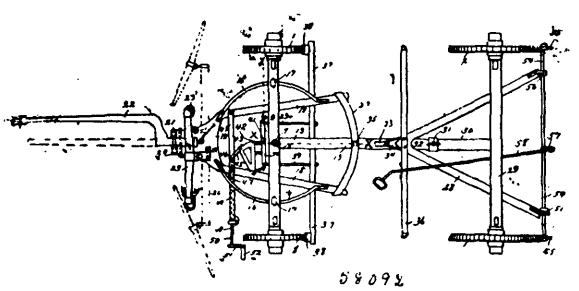
Claim.—1st. In a saw-mill set works, the combination with the set shaft, a ratchet-wheel mounted loosely thereon, a clutch on said shaft adapted to engage said ratchet-wheel, a swinging frame carrying a set of pawls adapted to engage teeth on said ratchet-wheel, and another set of pawls mounted in immovable supports also



adapted to engage the teeth on said wheel, of a stationary fluid cylinder mounted upon the carriage, pipes entering the ends of said cylinder, a slide-valve connecting said pipes, a feed-pipe connected to said valve, a piston rod working in one end of said cylinder, a cross-head mounted rigidly upon said piston rod, a pair of pitman rods connected to said cross-head and to said swinging pawl-carrying frame, stop blocks on said cross-head, an adjustable frame having stops thereon, mounted at the head of the operating cylinder, and means for adjusting said frame to regulate the thickness of the boards, substantially as described. 2nd. In a saw-mill set works, the combination with the set shaft, a ratchet-wheel mounted loosely thereon, a clutch on said shaft adapted to engage said ratchet-wheel, a swinging frame carrying a set of pawls adapted to engage the teeth on said ratchet-wheel, and another set of pawls mounted in immovable supports also adapted to engage the teeth on said ratchet-wheel, of a stationary fluid cylinder mounted upon the carriage, pipes entering the ends of said cylinder, a slide-valve connecting said pipes, a feed-pipe connected to said valve, a piston rod working in one end of said cylinder, a cross-head mounted rigidly upon said piston rod, a pair of pitman rods connected to said cross-head and to said swinging pawl-carrying frame, a cushion cylinder having a piston rod working in one end thereof, also connected to said cross-head, stop blocks on said cross-head, an adjustable frame having stops thereon mounted at the head of the operating cylinder, and means for adjusting said frame to regulate the thickness of the boards, substantially as described. 3rd. In a fluid-pressure operated saw-mill set works, the combination with the set shaft, a ratchet-wheel mounted loosely thereon, a clutch on said shaft adapted to engage said ratchet wheel, a swinging frame carrying a set of pawls adapted to engage the teeth on said ratchet-wheel, and another set of pawls mounted in immovable supports also adapted to engage the teeth on said ratchet-wheel, of a stationary fluid-cylinder mounted upon the carriage, pipes entering the ends of said cylinder, a slide-valve connecting said pipes, a feed-pipe connected to said valve, a piston rod working in one end of said cylinder, a cross-head mounted rigidly upon said piston rod, a pair of pitman rods connected to said cross-head and to said swinging pawl-carrying frame, a cushion cylinder having a piston rod working in one end thereof also connected to said cross-head, stop blocks on said cross-head, a frame mounted in a vertical slideway and having steps thereon adapted to be struck by said stop blocks and means for vertically adjusting said stepped frame, substantially as described. 4th. In a fluid pressure operated saw-mill set works, the combination with the set shaft, a ratchet-wheel mounted loosely thereon, a clutch on said shaft adapted to engage said ratchet-wheel, a swinging frame carrying a set of pawls adapted to engage the teeth on the said ratchet-wheel, and another set of pawls mounted in immovable supports, also adapted to engage the teeth on said ratchet-wheel, of a stationary fluid cylinder mounted upon the carriage, pipes entering the ends of said cylinder, a slide-valve connecting said pipes, a feed-pipe connected to said valve, a piston rod working in one end of said cylinder, a cross-head mounted rigidly upon said piston rod, a pair of pitman rods connected to said cross-head and to said swinging pawl-carrying frame, a cushion cylinder having a piston rod working in one end thereof, also connected to said cross-head, stop blocks on said cross-head, a frame mounted in a vertical slideway and having steps thereon adapted to be struck by said stop blocks, a shaft journalled in fixed bearings on the carriage, a pair of swinging arms rigidly mounted upon said shaft, a cross rod connecting said swinging arms and supporting said frame, and a hand lever mounted upon said shaft for turning the same and swinging said arms, substantially as described. 5th. In a saw-mill set works, the combination with the set shaft, a ratchet-wheel mounted loosely thereon, a clutch on said shaft adapted to engage said ratchet-wheel, a band brake on said clutch, a swinging frame carrying a set of pawls adapted to engage the teeth on said ratchet-wheel, and another set of pawls mounted in immovable supports also adapted to engage the teeth on said ratchet-wheel, a stationary fluid-cylinder mounted upon the carriage, pipes entering the ends of said cylinder, a slide-valve connecting said pipes, a feed-pipe connected to said valve, a piston rod working in one end of said cylinder, a cross-head mounted rigidly

upon said piston rod, a pair of pitman rods connected to said cross-head and to said swinging pawl-carrying frame, stop blocks on said cross-head, a frame mounted in a vertical slideway and having steps thereon adapted to be struck by said stop blocks and means for vertically adjusting said stepped frame, substantially as described. 6th. In a saw-mill set works, the combination with the set shaft, a ratchet-wheel mounted loosely thereon, a clutch on said shaft adapted to engage said ratchet-wheel, a band brake on said clutch, a swinging frame carrying a set of pawls adapted to engage the teeth on said ratchet-wheel, and another set of pawls mounted in immovable supports also adapted to engage the teeth on said ratchet wheel, a stationary fluid-cylinder mounted upon the carriage, pipes entering the ends of said cylinder, a slide-valve connecting said pipes, a feed-pipe connected to said valve, a piston rod working in one end of said cylinder, a cross-head mounted rigidly upon said piston rod, a pair of pitman rods connected to said cross-head and to said swinging pawl-carrying frame, a cushion cylinder having a piston rod working in one end thereof, also connected to said cross-head, stop blocks on said cross-head, a frame mounted in a vertical slideway and having steps thereon adapted to be struck by said stop blocks and means for vertically adjusting said stepped frame, substantially as described. 7th. In a saw-mill set works, the combination with the set shaft, a ratchet-wheel mounted loosely thereon, a clutch on said shaft adapted to engage said ratchet-wheel, a swinging frame carrying a set of pawls adapted to engage the teeth on said ratchet wheel, and another set of pawls mounted in immovable supports also adapted to engage the teeth on said ratchet-wheel, of a stationary fluid-cylinder mounted upon the carriage, pipes entering the ends of said cylinder, a slide-valve connecting said pipes, a feed-pipe connected to said valve, a piston rod working in one end of said cylinder, a cross-head mounted rigidly upon said piston rod, a pair of pitman rods connected to said cross-head and to said swinging pawl-carrying frame, a cushion cylinder having a piston rod working in one end thereof also connected to said cross-head, a pipe leading from end to end of said cushion cylinder, a regulating valve in said pipe, stop blocks on said cross-head, an adjustable frame having stops thereon mounted at the head of the operating cylinder, and means for adjusting said frame to regulate the thickness of the boards, substantially as described.

No. 58,092. Wagon. (*Wagon.*)

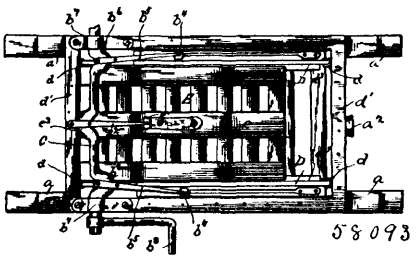


58092

Ferdinand Fisher, Chesaning, Michigan, U.S.A., 10th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—1st. In a wagon, the combination with the wheels, the axle, the pulley 11, and the reach 13, of the rear reach 30, and hounds and clamps securing the rear reach and hounds together, and a hook on the front reach, and a loop on the rear hounds engaging the hook, as specified. 2nd. In a wagon, the combination of the front and rear truck, of a reach extending from engagement with a pulley of the front axle to the rear hounds, and a reach extending from the rear axle frontward and engaging the front reach and held thereto by clamps, and a hook on the front reach engaging a loop on the front end of the rear hounds, as specified. 3rd. In a wagon, a brake for the wagon, comprising shoes on a transverse bar at the rear of the front truck, a screw-threaded crank-shaft in front of the axle, a travelling-nut on the screw-threaded crank-shaft connecting to a series of pivoted levers, the levers connected to the transverse bar carrying the shoes, whereby the crank-shaft is turned, the nut will travel in one direction and draw the shoes to wheel, and when turned in the opposite direction will push them away, as specified. 4th. In a wagon-brake, the combination with a series of levers arranged in front of the front axles, two parallel levers extending back of the front axle and connected to a rod carrying brake-shoes adapted to engage the front wheels and the brake-shoes, and a threaded crank-shaft in front of the front axle carrying a travelling-nut connected to one of the series of levers, and a crank for turning the shaft, as specified. 5th. In a wagon-frame, the combination of a shaft journalled in the rear extension of the hounds of the rear truck, rods connected to the shaft and adapted to be turned down just at the rear of each wheel of the rear truck, and having forked ends adapted to engage the earth, and a lever connected to a crank on the shaft and extending upward and frontward so as to be engaged by the operator, and adapted to turn the shaft, substantially as and for the purpose set forth.

No. 58,093. Washing Machine. (*Machine à laver.*)

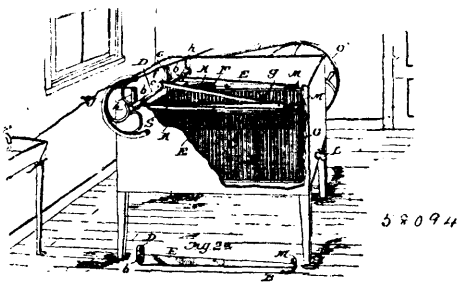


58093

James S. Hilyard, Columbus, Ohio, U.S.A., 10th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—The herein-described washing machine, comprising a tub or water-chamber, a main rubber mounted on rollers and resting on the bottom of said tub or chamber, grooved brackets secured to the end walls of said tub or water-chamber, longitudinal guides removably mounted in said brackets and having flanges projecting from their lower longitudinal edges, and independent supplemental rubber adapted to rest on said flanges, arms projecting upwardly from said main rubber between said guides and the walls of said tub, an arm projecting upwardly from said supplemental rubber, a crank-shaft, and connections between said arms and said crank-shaft whereby an opposite reciprocal movement is given to said rubbers, said guides also serving to prevent lateral motion of said supplemental rubber, substantially as set forth.

No. 58,094. Washing Machine. (*Machine à laver.*)



58094

Stephen Douglas Cole, Wallace, Idaho, U.S.A., 10th November, 1897; 6 years. (Filed 29th October, 1897.)

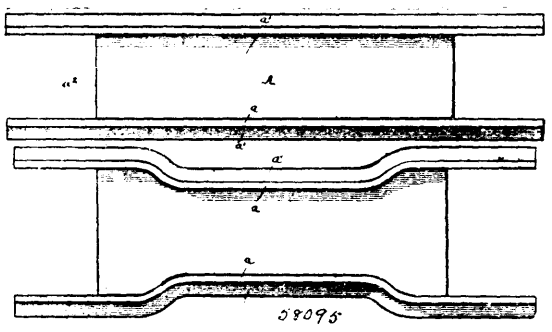
Claim.—1st. A washing machine, comprising a tank or case, an open cage suspended within the tank for horizontal reciprocation and having vertically slatted ends, a slatted follower of greater length than the cage adapted to rest upon the top of the clothes in the cage and having its slats protruding through the spaces between the end slats of the cage, and means for imparting an opposite reciprocation to the cage and its follower, substantially as and for the purposes described. 2nd. A washing machine consisting of a tank, a suspended cage therein having vertical end slats with shoulders *d* near their lower ends, a slatted follower arranged within the case and having its slats protruding between the end slats of the cage and adapted to rest when the cage is empty upon the shoulders *d*, and means for reciprocating the cage and follower, substantially as and for the purpose described. 3rd. A washing machine consisting of a tank, a slatted cage B with hangers G for suspending it within the tank, the slatted follower C, a crank shaft D connected by pitman to the cage and also to the follower for opposite reciprocation, and springs K and S for bringing back the said cage and follower after having been advanced by the pitman, substantially as and for the purpose described. 4th. In a washing machine, the combination with the tank and the suspended cage, of a crank shaft arranged in the tank, a socket plate H secured to the cage, and a detachable pitman E having a fork or slot at one end embracing the crank of the shaft and having its other end seated in the socket plate, and a spring for returning the cage, substantially as and for the purpose described.

No. 58,095. Side Frame for Car Trucks.
(*Cadre de châssis de chars.*)

Herbert Hills Hewitt, Buffalo, New York, U.S.A., 11th November, 1897; 6 years. (Filed 1st November, 1897.)

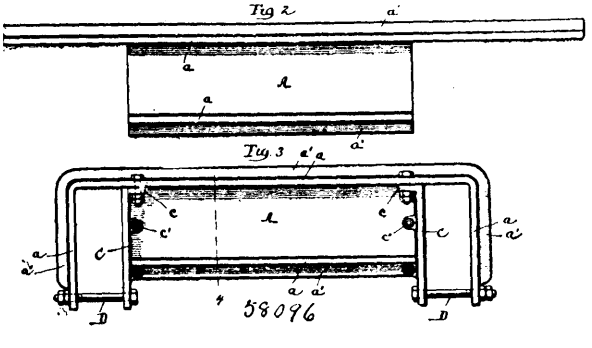
Claim.—1st. A side frame for car-trucks formed from a single rolled-plate girder or beam, having a thin web or body and having edges rolled with flanges or thicker than said web or body, the ends of said web or body being cut away, leaving the thick edges or flangeds projecting beyond said ends, substantially as described. 2nd. A side frame for car-trucks formed from a single rolled-plate

girder or beam, having flanges at its edges, the ends of the web of said plate girder or beam being completely cut away between its



edge flanges, and said edge flanges being bent to form the spaces for the journal-box, etc., substantially as described. 3rd. A side frame for car-trucks formed of an integral plate girder or beam, comprising a central web having at top and bottom lateral flanges and having at top and bottom outside of said lateral flanges the vertical reinforce-ribs, substantially as described. 4th. A side frame for car-trucks, comprising a central web having at top and bottom outside of said lateral flanges the vertical reinforce-ribs, said vertical ribs being formed of metal thicker than the central web substantially as described. 5th. A side frame for car-trucks, formed from a single plate girder or beam rolled with top and bottom, lateral flanges a, and with a top and bottom vertical ribs a^1 outside the lateral flanges, the ends of the lateral flanges and vertical ribs extending beyond the web of the beam and being suitably bent to form spaces for the axle-boxes, etc., substantially as described. 6th. A side frame for car-trucks rolled from a single plate girder or beam with top and bottom lateral flanges, and with top and bottom reinforce-ribs extending in vertical direction and having the lateral flanges and vertical ribs extending beyond the body of the web of the beam and bent outwardly therefrom, the end portions of said web being stretched or expanded adjacent said bent flanges, substantially as described. 7th. A side frame for car-trucks formed from a single rolled-plate girder or beam, having a thin web or body and having edges rolled thicker than said web or body, the end of said web or body being cut away so as to leave the thickened edges projecting beyond said ends, said projecting thickened edges being bent outwardly and the end portions of said web or body being stretched or expanded adjacent said bent edges, substantially as described.

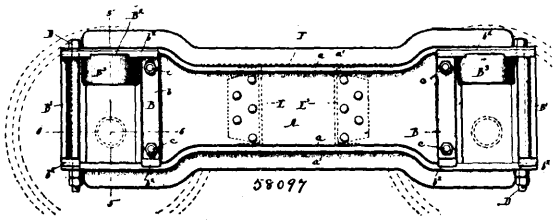
No. 58,096. Side Frame for Car Trucks.
(*Cadre de châssis de chars.*)



Herbert Hills Hewitt, Buffalo, New York, U.S.A., 11th November, 1897; 6 years. (Filed 1st November, 1897.)

Claim.—1st. A side frame for car trucks, formed from a single rolled-plate girder or beam having a thin web or body and having an upper flanged edge, the under portion of the plate girder or beam being cut away below said flanged edge and completely through the bottom, said flanged upper edge being bent down to form the outer pedestals, the space between the pedestal-jaws being open at the bottom for the withdrawal of the journal-boxes, substantially as described. 2nd. A side frame for car-trucks, formed from a single rolled-plate girder or beam, having a thin web or body and having at its top and bottom edges laterally projecting flanges a and reinforce-ribs a^1 outside of said flanges, said lateral flanges and reinforce-ribs at the upper edges of the web being projected beyond said web and bent downwardly to form open-bottom spaces for the axle-boxes, etc., substantially as described.

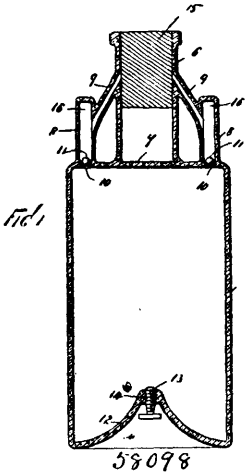
No. 58,097. Car Truck. (*Châssis de chars.*)



Herbert Hills Hewitt, Buffalo, New York, U.S.A., 11th November, 1897; 6 years. (Filed 1st November, 1897.)

Claim.—1st. A side frame for car trucks, formed of a rolled beam having open-ended spaces at its ends to permit the pedestals to be inserted into and removed horizontally therefrom, in combination with three-sided pedestals, formed with open bottoms and removably held within the end spaces of the side frame, substantially as as described. 2nd. A side frame for car trucks, formed of a metal web or body having top and bottom thickened edge portions projecting from its ends to form opened spaces for the pedestals within the end spaces of the side frame, the bottoms of said pedestals being closed by the bottom thickened end portions of the side frame, substantially as described. 3rd. A side frame for car trucks, formed from a single rolled-plate girder or beam having a thin web or body and having integral with said web or body top and bottom thickened edges projecting at its ends, in combination with three-sided pedestals removably held within the end spaces of the side frame, the bottoms of said pedestals being closed by the bottom projecting thickened portions of the side frame, substantially as described. 4th. A side frame for car trucks, comprising a metal web or body provided at its ends with top and bottom projecting portions forming pedestal-spaces, in combination with three-sided pedestals formed with open bottoms, said pedestals being removably bolted to the web or body and to the top and bottom projecting end portions of the side frame, substantially as described. 5th. A side frame for car trucks, comprising a metal web or body provided at its ends with top and bottom projecting portions forming pedestal spaces, in combination with three-sided pedestals provided at top and bottom with vertical projections to engage the projecting end portions of the side frame, substantially as described. 6th. A pedestal for the side frame of a car track formed of a single piece, consisting of integral jaws or sides and top, the inner jaw being flanged to engage the web and the top being flanged to engage the projecting end of the side frame, and a spring-cap formed in one piece therewith, substantially as described. 7th. A pedestal for the side frame of a car truck, consisting of integral jaws or sides and top, the inner jaw being formed with double flanges to straddle the end of the body of the side frame, substantially as described. 8th. A pedestal for the side frame of a car truck, consisting of integral jaws or sides and top, one of said jaws having a vertical hole therethrough to receive a bolt and the other of said jaws being flanged to permit it to be attached to the body of the side frame.

No. 58,098. Bottle, Jug, &c. (*Bouteille, pot, etc.*)



Francis Joseph Cullum, New York, U.S.A., 11th November, 1897 6 years. (Filed 30th October, 1897.)

Claim.—1st. A bottle or other vessel provided with a neck which is closed at the bottom thereof, and at one side of said neck with an upwardly directed tubular extension which communicates with said neck by a branch tube, said tubular extension being in com-

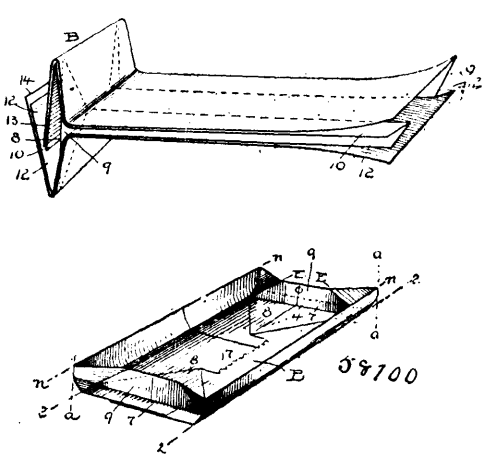
munication with the bottle or vessel at its lower end, and a valve which is placed in said tubular extension, and adapted to close said communication, and means for filling said bottle or vessel, substantially as shown and described. 2nd. A bottle or other vessel provided with a neck which is closed at its lower end, said bottle or vessel being provided at one side of said neck with an upwardly directed extension which communicates with said neck by a branch tube, a port or passage which forms a communication between the bottom of said upwardly directed extension and the bottle or vessel, and a valve which is placed in said upwardly directed extension and adapted to close said port or passage, and means for filling said bottle or vessel, substantially as shown and described, 3rd. A bottle or vessel provided with a neck which is closed at the lower end, and said bottle or vessel being also provided with upwardly directed extensions which communicate with the neck by means of branch tubes, said extensions being also in communication with the bottle or vessel by means of ports or passages in the lower ends thereof, ball valves placed in said extensions and adapted to close said ports or passages, and means for filling said bottle or vessel through the lower end thereof, substantially as shown and described.

No. 58,099. Fastening Device. (*Attache.*)

Osborn Congelton, New York, State of New York, U.S.A., 11th November, 1897; 6 years. (Filed 30th October, 1897.)

Claim.—1st. A fastening device comprising an elongated member formed into a coil with extending arms, which arms are inwardly turned and terminate in pointed ends. 2nd. A fastening device comprising an elongated member formed into a coil with extending arms, which arms are inwardly turned and terminate in pointed ends, together with means limiting the attaching power of said pointed ends. 3rd. A fastening device comprising an elongated member formed into a coil with extending arms, said arms being bent and inwardly turned, and terminating in inwardly turned pointed ends in approximately a like plane, a bend and a pointed end being contiguous to each other for the purposes substantially as set forth. 4th. The combination in an elongated member of a coil a, having arms b, b, with curvatures c^1, c^1, c^2 and inwardly turned pointed ends, and the shoulders f and g, substantially as set forth. 5th. A fastening device comprising an elongated member formed into a coil with arms extending oppositely therefrom in different planes, said arms terminating in in-turned pointed ends also lying in different planes relative to each other. 6th. A fastening device comprising an elongated member having a coil, arms extending therefrom in opposite directions to form in-turned engaging points together with a check upon one of said ends to limit the passage of material impaled thereon.

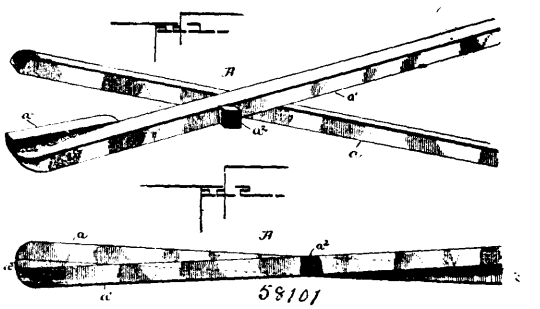
No. 58,100. Self-opening Square Bottom Paper Bag. (*Sac en papier.*)



Daniel Appel, Cleveland, Ohio, U.S.A., 11th November, 1897; 6 years. (Filed 18th September, 1897.)

Claim.—1st. A paper bag substantially as described, having a rib transversely of its side plies in the bottom of the bag inward from the edge thereof, and diagonal brace lines from the ends of this rib to the centre of the plies, substantially as described. 2nd. The bag described, having a rib at its bottom on each plicated side back from the edge proper of the bottom and shorter than the said edge, and converging brace lines between the ends of said ribs terminating in the centre of the plies, substantially as described. 3rd. A paper bag having temporary folding bottom lines on its four sides over which the four sides of the bag spread and unfold the bottom on new lines parallel with the square of the bag when the bag is filled, substantially as described. 4th. A square bottom bag having the broad sides of the bottom folded one across the other in opposite directions and one of the side plies at each plicated side folded in between said broad sides, substantially as described. 5th. The bag bottom described having its shorter lap at the bottom slitted from the intersection of the side plies, and the said side plies turned to a substantially triangular shape at their intersection and folded back through said slits, and the longer lap folded and pasted over all, substantially as described. 6th. In paper bags, a bag having a square bottom on temporary lines across the broad sides of the bottom and the plies on both sides folded to form ribs returned about one-fourth the depth of the plies from the edge of the bag, whereby temporary unfolding lines are produced on all sides of the bag, substantially as described. 7th. A paper bag having a temporary flat square bottom of less dimensions than the square of the bag in cross-section, and transverse ribs in the plicated sides contracting the four sides of the bottom on temporary lines, substantially as described. 8th. In square bottom paper bags, a bag having a temporarily formed bottom of less size than the full bag in cross-section, and having the corners of said temporary bottom creased at an angle to its sides, whereby the opening of the bottom on full lines is facilitated, substantially as described.

No. 58,101. Clothes Tong. (*Pinces à linge.*)



Elbert B. Stevenson, Philipsburg, Quebec, Canada, 11th November, 1897; 6 years. (Filed 30th October, 1897.)

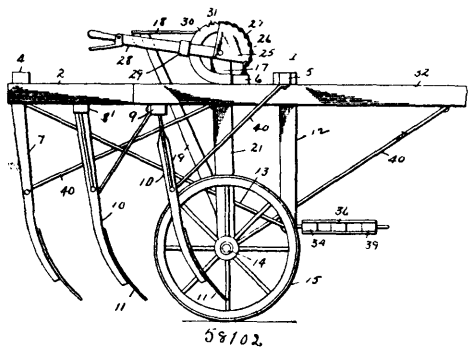
Claim.—1st. A clothes tongs comprising two members pivotally connected, one of said members being provided with an off-set portion, substantially as described. 2nd. A clothes tongs comprising two members pivotally connected, one of said members being provided with an off-set portion against which the inner face of the other member is adapted to abut, substantially as described. 3rd. A clothes tongs comprising two members pivotally connected, one of said members being provided with an off-set portion having an inclined face against which the other member is adapted to abut, meeting faces of said inclined face and the opposite member being arranged to fit one another, substantially as and for the purposes set forth.

No. 58,102. Cultivator and Draft Equalizer. (*Cultivateur et régulateur de tirage.*)

William F. Natschke, Cissnapark, Illinois, U.S.A., 11th November, 1897; 6 years. (Filed 1st November, 1897.)

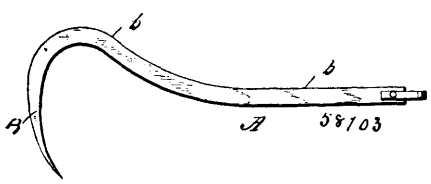
Claim.—1st. In a cultivator or harvester, the combination with a frame portion carrying the cultivators or harvesting devices, of a vertical frame work in rigid connection with the axle, and means provided for lifting to adjustable positions the first mentioned frame upon the vertical frame. 2nd. In a harvester or cultivator, the combination with a vertical frame in rigid attachment with the axle, of a frame carrying cultivators or harvesting devices adapted to be movably secured upon said vertical frame, and means for raising to predetermined positions said last mentioned frame. 3rd. In a cultivator or harvester, the combination with the axle thereof, of a vertical frame secured rigidly thereupon, a horizontal frame in movable connection with said vertical frame, and a lever for raising and lowering said horizontal frame in connection with the vertical frame. 4th. An improved harvester or cultivator, consisting of a vertical frame mounted upon an axle therefor, a horizontal frame movably secured to said vertical frame and means as therein set forth, consisting of a horizontal shaft, a lever, a pawl, segmental sprocket plates and sprocket chain, operated in connection with said

vertical and horizontal frames so as to raise and lower the latter and retain the same in an adjustable position. 5th. An improved har-



vester or cultivator, consisting of a vertical frame mounted rigidly upon an axle, a transverse shaft secured upon the upper portion of said frame, segmental sprocket plates secured to the ends of said shaft and to one of said plates, a spring pawl in connection with said lever, differentially placed cogs or teeth upon one of said sprocket plates adapted to be engaged by said spring pawl, a horizontal frame movably secured upon said vertical frame, sprocket chains having their lower ends secured to said horizontal frame and their upper ends to the segmental sprocket plates, a plurality of hangers depending from said horizontal frame, and cultivators or harvesters secured upon the lower ends of said hangers. 6th. An improved harvester or cultivator, consisting of a vertical frame mounted rigidly upon an axle, a transverse shaft secured upon the upper portion of said frame, segmental sprocket plates secured to the ends of said shafts, an operating lever secured to said shaft and to one of said plates, a spring pawl in connection with said lever, differentially placed cogs or teeth upon one of sprocket plates adapted to be engaged by said spring pawl, a horizontal frame movably secured upon said vertical frame, sprocket chains having their lower ends secured to said horizontal frame and their upper ends to the segmental sprocket plates, and a seat or saddle rigidly secured upon the upper surface of the horizontal portion of the vertical frame. 7th. The combination with a harvester or cultivator consisting of a horizontal frame movably secured upon a vertical frame, of means for operating said vertical portion, and draft gear adapted for working four horses abreast in connection with said harvester, substantially as herein set forth and shown.

No. 58,103. Land Scrubber. (*Nettoyeur d'agriculture.*)



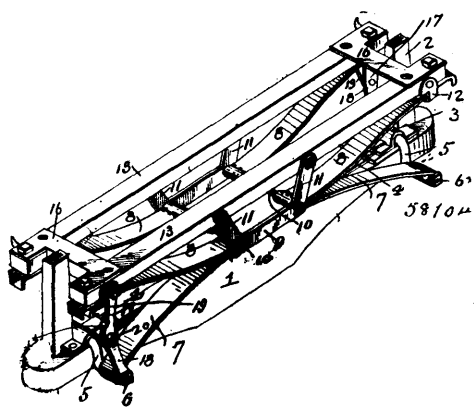
Alfred Ernest Brown, Hamiota, Manitoba, Canada, 11th November, 1897; 6 years. (Filed 30th October, 1897.)

Claim.—1st. A land scrubber comprising a beam, having its rear end bifurcated, said bifurcated ends extending downwardly from said beam, said beam also provided with a clevis at its forward end, substantially as described. 2nd. A land scrubber comprising a beam, having its rear end bifurcated, said bifurcated ends extending downwardly from said beam, said beam being bent upward between its front end and the ends of said bifurcations, and a clevis secured to the front end of said beam, substantially as described.

No. 58,104. Wagon Bolster Spring.
(*Ressort pour coussinets de wagon.*)

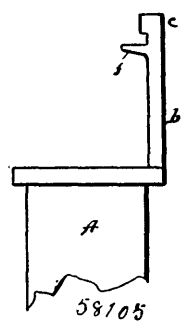
Targe G. Mandt, Stoughton, Wisconsin, U.S.A., 11th November, 1897; 6 years. (Filed 25th October, 1897.)

Claim.—1st. In a bolster spring for wagons, the combination with the boxes or bearings, the swinging shackles journalled in said bearings and the lower upwardly curved or bowed plates connected with said shackles, of the upper oppositely curved plates secured centrally to said lower springs, clips in which the ends of said springs slide, bed pieces to which said clips are secured, and the connecting plates, substantially as described. 2nd. A device of the character described consisting of a bolster, a duplicate set or pair of springs hung on opposite sides of the bolster, a bed piece for each pair, from which the springs are suspended, connections between the bed pieces, and shackles to which the lower leaf of each spring is attached for the purposes shown. 3rd. A device of the character described, consisting of a bolster, springs hung in pairs on the



opposite sides of the bolster, and each pair connected together at their rear or inner ends, a bed piece for each pair of springs, from which the springs are suspended, connections between the bed pieces, clips near the ends of the bed pieces with which the springs engage, shackles uniting the lower leaf of the opposite set of springs and bearings for said shackles, all combined as and for the purposes shown. 4th. A device of the character described consisting of a bolster, springs hung in pairs on the opposite sides of the bolster, and each pair connected together at their rear or inner ends, a bed piece for each pair of springs, from which the springs are suspended, connections between the bed pieces, clips near the ends of the bed pieces with which the springs engage, shackles uniting the lower leaf of the opposite set of springs and bearings for said shackles, all combined as and for the purposes shown.

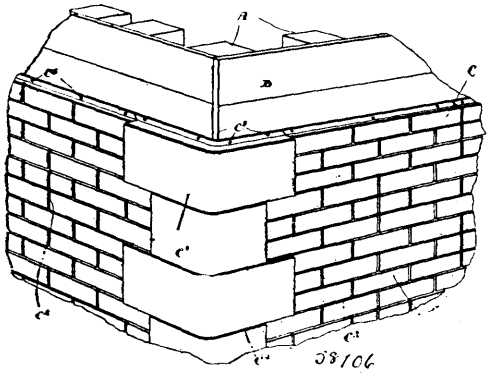
No. 58,105. Bottle Seal. (*Sceau pour bouteilles.*)



Leander Burnett, Ross, Michigan, U.S.A., 11th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—1st. In a bottle seal, the combination of a bottle having a flange at the upper edge thereof, a bar secured at one end to said flange, and having its opposite free end terminated in a dovetail, said flange constructed with a dovetailed slot at a point diametrically opposite to the fastening of said bar, said bar being adapted to bend over the top of said bottle, whereby the free dovetailed end may be engaged within said dovetailed slot, and means for securely locking said engagement in position, substantially as described. 2nd. A bottle seal, consisting of a bar having one end secured to the flange of said bottle and the opposite free end terminating in a dovetail, a dovetailed groove formed in said flange at a point diametrically opposite to the point of fastening of said bar, and a spur extending at right angles to said bar and secured thereto at a point a short distance from said free end and adapted to be bent down upon the inner edge of said bottle, said bar being constructed to be bent over the cork within the neck thereof, whereby the dovetailed free end may be engage within said dovetailed slot, substantially as described. 3rd. As a new article of manufacture, a bottle having a flange formed at its outer upper edge, a seal or bar formed integrally with said flange adapted to be bent over the mouth of said bottle, and means for fastening the free end of said bar to said flange, substantially as described. 4th. As a new article of manufacture, a bottle having a flange, a bar or seal formed integrally therewith adapted to be bent over the mouth of said bottle, means for engaging the free end of said bar or seal, and a spur secured to said seal adapted to be bent down upon the inner edge of the neck, whereby said seal is firmly ocked in position, substantially as described.

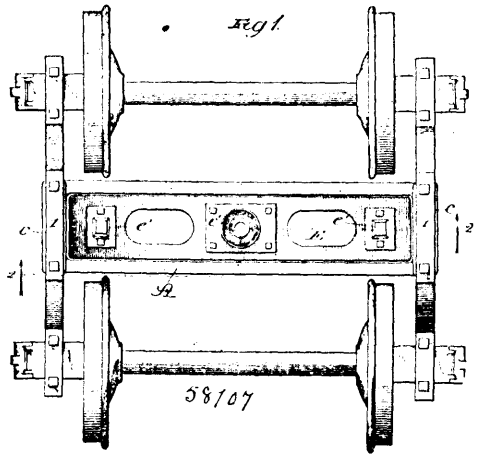
No. 58,106. Brick and Stone Work.
(*Ouvrage en brique ou pierre.*)



John Wesley Klinck, Toronto, Ontario, Canada, 11th November, 1897; 6 years. (Filed 1st November, 1897.)

Claim.—1st. As a new article of manufacture, a composition slab for forming brick and stone work having tongues along the edges of the slab forming one angle and grooves along the edges of the slab forming the opposite angle, such grooves extending into the tongues oppositely formed, as and for the purpose specified. 2nd. As a new article of manufacture, a composition slab for forming brick and stone work having tongues along the edges of the slab forming one angle and grooves along the edges of the slab forming the opposite angle, such grooves extending into the tongues oppositely formed, and cut away edges on the four sides of the slab forming when the slabs are placed together the joints, as and for the purpose specified. 3rd. As a new article of manufacture, a composition slab for forming brick and stone work having tongues along the edges of the slab forming one angle and grooves along the edges of the slab forming the opposite angle, such grooves extending into the tongues oppositely formed and holes extending obliquely through the tongues and main portion of the slab, as and for the purpose specified. 4th. The combination with a suitable backing, of composition slabs forming brick and stone work having tongues along the edges of the slabs forming one angle and grooves along the edges of the slabs forming the opposite angle, cut-away edges on the slabs forming when placed together joints for the brick work, holes extending obliquely through the tongues and slabs, and nails extending through the holes into the backing for securing it in place, as and for the purpose specified. 5th. The combination with the suitable backing, of composition slabs forming brick and stone work having tongues along the edges of the slabs forming one angle and grooves along the edges of the slabs forming the opposite angle, cut-away edges on the slabs forming when placed together joints for the brick work and intermediate longitudinal and cross channels on the slabs forming the intermediate joints and subdividing the slabs, all the slabs being suitably cemented together at the joints, as and for the purpose specified. 6th. As a new article of manufacture, a composition slab for forming brick and stone work having interlocking projections and recesses on the edges of the slabs, as and for the purpose specified.

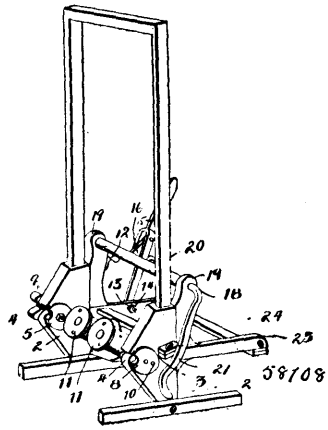
No. 58,107. Car Truck. (*Châssis de chars.*)



John Player, Topeka, Kansas, U.S.A., 11th November, 1897; 6 years. (Filed 2nd November, 1897.)

Claim.—As a new article of manufacture, a car-truck having a transom provided with vertical side-bars, a spring seat at each lower end thereof, a truck head at each end having grooves in its upper and lower portion, a central perforated cross-piece connecting the lower portions of the side-bars, and side-strengthening ribs, all formed in one integral casting, substantially as described.

No. 58,108. Fence Machine. (*Machine à clôture.*)



Sherman Grant Mooney and William Johnson Mooney, both of Pattonsburg, Missouri, U.S.A., 11th November, 1897; 6 years. (Filed 1st November, 1897.)

Claim.—1st. In an apparatus for applying stay-wires to longitudinal wires, a revoluble shaft made in crank form and provided with slotted journals for engaging the longitudinal wires, substantially as described. 2nd. In a wire-weaving apparatus, the revoluble shaft made in crank form and provided with slotted journals for the reception of the longitudinal wires, and with longitudinal perforations for the stay-wires passing through said journals, substantially as described. 3rd. In a wire-weaving apparatus, the revoluble shaft or shuttle made in crank form and provided with slotted journals, and spool spindles secured to the crank portion of said shuttle-shaft at right angles to and upon one side of the centre of the axis of said shaft, substantially as described. 4th. In a wire-weaving apparatus, the revoluble shaft or shuttle made in crank form and provided with slotted journals, the crank portions intermediate said journals carrying stay-wire spools, and means for rotating said shaft, substantially as described. 5th. In a wire-weaving apparatus, the revoluble shaft or shuttle made in crank form and provided with slotted and perforated journals, spool spindles secured to the crank portion of said shaft intermediate said journals and at one side thereof, slotted bearings for said journals, a piston fast on one journal, and means for actuating said pinion and shaft, substantially as described. 6th. The combination in a wire-fence-weaving machine or apparatus, of the upright frame, the revoluble shaft journalled in divided bearings adjustable on said frame, said shaft journals and bearings being slotted to receive the longitudinal fence-wires, a pinion fast on one of said journals, a gear-wheel engaging said pinion, and a lever for actuating said gear-wheel, substantially as described. 7th. A suitable shaft having slotted journals for engaging the longitudinal fence-wires, and longitudinal perforations for the passage of stay-wires on opposite sides of the journal centres from the longitudinal wires, means for actuating said shaft, and pivoted arms for removing the longitudinal wires from the slotted shuttle-shaft journals, substantially as described. 8th. The combination with a wire-fence-weaving machine, of a crank-axle provided with slotted and perforated journals for receiving the longitudinal and stay wires, stay-wire spools mounted on the crank portion of the said shuttle-shaft, a pinion fast on one journal of said shaft, a gear-wheel and lever for actuating said pinion, the arms for removing the longitudinal wires from the slots in said journals, and a pawl connected therewith for engaging the pinion actuating gear-wheel, and holding the same while the lever actuating said wheel is being retracted, substantially as described.

No. 58,109. Hinges for Attaching Covers to Cans, Jars, etc. (*Pentures pour attacher les couvercles de bidons, jarres, etc.*)

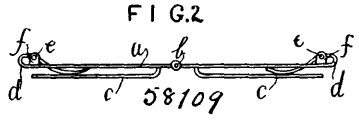
Samuel Robert Lang, Southsea, England, 11th Novermber, 1897; 6 years. (Filed 2nd November, 1897.)

Claim.—An improved clip hinge consisting of two flaps hinged together at one edge, each flap having a spring tongue attached thereto or formed therewith, the end of the flap being turned over

so as to pass through an opening provided in the flap, the said overturned end acting as an opposing spring to the tongue, the

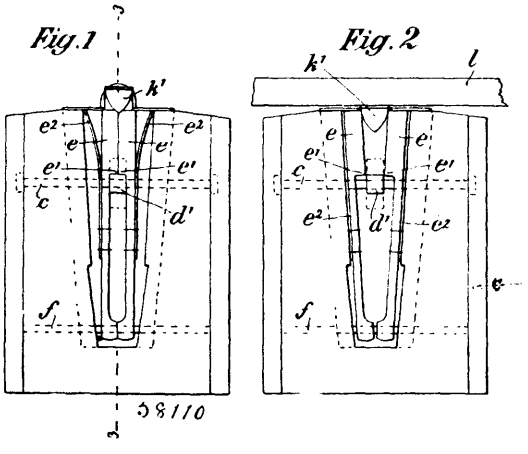
FIG. 1

FIG. 2



whole substantially as described in the above specification and exemplified in the accompanying drawing.

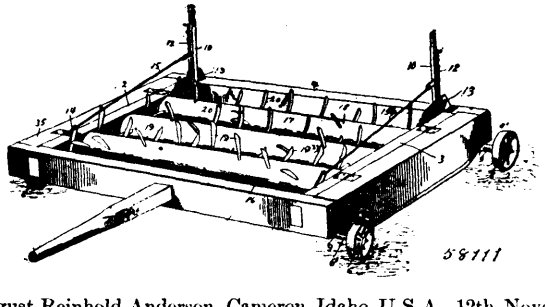
No. 58,110. Steam Ram. (*Bélier à vapeur.*)



Woldemar Drühl, Stapelstreet, Riga, Livonia, Russia, 12th November, 1897; 6 years. (Filed 2nd November, 1897.)

Claim.—1st. A steam ram, consisting of a block in a cavity of which is journalled on a rod, a hub having two arms, one of the said arms adapted to pass through the face of the block, when in a horizontal position, spring jaws adapted to hold the said arm, a wedge adapted to be pressed by the striking rail, between the said jaws to release the said arm, a continuous chain the links of which engage the said arm, and thereby raise the block, the other arm being provided with a depending rod, a die rod projecting through the lower face of the block, and a spring interposed between said rod and the die rod, substantially as set forth. 2nd. In a steam ram, the combination with the hub d, and arms d^1 and d^2, of the spring-pressed jaws e, e, wedge k^1, rod g, die rod h and h^1, and spring h interposed between the said rods, substantially as set forth. 3rd. In a steam ram, the combination with the chain a, of the arm d^1, on the hub d, journalled on the central pin c, the spring-pressed jaws e, e, the wedge k^1, and the striking rail, substantially as set forth.

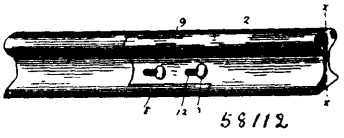
No. 58,111. Rolling Harrow. (*Herse roulante.*)



August Reinhold Anderson, Cameron, Idaho, U.S.A., 12th November, 1897; 6 years. (Filed 3rd November, 1897.)

Claim.—The rectangular frame comprising the side pieces upon which are mounted the bent axles, the carrying-wheels mounted on said axles, and the levers adapted to adjust the wheels on one side independently of the wheels on the opposite side, in combination with the toothed shafts 16, 17 and 18, the opposite ends of which are provided with sprocket-wheels connected by sprocket-chains, and having their said ends, their sprocket wheels and chains protected by hinged covers secured to the said side pieces 2 and 3, substantially as and for the purpose set forth.

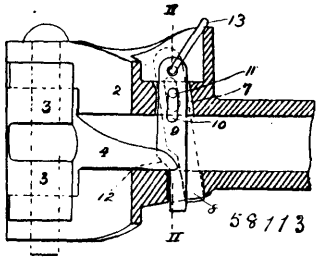
No. 58,112. Rail Joint. (*Joint de rails.*)



Edward Norton, Lumberton, Mississippi, U.S.A., 12th November, 1897; 6 years. (Filed 3rd November, 1897.)

Claim.—1st. The combination with one rail having a vertical apertured web, and an extended horizontal portion having a horizontal groove formed therein, of another rail also provided with a vertical apertured web, and a horizontal extension having a horizontal groove formed therein, the construction being such that when the two rails are applied together the web of one enters the groove of the horizontal extension of the other, whereby securing bolts may be passed through the web and the horizontal portions also supported and braced in position, substantially as described. 2nd. The combination with rails having an extended base formed with a horizontal groove, of a vertical web mounted on said extended base, another rail having an extended tread formed with a horizontal groove, an apertured tread pendent from said tread, the construction being such that the veatical web of one rail enters the horizontal groove of the adjoining rails so as to bring the apertures of the webs into coinciding positions, whereby securing-bolts may be passed through the same, substantially as described. 3rd. The combination with a rail having an extended base formed with a groove and vertical apertured web having a shoulder at its upper end, of another rail having an extended tread formed with a groove and a vertical apertured web having a shoulder at its lower end, the construction being such that the vertical web of one rail enters the vertical groove of the other rail, and the shoulder of one web abuts against a portion of the opposing-rail, substantially as described. 4th. The combination with a rail having an extended base formed with a horizontal groove and a vertical-apertured web, of another rail having an extended tread and formed with a horizontal groove, and a vertical web having elongated slots and bolts adapted to be passed through said slots and the apertures of the adjoining web, the construction being such that the web of one rail enters the groove of the adjoining rail, whereby the tread and base portions are supported and braced in position, substantially as described.

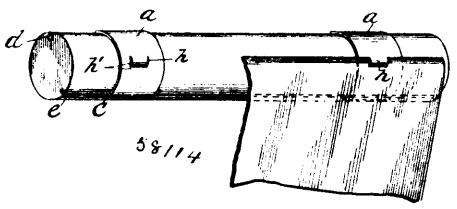
No. 58,113. Car Coupler. (*Attelage de chars.*)



William Reese, Carnegie, Pennsylvania, U.S.A., 12th November, 1897; 6 years. (Filed 3rd November, 1897.)

Claim.—1st. A car coupler having a swinging jaw provided with an extended tail-piece rounded on its outer end, a locking-bolt vertically mounted in the path of the swinging tail-piece, longitudinal lower and upper slots in the draw-head with clearance for movement of the locking-bolt, a transverse elongated slot through the locking bolt, a supporting-pin passing through the slot and the draw-head, and an inwardly downwardly bevelled shoulder on the front piece of the locking-bolt, substantially as set forth. 2nd. In a car coupler provided with a swinging jaw having an extended tail-piece rounded on its outer end, a vertical locking-bolt located in the path of the tail-piece mounted in a longitudinal slot in the upper and lower sides of the draw-head, the lower slot being lengthened for clearance, provided with a transverse elongated slot, and a supporting-pin passing through the slot and the draw-head, and an inwardly bevelled shoulder on the front face of the locking-bolt, substantially as set forth. 3rd. In a car coupler provided with a swinging jaw having an extended tail-piece rounded on its outer end, a vertical locking-bolt located in the path of the tail-piece mounted in a longitudinal tlot through the upper and lower sides of the draw-head, the lower slot being lengthened for clearance, provided with a transverse elongated slot, a supporting-pin passing through the slot and the draw-head, and an inwardly bevelled shoulder on the front face of the locking-bolt, and means for raising and tipping backwardly the locking-bolt, substantially as set forth.

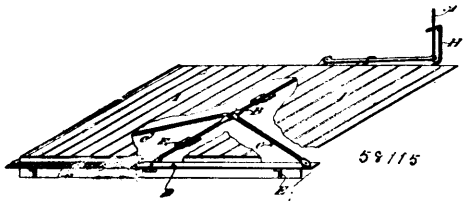
No. 58,114. Fastenings for Attaching Window Shades to Rollers. (*Appareil pour attacher les stores de fenêtres aux bâtons.*)



Edmund F. Hartshorn, Newark, New Jersey, U.S.A., 12th November, 1897; 6 years. (Filed 19th July, 1897.)

Claim.—As a new article, a spring-clasp for attaching window shades to rollers, consisting of the clasp *a* formed of a single piece and sprung over the roller, and having the spring-tongue *h* integral therewith, adapted to press the shade against the roller and grasp the same as the clasp is sprung over the roller, and the turned-in edge c^1, substantially as described.

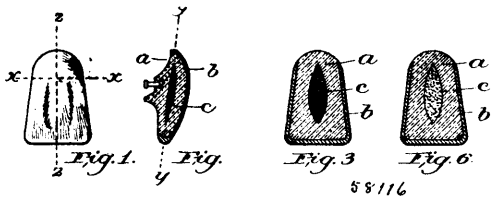
No. 58,115. Binder. (*Lieuse.*)



James Stewart Kerr, Winnipeg, Manitoba, Canada, 12th November, 1897; 6 years. (Filed 6th October, 1897.)

Claim.—1st. The combination of levers, by which the knife and guard protector is shifted in front of and away from the knife and guards. 2nd. The knife and guard protector. 3rd. The manner of its attachment to binders.

No. 58,116. Artificial Teeth. (*Dents artificielles.*)



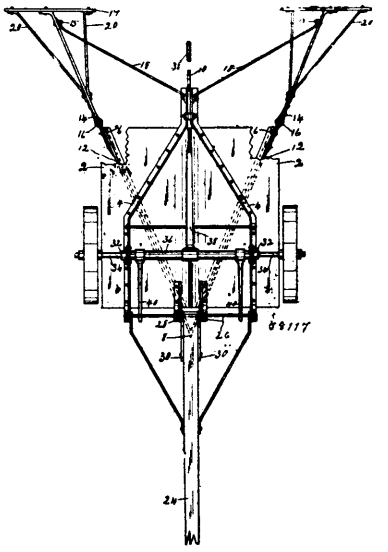
Herbert Enos Dennett, Boston, Mass., U.S.A., 12th November, 1897; 6 years. (Filed 16th October, 1897.)

Claim.—An artificial tooth formed of a translucent body with a portion tinted to represent the pulp, as herein shown and described.

No. 58,117. Land Shaper. (*Appareil à niveler et fossoyer.*)

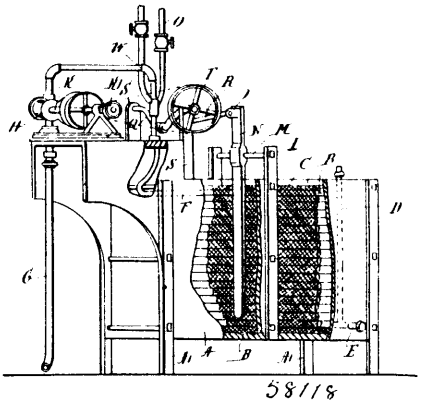
John Edmonds, Woodburn, Ontario, Canada, 12th November, 1897; 6 years. (Filed 1st November, 1897.)

Claim.—1st. A land shaper of the character described consisting of a depressed land plate, blades secured to the under face thereof by means of angle ribs and extending from the central fore part and beyond said plate and at angles thereto to the rear corners of said plate, and plough-shares secured to the fore part of the blades, and a rear central rudder secured to the junction of the upper angle ribs on said plate, as described. 2nd. A land shaper consisting of a depressed land plate, a plough-share secured to the lower and central fore part thereof, and a rudder secured to the lower and central rear part of the plate and beyond by means of supporting ribs secured to said plate, and means for drawing the same, substantially as described. 3rd. A land shaper consisting of a depressed land plate, blades secured to the under face and extending outwards towards the rear thereof and secured thereto by means of inner angle ribs, detachable extension blades secured to the rear ends of the rigid blades by hinged connection, suitable land sweep secured and braced to the ends of said extension blades with detachable braces, their inner ends pivoted to the rear junction of the angle ribs of the land plate with rear rudder, a forward extending plough-share attached to the fore ends of the rigid blades, ground-wheels on ends of transverse shaft in bearings in vertical slides, a central elongated sleeve on the shaft provided with forward levers to engage with the under part of the forward drag bar connected to the upper angle ribs of the plate, a central lever handle rigidly connected to said sleeve, to raise the land shaper, and fasten in the rear elevated slot, as described. 4th. A land shaper consisting of a land plate formed with gradually



rising sides, blades secured to rigid angle ribs, underneath said plate, and extending from the central fore part and beyond and widening out to the rear, a plough-share secured to and forming the fore junction of said blades, a rear central rudder, secured to the rear junction of the upper angle ribs, ground-wheels on ends of transverse shaft, shaft bearings in vertical slides, a sleeve on said shaft provided with fore levers to engage with the under part of the drag bar connected to the upper curved angle ribs of the plate, a central lever handle on said sleeve to raise the land shaper on the wheels, and fasten in the rear elevated slot, as described. 5th. A land shaping plate having gradually rising sides, strengthening angle ribs suitably arranged and secured thereto, under blades extending from the central forepart of the plate and at angles thereto to the extreme rear part and hinged beyond, a plough-share connected to the forepart of the blades, a rudder, or guide, secured to the rear extending upper ribs, and a transverse shaft having a centrally located sleeve and supported on side ground-wheels, vertical slides on said plate as guides for the shaft, and mechanism for raising the plate up and suspending the same from the shaft, as described. 6th. A land shaping plate of the character described consisting of a plate having gradually rising sides forming a central depression, a transverse shaft having a sleeve supporting by ground-wheels, levers connected to each end of the sleeve to engage with the under part of a forward drag bar, hand lever connected to central part of the sleeve to raise the land plate having vertical slides with direct opening to admit the bearing of said shaft, and means for detaining said hand lever, as described.

No. 58,118. Cooling Apparatus. (*Appareil réfrigérant.*)



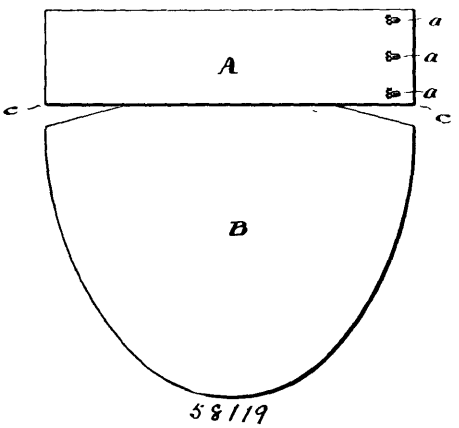
James Thomas Bentley, Circleville, Ohio, U.S.A., 12th November, 1897; 6 years. (Filed 3rd November, 1897.)

Claim.—1st. An apparatus for cooling liquids, consisting of a receptacle, coil of pipe contained therein, netting contained about the inner circumference of the coil and a reciprocating agitator working in the space within the coil; means for operating the same, substantially as shown and described. 2nd. In a cooling apparatus,

the combination with the cooling receptacle, coil of pipe located therein, the agitator N mounted on a shaft M, a pitman connected to the upper end of the said agitator, and a crank-shaft for operating the said pitman, substantially as shown and described. 3rd. In a cooling apparatus, the combination with the cooling receptacle, coil of pipe located therein, standards L secured to the outside of the casing, shaft M mounted in the upper ends of the said standards, agitator N journalled on the said shaft M, with its free end extended down to nearly the bottom of the space within the cooling receptacle, the pitman R connected to the upper end of the agitator, means for operating the same, of the supply-pipes and pumps leading to the coil and the outlet pipes connected to the lower end of the coil, substantially as shown and described.

No. 58,119. Neck and Chest Protector.

(*Protecteur de la poitrine et du cou*)

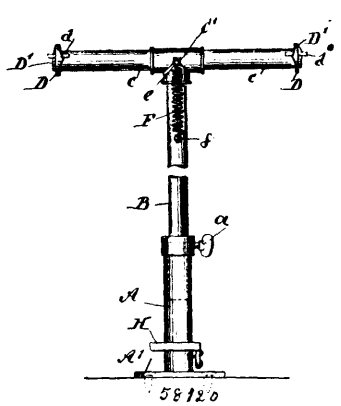


John Howard Way, Philadelphia, Pennsylvania, U.S.A., 12th November, 1897; 6 years. (Filed 6th November, 1897.)

Claim.—1st. A neck and chest protector comprising a collar and a depending flap, the collar being elastic in the direction of its length, and the upper edge of the flap being united to the lower edge of the collar centrally for a portion of the width of said flap, whereby the latter is free from the collar for a portion of its width at each side of the point of union, and the collar free to be fastened about the neck of the wearer, substantially as described. 2nd. A neck and chest protector comprising a collar and a depending flap, the two being formed of a single piece of elastic knit fabric, and the upper edge of the flap being united to the lower edge of the collar centrally for a portion of the width of said flap, whereby the latter is free from the collar for a portion of its width at each side of the point of union, and the collar free to be fastened about the neck of the wearer, substantially as described. 3rd. A neck and chest protector comprising an upper or neck portion folded over at its upper edge to form a two-ply collar, and a dependent flap, said collar being elastic in the direction of its length, and the upper edge of the flap being united to the lower edge of the collar centrally for a portion of the width of said flap, whereby the latter is free from the collar for a portion of its width at each side of the point of union, and the collar free to be fastened about the neck of the wearer, substantially as described.

No. 58,120. Improvements in Coat Holder.

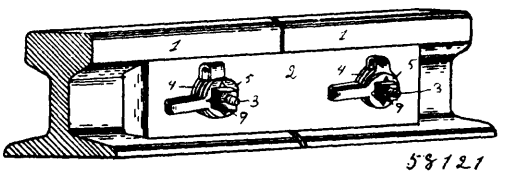
(*Porte-habits.*)



Robert J. Stuart, New Hamburg, New York, U.S.A., 12th November, 1897; 6 years. (Filed 3rd November, 1897.)

Claim.—1st. In a coat-holder, the combination of two pairs of spring-held clamps, one half of each set being fixed to the ends of a horizontal pipe, and the other half to a bar lying in said pipe, with a lever attached to said bar, a treadle, and connections between said lever and treadle, substantially as described. 2nd. In a coat-holder, the combination of two pairs of spring-held clamps, one half of each set being fixed to the ends of a horizontal pipe, and the other half to a bar lying in said pipe, and means for adjusting the height thereof, with a lever attached ta said bar, a treadle, and connections between said lever and treadle, substantially as described.

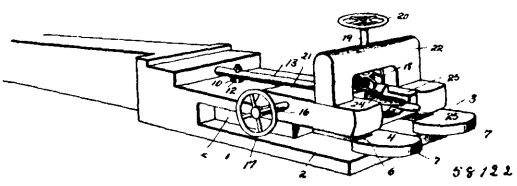
No. 58,121. Nut-Lock. (*Arrête-écrou.*)



Darneville H. Gabriel, Cypremore, Louisiana, U.S.A., 12th November, 1897; 6 years. (Filed 6th November, 1897.)

Claim.—The combination with the spring-washer comprising the two connected plates with registering bolt-holes therein, of the nut-lock consisting of the connected spring-arms, one of which is provided with an apertured plate located between the plates of the washer and the other formed with a plate having an angular opening, substantially as described.

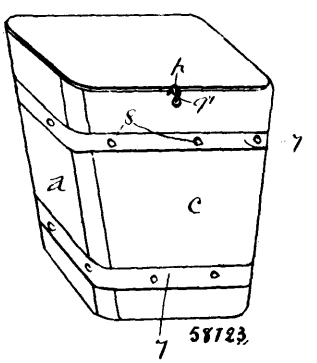
No. 58,122. Car Coupler. (*Attelage de chars.*)



Josiah Miller, Mansfield, Ohio, U.S.A., 12th November, 1897; 6 years. (Filed 5th November, 1897.)

Claim.—In a car-coupling, the combination of a draw-head having a movable and a stationary jaw therein, a shaft having a flexible connection with said movable jaw which is adapted to wind thereon and provided with a gear and an outer coupling-head, and an upper and a side gear engaging the gear on the shaft and having connections adapted to be operated from the top or side of the car, substantially as and for the purposes specified.

No. 58,123. Butter Box. (*Boîte à beurre.*)



George Esplin, assignee of Francis Frajeau, both of Montreal, Quebec, Canada, 13th November, 1897; 6 years. (Filed 6th February, 1897.)

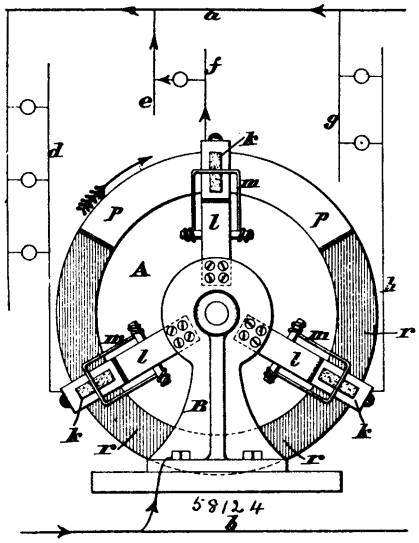
Claim.—A butter box characterized by such special construction or features as the removable cover, a spring on its rear edges, the body tapering with interlocking joints and rounded corners, vertical corner strips, encircling bands or hoops, substantially as and for the purpose set forth.

No. 58,124. System of Electrical Distribution.

(*Système de distribution électrique.*)

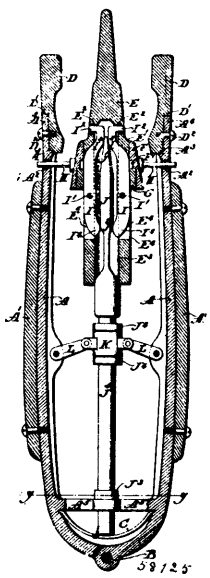
Robert Kulm, assignee of Louis Kling Oppenheimer, both of Cincinati, Ohio, U.S.A., 13th November, 1897; 6 years. (Filed 19th June, 1897.)

Claim.—1st. The herein described method of distributing electrical energy to a plurality of translating device circuits, which consists in



supplying successive electrical impulses to said circuits, the ratio of the duration of said impulses being, approximately, to the duration of the intervening periods of cessation, as the ratio of one-half of the electromotive force required by the translating devices, when constantly supplied with current, is to the electromotive force employed in excess of that required by said translating devices when constantly supplied with current. 2nd. Apparatus for distributing electrical energy to a plurality of translating device circuits, consisting of a source of supply, to said circuits, of successive intermitten' impulses, and means establishing the ratio of duration of said impulses to the duration of the intervening periods of cessation as equal to the ratio of one-half of the electromotive force required by the translating devices when constantly supplied, to the electromotive force employed in excess of that required by said translating devices when supplied with a continuous current, substantially as described.

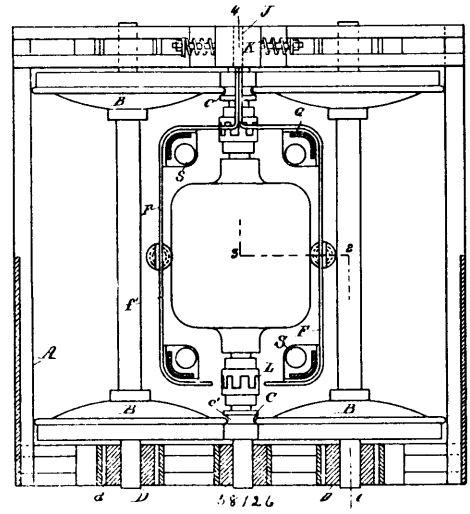
No. 58,125. Tools for Finishing Glass Bottles, etc.
(*Outil pour finir les boutcilles en verre, etc*)



The Practical Enclosure Co., assignee of Albert S. Lambert and Edmund Hoffman, all of Bridgeton, New Jersey, U.S.A., 13th November, 1897; 6 years. (Filed 2nd October, 1897.)

Claim.—1st. In a tool for finishing the necks of bottles, the combination with the clamps A, of the heads D, adapted to shape the outside of the bottle neck, a spring adapted to force the clamps A apart, a head F, supported by and between the clamps A, a former E, supported by head F, but free to turn therein, said former having a hollow base and slots E^2 therein, levers I, pivoted to the head E, and having di s I^2, attached thereto so as to register with the slots E^2, a plunger J, arranged to actuate levers I, positively so as to advance and retract dies I^2, and means for actuating said plunger operated by the motion of the clamps. 2nd. In a tool for finishing the necks of bottles, the combination with the clamps A, of the heads D, adapted to shape the outside of the bottle neck, a spring adapted to force the clamps A apart, a head F, supported by and between the clamps A, a former E, supported by head F, but free to turn therein, said former having a hollow base and slots E^2 therein, fixed dies E^6, formed or secured on the outside of the former E, so as to register with the slots E^2, levers I, pivoted to the head E, and having dies I^2, attached thereto so as to register with the slots E^2, a plunger J, arranged to actuate levers I, and advance or retract dies I^2, and means for actuating said plunger operated by the motion of the clamps. 3rd. In a tool for finishing the necks of bottles, the combination with clamps A, having formers D secured to their ends, of a head F, supported by and between said arms and having a slot F^1, formed in it, a former E, having a flange E^5, adapted to engage slot F^1, dies I^2, situated within former E, and adapted to project through slots E^2 therein, a rod J^5, supported between the clamps A, and connected therewith as described, and so as to be moved longitudinally as the clamps close and open, and a plunger J, secured to said rod and arranged to positively actuate the dies I^2, both to open and close them.

No. 58,126. System of Motor Trucks.
(*Système de châssis de moteur.*)



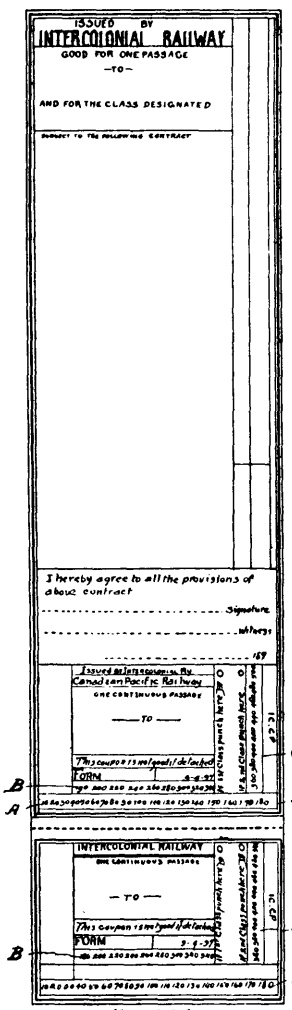
The Consolidated Car Heating Company, assignee of James F. McElroy, both of Albany, New York, U.S.A., 13th November, 1897; 6 years. (Filed 6th May, 1897.)

Claim.—1st. In a truck, forward and rear sets of drive-wheels, a friction-roller placed between them and arranged to rotate in contact therewith, constant contact maintained by the weight of the car acting on the movable bearing of the friction roller, a motor connected with and adapted to operate said friction-roller, for the purpose set forth. 2nd. In a truck, forward and rear sets of drive-wheels, a friction-roller, a motor connected with and adapted to operate said friction-roller, said friction-roller and drive-wheels so arranged in relation to each other that the roller shall be in contact with one of the forward and one of the rear wheels of each set in such manner that the rotation of the friction-roller will put in revolution both sets of wheels in the same direction, constant contact between the friction-roller and the drive-wheels maintained by the weight of the car acting on the movable bearing of the drive-wheels, for the purpose set forth. 3rd. In a truck, forward and rear sets of drive-wheels, journal-boxes for said drive-wheels movable horizontally, a roller arranged to make frictional contact with one of the forward and one of the rear wheels of each set, a motor, said roller connected therewith, a car mounted on supports connected with said movable journal-boxes, the weight of the car causing the drive-wheels to press against the roller, for the purpose set forth. 4th. In a truck, a friction-roller, a motor adapted to impart rotary motion to said roller, forward and rear sets of drive-wheels engaging with said roller, the bearings of said drive-wheels movable horizontally, a frame adapted to carry the car, a saddle supporting said frame, said saddle mounted in said truck, connections between the journal-boxes of the drive-wheels and the saddle, the weight of the car on the saddle forcing the drive-wheels in contact with the friction-roller, for the purpose set forth. 5th. In a truck, the combination of a drive-wheel, a friction-roller, a movable journal-box for said drive-wheel, a car mounted on said truck, means for connecting the

supports of said car with the movable journal-box, the weight of the car causing the journal-box of the drive-wheel to so move as to increase the pressure of the drive-wheel upon the friction-roller, for the purpose set forth. 6th. In a truck, a friction-roller, a motor adapted to impart rotary motion thereto, a drive-wheel in contact with said friction-roller, a movable bearing for said drive-wheel, and means for increasing the pressure of said drive-wheel against said friction-roller by the weight of the car acting on the journal-box of said drive-wheel, for the purpose set forth. 7th. In a truck, a drive-wheel, a roller in frictional contact therewith, a car supported upon a frame, connections between said frame and the journal-box of the drive-wheel and the friction-roller, the weight of the car on the frame operating to draw the drive-wheel and the friction-roller together, for the purpose set forth. 8th. In a truck, a motor, a drive-wheel, a friction-roller, said motor adapted to impart a rotary motion to said friction-roller, a movable bearing for said friction-roller in the truck-frame, a car mounted on said truck-frame, a lever connecting the movable journal-box of said friction-rolle to said motor, the weight of the car tending to force the friction-roller against the drive-wheel, substantially as described.

No. 58,127. Railway Passage Ticket.

(*Billet de chemin de fer.*)



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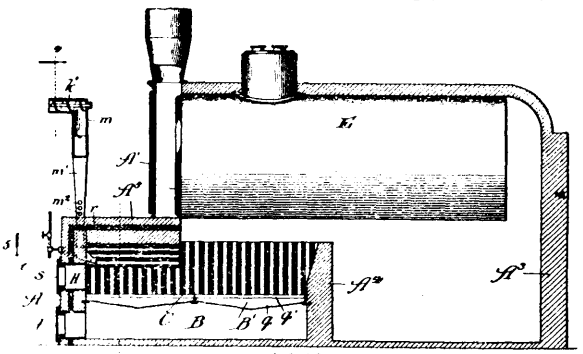
John Mitchell Lyons, Moncton, New Brunswick, and Nicholas Weatherston, Toronto, Ontario, both in Canada, 13th November, 1897; 6 years. (Filed 9th July, 1897.)

Claim.—As a new article of manufacture, a railway passage ticket comprising a form having a space or spaces and numbers indited thereon in arithmetical progression representing proportionate parts of the aggregate distance in miles for which the ticket is issued for, as and for the purpose specified.

No. 58,128. Furnace. (*Fourneaise.*)

Bernard Cornelius Heavey and Samuel Taggart White, both of Chicago, Illinois, U.S.A., 13th November, 1897; 6 years. (Filed 15th July, 1897.)

Claim.—1st. In a fuel dust furnace, the combination with the fire-chamber, of means at one side thereof for spraying fuel dust into said chamber, comprising a mixing chamber opening at its inner end into the fire-chamber, a steam blast pipe extending into



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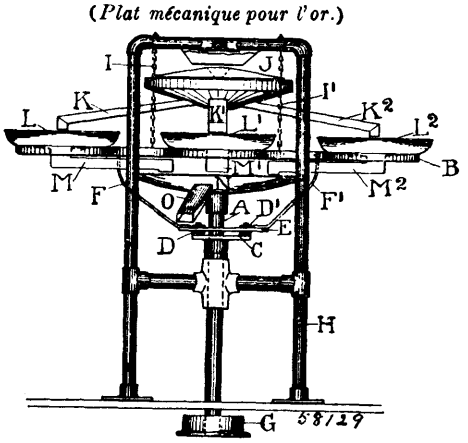
the outer end of the mixing chamber, an upward extending fue dust feed-tube communicating at its lower end with said mixing chamber between the blast-pipe and fire chamber, and a fuel dust conveyer extending to said feed-tube, substantially as and for the purpose set forth. 2nd. In a fuel dust furnace, the combination with the fire-chamber, of means at one side thereof for spraying fuel dust into said chamber, comprising convergent mixing chambers opening at their inner ends into the fire-chamber, steam blast-pipes extending into the outer ends of the mixing chambers, upward extending fuel dust feed-tubes communicating at their lower ends with the mixing chambers between the blast-pipes and fire-chambers, and a fuel dust conveyer extending to said feed-tubes, substantially as and for the purpose set forth. 3rd. In a fuel dust furnace, the combination with the fire chamber, of means at one side thereof for spraying fuel dust into said chamber, comprising a mixing chamber opening at its inner end into the fire-chamber, a steam blast-pipe extending into the outer end of the mixing chamber, an upward extending fuel dust feed-tube communicating at its lower end with said mixing chamber between the blast-pipe and fire-chamber, and a fuel dust conveyer extending to said feed-tube, said feed-tube having an air inlet, substantially as and for the purpose set forth. 4th. In a fuel dust furnace, the combination of a fire-chamber provided with heat storage sides and top incased in heat insulating material, and means at one side of said chamber for spraying fuel dust into the same, comprising a mixing chamber opening at its inner end into the fire-chamber, a steam blast-pipe extending into the outer end of the mixing chamber, an upward extending feed-tube communicating at its lower end with said mixing chamber, and a fuel dust conveyer extending to said feed-tube, substantially as and for the purpose set forth. 5th. A fuel dust feeder for furnaces, comprising a supply bin for the dust, an overflow receptacle, a dust conveyer extending from said bin to the overflow receptacle, a distributing receptacle in the line of said conveyer, and a dust conveyer extending from the distributing receptacle to the furnace, substantially as and for the purpose set forth. 6th. A fuel dust feeder for furnaces, comprising a supply chamber, an overflow chamber, a dust conveyer extending from said supply chamber to the overflow chamber, one or more distributing receptacles in the line of said conveyer, a dust conveyer extending from the distributing receptacle to the furnace, and an overflow conveyer extending from the lower side of the overflow chamber back to the said supply chamber, substantially as and for the purpose set forth.

No. 58,129. Placer Gold Mining.

(*Plat mécanique pour l'or.*)



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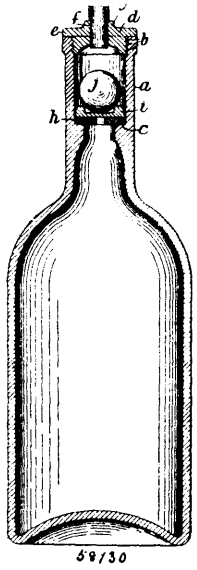
The Alaskan Bonanza Mining, Trading and Transportation Company, assignee of John H. Glendening, both of Chicago, Illinois, U.S.A., 13th November, 1897; 6 years. (Filed 2nd November, 1897.)

Claim.—Plate C attached to the driving shaft, at a point off from its longitudinal centre and equipped with rollers at its several ends to travel on the inner circumference of circle E, and the straps F, F^1, F^2, F^3 and F^4 attached to the cradle B, all in combination with mining pans set in frame B, substantially as and for the purposes hereinbefore set forth.

No. 58,130. Non-refillable Bottle, etc.

(*Appareil pour empêcher le remplissage des bouteilles.*)



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Edwards Atkinson, assignee of John Creasy, both of London, England, 13th November, 1897; 6 years. (Filed 2nd November, 1897.)

Claim.—1st. In a non-refillable bottle, the combination with a seating formed inside the bottle neck, of a ball and a disc of glass or other suitable material, which act as a valve to allow the flow of liquid from the bottle, but to prevent the introduction of liquid into the bottle, and a plug designed to be irremovably fixed in the mouth of the bottle and provided with an aperture for the discharge of the contents of the same, substantially as described. 2nd. In a non-refillable, wherein a disc acted upon by a ball or weight to press it againt a seating is employed, forming the said disc with inclined or tapering edges, substantially as and for the purpose described. 3rd. In a non-refillable bottle, having a ball or disc arranged as described, and a screw plug for closing the mouth of the bottle and provided with a hole for the discharge of the contents, forming the inner end of the said hole with an elongated recess, substantially as and for the purpose described. 4th. The manufacture and use of non-refillable bottles, substantially as hereinbefore described and illustrated in the accompanying drawings.

No. 58,131. Wheeled Plough. (*Charrue à roue.*)

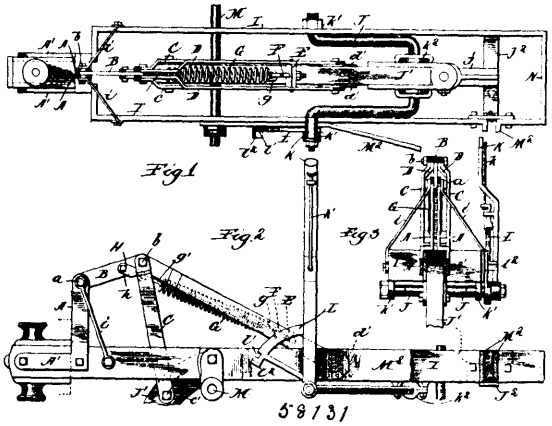

Fig 1

Fig 2

Fig 3

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The David Bradley Manufacturing Company, assignee of William Thomas McBrunnemer, both of Bradley, Illinois, U.S.A., 13th November, 1897; 6 years. (Filed 4th November, 1897.)

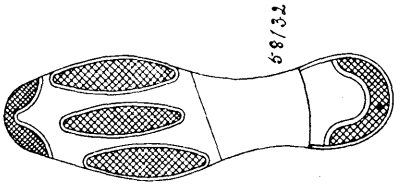
Claim.—1st. A lifting device consisting of two rigid members pivotally connected together, a support for one of said members, and a spring acting to move said members to change their relative angular position, substantially as described. 2nd. A lifting device, consisting of two pivotally connected members, one suitably fulcrumed and the other connected to the object to be lifted, and a spring acting to move said member to change their relative angular position, substantially as described. 3rd. The combination with a machine frame and a furrow-opener beam, of a member pivotally supported on said frame, a member pivoted to the first member and connected with the furrow-opener beam, and a spring which acts to move said members to change their relative angular position, substantially as described. 4th. The combination in a plough, of a machine frame, a furrow opener pivotally carried by said frame, means for preventing downward inclination of the furrow opener, and separate means for holding the furrow opener down in operative position, substantially as described. 5th. The combination, in a plough, of a machine frame, a beam carried by said frame, a furrow opener carried by said beam, a limit stop carried by the frame and acting to prevent downward inclination of the furrow opener, and means for locking the furrow-opener beam to said stop, substantially as described. 6th. The combination, in a plough, of a machine frame, a beam pivotally supported by said frame, a plough carried by said beam, a rigid stop carried by the frame, and means for holding the plough beam down upon said stop, substantially as described. 7th. The combination, in a plough, of a machine frame adapted to be connected to the draft device, a furrow-opener connected to said frame, the draft being transmitted through the frame to the furrow opener, means for lifting the furrow opener, and means independent of the lifting mechanism for preventing downward inclination of the furrow opener, substantially as described. 8th. The combination, in a plough, of a machine frame adapted to be connected to the draft device, a plough beam pivotally supported by said frame, the draft being transmitted through said machine frame to said plough beam, means for lifting the plough and beam, and a stop independent of the lifting mechanism for preventing downward motion of the front end of the plough beam, substantially as described. 9th. The combination, in a plough, of a frame, a draft device connected to the frame, a furrow-opener, a beam carrying the furrow-opener and pivotally mounted upon the frame, means for raising and lowering the furrow-opener, and means for rigidly locking the beam and the frame together when the furrow-opener is in operative position, whereby downward inclination thereof is limited and the draft is transmitted thereto through the frame and beam, substantially as described. 10th. In a wheeled plough, the combination of a fulcrum post, a lifting lever pivoted thereon, forward and rearward lifting links pivoted at a common point to the lifting lever, a lifting spring connected at its forward end with the forward lifting links and at its rear end to the lifting links, substantially as described. 11th. In a wheeled plough, the combination of a lifting lever pivotally mounted on a fulcrum post, front and rear lifting links pivotally connected to the lifting lever, a spring connected with the forward lifting links by a pivot block or bar and at its rear end to the lifting lever by a pivoted connection, a plough beam pivotally connected to the lifting links, and a hand lever connected with the beam and frame, substantially as described. 12th. In a wheeled plough, the combination of a fulcrum post, a lifting lever pivotally mounted thereon, front and rear lifting links pivotally connected with the lifting lever and with the plough beam, a spring connected at its forward end with the forward lifting links and at its rear end with the lifting lever, a hand lever, attached to the frame and provided with a crank or bail connected with the plough beam, the sector L provided with engaging notches for the latch, and a limit stop for limiting the backward movement of the lever, substantially as described. 13th. In a wheeled plough, the combination of a fulcrum post, a lifting lever pivotally mounted thereon, front and rear lifting links pivotally connected with the lifting lever and with the plough beam, a spring connected at its forward end with the forward lifting links and at its rear end with the lifting lever, a hand lever attached to the frame and provided with a crank or bail connected with the plough beam, the sector L provided with engaging notches for the latch, a limit stop for limiting the backward movement of the lever, and a limit stop for limiting the downward movement of the plough beam, substantially as described. 14th. In a wheeled plough, the combination of a lifting lever pivotally mounted on the frame of said plough, lifting links pivotally connected with the lifting lever and the plough beam, and a spring connected with the forward lifting links and with the lifting lever, said spring moving with the forward lifting links giving the spring a less movement than that of said links in raising or lowering the plough beam, substantially as described. 15th. In a wheeled plough, the combination of a fulcrum post, a lifting lever, a spring connected with said lever in rear of the link pivot, links, as D, with the spring attached thereto, whereby during the movement of the parts the spring moves bodily a less distance than the movement of said links, substantially as described. 16th. As an improved lifting device, the combination of a fixed fulcrum, and lifting lever, with pivoted links, a bodily moving spring having a shorter limit of travel than the link or links, and a weight lifting beam or bar, whereby a short contraction or expansion of the spring is obtained, substantially as described.

No. 58,132. Boot and Shoe Protector.

(*Protecteur de chaussures.*)

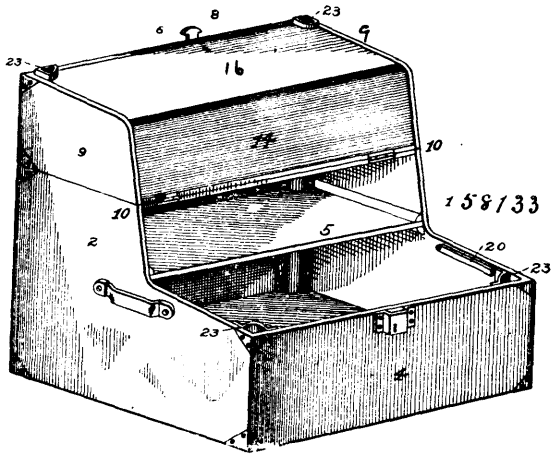
John William Hesp, Frederick Templer and William Combs Hooper, all of Adelaide, South Australia, 13th November, 1897; 6 years. (Filed 1st November, 1897.)

Claim.—1st. The herein described method of protecting the under parts of boots and shoes, consisting essentially in the application of



suitable pads of india-rubber or like slightly resilient material and affixing the same by cement, for the purposes set forth. 2nd. An india-rubber toe pad of two-horned or approximately crescent form whereby it can be expanded or contracted in affixing to accommodate a wider or narrower toe of a boot or shoe and capable of being securely affixed with cement, substantially as described and for the purposes set forth. 3rd. An india-rubber heel pad of two-horned or approximately crescent shape whereby it can be expanded or contracted in affixing to accommodate a wider or narrower heel of a boot or shoe and capable of being securely affixed with cement, substantially as described and for the purposes set forth. 4th. An india-rubber sole pad of approximately the shape illustrated so that a set of three fairly covers the tread portion of the sole with longitudinal spaces between whereby the sole pads can be adjusted to a wide or narrow sole, being affixed with cement, substantially as described and for the purposes set forth.

No. 58,133. Ventilated Receptacle.
(*Receptacle à ventilation.*)



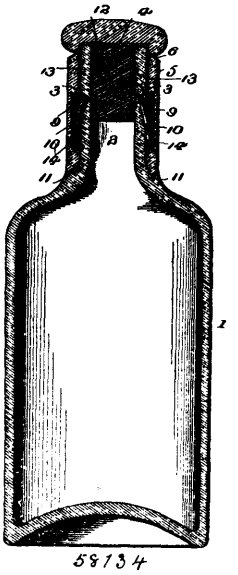
William E. Howell, Los Angeles, California, Alfred S. Gross and Leopold Kohn, both of Seatle, Washington, all in the U.S.A., 13th November, 1897; 6 years. (Filed 15th October, 1897.)

Claim.—1st. In a receptacle having a lid pivoted or hinged midway or part way of its width to the main body of the receptacle and said lid when closed with the receptacle body forming an approximately rectangular receptacle. I do not confine myself to any particular shape of the receptacle, though rectangular is preferred. 2nd. In a receptacle having a lid forming a receptacle within its walls, a hinged cover for said receptacle, and means whereby the said lid is hinged to the top of a receptacle body approximately midway or part way of the depth of the top of the receptacle body from front to rear. 3rd. In a receptacle body having an offset portion, and a lid or cover pivoted or hinged to the top of said receptacle body, approximately midway or part way of the top from front to rear, the said lid or cover constructed to close the opening formed by said offset portion. 4th. In a receptacle having an opening, a lid pivoted to close said opening, said pivot being approximately midway, or part way, of the depth of the receptacle from front to rear at its top side, and ventilating ducts at the corners of said receptacle and cover. 5th. In a receptacle to which is hinged a lid, at approximately the centre of the receptacle body from front to rear, upon the upper side thereof, the cover of said receptacle having hinged covers to be folded or unfolded, and a support pivoted upon the inside of the receptacle body to support the said covers in their unfolded position.

No. 58,134. Bottle. (*Bouteille.*)

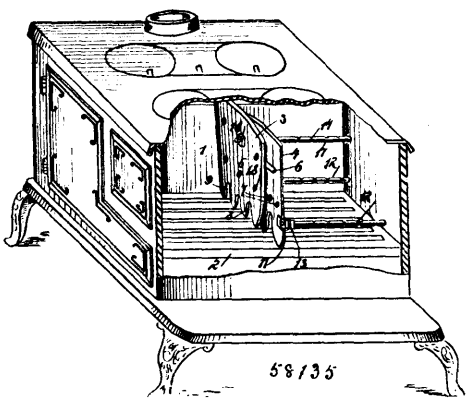
Elizabeth Moore, assignee of Elisha Moore, both of Meductic, New Brunswick, Canada, 13th November, 1897; 6 years. (Filed 27th September, 1897.)

Claim.—1st. A bottle formed with a shoulder and having a frangible cap surrounding the neck of the bottle and provided with automatic locking beams for engaging the shoulder, substantially in the manner and for the purpose set forth. 2nd. As a new article of manufacture, a frangible cap for bottles provided with the groove 7 and vertical groove 9 for the reception of a locking spring to engage



the head of a bottle, substantially as herein explained. 3rd. A bottle formed with the shoulders 3 and 11 presented respectively downward and upward, and a cap abutting the lower shoulder and having an automatic device engaging the upper shoulder, substantially in the manner and for the purposes set forth. 4th. As a means for closing bottles, the frangible cap 5 formed with the semi-annular groove 7 and the vertical recesses 9 in combination with a self-locking spring formed with the semi-annular portion 8 located in the groove 7 and the locking dogs 10 working in and out in recesses 9 and adapted to engage a shoulder on the neck of the bottle, substantially as set forth. 5th. As a means for closing bottles, a cap having a frangible top and interior recesses to receive an automatic locking spring, a suitable automatic locking spring in said recesses, and an unlocking bail having a transverse portion extending across the top of the bottle within reach after the top is removed and downwardly extending portions having eyes in engagement with the locking spring to force the same out of engagement with the bottle, and adapted to engage in the recess of the cap to remove the latter after disengaging the spring, substantially as herein explained.

No. 58,135. Fire Box Partitions for Cooking Stoves and Ranges. (*Cloison de boîte à feu pour poêles de cuisine.*)

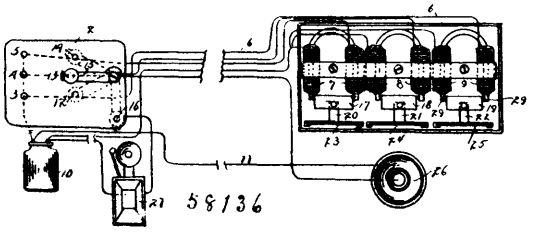


Francis May Hamilton, Baltimore, Maryland, executrix of the will of William G. Hamilton, late of Colorado Springs, Colorado, all in the U.S.A., 13th November, 1897; 6 years. (Filed 27th October, 1897.)

Claim.—1st. A partition for a fire-box, consisting of two sections adjustably connected together, and a rod or rods projecting therefrom to engage one of the end walls of the fire box, substantially as described. 2nd. A partition for a fire-box, consisting of two sections adjustably connected together and having a series of draft openings at their lower ends, and a rod or rods detachably connected to the partition to engage one of the end walls of the fire-box, substantially as described. 3rd. A partition for a fire-box, consisting of two sections adjustably connected and having a series of spaced teeth in

their lower ends, said teeth being transversely notched to facilitate the breaking off of their ends for the purpose of adjusting, and the open spaces between the teeth serving as draft openings, substantially as described. 4th. A partition for fire boxes, consisting of two sections, one of which sections has an elongated opening in its upper portion, and a series of perforations in its lower portion arranged in a line parallel with said opening, a device adapted to pass through either of said perforations and engage the other section to lock the lower ends of the section together, a threaded rod passing through the said elongated opening at an opening in the other section, and nuts on said threaded rod to engage the opposite faces of the two sections and clamp them together, substantially as described. 5th. A partition for fire-boxes, consisting of two sections adjustably connected and adapted to be supported on the grate, engaging the front and rear walls of fire-box and a rod or rods projecting from said sections to engage one of the end walls of the fire-box, said rods being notched at intervals in their length to facilitate breaking portions of them to permit of adjustment, substantially as specified. 6th. A partition for fire-boxes, consisting of two sections, one having both sides inclined, the other having both sides straight, whereby the upper end of one section is wider than its lower end to permit of adjusting the two sections relatively to each other, and means for locking them together to form a partition of proper width at top and bottom, substantially as described. 7th. The combination of the two adjustable sections, one of which is provided with recesses on one of its faces, and perforations in said recesses, and a rod or rods adapted to pass through said perforations and threaded to receive nuts countersunk with said recesses, substantially as described.

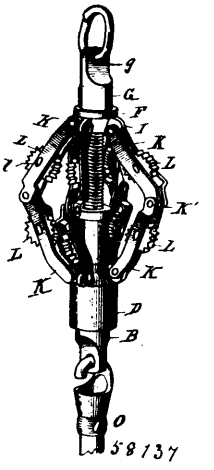
No. 58,136. Electric Call and Call Answering Apparatus. (*Sonnerie électrique.*)



Edward H. Owen, Charles N. Williams and Fred H. Donaldson, all of Garvanza, California, U.S.A., 15th November, 1897; 6 years. (Filed 3rd June, 1897.)

Claim.—1st. The combination in an electric call and call answering apparatus, of a case or holder, a plurality of electric-magnets secured therein, an armature pivoted in juxtaposition to the poles of each magnet and provided with an attached sign or visual signal device which is moved in a circular path by the motion of the armature, a switch-board having a plurality of contact-pieces and a plurality of push-buttons electrically connected with said contact-pieces, a switch movable into engagement with any one of said contact-pieces, a call bell electrically connected with the switch, an electric generator, an electric circuit including the electro-magnets, the switch, the contact-pieces, the push-buttons, and the call bell, and a device remote from the signs or visual signal devices, and switch-board for making and breaking the circuit independently of said push-buttons, substantially as and for the purpose described. 2nd. The combination in an electric call, and call answering apparatus, of a plurality of electro-magnets, an armature pivoted to the poles of each magnet, and provided with an attached sign or visual signal device, which is moved in a circular path by the motion of the armature, a switch-board having a plurality of contact-pieces, and a plurality of push-buttons, a pivoted switch-lever movable into engagement with any one of said contact-pieces, a call bell electrically connected with the switch-lever, an electric generator, an electric circuit including the electro-magnets, the switch-lever, the contact-pieces, the push-buttons and the call bell, and a push-button or buttons, for making and breaking the electric circuit, substantially as and for the purposes described. 3rd. The combination in an electrical call, and call answering apparatus, of a suitable case or holder, a plurality of electro-magnets secured thereto, an armature pivoted in operative connection with the poles of each magnet and provided with a projecting arm, a sign or visual signal device secured to the projecting arm of each armature and moved in the arc of a circle by the motion of such armature, a switch-board provided with a plurality of contact-pieces, and a plurality of push-buttons, a pivoted switch-lever movable into engagement with any one of the contact-pieces, and a plurality of push-buttons, a call bell electrically connected with the switch-lever, an electric generator, an electric circuit including the magnets, the switch-lever, the contact-pieces, the push-buttons, and the call bell, and a push-button or buttons, for making and breaking the circuit at a point distant from the sign or visual signal devices, substantially as and for the purposes described. 4th. The combination in an electrical call, and call answering apparatus, of a plurality of electro-magnets, each having projecting pole pieces, an armature pivoted at its corner portions, directly to and swinging in the space between the two projecting pole pieces of each magnet, a sign or visual signal device which is moved in a circular path by the motion of the armature between the pole pieces of each magnet, a switch-board having a plurality of contact-pieces and a plurality of push-buttons, a switch-lever movable into engagement with any one of said contact-pieces, an audible signal electrically connected with said switch-lever, an electric generator, an electric circuit including the electro-magnets, the switch-lever, the contact-pieces, the push-buttons, and the audible signal, and a device remote from the visual signal devices for making and breaking the circuit, substantially as described. 5th. The combination in an electrical call, and call asnwering apparatus, of a plurality of electro-magnets, an armature pivoted in juxtaposition to the poles of each magnet and provided with an attached sign or visual signal device which is moved in a circular path by the motion of the armature, a switch-board having a plurality of contact-pieces and a plurality of independent push-buttons electrically connected with said contact-pieces, a switch, common to all of the contact pieces and movable over the same into engagement with any one thereof, a call bell electrically connected with the switch, an electric generator, an electric circuit including the electro-magnets, the switch, the contact-pieces, the independent push-buttons and the call bell, and a push-button or buttons, for making and breaking the said electric circuit independently of said push-buttons, substantially as and for the purposes described.

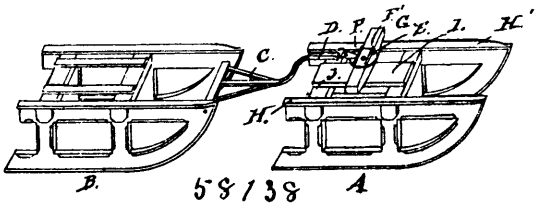
No. 58,137. Flue Cleaner. (*Nettoyeur de tubes.*)



Frank C. Williams, Bellefonte, Pennsylvania, U.S.A., 15th November, 1897; 6 years. (Filed 4th August, 1897.)

Claim.—1st. An improved flue-cleaner, comprising an expansible support, and a series of rotating cutters mounted in said expansible support, said cutters being arranged in parallel order and oblique to the axis of the cleaner, substantially as shown and described. 2nd. In a flue-cleaner, a central rod or bolt, the expansible support arranged thereon, comprising collars and the toggle-arms or levers uniting said collars, said toggle-arms or levers carrying the rotating cutters, the coiled spring arranged between one of the collars and the head of the bolt, and a screw-cap or nut arranged upon the opposite end of the bolt, substantially as shown and described. 3rd. An improved cleaner, comprising a central bolt or rod, the zigzag toggle-arms, the collars to which said arms are connected, the rotating cutters carried by said arms, substantially as shown and described. 4th. In a flue-cleaner, the combination with the central rod or bolt having the head at one end and threaded at the opposite end, the collars arranged upon said bolt, the parallel toggle-arms or levers, rotary cutters pivoted on said arms or levers, the coil-spring and the screw-cap, all arranged substantially as shown and described. 5th. In a flue-cleaner, the combination with the central rod or bolt, having a head at one end and threaded at the other end, the collars arranged upon said bolt, the coil-spring arranged between one of the said collars and the head of bolt, the screw-cap or nut arranged upon the opposite end of bolt, swivel connection attached to said cap or nut, the toggle-arms or levers composed of parallel zigzag members pivotally connected to the said collars and having a knuckle or joint, and the serrated rotary cutters pivotally mounted between the members upon both sides of the knuckle or joint, substantially as shown and described. 6th. In a flue-cleaner, the combination with the central rod or bolt, having a head at one end and threaded at the opposite end, a collar sliding upon the head and another collar secured upon the threaded end of the bolt, parallel toggle-arms connecting the said collars, the rotary cutters pivoted to the said toggle-arms, coil-spring arranged between the sliding collar and head, the screw-cap, the sliding sleeve arranged upon the central bolt or rod, and a regulating nut arranged also upon said bolt or rod upon the threaded portion thereof, said regulating nut and sleeve being adapted to limit the downward or expansive movement of the toggle-arms, substantially as shown and described.

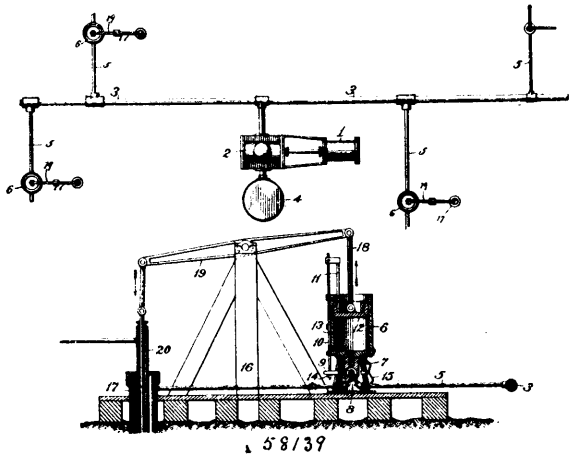
No. 58,138. Bob-Sleigh. (*Traineau accouplé.*)



David Merklinger, Milverton, Ontario, Canada, 15th November, 1897; 6 years. (Filed 5th November, 1897.)

Claim.—1st. The combination of the plate E, with the hole *e*, with or without the flanges F, F, secured to the sand board G, and bolstered by a king-bolt, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the plate E, with the hole *e*, with or without the flanges F, F', attached to the swivel clevis D on the end of the reach C, and secured to the sand board G, and bolstered by a king-bolt, substantially as and for the purpose hereinbefore set forth.

No. 58,139. Plants for Operating Motors.
(*Installation pour actionné un moteur.*)



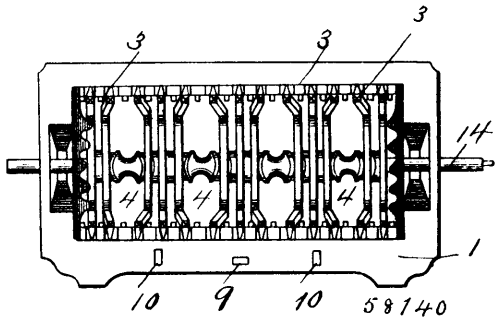
Miles Williams Quick, Titusville, Pennsylvania, U.S.A., 15th November, 1897; 6 years. (Filed 5th November, 1897.)

Claim.—1st. The combination of an exhaust pump, a single acting cylinder connected to the exhaust pump, and a valve mechanism controlling the connection between the cylinder and exhaust pump and constructed to permit the inflow of fluid in such quantity as to only partially destroy the vacuum in the cylinder, substantially as set forth. 2nd. The combination of an exhaust pump, a single acting cylinder connected to the exhaust pump, a pump rod or other weight connected to the piston of the cylinder, and a valve mechanism controlling the connection between the cylinder and exhaust pump and constructed to permit only such inflow of fluid to the cylinder as will reduce the vacuum to a point where the weight will shift the piston against atmospheric pressure, substantially as set forth. 3rd. The combination of an exhaust pump, a single acting cylinder connected to the exhaust pump, and to a gas supply, a pump rod or other weight connected to the piston of the cylinder, and a valve mechanism controlling the connection between the cylinder, the exhaust pump and the gas supply, substantially as set forth. 4th. In a plant for pumping oil wells, the combination of a central exhaust apparatus, two or more single acting cylinders located at the wells to be pumped, and connected to the exhaust apparatus, the pump rods of said wells being connected to the pistons of the cylinders, valve mechanisms controlling the flow of fluid from and to the cylinders, and connections from one or more of the cylinders to a gas supply, substantially as set forth.

No. 58,140. Stove Grate. (*Grille de poêles.*)

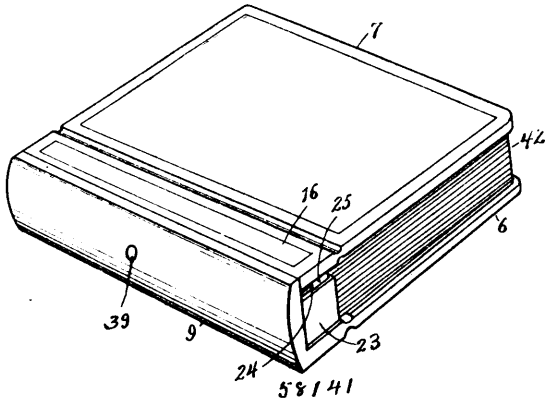
John Morrill and James Albert Cowan, both of Bangor, Maine, U.S.A., 15th November, 1897; 6 years. (Filed 21st October, 1897.)

Claim.—1st. In a stove-grate, the combination of two series suspended grate-bars, the bars of which are alternately arrang and means for swinging the bars of one series to and from the bars of the other series. 2nd. The combination of a grate composed of



bars arranged in groups of three, the middle bar of which is maintained stationary, and the side bars adapted to be swung to and from the stationary bar, and means for moving the side bars of the groups together, first toward and then away from the stationary bars. 3rd. The combination, in a stove-grate, of two series of suspended grate-bars, the bars of which are alternately arranged, and a shaker-bar provided with cam-grooves, whereby the bars of one series are swung to and from the bars of the other series. 4th. The combination, in a stove-grate, of two series of suspended grate-bars, the bars of which are alternately arranged, and a shaker-bar provided with rests for the bars of one series, for holding them stationary, and with cam-grooves for swinging the bars of the other series to and from the stationarily-held bars, 5th. A stove-grate consisting of a suitable frame provided with notches or recesses at its inner side edges, two series of independent depending grate-bars hung in said notches or recesses and adapted to swing therein, and a rotatable shaker-bar provided with a series of diverging cam-grooves in which the lower portions of the grate-bars of one series are adapted to rest, whereby the rocking of the shaker-bar will cause said grate-bars to swing to and fro. 6th. A stove-grate, consisting of a suitable frame provided with notches or recesses at its inner side edges, a series of independent depending grate-bars hung in said notches or recesses and adapted to swing therein, and a rotatable shaker-rod provided with a series of grooves 15 and a series of diverging cam-grooves to receive the lower portions of the grate-bars, as and for the purpose specified. 7th. A stove-grate consisting of a suitable frame provided with notches or recesses at its inner side edges, a series of independent depending grate-bars hung in said notches or recesses and adapted to swing therein, a guard provided with air-spaces situated at each inner end of the frame, and a rotatable shaker-bar provided with grooves 15 and diverging cam-grooves to receive the horizontal portions of the grate-bars, as and for the purpose specified. 8th. A stove-grate consisting of a suitable frame provided with notches or recesses at its inner edges, a series of independent depending grate-bars suspended in said notches or recesses and adapted to swing therein, a guard provided with air-spaces situated at each inner end of the frame, means for holding the grate-bars against accidental displacement, and a rotatable shaker-bar provided with grooves 15 and diverging cam-grooves to receive the horizontal portions of the grate-bars, as and for the purpose specified.

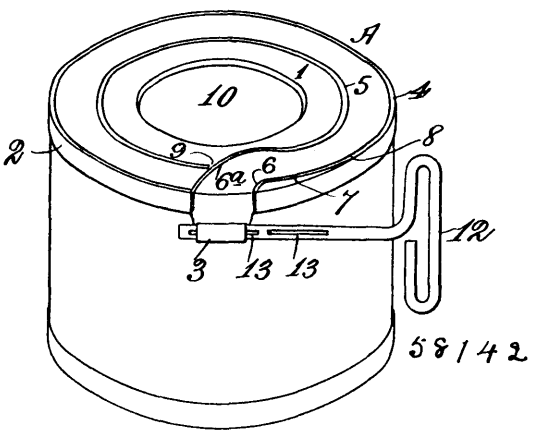
No. 58,141. Temporary Binder. (*Reliure temporaire.*)



Henry C. Miller and Julius Bauer, both of Milwaukee, Wisconsin, U.S.A., 15th November, 1897; 6 years. (Filed 18th October, 1897.)

Claim.—1st. In a temporary binder, the combination of upper and lower side-pieces, revolubly-telescoping parts extending respectively from the upper and lower side-pieces, and adapted to move one within the other as the side-pieces are brought closer together or further apart, and leaves having openings near their rear edges, with narrower slots extending from said openings to the rear edges, the telescoping parts adapted to be locked against withdrawal out of the openings of the leaves when said telescoping parts are turned in one direction, and to be capable of withdrawal from the narrower slots of the leaves when turned in the opposite direction. 2nd. In a temporary binder, the combination of upper and lower side-pieces, telescoping parts extending respectively from the upper and lower side-pieces, and adapted to move one within the other and to be given a partial revolution in either direction, and leaves having openings near their rear edges, with narrower slots extending from said openings to the rear edges, the telescoping parts adapted to be locked against withdrawal from the openings of the leaves when said telescoping parts are turned in one direction, and to be capable of withdrawal through the narrow slots of the leaves when turned in the opposite direction. 3rd. In a temporary binder, the combination of upper and lower side-pieces, one of said pieces provided near its rear edge with a vertical opening intersecting a horizontal recess, a tubular post provided at or near one end with an annular recess, a longitudinal strip fitting in the horizontal recess of one of the side-pieces, and provided with an opening registering with the opening of said side-piece, the bordering edge of said opening of the strip fitting in the annular recess of the post, a vertical bar fitting in a vertical recess of the other side-piece of the cover, the other end of said bar adapted to telescope into the tubular post, a longitudinal strip fitting in a horizontal recess with which the vertical recess communicates, said strip provided with an opening registering with said vertical recess, the bordering edge of the opening of the strip fitting the annular recess of the bar, and leaves provided near their rear edges with openings, and with narrower slots leading from the openings to the rear edges of the leaves, said openings adapted to register with the telescoping tubular post and bar, said telescoping parts adapted to be locked against withdrawal from the openings of the leaves when said telescoping parts are turned in one direction, and to be capable of withdrawal from the narrower slots of the leaves when turned in the opposite direction. 4th. In a temporary binder, the combination of upper and lower side-pieces, one of said side-pieces provided at its rear edge with a vertical opening intersecting a horizontal recess, a tubular post provided at or near one end with flanges forming a recess therebetween, a longitudinal strip fitting in the horizontal recess and provided with an opening registering with the opening of the side-piece, the bordering edge of said opening of the strip fitting in the recess formed between the flanges of the tubular post, a vertical bar rectangular in cross-section and fitting at one end in a vertical recess in the other side-piece of the cover, and provided with flanges having a space therebetween to form a recess, and said bar having its opposite end telescoping into the tubular post, a longitudinal strip fitting in the horizontal recess with which the vertical recess communicates, said strip provided with an opening registering with said vertical recess, the bordering edge of said opening fitting the recess formed between the flanges of the bar, a lug projecting from one of the longitudinal strips and adapted to act against shoulders formed upon one of the flanges of a post or bar when said post and bar are turned together in either direction, and leaves, each provided near its rear edge with an opening and with a narrower slot extending from said opening to the rear edge of the leaf, said opening adapted to register with the telescoping bar and tube, said telescoping parts adapted to be locked against withdrawal from the openings of the leaves when said telescoping parts are turned in one direction, and to be capable of withdrawal from the narrow slots of the leaves when turned in the opposite direction. 5th. The combination of parallel longitudinal strips provided with a registering opening or openings, a tubular post or posts extending into the opening or openings of one of the strips, and provided on each side of said strip with flanges, and a bar or bars extending into the opening or openings of the other longitudinal strip, and provided on opposite sides of said strip with flanges, said bar or bars telescoping into the tube or tubes, and the two parts adapted to be revolved together. 6th. The combination of parallel longitudinal strips, a tubular post or posts, and a bar or bars telescoping into the post or posts, said telescoping parts being revoluble in the parallel longitudinal strips. 7th. In a temporary binder, the combination of side-pieces constituting the cover of the binder, a plate extending from one of the side-pieces and provided with a toothed edge, a bar having teeth at one end, and at its upper edge provided with a projecting lug, and a pivoted dog also provided with a projecting lug adapted to engage on either side of the lug of the bar to normally prevent longitudinal movement of the bar, said dog adapted to be raised by a key or analogous device, so as to raise the lug of the dog out of engagement with the lug of the bar, whereby said bar may be moved in either direction, its movement in one direction causing its teeth to engage the teeth of the plate, and its movement in the opposite direction causing its teeth to be disengaged from the teeth of the plate, the final withdrawal of the key permitting the dog to resume its normal position.

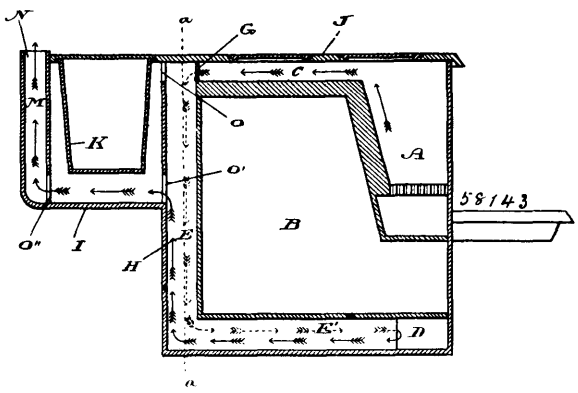
No. 58,142. Can Head. (*Fermeture de boîtes en fer blanc*)



Benjamin W. Morfoot, Chicago, Illinois, U.S.A., 15th November, 1897; 6 years. (Filed 3rd July, 1897.)

Claim.—As a new article of manufacture, a key opening can made substantially as shown and described in the drawings and specification hereto annexed.

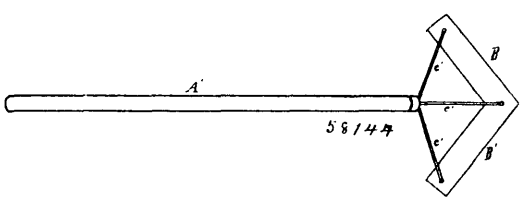
No. 58,143. Cook Stove. (*Poêle de cuisine.*)



John Cunningham, Toronto, Ontario, Canada, 15th November, 1897; 6 years. (Filed 2nd November, 1897.)

Claim.—1st. The combination of a cook stove, a water tank attached to the stove having a smoke chamber surrounding the boiler, in circulation with the combustion ducts of the cook stove, and an outlet from the smoke chamber, substantially as specified. 2nd. The combination of a cook stove, a water tank attached to the stove having a smoke chamber surrounding the boiler, in circulation with the combustion ducts of the cook stove, an outlet from the smoke chamber, and a smoke duct attached to the water tank, in circulation with the smoke chamber, and a collar fitted to the smoke duct, substantially as specified. 3rd. In a cook stove the combination of the combustion ducts, and a smoke collar at the extreme edge of the stove in circulation with the combustion ducts, substantially as specified.

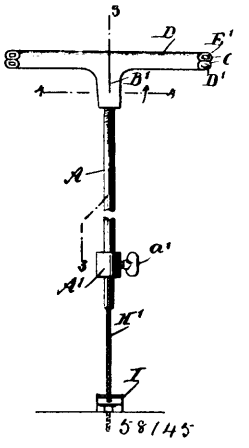
No. 58,144. Weeding hoe. (*Sarcloir.*)



Denis Gerin Lajoie, Yamachiche, Quebec, Canada, 15th novembre, 1897; 6 ans. (Déposé 28e septembre 1897.)

Résumé.—Un sarcloir composé d'une plaque angulaire, a tranchant B, B, ayant les bras C, C, C, unis à leur parties supérieure et un manche A, le tout tel que décrit.

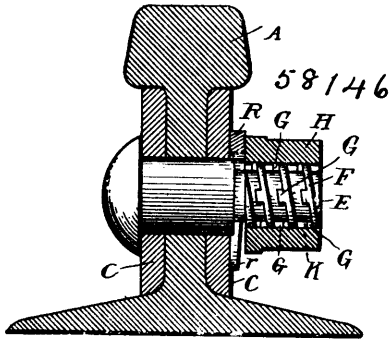
No. 58,145. Coat Holder. (*Porte-habits.*)



Robert James Stuart, New Hamburg, New York, U.S.A., 15th November, 1897; 6 years. (Filed 5th November, 1897.)

Claim.—1st. A coat holder having two horizontally extending bars pivoted one upon the other, one of said bars having curved pivot bearings open on one side and extending about journals on the other, two pairs of co-operating arms or fingers attached to the ends of each bar and extending forwardly, a rearwardly extending arm upon the inner one of said bars, and a spring acting on said bar to close the fingers and to hold the pivots of the bars in engagement, substantially as described. 2nd. A coat holder, comprising two horizontally extending bars having forwardly projecting fingers on each end, one of said bars lying within and pivoting upon curved bearings or hooks projecting from the other, and a spring acting upon the inner of said bars to hold the same in its bearings and to clamp the fingers together, substantially as described. 3rd. A coat holder, comprising two horizontally extending bars having forwardly extending clamping fingers at each end, one of said bars having a curved bearing-strip extending partially around the other, a rearwardly extending arm attached to the inner bar, a spring acting thereon to clamp the fingers togther, a standard or support connected to the outer bar, consisting of a base having one front standard and two separated rear standards connected at their upper ends with the body of the bar, whereby the inner bar may be inserted and removed at will, substantially as described. 4th. A coat holder, comprising two horizontally extending bars having forwardly extending clamping fingers at each end, one of said bars having curved bearing-strips extending partially around the other, a spring acting upon said bars to clamp the fingers together, a standard or support connected to the outer bar, consisting of a base having one front and two separated rear standards connected at their upper ends with the body of the bar, whereby the inner bar may be inserted and removed at will, substantially as described. 5th. A coat holder, comprising two horizontally extending bars having forwardly extending clamping fingers at each end, one of said bars having curved bearing-strips extending partially around the other, a rearwardly extending arm attached to the inner bar, a standard or support connected to the outer bar, consisting of a base having one front standard, two separated rear standards connected at their upper ends with the body of the bar, and a compressed spiral spring bearing against the under side of the rearwardly extending arm and the base of the standard, substantially as described. 6th. A coat holder, having two horizontally extending bars pivoted upon one another, one of the said bars having curved pivot bearings open on one side and extending about journals on the other, two pairs of co-operating arms or fingers attached to the ends of each bar and extending forwardly, a rearwardly extending arm upon the inner one of the said bars, a compressed spiral spring engaging the under surface of the rearwardly extending arm and the base of the arm supports, and a retaining pin passed therethrough, substantially as described. 7th. A coat holder, comprising two horizontally extending bars having forwardly projecting fingers on each end, one of said bars lying within and pivoting upon curved bearing-hooks or strips projecting from the other, a spring acting upon the inner of said bars to hold the same in its journals and to clamp the fingers together, and a foot lever and connections to said bars to open the clamping fingers, substantially as described. 8th. A coat holder, comprising two horizontally extending bars having forwardly projecting fingers on each end, one of said bars lying within and pivoting upon curved bearing-hooks or strips projecting from the other, a spring acting upon the inner of said bars to hold the same in its journals and to clamp the fingers together, a foot lever and connections to said bars to open the clamping fingers, and means for adjusting the height of said fingers, substantially as described. 9th. A coat holder, comprising two horizontally extending bars having forwardly extending clamping fingers at each end, one of said bars having a curved bearing-strip extending partially around the other, a rearwardly extending arm attached to the inner bar, a spring acting thereon to clamp the fingers together, a standard or support connected to the outer bar consisting of a base having one front standard, two separated rear standards connected at their upper ends with the body of the bar, whereby the inner bar may be inserted and removed at will, and means for adjusting the height of the said fingers, substantially as described. 10th. A coat holder, comprising two horizontally extending bars having forwardly extending clamping fingers at each end, one of said bars having a curved bearing-strip extending partially around the other, a rearwardly extending arm attached to the inner bar, a spring acting thereon to clamp the fingers together, a standard or support connected to the outer bar consisting of a base having one front standard, two separated rear standards connected at their upper ends with the body of the bar, whereby the inner bar may be inserted and removed at will, a foot lever and connections to said bars to open the clamping fingers, substantially as described. 11th. A coat holder, comprising two horizontally extending bars having forwardly extending clamping fingers at each end, one of said bars having curved bearing-strips extending partially around the other, a rearwardly extending arm attached to the inner bar, a standard or support connected to the outer bar consisting of a base having one front standard, two separated rear standards, connected at their upper ends with the body of the bar, a compressed spiral spring bearing against the under side of the rearwardly extending arm and the base of the standard, a foot lever, connections to said bars to open the clamping fingers, and means for adjusting the height of the said fingers, substantially as described.

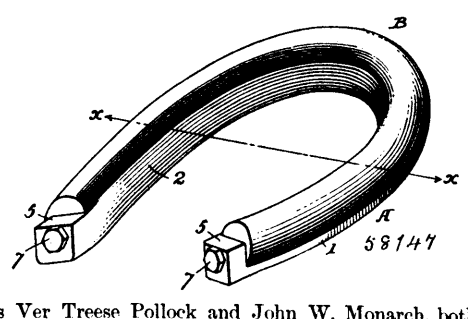
No. 58,146. Nut Lock. (*Arrête-écrou*)



Octavius Sutton Ebert, Galesburg, Illinois, U.S.A., 15th November 1897; 6 years. (Filed 8th November, 1897.)

Claim.—1st. The combination with a bolt, cylinder or other member having a threaded portion with lugs out of the plane of its threads, of a head cap-nut having broken threads, a spring interposed between the outer end of the bolt and the inner wall of the end of the nut, and a locking device interposed between the inner end of the nut and the fish-plate, substantially as shown and described. 2nd. The combination with a bolt, cylinder or other member having a threaded portion with lugs out of the plane of its threads, combined with a nut having broken threads, means for yieldingly forcing the nut in the direction of the length of the bolt, and a U-shaped wedge for permanently locking the nut, substantially as described. 3rd. In a nut-lock, the combination with a bolt passed through a railway-rail and a fish-plate and threaded a portion of its length, a series of lugs in rows on the same side of the thread of the bolt, and a nut provided with a series of broken threads designed to work on the threads of the bolt and to be locked thereto in the manner described, of a U-shaped washer designed to be interposed between the nut and the fish-plate, substantially as shown and described.

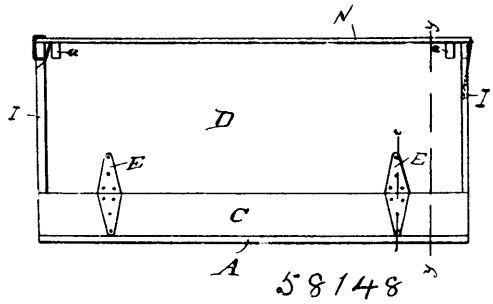
No. 58,147. Horse Shoe. (*Fer à cheval.*)



Charles Ver Treese Pollock and John W. Monarch, both of Des Moines, Iowa, U.S.A., 15th November, 1897; 6 years. (Filed 8th November, 1897.)

Claim.—1st. A horse-shoe comprising a base, a yielding tread, means extending longitudinally of the tread for securing it to the base, and adjusting devices for tightening said longitudinal securing means, substantially as described. 2nd. A horse-shoe comprising a base having a continuous flange at its inner edge, the outer face of which is inwardly and upwardly inclined, a yielding tread, means extending longitudinally of the tread for securing it against the flange, and adjusting devices for tightening said longitudinal securing means, substantially as described. 3rd. A horse-shoe comprising a base adapted to be attached to a hoof, a yielding tread, means for securing the tread to the base, said means being connected to but detachable from the tread, and adjusting devices for tightening the tread upon the base, substantially as described. 4th. A horse-shoe comprising a base having a flange and provided at its ends with perforated lugs, of a tread, a flexible metallic securing rod or plate connected to the tread provided with threaded ends adapted to engage the perforations of the lugs, and nuts for engaging the threaded ends for securing the tread upon the base, substantially as described. 5th. A horse-shoe comprising a base, a yielding tread, threaded metallic portions connected to the tread, and nuts for engaging said portions to secure the tread upon the base, substantially as described. 6th. A horse-shoe comprising a curved base, a flange at its inner edge and perforated lugs at its ends, a yielding tread provided with a longitudinal flexible metallic rod having projecting threaded ends adapted to engage the perforations of the lugs, and securing nuts for engaging the threaded ends, substantially as described. 7th. A horse-shoe comprising a curved base having perforated lugs at its ends, and a flange at its inner edge, the outer face of which is upwardly and inwardly inclined, a yielding tread provided near its base with a longitudinal flexible metallic rod having projecting threaded ends adapted to engage the perforations of the lugs, and securing nuts for engaging the threaded ends, substantially as described. 8th. A horse-shoe comprising a curved base having a flange at its inner edge and lugs at its ends provided with conical perforations, a yielding tread provided with a longitudinal flexible metallic rod having projecting threaded ends adapted to engage the perforations of the lugs and conical nuts for engaging the threaded ends of the rod, substantially as described. 9th. A horse-shoe comprising a base, a sectional yielding tread having solid wearing portions intermediate the sections of the tread, and a rod extending through the sections and wearing portions of the tread to the base, substantially as described. 10th. A horse-shoe comprising a base, a yielding tread, threaded metallic portions connected to the tread, and nuts countersunk on the base for securing the tread upon the base, substantially as described.

No. 58,148. Folding Box. (*Boite pliante.*)



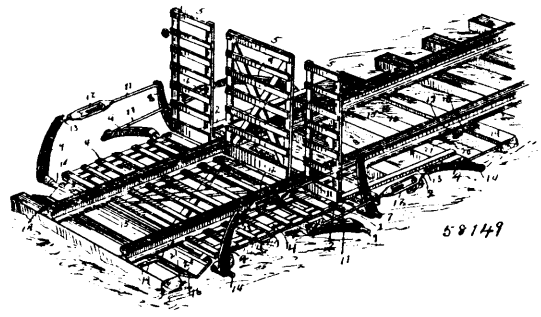
John H. Kreuziger, Milwaukee, Wisconsin, U.S.A., 15th November, 1897; 6 years. (Filed 8th November, 1897.)

Claim.—In a folding box, the combination with the bottom piece A of the folding end pieces I I, respectively secured to the respective ends of said bottom piece by hinges B B, central folding partition F hinged at its lower edge to said bottom piece and adapted to be folded in either direction over and upon the same, side strips C C rigidly affixed at their lower edges to the sides of said bottom piece, folding side pieces D D, respectively hinged at their lower edges to the upper edges of said side strips C C, and adapted to be folded over and upon said folding end pieces, U-shaped retaining brackets H affixed near the upper edges to the respective side pieces and adapted to engage the respective sides of said partition and hold the same in a vertical position, and two pairs of fastening-clamps K K respectively secured by pivots to the upper edges of said end pieces and adapted, when the box is set up, to engage the upper edges of the respective sides pieces, substantially as and for the purpose specified.

No. 58,149. Cattle Guard. (*Garde-bétail.*)

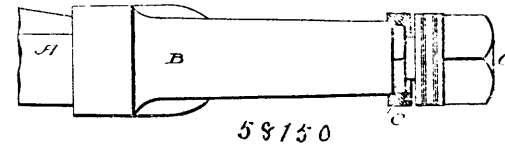
Slaughter L. Spencer, Roanoke, Virginia, U.S.A., 15th November, 1897; 6 years. (Filed 8th November, 1897.)

Claim.—1st. In a railway cattle-guard, the combination of a pintle-rod, a pair of gates composed of sections, and arranged on the said pintle-rod, transversely disposed rods connecting the sections of the gates and downwardly off-set from the pintle-rod, arms carried by the connecting-rods, and tilting platforms connected with said arms, substantially as and for the purpose set forth. 2nd. In a railway cattle-guard, the combination of a transverse pintle-rod, a pair of upwardly extending gates composed of sections and mounted



on the said pintle-rod, transverse rods connecting the sections of the gates and downwardly off-set from the pintle-rod, arms mounted on the connecting-rods, tilting platforms provided with arms and located at opposite sides of the gates, and adjustable connections between the said arms of the gates and the platforms, substantially as and for the purpose described. 3rd. In a railway cattle-guard, the combination of a transverse pintle-rod, a pair of independently-swinging gates mounted on the said pintle-rod, and composed of sections the downwardly off-set rods connecting the sections of the gates, the diverging arms mounted on the connecting-rods and inclined upward and outward, tilting platforms provided with inwardly inclined upwardly-extending arms, and turnbuckle connections between the arms of the platform, and the arms of the connecting-rods, substantially as and for the purpose described. 4th. In a railway cattle-guard, the combination of a transverse pintle-rod, the oppositely disposed gate-sections provided with eyes mounted on the pintle-rod, said eyes having depending lugs extending below the pintle-rod, the transversely disposed connecting-rods secured to the lugs of the eyes, arms mounted on the connecting-rods, and tilting platform provided with arms connected with those of the connecting-rods, substantially as described. 5th. In a railway cattle-guard, the combination of a gate, a tilting platform comprising two sections detachably hinged at their adjacent edges, and extending entirely across the space between two cross-ties, one of the sections being provided adjacent to its outer edge with slots, loops mounted on the cross-ties and linked into the said slots and supporting the adjacent section, and connections between the other section and the gate, substantially as described.

No. 58,150. Axle Nut Lock. (*Arrête-écrou pour essieux.*)



Octavius Sutton Ebert, Galesburg, Illinois, U.S.A., 15th November, 1897; 6 years. (Filed 8th November, 1897.)

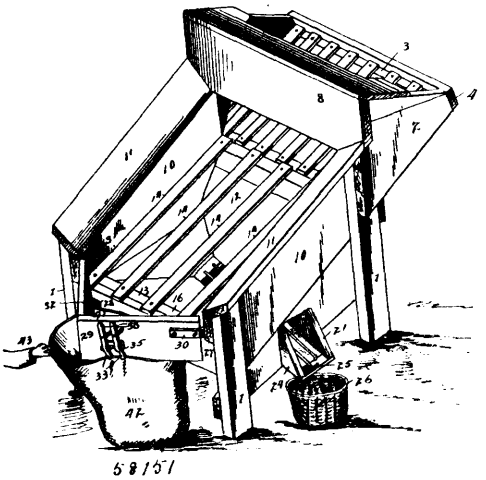
Claim.—1st. The combination with a bolt, cylinder or other member having a threaded portion with lugs out of the plane of its threads, of a headed cap-nut having broken threads, and a spring interposed between the outer end of the bolt and the inner end of the head of the cap-nut, substantially as and for the purpose specified. 2nd. In an axle-nut lock, the combination with the spindle having a portion of its length screw-threaded with integral lugs on said threads, a shouldered portion of the spindle hexagonal in outline, a washer having a similarly-shaped aperture adapted to fit upon the said shoulder, an axle-box mounted on the spindle, and a nut having a series of broken-thread portions and a spring carried within the nut and adapted to bear against the end of the spindle, substantially as shown and described. 3rd. In an axle-nut lock, the combination with a spindle, threaded a portion of its length and having off-sets or lugs on the same sides of the threads and in rows, a shouldered portion of the spindle, a washer having a hexagonal aperture therein, and a recessed portion adapted to be seated over the edge of the shoulder, an axle-box, a nut having the broken threads, as described, and the spring interposed between the inner end of the nut and a portion of the spindle, all substantially as shown and described.

No. 58,151. Potato Sorter and Sacker.
(*Appareil à trier et mettre en sac les patates.*)

Douglas Charles Wetherhead, Sabin, Minnesota, U.S.A., 16th November, 1897; 6 years. (Filed 8th November, 1897.)

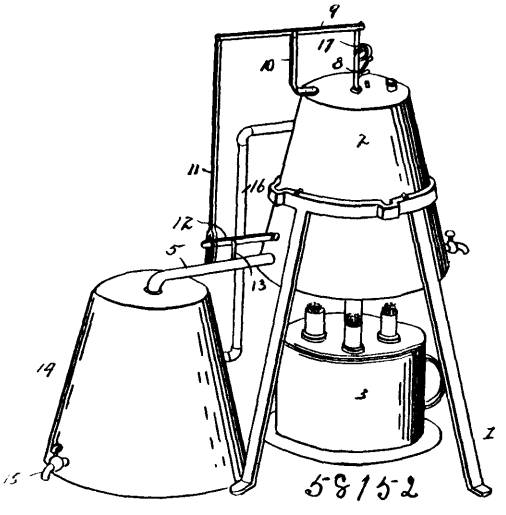
Claim.—In a separator, substantially as shown and described, the sack-holder, consisting of the cross-beam 27, perforated plates 28, V-shaped cross-beam 29, hinged to the lower end of said separator,

pins 32, secured to the lower edge of said frame and adapted to enter the perforations in the plates 28, pins 33, in the outer face of the



frame 29, perforated metal bars 38, pivoted in bearings 35, the lower perforations of said bars adapted to fit over the pins 33, and to be held in place by springs 40, substantially as shown and described and for the purposes set forth.

No. 58,152. Coffee Pot and Boiler Appliances.
(*Cafetière.*)



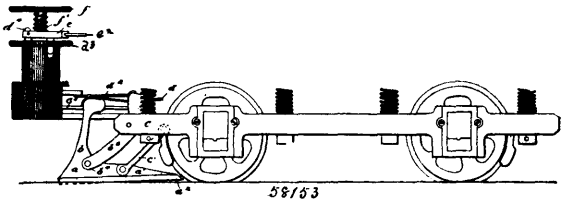
Forester Pardo, Plaquemine, Louisiana, U.S.A., 16th November 1897; 6 years. (Filed 11th November, 1897.)

Claim.—1st. The combination, with a coffee-pot or similar receptacle, of a boiler connected to the upper end thereof by a valve pipe or spout, a lamp or heating device located below the boiler, a float located within said boiler and connected to the valve by interposed levers and rods, and a pipe connected the upper end of the boiler to the upper end of the pot, substantially as shown and for the purpose set forth. 2nd. The combination with a drip coffee-pot or similar receptacle, of a boiler connected thereto by a valved pipe or spout, a float located within the boiler and connected to the valve by the intervention of levers and rods, the connection at one point providing an elongated slot, a bell attached to one of the connecting-rods and operated when the float reaches the limit of its downward movement, and a steam outlet pipe extending from the boiler and communicating with the coffee-pot, substantially as shown and for the purpose set forth.

No. 58,153. Combined Brake and Fender.
(*Frein et défense.*)

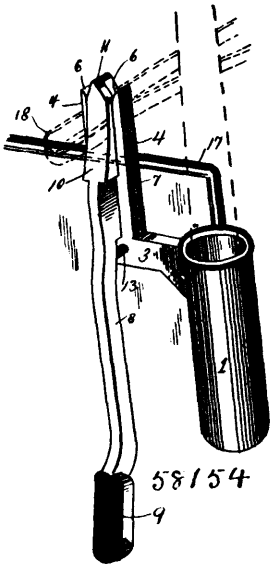
Newton Feigley, Pittsburg, Pennsylvania, U.S.A., 16th November, 1897; 6 years. (Filed 10th November, 1897.)

Claim.—1st. In a combined emergency brake and fender, the combination of the brake shoes having cross strips or slats connecting the same and forming a fender, means for supporting the brake shoes from the truck frame, and means for operating said shoes so as to force the same into engagement with the rails and cause the car wheels to engage the shoes, substantially as shown and described. 2nd. In a combination emergency brake and fender, the brake shoes



supported from the truck frame, cross strips connecting the brake shoes and forming the fender, means for holding said brake shoes and fender in the elevated position, said brake shoes being adapted to descend by gravity into engagement with the rails, and be engaged by the car wheels, substantially as shown and described. 3rd. In a combination brake and fender, the brake shoes having upwardly extending portions with spring straps secured thereto, supporting braces attached to said shoes and the car truck, a brake rod connected to one of said braces, a locking mechanism for holding said shoes in the elevated position, strips connecting said shoes and extending transversely of the car to form the fender, substantially as shown and described. 4th. In a brake of the class described, the brake shoes having an upwardly extending portion with spring straps secured thereto, supporting braces attached to said shoes and car truck, a brake rod connected to one of said braces, a locking mechanism for holding said shoes in the elevated position, substantially as shown and described. 5th. In a combined brake and fender, the brake shoe supported from the truck frame, means for holding said brake shoe and fender in the elevated position, said brake shoe being adapted to descend by gravity into engagement with the rail, and be engaged by the car wheels, substantially as shown and described.

No. 58,154. Whip-Socket and Rein-Holder.
(*Porte-fouet et accroche guides.*)



Louis M. Schulz, Edgerton, Kansas, U.S.A., 16th November, 1897; 6 years. (Filed 8th November, 1897.)

Claim.—The combination of a whip-socket, the lugs integral with the socket and the yokes therefor adapted to embrace the dash rail lateral arm 3 integral to the said socket, and provided with vertical parallel jaws having rabbetted seats 5, a lever with a head adapted to enter between the jaws, and provided with beads 12 at its sides adapted to rest in the rabbets 5, a pivot securing the said lever in co-relation to the jaws, a foot-plate 9 at the end of said lever, and a spring adapted to engage the said head with the said jaws, substantially as described.

No. 58,155. Funnel. (*Entonnoir.*)

John Frederick Sprain, New York, State of New York, U.S.A., 16th November, 1897; 6 years. (Filed 19th October, 1897.)

Claim.—1st. The combination of a funnel, an air tube for leading off the air displaced by the liquid in filling a vessel, the said tube being provided at its upper end with an outlet and at its lower end with a lateral inlet-orifice provided with a shield for diverting the inflowing liquid from said orifice and permitting a free inflow of the

diplaced air into said tube, substantially as described. 2nd. The combination of a funnel, an endwise movable gravity air-tube

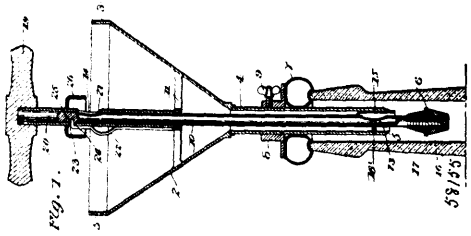
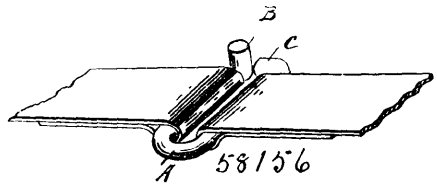


Fig. 1.

mounted therein and extending through the funnel-spout, and means for limiting the endwise movement of the air-tube in each direction and means for cutting off the passage for the fluid through the spout when said air-tube is at its limit of upward movement, said air-tube being provided at its upper end with an outlet and provided with an inlet near its lower end at a point above the means for cutting off the said passage for the liquid through the spout, said air-tube normally standing at its lower limit of movement and adapted to be drawn up as the funnel is lifted, whereby the fluid-passage and air-inlet may be simultaneously shut off, substantially as described. 3rd. The combination of a funnel, an endwise movable air-tube mounted therein and extending through the funnel-spout, said air-tube being provided at its upper end with an outlet and provided near its lower end with a lateral inlet opening and a depending piece or shield projecting from the exterior of the tube over said inlet for diverting the down-flowing liquid from the inlet, as set forth. 4th. The combination of a funnel, an air-tube mounted therein and extending through the funnel-spout, said air-tube being provided at its upper end with an outlet and provided near its lower end with a lateral inlet opening, a depending piece or shield projecting from the exterior of the tube over said inlet for diverting the down-flowing liquid from the inlet and a piece interposed between the exterior of the air-tube and the interior of the spout at a point substantially opposite the said shield, as set forth. 5th. The combination of a funnel, an endwise movable air-tube 10 mounted therein and extending through the funnel-spout and provided with means for limiting its downward movement, a stop mounted upon the lower end of said air-tube and of a larger diameter than the interior thereof, a washer 6 of soft material mounted upon said stop for engaging the lower end of the spout when the air-tube is drawn up, a downwardly-flaring piece 17 surrounding said tube above said washer and having its largest diameter about equal to that of the interior of said spout, whereby as the air-tube is drawn up, said piece by entering the spout may gradually stop the flow of liquid before the washer is seated against the spout, substantially as and for the purpose set forth. 6th. The combination of a funnel, an endwise movable air-tube 10 mounted therein and extending through the funnel-spout and provided with means for limiting its downward movement, a downwardly-tapering stop 16 mounted upon the lower end of said air-tube and having its upper end of greater diameter than the interior of said tube, a washer 6 of soft material mounted upon the upper end of said stop 16 for closing against the end of the spout, a downwardly-flaring piece 17 arranged above said washer for taking in the end of said spout, substantially as and for the purpose set forth. 7th. The combination of a funnel, an endwise movable air-tube mounted in the funnel and extending through the funnel-spout and provided with means for limiting its upward movement, a guide or bridgs-piece for said tube, a detachable handle mounted upon the upper end of the air-tube and provided with an extension adapted to engage with said guide or bridge-piece for limiting the downward movement of the air-tube, substantially as set forth. 8th. The combination of a funnel, an endwise movable air-tube mounted in the funnel and extending through the funnel-spout and provided with means for limiting its upward and downward movements, a detachable handle having a tubular extension fitting over the upper end of the air-tube, and means for locking the two togother, as set forth. 9th. The combination of a funnel, an endwise movable air-tube mounted in the funnel and extending through the funnel-spout and provided with means for limiting its upward and downward movements, said air-tube being provided at its upper end with a lateral outlet opening, a removable handle having a tubular extension adapted to fit over the upper end of said air-tube and provided with a lateral opening adapted to register with the said outlet opening of the air-tube, and a spring-latch for locking the handle to the air-tube when the two said openings are brought into registration, as set forth. 10th. The combination of a funnel, an air-tube mounted within the funnel and having at its upper end a lateral outlet opening, a detachable handle provided with a tubular extension adapted to fit over the upper end of said air-tube and provided with a lateral opening adapted to register with the outlet of said air-tube, means for locking the handle to said tube, and a deflector mounted upon said tube adjacent to the lateral opening therein for returning the fluid to the funnel body, as set forth. 11th. In an automatic funnel, the combination of the funnel, an annular air-seal surrounding the spout of the funnel and comprising a fluid-retaining body with a flexible portion for engaging the mouth of the vessel to be filled, and a holder for limiting the upward movement of said seal on the spout, said holder being adjustable along the spout, substantially as and for the purpose set forth. 12th. The combination of a funnel, an endwise movable air-tube extending through the funnel spout and having a limited range of movement, a stop mounted upon the lower end of said air-tube below the end of the spout, and having a diameter larger than that of the interior of the spout and serving to close the end of the spout when the air-tube is drawn up, a downwardly-flaring piece mounted upon said air-tube above said stop for shedding the fluid evenly as it is discharged from the spout, and a downwardly-tapering piece secured below said stop for permitting the ready insertion of the funnel in the mouth of the vessel, substantially as and for the purpose set forth. 13th. In an automatic funnel, the combination of the funnel, and an air-tube having its outlet provided with a deflector for returning to the funnel-body any liquid that may escape therefrom by the outward passage of the displaced air, substantially as and for the purpose set forth. 14th. The combination of a funnel provided with means for automatically stopping the flow of liquid from the funnel into the vessel when the liquid has reached a given height therein, and an air seal, consisting of a fluid-retaining body of flexible material, filled with fluid and adapted to seal the space between the funnel and the mouth of the vessel, substantially as and for the purpose set forth.

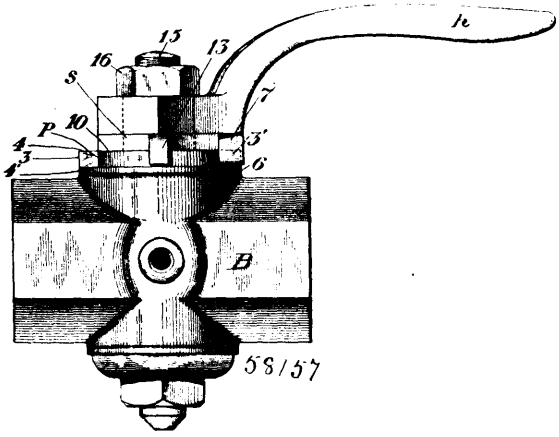
No. 58,156. Bale Tie. (*Lien de ballots.*)



Christopher Columbus Warren, Hookston, and Joseph Baum, Meridian, both in Mississippi, U.S.A., 17th November, 1897; 6 years. (Filed 8th November, 1897.)

Claim.—An improved bale tie formed of a single blank of heavy wire, the same consisting of the elongated U-shaped loop close at one end, and adapted to extend transverse the bale-band, and in the plane of the same with the band extremities looped around the parallel sides of the said U-shaped loop, extremities B and C of said loop being bent at right angles to each other and to the longitudinal extent of the loop, extremity B being disposed upward from the body of the tie to hold one extremity of the band from slipping from the tie, the other extremity lying in the plane of the tie, and extending toward the base of extremity B, and nearly closing the open end of the loop thereby effectually preventing accidental disengagement of both band extremities, substantially as shown and described.

No. 58,157. Valve. (*Soupape.*)

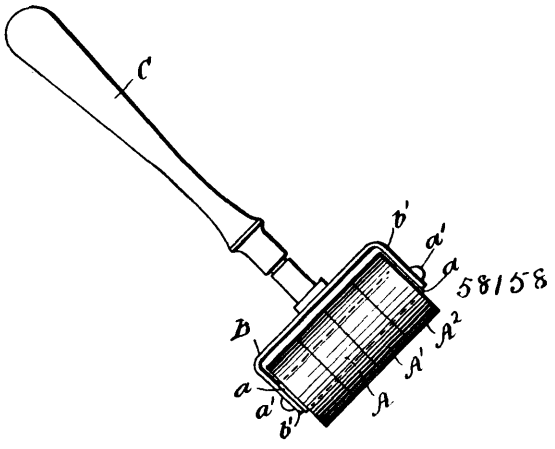


Hubert Kip Wood, Hartford, Connecticut, U.S.A., 17th November, 1897; 6 years. (Filed 22nd October, 1897.)

Claim.—1st. The combination, in a valve, of a valve body having a pair of oppositely disposed stops, a valve plug, a stop secured to said plug and limited in its movements in one direction by one of the stops on the valve body, and a handle also secured to the valve plug and having a stop disposed at an angle to the stop on the plug and limited in its movements in one direction by the other stop on the valve body. 2nd. The combination, in a valve, of a valve body having a pair of oppositely disposed stops, a valve plug having a polygonal portion, a removable stop washer fitted over said poly-

gonal portion of the plug and having a laterally projecting stop limited in its movements in one direction by one of the stops on the valve body, and a handle also fitted to the polygonal portion of the valve plug and having a stop disposed at an angle to the stop on the washer and limited in its movement in one direction by the other stop on the valve body.

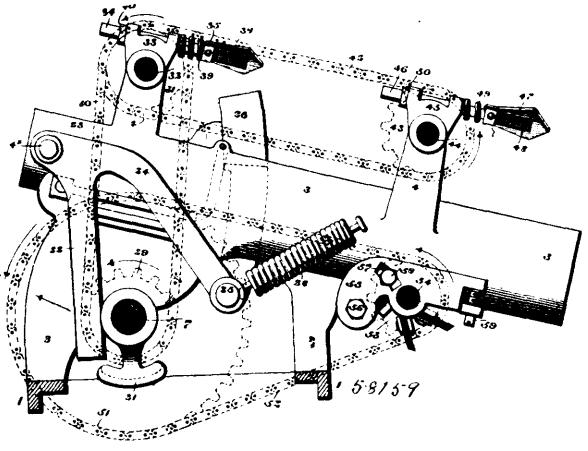
No. 58,158. Electric Roller. (*Rouleau électrique.*)



John Wilson Gibbs, New York, State of New York, U.S.A., 17th November, 1897; 6 years. (Filed 30th June, 1897.)

Claim.—1st. An electric roller consisting of a central body and superimposed generating plates as copper and zinc. 2nd. An electric roller consisting a body provided with axial bearings, and with a smooth cylindrical face, the said face formed by, and consisting of a series of contiguous generating, face plates, as copper and zinc, supported thereby, and of a bifurcated holder to engage the said axial bearings, whereby an even pressure may at all times be exerted upon the person to which the said roller is applied, and a circuit may become established upon application of the roller to the said person.

No. 58,159. Machine for Cleaning, Cutting and Gutting Fish. (*Machine pour nettoyer le poisson.*)



George William Stevenson, Cramer's Hill, New Jersey, U.S.A., 17th November, 1897; 6 years. (Filed 19th October, 1897.)

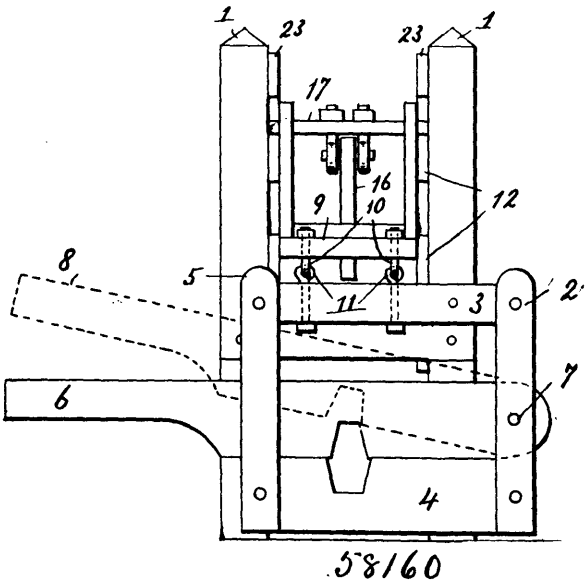
Claim—1st. In a machine of the character named, a receptacle for a fish, a knife automatically operated to cut the same, a transferrer in said receptacle which is adapted to remove the cut-away portions of the fish, and means which are suitably operated to remove the entrails of said fish. 2nd. In a machine of the character named, a receptacle for a fish, a knife suitably operated for cutting the same, a transferrer in said guide for removing the cut-away portions of the fish, mechanism suitably operated for removing the entrails thereof, and means for removing the fish from the knife to said latter mentioned mechanism. 3rd. In a machine of the character named, a guide adapted to receive a fish, a knife automatically operated to cut the same, a transferrer in said guide which is adapted to cut-away portion of the fish, a nose-piece or stop adjustably secured to said transferrer, mechanism suitably operated for removing the entrails of said fish, and mechanism for removing the fish from the knife to said finger. 4th. In a machine of the character named, a guide adapted to receive a fish, a knife automatically operated to cut the same, a transferrer in said guide which is adapted to act as a stop and to remove the cut away portions of the fish, and fingers which are suitable operated to remove the entrails of said fish. 5th. In a machine of the character named, a guide adapted to receive a fish, a knife suitably operated for cutting the same, a transferrer in said guide which is adapted to remove the cut-away portions of the fish, fingers suitably operated for removing the entrails thereof, and mechanism for moving the fish from the knife to said fingers. 6th. In a machine of the character named, a table, means for operating the same, a knife mounted on said table, a guide adapted to receive the fish, said knife being adapted to enter said guide, means for holding said fish during the cutting, fingers suitably operated to remove the entrails of said fish, and arms having fingers thereon which are adapted to transfer the fish in said guide. 7th. In a machine of the character, named, a guide adapted to receive a fish, a power shaft, a cam thereon, a table adapted to be operated by said cam, a knife carried by said table, and means for holding said fish during the operation of cutting. 8th. In a machine of the character named, a guide adapted to receive a fish, a power shaft, a cam thereon, a table adapted to be operated by said cam, a knife on said table, means for holding said fish during the operation of cutting, and a transferrer adapted to act as a stop and be operated to remove the cut-away portions of the fish. 9th. In a machine of the character named, a guide for the fish, a power shaft, a table, means on said shaft for imparting motion to said table, a knife carried by said table, means for holding the fish during the cutting, a second shaft mechanism thereon for removing the entrails of the fish, and means for imparting motion from one shaft to the other. 10th. In a machine of the character named, a guide adapted to receive a fish, a power shaft, a table, a knife for said table, mechanism on said power shaft for operating said table, a transferrer in said guide adapted to be operated by said power shaft, arms having fingers thereon mounted on a second shaft, and means for imparting motion thereto. 11th. In a machine of the character named, a guide adapted to receive a fish, mechanism for holding said fish therein, a power shaft, a table, means on said power shaft for operating the same, a knife on said table, a transferrer, an elbow lever secured thereto, means on said power shaft for operating said elbow lever, arms having fingers adapted to be operated in order to move the fish, a second shaft and fingers mounted thereon adapted to remove the entrails of said fish. 12th. In a machine of the character named, a guide adapted to receive a fish, said guide having openings in the bottom thereof, spring arms secured to said guide adapted to hold said fish, a table carried on suitable bearings, a power shaft, means on said power shaft for operating said table, a transferrer movable in said guide, means on said power shaft for operating said transferrer, arms having fingers carried by suitable shafts, means for imparting motion to said shaft, and fingers carried by a shaft which are adapted to remove the entrails of the fish. 13th. In a machine of the character named, a guide having openings in the bottom thereof, a power shaft, a cam on said power shaft, a table suitably mounted provided with a stud which is adapted to move in a groove in said cam, a knife on said table which is adapted to operate in one of said openings in said guide, spring arms extending partially over one of said openings, a transferrer moving in one of said openings, and an elbow lever suitably connected, means for returning said elbow lever to its normal position, arms suitably mounted adapted to operate in order to remove fish from said guide, a shaft having fingers suitably mounted thereon adapted to operate in the other opening in said guide, and means for imparting motion to the latter mentioned shaft. 14th. In a machine of the character named, a guide having openings therein, a power shaft, a cam carried by said power shaft, a table suitable supported and adapted to be operated by said cam, a knife carried by said table, an elbow lever suitably supported and adapted to by operated by said power shaft, means for returning said elbow lever to its normal position, and a transferrer moving in an opening in said guide and pivotally attached to said elbow lever, a shaft carrying an arm, means for imparting motion thereto, and fingers which are adapted to operate in an opening in said guide, said fingers being mounted on a shaft to which motion is imparted from said power shaft. 15th. In a machine of the character named, a guide adapted to receive a fish, a knife automatically operated to cut the same, a transferrer in said guide, which is adapted to remove the cut-away portions of the fish, and elastic fingers adjustably mounted which are suitably operated to remove the entrails of said fish. 16th. In a machine of the character named, a guide adapted to receive a fish, a knife suitably operated for cutting the same, a transferrer in said guide, which is adapted to remove the cut-away portions of the fish, fingers suitably operated for removing the entrails thereof, elastic fingers suitably mounted on the arm which is operated and moves the fish from the knife to said fingers, and springs mounted on said arm.

No. 58,160. Hog Trap and Hog Loading Device.
(*Piège et appareil à charger les porcs.*)

James West Harrelson, Belton, Missouri, U.S.A., 17th November, 1897; 6 years. (Filed 11th November, 1897.)

Claim.—1st. The combination of a hog-chute, provided with means for securing or holding the hog preparatory to inserting a

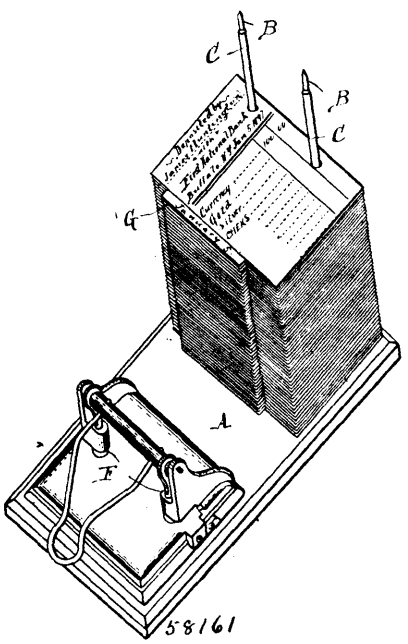
ring in the nose or snout of the hog, substantially as described. 2nd. The combination of a hog-chute, provided with a pivotally operating



gang-plank 9, substantially as shown and described. 3rd. The combination of a hog-chute, provided with a pivoted swinging bar adapted to be raised and lowered, as shown, substantially as described. 4th. The combination of a hog-chute, provided with means for securely holding a hog while inserting a ring into the nose or snout of the hog, and for branding and otherwise working with the hog while secured, and a gang-plank 9, provided with guide-boards at its upper end, and a suitable hook or catch held in position by a spring, substantially as described,

No. 58,161. File for Deposit Slips, etc.

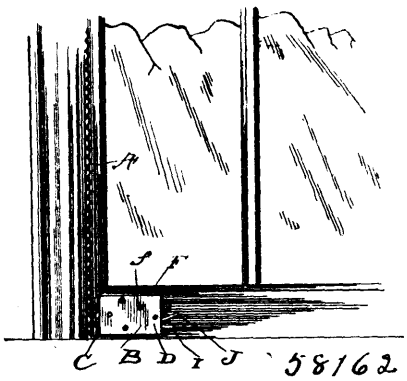
(*Enfile-lettres, etc.*)



James Henry Rand, North Tonawanda, New York, U.S.A., 17th November, 1897 ; 6 years. (Filed 16th October, 1897.)

Claim.—1st. In a file for deposit slips, etc., the combination with a base and a pair of upright spindles secured thereto, of removable tubes or sleeves surrounding said spindles and an approximately U-shaped tie or binding wire resting with its horizontal middle portion upon said base between the two spindles and having its branches confined between the spindles and said tubes, substantially as set forth. 2nd. In a file for deposit slips, etc., the combination with a base and a pair of upright spindles secured thereto, and having a flattened or recesssed side, of removable tubes or sleeves, surrounding said spindles, and an approximately U-shaped tie or binding wire resting with its horizontal middle portion upon said base between the two spindles and having its branches arranged in the spaces between the flattened sides of the spindles and their surrounding tubes, substantially as set forth.

No. 58,162. Sash Fastener. (*Arrête-croisée.*)

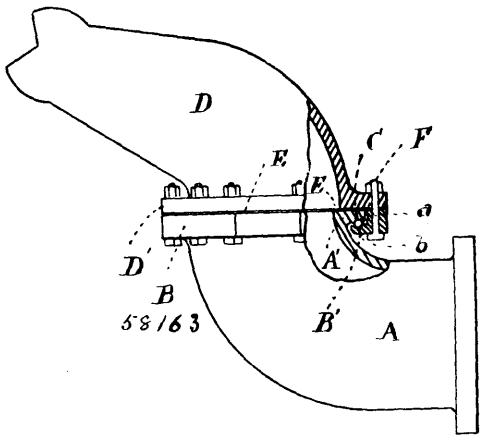


Isaac F. Eastham, Leroy, Florida, U.S.A., 17th November, 1897 ; 6 years. (Filed 11th November, 1897.)

Claim.—The combination with the rack-bar and the case, of the cog-wheel mounted to revolve within the case and engage the rack-bar, the sliding-bolt, the pivoted lever mounted between its ends on a stationary pivot, a spring acting thereon, and a push pin disposed at right angles to the pivot of said lever adapted to engage said lever, as set forth.

No. 58,163. Hydraulic Mining Giant.

(*Appareil hydraulique pour l'exploitation des mines.*)



John Peare Simmons, San Francisco, California, U.S.A., 17th November, 1897 ; 6 years. (Filed 7th October, 1897,)

Claim.—1st. A hydraulic giant, comprising a stationary pipe, a curved movable section and a ball-bearing joint connection between them. 2nd. A hydraulic giant, comprising a stationary pipe, a curved movable section and a water-tight ball-bearing joint connection between them. 3rd. A hydraulic giant, comprising a stationary pipe, a curved movable section and a ball-bearing connection provided with a ring or washer adapted to receive the thrust of the movable section. 4th. A hydraulic giant, comprising a stationary pipe, a curved movable section and a water-tight ball-bearing connection having a bearing-ring made in sections. 5th. In a hydraulic giant, the combination of a stationary pipe, a movable section and a water-tight joint between said pipe and movable section consisting of flanges A^1 and B^1, suitable packing-rings, as described, secured in place by the grooved and jointed ring B, and ball-bearings C, arranged substantially as described. 6th. A hydraulic giant, comprising a stationary pipe with a curved movable section, and a device connecting them having a holding-ring provided with antifriction balls upon opposite sides, for the purpose herein described.

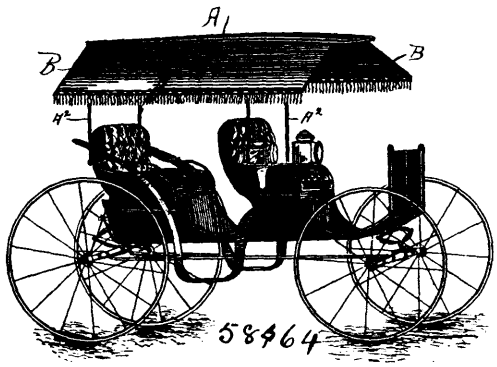
No. 58,164. Sunshade for Canopied Vehicles.

(*Garde-soleil pour voitures.*)

Aquila W. Hollingsworth, West Liberty, Iowa, U.S.A., 17th November, 1897 ; 6 years. (Filed 11th November, 1897.)

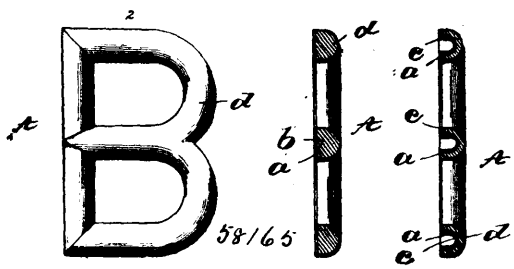
Claim.—The combination with a vehicle canopy of an automatic spring, actuated ratchet curtain roller mounted beneath one edge

thereof, two or more rods attached to the end of the curtain, clamps adjustably mounted on the canopy supports and having said rods



pivoted thereto and winged nuts for securing the rods to the clamps in any position, substantially as and for the purposes stated.

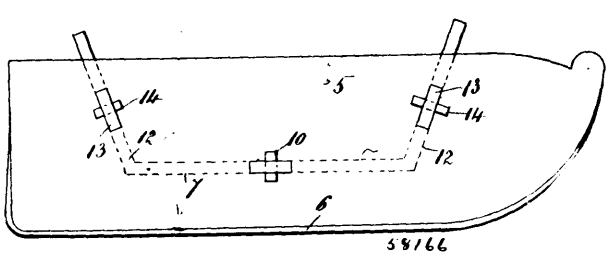
No. 58,165. Letter or Character for Signs.
(*Lettres ou caractères pour enseignes.*)



Edgar J. Lutwyche, Chicago, Illinois, U.S.A., 17th November, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. A letter, figure, character or symbol having a body of amber tinted or coloured transparent material and one side thereof covered with a brilliant coating, producing in effect a gold letter, figure, character or symbol. 2nd. A letter, figure, character or symbol having a body of amber tinted or coloured transparent material and one side thereof coated with a deposit from nitrate of silver, producing in effect, a gold letter, figure, character or symbol. 3rd. A letter, figure, character or symbol having a body of amber tinted or coloured glass and one side thereof covered with a brilliant material, producing in effect a gold letter, figure, character or symbol. 4th. A letter, figure, character or symbol having a body of amber tinted or coloured glass and one side thereof silver coated producing in effect a gold letter, figure, character or symbol. 5th. A letter, figure, character or symbol having a body of amber tinted or coloured glass provided with a concave back covered with a brilliant material, producing in effect, a gold letter, figure, character or symbol. 6th. A letter, figure, character or symbol having a body of amber tinted or coloured glass concave-convex in transverse section and the concave side coated with a deposit from nitrate of silver, producing in effect a gold letter, figure, character or symbol.

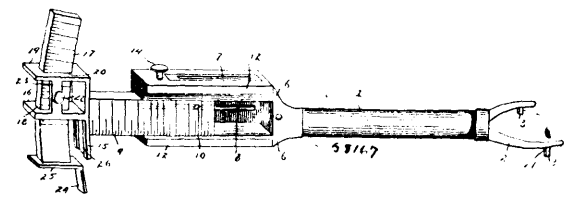
No. 58,166. Sled. (*Traineau.*)



Anthony C. Whittiker, Nangatuck, Connecticut, U.S.A., 19th November, 1897; 6 years. (Filed 21st October, 1897.)

Claim.—A sleigh, sled or similar article, comprising two runners which also constitute the sides of the body portion thereof, a bottom plate or board which is provided at its opposite sides with tennons or projections which are oblong in cross-section and passed through similar openings in the runners, and through which pins, plugs or bolts are passed, and two end plates or boards which extend upwardly from the opposite end of the bottom plate or board, and which are provided at their ends with shoulders or projections, which are oblong in cross section, and which are passed through similar openings formed in the runners, substantially as shown and described.

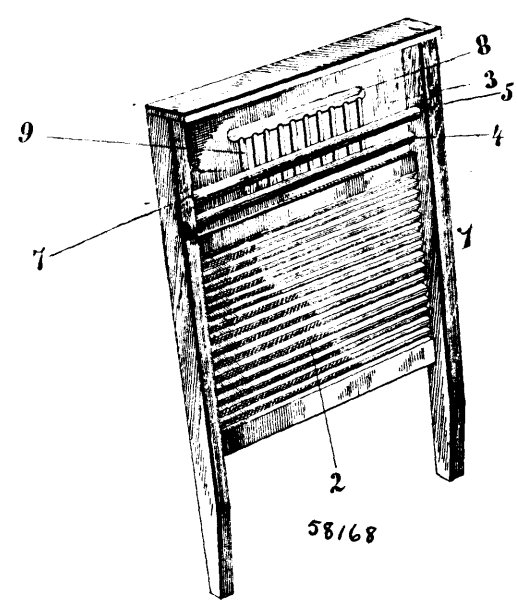
No. 58,167. Track Gauge. (*Jauge de voie de chemin de fer.*)



Orlando S. Kepler, Patterson, Pennsylvania, U.S.A., 19th November, 1897; 6 years. (Filed 8th November, 1897.)

Claim.—1st. In a track gauge the combination of a yoke at one end of the same having pins 3 with vertical inner and outer faces for engaging either side of a rail or other object, a longitudinal slide having its outer end, a guide and a curved elevation bar fitting said guide and having the flanges 24 and 25, the said flange 25 having its bottom face flush with the bottom of said guide when the parts are in their normal or closed position. 2nd. A track gauge having at one end means for engaging a rail, a longitudinal guiding recess and undercut flanges at the edges of the same, a sliding graduated bar fitting said recess, and carrying means for engaging the top and side of a rail, and a plate covering the recess and sliding within said flanges. 3rd. A track gauge having a longitudinal recess open at one side, and a groove within the recess, a slide fitting the recess and having a projection entering the groove, a removable plate covering the recess, and an elevation bar carried by the slide. 4th. A track gauge having a longitudinal slide, vertical and horizontal flanges carried by the latter, a second horizontal flange, an elevation bar guided in said horizontal flanges, and horizontal and vertical flanges or projections carried by said bar. 5th. A track gauge having a longitudinal slide, vertical and horizontal recessed flanges carried by the latter, an elevation-bar guided in said horizontal flange, and vertical and horizontal flanges or projections carried by the elevation bar and fitting flush within said recesses.

No. 58,168. Washboard. (*Planche à laver.*)



William Henry Orr, Beausejour, Manitoba, Canada, 19th November, 1897; 6 years. (Filed 12th November, 1897.)

Claim.—1st. In a washboard, the combination with the soapboard thereof, of a series of rest bars arranged in different vertical and horizontal planes, said bars being adapted to support the soap, substantially as described. 2nd. In a washboard, the combination with the soapboard thereof provided with a series of drain grooves, of a series of rest bars arranged in different vertical and horizontal planes, said bars being adapted to support the soap, substantially as described. 3rd. In a washboard, the combination with the soapboard thereof provided with a ventilatory slot and a series of drain grooves, of a series of rest bars arranged in different vertical and horizontal planes, said bars being adapted to support the soap,

substantially as described. 4th. In a washboard, the combination with the soapboard thereof, of a series of rest bars extending transversely thereof and arranged in different and vertical and horizontal planes, said bars being adapted to support the soap, substantially as described. 5th. In a washboard, the combination with the soapboard thereof provided with a ventilating slot and series of spaced parallel longitudinally-extending drain grooves communicating therewith, said soapboard being also provided with a transverse groove or depression at the lower ends of said drain grooves, of a series of transverse rest bars arranged in different vertical and horizontal planes, the lower of said rest bars fitting snugly within said transverse groove or depression and having a portion of its diamater lying on the exterior of the soapboard, substantially as and for the purpose described.

No. 58,169. Non-refilling Bottle.

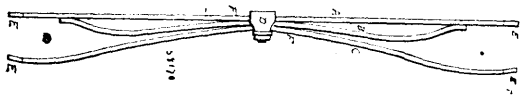
(*Appareil pour empêcher le remplissage des bouteilles.*)

Herbert Barry Fitz-Simon, Wapella, Assiniboia, N.W.T., Canada, 19th November, 1897; 6 years. (Filed 12th November, 1897.)

Claim.—1st. The combination with a bottle having a neck and top, said neck and top being provided with a cork, of an extension formed with said top and adapted to be removed therefrom at the point of connection, and means located within said extension for preventing the withdrawal of said cork prior to the removal of said extension. 2nd. The combination with a bottle having a neck and top, said neck and top being provided with a cork, of an extension formed with said top and adapted to be removed therefrom at the point of connection, and a stopper located within said extension provided with means for preventing the withdrawal from said extension. 3rd. The combination with a bottle having a neck and top, said neck and top being provided with a cork, of an extension formed within said top and adapted to be removed therefrom at the point of connection, said extension being provided with an interior annular opening, and a stopper located within said extension provided with a spring-actuated pin, said pin being adapted to enter said annular opening when the stopper is inserted in said extension, substantially as described.

No. 58,170. Wagon Bolster Spring.

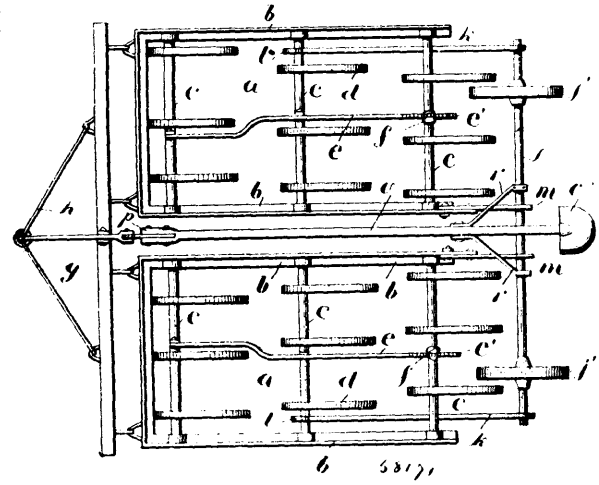
(*Ressort pour coussinets de wagon.*)



John W. Brownell and James Henry Kennedy, both of St. Thomas, Ontario, Canada, 19th November, 1897; 6 years. (Filed 12th November, 1897.)

Claim.—1st. In a bolster-spring, the combination of a semi-elliptic spring C, a distributing spring B and a perch-plate A, substantially as and for the purpose hereinbefore set forth. 2nd. In a bolster-spring, the combination of the semi-elliptic spring C and the perch-plate A, with a distributing spring B having a greater radius than the spring C and having its end portions pressing against the perch-plate A, substantially as and for the purpose set forth. 3rd. In a bolster-spring, the combination of a semi-elliptic spring C, a distributing spring B and a perch-plate A bound together at their point of contact by the clip D and the indentations F F, substantially as and for the purpose set forth. 4th. In a bolster-spring, the combination of a semi-elliptic spring C, a distributing spring B, and a perch-plate A, bound together at their common point of contact by a clip D, and without bolts or bolt-holes through the members A, B and C, substantially as and for the purpose hereinbefore set forth. 5th. In a bolster-spring, the combination of one or more semi-elliptic springs C with one or more distributing springs B and a perch-plate A, substantially as and for the purpose hereinbefore set forth.

No. 58,171. Wheeled Supporting Attachment for Harrows. (*Support pour roues de herses.*)



Effinger E. Whipple, Utica, New York, U.S.A., 19th November, 1897; 6 years. (Filed 12th November, 1897.)

Claim.—1st. A riding attachment or wheeled support in combination with a harrow having front draft attachments, said supports coupled loosely with the harrow, and a draft tongue carrying a seat and extending over the harrow and at the rear detachably connected to and supported on the wheeled support, and at the front detachably connected with the draft attachments of the harrow, substantially as described. 2nd. In combination, a rear wheeled support having slack connection with a harrow at a point in advance of it, rear tooth bars, and a draft tongue from the support to the draft attachments of the harrow and by which the support receives its draft, said tongue adjustable in length to attain proper slack in said connection, and a harrow, substantially as described. 3rd. A trailing support in combination with a harrow, said support disconnected from and arranged to limit the downward movement of the rear end of the harrow frame, and a draft tongue extending over the harrow and at the rear supported on and carried by said support and at the front end loosely connected with the draft attachments of the harrow, said tongue adjustable so that the distance between the front attaching point of the tongue and the support can be varied, substantially as described. 4th. A trailing support for a harrow, comprising a supporting bar, a draft tongue adapted to extend forwardly above the harrow and to be loosely connected at the front portion thereof, and at its rear end having a seat, a brace secured to the tongue beneath the seat and extending downwardly and forwardly and secured to said bar, and two braces secured to the tongue in advance of the seat and extending downwardly and rearwardly and spread laterally and secured to the bar, substantially as described. 5th. A rear wheeled support for a harrow arranged to extend forward beneath the rear of the harrow and having a loose coupling or connection adapted for loose connection with a forward part of the harrow, so as to permit a slight backward and forward movement of the harrow independent of the support, substantially as described. 6th. A trailing support in combination with a lever adjustable harrow, said support having a sustaining bar extending forwardly beneath a rear tooth bar of the harrow and coupled to the harrow in advance thereof, and curved upwardly in front and in rear of said rear tooth bar, with the downward deflection beneath said tooth bar, and so that the sustaining bar limits the downward movement of said tooth bar and the rear end of the harrow, substantially as described. 7th. A rear wheeled support in combination with an adjustable tooth harrow, said support having sustaining bars at their front ends coupled to the harrow in advance of the rear tooth bars, and passing down beneath and arranged to uphold the rear tooth bars, said harrow having projections extending rearwardly over the support and arranged to rest thereon and limit the downward movement of the harrow, substantially as described. 8th. A trailing wheeled support connected and in combination with a harrow, the harrow frame having a rigid rearward projection extending over and adapted to settle down on the support to uphold the harrow when the teeth are elevated, substantially as described. 9th. A rear wheeled support loosely coupled to a harrow at a point in advance of its rear end, and in combination with a lever harrow, and having a portion arranged beneath and disconnected from a rigid part of the frame of the harrow and adapted to receive and sustain the same, substantially as described. 10th. A wheeled supporting bar, in combination with a

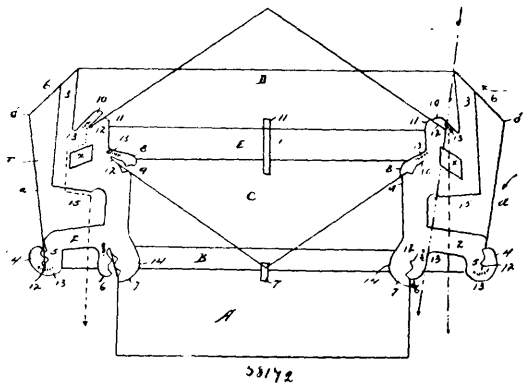
two (or more) section lever harrow, said support arranged in rear of the sections, sustaining bars from the supporting bar extending forwardly beneath the rear tooth bars of the sections and at or near the outer sides thereof and loosely coupled to the sections, respectively, in advance of the rear tooth bars, the inner sides of the frames of the sections extended rearwardly over the supporting bar, substantially as described. 11th. A riding or wheeled attachment for harrows and the like, comprising a horizontally disposed wheeled frame having sustaining bars extending forwardly and adapted for coupling to a harrow which is adapted to extend rearwardly over an intermediate portion of the frame, substantially as described. 12th. A riding or wheeled trailing support for harrows and the like, comprising a wheeled bar or axle having sustaining bars extending forwardly from its ends with attaching collars or coupling at their front ends, and each formed with an intermediate depression, substantially as described. 13th. A trailing wheeled supporting attachment for harrows, comprising a wheeled axle or frame having a bar extending forward for coupling with a harrow in advance of its rear end, and a forwardly extending draft tongue adapted for coupling with the front portion of the harrow or its draft devices, the forward end of the tongue deflected or extended downwardly and adjustably connected with the remaining length of the tongue to permit forwardly or rearwardly adjustment of the lower end of said forward downwardly extended end of the tongue, substantially as described. 14th. A wheeled supporting attachment for harrows, comprising a wheeled support having a forwardly extending sustaining bar loosely coupled to the harrow section and arranged to limit the downward movement of the same through the medium of a tooth bar, a portion of the harrow section frame or a part connected therewith arranged to engage the support and also limit the downward movement of the harrow section, in combination with a lever adjustment harrow section harrow, substantially as described. 15th. A wheeled support, in combination with a vertically movable or adjustable tooth harrow section, the section at one side having a portion of the frame or a part thereto arranged to engage said support and limit the downward movement of the harrow section, and a sustaining bar secured to the support and loosely coupled to the harrow and arranged to engage the same near the opposite side of the harrow section and limit its downward movement. 16th. A wheeled supporting attachment for harrows, comprising a wheeled axle, in combination with a harrow to which the axle is coupled and having a portion extending over and arranged to settle down on the axle to limit the downward movement of the harrow, substantially as described. 17th. A wheeled supporting attachment for harrows, in combination with a lever adjustment harrow, the harrow having forward projections or extensions from the inner portions of its frame extending over the support, and sustaining bars from the support extending forwardly and loosely coupled to intermediate tooth bars near the outer sides of the harrow so that rear tooth bars will be engaged by the sustaining bars, substantially as described. 18th. A wheeled supporting attachment for harrows having forwardly extending sustaining bars adapted for loose coupling to the harrow, the rear ends of the sustaining bars having vertical positions secured to the end portions of the supporting attachment in vertical adjustment, substantially as described. 19th. A harrow having turnable tooth bars, in combination with a trailing support having a draft attachment with the front part of the harrow, said support beneath the rear part of the harrow, which settles down on and is upheld by the support when the teeth are raised. 20th. A harrow, in combination with a rear support coupled with the draft of the harrow and having a forwardly extending sustaining bar beneath the harrow with a seat or depression to receive a part of the harrow. 21st. An axle having wheels and a draft attachment, in combination with a turnable tooth bar harrow having a portion extending over the axle, whereby the rear of the frame is carried when the teeth are elevated. 22nd. A support having wheels and a draft attachment, in combination with a harrow having turnable tooth bars and carrying front supports, and free to play at its rear portion independently of said support when the teeth are lowered and at its rear arranged to engage said support and be upheld by the same when the teeth are raised. 23rd. The axle with wheel draft attachment, the axle having a forwardly extending support arranged to carry the rear of the harrow frame, in combination with the harrow frame having turnable tooth bars, whereby the rear of the frame is carried in an elevated position when the working points of the teeth are raised. 24th. A wheeled support connected with the draft of the harrow, said support extending forwardly over the rear of the harrow, in combination with a turnable tooth bar harrow and loose upholding connections from the support to the rear of the harrow.

No. 58,172. Ventilator and Ventilator Braces.

(*Ventilateur.*)

Richard M. Pancoast, Camden, New Jersey, U.S.A., 19th November, 1897; 6 years. (Filed 13th November, 1897.)

Claim.—1st. The combination in a ventilator of the neck A, having a flaring edge B, the cone C, the cone D made separate from cone C and with an open space between, the deflector F, and means for securing the several enumerated parts in their proper relative positions, substantially as described. 2nd. An edgewise brace for holding in their proper relative positions the constituent elements of a ventilator, cowl or cap, said brace being made of malleable metal and provided with jaws adapted to be closed down upon and to finally grip the edges of the said elements, substantially as described. 3rd. An edgewise brace for ventilators having jaws adapted to be



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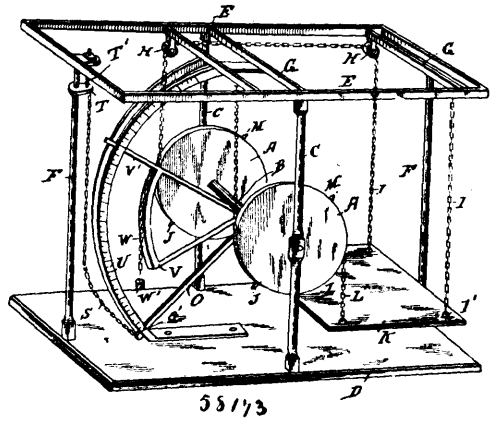
closed down upon the edges of constituent parts of a ventilator, said jaws being reinforced adjacent the bending points of the jaws, substantially as described. 4th. An edgewise brace for ventilators having jaws adapted to be closed down upon the edges of constituent parts of a ventilator, said jaws being serrated, substantially as described. 5th. An edgewise brace for uniting the constituent parts of a ventilator, said brace being provided with arms as 2 and 3, and pairs of jaws adapted to be closed upon and to finally grip the edges of the said parts of a ventilator, substantially as described. 6th. An edgewise brace for securing together in their proper relative positions constituent parts of a ventilator, said brace being provided with pairs of jaws, one jaw of each pair made rigid and the other adapted to be bent down, substantially as described. 7th. The combination, in a ventilator, of a neck, two cones, a deflector, and edgewise braces provided with jaws which grip the edges of the neck, cones and deflector, and securely hold them in their proper relative positions, substantially as described. 8th. An edgewise brace for securing together in their proper relative positions constituent parts of a ventilator, said brace having a part of the body or the metal thereof cut away, as at *x*, substantially as and for the purpose specified.

No. 58,173. Weighing Scale. (*Balance.*)



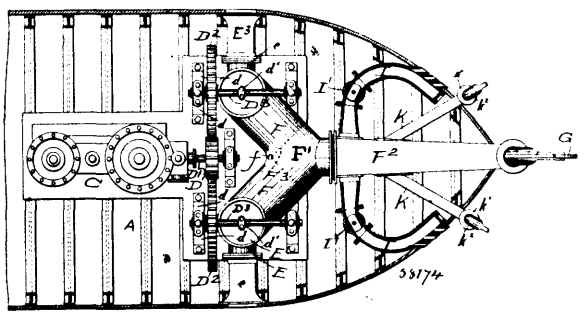
58173

John H. Stephens, Vernon, Texas, U.S.A., 19th November, 1897; 6 years. (Filed 25th October, 1897.)

Claim.—1st. The combination of revoluble discs, chains depending from the same to one side of the axis of the discs, a weighing-pan supported at one end of said chains, chains I, secured to the other end of the weighing-pan and passed over suitably arranged rollers to the side of the discs opposite the first named chains and there secured, and a weight indicator actuated with the discs, substantially as shown and described. 2nd. The combination of revoluble discs, the weighing pan sustained at one end by the discs at a point to one side of their axis, devices secured to the discs opposite the first named sustaining devices and extending upward and over the discs and depending to support the other end of the pan, and a weight indicator actuated with the discs, substantially as shown and described. 3rd. The combination of revoluble discs, the weighing pan-chains for sustaining one end of the pan which depend from the periphery of the discs, upwardly extending chains secured to the periphery of the discs diametrically opposite the first named chains, and second chains being extended over suitable guides for sustaining the other end of the pan, and a weight indicator actuated by the discs, substantially as shown and described. 4th. The combination of the revoluble discs, the short chains secured to and depending

over the peripheries of the discs, the weighing pan sustained at one end by the lower extremities of said chains, the second pair of chains secured to the other end of the weighing pan and extended upward over suitably arranged rollers and then depending over the peripheries of the discs opposite the first named chains and secured to said discs and a weight indicator movable with the discs, substantially as shown and described. 5th. The combination of a vibratory counter weight support having horizontal axis, a weighing pan arranged at one side thereof, chains L, depending from the support to the pan, chains I, extending upward from the support opposite depending chains L, an elevated way for chains I, whereby they are adapted to depend over the pan and with chains L, support the same, and a weight indicator movable with the counterweight suppport, substantially as shown and described. 6th. An improved scale comprising a framework, a shaft arranged horizontally therein, discs mounted concentrically on said shaft, weighing pan K, short chains L, depending from the discs upon one side and secured to the pan, the rollers H, depending from elevated positions in the frame, the long chains I, secured at their lower ends to the pan and extended upward to said rollers and downward therefrom and secured to the sides of the discs opposite the chain L, and a counterweight mechanism carried by the said shaft, substantially as described. 7th. The combination of the rotatable weighing discs and axial shaft, the sustaining chains secured to and leading from the discs as described, beam O, the double scale in which the beam moves, the segment V, carried by the axial shatt, the arm extended from the segment to move in said double scale, and the weight chain on the segment, substantially as shown and described.

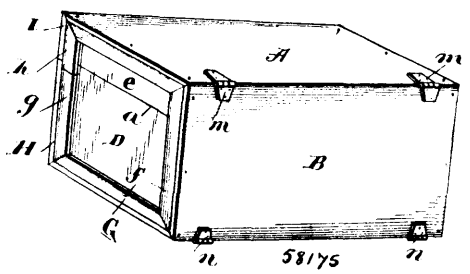
No. 58,174. Hydrostatic Vessel Propulsion and Steering Apparatus. (*Appareil de propulsion, etc.*)



Friedrich Krefft, Berlin, Prussia, Germany, 19th November, 1897; 6 years. (Filed 29th September, 1896.)

Claim.—A vessel propelling and steering apparatus, comprising a pump cylinder, a water induction pipe, a rudder blade pivotally supported in the usual manner to the stern of the vessel, a discharge pipe and a fan-shaped rudder discharge nozzle journalled to the outer end of the discharge pipe by flexible joints coincident with the pivotal axis of the rudder blade, substantially as described.

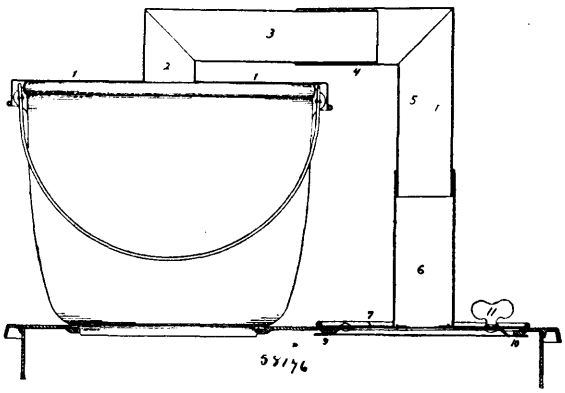
No. 58,175. Trunk. (*Coffre.*)



Augustus William Newell, Bradford, Pennsylvania, U.S.A., 19th November, 1897; 6 years. (Filed 23rd October, 1897.)

Claim.—1st. A convertible trunk or chest comprising a back hinged at its lower edge to the rear edge of the bottom, a top hinged at its rear edge to the upper edge of the back, the hinges being adapted to permit the back and top to fold outward so as to be in a line or in the same plane with the bottom of the trunk or chest, the top having end and side wings to form a foot, substantially as described. 2nd. A convertible trunk or chest comprising a back hinged at its lower edge to the rear edge of the bottom, a top hinged at its rear edge to the top of the back, the ends of the trunk or chest being divided on a line below the upper hinge-point of the back, and the strips *g*, *h*, being respectively cutaway and projecting for the purpose of preventing lateral movement of the front edge of the trunk, substantially as described.

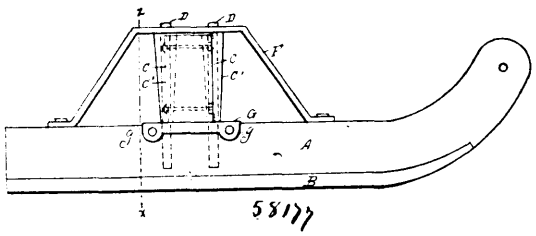
No. 58,176. Ventilating Device for Cooking Utensils.
(*Appareil de ventilation pour ustensiles de cuisine.*)



Charles Hoopes, Conshohockon, Pennsylvania, U.S.A., 19th November, 1897; 6 years. (Filed 13th November, 1897.)

Claim.—The combination of a lid or cover for a cooking utensil, a plate adapted to rest upon the flat surface of the top of a stove or range and to cover a pot hole therein, a projecting finger on the under side of the plate at one edge of the same, and a pivoted turn-buckle located on the under side of the plate at the opposite edge of the same, and having a handle above the plate, and a pipe connection between said plate and the lid or cover of the cooking utensil, substantially as specified.

No. 58,177. Bob-Sleigh. (*Traineau couplé.*)



John Clayton, Minneapolis, Minnesota, U.S.A., 19th November, 1897; 6 years. (Filed 13th November, 1897.)

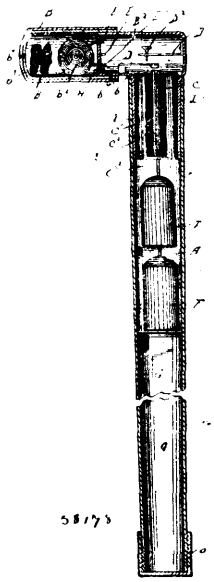
Claim.—1st. In a bob-sleigh, the combination with the runners, of plates G secured thereto, and having each a horizontal fang with seats on the upper edge of said runner and is formed with oblong slots *h*, a plate H secured to each runner opposite its plates G and having a horizontal fang upon which the horizontal fang of the plate G rests, and bolts connecting the two plates of each runner, together with a bench whose knee portions rest upon the horizontal fangs of the plates G, the reef-plates, and the starts whose lower ends enter the runner through the said slots *h* and whose upper ends are secured in said reef-plates, said starts having a loose engagement with the bench, substantially as specified. 2nd. In a bob-sleigh, the combination with a runner, a bench whose knee portion is seated on said runner, and a reef-plate whose end portions are secured to the runner upon opposite sides of the bench and whose intermediate portion extends over the bench but is disconnected therefrom, of the start-plates C secured to opposite faces of the said knee portion, each of said plates having the outwardly-projecting tapered fangs c^1 and the corrseponding opposite fangs connected at their inner edges by a connecting-wall, said fangs and wall forming in said plate a vertical chamber of gradually decreasing depth from its upper to its lower end, and starts, one of which extends loosely up through each of said chambers, said starts having their lower ends secured in the runner and their upper ends in the reef-plates, substantially as specified.

No. 58,178. Electric Cane. (*Canne électrique.*)

Walter N. Sherman and Samuel C. Cornell, both of Merced, California, U.S.A., 19th November, 1897; 6 years. (Filed 2nd July, 1897.)

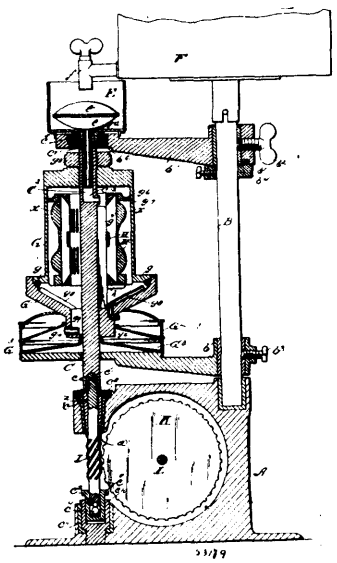
Claim.—1st. A walking stick, having a chamber therein and a hollow handle, combined with an electric battery, the parts of which are within said chamber, and nested metallic electrodes attached to the handle of the cane, and forming a part thereof, substantially as shown and described. 2nd. The combination with a walking stick, of a cylinder forming part of the handle thereof, carrying the electrodes and the cords and the sponges, and the cells and coils and connections arranged within the body portion of the cane, substantially as specified. 3rd. The combination with a walking stick, of a cylinder forming part of the handle thereof, carrying the electrodes and the cords and the sponges, and the cells

and coils and connections arranged within the body portion of the cane, and detachably and removably supported therein, substantially as described. 4th. The combination with a cane having a chamber therein, of the primary and secondary coils and their supports and the cells within said cane, the interrupter and adjusting screw, and the removable cylinder carrying electrodes, substantially as described, 5th. The combination with a cane, having a chamber therein, of the primary and secondary coils and their supports, and the cells within said cane, the interrupter and adjusting-screw, and the removable cylinder carrying electrodes, and a switch for controlling the current, substantially as described.



No. 58,179. Cream Separator.

(*Séparateur pour la crême.*)

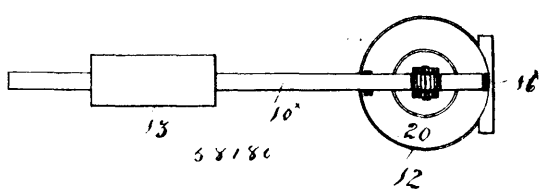


William C. Hartemann, Richard A. Hartemann and Charles J. O'Hara, all of Detroit, Michigan, U.S.A., 19th November, 1897 ; 6 years. (Filed 11th November, 1897.)

Claim.—1st. In a cream separator, a separating bowl provided with discharge outlet for the cream and milk at the bottom, substantially as described. 2nd. In a cream separator, a separating bowl consisting of a cylinder in combination with a chamber below the cylinder of greater diameter, substantially as described. 3rd. The combination of a separating cylinder, a chamber below the cylinder of greater diameter, and discharge passages for the milk leading from the outer extremity of said chamber, substantially as described. 4th. The combination of the separating bowl, provided with outlet passages leading downward from the outer extremities of the can for the discharge of the milk, and outlet passages leading downward near the axis of the can for the discharge of the cream, substantially as described. 5th. The combination of the separating bowl, the milk and cream discharge-outlets at the bottom of the can, and the cream and milk chambers below the can, substantially as described. 6th. The combination of the separator and shaft with a metal bushing supported in a felt bushing, substantially as described. 7th. The combination of the base, the standard, the arms, the collar for supporting the upper arm, and the pin for fixing the arm in a predetermined direction, substantially as described. 8th. The combination of the standard, the upper arm removably supported thereon, and means for fixing the position of the arm when replaced, substantially as described. 9th. The combination of the standard, the upper arm removably supported thereon, and means for fixing the direction of the arm when replaced, and the milk-cup supported on and removable with the arm, substantially as described. 10th. The separating bowl in combination with the screens H and H^1, substantially as described. 11th. The separating bowl in combination with the shaft provided with longitudinal wings, a screen supported on the wings provided with vertical bars, and an outer screen provided with diagonal bars, substantially as described. 12th. In a cream separator, the driving-wheel, the worm, and means for adjusting the shaft of the wheel endwise, substantially as described. 13th. The combination of the vertical driving-shaft and the adjustable step-bearing, substantially as described. 14th. The combination of the shaft, the worm, the driving-wheel, and the adjustable step-bearing, substantially as described. 15th. The combination of the separating bowl, the shaft, and the hollow, screw-threaded plug for drawing off the cream, substantially as described. 16th. In a cream separator, the vertical shaft, the step-bearing supported in a babbit-metal bushing, the journal c^5, a journal-box and babbit-metal bushing for said journal, the vertical standard, the arms b, b^1, and babbit-metal bushings between the standard and arms whereby the parts of the machine may be assembled and accurately adjusted and the babbit-metal bearings and bushings run in, substantially as described. 17th. In a cream separator, the shaft, journals and journal-boxes supported in babbit-metal bushings in combination with the standard, the arms and babbit-metal bushings between the standard and arms, substantially as described. 18th. In a cream separator, a separating bowl having an inclined bottom. 19th. In a cream separator, the combination of a separating bowl provided with an inclined bottom, and milk-discharge pipes wholly within the bowl on an incline, substantially as described. 20th. A separating bowl, in combination with milk-discharge pipes wholly within the bowl, substantially as described. 21st. The combination of the vertical standard, the lower arm having a vertical adjustment on the standard, and the milk and cream chambers supported on the arm, substantially as described. 22nd. The driving-shaft made in sections and provided with a ball-and-socket joint, whereby the upper end of the shaft is permitted to vibrate, substantially as described. 23rd. The driving-shaft made in two sections and connected by a socket-joint, in combination with the upper journal-box mounted in a bushing of resilient material, substantially as described. 24th. The combination of the journals, journal-boxes, journal-box supports and babbit-metal bushing, said journal-box supports provided with a key-way to receive a portion of the babbit-metal to prevent the bushing from turning, substantially as described. 25th. The combination of the worm, the shaft, the driving-wheel, the means for adjusting the horizontal shaft endwise, and the adjustable step-bearing, substantially as described. 25th. The combination of the cylinder G, the enlarged portion of the bowl G^1, and the diaphragm G^6, substantially as described.

No. 58,180. Hydraulic Air-Compressing Apparatus.

(*Appareil de compression hydraulique.*)

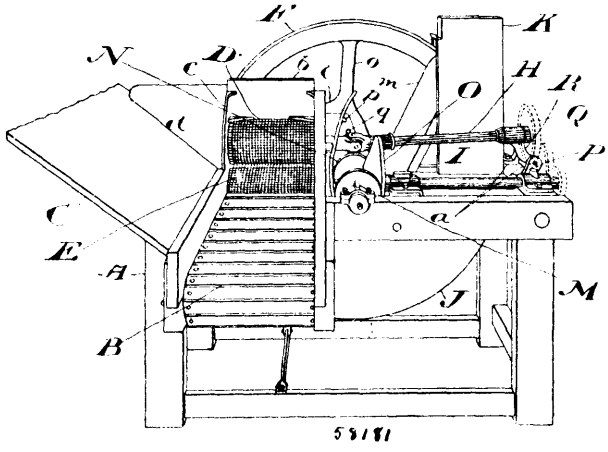


The Taylor Hydraulic Air Compressing Company, assignee of Charles Havelock Taylor, both of Montreal, Quebec, Canada, 19th November, 1897 ; 6 years. (Filed 31st July, 1897.)

Claim.—1st. Hydraulic air-compressing apparatus provided with a blow-off device adapted to prevent the escape of air into the return column of water, as set forth. 2nd. Hydraulic air-compressing apparatus having an automatically operated controller, or valve, controlling the passage of the compressed air. 3rd. In hydraulic air-compressing apparatus having a chamber wherein the air and water are separated, a distributer and a deflecting plate in said chamber adapted to deflect the moving body of water and so increase the length of travel thereof while in such tank, for the purpose set forth. 4th. In hydraulic air-compressing apparatus having a chamber wherein the air and water are separated and a spreader or distributer centrally of such chamber, an air passage connecting the air space beneath such spreader with the air space

proper of such chamber, for the purpose set forth. 5th. In hydraulic air-compressing apparatus having a chamber wherein the air and water are separated and a deflecting plate projecting inwardly from the walls of said chamber, an air passage connecting the air space beneath such deflecting plate with the air space proper of such chamber, for the purpose set forth. 6th. In hydraulic air-compressing apparatus having a chamber wherein the air and water are separated, a spreader or distributer centrally of such chamber, a deflecting plate projecting inwardly from the walls of said chamber and air passages connecting the air spaces beneath such spreader and deflecting plate with the air space proper of such chamber, for the purpose set forth. 7th. Hydraulic air-compressing apparatus provided with a blow-off consisting of an open ended pipe leading from the compressed air chamber proper of the apparatus to the open air, and a shield partially enclosing the end of the pipe that is within the compressed air chamber, as and for the purpose set forth. 8th. In hydraulic air-compressing apparatus, the stand pipe or conductor having a number of projections formed on its interior for the purpose set forth. 9th. Hydraulic air-compressing apparatus having an automatically operated controller located in the air conductor and comprising a valve casing having inlet and outlet, a sleeve projecting into same in line with the inlet piston, or valve, movable in said sleeve, a lever fulcrumed to said casing and an adjustable weight on said lever and a connection between said lever and the piston, all substantially as and for the purpose set forth.

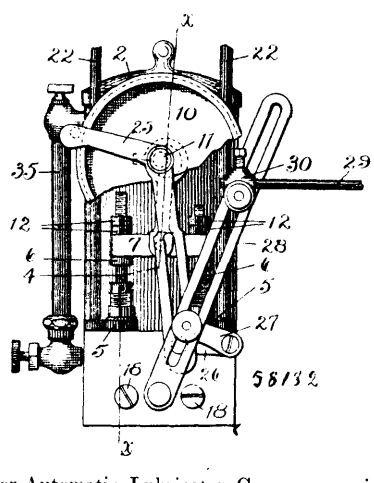
No. 58,181. Ensilage Cutter. (*Coupe-ensilage.*)



The Wilkinson Plough Co., assignee of Oscar Ezra Bray, both of Toronto, Ontario, Canada, 19th November, 1897; 6 years. (Filed 11th November, 1897.)

Claim.—1st. In an ensilage cutter, a knife wheel shaft and two friction bevel wheels slidably supported thereon and driven thereby, in combination with a counter shaft adapted to drive the feed rolls, a friction bevel wheel fast thereon in proximity to the aforesaid friction wheels, and means for moving the said friction wheels on the knife wheel shaft so that either may be placed in contact with the friction wheel on the counter shaft, substantially as and for the purpose specified. 2nd. In an ensilage cutter, the knife wheel shaft, a sleeve movable thereon and provided with a diagonal slot, a pin projecting from the shaft through the said slot, and two friction bevel wheels fast upon said sleeve, in combination with a counter shaft adapted to drive the feed rolls, and a friction bevel wheel fast thereon, in proximity to the aforesaid friction bevel wheels so that the above mentioned pin and slot tend to maintain one of them in combination with the friction bevel wheel upon the counter shaft, substantially as and for the purpose specified. 3rd. In an ensilage cutter, the knife wheel shaft, a sleeve movable thereon and provided with a diagonal slot, a pin projecting from the shaft through the said slot and two friction bevel wheels fast upon the said sleeve, in combination with the counter shaft adapted to drive the feed rolls, and a friction bevel wheel fast thereon in proximity to the aforesaid friction bevel wheels so that the above mentioned pin and slot tend to maintain one of them in combination with the friction bevel wheel upon the counter shaft, and clutch shifting mechanism connected with the sleeve by means of which either or neither of the knife shaft friction wheels may be so engaged, substantially as and for the purpose specified. 4th. In an ensilage cutter, the knife wheel shaft and two friction bevel wheels slidably supported thereon, and driven thereby, in combination with a counter shaft adapted to drive the feed rolls, a friction bevel wheel fast thereon in proximity to the aforesaid friction wheels, and means for moving the said friction wheels on the knife wheel shaft so that either may be placed in contact with the friction wheel on the counter shaft, and a bearing for the counter shaft made adjustable upon the frame so that the friction bevel wheel thereon may be adjusted towards the knife wheel shaft to take up wear, substantially as and for the purpose specified. 5th. In an ensilage cutter, the knife wheel shaft, a sleeve movable thereon and provided with a diagonal slot, a pin projecting from the shaft through the said slot, and two friction bevel wheels fast upon the said sleeve, in combination with a counter shaft adapted to drive the feed rolls, and a friction bevel wheel fast thereon in proximity to the aforesaid friction bevel wheels so that the above mentioned pin and slot tend to maintain one of them in combination with the friction bevel wheel upon the counter shaft and a bearing for the counter shaft made adjustable upon the frame so that the friction bevel-wheel thereon may be adjusted towards the knife-wheel shaft to take up wear, substantially as and for the purpose specified. 6th. In an ensilage cutter, a lower feed roll, the feed roll shaft suitably supported and driven, and a gear-wheel upon the shaft, in combination with a vertically movable upper feed roll, a shaft for the feed roll, a gear-wheel meshing with the aforesaid gear-wheel, a bearing for the outer end of the shaft, arms depending therefrom, and two lugs fixed to the frame whereon the said arms are journalled substantially in a line with the point of mesh of the two gear-wheels, substantially as and for the purpose specified. 7th. In an ensilage cutter, a fan casing in combination with the feed roll frame and a guard plate connected thereto and set forward close to the fan casing, substantially as and for the purpose specified. 8th. In an ensilage cutter, the feed box B, in combination with the feed board C, the feed roll frame *c* and the guide plate *d*, substantially as and for the purpose specified. 9th. In an ensilage cutter, the feed box B, having its outer edge lower than the inner, in combination with the feed board C, the feed roll frame *c*, and the guide plate *d*, substantially as and for the purpose specified. 10th. In an ensilage cutter, the knife-wheel F, the knife-wheel shaft G, longitudinally adjustable in the bearings *f* and *g*, substantially as and for the purpose specified. 11th. In an ensilage cutter, the combination of the knife-wheel F, the knife-wheel shaft G, the bearing *f*, the cap *h* thereon, the set screw *i*, the bearing *g*, and the sleeve j^1, adapted to adjust the shaft towards the bearing *f*, substantially as and for the purpose specified. 12th. In an ensilage cutter, the combination of the knife-wheel F, the knife-wheel shaft G, the bearing *f*, the cap *h* thereon, the set screw *i*, the bearing *g*, the sleeve *j* fast upon the shaft, and the sleeve j^1, screwed upon the said sleeve and abutting against the bearing *g*, substantially as and for the purpose specified. 13th. In an ensilage cutter, a knife-wheel having one or more knife spokes substantially L-shaped, the shorter arm connected to the hub and the longer to the rim, in combination with a straight knife securely bolted to each spoke, substantially as and for the purpose specified. 14th. In an ensilage cutter, a knife-wheel having one or more knife spokes substantially L-shaped, the shorter arm connected to the hub, and the longer to the rim, in combination with a straight knife securely bolted to each spoke by a series of bolts along the back and one at either or both ends near the edge, substantially as and for the purpose specified. 15th. In an ensilage cutter, a knife-wheel having one or more knife spokes substantially L-shaped, the shorter arm connected to the hub and the longer to the rim, in combination with a straight knife securely bolted to each spoke, one or more fan spokes connecting the knife spokes with the rim and fan blades connected thereto, substantially as and for the purpose specified. 16th. In an ensilage cutter, a knife-wheel having one or more knife spokes substantially L-shaped, the shorter arm connected to the hub, and the longer to the rim, in combination with a straight knife securely bolted to each spoke by a series of bolts along the back and one at either or both ends near the edge, one or more fan spokes connecting the knife spokes with the rim and fan blades connected thereto, substantially as and for the purpose specified.

No. 58,182. Lubricator. (*Graisseur.*)



The Rochester Automatic Lubricator Company, assignee of John Buckley, both of Rochester, New York, U.S.A., 19th November, 1897; 6 years. (Filed 6th November, 1897.)

Claim.—1st. In a lubricator, the combination with the reservoir, the cylinder outside of the latter, having the inlet-passage leading

from the cylinder, the check-value therein, and the exit-passage having the check-valve therein, of the piston operating in the cylinder, the reciprocating cross-head having a constant stroke, and the relatively-adjustable stops between opposite sides of the head and the piston, whereby the stroke of the piston may be adjusted to any portion of that of the head, substantially as described. 2nd, In a lubricator, the combination with the reservoir, of the two cylinders outside of the reservoir, inlet and exit-passages for the cylinders, and check-valves therein, the two pistons 4 operating in the cylinders, the reciprocating cross-head 7, and the relatively-adjustable stops on each of the pistons with which the cross-head engages, substantially as described. 3rd. In a lubricator, the combination with a reservoir, two pump-cylinders having supply and discharge passages and valves therein, of a reciprocating member, as a cross-head, two pistons operating in the cylinders having the collars and adjustable nuts thereon, co-operating with the member, whereby the stroke of the pistons may be independently regulated, substantially as described. 4th. In a lubricator, the combination with a reservoir, two pump-cylinders having supply and discharge passages and valves therein, of the rotary cam, the pitman actuated thereby, the cross-head pivoted to the pitman, the two pistons operating in the cylinders and upon which the cross-head is guided, and adjustable connections between the pistons and cross-head for regulating the stroke of the former relative to the stroke of the latter, substantially as described. 5th. In a lubricator, the combination with the reservoir, the cylinder, and the piston operating therein, of an oil-passage communicating with the cylinder and having two diameters, the upper being the larger, a countersunk, valve-seat at the lower end of the larger diameter, and a counter-sunk valve-seat at the lower end of the smaller diameter, and the large and small check-valves co-operating with said seats, both capable of introduction through the larger diameter, substantially as described. 6th. In a lubricator, the combination with the reservoir, a pump-cylinder, inlet and discharge passages and valves therein, of the piston operating in the cylinder, the reciprocating member, as a cross-head, adjustable slip connections between the piston and reciprocating member for regulating the length of stroke of the former relative to the length of stroke of the latter, the cam-wheel actuating the member, an actuating device for the cam-wheel, as rod 29, and adjustable connections between said actuating device and the cam-wheel, whereby the speed of the cam-wheel may be adjusted relative to the speed of the actuating device, substantially as described. 7th. In a lubricator, the combination with the reservoir, two pump-cylinders, inlet and discharge passages and valves therein, and pistons operating in the cylinders, of a rotary cam-wheel, a reciprocating member, as a cross-head, actuated from the cam-wheel, independent adjustable slip connections between each of the pistons and member for regulating their stroke relative to the length of stroke of the member, actuating devices, as a rod 29, for rotating the cam-wheel, and adjustable connections between said actuating devices and the wheel, whereby the speed of the cam-wheel may be changed, substantially as described. 8th. In a lubricator, the combination with a reservoir, a cylinder, inlet and discharge passages and valves therein, of a reciprocating member, as a cross-head, having the aperture, the piston operating in the cylinder and having the collar, and the adjustable nut thereon for co-operating with opposite sides of the member, substantially as described.

No. 58,183. Process of and Apparatus for Welding Metals. (*Procédé et appareil pour souder les métaux.*)

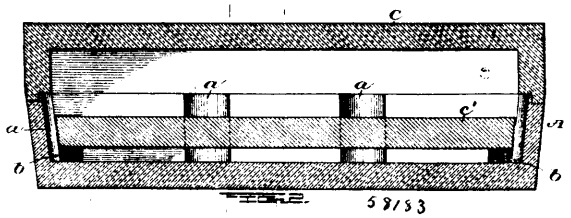
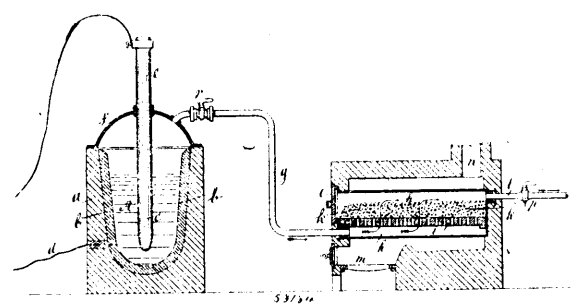


Fig. 2. 58/183

Joseph William Comley, Baddock, Leon James Long, Pittsburg, Archibald Hamilton Rowand, Jr., Verona, William Wilbur Payne, Coal Valley, James Payne Beam and William Smith Frye, both of Gill Hall, and James Sherry Bedell, Beanville, all in Pennsylvania, U.S.A., 19th November, 1897 ; 6 years. (Filed 27th September, 1897.)

Claim.—1st. The method of welding two metals which are fusible at different temperatures, which consists in liquidifying the more fusible metal and causing the less fusible metal to contact therewith, and then raising the temperature of both metals while thus in contact to a temperature considerably greater than the fusing temperature of the more fusible metal, and almost to the fusing point of the less fusible metal, whereby a homogenous union of the metals may be effected, substantially as described. 2nd. The method of welding two metals which are fusible at different temperatures, which consists in liquefying the more fusible metal and bringing the same into contact with the surface of the less fusible metal, raising the temperature of both metals while thus in contact to a temperature above the fusing point of the more fusible metal but below the fusing point of the less fusible, agitating the molten metal so as to drive off the impurities, and finally solidifying the molten metal while in contact with the metal to be welded thereto, whereby the molten metal may be purified and a homogeneous union secured between the metals, substantially as described. 3rd. The method of welding copper and iron or copper and steel, which consists in forming a liquified layer of the desired thickness of copper in contact with the surface or surfaces of the iron or steel, then raising the temperature of both metals while thus in contact to a degree above the fusing point of the copper and almost to the fusing point of the iron or steel, and finally solidifying the copper while in contact with the iron or steel, whereby a homogeneous union of the metals may be secured, substantially as described. 4th. The method of welding copper and iron or copper and steel, which consists in forming a liquefied layer of the desired thickness of copper in contact with the surface or surfaces of the iron or steel, then raising the temperature of both metals while thus in contact to a high degree of heat above the fusing point of the copper, but below the fusing point of the iron or steel, eliminating the impurities from the copper by agitating or teasing the molten metal, and finally solidifying the copper while in contact with the iron or steel, whereby a homogeneous union may be secured between the metals, substantially as described. 5th. The method of welding copper and iron or copper and steel, which consists in forming a layer or layers of copper in contact with the surface or surfaces of the iron or steel, then gradually raising the temperature of both metals while thus in contact to a degree of heat considerably above the fusing point of the copper but below the fusing point of the iron or steel, agitating the molten copper so as to remove or drive off the impurities contained therein, and finally gradually cooling the metals so as to solidify the copper while in contact with the iron or steel, whereby the copper may be purified and a homogeneous union secured between the metals, substantially as described. 6th. The method of welding copper and iron or copper and steel, substantially as hereinbefore described, which consists in producing a layer or layers of molten copper in contact with the previously cleaned surface or surfaces of the iron or steel, then raising the temperatures of the metals to the boiling point of the copper and approximating the fusing point of the iron or steel, agitating the molten copper to eliminate impurities, then covering the metals thus treated while still highly heated with a heat-retaining medium and permitting the metals to gradually cool, substantially as described. 7th. A crucible for welding copper and iron or copper and steel, comprising a body-portion provided with vents or port-holes therein, means for supporting an iron or steel plate so as to provide a space for the copper between the inner surface of said body-portion and the surface of the plate, and a lid adapted to fit over the body-portion and enclose the metals within the same, substantially as described. 8th. A crucible for welding copper and iron and copper and steel, comprising a body-portion provided with vents or port-holes in the sides thereof, non-fusible means for supporting the iron or steel plate above the bottom of the body-portion so as to provide a space for the copper, and a lid for enclosing the plate within said body-portion, substantially as described.

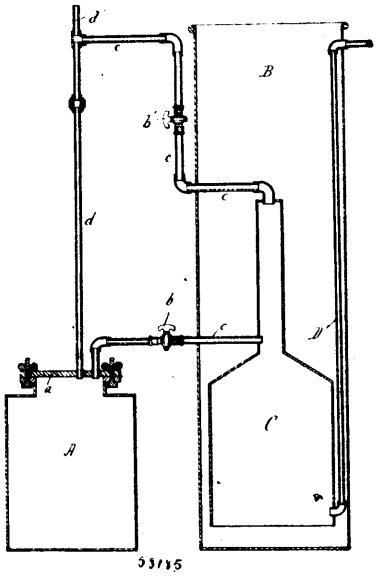
No. 58,184. Manufacture of Carbonic Acid Gas. (*Fabrication de gaz acide carbonique.*)



Herbert Samuel Elworthy, Baudra, Bombay, India, 22nd November, 1897 ; 6 years, (Filed 23rd November, 1896.)

Claim.—1st. The process of manufacturing carbonic acid gas by heating together lime and coal-dust or other carbon in a covered electric furnace, and oxidizing the carbon non-oxide evolved during such heating by causing it to pass over a heated metallic oxide contained in a separate chamber heated by a second furnace, and then collecting the carbonic acid gas so formed in a gas-holder or other receptacle, substantially as specified. 2nd. In an apparatus of the class specified, the combination of the pipe *g* provided with valve *r*, the heated chamber *h* contained in a furnace and provided with door *o* and exit-pipe *l* from the upper part of the chamber, and the perforated bottom *i* located in the chamber *h* above the opening from the pipe *g* and below the opening with the pipe *l*, substantially as described and for the purpose specified.

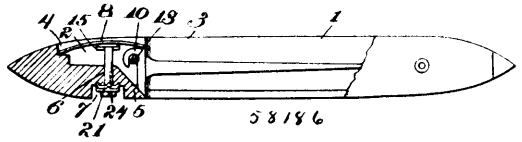
No. 58,185. Acetylene Gas Generator.
(*Générateur de gaz acetyline*)



Eugène Godin, Three Rivers, Quebec, Canada, 22nd November, 1897 ; 6 years. (Filed 2nd July, 1897.)

Claim.—1st. In apparatus for generating acetylene gas, the combination, with a vessel A for holding metallic carbide, of a vessel B for holding water, an internal vessel C open at the bottom and supported in the vessel B, a gas outlet pipe connected to the upper parts of the vessels A and C, and a pipe connecting the vessel A with the vessel C at a point below the said gas-pipe, substantially as set forth. 2nd. In apparatus for generating acetylene gas, the combination with a vessel A for holding metallic carbide, of a vessel B for holding water, an internal vessel C open at the bottom and supported in the vessel B, a gas outlet pipe *d* connected to the vessel A, a pipe *c* provided with a valve and connected to the pipe *d* and to the upper part of the vessel C, and a pipe c^1 provided with a valve and connected to the vessel A and to the vessel C at a point below the pipe *c*, substantially as set forth.

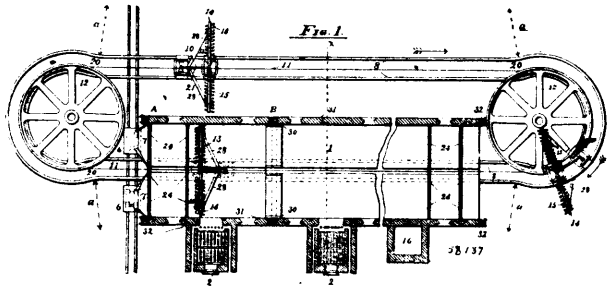
No. 58,186. Loom Shuttle. (*Navette de métier.*)



Alfred Isherwood, New Bedford, Massachusetts, U.S.A., 22nd November, 1897 ; 6 years. (Filed 28th June, 1897.)

Claim.—1st. The combination with the shuttle-body having a recess in its upper side, and a spindle having its head pivoted at the inner end of the recess, of an imperforate shuttle-spring arranged within the recess and at its inner end bearing on the head of the spindle, a bolt passed through the shuttle-body and removably connected to the underside of the spring, and a retaining device on the lower end of the bolt, substantially as specified. 2nd. The combination, with the shuttle-body having a recess in its side, and a headed spindle pivotally mounted at the inner end of the recess, of a shuttle-spring seated in the recess and at its front end bearing on the spindle head, said spring between its ends having a pair of lips horizontally disposed and spaced apart and located under the spring, a bolt having its head resting upon the lips and its body portion embraced thereby and extending through the shuttle-body, and a securing device on the lower end of the bolt, substantially as specified. 3rd. The combination with the shuttle-body having the recess of uniform width formed in the upper side near one end, and the angular headed spindle pivoted at the inner end of the same, of the shuttle-spring within the recess and bearing at one end on the head of the spindle, said spring having at one side a depending portion at the lower end of which is located a pair of horizontal spaced apart lips, a bolt having an angular head seated on the lips and having one of its flat faces abutting against the depending portion of the spring, the lower oppositely flattened portions of the bolt and extreme lower cylindrical portion thereof passing through a correspondingly-shaped opening in the shuttle-body and terminating in a cavity in the underside of the same, a nut on the lower end of bolt within the cavity, and means for locking the nut upon the bolt, substantially as specified. 4th. As a new article of manufacture, an imperforated shuttle-spring of uniform width having integrally formed parallel lips on its underside and adapted to support a bolt-head and receive and embrace the body portion thereof, substantially as specified.

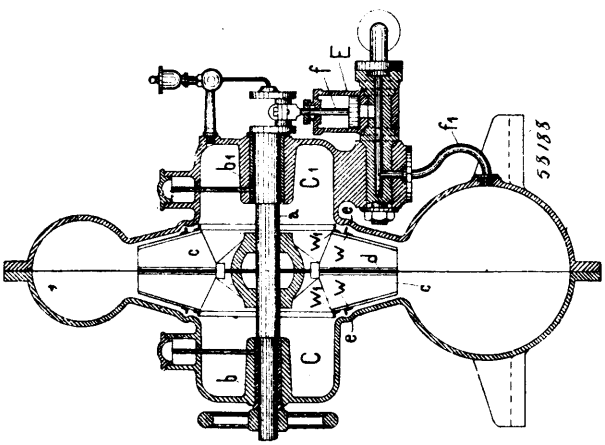
No. 58,187. Mineral Roasting and Oxidizing Furnace. (*Fournaise pour griller et oxyder les minerais.*)



Alfred Ropp, Selby, California, U.S.A., 22nd November, 1897 ; 6 years. (Filed 3rd December, 1896.)

Claim.—1st. In an ore roasting furnace, rakes or rabbles supported and guided by cars or trucks that run on ways beneath and outside the furnace, said ways having a double or reverse curve 20, and increased radius around the wheels or pulleys 12, so the impelling rope will enter upon and leave the guiding and driving pulleys without lateral strain, substantially as described. 2nd. In an ore roasting furnace, having mechanically impelled rakes or rabbles to stir and move the ore, and trucks or cars moving on rails or ways in a conduit beneath the hearth of the furnace, the car or truck-wheels, the swivelling axles 17 to accommodate the curves 20 at the ends of the furnace, in the manner substantially as described. 3rd. In an ore roasting furnace, having rakes or rabbles moving over the ore hearth, supported and guided by trucks or cars, guiding rollers 18 to bear against the sides of the rails or ways, in the manner substantially as described. 4th. In an ore roasting furnace, having rabbles or rakes moving therethrough in a conduit beneath the hearth, having at tho top a narrow slot adapted to receive a strut or standard, provided with rollers 25, in the manner substantially as described. 5th. In an ore roasting furnace, retaining rods or bolts in combination with the metallic bars 30, that will telescope or slide one upon the other, permitting longitudinal expansion and contraction of the walls, in the manner and for the purposes substantially as described. 6th. In an ore roasting furnace, side walls in divisions, the hearth and top in corresponding divisions, and plates 38 and 45 to cover the spaces between the divisions of the hearths and top, attached at each end to the longitudinal members of one division of the furnace and adapted to slide on the other members, substantially as described. 7th. In an ore roasting furnace, sections set in alignment provided with rakes or rabbles common to the several sections of the furnace and passing through the whole, in the manner substantially as described. 8th. In an ore roasting furnace, arranged in sections, feeding and discharge devices for each section, and trap doors 24 at each end of each furnace or section, adapted to open and close as the rakes or rabbles pass, in the manner substantially as described.

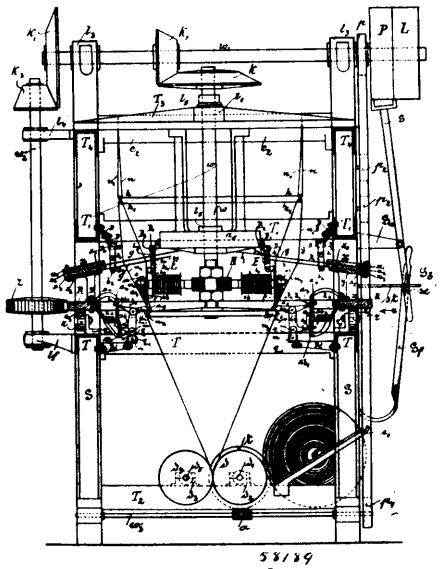
No. 58,188. Ventilator for Mines, etc.
(*Ventilateur pour mines, etc.*)



Fritz Eisenbeis, Wellesweiler, Rhineland, Prussia, 22nd November, 1897 ; 6 years. (Filed 16th December, 1895.)

Claim.—1st. A miner's ventilator, the axle of which is directly coupled with the piston rod of an oscillating compressed air engine, for the purpose, that the apparatus wants only a small space, so that it may be set up in the smallest leads of a mine. 2nd. The arrangement of the ventilator, distinguished by the suction pipes G, G^1, arranged centrally on both sides of the casing, the fan-wheel supplied with a partition at right angles to the axle and dividing the wings in half as well as the check angle rings on both sides of the vent hole.

No. 58,189. Circular Loom. (*Métier circulaire.*)



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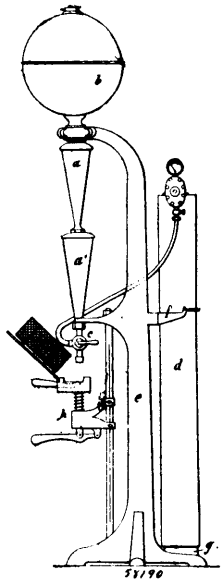
Josef Herold, Brunn, Zollhaus-glacis No. 23, and Carl Herold, Ronigsfeld, both in the Austrian Empire, 22nd November, 1897 ; 6 years. (Filed 22nd March, 1897.)

Claim.—1st. A circular loom constructed with the electro-magnets E on the hub N rotating with the shatt *w*, the shuttles *s* provided with soft iron plates *s b*, and running on their rollers *s* r^1, *s r*, *s* r^2, over the inner vertical partition walk, covering the ends a^5 of the levers *b* l^2 projecting into the partition 2, which are propelled forward by the magnets E and carry the weft thread through the shed, the inclined heddles *g* by which the shed is formed, and the levers *b* l^2, with arms a^5, by which the threads are beaten up, substantially as described. 2nd. In a circular loom, a toothed flange R actuated by the toothed wheel *z* and running on rollers *r* or balls to which the grooved eccentrics x^2, x^3, are fastened, provided with the grooves x^5, x^6, intersecting each other several times, which receive the deflected ends of the heddles *z*, fitted with rollers *g*, *r*, carried in such a way that following the passage of each shuttle *o* there is an immediate change of shed. 3rd. The arrangement of the heddle flanges B, B^1, fixed on the bearing pieces D, D^1, between the metal plates B^2, of which, on spring rings b^1, b^5, the heddles *g* tapered in front and sliding on the rings, are carried in order to prevent a rotary movement of same. 4th. The arrangement of the flanges *x* b^1, *x* b^2, *x* b^3, fastened on the flange R*x* in the curved grooves 1 and 2, of which the arms a^1, a^3, connected together by joints, engage with the bent lever *b* l^1, b^2, pivoted on the ring *m*, so that when the arms a^1, a^3, pass through the bends of the groove the lever is turned in such a way that the lever arms a^3 are first thrown out of gear with the shed in order to immediately engage again with it above the inserted weft threads and beat them up to the web. 5th. A weft guard, consisting of a spring plate G*f*, which traverses the slit *s* t^1 of the plate *s t*, and, when the loom is being started, comes in contact with the curved end *h* s^2 of the bent piece *h s*, in order to be released to turn the strap fork G and stop the loom, when at the breakage or coming to an end of a weft thread, the lever arms a^5 come in contact with the ring *e e*, (fig. 5), and the piece *h* s^1 is drawn into the spool *s* E.

No. 58,190. Apparatus for the Manufacture of Aerated Water. (*Appareil pour la fabrication des eaux et boissons gazeuses.*)

Jules Emringer et Prosper Emile Marchand, tous deux de Paris. France, 22 novembre 1897 ; 6 ans. (Déposé le 2 juillet 1897.)

Résumé.—1° Un systéme d'appareil pour la fabrication des eaux et boissons gazeuses, principalement caractérisé par l'emploi de cônes recevant la matière saturante et communiquant entre eux, le cône supérieur communiquant en outre avec le récipient d'eau et le cône inférieur comportant un robinet à plusieurs orifices pour l'arrivée intermittante de l'eau et du gaz, en principe tel qu'il est décrit en référence au dessin spécimen annexé. 2° Dans l'appareil décrit ci-dessus, la combinaison du cône supérieur avec une soupape,



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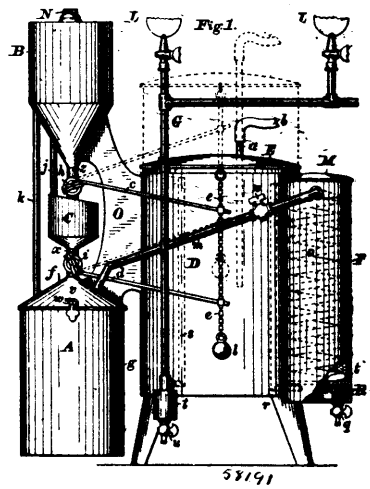
un robinet et une conduite reliant l'appareil à une canalisation d'eau sous pression, en principe tel quil est décrit. 3° Dans l'appareil décrit ci-dessus, l'emploi d'un cylindre entourant l'appareil et emmagasinant le gaz pour l'alimentation, le dit cylindre comportant deux tubulures l'une le reliant au récipient d'acide carbonique, l'autre conduisant le gaz au robinet, et une soupape et un manomètre pour réglementer la pression ; le récipient d'eau comportant également un manomètre pour le contrôle de la pression de la saturation au moment de l'injection, en principe, tel qu'il est décrit. 4° Dans un appareil du genre revendiqué ci-dessus, la disposition du récipient d'eau en forme de cylindre ou cloche dont les bords reçoivent par emboutissage, le cône supérieur, en principe tel qui'l est décrit.

No. 58,191. Apparatus for Generating Acetylene Gas. (*Appareil pour générer le gaz acétyline.*)



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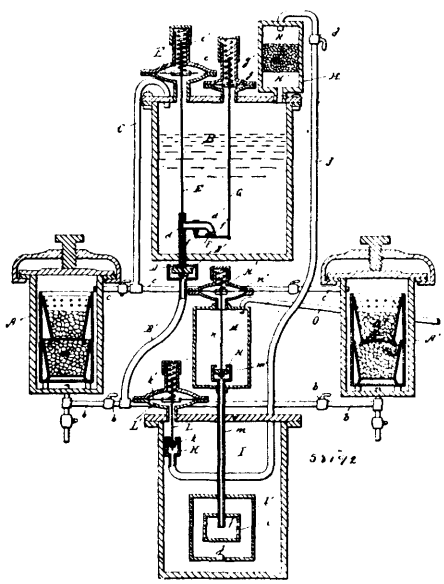
Jerome Josiah Patterson, Batavia, New York, U.S.A., 22nd November, 1897 ; 6 years. (Filed 19th April, 1897.)

Claim.—1st. The combination of a gas-generating receptacle. the closed water-supply tank and the intermediate receiver, the valves between the supply-tank and the intermediate receiver and between the receiver and the generator, the pipes connecting the receiver and the generator with the supply tank, the movable gas-holder, suitable mechanism whereby the valves are connected with the gas-holder so as to be operated thereby, and suitable piping connecting the generator with the gas-holder, substantially as described. 2nd. The combination of the gas-generating receptacle, the closed water-supply tank and the intermediate receiver, the connecting pipe between the supply-tank and the receiver with the valve therein, the connecting pipe between the receiver and generator with the valve therein, the pipes connecting the receiver and generator with the

supply tank, the movable gas-holder, suitable mechanism whereby the valves are connected with the gas-holder so as to be operated thereby, and suitable piping connecting the generator with the gas-holder, substantially as described. 3rd. The combination with the gas-generator A, consisting of the cover *f* and detachable vessel *g* connected by a water-seal, of the receiver C, the water supply-tank B, the intermediate valves *h* and *i*, the movable gas-holder and suitable mechanical connections whereby the valves are operated from the holder, substantially as described. 4th. The combination of the gas-generating receptacle, the water supply-tank and the intermediate receiver, the valves between the supply-tank and the intermediate receiver and between the receiver and the generator, the movable gas-holder, the piping connecting the generator with the gas-holder, and suitable connecting mechanism between the movable gas-holder and the valves whereby one valve is opened when the other is closed, substantially as described.

No. 58,192. Apparatus for Generating Acetylene Gas. (*Appareil pour générer le gaz acétyline.*)



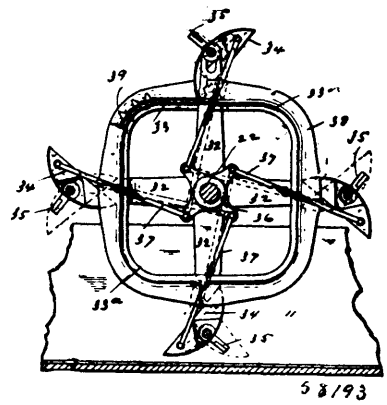
John Flood and Joseph Kipling, both of Quebec, Province of Quebec, Canada, 22nd November, 1897; 6 years. (Filed 14th April, 1897.)

Claim.—1st. In an acetylene gas generator, the combination, with a vessel B for holding gas and water, of two vessels A, A^1 for holding carbide, pipes provided with stop valves and connecting the upper and the lower parts of the vessels A and A A^1 respectively, and an automatic valve preventing the water from passing out of the vessel B when the pressure of gas in the said vessel exceeds a prearranged limit, substantially as set forth. 2nd. The combination with a vessel for holding acetylene gas and water, of a filter attached to the upper part of the said vessel and holding layers of absorbent cotton and charcoal, and a gas-pipe connected to the top of the said filter, substantially as set forth. 3rd. The combination, with a filter for acetylene gas, of a perforated vessel I^1 inside the filter, a perforated vessel *i* inside the vessel I^1, absorbent cotton in the vessel *i*, charcoal between the vessels I^1 and *i*, a gas-pipe leading out of the vessel *i*, a gas-pipe J leading into the filter, and an automatic valve connected to the said filter and regulating the admission of gas through the pipe J, substantially as set forth. 4th. In an acetylene gas generator, the combination, with a vessel B for gas and water, of a water-pipe projecting into the said vessel and provided with a branch, a pivoted lever provided with a valve for closing the said branch, a chamber and a spring-pressed plate secured therein and connected to the top of said vessel, and a rod connecting the said plate with the free end of the said lever, substantially as set forth.

No. 58,193. Malting Machine. (*Machine à faire la drèche.*)

Michael Angels Barber, Norwick, Connecticut, U.S.A., 22nd November, 1897; 6 years. (Filed 7th June, 1897.)

Claim.—1st. In a removable stirrer of the class herewith described, in combination, a series of reversible buckets and a shell located between the said buckets and the axial centre of the stirrer, substantially as specified. 2nd. In combination with a suitably journalled shaft, radial arms secured to said shaft, buckets journalled in the free ends of said arms, and a shell interposed between the shaft and the buckets, said shell being substantially polygonal in cross section. 3rd. In combination in a malt stirrer, a shaft with radial arms, reversible buckets journalled in the outer ends of said arms, a shell between the said buckets and shaft, having substantially



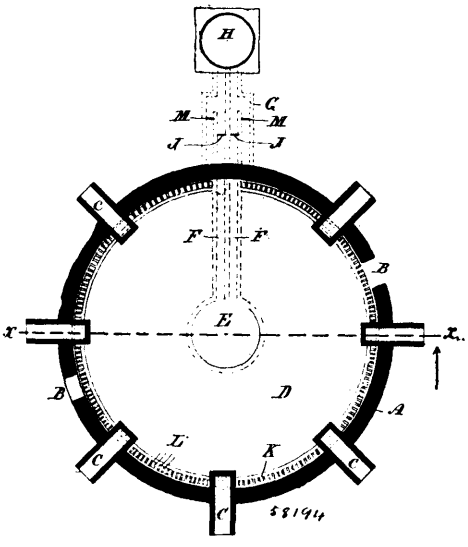
flat portions adjacent to the buckets and curved portions 33 *a*, intermediate each pair of buckets, and means connecting the several buckets, whereby the reversal of one bucket will act simultaneously to reverse all of the others of the series. 4th. In a revoluble malt stirrer, in combination, a series of reversible buckets and a shell located between said buckets and the axial centre of the stirrer, the combination of the journalled shaft, having radial arms, reversible buckets journalled in the free ends thereof, each bearing a rigid reversing rib, a shell interposed between the shaft and the buckets, a spider loosely mounted on the shaft, and link connections between the said buckets and the spider arms, whereby the reversal of one bucket cause all the others to revolve in unison, substantially as specified. 6th. In a revoluble stirrer, the combination of the journalled shaft, with radial arms having reversible buckets journalled in the free ends thereof, and a shell interposed between the shaft and the said buckets, the said shell bearing on its outer surface radially projecting spurs or teats for the better distribution of the grains, substantially as specified. 7th. In a revoluble stirrer, the combination of the journalled shaft, having radial arms bearing reversible buckets, journalled in the free ends thereof, with a shell located between the said shaft and the reversible buckets, at such relative distance from each that the edges of the reversible buckets shall strike and bear upon the shell in either position, whereby the said buckets are steadied and held agsinst further revolution during the act of stirring, substantially as and for the purpose specified. 8th. A revoluble stirrer for malting purposes, consisting of a journalled shaft having radial arms, a shell surrounding the said shaft at a suitable distance, borne by the said arms, and a series of reversible buckets journalled in the free ends of the radial arms outside the shell in journal boxes made radially adjustable to and from the shell, whereby the working angle of the buckets may be varied and adjusted at the will of the operator, in accordance with the varying character of the work, substantially as and for the purpose specified. 9th. In a malting machine, the combination of the revoluble stirrer, consisting of the central shaft, with radial arms, the reversible buckets and the reversing means, the intermediate shell, the agitator frame travelling on ways, the transverse pinion shaft and pinion borne on the said travelling frame, the rack bars, driving cable, and intermediate gearing between the said driving cable and the central stirrer shaft, and also between the said shaft and the pinion shaft and pinions, engaging the rack bar, all substantially as and for the purpose specified. 10th. In a malting machine, the combination of the revoluble stirrer, consisting of the central shaft with radial arms, the reversible buckets mounted in adjustable bearings in the free ends of said radial arms, the reversing means, the intermediate shell, the agitator frame travelling on ways, the transverse pinion shaft and changeable pinion gear for effecting the relative speed of the travelling frame, the rack bars, the driving cable, and intermediate gearing between the said driving cable and the said changeable pinion gear and rack bars, including the gear on the central stirrer shaft, all substantially as and for the purpose specified.

No. 58,194. Brick and Tile Kiln. (*Four à brique et tuile.*)

Jonas Cornell, Thedford, Ontario, Canada, 22nd November, 1897; 6 years. (Filed 7th September, 1897.)

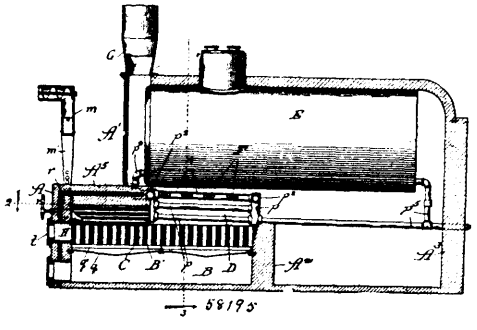
Claim.—1st. A circular dome-shaped kiln, having a flue with open spaces L, around the base near the floor and provided with dampers M, a well-hole at the centre and radial flues F therefrom provided with dampers J, said flues connected to a smoke stack H outside the kiln, as and for the purpose set forth. 2nd. A dome-

shaped kiln having a circumferential horizontal flue K with spaces L, admitting smoke from the interior of the kiln, a well-hole E, at



the middle and radial flues F therefrom, said flues provided with dampers J, M, substantially as set forth.

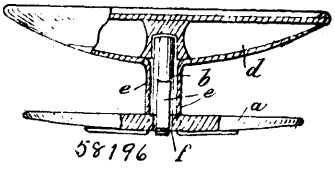
No. 58,195. Boiler Furnace. (*Fournaise de chaudières.*)



Bernard Cornelius Heavey and Samuel Taggart White, both of Chicago, Illinois, U.S.A., 24th November, 1897; 6 years. (Filed 13th November, 1897.)

Claim.—1st. In a boiler furnace, the combination of a fire-chamber provided along its forward portion with heat storage sides and top, the top terminating beneath the forward end portion of the boiler, a bridge wall at the rear end of the fire-chamber, water circulating conduits extending from the rear end of said top to the bridge wall, and spaced blocks resting upon the said conduits, substantially as and for the purpose set forth. 2nd. In a boiler furnace, the combination of a fire-chamber provided along its forward portion with corrugated heat storing sides, the top terminating beneath the forward end-portion of the boiler, a bridge wall at the rear end of the fire-chamber, water circulating conduits extending from the rear end of said top to the bridge wall, and spaced blocks resting upon the said conduits, substantially as and for the purpose set forth. 3rd. In a boiler furnace, the combination of a fire-chamber provided along its forward portion with heat storing sides and top, the top terminating beneath the forward end-portion of the boiler, a fuel dust feeder and spraying device in the front part of the fire-chamber, a bridge wall at the rear end of the fire-chamber, water circulating conduits extending from the rear end of said top to the bridge wall, and spaced blocks resting upon the said conduits, substantially as and for the purpose set forth. 4th. In a boiler furnace, the combination of a fire-chamber provided along its forward portion with heat storing sides, the top terminating beneath the forward end portion of the boiler, a bridge wall at the rear end of the fire-chamber, a frame formed of manifolds and water circulating pipes communicating with opposite ends of the boiler and extending from the rear end of said top to the bridge wall, and a fuel dust feeding and spraying device in the front part of the fire-chamber, substantially as and for the purpose set forth. 5th. In a boiler furnace, the combination of a fire-chamber provided along its forward portion with heat storing sides, the top terminating beneath the forward end portion of the boiler, a bridge wall at the rear end of the fire-chamber, a frame formed of manifolds and water circulating pipes communicating with opposite ends of the boiler, and extending from the rear end of the said top to the bridge wall, and spaced blocks of fire-clay, or the like, resting upon the said circulating pipes, substantially as and for the purpose set forth.

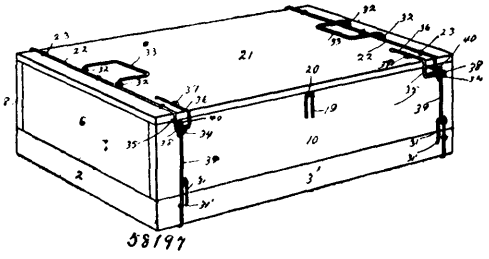
No. 58,196. Button. (*Bouton.*)



Otto Hermann Plew, Barth-a-Ostsee, Prussia, Germany, 24th November, 1897; 6 years. (Filed 20th September, 1897.)

Claim.—1st. A button consisting essentially of a shank *b*, mounted on a base plate *a*, and adapted to be inserted in the head *d*, of depending sheet metal strips *e*, which are adapted to be passed through slots *f*, in the base plate *a*, and capable of being bent over in such a manner as to attach the base plate *a*, to the head *d*, as set forth. 2nd. A button constructed substantially as hereinbefore described and shown.

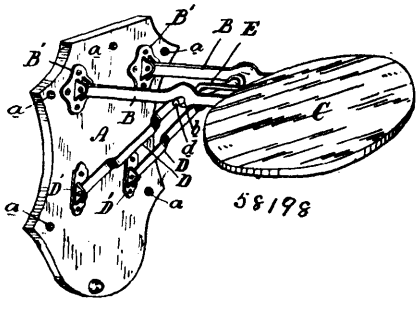
No. 58,197. Folding Egg-Crate. (*Boîte à œufs pliante.*)



Henry Clay Dean, Difficult, Tennessee, U.S.A., 24th November, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—1st. A folding egg-crate comprising the bottom 1, provided with the fixed end and side pieces, the partition 15, hinged thereto, and provided with the projecting pins 17, 17, the swinging end pieces 4 and 6 having orifices 14, the front and back pieces 8 and 10, provided with dowel-pins 13, transverse guide-recesses 20 and the spring-clips 19, formed with integral loops 18, the bottom binding wires 30 formed with eyes 26, and oblong links 31, and the rods 27 and 39, in combination with the detachable lid 21, the binding wire 22, secured thereto and formed with the hook 25, integral eyes 32, and the terminal eye 34, the bail-handle 33, hinged in said eyes 32, 32, and the spring-bolt 38, adapted to engage the eye 34, substantially as and for the purpose set forth.

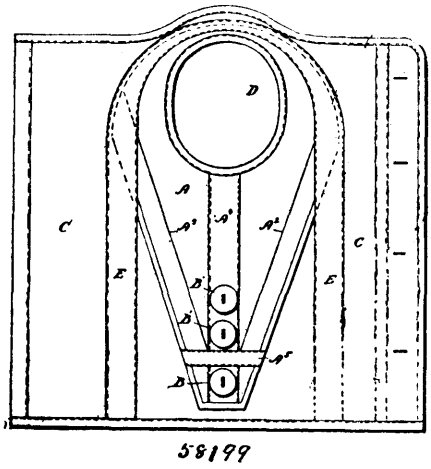
No. 58,198. Counter Bracket Seat.
(*Console pour siège mobile.*)



George A. Coulson, Brockville, Ontario, Canada, 24th November, 1897; 6 years. (Filed 11th November, 1897.)

Claim.—In a counter or bracket seat, an adjustable two-armed bracket B, each arm provided with a locking notch *b*, and having a hinged lug B^1, adapted to be secured to a counter front or fixture, braces D, D, each having a hinged lug D^1, adapted to be secured to said front, and connected at the outer ends by a locking bar *d*, engaging said locking notches when the seat is in use, a seat C, secured to said bracket, and a slotted guide bar E, secured at one end to said seat and receiving the locking bar, as set forth.

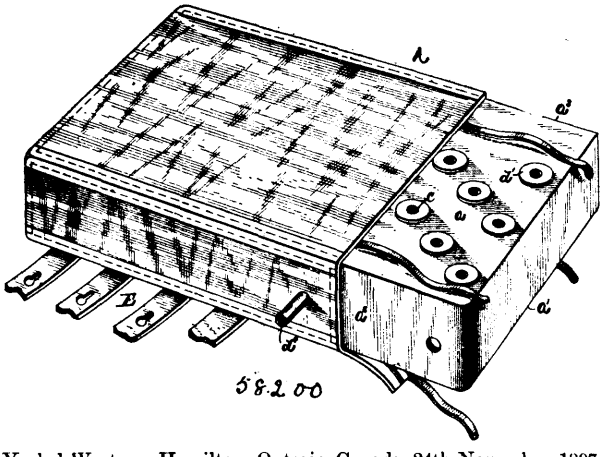
No. 58,199. Underwaist. (*Corsage.*)



James Courtney Andrews, Springfield, Mass., U.S.A., 24th November, 1897; 6 years. (Filed 15th November, 1897.)

Claim.—The combination with an underwaist, of a permanently applied, wedge-shaped supporting-flap arranged with its pointed end downward, and having its upper end formed with an arm-hole which is registered with the arm-hole in the waist, a binder binding the edges of the arm-hole of the waist and the edges of the arm-hole of the supporting-flap together, and a reinforcing shoulder-strap extending over the upper portion of the supporting-flap and above the arm-holes of the waist and flap, and extended downward in parallel lines to the lower edge of the waist so as to include the entire flap within it, the upper portion of the flap being therefore permanently attached to the waist, while its lower portion is left free, substantially as set forth.

No. 58,200. Pneumatic Hospital Bed.
(*Lit pneumatique.*)



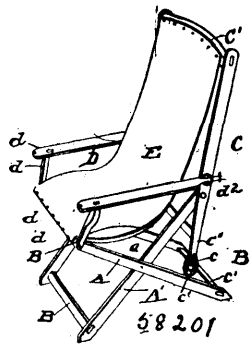
Ysobel Western, Hamilton, Ontario, Canada, 24th November, 1897; 6 years. (Filed 15th November, 1897.)

Claim.—1st. A pneumatic mattress consisting of a rectangular body made of sheeting, the top and bottom sheets thereof connected by tubular rubber stays, substantially as described. 2nd. A pneumatic mattress consisting of a rectangular body made of sheets joined at their edges, the top and bottom sheets having oppositely disposed perforations therein, and short rubber tubes fitted with nipples and screw caps upon the ends thereof, for securement to the top and bottom sheets of the mattress, substantially as described.

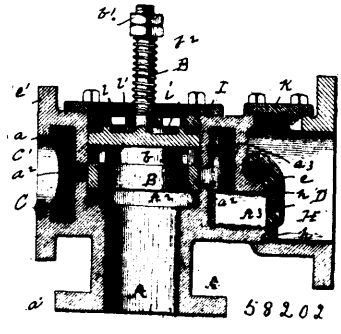
No. 58,201. Adjustable Folding Chair. (*Siège pliant.*)

Adelbert F. Briggs, New Lisbon, Wisconsin, U.S.A., 24th November, 1897; 6 years. (Filed 15th November, 1897.)

Claim.—1st. An adjustable folding chair provided with crossed legs and having back standards pivotally secured to the ends of the upper rear crossed legs and adjustably supported on the lower rear crossed legs of said chair, arms movable lengthwise supported on the outer sides of said standards, said arms supported at their forward ends by uprights pivotally attached at the upper front ends of said crossed legs whereby said arms are held parallel to the plane in which said chair is supported when said standards are inclined either forward or back, and said chair provided with a seat, substantially as shown and described. 2nd. A folding chair consisting of back standards and crossed legs, said standards held together at their upper ends by a cross-bar and at their lower ends by a tie and pivotally secured to the upper rear ends of said crossed legs, the lower ends of said standards having springs secured thereon and supported on the rear pair of said crossed legs and said chair provided with a seat supported by said standards and the cross-bar attached to the upper front ends of said crossed legs, substantially as shown and described. 3rd. A folding chair provided with legs crossed and pivotally secured to each other in pairs, said chair provided with a back consisting of two standards held together by a cross-bar and a tie-bar, each of said standards pivotally secured to the rear upper ends of said crossed legs, the lower ends of said standards free and adjustably supported on the rear lower crossed legs whereby the back of said chair may be inclined forward or backward, said chair provided with a seat and having arms movable longitudinally at their rear ends supported at the sides of said standards and the forward ends of said arms pivotally attached to and supported by a cross-bar secured to the ends of the upper crossed legs, substantially as shown and described. 4th. In a folding chair, the combination with the crossed legs thereof, of a back formed of standards pivoted to the upper rear ends of said legs, said standards provided with springs on their lower ends resting on the rear legs and means for holding said standards at any desired point thereon, horizontal arms secured to each end of the round of said chair at their forward end and having their rear ends movably supported at the sides of said standards, a seat and back-support secured at its upper end to the cross-bar of said standards and attached at its opposite end to the round connected to the ends of said legs, substantially as shown and described. 5th. The combination in an adjustable folding chair provided with crossed legs pivotally secured together in pairs, of a back consisting of a pair of standards held to each other by a cross-bar at the top and a tie-bar at the lower end thereof, said standards pivotally secured to the upper rear ends of said crossed legs and the free ends of said standards adjustably supported on the lower rear crossed legs, arms movable longitudinally, loosely secured at their rear ends to said standards and pivotally supported at their forward ends to the cross-bar uniting the upper ends of the upper front crossed legs and a seat and back-support attached to the cross-bar of said standards and the cross-bar uniting the ends of the upper front crossed legs, substantially as shown and described.



No. 58,202. Three-Way Valve.
(*Soupape à trois tubulures.*)

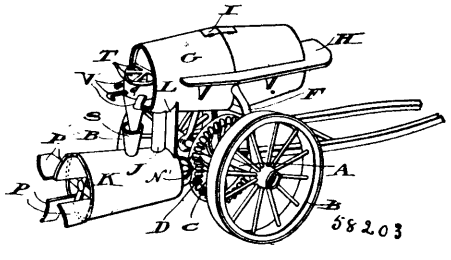


Frederick Billings, Marinette, Wisconsin, U.S.A., 24th November, 1897; 6 years. (Filed 15th November, 1897.)

Claim.—1st. In a three-way valve, the combination with a casing having a central passage, a valve-chamber opening into the said central passage, a steam-chamber surrounding the said valve-

chamber, a vent opening from the surrounding chamber into the said valve-chamber, an opening to admit steam to the said steam-chamber, an opening from the steam-chamber to the outer or atmospheric air, and a check-valve controlling the said opening, of a valve arranged to slide in the said chamber, and open or close the said vent, substantially as described. 2nd. In a three-way valve, the combination with a casing having a central passage, a valve-chamber opening into the said central passage, a steam-chamber surrounding the said valve-chamber, a vent opening from the surrounding chamber into the said valve-chamber, an opening to admit steam to the said steam-chamber, an opening from the steam-chamber to the outer or atmospheric air, and a check-valve controlling the said opening, of a valve arranged to slide in the said valve-chamber and having ports adapted to register with the said vent and open or close the same, substantially as described. 3rd. In a three-way valve, the combination with a casing having a central passage, a valve-chamber opening into the said central passage, a steam-chamber surrounding the said valve-chamber, a vent opening from the surrounding chamber into the said valve-chamber, an opening to admit steam to the said steam-chamber, an opening from the steam-chamber to the outer or atmospheric air, and a check-valve controlling the said opening, of a valve arranged to slide in the said valve-chamber and having ports adapted to register with said vent, a valve-rod on the said valve and a spring on the said valve-rod adapted to normally hold the valve in the closed position, substantially as described. 4th. In a three-way valve, the combination with a casing having a central passage, a valve-chamber opening into the said central passage, a steam-chamber surrounding the said valve-chamber, a vent opening from the surrounding chamber into the said valve-chamber, an opening to admit steam to the said steam-chamber, an opening from the steam-chamber to the outer or atmospheric air, a rod journalled in the casing, a check-valve hung upon the said rod and adapted to cover the opening to the atmospheric air, and a handle on the end of the rod, of a valve arranged to slide in the said valve-chamber and having ports adapted to register with said vent, a valve-rod on said valve, and a spring on the said valve-rod adapted to hold the valve in its closed position, substantially as described.

No. 58,203. Seeder. (*Semoir.*)



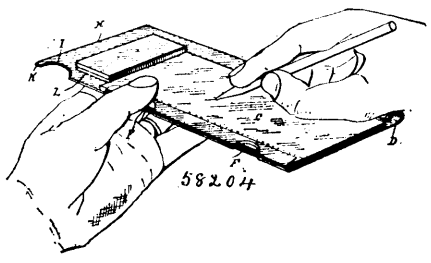
Eliot K. Clover, Baton Rouge, Louisiana, U.S.A., 24th November, 1897; 6 years. (Filed 15th November, 1897.)

Claim.—1st. The combination with the receptacle, the main axle and the wheels, of the casing at the rear of the receptacle, the revolving blades within the casing, the means for revolving said blades, and the coverers on the rear ends of the blades, as set forth. 2nd. The combination with the receptacle and the casing at the rear thereof, of the revolving blades within the casing, the coverers at the rear ends of the blades, and the hopper at the rear of the receptacle and communicating with said casing substantially as shown and described. 3rd. The combination with the main axle and the wheels and the coverers, of the bevel-pinion on the axle, the casing and longitudinal shaft therein, the bevel-pinion on the front end thereof, and the blades on the shaft within the casing, as set forth. 4th. The combination with the receptacle, the axle and the wheels, of the bevel-pinion on the axle, the casing, the longitudinal shaft, the bevel-pinion thereon, the blades on the longitudinal shaft within the casing, and the coverers on the rear ends of said blades, substantially as and for the purpose specified. 5th. The combination of the receptacle, the casing supported from the rear end thereof, the axle, the wheels and bevel-pinion on said axle, the longitudinal shaft, the bevel-pinion thereon, the blades on said shaft, the coverers on the rear ends of the blades, the divided hopper detachabley mounted on the rear end of the receptacle, the slides therefor, and the funnels between the hopper and the said casing, all substantially as shown and described.

No. 58,204. Pocket Memorandum Book, Paper Cutter, etc. (*Calepin, coupe-papier, etc.*)

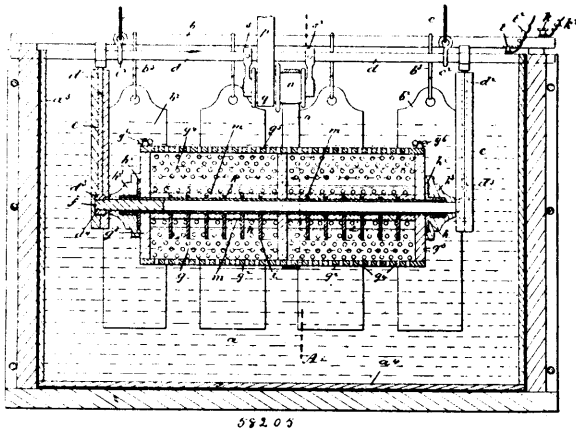
John Melvin Adams, Fort Annel, New York, U.S.A., 24th November, 1897; 6 years. (Filed 4th August, 1897.)

Claim.—1st. A combination device of the kind described, consisting of the blank of sheet metal turned over at the opposite edges, said turned over edges having integral ears punched therefrom, said ears being turned down beneath the blank, said turned over edges and integral ears being adapted to hold a memorandum book, lead pencil and blotter, substantially as shown and described. 2nd. In a combination device of the kind described, a sheet metal blank,



having the opposite edges turned over upon the top of the said blank, the left hand edge being adapted to hold the memorandum book, the right hand edge being adapted to hold the pencil, the integral ears punched from the said turned over edges and bent beneath the blank pads held by the said integral ears, the upper end of the blank being cut out to provide an envelope opener at the corner, substantially as shown and described. 3rd. In a combination of the kind described, a sheet metal blank having a straight upper edge, one edge being cut away near the said upper edge to provide an envelope opener, the overlapping edge B adapted to hold a memorandum book, the rolled edge D adapted to hold a pencil, the integral ears F turned down beneath the blank and adapted to hold the blotting pads, the shallow box arranged upon the upper face of the blank near the upper end, and provided with a hinged cover, all arranged and adapted to operate substantially as shown and described.

No. 58,205. Apparatus for the Electro Deposition of Metals. (*Appareil pour l'electro-deposition des métaux.*)

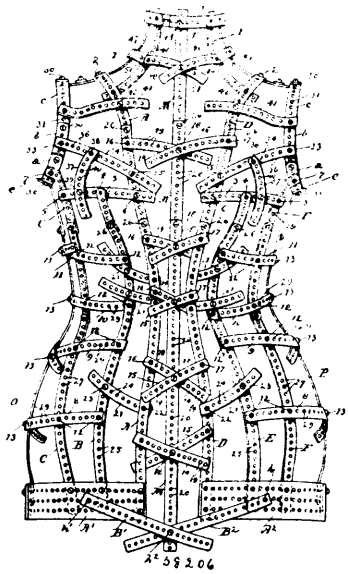


Alfred S. Smith, Thomas A. Smith, Roland J. Smith, Sydney Smith and Thomas Deakin, all of Walsall, Stafford, England, 24th November, 1897; 6 years. (Filed 31st August, 1896.)

Claim.—1st. In an electrolytic tank, the combination, with a vat having anodes, of a perforated drum capable of revolution in the vat and in an electrolyte therein and adapted to receive articles to be plated, contacts loosely suspended from a conducting axial sleeve, and negative and positive wires connected to supply current to the anodes and to carry it from the suspended contacts back to the generator of electricity, substantially as described. 2nd. In an electrolytic tank furnished with anodes, the combination, with a perforated drum, of a vat for the electrolyte, conducting devices for suspending the drum therein on a conducting-axis, separated contacts loosely mounted on a sleeve enclosing the axis, means for rotating the drum, and negative and positive wires, the former connected to the device supporting the anodes, and the latter to the support for the separated contacts, substantially as described. 3rd. The combination, in an electrolytic vat having a horizontal conducting-rod, of a shaft and pulleys suspended therefrom, a perforated drum suspended from said horizontal rod by conducting hangers, a conducting-axis for the drum, a band surrounding the body of the drum and driven by one of the pulleys on the suspended shaft, contacts having rings which loosely surround a conducting-sleeve on the axis of the drum, being separated thereon by insulating contacting-pieces, anodes suspended in the vat from a conducting-support, and negative and positive wires, substantially as described. 4th. In an electrolytic vat having anodes suspended in the electrolyte, the combination with conducting-hangers of a perforated drum, a conducting-rod forming the axis and supported by said hangers, a

conducting-sleeve enclosing the axis, contacts loosely mounted on said sleeve and hanging from it as the drum turns, and means for rotating said drum, substantially as described.

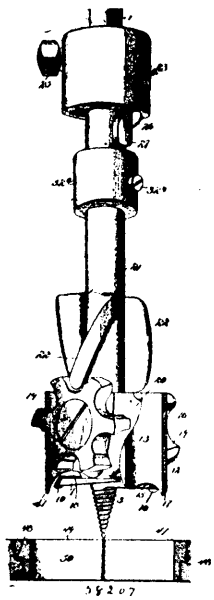
No. 58,206. Bust Form. (*Forme de buste.*)



Natalie Schell, Los Angeles, California, U.S.A., 24th November, 1897; 6 years. (Filed 18th June, 1897.)

Claim.—1st. In a bust form composed of sections, each section comprising a series of adjustable vertical stays, said stays being connected to each other and to adjustable side vertical stays by adjustable cross-bands and connecting straps, and to adjustable metallic front-and-back central stays by adjustable straps, each section being capable of adjustment independent of the other, either vertically or laterally. 2nd. As a new article of manufacture, a bust form for dress-making and similar purposes, said form being composed of a series of vertical adjustable stays united to vertical adjustable side and front and back stays by adjustable bands and connecting straps, whereby the form may have lateral and vertical adjustment, the stays and connecting straps being of material sufficiently ductile to permit of being readily bent to conform to the shape of the human figure, and of such rigidity as to resist collapsing after the form has been completed.

No. 58,207. Auger. (*Tarière.*)

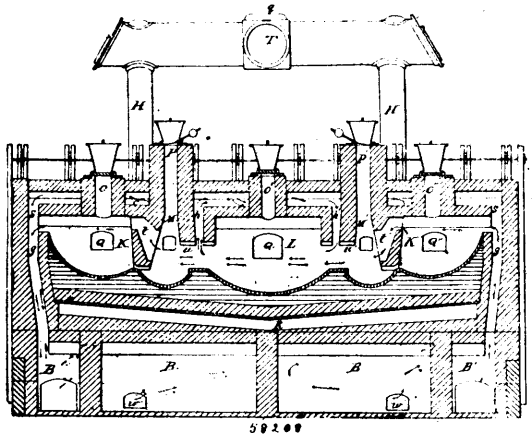


A. Y. Pearl, Rochester, New Hampshire, U.S.A., 24th November, 1897; 6 years. (Filed 5th August, 1897.)

Claim.—1st. An auger having a bit-carrying shank provided with a longitudinal groove or channel, a sleeve or barrel enclosing the shank and covering the groove or channel, and an oil reservoir secured to the sleeve or barrel and communicating by means of a perforation, covered by the reservoir, with said groove or channel in the shank, substantially as described. 2nd. An auger having a bit-carrying shank provided with a longitudinal groove or channel, a sleeve or board enclosing the shank and covering the groove or channel, an oil reservoir arranged upon the sleeve or barrel and having closed upper and lower ends, a perforation being formed in the sleeve or barrel in communication with the reservoir and the groove or channel, and a plug removably fitted in an opening in the reservoir, substantially as specified. 3rd. A bit or cutting head having co-operating wings, each provided with a cutting and a rear edge bevelled at different angles to a transverse plane intersecting the shank, the bevel of each cutting edge being at a sharper angle than the contiguous rear edge of the preceding wing, whereby the throat between said contiguous edges is widened or flared toward the upper or outer surfaces of the wings to provide clearance for chips detached by the cutting edge, substantially as specified. 4th. In an auger, the combination with a rotatable shank, of a bit secured to the lower end of the shank, and a non-rotatable guide-block mounted upon said shank and having one or more knives arranged parallel with the axis of the shank and with their cutting edges projecting beyond the end faces of the block and extended to or below the plane of the cutting edges of the bit, one or more side cutter or cutters, and means for communicating motion to the side cutter or cutters, substantially as described. 5th. In an auger, the combination with a rotatable shank carrying at its lower end a bit, of a non-rotatable block mounted upon the shank above the bit, one or more knives carried by and projecting perpendicularly beyond the ends of the block and provided with terminal spurs extending below the cutting edges of the bit, one or more rotary side cutters, the peripheries of which terminate short of the edges of said knives, and means for communicating motion from the auger to said side cutters, substantially as specified. 6th. In an auger, the combination with a shank, of a bit secured to the lower end of the shank and having one or more wings provided with cutting edges and with roughened or serrated upper clearing surfaces, a block rotatably mounted upon the auger above the bit, and provided with one or more knives having lower cutting edges, and suitable clearance passages in its lower side, side cutters rotatably mounted upon the block, and means for communicating motion from the auger to the side cutters, substantially as specified. 7th. In combination with a rotary bit, a guide-block having a shearing edge 20^b, a rotary cutter arranged parallel and in operative relation with said edge, and means for operating the rotary cutter, substantially as specified. 8th. In an auger, a bit, a guide-block having parallel side surfaces and provided in the planes thereof with cutting edges extending from the upper to the lower surfaces thereof, rotary side cutters arranged with their inner surfaces in contact with said cutting edges, and means for communicating motion to the side cutters, substantially as specified. 9th. In an auger, a bit, a guide-block carrying one or more side cutters and having upwardly flared channels, the edges of said block adjacent to the plane of the inner sides of said cutter or cutters being extended to form cutting edges 20^b to crumble and thereby prevent chips from interfering with proper operation of said auger, substantially as specified. 10th. In an auger, a bit, a guide-block having cutting lips 16 and 20^b, a clearance channel 20 and upper and lower channels 20^a and 18, rotary side cutters having their inner surfaces parallel and in contact with the lips 20^b, and means for imparting rotary motion to the side cutters, substantially as specified. 11th. In an auger, the combination with a shank carrying a bit at its lower end, of a block rotatably mounted upon said shank and having channels extending from its lower to its upper end, rotary side cutters, and projections carried by said shank and adapted to engage and rotate said cutters, clearance passages being formed in the upper end of said block in communication with said channels and adjacent to the lower ends of said projections to prevent clogging by chips, substantially as specified. 12th. In an auger, the combination with a shank carrying a bit at its lower end, of a block rotatably mounted upon the shank above the bit, one or more rotary cutters mounted upon the said block and means including clutch mechanism whereby motion is communicated from the shank to said rotary cutters when the shank is rotated in one direction only, substantially as specified. 13th. In an auger, the combination with a shank carrying a bit at its lower end, of a block rotatably mounted upon the shank, rotary cutters mounted upon the block, a sleeve or barrel rotatably fitted upon the shank above said block and provided with radial projections adapted to engage and rotate the said cutters, and means for communicating motion from the shank to said sleeve or barrel when the shank is turned in one direction only, substantially as specified. 14th. In an auger, the combination with a shank terminating at its lower end in a bit, of a block mounted upon the shank and having opposite knives or stationary cutters, spurred rotary cutters mounted upon the remaining sides of the block, wings loosely mounted upon the shank and adapted to engage at their lower ends with the spurs of the rotary cutters, said wings and rotary cutters being arranged in such relative positions that the latter are engaged alternately by the former and receive an alternate intermittent movement therefrom, and pawl and ratchet clutch mechanism for communicating motion in one direction only from the shank to the wings, substantially as specified. 15th. In an auger, the combination with a shank terminating at its lower end in a bit, of a block rotatably mounted upon the shank

above the bit and having stationary guiding and cutting lips upon opposite ends, rotary cutters mounted upon the remaining opposite sides of said block, a plurality of wings or projections arranged in position to engage spurs carried by said rotary cutters, and means including clutch mechanism for communicating motion from the shank to said wings or projections when the shank is rotated in one direction, and for releasing the same when the shank is reversed, substantially as specified. 16th. In an auger, the combination with a shank terminating at its lower end in a bit, of a block rotatably mounted upon the shank and having fixed knives or cutters, rotary cutters mounted upon opposite sides of the block, a sleeve or barrel rotatably fitted upon the shank above said block and provided with radial spirally-disposed wings arranged at their lower extremities in position to engage spurs on the rotary cutters, and means for communicating motion from the shank to said sleeve or barrel when the shank is turned in one direction only, substantially as specified. 17th. In an auger, the combination with a shank terminating in its lower end in a bit, a block rotatably mounted upon the shank above said bit and having fixed knives, and opposite rotary cutters mounted upon the block, of a sleeve or barrel mounted revolubly upon the shank above the block and provided with radial spirally-disposed wings to engage and communicate motion to the rotary cutters, a clutch-block fitted upon the shank, means for securing said block at the desired adjustment, and a spring-actuated pawl carried by the clutch-block to engage a tooth or detent on the sleeve or barrel when the shank is rotated in one direction, substantially as specified. 18th. In an auger, the combination with a shank terminating at its lower end in a bit, a block rotatably mounted upon the shank and having fixed knives, and rotary cutters mounted upon the block, of a sleeve or barrel mounted revolubly upon the shank above the block and provided with wings to engage and communicate motion to said rotary cutters, a clutch-block fitted upon the shank above the upper end of the sleeve or barrel and provided in its under side with a recess, means for securing said clutch-block at the desired adjustment upon the shank, a bevelled spring-actuated pawl carried by the clutch-block, and a bevelled tooth or detent on the sleeve or barrel in the path of the lower end of said pawl when the latter is extended, substantially as specified. 19th. An auger gauge having a block provided with an opening corresponding with the cross-sectional construction of the auger, and means for adjusting and securing said block in the desired position, substantially as specified. 20th. An auger gauge having an expansible sleeve, a block fitted in the sleeve and provided with an angular opening, a set-screw for contracting the sleeve to lock the block at the desired adjustment, and guiding devices for the sleeve, substantially as specified.

No. 58,208. Process of and Apparatus for the Direct Production of Metals. (*Procédé et appareil pour la production du fer, etc.*)

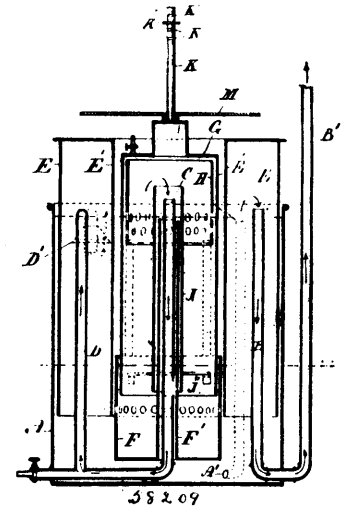


58208

Alexander Karyscheff and Sergie Demmenie, both of St. Petersburg, Russia, 24th November, 1897; 6 years. (Filed 15th July, 1897.)

Claim.—1st. A process for the production of metals and their alloys directly from their ores without it being necessary to resort to the production of any intermediate compounds or alloy, which consists essentially in subjecting the ores to be treated to the action of heat in a suitable furnace until they assume a molten condition, and then treating the solution so formed to the action of further heat energy so as to effect complete decomposition of the molten bodies, substantially as specified. 2nd. In the treatment of iron oxides, the admixture therewith in a furnace, of a suitable pyroxene and subjecting the charge to such heat as will dissolve the iron oxides, and convert deleterious mixtures into slags, substantially as specified. 3rd. In the treatment of aluminous iron ores, the admixture therewith in a suitable furnace of lime, and subjecting the charge to such heat as will produce aluminates of lime in which the iron oxides dissolve, substantially as specified. 4th. In the treatment of iron ores in a furnace with a lining of an acid nature, the admixture therewith of caustic soda and lime, and then subjecting the charge to such heat as will cause the silicic acid contained in the ore to combine with the soda and lime and form soda-silicate of lime (Na. 2 O, 8 Ca. O, 33 Si. O 2), substantially as specified. 5th. In treating phosphorous iron ores, introducing into the charge dolomite, or other materials which like dolomite are capable of forming vitreous phosphorous compounds or phosphites of lime, substantially as specified. 6th. In the production of metals from their ores, subjecting the ores to be treated to the action of heat in a suitable furnace until they assume a molten condition and then treating the solution so formed to the action of further heat energy and the use of chemical reagents in the form of pyro-chemical solutions for the purpose of aiding the thermic energy, substantially as specified. 7th. For the formation of pyro-chemical solutions to aid thermic energy, introducing the carbon into the charges treated in the furnace in the proportion of one-fifth to one-tenth of the quantity which is necessary to convert the oxygen contained in the oxide into the carbonic acid anhydride according to the furnace temperature, substantially as specified. 8th. In the production of metals from their ores, subjecting the ores to be treated to the action of heat in a suitable furnace until they assume a molten condition and then treating the solution so formed to the action of further heat energy, and the employment of electrical energy either in its dynamic form or static condition for aiding the thermic energy or chemical energy, substantially as specified. 9th. In the production of metals from their ores, subjecting the ores to be treated to the action of heat in a suitable furnace until they assume a molten condition and then treating the solution so formed to the action of further heat energy and electric energy by means of transformers of very high tension, the anodes being put in connection with the slag and the cathodes with the furnace bed which is made of an electrical conductor, resistances being introduced into the circuit to retard or check the return induction current, and interrupters to produce currents of high tension and frequency, substantially as specified. 10th. In a metallurgical furnace of the class specified, the combination of a melting chamber located between the regenerators, and vaulted or domed roofs in the regenerator system, substantially as specified. 11th. In a metallurgical furnace of the class specified, the combination with the generators and regenerators of connecting passages between the generators and the regenerators, so that the former can be included in the system of the latter, substantially as specified. 12th. In a metallurgical furnace of the class specified, the combination of three separate chambers, and chambers containing carbon dividing the separate chambers from each other, the arrangement being such that the two side chambers serve for the preparation of pyro-chemical solutions of the reagents, whilst the middle chamber is specially reserved for smelting or melting out the metals, substantially as specified. 13th. In a metallurgical furnace of the class specified, the production of oxygen or of air more rich in oxygen, by utilizing the waste heat for the purpose of heating the mixture, contained in the retorts of the air regenerator, of caustic alkalies and the haloid compounds of those metals to the production of which from their natural ores the present invention relates, substantially as specified. 14th. In a metallurgical furnace of the class specified, the formation of calcium carbide by means of the waste heat from the furnace acting on the carbon and lime ingredients introduced into the generator chambers, and the treatment of the calcium carbide so formed with aqueous vapour so as to produce acetylene gas, substantially as specified.

No. 58,209. Acetylene Gas Generator.
(*Générateur de gaz acétyline.*)

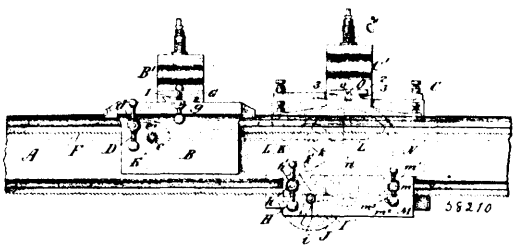


58209

Joseph C. Kraemer and George H. Kraemer, both of Formosa Ontario, Canada, 24th November, 1897; 6 years. (Filed 7th June, 1897.)

Claim.—1st. An acetylene gas generator consisting of a water tank and interior pipes as set forth, an annular gas holder, a carbide holder and cage, and a gauge operated by the gas holder to lift the carbide holder when an excess of gas is produced, substantially as set forth. 2nd. An acetylene gas generator, comprising a water tank and interior pipes, a annular gas holder, an ash pan fitting through the tube of the gas holder and resting on the bottom of the tank, a carbide holder over said pan, a carbide cage fitting within the carbide holder and a gauge to lift the holder when the limit set to the raising of the gas holder is reached, as set forth. 3rd. The combination with a tank having interior pipes as set forth, of an annular gas holder telescoping therein, as ash pan seated on the bottom of the tank, a carbide holder fitting loosely into the centre tube of the gas holder, a cage fitting within the carbide holder to contain the carbide, and a gauge to cause the gas holder to lift the carbide holder when an excess of gas is produced, as set forth. 4th. The combination with an annular gas holder telescoping within a water tank, of a carbide holder sliding loosely in the central opening or tube of the gas holder, said holder having a gauge comprising a perforated post, standing on the top of the carbide holder, a bar crosswise of the post and sliding thereon, a pin inserted in a hole in the post, said bar lifted by the gas holder, and engaging the pin to lift the gas holder and carbide holder simultaneously by over-rising of the gas holder by the excess of gas, as set forth.

No. 58,210. Lathe. (*Loquet.*)

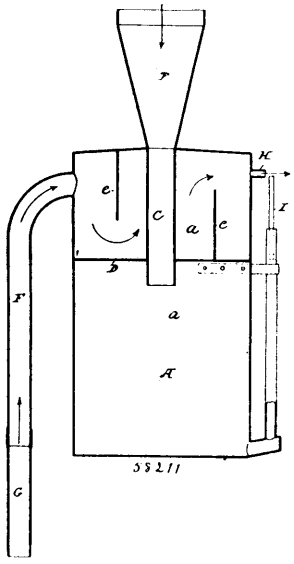


Willard Goldthwaite Bixby, New York, State of New York, U.S.A., 24th November, 1897; 6 years. (Filed 21st September, 1897.)

Claim.—1st. In a lathe, the combination with a back tool carriage independent of the front tool carriage and adapted to carry a cutting tool, of a handle carrier in the front of the lathe adapted to move laterally with the back tool carriage, a handle mounted in the said handle carrier, and means connecting the said handle with the back tool carriage, whereby the movement of the handle will cause the back tool carriage and the handle carrier to move laterally between the head and tail stocks, substantially as set forth. 2nd. In a lathe, the combination with a back tool carriage independent of the front tool carriage and adapted to carry a cutting tool, of a handle carrier in the front of the lathe adapted to move laterally with the back tool carriage, a handle mounted in said handle carrier, a shaft for transmitting the motion of the handle to the back of the lathe, and connecting mechanism between the shaft and the handle and the shaft and the back tool carriage, whereby the movement of the handle will cause the back tool carriage and the handle carrier to move laterally between the head and tail stocks, substantially as set forth. 3rd. In a lathe, the combination with a back tool carriage, independent of the front tool carriage adapted to carry a cross slide and a cutting tool, of a handle carrier in the front of the lathe adapted to move laterally with the back tool carriage, a handle mounted in said handle carrier and means connecting the said handle and the back cross slide, whereby the movement of the handle will cause the back cross slide to move toward or away from the vertical plane passing through the centre of the lathe parallel to the front and back of the lathe, substantially as set forth. 4th. In a lathe, the combination with a back tool carriage independent of the front tool carriage and adapted to carry a cross slide and a cutting tool, of a handle carrier in the front of the lathe adapted to move laterally with the back tool carriage, a handle mounted in said handle carrier, a shaft for transmitting the motion of the handle to the back part of the lathe, and connecting mechanism between the shaft and the handle and between the shaft and the back cross slide, whereby the movement of the handle will cause the back cross slide to move toward or away from the vertical plane passing through the centre of the lathe parallel to the front and back of the lathe, substantially as set forth. 5th. In a lathe, the combination with a back tool carriage independent of the front tool carriage and adapted to carry a cross slide and cutting tool, of a handle carrier in the front of the lathe adapted to move laterally with the back tool carriage, handles mounted in said handle carrier, and means connecting the handles with the back tool carriage and the cross slide, whereby the movement of one handle will cause the back tool carriage and the handle carrier to move laterally between the head and tail stocks, and the movement of the other handle will cause the back cross slide to move toward or away from the vertical plane passing through the centre of the lathe parallel to the front and back of the lathe, substantially as set forth. 6th. In a lathe, the combination with the back tool carriage independent of the front tool carriage and adapted to carry a cross slide and cutting tool, of a handle carrier in front of the lathe adapted to move laterally with the back tool carriage, handles mounted in said handle carrier, shafts for transmitting the motion of the handles to the back part of the lathe, mechanism connecting the handles to the shafts and mechanism connecting the shafts with the back tool carriage and cross slide, whereby the movement of one of the handles will cause the back tool carriage and the handle carrier to move laterally between the head and tail stocks, and the movement of the other handle will cause the back cross slide to move toward or away from the vertical plane passing through the centre of the lathe parallel to the front and back of the lathe, substantially as set forth. 7th. In a lathe, the combination with a back tool carriage adapted to carry a cutting tool, inverted V-shaped grooves on the underside of the bed of the lathe, and inverted V-shaped projections forming part of the back tool-carriage adapted to slide within said grooves, whereby upward pressure upon the back cutting tool is resisted, substantially as set forth. 8th. In a lathe, the combination of two tool carriages independent of each other, each extending substantially to the vertical plane passing through the centre of the lathe parallel to the front and back of the lathe, cross-slides upon said tool-carriages, a handle carrier on the front of the lathe, handles mounted in the front of the lathe for moving the tool carriages laterally between the head and tail stocks, and handles mounted in the front of the lathe for moving the cross-slides toward or away from the said central vertical plane of the lathe, and mechanism connecting said handles with the said tool-carriages and with the cross slides respectively, all so arranged that said tool carriages may be moved laterally between the head and tail stocks independently of each other, and the cross slides may be moved independently of each other and up to the said central vertical plane of the lathe or away from it to the extreme front or back of the lathe, substantially as set forth. 9th. The combination, in a lathe, of two tool-carriages independent of each other, each adapted to carry a cutting tool and extending substantially to the vertical plane passing through the centre of the lathe and parallel to the front and back of the lathe, and cross slides upon which the tools are mounted, whereby the tools mounted upon said cross-slides may be moved up to the said central vertical plane of the lathe, inverted V-shaped grooves on the underside of the bed of the lathe and inverted V-shaped projections forming part of the back tool carriage adapted to slide within said grooves, whereby upward pressure upon the back cutting tool is resisted, substantially as set forth. 10th. In a lathe, the combination with a back tool carriage independent of the front tool-carriage and adapted to carry a cutting tool, of a handle-carrier in the front part of the lathe, a handle mounted upon said handle-carrier for moving the back tool-carriage laterally between the head and tail stocks, and means connecting the back tool-carriage and the handle, whereby the movement of the handle will cause the back tool-carriage to move laterally between the head and tail stocks, a portion of the back tool-carriage sliding under a part of the bed of the lathe, whereby upward pressure upon the back cutting tool is resisted, substantially as set forth. 11th. In a lathe, the combination with a back tool-carriage independent of the front tool-carriage and adapted to carry a cutting tool, of a handle in the front part of the lathe for moving the back tool-carriage laterally between the head and tail stocks, and means connecting the back tool-carriage and the handle, whereby the movement of the handle will cause the back tool-carriage to move laterally between the head and tail stocks, inverted V-shaped grooves on the underside of the bed of the lathe, and inverted V-shaped projections forming part of the back tool-carriage adapted to slide within said grooves, whereby upward pressure upon the back cutting tool is resisted, substantially as set forth. 12th. In a lathe, the combination of two tool-carriages independent of each other, each extending substantially to the vertical plane passing through the centre of the lathe and parallel to the front and back of the lathe, cross-slides upon the said tool-carriages, handles in the front part of the lathe for moving the tool-carriages laterally between the head and tail stocks, and handles in the front part of the lathe for moving the cross-slides toward or away from the said central vertical plane of the lathe, and mechanism connecting said handles with the said tool-carriages and with the cross-slides respectively, all so arranged that said tool-carriages and cross-slides may be moved independently of one another between the head and tail stocks and up to and away from the central vertical plane, inverted V-shaped grooves on the underside of the bed of the lathe, and inverted V-shaped projections forming part of the back tool-carriages adapted to slide within said grooves, whereby upward pressure upon the back cutting tool is resisted, substantially as set forth. 13th. In a lathe, the combination of two tool-carriages independent of each other, each extending substantially to the vertical plane passing through the centre of the lathe and parallel to the front and back of the lathe, cross-slides upon the said tool-carriages, handles in the front part of the lathe moving at the same time and speed as the respective tool-carriages and adapted to move the tool-carriages laterally between the head and tail stocks and adapted to move the cross-slides toward or away from said central vertical plane of the lathe, and mechanism connecting said handles with the said tool-carriages and with the cross-slides respectively, all so arranged that said tool-carriages and cross-slides may be moved independently of one another between the head and tail

stocks and up to and away from the said central vertical plane, inverted V-shaped grooves on the under side of the bed of the lathe, and inverted V-shaped projections forming part of the back tool-carriage adapted to slide within said grooves, whereby upward pressure upon the back cutting tool is resisted, substantially as set forth. 14th. In a lathe having two tool-carriages independent of each other, the combination, with the back cross-slide, of a rail upon which said cross-slide is adapted to slide, said rail having a flat under surface, and also having inclined surfaces, and a projection from the cross-slide having a flat upper surface adapted to take against the flat under surface of the said rail, whereby upward pressure upon the back cutting tool is resisted, and having inclined surfaces adapted to take against the inclined surfaces of the rail, whereby the said abutting surfaces may be kept in contact with one another, substantially as set forth.

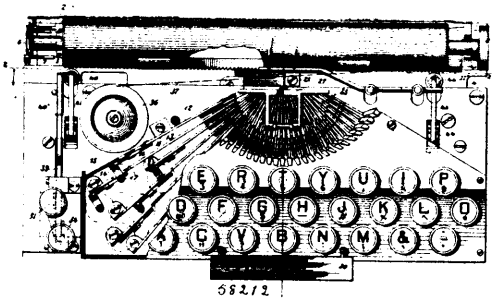
No. 58,211. Substitutes for Lithographic Stone. (*Procédé de fabrication de substitut pour pierres lithographiques.*)



William Reed Lewis, London, England, assignee of Hugo Bittner, Paris, France, 24th November, 1897; 6 years. (Filed 6th April, 1897.)

Claim.—1st. As a new article of manufacture, a paste composed of an oil or fatty substance and earth containing oxides and alkalies, substantially as described. 2nd. The hereinbefore-described process of producing artificial stone, consisting in combining with a suitable stone or sand, a suitable oil or fatty substance and an acid, and then boiling the mass to reduce it to a paste. 3rd. The hereinbefore described process of producing artificial stone, which consists in combining with a suitable stone or sand, a suitable oil or fatty substance and an acid, in boiling the mass to reduce it to a paste, and finally in washing and filtering the paste. 4th. The hereinbefore described process of producing artificial stone, which consists in combining with a suitable stone or sand, an oil or fatty substance and an acid, in boiling the mass to reduce it to a paste, and finally adding silicate of potash. 5th. The hereinbefore described process of producing artificial stone, which consists in combining with a suitable sand or stone, an oil or fatty substance and an acid, in boiling the mass to reduce it to a paste, and finally in neutralizing the acid contained in the paste.

No. 58,212. Typewriting Machine. (*Clavigraphe.*)

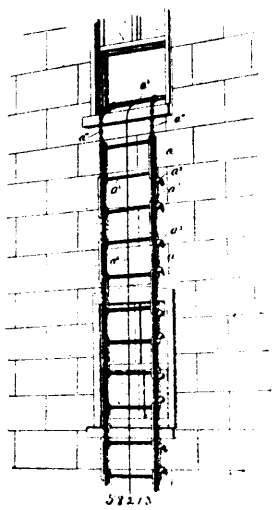


Emery Manville Hamilton, Flushing, New York, U.S.A., 24th November, 1897; 6 years. (Filed 20th October, 1897.)

Claim.—1st. In a typewriting machine, the combination of a series of converging bars 25, combined with key levers and with an universal spacing bar. 2nd. In a typewriting machine, the combination with suitable actuating mechanism, of a series of type-bars arranged upon a curve, the said type-bars being of successively greater lengths as the middle of the curve is approached, whereby a spoon-like arrangement of the types may be effected, substantially as described. 3rd. In a typewriting machine, the combination with suitable actuating mechanism of a series of type-bars arranged upon a curve, the said type-bars being pivoted at successively greater distances from the point of convergence thereof as the middle of the curve is approached. 4th. In a typewriting machine, the combination with suitable actuating mechanism of a series of type-bars arranged upon a curve, the said type-bars being pivoted on the same plane at successively greater distances from the point of convergence thereof as the middle of the curve is approached. 5th. In a typewriting machine, the combination of a series of disconnected converging plates, each carrying a type-bar, actuating mechanism for the said type-bars also carried by each of said plates, the said type-bars being arranged on a curve and of successively greater lengths from the ends of the curve to the middle thereof, whereby a spoon-like arrangement of the types may be effected, substantially as described. 6th. The combination in a typewriting machine of a series of converging type-bar carriers, pivoted type-bars carried thereby, converging spacing bars 25 likewise carried by said type-bar carrier, and an universal bar 27 adapted to be operated upon by said spacing bars. 7th. In a typewriting machine, the combination with suitable actuating mechanism of a series of type-bars arranged upon a curve, the said type-bars being of successively greater lengths as the middle of the curve is approached, and a platen corresponding in position to a chord of the curve upon which said type-bars are mounted. 8th. The following instrumentalities combined in a typewriter, a series of disconnected converging type-bar carrying plates each provided with independent means for adjusting the same to or from the point or points of convergence, type-bars carried thereby and arranged along a curve, the said type-bars being of greater length at the middle of the curve than at the ends thereof, as and for the purposes set forth. 9th. A typewriter printing mechanism comprising a single recessed plate, a type-bar, pivoted thereto, a key stem and a connection between the key stem and type-bar, working in the recess of the plate, whereby the support for the working parts adds only the thickness of the material to the lateral space occupied by the printing mechanism. 10th. A typewriter printing mechanism comprising a plate or frame, a type-bar pivoted thereto, a bell crank lever also pivoted to the plate or frame, a key stem for actuating the bell-crank lever, and a link connection intervening between the type-bar and the bell crank lever. 11th. A typewriter mechanism comprising a single apertured plate, a type-bar pivoted thereto, a key stem for actuating the type-bar and a connection between the key stem and the type-bar working in the aperture of the plate, whereby the support for the working parts adds only the thickness of the material to the lateral space occupied by the printing mechanism, substantially as described. 12th. As a means for rotating the platen of a typewriting machine, the combination with the said platen of a ratchet wheel carried thereby, a pivoted frame adjacent to said ratchet wheel, and carrying a plurality of pawls adapted to engage on opposite sides of the said ratchet wheel, whereby upon swinging the frame one pawl will operate to rotate the ratchet wheel as the pivoted frame swings, and the other pawl will be brought into contact with the side of the ratchet wheel opposite to that acted upon by the actuating pawl so as to bring the ratchet wheel to rest. 13th. As a means for rotating the platen of a typewriting machine, the combination with the said platen and a ratchet carried thereby, of a pluralty of pawls upon a common carrier, one of the said pawls being laterally movable and the other pawl being rigid, the said pawls being adapted to engage with the opposite sides of the ratchet wheel, whereby upon movement of the common carrier the laterally movable pawl will engage with the ratchet wheel and rotate the same, and the rigid pawl will be brought in contact with the ratchet wheel to stop the same, the said laterally moving pawl yielding and gliding over the teeth of the ratchet wheel upon the return movement of the common carrier. 14th. In a typewriting machine, the combination of a platen, a ratchet wheel 5 carried on one end thereof, a carrier frame 6 provided with a pawl 7 rigid therewith, and a laterally yielding pawl 8 provided with incline 9, the said pawls being adapted to engage with the ratchet wheel upon opposite sides, the pawl 8 operating to rotate the ratchet until the rigid pawl 7 contacts therewith to stop the same, the whole constituting a platen rotating device or feed for a typewriting machine. 15th. In a typewriting machine, the combination of a platen carriage, a link connected to said carriage for moving the same, said link being on a dead centre with relation to the carriage when the carriage is in its normal position, and one or more keys for moving said link from the dead centre position to shift the carriage. 16th. A shifting mechanism comprising a key stem, a pivoted shifting link which is on a dead centre with relation to the carriage in one of the printing positions, a platen link connected to the platen carriage, and means for connecting the pivoted shifting link with the platen link to move it to and from its dead centre position to shift the carriage, substantially as described and for the purposes set forth. 17th. A back and forth carriage shifting mechanism, consisting of a carriage, a platen link, a plurality of pivoted shifting links on a dead centre with relation

to the carriage in one of the printing positions and adapted to connect with the platen link for shifting the carriage, the said shifting links being pivoted on opposite sides of the point of connection thereof with the platen link, whereby the connection of one pivoted shifting link with the said platen link will cause the carriage to be shifted in one direction, whereas the connection of the other shifting link with the platen link will cause the carriage to be shifted in an opposite direction. 18th. In a carriage shifting device for typewriters the combination of a platen link, a plurality of shifting links pivoted to swing in opposite directions, each of said links being on a dead centre with relation to the carriage in one of the printing positions and adapted to connect with and be disconnected from said platen link, and keys for actuating said shifting links, substantially as described.

No. 58,213. Fire Escape. (*Sauveteur d'incendie.*)



Aristide Rainville, Central Falls, and Oliver Niclette, Pawtucket. both in Rhode Island, U.S.A., 24th November, 1897; 6 years. (Filed 12th November, 1897.)

Claim.—1st. In a fire escape, the combination of inner and outer sections hingedly connected together, means for drawing said sections into position for use, and means for holding said sections away from contact with the walls of the building when in use, substantially as described. 2nd. A portable fire escape comprising inner and outer sections hingedly connected together in a manner to allow them of being folded to a compact position, a bar connected to one of said sections adapted to support the fire escape, means for raising said bar to the point desired, and offsets connected to the outer sections, by means of which the sections are held from contact with the walls, substantially as described. 3rd. A portable ladder comprising outer and inner sections, bolts for connecting said sections together, said bolts forming the rungs of the ladder, said rungs having an outer covering to prevent slipping, and offsets secured to outer side of the outer sections, for holding the ladder away from the object to which it is attached, substantially as described.

No. 58,214. Manufacture of Waterproof Fabrics.
(*Fabrication de tissus imperméables.*)

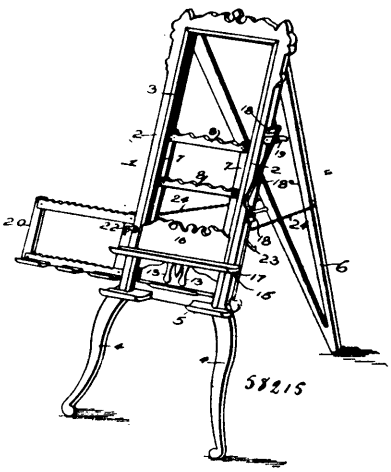
The Publishing, Advertising and Trading Syndicate, Limited' assignee of Frederick Weaver Oliver, all of London, England, 24th November, 1897; 6 years. (Filed 27th January, 1897.)

Claim.—The process of waterproofing fabrics with celluloid, consisting in spreading a film of celluloid solution on transfer paper and transferring the film to the fabric, substantially as described.

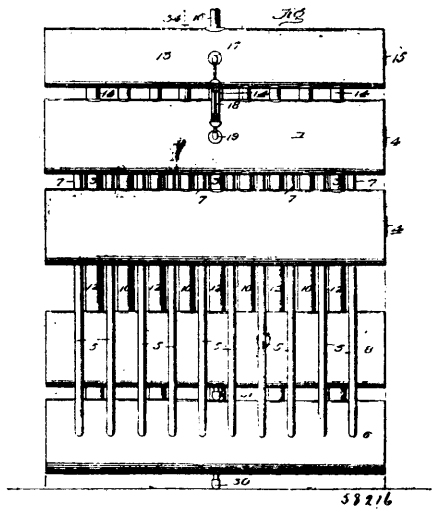
No. 58,215. Easel. (*Chevalet.*)

Harry Cooper, San Antonio, Texas, U.S.A., 27th November, 1897; 6 years. (Filed 15th November, 1897.)

Claim.—1st. In combination with an easel, an auxiliary rest hinged to the side of the easel-frame and adapted to be folded into the same plane therewith or to a position in rear thereof, and fastening means for holding said auxiliary rest in either of such positions, substantially as described. 2nd. In an easel, the combination of a vertically-adjustable rest, clutches located at the sides of the rest and adapted to engage with the main frame of the easel for holding the rest at an adjusted position, finger-levers fulcrumed to the rest and having independent connection with the clutches, and springs operating directly on the finger-levers to normally hold the clutches in engagement with the frame of the easel, substantially as set forth. 3rd. In an easel, the combination of a vertically-adjustable rest, friction-clutches pivoted to the rest adjacent to the edges thereof, finger-levers fulcrumed midway of their ends to the said rest, rods connecting the finger-levers with the pivoted clutches and having pivotal connection with each, and springs connecting the ends of the finger-levers with the rest for normally holding the clutches in engagement with the frame of the easel, substantially as and for the purpose set forth. 4th. In combination with an easel-frame, a slide-bar moving through loops or keepers attached to one of the side bars of the easel, a picture-holding hook pivotally connected to said slide-bar and adapted to fold beside the slide-bar and into the plane of the easel-frame, and a dog for holding said slide-bar at any adjustment, substantially as described.



No. 58,216. Steam Generator. (*Générateur de vapeur.*)

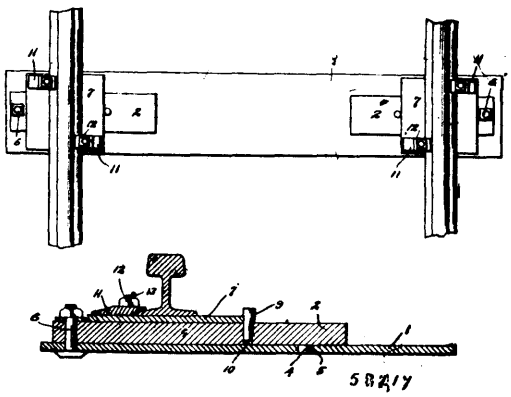


George Edmund Turner, Marion, Ohio, U.S.A., 27th November, 1897; 6 years. (Filed 16th November, 1897.)

Claim.—1st. In a steam generator, the combination with the two sets of drums 1 and 2, and 6 and 8, the drums of each set arranged one above the other, and one set arranged above and in advance of the other set, a series of tubes connecting respectively the upper and lower drums of each set, circulating tubes 10, 12, connected to the rear set of drums 6, 8, extending upwardly, horizontally and forwardly, and connected with the upper drum of the forward set, a steam drum communicating with the steam space of the tubes 10 and 12, and blow-off pipes leading from the lower set of drums 6 and 8, substantially as set forth. 2nd. In a steam generator, the combination with the drums 1 and 2, and 6, 8, connecting tubes 5 and 8, circulating tubes 10 and 12, connecting the drums 1, 2, and 6, 8, a steam drum communicating with the steam space of the tubes 10, 12, a band of separated but communicating feed water heaters, an inclined settlings chamber communicating with the feed water heaters, a pipe establishing communication between the settlings chamber and the lower drum 8, blow-off pipes for the settlings chamber and the lower drums 6, 8, and the inclined walls 19, 21, arranged as described. 3rd. A water-tube steam generator, comprising the forward horizontal drums 1 and 2 arranged in the same vertical plane and connected by the saddles 3, the rear horizontal drums 6 and 8 mounted in the same vertical plane, a series of inclined tubes connecting the drums 1 and 8, and 2 and 6, respectively, a series of curved return drums 10 connecting the drums 1 and 8, and an alternate series of curved return drums 12 connected to said drum 1 and

the lower rear drum 6, a transverse steam drum 13 connected to the return drums 10 and 12, substantially as and for the purpose set forth. 4th. A steam generator comprising the drums 1, 2, and 6, 8, the drums of each set arranged vertically above each other, and the front set arranged above and in advance of the rear set, a series of tubes connecting the upper and the lower drums of each set, and a series of independent circulating tubes 10, 12, connecting the rear set of drums with the upper drum of the front set, substantially as shown and described.

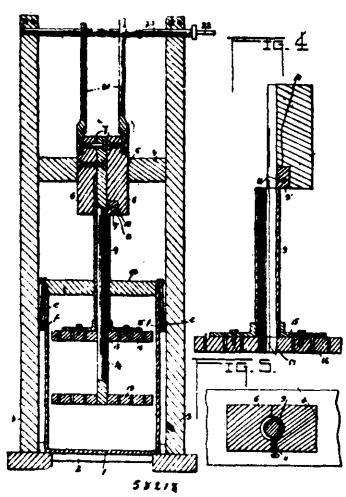
No. 58,217. Combination Tie Rail Fastener.
(*Attache pour assujétir les rails aux traverses.*)



Jacob Scott Flegal, Clearfield, Pennsylvania, U.S.A., 27th November, 1897 ; 6 years. (Filed 16th November, 1897.)

Claim.—The combination of a metallic tie having holes near its ends, blocks having pins at their inner ends which project through the holes in the ties, bolts for securing the outer ends of the blocks to the ties, said blocks being provided with longitudinal grooves in their sides, a chair having side flanges adapted to said grooves, a stop pin for holding the chair in position on said blocks, and clamps bolted to said chair, substantially as set forth.

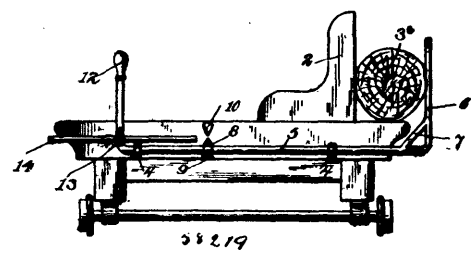
No. 58,218. Churn. (*Baratte.*)



Joseph Weggeman, Henderson, Colorado, U.S.A., 27th November, 1897 ; 6 years. (Filed 16th November, 1897.)

Claim.—In a churn, the combination with the churn body and the standards, of a cross-bar secured thereto near their upper ends and provided with a rectangular bearing opening, sliding blocks fitted in said opening and provided with longitudinal grooves in their inner faces, dasher shafts secured to said sliding blocks, one of said dasher shafts being located in the groove of said blocks and forming a spline or rib for guiding the blocks in their vertical movement, one of said dasher shafts being tubular and the other projecting through it, dashers secured to the extreme lower ends of said dasher shafts, a top consisting of two hinged sections, means for securing the top to the churn body, and means for securing the sections about the dasher shafts, a crank shaft journalled in bearings in the upper ends of said standards, and links connecting the blocks with the shaft, substantially as set forth.

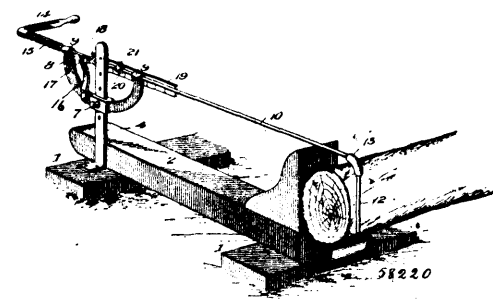
No. 58,219. Slab Gauge or Indicator for Saw-mill Carriages. (*Jauge de dosses ou indicateur pour châssis de scieries.*)



George Glass, Port Huron, Michigan, U.S.A., 27th November, 1897 ; 6 years. (Filed 16th November, 1897.)

Claim.—1st. A slab-indicator or gauge for saw-mill carriages, comprising the carriage-bed provided with the fixed pointer 10, and the transverse rod 5 mounted on said carriage and provided with the right-angular gauge-arm 6, and the pointer 8 adjustably mounted on said rod, substantially as and for the purpose set forth. 2nd. A slab-indicator or gauge for saw-mill carriages, comprising the carriage-bed, the pointer 10, guide-eyes 4, 4, and guide-rod 14 fixed to said bed, in combination with the transverse sliding-rod 5, having a longitudinal and a rotary movement in said guide-eyes and provided at its outer end with the gauge-arm 6 and at its inner end with the lever handle 12, formed with the clamp offset 13, and the pointer 8 adjustably secured on the rod 5, substantially as and for the purpose set forth.

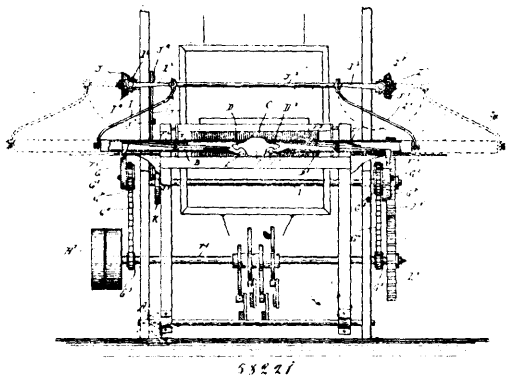
No. 58,220. Slab Gauge or Indicator for Saw-mill Carriages. (*Jauge de dosses ou indicateur pour châssis de scieries.*)



George Glass, Port Huron, Michigan, U.S.A., 27th November, 1897 ; 6 years. (Filed 16th November, 1897.)

Claim.—1st. A slab indicator or gauge for saw-mill carriages, comprising the carriage-bed, the standard 4 fixed thereon, the cross-head 6 vertically adjustable thereon, and provided with the arms 8, 8^1, the cylindrical rod 10 longitudinally and axially adjustable in said arms and terminating at its outer end in the gauge-arm 12, and means as described for indicating the point of longitudinal adjustment of said rod, substantially as shown and described. 2nd. A slab indicator or gauge for saw-mill carriages, comprising the carriage-bed, the standard 4 provided with the transverse orifices 5, 5, the cross-head 6 vertically adjustable on said standard and provided with the arms 8, 8^1, terminating in the aligned sleeves 9, 9^1, the spring-aetuated pin 7 mounted in said cross-head and adapted to engage said orifices in the standard, the rod 10 journalled in and longitudinally adjustable in said sleeves, and having its outer end terminating in a right-angular gauge-arm 12, the handle 14 fixed on the opposite end of said rod, the spiral spring 15 encompassing said rod between the handle and the sleeve 9, the fixed plate 19 provided with the graduated scale, and the pointer 20 adjustably mounted on said rod and adapted to traverse said scale, substantially as shown and described. 3rd. A slab indicator for saw-mill carriages, comprising the carriage-bed. the standard 4 provided with the transverse orifices 5, 5, the cross-head 6 vertically adjustable on said standard and provided with the arms 8, 8^1, terminating in the aligned sleeves 9, 9^1, the spring-actuated pin 7 mounted in said cross-head and adapted to engage said orifices in the standard, the rod 10 journalled in and longitudinally adjustable in said sleeves and having its outer end terminating in a right-angular gauge-arm 12, the handle 14 fixed on the opposite end of said rod, the spiral spring 15 encompassing said rod between the handle and the sleeve 9, the fixed plate 19 provided with the graduated scale, and the pointer 20 adjustably mounted ou said rod, the square collar 18 adjustably mounted on said shaft, and the spring-dog 16 fixed to said cross-head and having its free end terminating in the square jaws 17, 17, adapted to engage said collar, subetantially as shown and described.

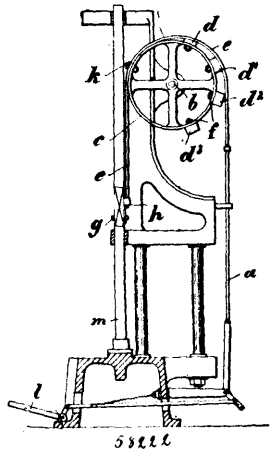
No. 58,221. Shuttle-worker for Looms.
(*Navette pour métiers.*)



Lewin K. Heathcote, Glen Rock, Pennsylvania, U.S.A., 27th November, 1897 ; 6 years. (Filed 20th April, 1897.)

Claim.—1st. In a shuttle-worker, the combination with longitudinally movable shuttle carriers, of the shuttle-securing latches held therein, levers pivoted within the said shuttle carriers, and arranged at one end to release the said latches, and having abutments for engagement by the revolving cams, and a shaft provided with reversely projected cams arranged to operate their respective latch working levers, substantially as shown and described. 2nd. The combination substantially as described of the shuttle carriers, shafts provided with cranks connected with the said shuttle carriers, pinions on said crank-shafts, gears meshing with said pinions, a shaft supporting said gears and having a crank-arm, a lever pivoted between its ends, connections between one end of said lever and the crank of the gear shaft, and operating devices connected with the other end of said lever, substantially as shown and described.

No. 58,222. Drop Hammer. (*Marteau mécanique.*)



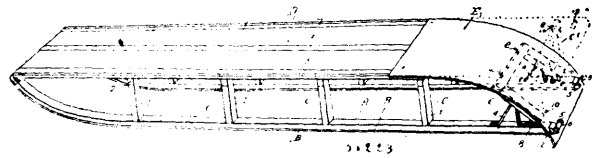
Fritz Theile, Schwerte, Westphalia, Prussia, 27th November, 1897 ; 6 years. (Filed 21st September, 1897.)

Claim.—1st. In drop hammers of the type referred to, providing a strap drum with projections to act as levers and to effect a better drop of the hammer through the recoil, substantially in the manner herein described and set forth. 2nd. In drop hammers of the type referred to, providiug a friction roller outside the drum at the end of a lever rod connected to the strap, to regulate the height of the drop, substantially in the manner herein described and set forth.

No. 58,223. Combined Sled and Toboggan.
(*Traîneau et tobaggan.*)

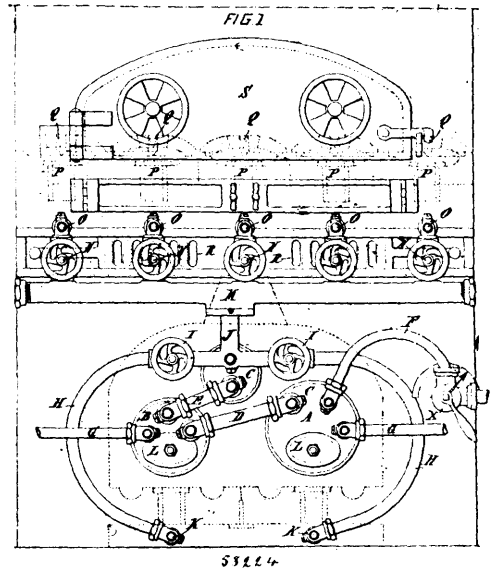
William Patterson, Seattle, Washington, U.S.A., 27th November, 1897 ; 6 years. (Filed 16th November, 1897.)

Claim.—1st. A combined sled and toboggan comprising a suitable sled body with a top extension of flexible material, collapsible means normally supporting same in horizontal position to provide a sled, and means to secure same in a position curving from said top to provide a nose and a toboggan of the sled when inverted. 2nd. A combined sled and toboggan, the sled having a suitable top and runners



extending rearward the top, a flexible section to said top with a free end over the extended portion of the runners, collapsible means to support said section parallel to the runners, and means to secure said free end to the runners with said section curving from the top thereto to provide a nose and a toboggan of the sled when inverted. 3rd. A sled having a suitable top, the runners extending rearward the top, a flexible extension to said top over the runners, a collapsible section from the runners to support said extension, suitable means to support the section in an inclined position when collapsed, and means to secure the free end of said extension to said runners and in contact with said collapsed section when curved from said top, to provide a nose and a toboggan of the sled. 4th. A convertable sliding device, comprising runners B, sections C, thereon, supporting top portion *d*, extension E, to said portion, collapsible section C^1 normally supporting said extension in a raised position, brackets 4, to sustain said section when partly collapsed, and means to oppose the return of said extension when bent upon the collapsed section and runners to form a nose and convert said sled into a toboggan.

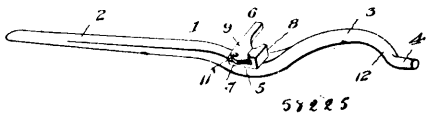
No. 58,224. Apparatus for Manufacturing Gas from Hydrocarbons. (*Appareil pour la gazéification des pétroles, huiles lourdes, huiles de goudrons, etc.*)



Louis Ernest Fraipont, Paris, France, le 27 novembre 1897 ; 6 ans. (Déposé le 9 novembre 1897.)

Résumé.—Un appareil permettant d'effectuer la gazéification complète des hydrocarbons par la production de distillations et gazéifications fractionnées et successives de ces hydrocarbons, appareil caractérisé par la combinaison d'une série de cornues ou gazéifications A B C en nombre et de forme quelconques, chauffées indepeudamment les unes des autres et communiquant entre elles par des tuyaux D E qui permettent de produire dans chacune d'elles les distillations et gazéifiations successives, d'évacuer les matières non distillables pendant la marche de l'appareil, d'effectuer la combinaison rationnelle et complète de tous les combustibles gazeux provenant d'hydrocarbures quelconques, par la combinaison d'un dispositif de plancher T à doubles parois entrent lesquelles passent les tubes d'arrivée du gaz O munis d'ajustages convenables. Ces parois étant percées ; la paroi supérieure d'ouvertures munis de champignons P, par lesquelles s'échappe et s'étale le gaz enflammé, la paroi inférieure de petites ouvertures servant à l'arrivée d'air nécessaire à la combustion parfaite du gaz avant leur introduction dans le foyer S, soit la suppression d'entrée d'air froid dans le foyer ; le tout en principe ainsi que décrit et représenté.

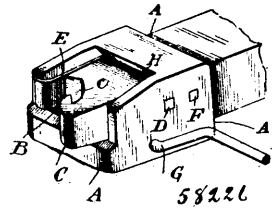
No. 58,225. Wire Stretcher. (*Tendeur de fil.*)



Joseph Culton Walker, Lewiston, Montana, U.SA., 27th November, 1897; 6 years. (Filed 16th November, 1897.)

Claim.—1st. A wire-stretcher, comprising a lever consisting of a straight portion 2, a curved portion 3 and a straight extension located at the outer terminus of the curved portion, and arranged in alignment with the straight portion, said curved portion consisting of a regularly-curved inner part and an irregularly-curved outer part, and the lever being provided at the juncture of its curved portion 3 and its straight portion 2 with a depression, and a wire-holding clamp pivotally mounted in the depression and located directly above the lever, whereby the clamp is prevented from coming in contact with the fence-post and a central-draft fence-lever is obtained, substantially as and for the purpose described. 2nd. A wire-stretcher comprising a lever provided with a perforation, and a clamp composed of a base-plate provided at one side with a substantially L-shaped flange having a vertical portion and a horizontal portion extending inward over the base-plate, a stud depending from the lower face of the base-plate and arranged in the perforation of the lever, a pivot extending upward from the upper face of the base-plate, and a detachable cam-lever provided with a perforation receiving the pivot, the head of the cam-lever extending under the horizontal portion of the L-shaped flange of the base-plate, whereby the cam-lever is retained on the pivot, substantially as described.

No. 58,226. Car Coupler. (*Attelage de chars.*)



John Joseph Flynn, Aurora, Illinois, U.S.A., 27th November, 1897; 6 years. (Filed 16th November, 1897.)

Claim.—1st. A car-coupler comprising a draw-head, a coupling-hook pivoted thereto, and a hook-engaging spring attached to the draw-head, whose movement is in a direction at a right angle to that in which the hook is swung to couple and uncouple, substantially as and for the purpose specified. 2nd. A car-coupler comprising a draw-head, a hook mounted on a horizontal pivot, and a flat spring secured to the draw-head at the side of the hook and having its free end projecting forward to engage the side of a connected hook, substantially as and for the purpose set forth. 3rd. A car-coupler comprising a draw-head having a cavity in its upper side, at the front end, a hook pivoted within and normally resting on the bottom of the cavity, a flat spring interposed between the side of the hook and the side wall of the cavity, and having its free end projecting forward to engage the side of a connected hook, the overhang or lip on the draw-head to engage and stop the hook when swung upward, a shaft extending through the draw-head beneath the hook, and an arm carried by said shaft to engage the underside of the hook, substantially as and for the purpose described.

TRADE-MARKS

Registered during the month of November, 1897, at the Department of Agriculture—Copyright and Trade-Mark Branch.

6235. THE WAUKESHA WATER COMPANY, Jersey City, New Jersey; Waukesha, Wisconsin; and Chicago, Illinois, U.S.A. Mineral Waters, 2nd November, 1897.

6236. GEORGE WILLIAMS, Montreal, Que. General Trade Mark, 2nd November, 1897.

6237. SIGMUND BLUMENTHAL, New York, N.Y., U.S.A. Strings for musical instruments, 2nd November, 1897.

6238. THOMAS EDWARD BRAIME, Toronto, Ont. Shirts, Overalls, Cottonade and Denim Pants, 2nd November, 1897.

6239. THE GEORGE R. SIMS HAIR RESTORER COMPANY, LIMITED, 11 Farringdon Avenue, London, England. A Toilet Article (Liquid for restoring the growth of Hair), 3rd November, 1897.

6240. CHARLES STANSFELD HICKS, London, England. Tea, 3rd November, 1897.

6241. McALLISTER MILLING COMPANY, Peterborough, Ont. Flour, 3rd November, 1897.

6242. } EBENEZER MILLER, Dresden, Ont. A Medicine, 3rd November, 1897.
6243. }

6244. MASSEY-HARRIS COMPANY, LIMITED, Toronto, Ont. Reaping and Mowing Machines and accessories thereof, 4th November, 1897.

6245. T. CLARENCE WALLACE & GEORGE A. FRASER, St. John, N.B. Ground Blast Furnace Slag, 4th November, 1897.

6246. THE JAMES STEWART MANUFACTURING COMPANY, LIMITED, Woodstock, Ont, Heating Apparatus (Stoves, Ranges, Furnaces), 4th November, 1897.

6247. WILLIAM GEORGE NIXEY, 12 Soho Square, London, England. Stove Polish, 4th November, 1897.

6248. THE PATERSON MANUFACTURING COMPANY, LIMITED, Montreal, Que. Building Paper, 5th November, 1897.

6249. PUGSLEY, DINGMAN & COMPANY, Toronto, Ont. Soap, 5th November, 1897.

6250. HIRAM RICKER & SONS, Portland, Maine, U.S.A. Natural Spring Water, 12th November, 1897.

6251. THE ALLIED PRINTING TRADES COUNCIL OF CANADA, with headquarters in the City of Toronto, Ont., through their Agent, W. S. COOPER, of said Toronto. Work done in the Union Offices (Printing, Bookbinding, etc.), by Members of the Registrants' Union, 12th November, 1897.

6252. THE MAYPOLE COMPANY, LIMITED, 98-99 High Holborn, London, England. Soap, 15th November, 1897.

6253. THE MAYPOLE COMPANY, LIMITED, 98-99 High Holborn, London, England. Dyes, 15th November, 1897.

6254. } WRIGHT & GREIG, LIMITED, Cadogan Buildings, 8 Cadogan Street,
6255. } Glasgow, Scotland. Whisky, 17th November, 1897.

6256. ROYER ET ROUGIER FRÈRES, Paris, France et Montréal, Canada. Marque de Commerce Générale, 17 novembre 1897.

6257. D. S. PERRIN & COMPANY, London, Ont. Biscuits, Candies and Confectionery, 17th November, 1897.

6258. D. S. PERRIN & COMPANY, London, Ont. Soda Biscuits, 17th November, 1897.

6259. RICHARD L. BAKER, Toronto, Ont. Hosiery and Underwear, 17th November, 1897.

6260. THE IDENTIFICATION AND PROTECTIVE COMPANY OF CANADA, LIMITED, Montreal, Que. General Trade Mark, 19th November, 1897.

6261. McLAREN & COMPANY, St. Catharines, Ont. Soap, 22nd November, 1897.

6262. THE WARREN FEATHERBONE COMPANY, Three Oaks, Berrien County, Michigan, U.S.A. Corset Stiffeners, etc., 26th November, 1897.

6263. SERAPHIS G. WALDRON & FERDINAND B. DROUIN, Montreal, Que., trading as WALDRON, DROUIN & COMPANY. Felt Hats, 26th November, 1897.

6264. E. N. CUSSON & COMPANY, Montreal, Que. Cigars, 26th November, 1897.

6265. JOSEPH HIRSCH & SONS, New York, N.Y., U.S.A. Cotton, Linen, Silk and Woollen Goods and Stiffening Fabrics made therefrom, 26th November, 1897.

6266. A. F. RANDOLPH & SONS, Fredericton, N.B. Teas, 26th November, 1897.

6267. DORKEN BROTHERS & COMPANY, Montreal, Que. Razors and other Cutlery, 27th November, 1897.

6268. JOHN COWAN, Montreal, Que. Violet Ammonia for Toilet use, 27th November, 1897.

6269. TRÉFOUSSE & COMPANY, Chaumont, France, and New York, N.Y., U.S.A. Gloves, 27th November, 1897.

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9545. HUMOURS OF '37. Grave, Gay and Grim. Rebellion Times in the Canadas. By Robina and Kathleen MacFarlane Lizars. Kathleen MacFarlane Lizars, Stratford, Ont., 2nd November, 1897.

9546. QUO VADIS. (A Narrative of the Time of Nero.) By Henryk Sienkiewicz. Translated from the Polish by Jeremiah Curtin. Little, Brown & Co., Boston, Massachusetts, U.S.A., 2nd November, 1897.

9547. YOU'RE SO GOOD, DADDY. (Song and Chorus.) Words and Music by Hattie Starr. M. Witmark & Sons, New York, N.Y., U.S.A., 2nd November, 1897.

9548. DIRECTORY OF LIQUOR LICENSE HOLDERS OF PROVINCE OF ONTARIO. J. J. Walsh & S. J. Crosby, Toronto, Ont., 2nd November, 1897.

9549. KLONDYKE. (March and Two-Step.) By O. F. Telgmann, Kingston, Ont., 2nd November, 1897.

9550. IN HIS KEEPING. (Words of Sustaining from the Source of all Strength, with Kindred Thoughts in Verse.) By Amy Parkinson, Toronto, Ont., 4th November, 1897.

9551. I WAS ONCE YOUR WIFE. Words by Raymond A. Browne. Music by Monroe H. Rosenfeld. Brokaw Music Publishing Company, St. Joseph, Missouri, U.S.A., 5th November, 1897.

9552. THE LAWS OF BUSINESS. By C. A. Fleming, Owen Sound, Ont., 8th November, 1897.

9553. HAPPY DAYS IN DIXIE. (Characteristic Two-Step March.) By Kerry Mills. F. A. Mills, New York, N.Y., U.S.A., 9th November, 1897.

9554. HARD PLACES IN GRAMMAR MADE EASY. By G. E. Henderson and A. B. Cushing, B.A., Toronto and Essex respectively, Ont., 9th November, 1897.

9555. THE KLONDYKE. (March and Two-Step.) By B. J. Winkup. Thomas William Wilson, Montreal, Que., 9th November, 1897.

9556. TO KLONDYKE *VIA* EDMONTON. (A Full Description of Land and Water Routes from Edmonton to the Peace River, Liard, Cassier and Yukon Gold Fields.) James H. McDonald and James D. Skinner, South Edmonton, Alta., N.W.T., 9th November, 1897.

9557. THE GAIRDNER AND HARRISON PROSPECTOR'S GUIDE MAP AND PAMPHLET TO THE OMENICA, CASSIER, LIARD, KLONDYKE AND YUKON GOLD FIELDS, *VIA* THE EDMONTON ROUTE. George W. Gairdner and Arthur G. Harrison, Edmonton, Alta., N.W.T., 11th November, 1897.

9558. THE DELINEATOR. A Journal of Fashion, Culture and Fine Arts. (December, 1897.) The Butterick Publishing Company (Ltd.), New York, N.Y., U.S.A., 12th November, 1897.

9559. THE GLASS OF FASHION UP TO DATE. (December, 1897.) The Butterick Publishing Company (Ltd.), New York, N.Y., U.S.A., 12th November, 1897.

9560. METROPOLITAN FASHIONS. (December, 1897.) The Butterick Publishing Company (Ltd.), New York, N.Y., U.S.A., 12th November, 1897.

9561. VARIÉTÉS CANADIENNES. Par Wilfrid Larose, avocat, Montréal, Qué., 12 November 1897.

9562. CHATTEL MORTGAGES AND BILLS OF SALE. By John A. Barron and A. H. O'Brien, M.A. A. H. O'Brien, Ottawa, Ont., 15th November, 1897.

9563. JOHNSON'S ALPHABET OF FIRST THINGS IN CANADA. A Ready Reference Book of Canadian Events. (Third Edition.) George Johnson, Ottawa, Ont., 15th November, 1897.

9564. MAP OF THE YUKON GOLD FIELDS. Showing Overland and River Routes *via* Edmonton, Alberta. Compiled by Edward C. Dawson, B.C.E. James Hamilton McDonald and James Dougald Skinner South Edmonton, Alta., N.W.T., 15th November 1897.

9565. THE MANITOBA REPORTS, VOLUME XI. Containing Reports of Cases decided in the Court of Queen's Bench for Manitoba. Editor: George Patterson; Reporter: W. A. Taylor, Barristers-at-law. The Law Society of Manitoba, Winnipeg, Man., 16th November, 1897.

9566. THE HOUSEHOLD GUIDE; OR, DOMESTIC CYCLOPÆDIA. By Prof. B. G. Jefferis, M.D., Ph.D., and J. L. Nichols, A.M. (Twentieth Edition.) J. L. Nichols & Co., Toronto, Ont., 16th November, 1897.

9567. TRUE BLUE; OR, THE LASS THAT LOVED A SAILOR. By Herbert Russell. published in the "Montreal Star," Montreal, Que. (Temporary Copyright.) National Press Agency (Ltd.), London, England, 16th November. 1897.

9568. LOVELL'S CANADIAN BUSINESS GUIDE TO THE LEADING MANUFACTURERS, BANKS, WHOLESALE MERCHANTS, INSURANCE, RAILWAY AND STEAMSHIP COMPANIES, ETC., OF THE DOMINION, WITH DIARY FOR 1898. John Lovell & Son, Montreal, Que., 17th November, 1897.

9569. THE FAIRY SCHOOL OF CASTLE FRANK. By Grant Balfour, published in "The Congregationalist," Toronto, Ont. (Temporary Copyright.) A. Balfour Grant, Toronto, Ont., 18th November, 1897.

9570. A LABORATORY SCENE. (Engraving.) Jesse James Foster, Toronto, Ont., 18th November, 1897.

9571. NATURE'S CURE FOR CONSUMPTION. J. A. Watkins, Hamilton, Ont., 19th November, 1897.

9572. OFFICIAL TELEPHONE DIRECTORY, CITY OF TORONTO AND SUBURBS. The Bell Telephone Company of Canada (Ltd.), Montreal, Que., 19th November, 1897.

9573. LES FLORAISONS MATUTINALES. Par Nérée Beauchemin, Yamachiche, Qué., 19 novembre 1897.

9574. WARNING. Monsoon Tea Company, Toronto, Ont., 19th November, 1897.

9575. PETIT TRAITÉ D'ART VÉTÉRINAIRE. Vulgarisée pour les Cultivateurs. Par John D. Duchêne, D.V.S., Québec, Qué., 19 novembre 1897.

9576. THE PRISONERS OF THE SEA. By Florence Morse Kingsley. The Copp, Clark Company (Ltd.), Toronto, Ont., 22nd November, 1897.

9577. CERTIFICATE OF REGISTRATION WITH THE IDENTIFICATION AND PROTECTIVE COMPANY OF CANADA (LTD.), Montreal. G. I. Goddard, Montreal, Que., 22nd November, 1897.

9578. SEXTON'S OMNIMETRE, COMPANION EDITION. Thaddeus Norris, Washington, D.C., U.S.A., 22nd November, 1897.

9579. SEXTON'S OMNIMETRE, SINGLE DIAL EDITION. Thaddeus Norris, Washington, D.C., U.S.A., 22nd November, 1897.

9580. SYPHILIS ET CÉLIBAT, SYPHILIS ET MARIAGE. Par le Dr. Paul E. Prevost, Montréal, Qué., 22 novembre 1897.

9581. INSPIRATION WALTZES. By Louis Field. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England., 29th November, 1897.

9582. THE GOVERNORS WALTZES. By James H. Davis. Whaley, Royce & Co., Toronto, Ont., 29th November, 1897.

9583. THE CANADIAN ALMANAC, 1898. The Copp, Clark Company (Ltd.), Toronto, Ont., 30th November, 1897.

9584. AN ARGUMENT IN FAVOUR OF THE GOODWIN METHOD OF TEACHING HISTORY. By W. H. Goodwin, Montreal, Que., 30th November, 1897.

9585. THE TERRITORIAL HISTORY OF NORTH AMERICA. (The Goodwin Method.) W. H. Goodwin, Montreal, Que., 30th November, 1897.

9586. TOPOGRAPHICAL MAP OF MOUNT ROYAL, 1898. By Adrien de Grandpré, Montreal, Que., 30th November, 1897.