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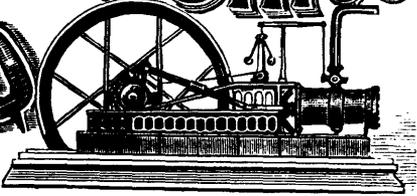
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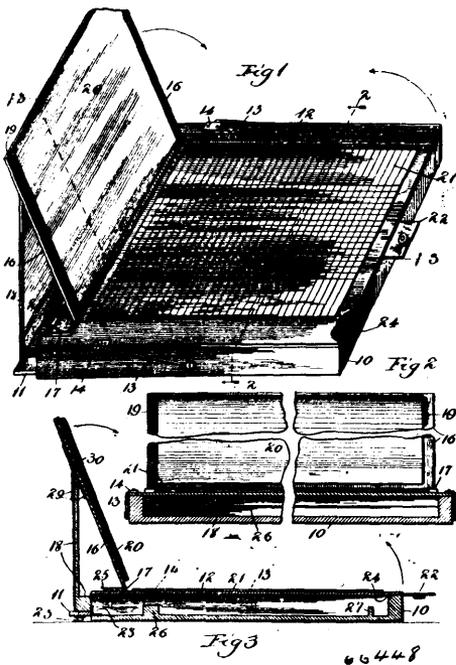
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INVENTIONS PATENTED.

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No. 66,448. Desk. (Pupitre.)



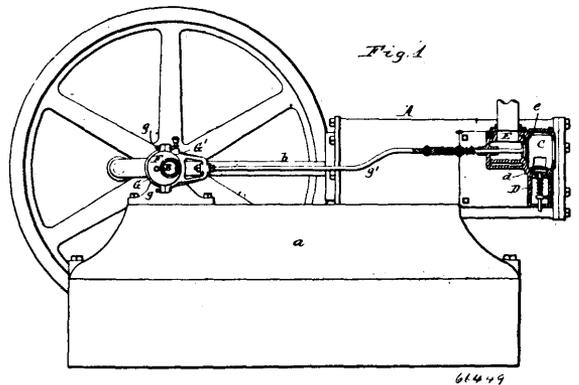
Truman E. Stack, Naperville, Illinois, U.S.A., 1st March, 1900; 6 years. (Filed 19th February, 1900.)

Claim.—1st. In a portable drawing and writing desk, in combination, a base, a cover hinged to the base by links attached to the ends of said parts, an easel hinged to the inner face of the cover near one of its edges, and a leg for the easel hinged thereto and to the base. 2nd. In a portable drawing and writing desk, in combination, a base in box form, one side of the box being hinged to the bottom, a cover hinged to the box by links attached to the ends of

such parts, an easel hinged to the inner face of the cover, and a leg for the easel fixed to the hinged side of the box. 3rd. In a portable drawing and writing desk, in combination, a base, a cover hinged to the base by links attached to the ends of such parts, a lip secured to the inner face of the cover, a lip fixed to the base for engaging the lip of the cover, and means for securing the edge of the cover, remote from its lip, to the base. 4th. In a portable drawing and writing desk, in combination, a base in box form, one side of the box being hinged to the bottom, a cover hinged to the box by links pivotally attached to the box ends midway of their length and to the edges of the cover near one of its side edges, an easel pivoted to one face of the cover, a leg fixed to the hinged side of the box and hinged to the easel. 5th. In a portable drawing and writing desk, in combination, a base, a cover hinged to the base by links pivotally attached to the base ends midway of their length and to the ends of the cover near one of its side edges, an easel pivoted to one face of the cover, a leg for the easel and being hinged thereto and to the base.

No. 66,449. Mechanical Movement.

(Mouvement mécanique.)

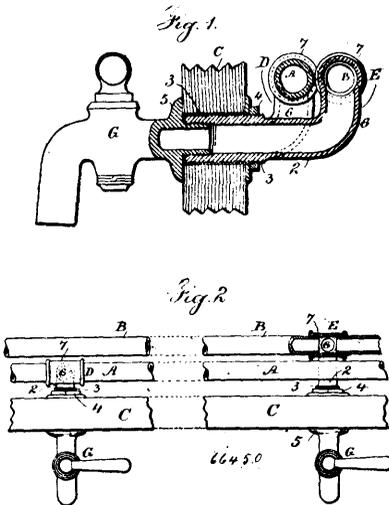


Jess Burnside Fenner, Buffalo, New York, U.S.A., 1st March, 1900; 6 years. (Filed 15th February, 1900.)

Claim.—1st. The combination with a rotary shaft, of an eccentric rotating concentrically with reference to the shaft but independent thereof, an eccentric strap embracing the eccentric but intermediate gearing mounted on said eccentric and meshing with gearing on the shaft, and with gearing on the eccentric strap, substantially as set forth. 2nd. The combination with a rotary shaft, of an eccentric rotating concentrically with reference to the shaft but independent thereof, an eccentric strap embracing said eccentric, a gear wheel secured to said shaft, an internal gear rim secured to the eccentric strap, and an intermediate gear wheel journaled on the eccentric and meshing with the gear wheel on the shaft and the gear rim on the eccentric strap, substantially as set forth. 3rd. The combination with a rotary shaft, of an eccentric rotating concentrically with reference to the shaft but independent thereof, an eccentric strap embracing said eccentric, a gear wheel secured to said shaft, an internal gear rim secured to the eccentric strap and a pair of connected gear wheels journaled on the eccentric

and one of said pair meshing with the gear wheel on the shaft and the other of said pair meshing with the internal gear rim, substantially as set forth. 4th. The combination with a rotary shaft, of two eccentric discs arranged side by side and rotating concentrically with reference to the shaft but independent thereof, an eccentric strap embracing said discs, a gear wheel arranged between said discs and secured to said shaft, an internal gear rim arranged between said discs and secured to said strap, and a pair of connected gear wheels arranged between said discs and journaled thereon, one of said pair meshing with the gear wheel of the shaft while the other of said pair meshes with the gear rim of the eccentric strap, substantially as set forth.

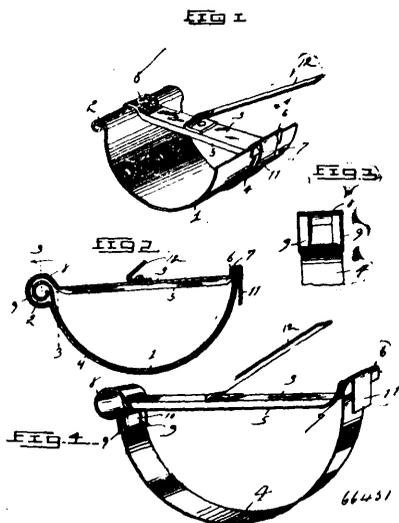
No. 66,450. Pipe Connection for Tubs.
(*Joint de tuyaux pour cuves.*)



Dennis Jacques Galbraith, Plainfield, New Jersey, U.S.A., 1st March, 1900; 6 years. (Filed 13th February, 1900.)

Claim.—A coupling for uniting the hot or cold water pipe and the faucet at a washtub or similar article, such coupling having a cylindrical body portion into either end of which the pipe is screwed, an integral downward bend and horizontal pipe at right angles to the body portion, and having a parallel cylindrical exterior surface to pass through the opening in the back of the tub or similar article, and a screw thread around the exterior surface, and a nut screwed upon the same and acting to apply pressure for holding the coupling and faucet in position upon the tub or similar article, substantially as set forth.

No. 66,451. Eaves-trough Hanger. (*Porte lamiers de toit.*)

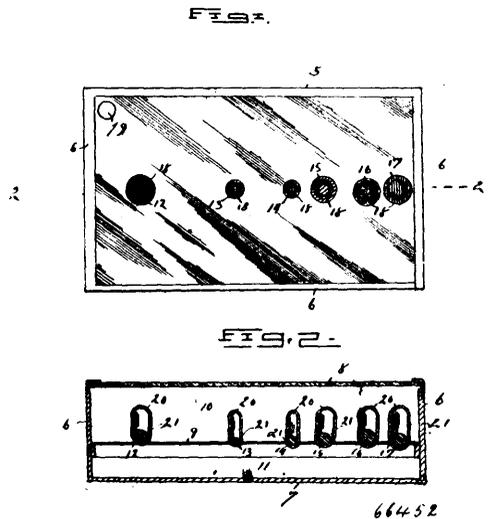


Edward Edwards Taft, Mount Pleasant, Iowa, U.S.A., 1st March, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. An eaves-trough hanger, comprising a cross-bar provided at its outer end with an eye for the bead of the trough, and

with inturned clamp flanges at its side edges, and a bowed bottom strap having one end interlocked with said inturned clamp flanges of the cross-bar, substantially as set forth. 2nd. An eaves-trough hanger, comprising a straight cross-bar provided at its outer end with an eye for the bead of the trough, and with inturned clamp flanges at the side edges thereof, and a curved bottom strap having the outer end thereof interlocked with said clamp flanges, substantially as set forth. 3rd. An eaves-trough hanger, comprising a straight cross-bar provided at its outer end with an eye for the bead of the trough, a bottom strap having the outer end thereof interlocked with the similar end of the cross-bar, the inner end of said bottom strap being detachably engaged with the inner end of the cross-bar and extended downward to form an inner anchor or hold-down strap, and an outer anchor or hold-down strap having the upper end thereof connected with the outer end of the cross-bar, substantially as set forth. 5th. An eaves-trough hanger, comprising a cross-bar provided at its outer end with an eye for the bead of the trough and with inturned clamping flanges, a bottom strap having the outer end thereof interlocked with said clamping flanges and the inner end detachably engaged with the inner end of the cross-bar and extended downward to form an inner anchor or hold-down strap, and an outer anchor or hold-down strap having the upper end thereof also engaged by said clamping flanges, substantially as set forth.

No. 66,452. Puzzle. (*Jeu de ratiocnee.*)



Albert Ellsworth Libby, Limerick, Maine, U.S.A., 1st March, 1900; 6 years. (Filed 10th January, 1900.)

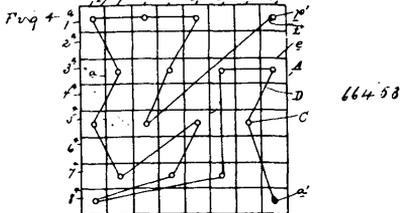
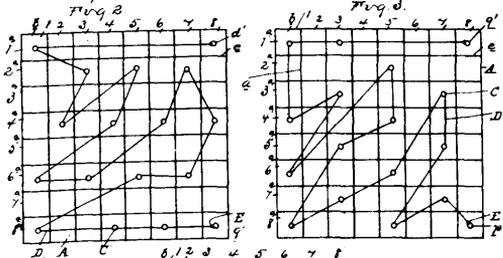
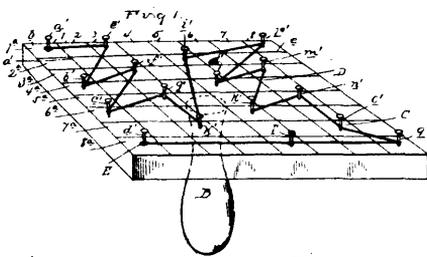
Claim.—1st. A puzzle, comprising a box or casing provided with a transparent top and flexible longitudinal partition, a plurality of various sized holes or openings arranged in a series or group in said partition and provided with vari-coloured borders, an equal number of capsules coloured similarly to the borders of said holes and of such size that the smaller capsules may pass through the larger holes having borders coloured similarly thereto, the larger capsules being adapted to stand in the smaller holes having borders coloured similarly thereto, and a supplemental hole or opening in said partition in one corner thereof through which the smaller capsules may pass, each of said capsules being provided with a ball or weight, substantially as shown and described. 2nd. In a puzzle of the class described, a box, or casing provided with a flexible partition having a plurality of openings, and a plurality of movable bodies adapted to operate in connection with said flexible partition, substantially as shown and described.

No. 66,453. Puzzle. (*Jeu de patience.*)

Donald Fuller, Detroit, Michigan, U.S.A., 1st March, 1900; 6 years. (Filed 10th January, 1900.)

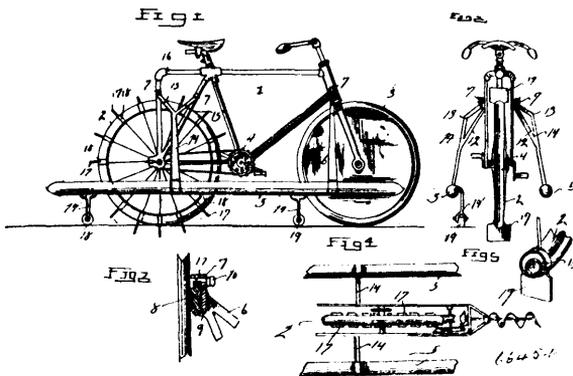
Claim.—1st. In a puzzle, the combination of a board, a multiple of projections or pins distributed over and secured upon the board top, a cord, and means for detachably securing the cord at its ends to two of the pins, the portion of the cord intermediate the ends being adapted to be partly wound without slack about each of the remaining pins, and the arrangement being such that the winding may be effected without touching any pin twice or crossing the strands. 2nd. In a puzzle, the combination of a board having marked upon its upper surface or top, a plurality of squares arranged

in equal columns, a multiple of pins or projections secured to the board, one pin being located in each corner square and the balance



of the pins being arranged within the columns of squares specified and in the order described, a cord, and means for detachably securing the ends thereof to two of the corner pins, the portion of the cord intermediate the ends being adapted to be partly wound without slack about each of the remaining pins, and the arrangement being such that the winding may be effected without touching any pin twice or crossing the strands. 3rd. In a puzzle, the combination of a board, square in configuration and having marked upon its upper surface or top a multiple of squares arranged in equal columns, a multiple of pins fixed secured upon the board, one pin being arranged in each corner thereof within one of the corner squares, and the balance of the pins being arranged within the columns of squares specified and in the order described, a cord and rings upon the cord ends for detachably securing the latter to a pair of adjacent corner pins, the portion of the cord intermediate the ends being adapted to be partly wound without slack about each of the remaining pins, and the arrangement being such that the winding may be effected without touching any pin twice or crossing the strands.

No. 66,154. Land or Water Bicycle. (Bicycle.)

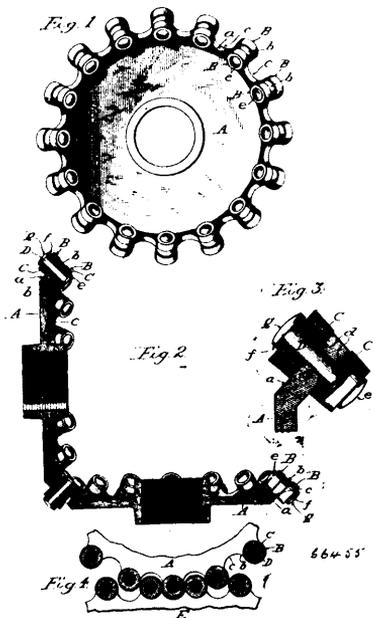


Rickard Möller, Pittsburg, Pennsylvania, U.S.A., 1st March, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. The combination with a bicycle frame, of a pair of floats removably secured thereon, said floats having wheels connected therewith located substantially on a level with the main wheels of

the bicycle. 2nd. The combination with the frame of a bicycle, of a float extending alongside the frame, arms thereon, said arms terminating at their upper ends in a jaw, T-shaped lugs on the frame beneath which said jaws are adapted to engage and means for holding said jaws removably in engagement with said lugs. 3rd. The combination with the frame of a bicycle, of wheels, one of which is provided with paddles which may be extended outside of or turned inside of the rim of the wheel, and floats removably connected to the frame. 4th. The combination with a diamond-shaped frame and a rectangular rear extension 16, secured thereon, of a float, an arm connected therewith, said arm pronged at its upper end, the ends of which prong are removably secured respectively, to the rear end of the diamond frame and to the rectangular rear extension 16.

No. 66,455. Gearing. (Engrenage.)

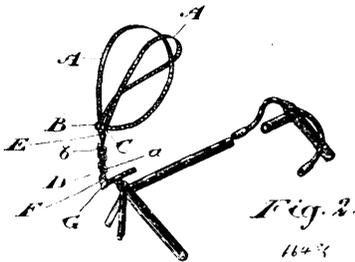
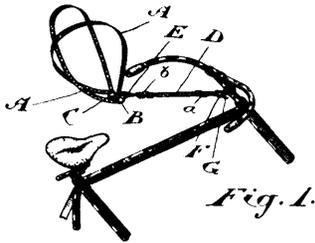


Charles L. Travis, Minneapolis, Minnesota, U.S.A., 1st March, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. A gear wheel consisting of a disc or body, a series of stationary axles carried at or near the periphery thereof, and rollers carried by said axles in pairs, one roller of each pair on one side of the disc or body and the other roller on the other side thereof. 2nd. In a gear wheel, the combination of a disc or body, a series of axles projecting from opposite faces thereof at or near its periphery, and straight faced rollers applied to said axles on opposite sides of the disc or body. 3rd. In a gear wheel, the combination of a body having its periphery provided with alternate ears or projections and recesses or depressions adapted to receive corresponding ears or projections, and a series of rollers carried in pairs by the ears or projections, the rollers of each pair being on opposite sides of the carrying ear or projection. 4th. The hereindescribed gear wheel, comprising a body A, a series of projections or ears b, a series of depressions c alternating and corresponding in form with the ears b, axles supported by the ears b and projecting on opposite sides thereof, and rollers B applied to said axles. 5th. In a gear wheel, combination of a body or disc provided with peripheral ears or projections b, rivets or fastenings D passing through the ears b and projecting on opposite sides thereof, bushings encircling said fastenings and secured thereby to the ears b, and rollers encircling the bushings, substantially as and for the purpose set forth. 6th. In combination with disc or body A having counterbored ears or projections b, sleeves or bushings having their inner ends seated in the counterbores of the ears, rollers encircling said sleeves, and fastenings passing through the sleeves and serving to retain said sleeves and the rollers in position. 7th. The combination substantially as herein set forth, of two co-acting gear members, each provided with projecting ears and intervening recesses, said ears being provided on both outer faces with rollers, substantially as shown and described. 8th. A bevel gear consisting of a body or disc A having a peripheral flange at an angle to the plane of rotation, and provided with alternate projections and depressions, and sectional conical rollers carried by and upon opposite sides of said projections and having their axes and their longitudinal surfaces radial to a common point or centre in the axial line of the wheel. 9th. The combination of two bevel gear wheels each comprising a disc or body having a peripheral flange at an angle to said body, formed with alternate projections and depressions, each wheel provided with a series of rollers arranged

in pairs, the rollers of the respective pairs being carried upon opposite sides or faces of the respective peripheral projections, and having a common centre from which their axes radiate, substantially as set forth. 10th. In a gear wheel, the combination of a main body or disc provided on opposite faces with short axles, each consisting of a tubular sleeve, each sleeve on one side being in alignment with another on the opposite side, and a fastening passing through the bushings and the web or body of the wheel, and bearing upon the ends of the bushings. 11th. The combination of two co-acting wheels, each provided with peripheral ears or projections, and with lateral rollers on both outside faces of said ears, whereby pressure brought by one wheel upon the other tends to force or to hold the rollers of the co-acting wheels in engagement throughout their length.

No. 66,456. Back Rest for Cyclists.
(*Appui dos pour cyclistes.*)

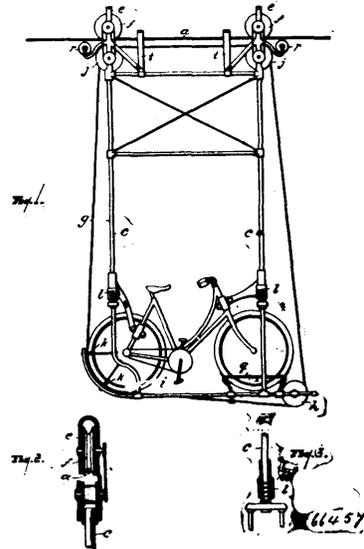


Alexander MacArthur, Chicago, Illinois, U.S.A., 1st March, 1900;
6 years. (Filed 10th July, 1899.)

Claim.—1st. A harness and back rest for cyclists, comprising shoulder straps having their ends connected to a strap, the other end of which is provided with a hook or eye, in combination with a hook or eye secured to the frame of the bicycle at or near the head, substantially as and for the purpose specified. 2nd. A harness and back rest for cyclists, comprising the shoulder straps, each crossing the body diagonally over the shoulders and having its ends secured to two rings, in combination with a strap provided at one end with means for detachably connecting it to the said rings, and at the other with an hook or eye, in combination with an hook or eye secured to the frame of the bicycle at or near the head, substantially as and for the purpose specified. 3rd. A harness and back rest for cyclists, comprising two shoulder straps, each crossing the body diagonally over the shoulders and having its ends secured to two rings, in combination with an adjustable strap provided at one end with means for detachably connecting it to the said rings, and at the other with an hook or eye, in combination with an hook or eye secured to the frame of the bicycle at or near the head, substantially as and for the purpose specified. 4th. A harness and back rest for cyclists, comprising two crossed shoulder straps crossing the body diagonally and secured together where they cross one another, the ends being secured to one or more rings, and a strap secured at one end to the said ring or rings and provided at its other end with means for engaging it with a portion of the bicycle, substantially as and for the purpose specified. 5th. A harness and back rest for cyclists, comprising two cross shoulder straps secured together where they cross, each crossing the body diagonally over the shoulders and each having its ends secured to two rings, an adjustable strap secured to the said rings and provided at its other end with means for engaging it with a portion of the bicycle, substantially as and for the purpose specified. 6th. A harness and back rest for cyclists, comprising two crossed shoulder straps secured together where they cross, each crossing the body diagonally over the shoulders and each having its ends secured to two rings, an adjustable strap detachably secured by a hook to the said rings and provided at its other end with means for engaging it with a portion of the bicycle, substantially as and for the purpose specified. 7th. A harness and back rest for cyclists, comprising two crossed shoulder straps, each crossing the body diagonally over the shoulders and each having its ends secured to two rings, an adjustable strap secured to the said rings and provided at its other end with means

for engaging it with a portion of the bicycle, substantially as and for the purpose specified.

No. 66,457. Bicycle Trolley Car. (*Troulé de char-bicyclee.*)

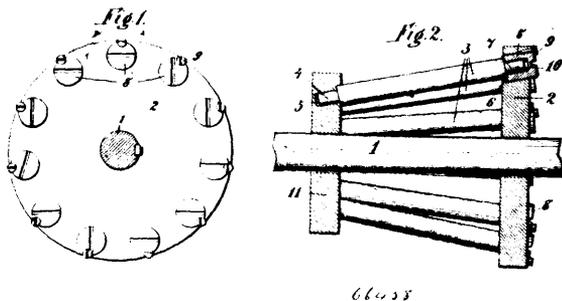


James Hartman Talbot, Detroit, Michigan, U.S.A., 1st March, 1900; 6 years. (Filed 16th June, 1899.)

Claim.—1st. A bicycle trolley, consisting of trolley wheels, a frame work adapted to support said trolley wheel and to receive a bicycle, and means operated by said bicycle for propelling said trolleys, substantially as described. 2nd. A bicycle trolley, consisting of trolley wheels, a framework adapted to support said trolley wheels, and means under the control of the rider for propelling said trolley, substantially as described. 3rd. A bicycle trolley, consisting of a suitable framework, trolley wheels mounted in said framework, means for supporting a bicycle in said frame, and propelling means connecting said bicycle with the trolley, substantially as described. 4th. A bicycle trolley, consisting of trolley wheels suitably mounted, a framework adapted to receive a bicycle, means for propelling the trolley wheels, and a belt connecting the wheels of said bicycle with said means for propelling the trolley wheels, substantially as described. 5th. A bicycle trolley, consisting of a suitable framework, trolley wheels mounted in said framework, a belt adapted to operate said trolley wheels, and a driving mechanism supported by and adapted to drive said belt, substantially as described. 6th. A bicycle trolley, consisting of a suitable framework, trolley wheels mounted in said frame, suitable clamping mechanisms for securing a bicycle in the frame, and a belt adapted to drive said trolley wheels and to support and be driven by said bicycle, substantially as described. 7th. The combination of a bicycle, a trolley carriage adapted to support said bicycle, and means for propelling said trolley carriage operated by said bicycle, substantially as described. 8th. The combination of the trolley, a carriage adapted to transport one or more persons, a belt suspended from said trolley arranged to support said carriage and drive said trolley, and means for driving said belt, substantially as described. 9th. The combination of the bicycle, a suitable framework to receive said bicycle, trolley wheels mounted in said frame, a belt adapted to drive said trolley and to support and be driven by the bicycle, and means for retaining said belt in position under said bicycle wheels, substantially as described. 10th. In a bicycle trolley, a frame adapted to support the bicycle, and a clamping device arranged to clamp the front fork to the frame and to hold the same against rotation, substantially as described. 11th. In a bicycle trolley, a frame adapted to support the bicycle, and the clamping bolt arranged to grip the fork to hold the same rigid and against side motion, substantially as described. 12th. In a bicycle trolley, the trolley wheels, the upper and lower frames, the trolley wheels mounted in the upper frame, the prime motor supported in the lower frame, the extension connection between the upper and lower frames, and the driving belt whereby the weight of the lower frame and the motor keep the belt taut, substantially as described. 13th. In a bicycle trolley, the upper and lower frames, the trolley wheels, the prime motor, means connecting the upper and lower frames arranged to allow for their extension, the driving belt, and a spring arranged to relieve excessive weight on the belt, substantially as described. 14th. In a bicycle trolley, the upper and lower frames, means connecting the frames arranged to allow for their extension, and means arranged to limit the extension, substantially as described. 15th. In a bicycle trolley, the combination of the frame, the trolley wheels mounted in said frame, and the over-

hanging hooks *t* engaged with said frame, substantially as described. 16th. In a bicycle trolley, the combination of the frame, the trolley wheels mounted in said frame, and the guide rolls mounted in the frame underneath the wire, substantially as described. 17th. A portable bicycle trolley, consisting of the skeleton frame, the trolley wheels, the prime motor and the driving mechanism connecting the motor and the trolley wheels, substantially as described. 18th. The combination of the frame, the trolley wheels, the driving belt, means for supporting the driving wheel of a bicycle in running contact with said belt, and means driven by said belt for operating the trolley wheels, substantially as described. 19th. The combination of the frame, the trolley wheels, the prime motor mounted in the frame and a shaft collecting said prime motor and the trolley wheels, substantially as described. 20th. The combination of the frame, the driving belt, means for supporting a bicycle in running contact with said belt, and a shaft operated by said belt for driving the trolley wheels, substantially as described. 21st. The combination of the frame, and a cradle for supporting the front wheel of the bicycle, having an adjustable connection with said frame, substantially as described.

No. 66,458. Roller Gear Wheels for Cycles.
(*Roue à rouleau d'engrenage pour cycles.*)

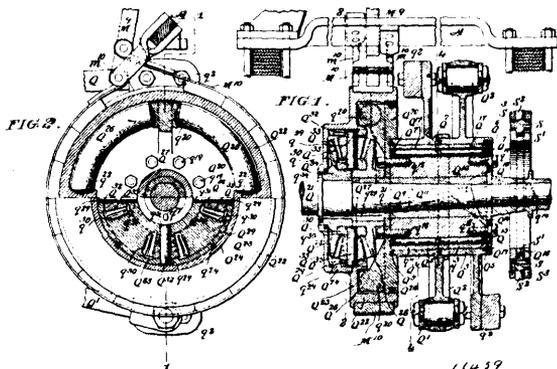


66458

Carl Gustave Irenans Schultz, Hamburg, Germany, 1st March, 1900; 6 years. (Filed 14th June, 1899.)

Claim.—1st. Roller gear wheels for cycles and the like in which two flanges are fixed upon the driving shaft to carry the respective ends of the rollers, one flange being provided with removable plugs and safety screws so that any roller may be removed and replaced without disturbing any other portion of the wheel, substantially as hereinbefore described. 2nd. The improved roller gear wheel with the following essential features in combination, two flanges fixed upon the driving shaft, bearings formed in one flange to receive the ends of the rollers, removable plugs screwed in the other flange to permit the rollers to be removed or inserted and when in position to act as bearings for the other ends, and all substantially as hereinbefore described.

No. 66,459. Clutch. (*Embrayage.*)



66459

John Potter Murphy, Philadelphia, Pennsylvania, U.S.A., 2nd March, 1900; 6 years. (Filed 30th August 1899)

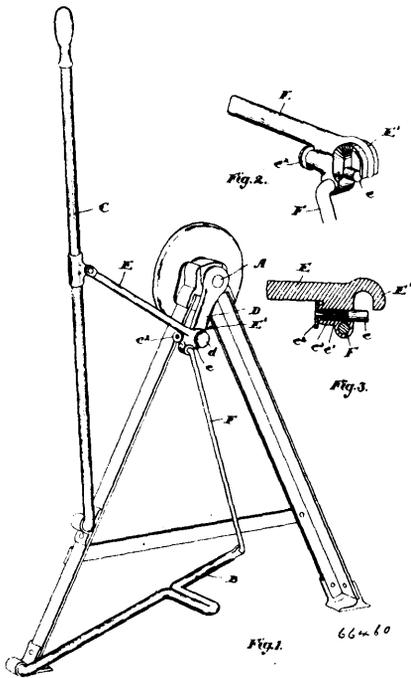
Claim.—1st. A clutch drum having a series of facets on its face, each consisting of a central surface Q^{13} , substantially radial to the centre of the drum and lateral surfaces q^{13} , q^{12} , forming a very obtuse angle with said central surface in combination with a clutch ring with a cylindrical inner face and a series of rollers interposed between the drum and ring and adapted to fit closely between the surfaces Q^{13} , and the clutch ring. 2nd. A clutch drum having a series of facets on its face each consisting of a central surface Q^{13} , substantially radial to the centre of the drum and lateral surfaces q^{13} , q^{12} , forming a very obtuse angle with said central surface in combination with a clutch ring with a cylindrical inner surface, a series of square ended rollers interposed between the drum and ring, and adapted to fit closely between the surfaces Q^{13} , and the clutch ring, a roller cage C^6 , angularly adjustable on the clutch drum formed with a series of rectangular chambers Q^8 , of length equal to the rollers and of breadth somewhat greater than the diameter of the rollers and means for adjusting the cage. 3rd. The combination with a clutch drum as Q^{10} , clutch ring and rollers working between said ring and drum, of a roller cage situated between said ring and drum, one or more keys uniting the drum and cage having a straight connection with the one and a spiral connection with the other and means for moving said key or keys to shift the angular position of the cage on the drum. 4th. The combination with a clutch drum as Q^{10} , clutch ring and rollers working between said ring and drum, of a roller cage situated beneath the ring and drum, two keys uniting the drum and cage and having a straight connection with the one and a spiral connection with the other, a grooved annular ring secured to extensions of the keys aforesaid and lever arms engaging the groove of said ring for moving it and the keys and thus adjusting the angular position of the cage on the drum. 5th. The combination with intermittently acting clutch mechanism of two shafts to be driven thereby, an equalizing mechanism coupling the two shafts as described and whereby they are directly actuated and a yielding connection between the said equalizing device and the intermittently acting clutch. 6th. The combination with intermittently acting clutch mechanism of two shafts to be driven thereby arranged concentrically with the clutch, a plate Q^{20} , secured to the clutch drum and formed with outwardly extending wings q^{20} , bevel gear wheels Q^{28} and Q^{35} , one secured to each shaft, a casing Q^{22} , Q^{23} , Q^{24} , Q^{25} , forming a close joint with the edge of plate Q^{20} , and enclosing all the gear wheels aforesaid, said casing having internal wings q^{22} , arranged to interlock with wings q^{20} , springs interposed between said wings q^{22} and q^{20} , an annular spider secured on the inside of the casing to afford support to the journals of bevel wheels Q^{33} , and bevel wheels Q^{33} secured in said spider and in engagement with bevels Q^{28} and Q^{35} . 7th. The combination with intermittently acting clutch mechanism of two shafts to be driven thereby arranged concentrically with the clutch, a plate Q^{20} , secured to the clutch drum and formed with outwardly extending wings q^{20} , bevel gear wheels Q^{28} and Q^{35} , one secured to each shaft, a casing Q^{22} , Q^{23} , Q^{24} , Q^{25} , forming a close joint with the edge of plate Q^{20} , and enclosing the gear wheels aforesaid, said casing having internal wings q^{22} , arranged to interlock with the wings q^{20} , springs interposed between said wings q^{22} and q^{20} , an annular spider secured on the inside of the casing to afford support to the journals of bevel wheels Q^{33} , bevel wheels Q^{33} , secured in said spider and in engagement with bevels Q^{28} and Q^{35} , and a brake arranged to operate on the casing aforesaid. 8th. A clutch drum having a series of facets on its face in combination with a clutch ring with a cylindrical inner face, a series of square ended rollers interposed between the drum and ring, a cylindrical roller cage Q^6 , situated between the drum and ring and angularly adjustable on the clutch drum, said cage being formed with a series of rectangular chambers Q^8 , of length equal to the rollers and of breadth somewhat greater than the diameter of the rollers and means for adjusting the cage.

No. 66,460. Barrel Churn. (*Baratte.*)

David Maxwell & Sons, assignee of David Maxwell, all of St. Mary's Ontario, Canada, 2nd March, 1900; 6 years. (Filed 20th February, 1900.)

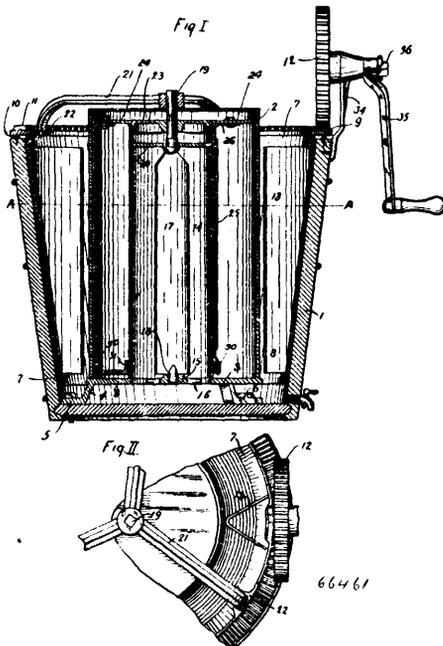
Claim.—1st. The combination with the barrel, trunnions, and crank secured on the end of one of the trunnions and crank pin thereof, and the driving lever and rod connected to the lever, of an adjustable means for normally confining the crank pin within the jaw, as and for the purpose specified. 2nd. The combination with the barrel, trunnions, and crank secured on the end of one of the trunnions and crank pin thereof, and the driving lever, and rod connected to the lever, of spring held adjustable means for confining the crank pin within the jaw, as and for the purpose specified. 3rd. The combination with the barrel, trunnions, and crank secured on the end of one of the trunnions and crank pin thereof, and the driving lever and rod connected to the lever, of a socket formed in the enlarged end of the rod, a plunger in the socket, designed to close the end of the jaw and a spring for holding such plunger in its normal position

and means for withdrawing the plunger, as and for the purpose specified. 4th. The combination with the trunnions and crank and



the driving means, of a detachable spring held connection between the driving means and the crank, as and for the purpose specified.

No. 66,461. Ice Cream Freezer.
(Réfrigérant pour crème à la glace.)



Lafayette D. Raulback, Indianapolis, Indiana, and Mamie L. Ifft, Washington, Columbia U.S.A., 2nd March, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. An ice cream freezer including an outer ice receptacle, a hollow annular cream can mounted within said receptacle above its bottom to leave an ice receptacle below said cream can, and an inner ice receptacle formed by the hollow of the cream can and

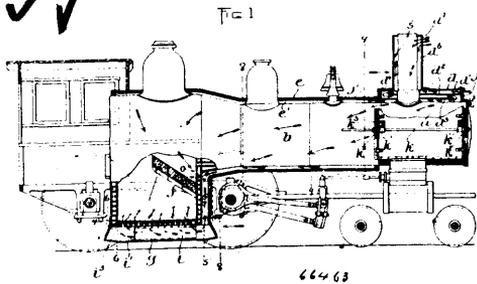
having no bottom, whereby the space about, beneath and within the hollow of the cream can forms practically a single ice chamber, and means for forcing the ice from the outer to the inner receptacle. 2nd. An ice cream freezer including a stationary cream can, a revoluble plate or support at the upper end of the cream can, a loosely mounted band at the lower end of the cream can provided with a socket an arm secured to the plate or support above and extending down and detachably entering the socket in said band, and a scraper or worker secured to such arm. 3rd. An ice cream freezer including a stationary cream can, an ice chamber within the cream can, a rotatable plate or support at the upper end of the cream can, radially adjustable arms extending downward from each end of said plate or support, a band provided with sockets detachably engaged by said arms, a scraper on each of said arms, said arms being so located that the scraper on one arm will engage the outer wall of the cream can, and the other will engage the inner wall thereof. 4th. An ice cream freezer including a stationary hollow cream can, ice chambers surrounding and within the hollow of the cream can, a rotatable plate or support at the upper end of the cream can, a band loosely surrounding the inner wall of the cream can having sockets in it, a pair of arms secured to the plate or support and extending down into said sockets and detachable therefrom, a scraper secured to said arms, one arm being attached to the plate or support at such point as to cause its scraper to engage the outer wall of the cream can, and the other arm being so located as to cause its scraper to engage the inner wall of the cream can. 5th. An ice cream freezer including a suitable vessel, a stationary hollow cream can centrally secured therein, a lining for said vessel that is movable and has a toothed outwardly extending annular flange that rests upon the upper edge of said vessel, a bracket secured to the side of said vessel, a gear carried in said bracket that meshes with and drives the rack on said lining, a frame extending across the upper end of the freezer secured to said lining, means within the ice chamber within the cream can for agitating the ice therein, a plate or support at the upper end of the cream can for carrying suitable scrapers and workers, means for detachably connecting said frame, the plate or support for the scrapers and workers and the means for agitating the ice in the central ice chamber so that they will all rotate together.

No. 66,462. Nitro Explosive. (*Nitro-explosif.*)

James Findlay Torrence Sargent, assignee of Ansel Moffatt, both of Indianapolis, Indiana. U.S.A., 2nd March, 1900; 6 years. (Filed 26th June, 1899.)

Claim.—1st. The process producing nitrate starch which consists in eliminating the moisture from the starch and subjecting it to a nitrating bath at a temperature below the point where the heat caused by the reaction will rupture the starch granules, whereby the product consists of granules of the same physical form as the original starch granules, and its stability thereby insured, substantially as set forth. 2nd. The process of producing nitrate of starch which consists in removing the moisture from the starch by dry heat, reducing its temperature to below the point where its granules will rupture in the nitrating bath, mixing said starch into said nitrating bath made and maintained during the operation at a temperature below said point, and then purifying and drying the same, whereby the product consists of unruptured granules and its stability thus insured, substantially as set forth. 3rd. The process of making a stable nitrate of starch consisting in removing the moisture from the starch, then cooling the starch, and then treating said dried and cooled starch in a nitrating bath at such temperature where rupture of the starch granule will not occur during nitration, substantially as set forth. 4th. The process of producing nitrate of starch consisting in submitting dried starch to the action of a nitrating bath or below 4° Centigrade, diluting the mixture with water sufficient to lower its specific gravity to below 1.30, washing, neutralizing and drying the product, substantially as set forth. 5th. The process of producing nitrate of starch consisting in drying the starch until practically free from moisture, cooling the same in closed vessels, mixing the same into a nitrating bath of a temperature maintained during the operation below 4° Centigrade, allowing the starch to macerate, then diluting the bath to not over 1.30 specific gravity, then washing, neutralizing and drying the nitro starch product, substantially as set forth. 6th. The process of producing nitrate of starch consisting in drying the starch until free from moisture as nearly as may be, placing the dried starch while hot in closed vessels, reducing its temperature in said vessels to below 4° Centigrade, preparing a bath of nitric and sulphuric acids, reducing its temperature to below 4° Centigrade, mixing said dried starch into said bath while maintaining its temperature below 4° Centigrade, permitting the starch to thoroughly macerate, diluting the mixture into ice or water in a refrigerating apparatus so that the heat caused by the reaction between the acid and water shall not cause the temperature to rise above 4° Centigrade, and proportioning the water or ice so that the diluted acids shall not exceed 1.30 in specific gravity, removing the diluted acids by subsidence of the nitro starch and decantation of the acids, washing the greater portion of the acids from the nitro starch, then boiling the nitro starch with an alkalinized lye sufficient to maintain a distinct alkaline reaction, until soluble matters are dissolved, washing the nitro starch with water until soluble matter is practically eliminated, and finally drying into the finished product, substantially as set forth.

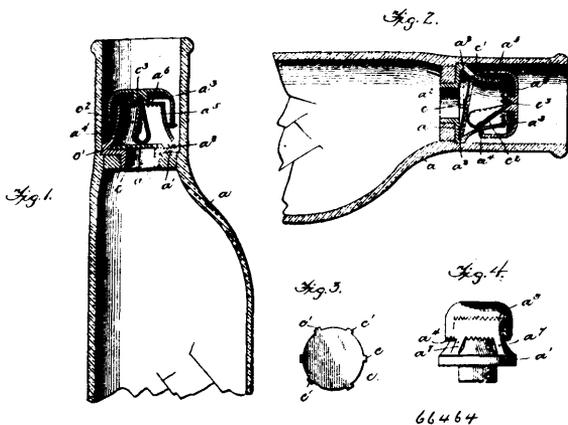
No. 66,463. Locomotive. (Locomotive.)



Henry H. Huff, Dorchester, Arthur Dudley Curran, Boston, and Smith Payne Burton, Reading, all in Massachusetts, U.S.A., 2nd March, 1900; 6 years. (Filed 15th February, 1900.)

Claim.—1st. A locomotive engine having an air chamber exterior to the smoke arch and adapted to be heated thereby, said chamber being provided with means for preventing the direct passage of air therethrough, an air conducting sheath or jacket surrounding the boiler and connected at one end with the air chamber and at the other end with the fire box, whereby heated air from the said chamber is conducted in a thin stratum along the heated external surface of the boiler and delivered additionally heated to the fire box, and means for varying the admission of air to the said chamber. 2nd. A locomotive engine having an air chamber exterior to the smoke arch, means for connecting said chamber with the fire box, air inlets at the front and rear ends of said chamber, and registers whereby either of said inlets may be closed. 3rd. A locomotive engine having an chamber exterior to the smoke arch, means for connecting said chamber with the fire box, air inlets at the front and rear ends of said chamber, registers adapted to close said inlets, and means for simultaneously operating the registers, the said inlets and registers being arranged so that when one register is opened the other is closed. 4th. A locomotive engine having an air chamber surrounding the smoke arch and provided with internal horizontal partitions to form a sinuous passage, said passage having an air inlet at its front end, and an air conduit surrounding the boiler and extending from the other end of said passage to the fire box. 5th. A locomotive engine having an externally closed ash pan, means for heating air and conducting it to said inlet, and the longitudinal partitions *i*, *i* extending from the forward end of the ash pan partly to the rear end, and a transverse partition *i*¹ extending across the space between the partitions *i*, *i* at the rear end thereof, whereby the space within the ash pan is divided into side conduits *i*², *i*², communicating with a chamber *i*³ at the rear of the partition *i*¹ for uniformly supplying air to all parts of the grate.

No. 66,464. Non-refillable Bottle. (Bouteille non réemplissable.)

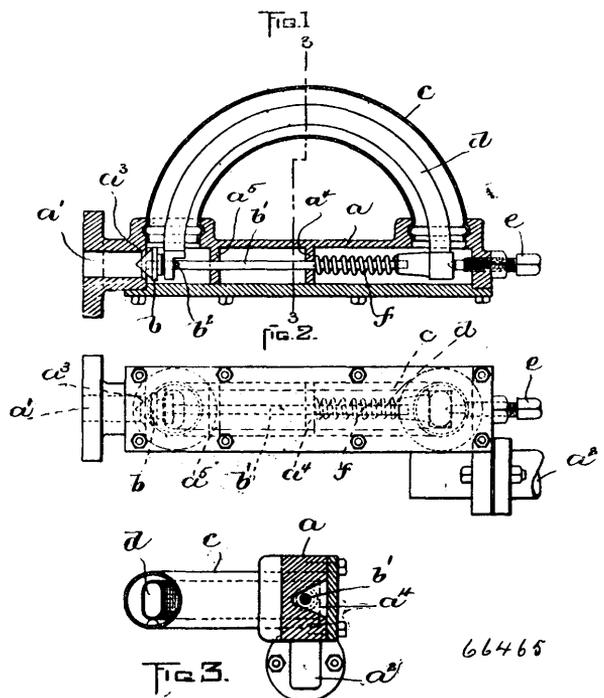


Charles Harris Whitaker, Boston, Massachusetts, and George James Tobin, Plainfield, New Jersey, U.S.A., 2nd March, 1900; 6 years. (Filed 15th February, 1900.)

Claim.—1st. An anti-refilling device comprising a valve chamber the bottom of which constitutes a valve seat surrounding a contracted passage, while the surface of the chamber above the valve seat is tapered or dome shaped and co-operates with the valve seat in forming an annular hinge member, a loose valve formed to fit the valve seat and having a diameter slightly less than that of said

annular hinge member, so that the valve slips edgewise on its seat, permitting the automatic engagement of the lower edge of the valve with the lower portion of the said hinge member to form a hinge when the bottle is tipped, and a float co-operating with the valve in said chamber, whereby the valve is closed upon its seat when liquid accumulates in the chamber, the surface of the chamber above the valve seat being formed to permit a limited opening of the valve and to prevent the displacement of the float and valve to an inoperative position. 2nd. An anti-refilling device comprising a head having an orifice and a valve seat surrounding the orifice, a tube or tubular flange surmounting said head and having a tapering surface the lower portion of which co-operates with the valve seat in forming an annular hinge member surrounding the valve seat, the said tube having an outlet at its upper end above the valve seat, a valve formed to fit the valve seat and having a diameter slightly less than that of the valve seat, so that the lower edge of the valve automatically engages the lower portion of the recess to form a hinge when the bottle is tipped, a dome attached to the exterior of the tube and extending across and below the outlet of the tube. 3rd. An anti-refilling device comprising a head having an orifice and a valve seat surrounding the orifice a tube or tubular flange surmounting said head and having a tapering surface the lower portion of which co-operates with the valve seat in forming an annular hinge member surrounding the valve seat, the said tube having an outlet at its upper end above the valve seat and a series of notches in said upper end, a valve formed to fit the valve seat and having a diameter slightly less than that of the valve seat, so that the lower edge of the valve automatically engages the lower portion of the recess to form a hinge when the bottle is tipped, a float located in the valve chamber, and a dome attached to the exterior of the tube and having a series of notches at its lower end.

No. 66,465. Steam Trap. (Purge à vapeur.)

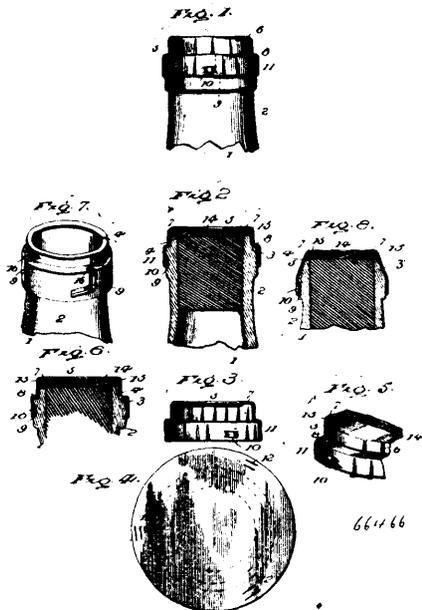


Charles Harris Whitaker, Boston, Massachusetts, and Alfred Catlin Whiting, Burlington, Vermont, both in the U.S.A., 2nd March, 1900; 6 years. (Filed 15th February, 1900.)

Claim.—1st. A steam trap, comprising an elongated casing having an inlet at one end, an outlet at the other end, a valve seat ur-

rounding said inlet, and a transverse partition substantially closing said casing as a fluid passage, a valve adapted to open and close against said seat and having a stem extending longitudinally of said and traversing the partition, a substantially semi-circular shell casing jointed at its ends to said casing and composed of thin metal adapted to quickly dissipate heat from the interior of the shell, and a thermostat of substantially semi-circular shape enclosed in said shell and having its ends in the casing, one end being connected with and adapted by its movements to operate the valve. 2nd. A steam trap, comprising an elongated casing having an inlet at one end, an outlet at the other end, and a valve seat surrounding the inlet, a valve adapted to close against said valve seat, a substantially semi-circular shell jointed at its ends to said casing and composed of thin metal adapted to quickly dissipate heat from the interior of the shell, and a thermostat of substantially semi-circular shape enclosed in said shell and having its ends in the casing, one end being connected with and adapted by its movements to operate the valve.

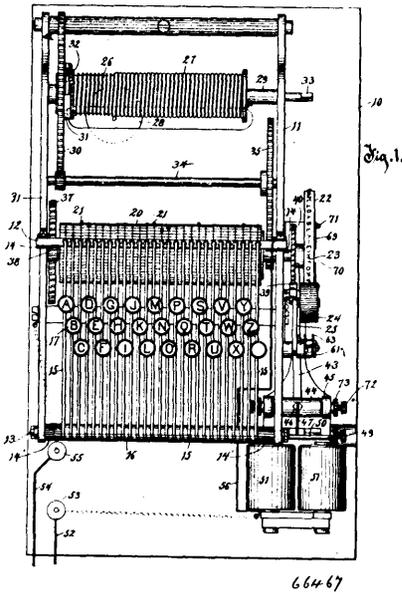
No. 66,166. Bottle. (Bouteille.)



The American Stopper Company, New York City, New York, assignee of Philip Lindemeyer, Baltimore, Maryland, both in the U.S.A., 2nd March, 1900; 6 years. (Filed 27th March, 1899.)

Claim.—1st. The combination of a bottle, having a neck provided with a continuous circumferential shoulder constituting its upper end and a head of less diameter than said neck, the latter having bayonet joint grooves each with an inclined circumferential part and a vertical part beginning in the shoulder below the bottle lip and cork seat, said groove terminating in the enlargement, with a cap provided with a similar shoulder, a cork or other packing seated on the bottle lip, and lugs in the cap below its shoulder to engage said bayonet joint grooves, whereby when the cap is screwed down the cork is drawn upon the lip without entering the groove, substantially as described. 2nd. The combination of a bottle having a neck provided with a continuous circumferential shoulder constituting the upper end of a neck enlargement, a head of less diameter than said neck and bayonet joint grooves beginning in the shoulder and terminating in the enlargement, with a cap provided with a similar shoulder, and lugs below the cap shoulder to engage said bayonet joint grooves, said lugs having sharp edges with inclination approximately similar inclined walls of the grooves, substantially as described. 3rd. The combination of a bottle having a neck provided with a continuous circumferential shoulder constituting the upper end of a neck enlargement, a head of less diameter than said neck and bayonet joint grooves beginning in the shoulder and terminating in the enlargement, with a cap provided with a similar shoulder, lugs below the cap shoulder to engage said bayonet joint grooves, and vertical corrugations formed in the enlarged part of the cap flange intermediate the lugs, substantially as described. 4th. The combination of a bottle having a neck provided with a continuous circumferential shoulder constituting the upper end of a neck enlargement, a head of less diameter than the said neck and bayonet joint grooves beginning in the shoulder and terminating in the enlargement, with a cap provided with a similar shoulder, and lugs below the cap shoulder to engage said bayonet joint grooves, said lugs being integral with the cap flange and comprised between two slits therein, substantially as described.

No. 66,167. Printing Telegraph. (Télégraphe imprimant.)

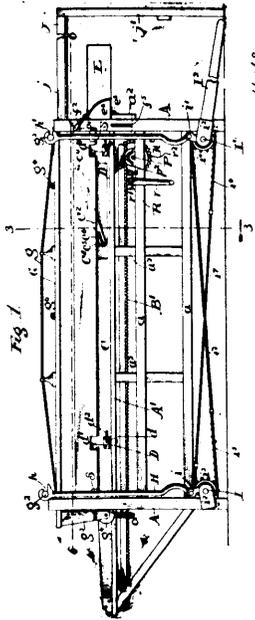


Charles Pfeifer, Plymouth, Wisconsin, and Casper Ernest, St. Paul, Minnesota, assignee of Frederick Hachmann, Milwaukee, Wisconsin, U.S.A., 2nd March, 1900; 6 years. (Filed 12th January, 1899.)

Claim.—1st. In a printing telegraph, a cylinder and a type wheel fixed thereto and mounted in a frame, the type wheel having type thereon some characters of which exist in plurality, the cylinder being provided with pins corresponding in number with the type on the wheel, the pins standing for duplicate letters being arranged on the cylinder in the same diametrical plane, and keys one for each letter of the type wheel (not for duplicates of the same letter) arranged movably near to but insulated electrically from the cylinder and so as to be capable of being moved severally into the path of and so as to contact with a pin on the cylinder when the cylinder is revolved. 2nd. In a printing telegraph, the combination with a frame and a revolvable cylinder mounted in the frame and provided with a series of radially projecting pins, of a bar fixed on the frame near to and parallel with the cylinder, said bar having guideways extending toward and from the cylinder, and a series of keys pivoted on the frame and movable at their free ends in said bar toward and from the cylinder in said guideways, said bar and said keys being normally electrically insulated from said cylinder. 3rd. In a printing telegraph, the combination with a series of pivoted lever keys, of a key supporting and guide bar arranged transversely of the keys and having slots in which the keys move being guided by the walls of the slots, and having sockets in the bar below the slots, and springs in the sockets adapted to support the keys yieldingly. 4th. In a printing telegraph, the combination with a revolvable cylinder provided with fixed radially projecting pins, of a plurality of pivoted lever keys near the cylinder, finger buttons having characters thereon on the keys, means for supporting the free ends of the keys yieldingly away from the pins on the cylinder, and elastic fingers on the keys adapted severally to contact with a pin on the cylinder when its key is depressed against the action of the spring. 5th. In a printing telegraph, the combination with a revolvable type wheel having type on its periphery, of a hammer arm adapted to swing towards and from the type wheel, a stop to limit the movement of the arm toward the type wheel, and a hammer loose in the arm adapted to be carried on its seat in the arm toward the type wheel and on the stopping of the arm at a distance from the type wheel to move by its momentum against the type on the type wheel and by gravity to resume position on its seat in the arm. 6th. In a printing telegraph, the combination of a hammer arm 43 fixed at one extremity on a rock shaft and provided with an aperture in the free extremity of the arm, the aperture extending in the direction of the movement of the arm, and a hammer mounted on the hammer arm and having a stem movable in the aperture in the arm and provided with a yielding tip or face. 7th. In a printing telegraph, the combination with a revolvable wheel having type on its periphery, of a hammer mounted movably in and adapted to be thrown forward limitedly by the swinging of the free end of an arm on a rock shaft, the hammer being adapted to strike on the type, an actuating electro-magnet, an armature in front of the coils of the electro-magnet on a swinging arm, and a rod connecting the arm of the swinging armature to a crank on said rock shaft. 8th. In a printing telegraph, the combination with a revolvable wheel having type on its periphery, of a strip guard opposite and near to the

periphery of the wheel provided with a medially disposed aperture therein, guides on the guard at each side respectively of the aperture for receiving and guiding a paper strip, and a hammer adapted to be struck against the strip of paper opposite the aperture in the guard and against a type on the wheel. 9th. In a printing telegraph, the combination of a frame, a power rotated cylinder having pins in its perimeter, a type wheel on the axle of the cylinder, a ratchet wheel on the axle of the cylinder, and a pendulum escapement engaging the ratchet wheel and provided with an adjustable weight on its pendulum. 10th. In a printing telegraph, the combination of a cylinder provided with key contacting teeth, a type wheel fixed on the axle of the cylinder, a ratchet wheel also fixed on the axle of the cylinder, an escapement intermittently engaging and releasing the ratchet wheel, a weight actuated drum, and a gear interposed between and connecting the drum operatively with the cylinder.

No. 66,468. Mattress Stuffing Machine.
(Machine à rembourrer les matelas.)

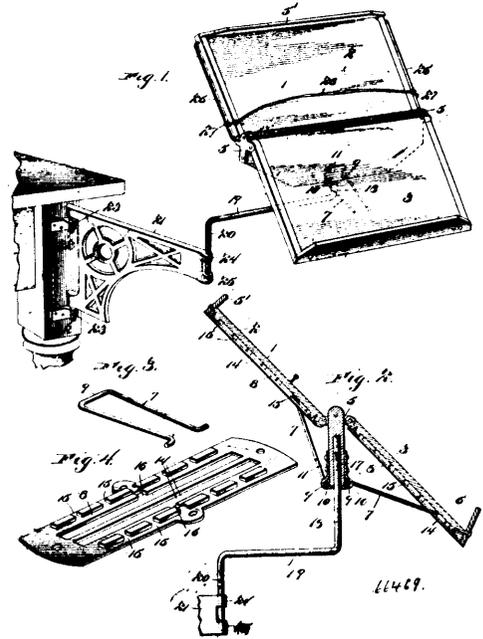


Robert R. Thompson, Chicago, Illinois, U.S.A., 5th March, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. In a machine of the class described, a press box having a suitable top and bottom, one of which is movable toward and from the other, and side rails, one of which is vertically expandible and compressible and laterally adjustable with respect to the box, substantially as described. 2nd. In a mattress stuffing machine, a press box having a vertically expandible and compressible side rail, substantially as described. 3rd. In a machine of the class described, the combination of a rigid framework, a bottom fixed thereto, a vertically movable top and suitable side rails, one of which is vertically expandible and compressible and laterally adjustable between said top and bottom, substantially as described. 4th. In a machine of the class described, a side rail embraced between the top and bottom and made up of a rigid portion, and a portion vertically movable with respect thereto, and provided with a spring tending to keep it in its vertically extended position, substantially as described. 5th. In a machine of the class described, a press box having a vertically and horizontally movable cover, means for moving said cover vertically to press the stuffing material, and means for sustaining said cover adapted to permit it to be moved horizontally to uncover the press box when the stuffing material is to be placed therein, substantially as described. 6th. In a machine of the class described, a press box having a vertically and horizontally movable cover, means for moving said cover vertically to compress the stuffing material, said means containing devices engaging said cover against vertical, but not against horizontal movement in the direction desired, and means for sustaining said cover when moved in the proper direction, to uncover the box, substantially as described. 7th. In a device of the class described, a laterally adjustable side rail having an extension forming part of a spout, and a pivoted or hinged gate pivoted at any side between the side rail and the spout, said extension being cut away to allow the gate to swing upon its hinge, from a vertical position adjacent to the end of the side rail to a horizontal position within the spout, substantially as described. 8th. In a machine of the class described, a press box having a suitable bottom and top and containing a compressible side rail formed with two overlapping portions provided

with springs tending to extend the side rail to its greatest width, substantially as described. 9th. In a machine of the class described, a press box having in combination with suitable top and bottom, a vertically compressible and expandible side rail composed of the relatively stationary portion C, and the U-shaped movable portion C', overlapping the portion C, upon both sides and forming a hood therefor, and means for extending said side rail, substantially as described. 10th. In a machine of the class described, the combination with a suitable press box and a horizontally and vertically movable cover provided with means of engagement therewith, of the hooked arms H, adapted to engage with said cover to prevent movement thereof, except in a horizontal direction, said arms being pivoted at their lower ends to oscillating cranks connected together and provided with means for their oscillation and devices for engaging the upper portions of said arms against horizontal movement at the upper limit of their movement, substantially as described.

No. 66,469. Book Holder. (Porte-livre.)



Nathaniel Grant French, Auburn, Maine, U.S.A., 5th March, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. In a device of the class described, comprising a horizontal bar, the opposite leaves or sections hinged to the sides of the horizontal bar at a point below the upper edges thereof and arranged to swing upward and downward above and below a horizontal position, whereby either of the leaves or sections may be arranged at an inclination above or below the bar, the upper edge of the latter projecting above the point of hinging and forming a ledge for the upper leaf or section, and means for supporting the leaves or sections at the desired adjustment, substantially as described. 2nd. A device of the class described, comprising a support, a leaf or section hinged to the support, a plate secured to the lower face of the leaf or section and provided with an opening, and having opposite notches, said plate being provided at its inner face with longitudinal series of lugs forming recesses, and a brace hinged to the support and provided with arms adapted to pass through the said notches and engaging the lugs, substantially as described.

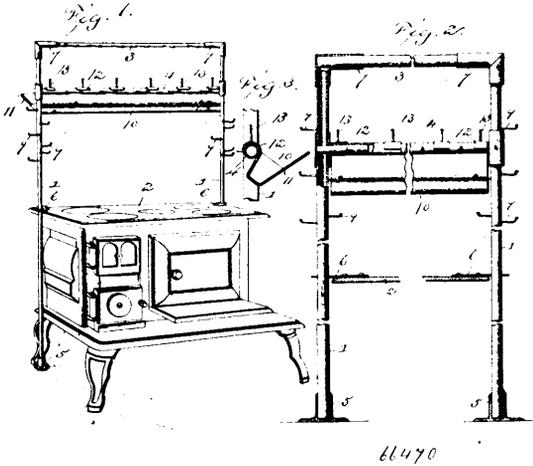
No. 66,470. Stove Rack. (Râtelier pour poêles.)

Edwin Bennett, Carthage, Missouri, U.S.A., 5th March, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. A device of the class described, comprising standards designed to be arranged at opposite sides of a stove and provided with supporting hooks or projections, cross-pieces connecting the standards and provided with supporting devices, and a transverse receptacle supported by one of the cross-pieces, substantially as described. 2nd. A device of the class described, comprising standards designed to be secured at opposite sides of a stove, a cross-piece connecting the standards, and a transverse receptacle provided with supporting hooks engaging the cross-piece, substantially as described. 3rd. A device of the class described, comprising standards designed to be arranged at opposite sides of a stove, cross-

pieces connecting the standards, a receptacle provided at intervals with hooks engaging one of the cross-pieces, and hooks or projec-

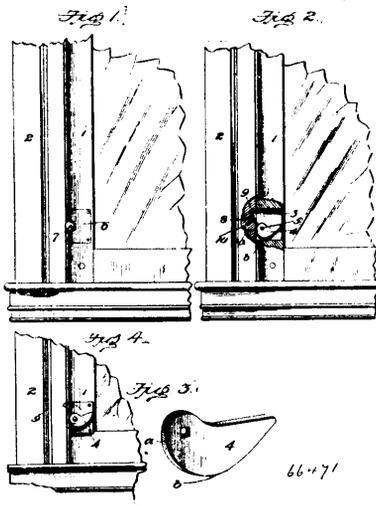
tially as described and illustrated. 4th. The method of making caps of the kind described in claims 1, 2 and 3, of cork, covered



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tions mounted on the standards and on the cross-pieces, substantially as described.

No. 66,471. Sash Holder and Lock. (Arrête croisée.)



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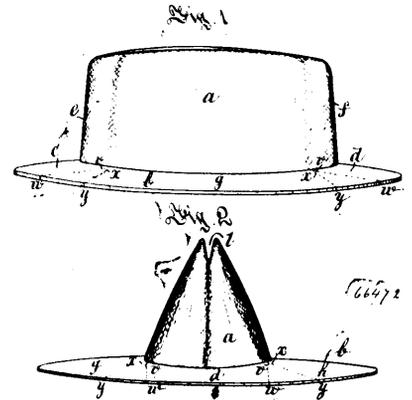
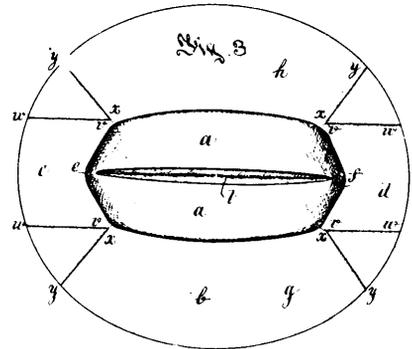
Henry William Steinberg, jr., Walla Walla, Washington, U.S.A., 5th February, 1900; 6 years. (Filed 19th February, 1900.)

Claim.—The combination with a window frame and a vertically movable sash, said frame being provided with a recess in its side piece, said recess having an inclined base and an abrupt end wall, of a cam pivoted in a recess formed in the sash and provided with a friction surface *a-b* to hold said sash in vertical adjustment, and with a bill or point to engage the end wall of the recess in the frame and lock the sash in its closed position, and a shaft for operating the cam, substantially as and for the purpose set forth.

No. 66,472. Cap. (Casquette.)

Francis Joseph Stohwasser and George Birtchnell Winter, London, England, 5th March, 1900; 6 years. (Filed 19th February, 1900.)

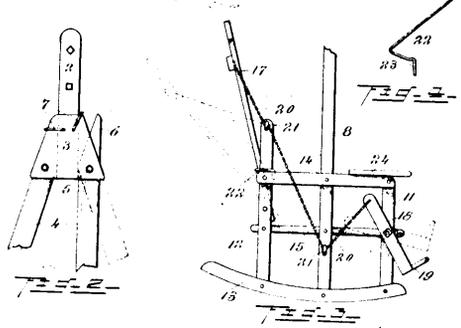
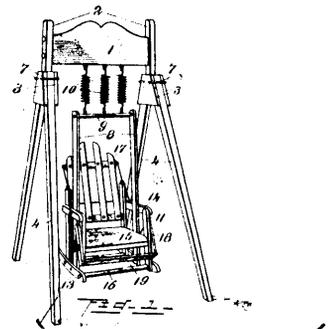
Claims.—1st. A cap for military or other purposes, having a body with a brim attached to its lower edge, the brim being so formed that it may be turned up and folded together so that it lies flat against the body of the cap, substantially as described and illustrated. 2nd. The combination of the body of the cap *a*, consisting of two flexible sides attached together at their front and back vertical edges and an expanding fold or gusset joining their top edges, a brim *b* attached to the body *a* and capable of being folded along the lines *x, y* and *r, v* so that it can be turned up and folded together to lie flat against the body of the cap, substantially as described and illustrated. 3rd. The combination with the folding brim *b* of hooks and eyes or equivalent fastenings by which its folded parts can be held securely together against the body of the cap, substan-



66472

with cloth or other flexible material, which constitutes the joints between the parts of the cap which are to be folded together, substantially as described and illustrated.

No. 66,473. Baby Jumper. (Chariot escarpolette.)



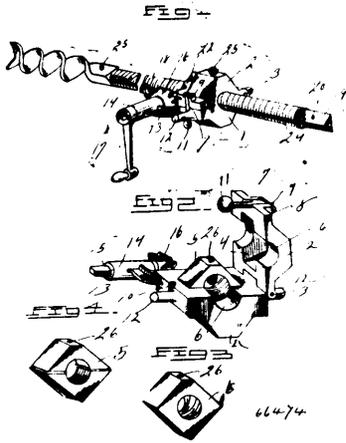
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William Hackley Church, Fenelon Falls, Ontario, Canada, 5th March, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. The combination of a portable support with a swinging chair or baby jumper, consisting of two pair of diverging legs pivoted at the apex in a mortise formed by triangular caps secured

to the upper portion of the supporting frame, a rectangular keeper pivoted to the said caps and falling over the upper extensions of the legs, a plurality of spiral springs pending from the horizontal portion of the supporting frame and supporting the swinging chair or baby jumper, said chair consisting of an adjustable back pivoted to the side frames, an adjustable foot rest pivoted to said side frames, means for operating said adjustable back and said adjustable foot rest in unison, substantially as shown and described. 2nd. In a swinging chair or baby jumper, the combination of an adjustable back pivoted at its lower extremity to the side frames of said chair, an adjustable foot rest secured to levers pivoted to said side frames, with means for operating said back in unison with said foot rest, said means consisting of flexible connections working through guides attached to said side frames, substantially as shown and described.

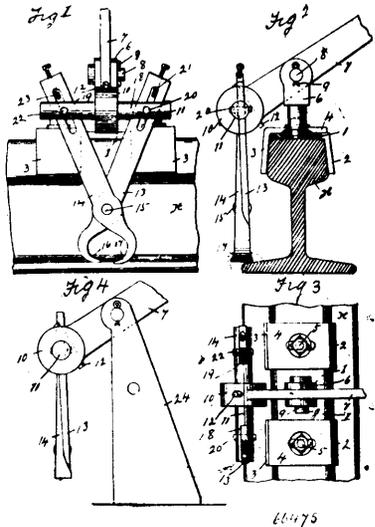
No. 66,474. Drilling Machine. (Machine à forer.)



Hermann Staplemann, Newark, Ohio, U.S.A., 5th March, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—In a drilling machine, the combination with a two part boxing hinged to each other at one end and having communicating recesses at its other end, a gravity arm pivoted to the upper part of the boxing to automatically engage the recesses in both parts when the said parts are brought together, the outer end of the arm having a spherical enlargement, a nut removably seated in a chamber or cavity formed within the boxing, the latter having openings on a line with the opening in the nut, and a threaded shaft having its opposite ends shaped to receive a bit, together with devices for holding the bit in place, and mechanism for turning the shaft, substantially as shown and for the purpose set forth.

No. 66,475. Spike Puller. (Arrache-cheville.)

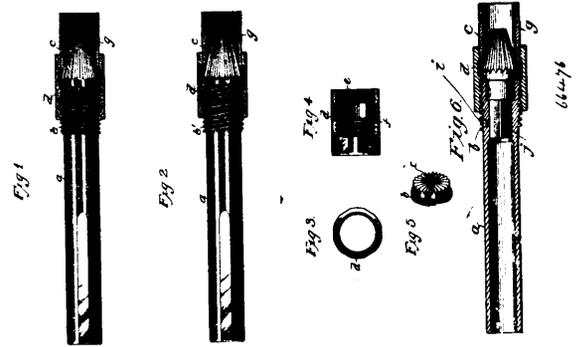


William Fielden, Port Orant, New Jersey, U.S.A., 5th March, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. A spike puller, comprising a bed plate adapted to rest on the top of a railway rail, clips adjustably mounted on said

bed plate for engaging the sides of the rail, a fulcrum block having pivotal connection with the plate so as to rotate in a horizontal plane relatively to the plate, a lever fulcrumed in said block, a cross head carried by said lever, jaw carrying levers pivoted together and having sliding connection with the cross head, and gripping jaws on said levers, substantially as specified. 2nd. A spike puller, comprising a bed plate adapted to rest upon the top of a railway rail, clips having adjustable connection with said plate for engaging the sides of the rail, a fulcrum block having pivotal connection with the bed plate so as to rotate in a horizontal plane relative to the plate, a lever fulcrumed in said block, a cross head mounted to rotate in said lever, the said cross head being provided with slots, jaw carrying levers pivoted together and having portions extended through said slots, the said portions being slotted and pins extended through the cross head and through the slots on the jaw carrying levers, substantially as specified. 3rd. A spike puller, comprising a bed plate adapted to rest on the top of a railway rail, a fulcrum block mounted to rotate in a horizontal plane on said plate, a lever fulcrumed in said block, and jaw carrying levers carried by the first named lever, substantially as specified.

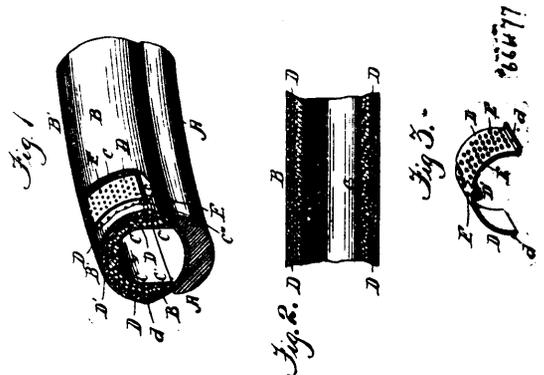
No. 66,476. Nipple Holder. (Porte cheminée.)



Ernest Linwood Fox, Springfield, Massachusetts, U.S.A., 5th March, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. A nipple holder comprising a chuck rod provided with quick pitch screw threads adjacent to its nipple engaging end and formed with a nipple holding end provided with serrations to engage and hold a nipple while being screw threaded, and a coupling sleeve provided with interior right and left hand screw threads at its opposite ends, those at one end to engage the quick pitch threads of the chuck rod and differential threads at the other end to engage and hold the nipple, substantially as described. 2nd. A nipple holder comprising a chuck rod provided with quick pitch screw threads adjacent to its nipple engaging end and formed with a recess in the end, a removable nipple holding end with its shank to fit said opening and provided with serrations on the projecting portion to engage the nipple, and a coupling sleeve provided with interior threads, one to engage the thread on the chuck rod and one to engage the thread of the nipple, substantially as shown.

No. 66,477. Pneumatic Tire. (Bandage pneumatique.)

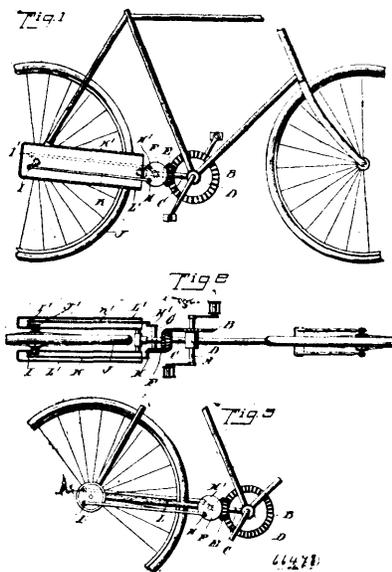


Philippe Rousseau, Terrebonne, Quebec, Canada, 5th March, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—In a pneumatic tire, the outer tire or tube B, an inner tire or stiffening portion C, and the series of pairs of aluminium plates D, the lower edges of said plates being provided with cut

wardly extending flanges, the plates of each pair being hinged together, said pairs of plates being set side by side between the inner and outer tires with their hinges extending along the line of the centre of the tread, said plates being provided with depressions one their outer surfaces, and the outer tire, inner tire, and plates being moulded together, substantially as described.

No. 66,478. Chainless Bicycle. (*Bicycle sans chaînes.*)

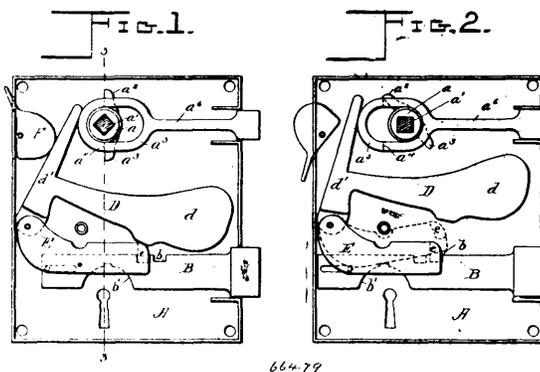


Axel Harland Thomas Hansen, Buenos Ayres, Argentine Republic 5th March, 1900; 6 years. (Filed 22nd July, 1899.)

Claim.—1st. The combination in a bicycle or the like, of a drive shaft or pedal shaft carrying a driving wheel on one side of the machine's longitudinal centre, a pinion located on the other side of said centre and operatively connected with the rear wheel or driven wheel, and a transmission wheel engaging said driving wheel and pinion and mounted to rotate about an axis extending longitudinally of the machine in the central plane thereof. 2nd. The combination in a bicycle or the like, of a drive shaft or pedal shaft carrying a driving wheel on one side of the machine's longitudinal centre, a pinion located on the other side of said centre and operatively connected with the rear wheel or driven wheel, and a transmission wheel engaging the rear face of said driving wheel and the front face of the pinion, said transmission wheel being mounted to rotate about an axis extending longitudinally of the machine in the central plane thereof. 3rd. The combination in a bicycle or the like, of a drive shaft or pedal shaft carrying a bevel driving wheel on one side of the machine's longitudinal centre, a bevel pinion located on the other side of said centre and operatively connected with the rear wheel or driven wheel, and a double bevel transmission wheel mounted between said driving wheel and pinion to rotate about an axis extending longitudinally of the machine in the central plane thereof, the front bevel teeth of said transmission wheel meshing with the driving wheel and the rear bevel teeth of the transmission wheel meshing with the pinion. 4th. The combination in a bicycle or the like, of a drive shaft or pedal shaft carrying a driving wheel on one side of the machine's longitudinal centre a pinion located on the other side of said centre, a transverse shaft on which said pinion is mounted, the shaft carrying crank members on each side of the machine, crank members on the rear wheel or driven wheel, rods connecting the crank members on each side of the machine, and a transmission wheel engaging said driving wheel and pinion mounted to rotate about an axis extending longitudinally of the machine in the central plane thereof. 5th. The combination in a bicycle or the like, of a draft shaft or pedal shaft carrying a driving wheel on one side of the machine's longitudinal centre, a pinion located on the other side of said centre, a transverse shaft on which said pinion is mounted, the shaft carrying on opposite sides of the machine crank members set at an angle of 90° to each other, similarly set crank members on the rear wheel or driven wheel, rods connecting the crank members on each side of the machine, and a transmission wheel engaging said driving wheel and pinion and mounted to rotate about an axle extending longitudinally of the machine in the central plane thereof. 6th. The combination in a bicycle or the like, a rear wheel or driven wheel having crank members, a transverse shaft likewise carrying crank members, rods connecting the crank members on the same side of the machine, means for driving said transverse shaft, and tubular bars enclosing said connecting rods, the bars forming a part of the bicycle frame. 7th. The combination in a bicycle or the like, of a drive shaft or pedal shaft carrying a

driving wheel on one side of the machine's longitudinal centre, a rear stay extending as a single bar rearward from the crank hanger, in the longitudinal central plane of the machine, a transmission wheel mounted to rotate on said single central rear stay, and engaging said driving wheel, and a pinion operatively connected with the rear wheel or driven wheel and engaging the transmission wheel. 8th. The combination in a bicycle or the like, of a drive shaft or pedal shaft carrying a driving wheel on one side of the machine's longitudinal centre, a pinion located on the other side of said centre, a transverse shaft on which said pinion is mounted, said shaft carrying crank members on each side of the machine, crank members on the rear wheel or driven wheel, rods connecting the crank members on each side of the machine, tubular bars forming a part of the bicycle frame and enclosing said connecting rods, and a transmission wheel engaging said driving wheel and mounted to rotate about an axis extending longitudinally of the machine in the central plane thereof.

No. 66,479. Lock. (*Serrure.*)



Cephas Ezra Martin, Newbury, and William John Magrath, Belleville, both in Ontario, Canada, 5th March, 1900; 6 years. (Filed 19th August, 1899.)

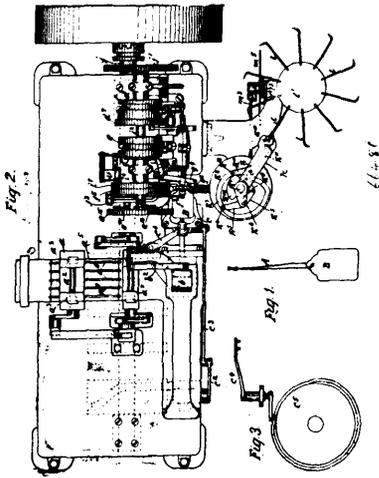
Claim.—1st. A springless lock, comprising a casing, a latch and a lock bar slidably mounted therein, a stop bar pivoted in said casing and adapted to engage said lock bar and hold the same in its locked or unlocked position, a weighted lever pivoted in said casing and engaging said latch and adapted to normally bear upon the said stop bar to hold the same in its operative position, substantially as described. 2nd. A springless lock, comprising a casing, a latch and a lock bar slidably mounted therein, a stop bar pivoted in said casing and adapted to engage said lock bar and hold the same in its locked or unlocked position, a lever pivoted in said casing having a weighted arm adapted to normally bear upon said lock bar and hold the same in its operative position, a lug carried by said lever and held in constant engagement with said latch by said weighted arm, substantially as described. 3rd. A springless lock, comprising a casing, a latch and a lock bar slidably mounted therein, a stop bar pivoted in said casing and adapted to engage said lock bar and hold the same in its locked or unlocked position, a weighted lever pivoted in said casing and held in engagement with said latch and adapted to normally bear upon the said stop bar to hold the same in its operative position, and a cam plate pivoted in said casing and adapted to be thrown into engagement with said lever, whereby both the latch and lock bar are held in their locked position, substantially as described.

No. 66,480. Machine for Making and Stringing Tags. (*Machine pour faire et attacher les étiquettes.*)

Joseph T. Kavenaugh, Philadelphia, Pennsylvania, assignee of Walter Sabin McKinney, Chicago, Illinois, both in the U.S.A., 5th March, 1900; 6 years. (Filed 2nd May, 1899.)

Claim.—1st In a tag machine, the combination of a reciprocating needle, with an oscillating gripper adapted to engage the string, a lever around which the string is looped by the gripper jaws to draw out the string and elongate the loop, and means for moving the lever towards and away from the needle, substantially as specified. 2nd. In a tag machine, the combination of a reciprocating hollow needle, with a plug for intermittently clamping the string to the needle, an oscillating gripper adapted to engage the string, a lever around which the string is looped by the gripper, means for moving the lever towards and away from the needle, means for cutting the string, and a knot former for knotting the ends of the string, substantially as specified. 3rd. In a tag machine, a gripper composed of an L-shaped sleeve, a pair of jaws, a longitudinally movable plug within the sleeve, and means for converting the reciprocating motion of the plug into an opening and closing motion of the jaws, substantially as specified. 4th. In a tag machine, the combination of a rotatable sleeve with a sectional spring plug having a conical head, a pin engaged by the plug, and a pair of jaws operatively con-

needed to the pin, substantially as specified. 5th. In a tag machine, a knot former composed of a tubular shaft, an enclosed longi-



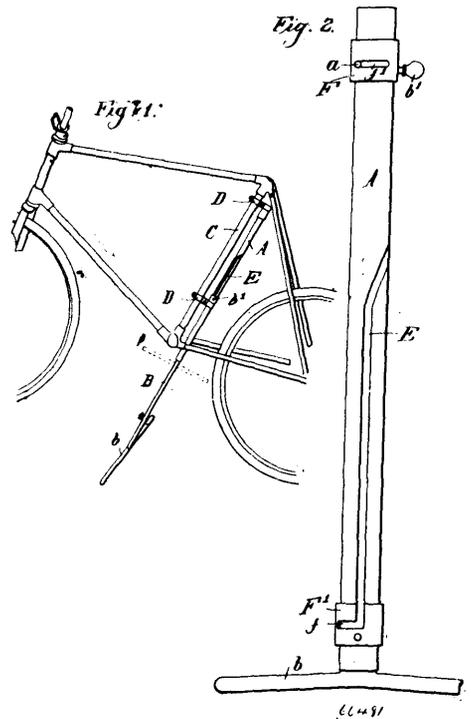
tudinally movable and oscillating plug, a pair of jaws pivoted thereto and having hook-shaped ends, and a rotatable tube into and out of which the jaws are adapted to be projected, substantially as specified. 6th. In a tag machine, a knot former composed of a tubular shaft, an enclosed longitudinally movable and oscillating plug, a pair of jaws having oblique slots and hook-shaped ends, a pin engaging the oblique slots, and a rotatable tube into and out of which the jaws are adapted to be projected, substantially as specified. 7th. In a tag machine, a knot former composed of a tubular sleeve, an enclosed longitudinally movable and oscillating plug having a flattened end, a pair of jaws having oblique slots and pivoted to said flattened end, and a rotatable tube into and out of which the jaws are adapted to be projected, substantially as specified. 8th. In a tag machine, the combination of a lever *i*, for drawing out the loop, with a lever *i'*, to which lever *i*, is pivoted, a stop pin *i''*, on lever *i'*, and a spring for yieldingly holding lever *i*, against said pin, substantially as specified. 9th. In a tag machine, a paper feed composed of a slide, a rock shaft hung therein, eccentrics mounted upon the rock shaft, a gripping bar actuated by the eccentrics, and a second vertically movable gripper adapted to engage the blank when released by the gripping bar, substantially as specified. 10th. In a tag machine, the combination of a crank shaft, with a cam-actuated lever pivoted thereto, a stripper arm pivoted to the lever, a hook pivoted to the stripper arm, and means for opening and closing said hook, substantially as specified. 11th. In a tag machine, the combination of a paper feed, with a punch, a carrier, a tubular needle, a plug for intermittently clamping the string, an oscillating gripper, a lever around which the string is looped by the gripper, means for bodily moving the gripper jaws to draw out the string and elongate the loop, means for cutting the string, a knot former, and a stripper adapted to draw the stringed tag off the knot former, substantially as specified.

No. 66,481. Bicycle Support. (*Support de bicyclette.*)

Charles Nicholson, The Leylands, Hatfield, Nr. Dancaster, England, 6th March, 1900; 6 years. (Filed 14th September, 1899.)

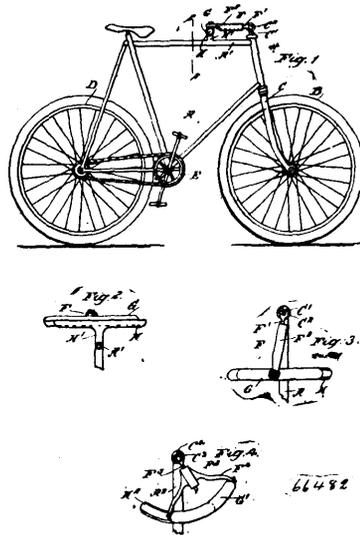
Claim.—1st. An improved support for bicycles consisting of a collapsible rod having a cross piece adapted to rest on the ground, a tube receiving the said rod, a curved slot and pin connecting the rod and tube and means for securing the rod in top or bottom position, the rod being adapted to turn on raising or lowering, substantially as described and for the purpose specified. 2nd. An improved support for bicycles consisting of a collapsible supporting rod having a cross piece at its end, a tube fitted to the frame receiving the said rod, a curved longitudinal slot in the tube, a pin on the rod extending through the said slot and locking rings, adapted to secure the rod in the top and bottom position by means of bayonet slots, substantially as described and shown for the purposes specified. 3rd. In combination with the support claimed above, a stand consisting of a base having posts at each side adapted to receive the cross piece

of the support, a post at the back, having a forked end to receive the rod of the support and a slanting fork at the front receiving the



front wheel of the bicycle, substantially as described and shown in the accompanying drawings, and for the purposes specified.

No. 66,482. Steering Gear for Bicycles. (*Engrenage pour gouverner les bicyclettes.*)

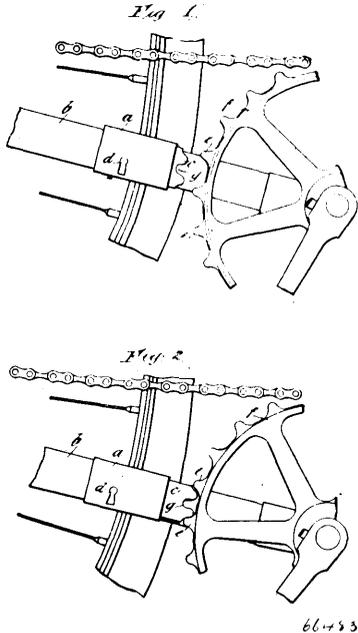


Arthur Doyle, Seattle, Washington, U.S.A., 6th March, 1900; 6 years. (Filed 8th September, 1899.)

Claim.—1st. A steering gear for bicycles, comprising a transverse bearing, a slide mounted to slide thereon, and a link pivotally connected with the said slide, and attached to the fork of the bicycle, the said link being made in telescoping parts, substantially as shown and described. 2nd. A steering gear for bicycles, comprising a transverse bearing adjustable up and down and held against lateral movement, a slide mounted to slide on the said bearing, and a link pivotally connected with the said slide, and attached to the fork of the bicycle, substantially as shown and described. 3rd. A steering

gear for bicycles, comprising a transverse bearing adjustable up and down and held against lateral movement, a slide mounted to slide on the said bearing, a link pivotally connected with said slide, and attached to the fork of the bicycle, and means as described, for adjusting the said bearing vertically and securing it in the adjusted position, as set forth.

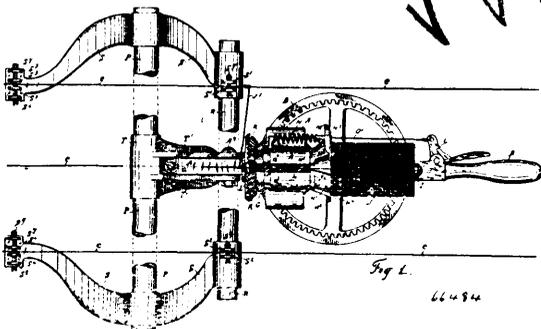
No. 66,483. Lock for Bicycle Driving Gear.
(*Serrure pour engrenage de bicycles.*)



Wilhelm Morris, Christchurch, Canterbury, New Zealand, 6th March, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. A lock upon the frame of a cycle, the bolt of which is adapted when in its projected position to engage between its teeth upon a wheel of the driving gear of the machine, substantially as specified. 2nd. A lock upon the frame of a cycle the bolt of said lock having a notch in its outer end adapted to receive a tooth upon a wheel of the driving mechanism of the machine, substantially as specified. 3rd. A lock upon the frame of a cycle, the bolt of said lock being formed to engage between the teeth upon a wheel of the driving gear of the machine, said bolt also having a notch adapted to receive one of said teeth, substantially as and for the purposes herein described and illustrated.

No 66,484. Wire Fence Weaving Machine.
(*Machine à tisser pour clôtures en fil de fer.*)



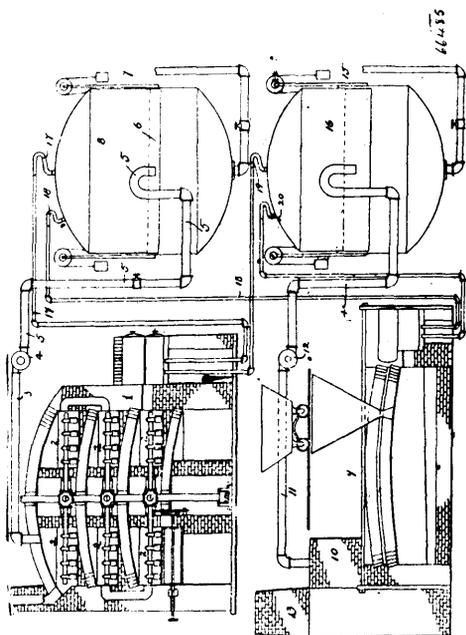
Arthur E. Blashill, Delaware Township, Middlesex, Ontario, Canada, 6th March, 1900; 6 years. (Filed 17th August, 1899.)

Claim.—1st. In a wire fence weaving Machine, the shaft, H, in which a channel H² is formed, and having an enlarged head H¹, provided with a flange H⁴, in which a socket H³ is formed, and bevelled at its ends adjacent to said channel, H², substantially as and for the purpose set forth. 2nd. In a wire fence weaving machine, the shaft H, in which a channel H² is formed, and having

a head H¹, provided with a flange H⁴, in which a socket H³ is formed and bevelled at its ends adjacent to said channel H², and means for supporting said shaft in which it rotates perfectly free, in combination with a locking arm M, provided with an angular end M¹, and means for engaging said angular end with and disengaging it from the head H¹, at the socket H³, substantially as and for the purpose set forth. 3rd. In a wire fence weaving machine, the frame A, the stationary shaft C, the internal gear wheel D, revolving on said shaft C, and means for operating said internal gear wheel, in combination with the shaft E, the toothed pinion F, rigidly secured to one end of said shaft E, and meshing with the teeth of the internal gear wheel D, the bevelled gear wheel G, rigidly secured to the opposite end of said shaft E, the shaft H, and bevelled gear wheel K, rigidly secured thereto, and engaging with the bevelled gear wheel G, substantially as and for the purpose set forth. 4th. In a wire fence weaving machine, the frame A, the stationary shaft C, the internal gear wheel D, and means for operating same, the shaft E, the toothed pinion F, rigidly secured to one end of said shaft E, and engaging with the teeth of the internal gear wheel D, the bevelled gear wheel C, secured to the opposite end of said shaft E, the shaft E, the bevelled gear wheel R, rigidly secured thereto, and engaging with the bevelled gear wheel G, and the sleeved spindle I, secured to the end of the shaft H, in combination with the locking arm M, formed with an angular end M¹, and means for engaging the angular end of said arm with and disengaging it from the shaft H, or other operative part of the machine, substantially as and for the purpose set forth. 5th. In a wire fence weaving machine, the frame A, in which the opening A¹ is formed, the stationary shaft C, the internal gear wheel D, and means for operating the same, in combination with the shaft E, the toothed pinion F, rigidly secured to one end of said shaft E, and engaging with the internal gear wheel D, the bevelled gear wheel G, rigidly secured to the opposite end of the shaft E, the shaft H, formed with a channel H², the bevelled gear wheel K, formed with the slot K¹, secured to the shaft H, and engaging with the bevelled gear wheel G, and the sleeved spindle I, secured to the end of the shaft H, substantially as and for the purpose set forth. 6th. In a wire fence weaving machine, the frame A, in which an opening A¹ is formed, the stationary shaft C, the internal gear wheel D, and means for operating the same, in combination with the shaft E, the pinion F secured to one end of said shaft E and engaging with the internal gear wheel D, the bevelled gear wheel G secured to the opposite end of said shaft E, the shaft H formed with a channel H², the bevelled gear wheel K formed with a slot K¹ secured to the shaft H and engaging with the bevelled gear wheel G, the plate L in which the recess L¹ and perforation L² are formed, the guides d secured to the frame A, and the sleeved spindle I secured to the end of the shaft H, substantially as and for the purpose set forth. 7th. In a wire fence weaving machine, the shaft H having an enlarged head H¹ provided with a flange H⁴ in which a socket H³ is formed, and also formed with bevelled ends H² and H⁶ in combination with the frame A, the stud A² formed thereon, the locking arm M formed with angular end M¹, the spring N interposed between the angular end M¹ of said locking arm M and said stud A², the bell crank O pivotally mounted on said frame A, the strand O¹ connecting one end of bell crank O with the locking arm M and the handle B, substantially as and for the purpose set forth. 8th. In a wire fence weaving machine, the pivot bar P and means for supporting said bar, the sleeve T pivotally and vertically adjustable on said bar P, in combination with the frame A pivotally secured to the sleeve T, and a spring applied to said frame so that the latter will move pivotally in relation to said sleeve with a steady even motion, substantially as set forth. 9th. In a wire fence weaving machine, the pivot bar P and means for supporting said bar, the sleeve T provided with the flange T² and pivotally and vertically adjustable on said bar P, in combination with the frame A provided with the flange A⁴ and pivotally secured to the sleeve T, substantially as and for the purpose set forth. 10th. In a wire fence weaving machine, the pivot bar P and means for supporting said bar, the sleeve T provided with the flange T² and pivotally and vertically adjustable on said bar P, in combination with the frame A, provided with the flange A⁴ and pivotally secured to the sleeve T, and a spring applied to said frame so that the latter will move pivotally in relation to said sleeve with a steady even motion, substantially as set forth. 11th. In a wire fence weaving machine, the pivot bar P and means for supporting said bar, the sleeve T pivotally and vertically adjustable on the said bar P, and the frame A pivotally secured to the sleeve T, in combination with the bolt a extending through the frame A and the sleeve T, a nut b on the end of said bolt, and a coil spring c encircling said bolt and interposed between said frame A and nut b, substantially as and for the purpose set forth. 12th. In a wire fence weaving machine, the pivot bar P and means for supporting said bar, the sleeve T provided with the flange T² and pivotally and vertically adjustable on the bar P, and the frame A provided with a flange A⁴ and pivotally secured to the sleeve T, in combination with the bolt a extending through said flanges T and A⁴, a nut b on the end of said bolt, and a coil spring c, encircling said bolt a, and interposed between said nut b, and the flange A⁴, substantially as and for the purpose set forth. 13th. In a wire fence weaving machine, the pivot bar P, the spacer bar R, and means for supporting said bars, the spacers R², adjustable longitudinally on said bar R, and means for holding said spacers at the position to which they are adjusted, and for holding the wire in

contact therewith, the sleeve T, pivotally and vertically adjustable on said bar P, and the frame A, provided with the flange f, and pivotally secured to the sleeve T, in combination with the bolt a, extending through the frame A, and sleeve T, a nut b, on the end of said bolt, and a coil spring c, encircling said bolt and interposed between said nut b, and frame A, substantially as and for the purpose set forth. 14th. In a wire fence weaving machine, the pivot bar P, the spacer bar R, and means for supporting said bars, the spacers R², longitudinally adjustable on said bar R, and means for holding said spacers at the position to which they are adjusted on said bar K, and for holding the wire in contact therewith, the sleeve T, provided with the flange T², pivotally and vertically adjustable on the bar P, and the frame A, provided with the flanges f, and A⁴, and pivotally secured to the sleeve T, in combination with the bolt a, extending through said flanges T², and A⁴, the nut b, on the end of said bolt, and a coil spring c, encircling said bolt, and interposed between said nut b, and frame A, substantially as and for the purpose set forth. 15th. In a wire fence weaving machine, the pivot bar P, the spacer bar R, and the vertically and laterally curved arms S S, and means for engaging the horizontal wires c, with said arms, in combination with the sleeve T, pivotally and longitudinally adjustable on said pivot bar P, and the frame A, substantially as and for the purpose set forth. 16th. In a wire fence weaving machine, the pivot bar P, the spacer bar R, and the vertically and laterally curved arms S S, provided with flanges, and means for holding the horizontal wires c, between said flanges, in combination with the sleeve T, pivotally and longitudinally adjustable on said pivot bar P, and the frame A, substantially as and for the purpose set forth.

No. 66,485. Apparatus for Utilizing the Waste Gases and fumes from Furnaces. (*Appareil pour utiliser la fumée et les gaz perdus des fournaies.*)



Harrison B. Meech, Denver Colorado, U.S.A., 6th March, 1900 ; 6 years. (Filed 6th March, 1899.)

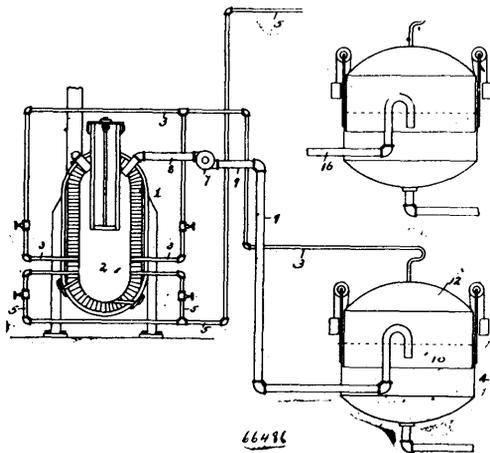
Claim.—In an apparatus for utilizing gases and fumes from ores, a roasting furnace in combination with a gasometer, means for forcing the gases and fumes from said furnace into said gasometer, a smelting furnace in combination with a gasometer, means for forcing the gases and fumes from said furnace into said gasometer, and return pipes leading from each of said gasometers to each of said furnaces, substantially as described for the purpose specified.

No. 66,486. Apparatus for Utilizing the Waste Gases in the Production of Aluminum. (*Appareil pour utiliser les gaz perdus dans la production d'aluminium.*)

Harrison B. Meech, Denver, Colorado, U.S.A., 6th March, 1900 ; 6 years. (Filed 6th March, 1899.)

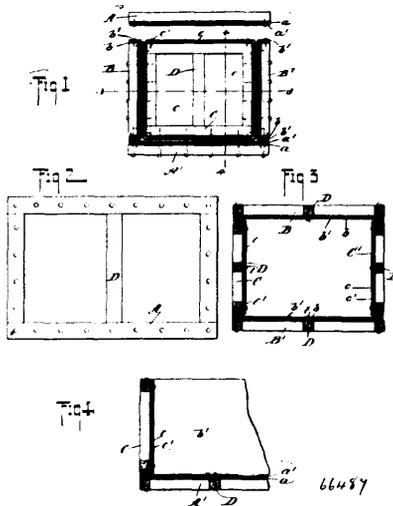
Claim.—A device for extracting aluminum from clay, consisting of a smelting furnace 1, in combination with two gasometers, 6 and

4, the gasometer 6 supplied with gases from furnaces for roasting or smelting ores, by a supply pipe 16, the gasometer 4 supplied with



gases from the smelting furnace 1 and return pipes 3 and 5 connecting said gasometers and said smelting furnaces.

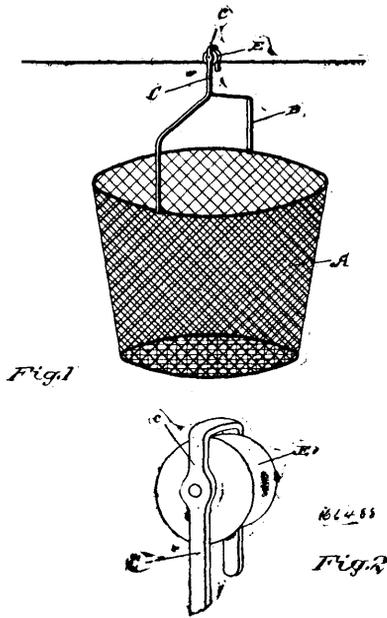
No. 66,487. Packing Box. (*Boite d'emballage.*)



Charles Ayers Robbins, New York City, New York, U.S.A., 6th March, 1900 ; 6 years. (Filed 20th February, 1900.)

Claim.—1st. A packing box, the same consisting of open frames forming the top, bottom, sides and ends of the box, and linings secured upon the inner faces of the said frames, and having portions exposed through the openings of the frames, sundry of said linings having their edges bent around members of said frame so as to be clamped between two frames, substantially as described. 2nd. A packing box comprising open frames forming the top, bottom, sides and ends of the box, and linings secured to the inner surface of the said frames, and having portions exposed through the openings of the frames, the linings of the top and bottom frame extending flush with the outer edges of the said frames, while the linings of the sides extend flush with the vertical members of the said side frames and are bent over and under the top and bottom members of the said frames, the linings of the ends being extended and bent over the top, bottom and side members of the end frames, whereby two linings will be in contact with each other at each joint, substantially as described. 3rd. A packing box, comprising open frames forming the top, bottom, sides and ends of the box, and linings secured to the inner surfaces of the said frames, and having portions exposed through the openings of the frames, the linings of the top and bottom frames extending flush with the outer edges of the said frames, while the linings of the sides extend flush with the vertical members of the said side frames and are bent over and under the top and bottom members of the said frames, the linings of the ends being extended and bent over the top, bottom and side members of the end frames, whereby two linings will be in contact with each joint, each of said linings consisting of a plurality of layers placed together loosely so as to form an air space between them, substantially as and for the purpose set forth.

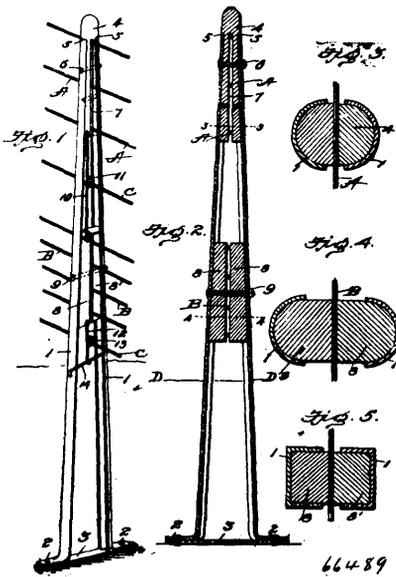
No. 66,488. Clothes Pin Carrier. (Porte-epingle à linge.)



Walter T. Shaver, Islington, Ontario, Canada, 6th March, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. A clothes pin carrier consisting of a holder, a handle for the holder, and a hanger connected to the handle to overhang the clothes-line, substantially as specified. 2nd. A clothes-line carrier consisting of a holder, a handle for the holder, and a hanger connected to the handle to overhang the clothes-line, provided with a wheel or roller to travel on the line, substantially as specified.

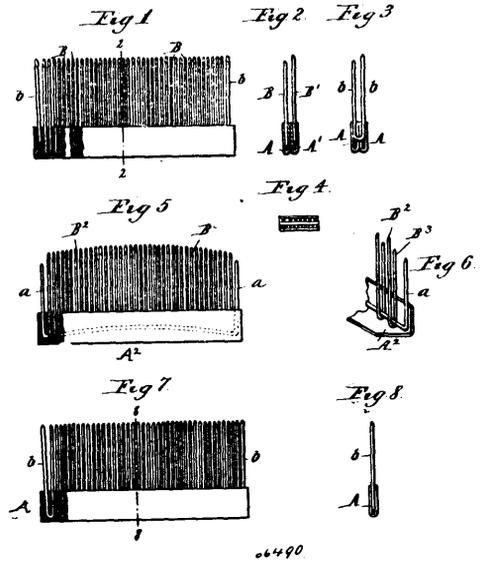
No. 66,489. Fence Post. (Poteau de clôture.)



Robert Clark Glasco, Anderson, Indiana, U.S.A., 6th March, 1900; 6 years. (Filed 19th February, 1900.)

Claim.—A composite fence post, comprising the counterpart concave converging members 1, 1, the conical block 4 formed with the annular shoulders 5, 5, and the axial longitudinal slot 7 to receive the fence wires, and means for securing said members, block and fence wires together, substantially as and for the purpose set forth.

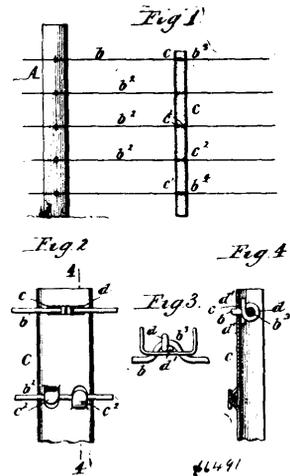
No. 66,490. Toilet Comb. (Peigne.)



James A. Carr, Fall River, Massachusetts, U.S.A., 6th March, 1900; 6 years. (Filed 17th February, 1900.)

Claim.—1st. A textile and toilet comb comprising a trough-shaped back, one or more rows of teeth projecting from said back in pairs, each pair formed from a single piece of wire bent near its middle and having said bent middle portion secured within said back, substantially as described. 2nd. The textile and toilet comb above described, comprises two trough-shaped backs A and A', one set B of teeth in pairs, which are formed of a single piece of wire bent near its middle and arranged in trough-shaped back A, a like set of teeth B' in trough-shaped back A', two pairs of end teeth b and b', one tooth b of each pair of teeth in trough A and the other tooth b' in trough A', substantially as described.

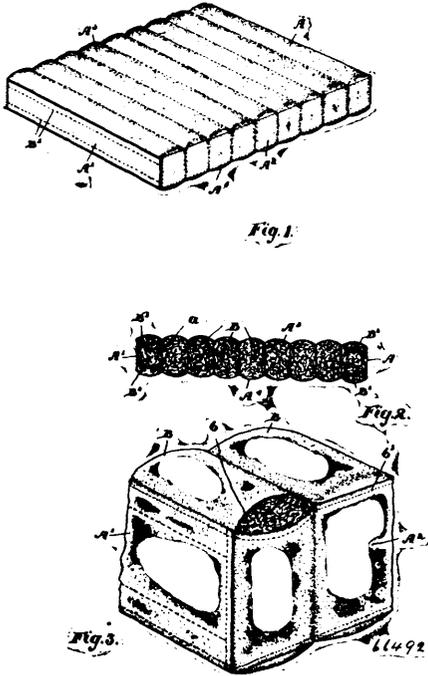
No. 66,491. Wire Fence. (Clôture de fil de fer.)



Thomas Gore Bonta, Harrodsburg, Kentucky, U.S.A., 6th March, 1900; 6 years. (Filed 17th February, 1900.)

Claim.—In a wire fence, metallic stays having horizontal transverse slots near each end, and lips upset in pairs side by side standing in opposite directions at intervals on the front side of the stay, in combination with wire strands, the upper and lower ones of which are looped through the transverse slots and a tie coiled tightly around the loop against the reverse side of the stay, the intermediate wire strands freely engaging the pair of lips across the front side of the stay, whereby the top and bottom strands are firmly tied on one side and the intermediate strands are seated on the other side of the stay giving an effective bracing action of the stays to the strands.

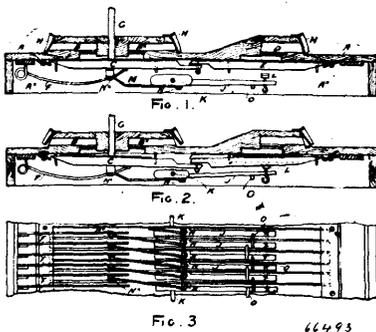
No. 66,492. **Mattress.** (*Matelas.*)



Martin Love, Toronto, Ontario, Canada, 6th March, 1900; 6 years. (Filed 16th February, 1900.)

Claim.—1st. In a mattress, the combination with the top and bottom, sides and ends, of the web divisions forming separate longitudinal compartments and a suitable independent filling for each compartment, as and for the purpose specified. 2nd. In a mattress, the combination with the top and bottom, sides and ends, of the web divisions forming separate longitudinal compartments, a suitable independent filling for each compartment and the reinforcing stitching extending from the top and bottom of the first divisions to the ends, as and for the purpose specified.

No. 66,493. **Organ.** (*Orgue.*)



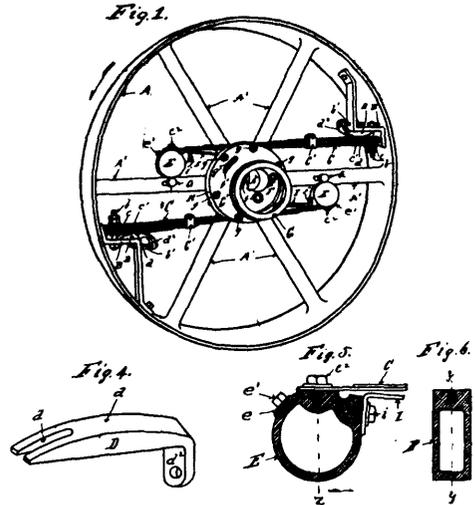
Samuel Howard, Swan Street, Manchester, England, 6th March, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. In American organs and the like operating on the exhaust principle, a well or space below the cavity board, two sets of reed pallets overlapping each other within said well, springs for holding the pallets to their cavities, a set of levers within the organ well capable of tilting under the depression of one of said sets of pallets and thereby holding up the next adjoining pallet of the other set of pallets, and small fingers or lateral extensions for imparting the tilting movement of one lever to the next adjoining lever, substantially as and for the purposes set forth. 2nd. In combination in an organ operating on the exhaust principle, a cavity board having a well or space below it, two sets of reed pallets, the pallets of one set operating when the corresponding pallets of the other set are operated, means for holding the pallets to their cavities, a set of levers within the organ well tilting under the depression of one of said sets of pallets and holding up the next adjoining pallets of the other set of pallets, and small fingers or lateral extensions for imparting the tilting movement of one lever to the next adjoining lever, substantially as described. 3rd. In combination in an organ, the

cavity board having a well below it, two sets of reed pallets, the pallets of one set operating when the corresponding pallets of the other set are operated, means for holding the pallets to their cavities, a set of levers within the organ well, resilient means between said levers and one set of pallets, whereby the levers are tilted upon the depression of the pallets of said set and hold up the next adjoining pallet of the other set, and lateral extensions on the levers for imparting the tilting movement of one lever to the next adjoining lever, substantially as described.

No. 66,494. **Steam Engine Governor.**

(*Gouverneur de machine à vapeur.*)



66494

Charles Wistar Lawrie, Erie, Pennsylvania, U.S.A., 6th March, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. The combination in a steam engine governor, of a rotating member or wheel, centripetal springs secured thereto, at opposite sides thereof, and extending crosswise of the same at each side of the hub, weights secured to the free ends of said springs, a shifting eccentric at the hub of the wheel, and links secured to said weights extending backward to and connecting with said shifting eccentric so that the angular motion thereof is in the opposite direction to that of the weights, substantially as set forth. 2nd. The combination in a steam engine governor, of a rotating member or wheel, centripetal springs secured to said wheel and extending in opposite directions crosswise of the same at each side of the hub thereof, substantially parallel with each other, weights secured to the free ends of said springs, a shifting eccentric at the hub of the wheel, and spring links secured to said weights extending backward at a slight angle to said springs, to and connecting with the shifting eccentric, substantially as set forth. 3rd. The combination in an inertia steam engine governor, of a rotating member or wheel, centripetal springs secured thereto at opposite sides thereof and extending approximately two-thirds of the distance across the face of the wheel in opposite directions, at each side of the wheel hub, centrifugal weights secured to the free ends of the springs, a fixed eccentric on the wheel hub or engine shaft, a valve driving eccentric adapted to rotate on said fixed eccentric, and spring links secured to said weights extending backward, substantially in line with said springs to and connecting with said valve driving eccentric, substantially as set forth. 4th. The combination in an inertia steam engine governor, of a rotating member or wheel, centripetal springs secured to supports, at opposite sides of said wheel and extending crosswise thereof at each side of the wheel hub, an adjustable fulcrum for said springs centrifugal weights secured to the free ends of said springs, a shifting eccentric at the hub of the wheel, and links secured to said weights extending backward, substantially in line with said springs, to and connecting with said shifting eccentric so that the angular motion thereof is in the opposite direction to that of the weights, substantially as set forth. 5th. The combination in a steam engine governor, of a rotating member or wheel, spring supports at opposite sides of said wheel, centripetal springs secured to said supports and extending crosswise of said wheel, at each side of the wheel hub, longitudinally adjustable shoes between said springs and said supports operating as fulcrums for said springs, centrifugal weights secured to the free ends of said springs, a shifting eccentric at the hub of said wheel, and flexible links secured to said weights extending backward, substantially parallel with said springs to and connecting with studs on said shifting eccentric, substantially as set forth. 6th. The combination in a steam engine governor, of a rotating member or wheel A, spring supports B secured thereto at opposite sides thereof, leaf springs C, secured to said supports and

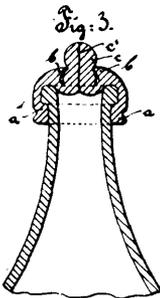
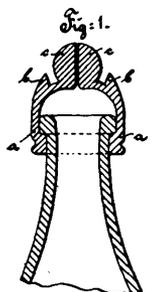
extending crosswise of said wheel, at each side of the hub thereof, centrifugal weights E, secured to the free ends of said springs, a fixed eccentric F, on the hub of said wheel, a rotatable valve driving eccentric G, mounted on said fixed eccentric, studs h, secured to said valve driving eccentric, and flexible links I, pivoted to said studs, and extending forward at a slight angle to the springs C, to and secured to the weights E, substantially as and for the purpose set forth.

No. 66,495. Explosive. (Explosif.)

Joseph Ross and William Douglas Cairney, both of 45 Renfield Street, Glasgow, Scotland, 6th March, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. Explosives, either in the form of moulds or cartridges, or in a granulated form, and consisting of a mixture of about 87 per cent of chlorate of potash, 3 per cent of charcoal, 7 per cent of paraffin or other suitable wax, and 8 per cent of vaseline, all treated in the manner substantially as hereinbefore described. 2nd. Explosives, either in the form of moulds or cartridges, or in a granulated form and consisting of about 75 per cent of chlorate of potash, 6 per cent of black oxide of manganese, 6 per cent of charcoal, 9 per cent of paraffin or other suitable wax, and 4 per cent of vaseline, and all treated in the manner substantially as hereinbefore described.

No. 66,496. Bottle Stopper. (Bouchon de bouteille.)



66496

Julius Schäfer, Bonn, Germany, 6th March, 1900; 6 years. (Filed 13th December, 1899.)

Claim.—Bottle stoppers for sterilizing purposes characterized by an elastic cap a, provided at top with a spherical valve head c, and at the sides with two diametrically opposed projections b b which latter on the ball head c being depressed owing to the rarefaction in the bottle depress or flatten the same in a direction at right angles to the slot while at the same time preventing the ball head from completely entering the bottle neck.

No. 66,497. Surface Decoration and Ornamentation. (Décoration et ornementation de surfaces.)

Aubrey Edgerton Meyer, Whitehall, New York, U.S.A., 6th March, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven fibres applied to a suitable backing or support with an adhesive material, said fibres lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing. 2nd. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-

woven and non-spun fibres applied to a suitable backing or supported with an adhesive material, said fibres lying substantially

Fig. 1.

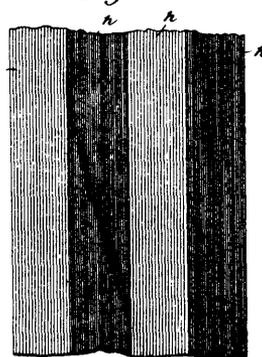


Fig. 2.

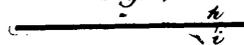
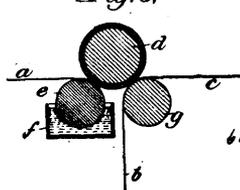


Fig. 3.



parallel to the face of the backing and in the main running substantially parallel to each other over the backing. 3rd. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven silk fibres applied to a suitable backing or support with an adhesive material, said fibres lying substantially parallel to the face of the backing and in the main running, substantially parallel to each other over the backing. 4th. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven and non-spun silk fibres applied to a suitable flexible backing or support with an adhesive material, said fibres lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing. 5th. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven silk fibres applied to a suitable flexible backing or support with an adhesive material, said fibres lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing. 6th. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven and non-spun fibres applied to a suitable flexible backing or support with an adhesive material, said fibres lying substantially parallel to the face of the backing and in the main running, substantially parallel to each other over the backing. 7th. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven silk fibres applied to a suitable flexible backing or support with an adhesive material, said fibres lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing. 8th. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven and non-spun silk fibres applied to a suitable flexible backing or support with an adhesive material, said fibres lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing. 9th. The new surface ornamentation, consisting of a web or webs of non-woven fibres suitably secured to a backing or support, as set forth, said fibres lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

No. 66,498. Plough. (Charrue.)

Félix Grégoire, St. Jean Baptiste, Manitoba, Canada, 6th March, 1900; 6 years. (Filed 5th October, 1899.)

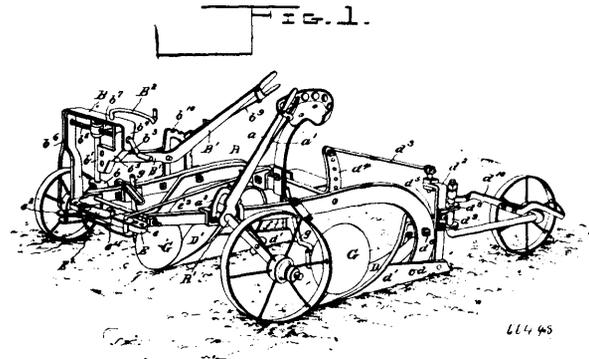
Claim.—1st. A gang plough comprising a frame, a plurality of ploughshares pivotally secured thereto, and means for adjusting the said ploughshares, whereby the depth of the furrow may be regulated substantially as described. 2nd. A gang plough comprising a frame, a plurality of ploughshares pivotally secured thereto, a bar secured to one of said ploughshares, a rod connected with said bar and adjustably connected with a lug, whereby the inclination of the ploughshare may be varied, substantially as described. 3rd. A

gang plough comprising a frame, a plurality of ploughshares adjustably secured thereto, a bar journalled in said frame, a threaded rod

line of stitching that connects the edges of said soles together, substantially as described. 6th. In the manufacture of stitched boots or shoes, placing waterproof material along the line of stitching to be drawn into the needle holes as the stitching of the insole to the upper takes place.

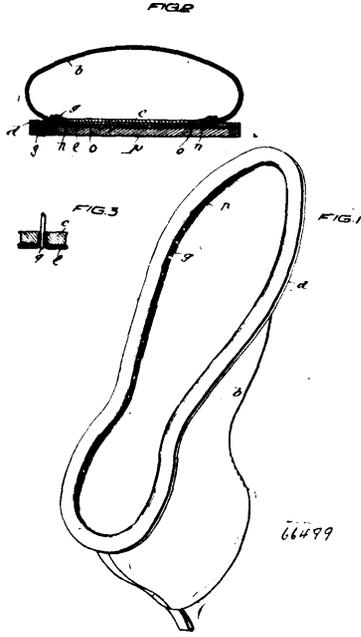
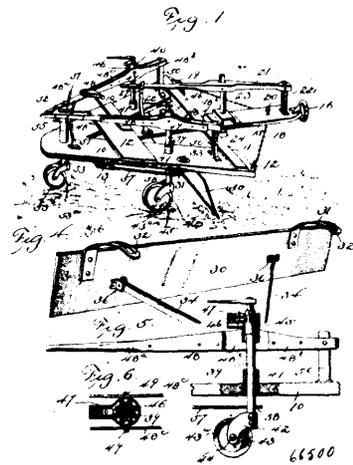
No. 66,500. Road Grader.

(Appareil de réglage pour routes.)



passing transversely through said bar, a frame supported by said threaded rod, the lower end of said rod forming the axle, substantially as described. 4th. A gang plough comprising a frame, a draft bar secured thereto having a plurality of perforations, a draft plate secured to said bar by means of a pin passing therethrough and engaging one of said perforations, a clevis pivoted to said draft plate, and a tie rod connecting said plate with the frame, substantially as described.

No. 66,499. Boot or Shoe. (Chaussure.)



George Alson Slater, Montreal, Quebec, Canada, 6th March, 1900; 6 years. (Filed 22nd February, 1900.)

Claim.—1st. A waterproof boot or shoe having a flexible waterproof lining extending along the line of the means for joining the upper to the sole of the boot or shoe and adapted to be drawn into and plug the holes caused by the insertion of said joining means, to render said holes impervious to moisture. 2nd. A stitched waterproof boot or shoe, having a flexible waterproof lining connected to the insole by the line of stitching that joins the upper to said insole, substantially as described and for the purpose set forth. 3rd. A stitched waterproof boot or shoe, having a flexible waterproof lining connected to the insole by the line of stitching that joins the upper to said insole and a coating of cement for said line of stitching, substantially as described and for the purpose set forth. 4th. In a stitched waterproof boot or shoe the combination of the upper *b*, insole *c*, welt strip *d*, waterproof lining *e*, and a line of stitching *g*, for connecting said parts together, a coating of cement *n*, a filler *o*, an outsole *p*, and a line of stitching *s*, for connecting said outsole to said welt strip, substantially as described and for the purpose set forth. 5th. A stitched waterproof boot or shoe having a flexible waterproof lining connected between the insole and outsole by the

Elijah B. Kirkendall, Leando, Iowa, U.S.A., 6th March, 1900; 6 years. (Filed 23rd March, 1900.)

Claim.—1st. In a road grader, the combination with a frame, of a scraper blade free from pivotal connection with the frame, curved slotted arms secured firmly to the blade to project above the upper edge thereof and applied against said frame, and clamping bolts to fasten the slotted arms to said frame and connect the blade firmly thereto, said arms being adjustable on the frame to vary the pitch to the scraper blade with relation to the plane of the frame, substantially as described. 2nd. In a road grader, the combination of a frame, a scraper blade fastened thereto for adjustment in a direction to vary the pitch of said blade, the keepers fixed to the frame and depending therefrom, and stay links pivoted to said blade and having the notched free ends, said notched ends of the stay links fitted slidably in the keepers and normally engaging, by gravity, therewith to hold the links against endwise movement, substantially as described. 3rd. In a road grader, the combination with a frame and a scraper blade carried thereby, of a tongue keeper secured to the frame and having a horizontal opening, a draft tongue fitted in said keeper and removable therefrom, and from the frame by an endwise movement, draft eyes secured to the front part of the frame at the sides thereof, a looped fixed to the draft tongue, a draft chain connected to said draft eyes and passing through the loop of the draft tongue, and a coupling bolt passing through the tongue and the loop and engaging with a link of the chain, substantially as described. 4th. In a road grader, the combination with a frame and a scraper blade mounted thereon, of a draft tongue connected to said frame, a stay chain attached to the tongue and the frame, and affording a flexible connection between the tongue and the frame to permit adjustment of the tongue in a vertical direction, a vertical spindle slidably mounted in the tongue and having a bearing wheel at its lower end, and a lever fulcrumed on the frame and connected with the spindle for adjusting the latter vertically, substantially as described. 5th. In a road grader, the combination with a frame, a scraper blade, and a draft appliance, of vertical spindles connected to said frame and carrying bearing wheels, means for holding the spindles in positions for the bearing wheels to lie obliquely to the line of draft, and means for adjusting the spindles and bearing wheels vertically, substantially as described. 6th. In a road grader, the combination with a frame, a scraper thereon, and a draft appliance, of bearing wheels connected with said frame for adjustment on vertical axes to lie obliquely to the line of draft, and means for locking the said bearing wheels in their adjusted positions, substantially as described. 7th. In a road grader, the combination with a frame, a scraper, and a draft appliance, of spindles connected with said frame and provided with ratchet devices, a bearing wheel mounted on each spindle for adjustment therewith, and a sleeve supported in operative relation to the ratchet of the spindle and carrying a locking pawl for holding the spindle in its adjusted position, substantially as described. 8th. In a road grader, the combination with a frame, a scraper thereon, and a draft appliances, of vertical spindles fitted to the frame and provided with bearing wheels, a lever fulcrumed on the frame adjacent to each spindle, a sleeve connected to said lever and embracing a ratchet on the spindle, and a locking device supported by the sleeve and engaging with the ratchet, substantially as described. 9th. In a road grader, the combination with a frame, a scraper thereon and a d)

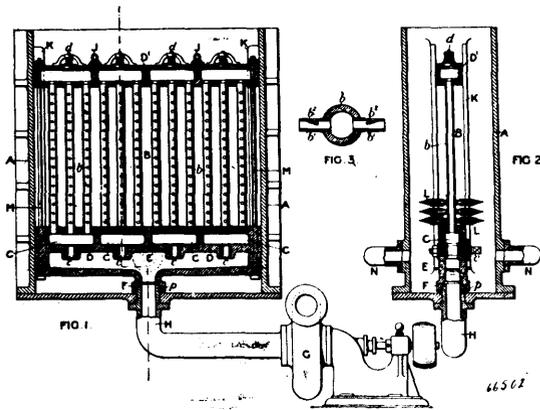
of vertical spindles connected to the sides of the frame and adjustable axially and vertically thereon, and another spindle supported by the frame in line with the draft appliance and in rear of the first named spindles, each spindle having a bearing wheel at its lower end, substantially as described.

No. 66,501. Yeast. (Levûre.)

James E. Carpenter, Cornwall, Ontario, Canada, 7th March, 1900; 6 years. (Filed 1st May, 1899.)

Claim.—1st. The herein described composition of matter, consisting of wheat flour, malt, hops, soft water and corn meal, substantially as described and for the purpose specified. 2nd. The herein described composition of matter for manufacturing yeast for making bread, consisting of wheat flour four pounds, malt flour four pounds, hops one pound, soft water five gallons and corn meal thirty pounds, to be known as Mother's Best Malt Yeast, substantially as described.

No. 66,502. Apparatus for Dyeing, Bleaching and Drying Yarn. (Appareil pour teindre, blanchir et secher le fil.)



Alexander Marr, Manchester, Lancaster, England, 7th March, 1900; 6 years. (Filed 30th May, 1899.)

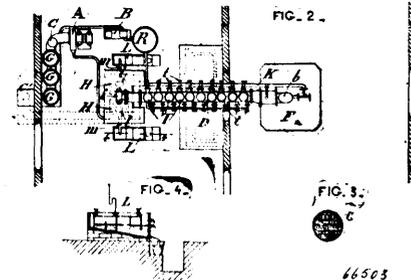
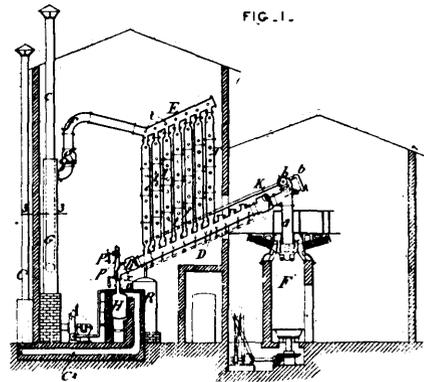
Claim.—1st. In apparatus for dyeing, bleaching drying and similarly treating yarn in cops and the like, an inner vessel perforated for the reception of the spindles carrying the cops and divided into sections each of which is furnished with a valve or the like by means of which it may be placed in or out of communication with the pump, the whole inner vessel being capable of being placed within or removed from an outer vessel containing the dye or other liquid, constructed as described and as illustrated. 2nd. In apparatus for dyeing, bleaching, drying and similarly treating yarn in cops and the like, an inner vessel perforated for the reception of the spindles carrying the cops and capable of being lifted away from or placed upon a base plate divided into chambers and furnished with valves so that any desired part of the inner vessel may be thrown out of action when desired, constructed and arranged substantially as described and as illustrated. 3rd. In apparatus for dyeing, bleaching, drying and similarly treating yarn in cops and the like, an inner vessel composed of a frame having members perforated for the reception of the spindles carrying the cops, and a base plate divided into chambers and provided with cocks and valves, the frame being removable from the base, constructed and arranged substantially as described and as illustrated.

No. 66,503. Manufacture of Phosphorus and Apparatus Therefor. (Fabrication de phosphore et appareil à cet effet.)

Louis Lucien Bellandot, Paris, France, 7th March, 1900; 6 years. (Filed 21st September, 1898.)

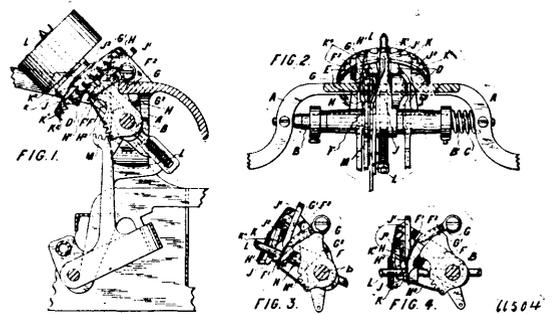
Claim.—An apparatus for condensing and gathering phosphorus, comprising a suitable gas tight crucible, a condenser communicating therewith and having an upper and a lower inclined tube, vertical pipes connecting said tubes, the area of the cross sections of said pipes at their junction with each of said tubes being equal to the surface of the section of each of said tubes, a series of condensing towers containing a solution of condensing salt, a gas receptacle.

suction apparatus for storing the purified gas in said receptacle, gathering apparatus having distilling receptacles for receiving the



condensed phosphorus from said condensing towers and filters for eliminating the red phosphorus, from the condensed phosphorus, substantially as described.

No. 56,504. Typewriting Machine. (Clavigraphic.)



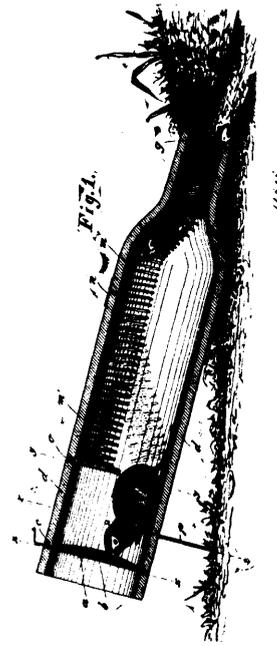
Charles Thomas Powers, Brisbane, Queensland, Australia, 7th March, 1900; 6 years. (Filed 6th March, 1899.)

Claim.—1st. The combination with the type wheel rock shaft, the type wheel spindle rocked by said shaft, the type wheel, a toothed stop wheel mounted to revolve synchronously on said spindle, and a stop pawl rocking with and having radial motion on said rock shaft, of the type key levers and means controlled thereby and positioning the type wheel and then imparting radial motion to said pawl on the rock shaft to engage the stop wheel, for the purpose set forth. 2nd. The combination with the type wheel rock shaft, the type wheel spindle rocked by said shaft, the type wheel, a toothed stop wheel mounted to revolve synchronously on said spindle, and a stop pawl rocking with and having radial motion on said rock shaft, of the type key levers, means controlled thereby and positioning the type wheel and then imparting radial motion to said pawl on the rock shaft to engage the stop wheel, and means for moving said pawl out of engagement with the stop wheel, for the purpose set forth. 3rd. The combination with the type wheel rock shaft, the type wheel spindle rocked by said shaft, the type wheel and a toothed stop wheel mounted to revolve synchronously on said spindle, and a locking pawl rocking with and having radial motion on the rock shaft in the path of the teeth of said stop wheel, and a cam lever on the rock shaft, a lever acted upon by said cam lever and acting upon said locking pawl to move it into engagement with the stop wheel, of the type key levers and means controlled thereby and positioning the type wheel and then actuating the aforesaid cam lever, for the purpose set forth. 4th. The combination with the type wheel rock

shaft, the type wheel spindle rocked by said shaft, the type wheel and a toothed stop wheel mounted to revolve synchronously on said spindle, and a locking pawl rocking with and having radial motion on the rock shaft in the path of the teeth of said stop wheel, and a cam lever on the rock shaft, a lever acted upon by said cam lever and acting upon said locking pawl to move it into engagement with the stop wheel, of the type key levers, means controlled thereby and positioning the type wheel and then actuating the aforesaid cam lever, and means for moving the locking pawl out of engagement with the stop wheel, for the purpose set forth. 5th. The combination with the type wheel rock shaft, the type wheel spindle rocked by said shaft, the type wheel, and a toothed stop wheel mounted to revolve synchronously on said spindle, a locking pawl rocked by and having radial motion on the aforesaid rock shaft, said pawl provided with a bearing flange, a cam lever on the rock shaft having stepped bearing surfaces, and a lever acted upon by said surfaces and acting upon the aforesaid flange on the locking pawl to move the same into engagement with the stop wheel, of the type key levers and means controlled thereby and positioning the type wheel and then actuating the aforesaid cam lever, for the purpose set forth. 6th. The combination with the type wheel rock shaft, the type wheel spindle rocked by said shaft, the type wheel, and a toothed stop wheel mounted to revolve synchronously on said spindle, a locking pawl rock by and having radial motion on the aforesaid rock shaft, said pawl provided with a bearing flange, a cam lever on the rock shaft having stepped bearing surfaces, and a lever acted upon by said surfaces and acting upon the aforesaid flange on the locking pawl to move the same into engagement with the stop wheel, of the type key levers, means controlled thereby and positioning the type wheel and then actuating the aforesaid cam lever, and a coiled spring connecting the locking pawl and cam lever, for the purpose set forth. 7th. The combination with the type wheel rock shaft, the type wheel spindle rocked by said shaft, the type wheel, and a stop wheel having a toothed circular flange divided into two series of teeth by a longer and a shorter tooth, said series of teeth having their faces beveled in opposite directions and said stop and type wheels mounted to revolve synchronously on the said spindle, and a locking pawl having radial motion on the rock shaft in the path of the teeth on the stop wheel, of the type key levers and means controlled thereby to position the type wheel and then move the pawl into engagement with the stop wheel, for the purpose set forth. 8th. The combination with the type wheel rock shaft, the type wheel spindle rocked by said shaft, the type wheel, and a stop wheel having a toothed circular flange divided into two series of teeth by a longer and a shorter tooth, said series of teeth having their faces beveled in opposite directions and said stop and type wheels mounted to revolve synchronously on said spindle, and a locking pawl having radial motion on the rock shaft in the path of the teeth on the stop wheel, of the type key levers, means controlled thereby to position the type wheel and then move the pawl into engagement with the stop wheel, and means not controlled by the key levers to move said pawl out of engagement with the said stop wheel for the purpose set forth. 9th. The combination with the type wheel rock shaft, the type wheel spindle rocked thereby, the type wheel and the stop wheel K¹ and having two series of teeth K² divided by the shorter tooth K¹ and the longer tooth K², said two wheels mounted to revolve synchronously on said spindle, the locking pawl H and cam lever F constructed as described and mounted on the rock shaft, and the lever G interposed between the cam surfaces of the cam lever and the bearing flange of the locking pawl, of the type key levers, the short bails actuated thereby, and means controlled by said short bails to position the type wheel, the long bail M actuated by the key levers, and a toothed arm on said long bail adapted to gear with a toothed portion of the cam lever, for the purpose set forth. 10th. The combination with the type wheel rock shaft, the type wheel spindle rocked thereby, the type wheel, and a toothed stop wheel mounted to revolve synchronously on said spindle, a locking pawl having radial motion on the rock shaft and a guide for said pawl rocked by the shaft, of the key levers, means controlled thereby to position the type wheel and then move the locking pawl radially of the rock shaft into engagement with the stop wheel, and means for moving said pawl out of engagement with the stop wheel on the release of a type key lever, for the purpose set forth. 11th. The combination with the type wheel rock shaft, the type wheel spindle rocked thereby, the type wheel, and a toothed stop wheel mounted to revolve synchronously on said spindle, a locking pawl having radial motion on the rock shaft and a guide for said pawl rocked by the shaft and carrying a retarding spring in perpetual frictional contact with said stop wheel, of the key levers, means controlled thereby to position the type wheel and then move the locking pawl radially of the rock shaft into engagement with the stop wheel, and means for moving said pawl out of engagement with said stop lever on the release of a type key lever, for the purpose set forth. 12th. The combination with the rock shaft B, of the type wheel spindle, the stop wheel K and the locking pawl H, of the sleeve J rocking with the shaft B, and having two radial arms, one of which J¹ is provided with a guide slot for the locking arm of said pawl H, substantially as and for the purpose set forth. 13th. The combination with the rock shaft B, the type wheel spindle, the stop wheel K and the locking pawl H, of the sleeve J rocking with the shaft B and having two radial arms, the angle radial arm J¹ provided with a guide slot for the locking arm of said pawl H, and the

segmental spring J² secured to said slotted arm and having bearing on the inner face of the toothed flange of said stop wheel, substantially as and for the purpose set forth.

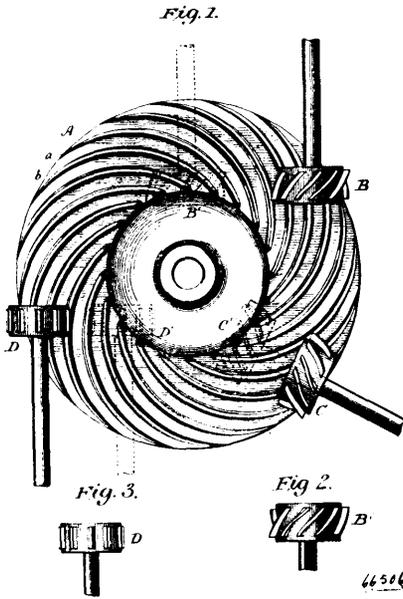
No. 66,505. Animal Trap. (Piège.)



Gottlieb Kahle, Theodor Henjes and Ludwig Beissner, all of Hannover, Germany, 7th March, 1900; 6 years. (Filed 10th May, 1899.)

Claim.—1st. A vermin trap, consisting of a hollow body having an entrance, a transparent partition, a spring raised, tubular passage having one end portion secured in the entrance of the body and its other end portion normally obstructed by the partition and depressed below the same by the weight of the vermin, the depressed end portion of the tubular passage automatically springing up in front of the partition when the animal passes from said passage into the body, substantially as described. 2nd. A vermin trap which is of bottle shape and has as its outer end a sliding door *a*, provided with holes, at its interior a spiral spring passage way *m m'*, and at the back of the passage way a transparent partition *o*, the parts being so arranged that when the animal has advanced a certain distance along the spiral passageway the latter bends down in front of the transparent partition so as to direct the animal into the body of the trap and thereafter springs back into its former position, substantially as described. 3rd. A vermin trap, consisting of a hollow body, having an entrance, a transparent partition in said body, a spring raised, tubular passage having one end portion secured at said entrance and the other end portion depressed below the partition by the weight of the vermin and automatically raised in front of the partition when the vermin passes from the passage into the body, and a movable device for opening and closing the end portion of said body which is opposite the entrance, substantially as described. 4th. A vermin trap, consisting of a hollow body, having an entrance at one end portion, a movable door arranged in the opposite end portion and constructed for the entrance light, a partition in the body between said door and said entrance, and a tubular passage having one end portion depressed below the partition by the weight of the vermin and automatically sprung upward in front of said partition when the vermin passes from the passage into the body, substantially as described. 5th. A vermin trap, consisting of a hollow body having a contracted entrance, a block mounted on the exterior of the entrance and containing a bait holding recess, an interior partition, and a spring raised tubular passage having one end secured in said entrance and its other end normally obstructed by the partition and depressed below the same by the weight of the vermin, substantially as described. 6th. A vermin trap, consisting of a hollow body having an entrance, an exterior support serving as a handle to hold the body inclined, an internal partition, a door at the end opposite the entrance, and a spring raised, tubular passage secured at one end in said entrance and its other end depressible below the partition by the weight of the vermin, substantially as described.

No. 66,506. Mechanical Gearing. (*Engrenage mécanique.*)



William Reed Green, Denver, Colorado, assignee of Augustus Howard, San Francisco, California, U.S.A., 7th March, 1900; 6 years. (Filed 17th August, 1899.)

Claim.—1st. A gear wheel having on its working face between the centre and periphery alternate ridges and depressions forming gear teeth on curves extending concentrically from the periphery inward, and the sides of which teeth are at less than a right angle to the plane of the wheel face, substantially as set forth. 2nd. A gear wheel having on its extended working face between the centre and periphery alternate ridges and depressions forming gear teeth on curves extending eccentrically from the periphery inward, and the sides of which teeth are at less than a right angle to the plane of the wheel face and adapted to gear effectively with pinions of different diameters and with different numbers of teeth, substantially as set forth. 3rd. A gear wheel having on its extended face between the centre and periphery a series of curved bevelled teeth, each extending from the periphery inward and adapted to effectively engage pinions arranged at different angles and positions, substantially as set forth. 4th. A gear consisting of a wheel having an extended face with bevelled curved teeth between the centre and the periphery, in combination with a pinion adapted to effectively engage and operate with said teeth when adjusted to different positions between the centre and periphery, substantially as set forth.

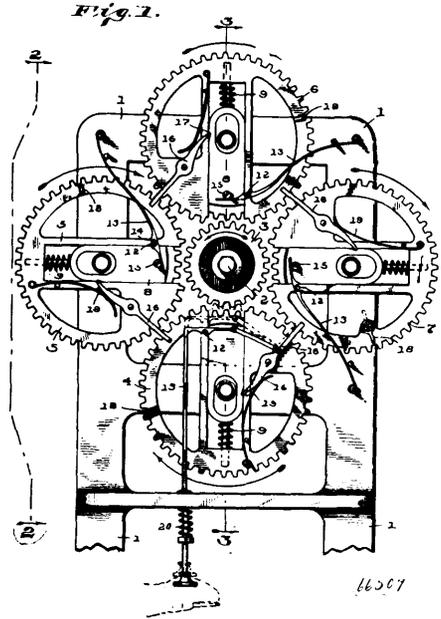
No. 66,507. Mechanical Movement.

(*Mouvement mécanique.*)

The Brown Straw Binder Co., assignee of Braselton T. Brown, al of Indianapolis, Indiana, U.S.A., 7th March, 1900; 6 years (Filed 19th August, 1899.)

Claim.—1st. A mechanical movement, comprising a main driving gear, a series of sectional gears surrounding the same, a slidable section mounted in ways in each gear which engage at intervals with the main gear, a stud attached on the rear thereof, a cam fixed to the framework whereby the slidable sections are actuated, substantially as described and for the purposes specified. 2nd. A mechanical movement, comprising a main driving gear, a series of sectional gears surrounding the same, a stud 12 attached to the surface of each gear, a spring 13 secured to the framework at one end, and having a notch adapted to engage with said stud, locking and determining the length of rotation of the gear, substantially as shown and described. 3rd. A mechanical movement, comprising a main driving gear, a series of sectional gears surrounding the same, each of which has a slidable section mounted therein, each section terminating at its outer end into a spindle, a spring surrounding said spindle and the ends of which bear against the main body of the gear and the slidable section, and adapted to move the same into engagement with the main driving gear, substantially as shown and described. 4th. A mechanical movement, comprising a main driving gear, a series of sectional gears surrounding the same, each of which has a slidable notched section mounted therein, a pawl 16, one end of which is adapted to engage with said notch, and a stud for disengaging said pawl, substantially as shown and for the purposes set forth. 5th. A mechanical movement, comprising a main driving gear, a series of sectional gears surrounding

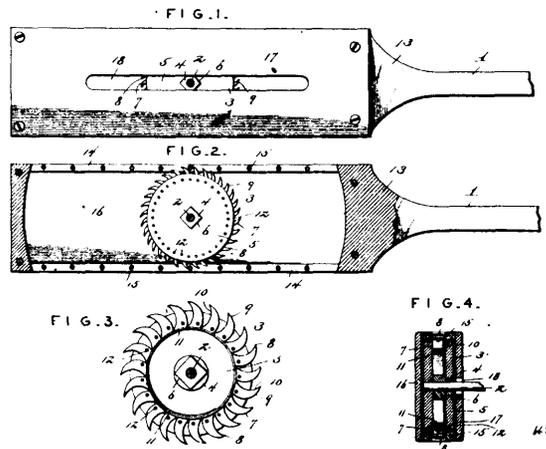
the same, each of which has a slidable section therein, a stud 15 mounted on the surface of the slidable section, a spring adapted



to engage with said stud, said stud actuating said spring, whereby the release of said gear is accomplished, substantially as described and for the purposes set forth. 6th. A mechanical movement, comprising a main driving gear, a series of sectional gears surrounding the same, and each of which has a stud 18, a pawl on the adjacent gear to come into contact with said stud and disengaging said pawl from the notch in the side of the slidable section of the gear, a spring pressing against one end of said section, substantially as shown and for the purposes set forth. 7th. In a mechanical movement, comprising a main driving gear, a series of sectional gears surrounding the same, cams rigidly secured to the framework, studs attached to the slidable sections of the gears and so situated as to come in contact with the cams and actuating the same, thereby shifting the position of the slidable sections, substantially as described and for the purposes set forth.

No. 66,508. Mechanical Movement.

(*Mouvement mécanique.*)

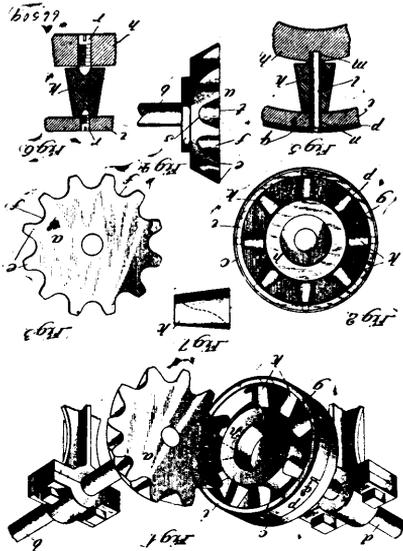


Jacob E. Hartwell and George W. Waters, both of Troy, Montana, U.S.A., 7th March, 1900; 6 years. (Filed 9th September, 1899.)

Claim.—1st. A gear wheel having pivoted teeth in combination with a single spring common to and normally holding all of said teeth in their operative positions, but allowing the points thereof to yield inward. 2nd. A gear wheel having pivoted teeth, in combination with a circular spring bearing against all of the teeth, substantially as described. 3rd. A gear wheel having pivoted teeth, the bases of which lie in a circumferential plane, in combination with a circular spring bearing against the bases of all of the

teeth, substantially as described. 4th. A gear wheel having pivoted teeth with concaved inner faces, in combination with a circular spring bearing against the concaved inner faces of all of the teeth. 6th. A gear wheel, comprising parallel side plates, and teeth pivotally mounted between said plates and normally projecting beyond the peripheries thereof, in combination with a circular spring intermediate said side plates and common to and bearing against all the teeth to hold them normally in their operative positions while allowing them to yield, substantially as and for the purpose described. 6th. The combination with a gear wheel having yielding teeth, and a circular spring common to and operating against the inner ends of all of said teeth, of a reciprocating double rack engaging the teeth on opposite sides of the centre of rotation of the gear wheel, said spring permitting the teeth to yield alternately on opposite sides of said centre, substantially as described.

No. 66,509. Motion Transmitting Device.
(Appareil transmetteur de mouvement.)

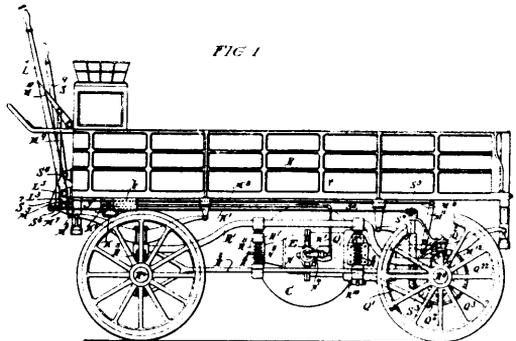


Charles Frederick Stokes, Chicago, Illinois, U.S.A., and Charles Edward McGlinchey, Highlandville, Massachusetts, U.S.A., 7th March, 1900; 6 years. (Filed 7th October, 1899.)

Claim.—1st. In angle gearing, the combination with the drive gear having curved interdental spaces and teeth of greater length at the base than at the extremity, of a driven gear having rounded teeth extending at an angle from the centre of rotation, substantially as described. 2nd. In angle gearing, the combination with a drive gear having the curved interdental spaces and teeth of characteristically bevel shape, and a driven gear having frusto-conical teeth extending outward from the centre of rotation whereby the movement of the drive teeth on the driven teeth is substantially as described. 3rd. In angle gearing, the combination with the driven gear having radially extending round faced teeth, of a driving gear frusto-conical in form with curved interdental spaces, the bases of which are substantially parallel with the drive shaft, the parts being arranged, substantially as described, whereby the drive teeth engage the driven teeth in a line changing gradually in a spiral centripetal direction, substantially as set forth. 4th. In angle gearing, the combination with a driven gear having rotatory teeth extending at an angle from the centre of rotation, of a frusto-conical drive gear having outward extending conical teeth and curved interdental spaces, the bases of which present a line substantially parallel with the drive shaft, the parts being arranged to operate substantially as described, whereby the pressure contact between the teeth is on a spirally varying line leading toward the centre of the driven gear and sliding friction is overcome, substantially as set forth. 5th. In angle gearing, the combination with the driven gear having round faced teeth, of a drive gear frusto-conical in shape and having bevel teeth and curved interdental spaces, said interdental spaces being warped at their rear extremities to afford freedom of movement of the extremity of the driven gear tooth in its archial rotation, substantially as described. 6th. In angle gearing, the combination with the driven gear having the round faced radially extending teeth, of a drive gear frusto-conical in shape and presenting interdental spaces of greater expense at the rear than at the forward end and having the edges of the teeth at the front rounded to permit ready withdrawal of the teeth extremities from between the driven teeth in the archial movement of the gear, substantially as described. 7th. In angle gearing, the combination with a frusto-conical drive gear having interdental spaces cut transversely of the gear body on a line substantially parallel with the drive shaft, whereby the depth of the interdental space is

greater at the face of the gear than at the back, and a driven gear having radially projecting rotatory teeth supported substantially as described. 8th. In angle gearing, the combination with a frusto-conical drive gear having interdental spaces cut transversely of the gear body on a line substantially parallel with the drive shaft, whereby the depth of the interdental surface is greater at the face of the gear than at the back, and a driven gear having radially projecting rotatory frusto-conical teeth supported substantially as described. 9th. In angle gearing, the combination with the driven gear having radially projecting frusto-conical teeth supported at both ends, of a drive gear frusto-conical in form with curved interdental spaces cut transversely of the gear body on a line substantially parallel with the drive shaft, whereby the interdental space is deeper at the outer than at the inner end thereof relative to the teeth, the said teeth being of a length to engage the surface of the driven teeth before driving pressure is exerted, whereby a contact without shock between the gear members is produced, and in the driving operation the driving teeth move in a line spirally upon the driven teeth and toward the centre of the driven gear, and friction is overcome by the rotation of the driven gear teeth on their axis, all as set forth. 10th. In angle gearing, the combination with a driven gear having round faced radially projecting teeth, of a drive gear having radially projecting teeth and interdental spaces, the sides of which are formed to conform to the opposing face of the driven gear teeth during driving engagement in their movement through their arc of rotation to preserve line contact during said engagement, substantially as described. 11th. In angle gearing, the combination with the driven gear having round faced radial teeth supported at opposite ends as described, of a drive gear frusto-conical in shape with curved interdental spaces, the bases of which are parallel with the driven gear teeth at the moment of most intimate meshing of the gears, and the sides of which are formed to maintain line contact with the driven gear teeth throughout the period of the application of the driving power, substantially as described.

No. 66,510. Power Transmitting Mechanism.
(Mécanisme transmetteur de la force.)

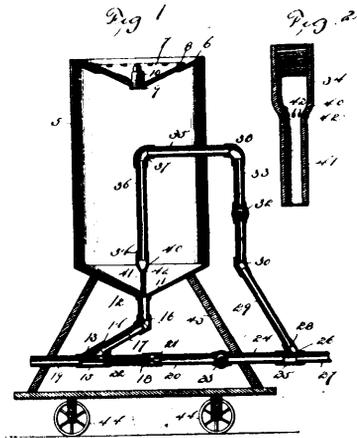


John Potter Murphy, Philadelphia, Pennsylvania, assignee of George Simpson Strong, New York City, New York, U.S.A., 7th March, 1900; 6 years. (Filed 10th October, 1899.)

Claim.—1st. A rotary head having a transverse cylinder formed in it inside the plane of its outer face in combination with a plunger movable in the cylinder, a crank pin secured directly to said plunger, and so as to project from the outer face of the head, a driving shaft for actuating the head, and channels for introducing and exhausting pressure fluid to and from the cylinder to move the plunger and adjust the eccentricity of the crank pin, and channels being formed in the shaft and head aforesaid. 2nd. A rotating head having a transverse channel formed in it, said channel comprising a cylinder at one end, a plunger movable in the cylinder aforesaid and having a crank pin secured in it, resilient means secured to the head and arranged to exert its force against the plunger to force it home in the cylinder, and a channel for fluid under pressure leading to the outer end of the cylinder. 3rd. A rotating head having a transverse channel formed in it, said channel comprising a cylinder at one end, and a spring chamber at the other, a plunger movable in the cylinder aforesaid and having a crank pin secured to it, a spring situated in the spring chamber and acting against the end of the plunger to force it home in the cylinder, and a channel for fluid under pressure leading to the outer end of the cylinder. 4th. A rotary head in combination with a transverse movable slide having a crank pin secured thereto, transversely movable counterweight mechanism, means connecting the crank pin slide and counterweight mechanism as described, and so that they will move simultaneously, and so as to balance each other and the head as a whole, and means for moving the slide to adjust the eccentricity of the crank pin. 5th. A rotary head in combination with a transversely movable slide having a crank pin secured thereto, transversely movable counterweight

mechanism, means connecting the crank pin slide and counterweight mechanism as described, and so that they will move simultaneously and so as to balance each other and the head as a whole, resilient means arranged to oppose the movement of the pin away from the centre of the head, and means for moving the slide to adjust the eccentricity of the crank pin. 6th. A rotary head in combination with a transversely movable slide having a crank pin secured thereto, two counterweights, each moving in guides in the head parallel to the crank pin slide and one on each side of said slide, racks formed in or secured to the opposite side of the slide and counterweights, pinions journaled in the head between the slide and counterweights with their teeth in engagement with the racks, and means for actuating the slide and through it the pin and counterweight. 7th. A rotary head in combination with a transversely movable slide having a crank pin secured thereto, two counterweights, each moving in guides in the head parallel to the crank pin slide and one on each side of said slide, racks formed in or secured to the opposite sides of the slide and counterweights, pinions journaled in the head between the slide, and counterweights with their teeth in engagement with the racks, resilient means arranged to oppose the movement of the pin connected parts away from the position they occupy when the pin is at the centre of the head, and means for actuating the slide and through it the pin and counterweights. 8th. The rotating head *c* having a central transversely extending cylinder C^1 and lateral parallel channels C^2 C^3 , a slot C^2 formed in the face of the head leading into cylinder C^1 , connecting passages C^4 C^4 between the cylinder C^1 and the channels C^3 C^3 and a fluid channel C^8 leading to one end of cylinder C^1 in combination with a plunger working in the cylinder C^1 and having a crank pin *E* attached to it and projecting through slot C^2 , counterweights working in channels C^3 C^3 , the plunger and counterweights having their opposite sides provided with racks, and spur wheels *H H* journaled in passages C^4 C^4 having their teeth in engagement with the racks aforesaid. 9th. The rotating head *c* having a central transversely extending cylinder C^1 and lateral parallel channels C^3 C^3 , a slot C^2 formed in the face of the head leading into cylinder C^1 , connecting passages C^4 C^4 between the cylinder C^1 and the channels C^3 C^3 and a fluid channel C^8 leading to one end of cylinder C^1 in combination with a rim *C* surrounding the head, a plunger working in the cylinder C^1 and having a crank pin *E* attached to it and projecting through slot C^2 , counterweights working in channels C^3 C^3 , the plunger and counterweights having their opposite sides provided with racks, and spur wheels *H H* journaled in passages C^4 C^4 having their teeth in engagement with the racks aforesaid. 10th. The combination with a head having a transverse cylinder formed in it and a channel formed in the head leading from its centre to one end of the cylinder aforesaid, a shaft secured to the head and having a channel formed through it said channel connected with the channel in the head at one end and with a cylindrical enlargement A^6 at the other end of the shaft, a fixed tube *O* having a portion O^2 fitting in cylinder A^6 and formed with a multiplicity of annular grooves on its outer surface and a support for the outer end of the tube having a port as N^6 in communication with the end of the tube. 11th. In combination with a head having a transverse cylinder formed in it and a channel formed in the head leading from its centre to one end of the cylinder aforesaid, a shaft secured to the head and having a channel formed through it, said channel connecting with the channel in the head at one end and with an inner cylindrical enlargement A^6 and through said enlargement A^6 into an outer larger and threaded enlargement A^8 at the other end of the shaft, a fixed tube *O* having a portion O^2 , fitting in cylinder A^6 and formed with a multiplicity of annular grooves on its outer surface, an annular shoulder *O* adapted to rest on a shoulder A^7 at the end of enlargement A^8 , a threaded tubular bushing O^5 screwing into the enlargement A^8 and around tube *O*, and a support for the outer end of the tube having a port as N^6 in communication with the end of the tube. 12th. In combination with a rotating head having a transverse hydraulic cylinder formed in it and a crank pin actuating plunger movable therein, resilient means tending to force the plunger home in its cylinder and to hold the pin in or about a central position, a channel leading to the end of the cylinder in the head, a reservoir of liquid, a pump cylinder connected to said reservoir and to the channel leading to the cylinder in the head, a plunger working in the pump cylinder, valves arranged as described and so that the plunger will draw liquid from the reservoir and force it into the cylinder in the head, a port connecting the delivery passage of the pump and the reservoir, a normally seated valve for closing said port, means for opening said valve at will and means for actuating the pump plunger. 13th. In combination with a rotating head having a transverse hydraulic cylinder formed in it and a crank pin actuating plunger movable therein, mechanism driven by said crank pin including a brake drum, a brake arranged to check the movement of said mechanism by pressure on said drum, resilient means tending to force the plunger home in its cylinder and to hold the pin in or about a central position, a channel leading to the end of the cylinder on the head, a reservoir of liquid, a pump cylinder connected to said reservoir and to the channel leading to the cylinder in the head, a plunger working in the pump cylinder, valves arranged as described and so that the plunger will draw liquid from the reservoir and force it into the cylinder in the head, a port connecting the delivery passage of the pump and the reservoir, a normally seated valve for closing said port, a lever arranged when actuated to simultaneously open said valve and apply the brake and means for actuating the pump plunger.

No. 66,511. Sand Blast. (*Soufflerie à sable.*)



James McNewhouse, Marble Cliffe, Ohio, and Charles Irwin, Chicago, Illinois, and Clinton Newhouse, Marble Cliffe, aforesaid, all in the U.S.A., 7th March, 1900; 6 years. (Filed 9th February, 1900.)

Claim.—1st. A sand blast, comprising a sand reservoir, a discharge pipe leading from the reservoir, an air nozzle opening into said discharge pipe, and adapted to create suction therethrough from the reservoir, openings in the nozzle for directing air against the contents of the reservoir, a second nozzle leading into the discharge pipe below the first named nozzle and adapted to create suction between it and the first named nozzle and to exert a discharge pressure between it and the outlet of the discharge pipe, and means for supplying air pressure to said nozzles. 2nd. A sand blast, comprising a sand reservoir, a discharge pipe having branches, a siphon in one of said branches adapted to create suction from the reservoir, a siphon in a second branch adapted to create suction in the first named branch and to create pressure in the discharge pipe, and means for supplying air pressure to the siphons. 3rd. A sand blast, comprising a casing or reservoir adapted to receive sand, an outlet for the reservoir, a nozzle within the reservoir and opening through the outlet, openings in the nozzle communicating directly with the reservoir, a discharge pipe connected with the outlet, and means for supplying pressure to the nozzle. 4th. A sand blast comprising a reservoir and adapted to receive sand, an outlet for the reservoir, a nozzle within the reservoir, an opening through the outlet, a discharge pipe comprising branches, one of which is connected with said outlet, a second nozzle in the second branch of the discharge pipe and adapted to create suction in the first named branch, and means for supplying pressure to the nozzle. 5th. A sand blast, comprising a sand reservoir having an outlet opening, a siphon in operative relation to said opening and adapted to create suction therethrough from the reservoir, a discharge pipe connected with said opening, a second siphon in the discharge pipe and adapted to create suction from the reservoir opening and to establish pressure at the outlet of the discharge pipe, means for supplying a fluid under pressure to the siphons, and means for regulating the fluid supplies independently.

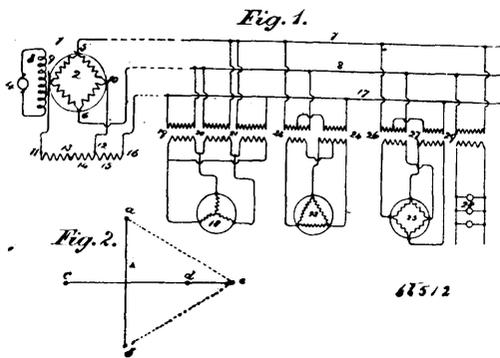
No. 66 512. System of Electrical Distribution.

(*Système de distribution électrique.*)

The Westinghouse Electric and Manufacturing Company, assignee of Charles F. Scott, all of Pittsburgh, Pennsylvania, U.S.A. 7th March, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. In a system of alternating current electrical distribution, the combination with a single winding or a plurality of connected windings traversed by out-of-phase currents, of two pairs of leads so connected to said winding or windings as to receive currents in quadrature, two line conductors connected to one pair of said leads, a transformer having its primary connected to the other pair of leads, and a third line conductor connected to one terminal of the transformer secondary, the transformer windings being so proportioned that the three line conductors receive three out-of-phase currents of substantially equal electromotive force. 2nd. In a system of alternating current electrical distribution, the combination with a generator of two phase currents, of three line conductors, two of which are connected to the generator terminals corresponding to one phase of current, a transformer having its windings connected to the generator terminals corresponding to the other phase current and to the third line conductor, whereby said transformer co-operates with said generator to supply the line conductors with three-phase working currents. 3rd. A system of alternating current

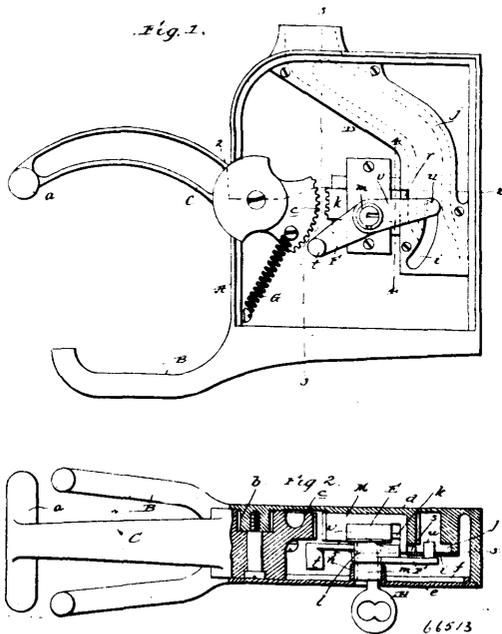
electrical distribution for single and polyphase translating devices, comprising three line conductors, a source of two-phase currents



68512

and a transformer connecting one of the line conductors with the other two line conductors through a source of current and so proportioned as to equalize the line of electromotive forces and adjust the phase relation thereof. 4th. In a system of alternating current electrical distribution, the combination with a generator of two-phase currents, and two line carrying conductors carrying currents of one phase derived from said generator, of a transformer having its winding connected to the generator and to a third line conductor and so proportioned as to co-operate with said generator in supplying the line conductors with three substantially equal electromotive forces having a proper phase relation. 5th. In a system of alternating current electrical distribution, the combination with a generator having a closed coil armature winding, of two line conductors so connected to said winding as to receive a single phase current therefrom, of a transformer having its primary winding terminals so connected to the armature winding as to receive current displaced ninety degrees from the first-named current and having its secondary winding terminals connected respectively to a third line conductor and to one of the primary terminals, said transformer windings being so proportioned as to co-operate with the generator in supplying the line conductors with three symmetrically displaced currents of substantially equal electromotive force.

No. 66,513. Bicycle Securing Device.
(Cadenas pour bicycles.)



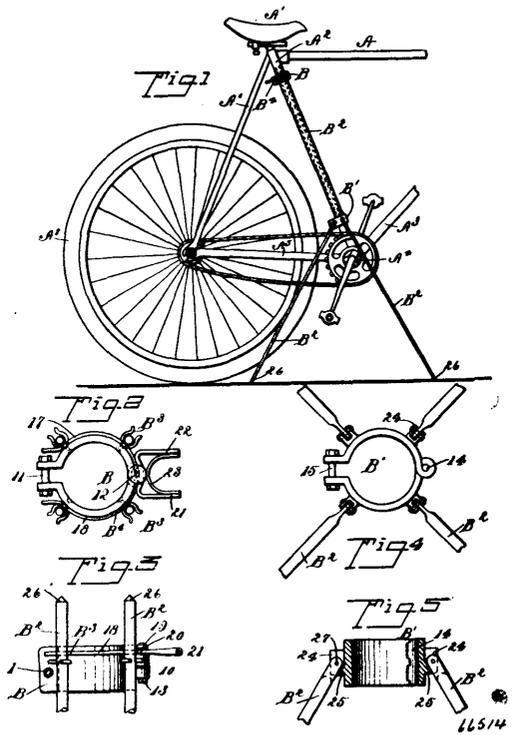
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John T. Roddy, New York City, New York, assignee of Luther A. McCord, Laurens, South Carolina, both of the U.S.A., 7th March, 1900; 6 years. (Filed 21 October, 1899.)

Claim.—1st. In a securing device, the combination of a body or casing, a support for the article to be secured, a keeper pivotally mounted in the body or casing, a bolt for securing said keeper in its closed position, a coin chute, a lever arranged to engage the bolt when said bolt is disengaged from the keeper and having a portion

disposed in the coin chute, and suitable means for moving the bolt subsequent to the disengagement of the lever therefrom, substantially as specified. 2nd. In a securing device, the combination of a body or casing, a support for the article to be secured, a keeper pivotally mounted in the body or casing, a bolt adapted to secure the keeper in its closed position and having a shoulder, a coin chute, a lever fulcrumed at an intermediate point of its length and having one end weighted and its other end arranged in the coin chute and also having a shoulder engaging that of the bolt, and means for moving the bolt subsequent to the disengagement of the lever therefrom, substantially as specified. 3rd. In a securing device, the combination of a body or casing, a support for the article to be secured, a keeper pivotally mounted in the body or casing, a bolt adapted to secure the keeper in its closed position, a coin chute, a lever arranged to engage the bolt when said bolt is disengaged from the keeper, and having a portion disposed in the coin chute, and a lock arranged in the body or casing and having a reciprocating bolt engaging the keeper securing bolt, substantially as specified. 4th. In a securing device, the combination of a body or casing, a support for the article to be secured, a keeper pivotally mounted in the body or casing, a bolt adapted to secure the keeper in its closed position and having a recess, a coin chute having an arcuate slot in one of its walls, a lock arranged in the body or casing and having a cylinder, a rotary plug and a bolt, the latter being arranged in the recess of the securing bolt, and a lever fulcrumed on the cylinder and having one end weighted and its other end provided with a lateral projection extending through the arcuate slot, and also having a portion arranged to engage the securing bolt when said bolt is disengaged from the keeper, substantially as specified. 5th. In a securing device, the combination of a body having an arm to support the article to be secured, a keeper pivoted in the body and having a toothed segment at its inner end, and a slidable bolt arranged in the body and adapted to engage the segment of the keeper so as to secure said keeper in its closed position. 6th. In a securing device, the combination of a body, a support for the article to be secured, a keeper pivoted in the body and having a toothed segment at its inner end, a slidable securing bolt arranged in the body and adapted to engage the toothed segment of the keeper, and a lock secured in the body and having a bolt for moving the securing bolt, substantially as specified.

No. 66,514. Bicycle Rests. (Support de bicyclee.)



66514

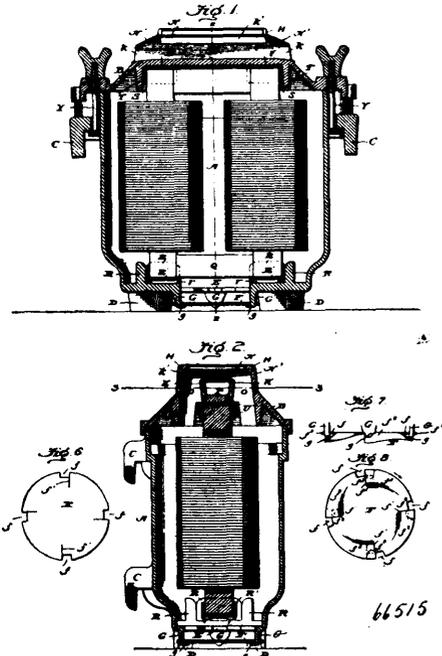
Alexander G. Shields, L'Anse, Baraga County, Michigan, U.S.A., 7th March, 1900; 6 years. (Filed 18th September, 1899.)

Claim.—1st. A bicycle rest, comprising clamping collars adapted for attachment to the frame of a bicycle, one of the collars being provided with pivotally connected legs and the other collar having outwardly extended spring clips attached to it and adapted to receive the legs when folded, arms pivotally attached to the collar carrying said clips, said arms normally engaging with the outer faces of the collar at opposite sides, and a spring for holding said

arms in their normal position, substantially as specified. 2nd. A bicycle rest, consisting of clamping collars adapted for attachment to the frame of a bicycle, one of the collars being provided with pivotally connected legs and the other collar having clips attached, adapted to receive the legs when folded, arms pivotally attached to the collar carrying said clips, said arms normally engaging with the outer faces of the collar at opposite sides, independent handles for said arms, and a spring connection between said handles, said spring connection serving to normally hold said arms in engagement with the collar in connection with which they are employed, for the purpose set forth. 3rd. A bicycle rest, comprising members adapted for attachment to a bicycle frame, one of said members having outwardly extended lugs, legs pivotally connected to said lugs, and downwardly and outwardly inclined blocks between adjacent lugs, to govern the angle of the legs relatively to the bicycle, and a member adapted to be secured to the bicycle frame and having clips to receive the legs when folded.

No. 66,515. Ventilated Transformer.

(*Transformeur électrique.*)



James W. Packard, Warren, Ohio, U.S.A., 7th March, 1900; 6 years. (Filed 21st June, 1899.)

Claim.—1st. The herein described case for an electric transformer having ventilating openings in its top and bottom, and a shield or baffle plate supported from the casing in a position below the ventilating opening in the bottom thereof, substantially as set forth. 2nd. The herein described case for an electric transformer having ventilating openings in its bottom and top, a series of lugs depending from the bottom of the casing about the ventilating opening therein, and a plate supported by said lugs out of contact with the bottom and extending across the opening therein, substantially as set forth. 3rd. In a transformer casing, the combination of a body having an opening in its bottom and an opening in its top, upwardly extending ribs or flanges on opposite sides of the opening in the top, and a plate connecting said flanges and forming therewith a horizontal passage above, and communicating at points intermediate its ends with the coil chamber of the casing, substantially as set forth. 4th. In a transformer casing, the combination of a body having an opening in its bottom and two parallel slots or openings in its top, the walls of which extend above said top, and the outer side walls of the top openings extending above the inner side walls thereof, and a plate secured to the outer side walls of said top openings, above the inner side walls thereof, whereby a passage open at its ends and communicating with both of the slots in the casing top is provided, substantially as set forth. 5th. In a transformer casing, the combination of a body having an opening at its bottom and two parallel slots or openings in its top, the walls of which extend above the casing, the outer side walls of said top slots or openings extending above the inner and end walls thereof, and the inner walls of said slots projecting longitudinally beyond the ends of the slots, and a cap plate connecting the outer walls of said slots, above the inner walls, and provided at its ends with sections that connect the portions of the inner walls of said slots that extend longitudinally beyond the outer walls thereof, substantially as set forth. 6th. The combination with a transformer casing, having an opening in

its bottom, of the herein described ventilating cap or cover having the longitudinally extending flanges or ribs H, on its upper surface, the relatively lower ribs or flanges K, between those aforesaid, a plate having its opposite side edges supported by the first said flanges or ribs H, and slots or apertures O, formed in the body of the cap or cover between the flanges H, K, substantially as set forth. 7th. In a transformer, the combination of a casing having an air inlet opening in its bottom, a coil whose core extends across said opening and is supported by raised portions of the bottom on opposite sides thereof, and a cover for the casing having on its inner surface means for engaging with the upper end of the core and having air outlet passages between which the upper end of the core extends, substantially as set forth. 8th. In a transformer, the combination of a coil, a casing for said coil, lugs extending upwardly from the bottom of the casing and arranged to receive the core of the coil between them and prevent horizontal movement thereof in any direction, a cover provided on its inner side with two sets of downwardly projecting ribs T, the members of each set being arranged to form a socket or holder for one of the upper corners of the core, and insulating means separating the coil from said lugs and ribs, substantially as set forth. 9th. The combination with a case for an electric transformer having a ventilating aperture formed in one of its walls, of a series of lugs projecting from the outer face of said wall about said aperture, and a baffle plate adapted to detachably engage and extend across the space between said lugs, substantially as set forth. 10th. The combination with a case for an electric transformer having a ventilating aperture formed in one of its walls, of a plate supported from said wall to provide a series of passages, each open at both ends and communicating at intermediate points with the said ventilating aperture, substantially as set forth. 11th. The combination with a case for an electric transformer having a ventilating aperture in its bottom wall, of a series of lugs depending from said wall about the ventilating aperture therein, and each having its lower end bent inwardly, and a plate arranged to extend across the space between said lugs and be supported by the said inwardly extending lower ends thereof, substantially as set forth. 12th. The combination with a case for an electric transformer having a ventilating aperture in its bottom wall, of a series of lugs depending from said wall about the ventilating aperture therein, and each having an inwardly extending lip at its lower end, and a plate adapted to be supported by said lips and to project across the edges of the lugs above the lips, substantially as set forth. 13th. The combination with a case for an electric transformer having a ventilating aperture in its bottom wall, of a series of lugs depending from said wall about the opening therein, and each having its lower end bent inwardly, and a plate adapted to be supported by said lower ends of the lugs, and at points inside of its perimeter, substantially as set forth. 14th. The combination with a case for an electric transformer having a ventilating aperture in one of its walls, of a series of lugs projecting from said wall and each having its free ends bent inwardly, and a plate adapted to be supported by said lugs, it having a series of peripheral notches corresponding in number and location to said lugs, and a radial slit extending into its body to points beyond the inner end of said notch at one side of said notch, substantially as and for the purpose set forth.

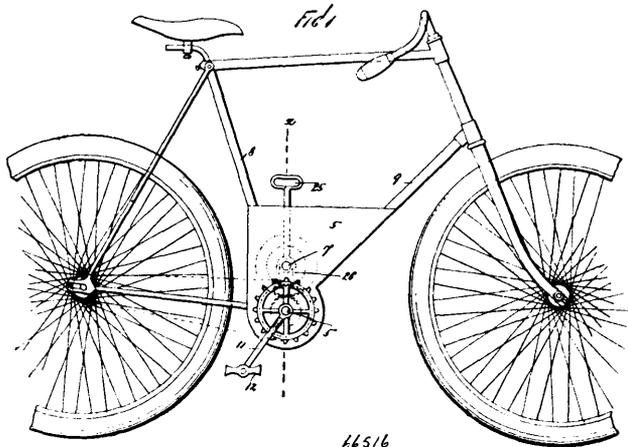
No. 66,516. Bicycle Propelling Mechanism.

(*Mécanisme de propulsion de bicyclettes.*)

Johan Kibin, New York City, New York, U.S.A., 7th March, 1900; 6 years. (Filed 16th September, 1899.)

Claim.—1st. An apparatus of the class described, comprising a pedal shaft, a sleeve mounted thereon, and adapted to turn thereon, and provided at its outer end with a sprocket wheel and at its inner end with a small gear wheel, a larger gear wheel keyed to said shaft adjacent to the inner end of the sleeve, a supplemental shaft mounted adjacent to the pedal shaft, a sleeve mounted thereon and adapted to slide thereon, and turn therewith, a small gear wheel connected with the inner end of said sleeve and adapted to operate in connection with the larger gear wheel on the pedal shaft, a larger gear wheel mounted on the outer end of said last-named sleeve and adapted to operate in connection with the small gear wheel on the sleeve mounted on the pedal shaft, and means for moving the sleeve longitudinally on the supplemental shaft, said pedal shaft being also provided at each end thereof with a pedal crank and one of said cranks being provided with a pivoted pawl or dog which is adapted to operate in connection with the sprocket wheel, substantially as shown and described. 2nd. An apparatus of the class described, comprising a casing secured to the frame of a bicycle adjacent to the crank shaft, and surrounding a portion thereof adjacent to the usual sprocket wheel, said crank shaft being provided at each end with the usual pedal cranks, a pivoted pawl secured to one of said pedal cranks and adapted to operate in connection with said sprocket wheel, a collar revolvably mounted on said crank shaft, and bearing said sprocket wheel exterior of said casing, a supplemental shaft transversely mounted in said casing, a train of gears comprising a first gear wheel keyed to said crank shaft, a collar revolvably and slidably mounted on said supplemental shaft, and pivoted with two gear wheels, of which the second in the gear train is smaller than said first gear wheel, and the third larger than the second and a fourth gear wheel fixed to said collar on said crank shaft, and smaller than said third gear wheel, said gear wheel being adapted to slide

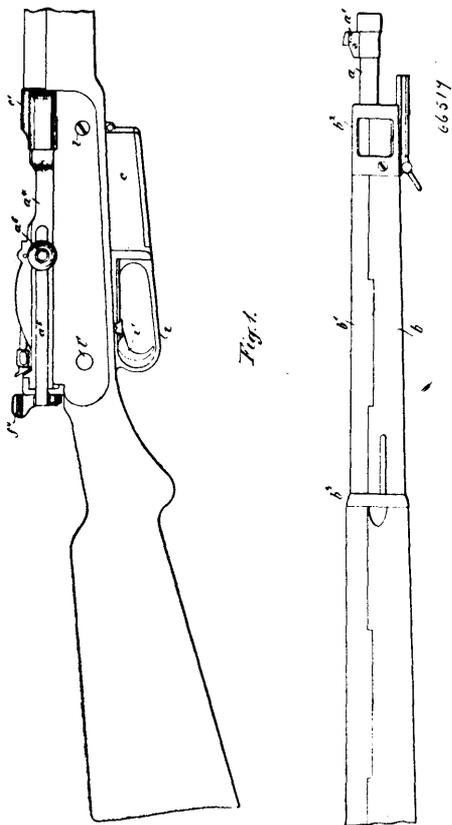
into engagement with said first gear wheel and said third with said fourth, and an arm pivoted to the upper portion of said casing and



terminating between said second and third gear wheels and provided with a handle within the plane of the frame of the bicycle whereby said second and third gear wheels may be moved into and out of engagement with said first and fourth gear wheel, substantially as shown and described.

No. 66,517. Self Loading Fire Arm.

(Armes à feu se rechargeant automatiquement.)



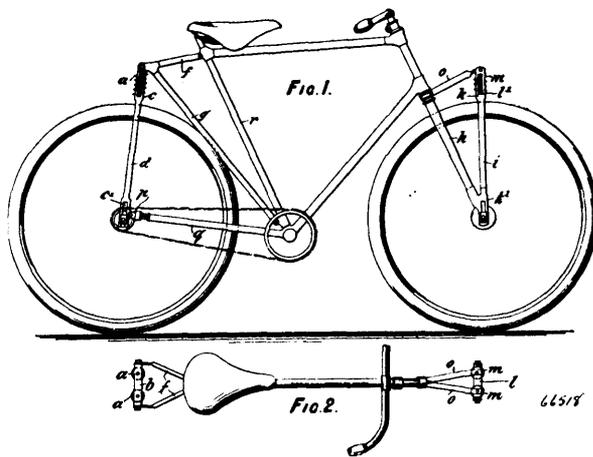
Paul Mauser, Oberndorf, German Empire, 7th March, 1900; 6 years. (Filed 7th March, 1899.)

Claim.—1st. A recoil operated fire arm having an intercepting contrivance which according to its adjustment, either allows free play to the bolt, which, in consequence of the recoil, is moving backwards rapidly or holds the same, after each shot, in the most backward position, and only sets it free, after the operating of a disengaging apparatus, for the purpose of rendering single firing or quick firing possible at will, substantially as set forth. 2nd. In a recoil operated fire arm in which the breech bolt may have free play or in which it may be retained in its most backward position after each

shot the combination of an adjustable pawl a^{10} , capable of being put out of engagement by means of a spring pressure pin a^8 , and serving as an intercepting contrivance for the breech bolt and a curved disc f^6 , connected with the securing lever f^4 , and furnished with recesses f^6, f^7, f^8 , which disc can be so adjusted that it either allows the nose a^{11} , of the adjustable pawl to spring within the range of the additional piece d^2 , of the breech bolt d , as in the single firing position or presses the same outwards as in the quick firing position, substantially as set forth. 3rd. In a recoil operated fire arm in which the breech bolt may have free play for quick firing or in which may be retained in its most backward position after each shot for single firing, the combination of two breech blocks arranged in bearings a^3 , on the breech case and furnished with oblique surfaces a^{22} and a^{23} , which are operated by corresponding oblique surfaces c^{10} or c^{11} on the cap c^1 , in such a manner that, when the barrel recedes, automatic outward turning of the breech blocks is effected, and on the contrary, a swinging inward thereof when the barrel moves forward, a barrel catch for locking the barrel with the breech case, in the backward position, consisting of a locking plate m , pivoted to the lock body, which upon the barrel moving backwards, falls into a recess a^7 on the breech case, and is held therein by the breech which during the time it is in the back position, lies against the locking plate from the inside, a hammer securing contrivance, consisting of a securing pin g , furnished with an oblique surface g^3 , and having a spring seating and which pin upon the turning down of the safety lever f^4 , is pushed so far forward by the surface f^6 , thereof that the oblique part g^3 , of the securing lever presses down the hammer until the trigger bar is set free and then holds it fast, a trigger or firing apparatus consisting of the trigger bar h^1 , seated in guiding grooves and of the trigger catch h^8 , seated in the bar, this catch being under the influence of the sear spring h^7 , and lying on both sides, with its additional pieces or extensions h^{15} against the guiding pieces h^{14} , on the lock body, a contrivance for receiving the firing pin consisting of a locking or securing piece d^4 , passed through a vertical slot of the pin, which piece is constantly pressed downward by the ejection spring, so that during this time the breech is in the backward position, the nose d^5 of the locking piece lies in front of the edge or rim of the firing pin, whereas, when the breech moves forward the locking or securing piece is raised by the surface c^6 , of the lock body and the firing pin is freed, a spring d^2 serving to hold back the firing pin, the head of the firing pin being furnished with a kind of screw thread into which the back end of the spring is secured, a supply or feed spring k , for the magazine of zig-zag form the bendings of said spring extending but a short distance beyond the back half of the space of the magazine, for the purpose of exercising an increased pressure on the back part of the cartridge to be brought within the range of the breech, substantially as herein set forth. 4th. In a recoil operated fire arm in which the breech bolt may have free play for quick firing or in which it may be retained in its most backward position after each shot for single firing, the combination of the barrel, lock and trigger or firing apparatus, in such a manner that after the barrel has been pushed in between the stock and the wooden protecting piece b^1 , the lock pushed in from below into the breech frame or casing c engages by means of its extension c^4 , over the middle wall c^2 , of the casing c , the trigger guard being then introduced and secured in the known manner by the bottom plate of the magazine, serves by the engaging of its nose i^6 , behind the extension c^3 , for holding the lock, substantially as set forth.

No. 66,518. Application of Springs to Cycles.

(Application de ressorts aux cycles.)

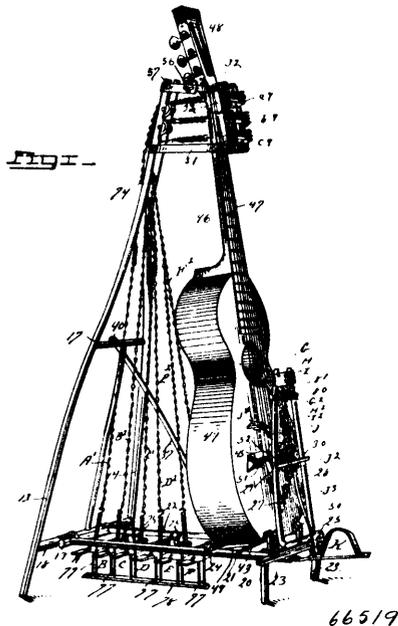


Edward Harnett, St. Peter's Cottage, Usk Road, Battersea, London, England, 7th March, 1900; 6 years. (Filed 29th September, 1899.)

Claim.—1st. In rear driving cycles, suspending the front wheel in an independent fork, said fork being connected by means of springs o an outer fork, which latter is connected to the front fork of the

machine, in combination with slides and guides, as set forth. 2nd. In rear of driving bicycles, suspending the driving wheel in an independent fork, said fork being connected to the frame of the machine, by means of springs, in combination with slides and guides, as set forth. 3rd. In front driving bicycles, suspending the rear wheel in an independent fork, said fork being connected to the frame of the machine, by means of springs, in combination with slides and guides as set forth.

No. 66,519. Guitar Support and Player.
(*Guitare mécanique*)

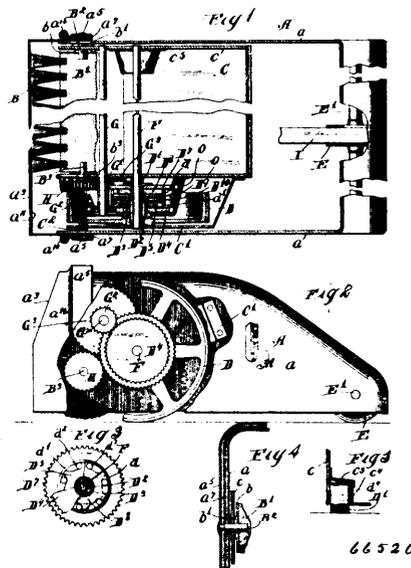


Morton G. Miller, Summit Grove, Indiana, U.S.A., 7th March, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. In a machine for supporting and playing a guitar, the combination of a base frame, a body frame pivoted thereto, a main frame pivoted to the base frame and a head frame projecting from the main frame over the base frame, substantially as described. 2nd. In a machine for supporting and playing a guitar, the combination of a base frame, a body frame pivoted thereto at one end and adapted to rest on the face of the body of the instrument, a main frame pivoted to the opposite end of the base frame, a head frame on the main frame projecting over the base frame, and hook braces connecting the base frame with the body and main frame, substantially as described. 3rd. In a machine for supporting and playing a guitar, the combination of the base frame, the main frame pivoted thereto, a bracket on the main frame having two openings, a brace pivoted to the base frame and having hook and engaging in one of said openings, a hook passing through the other opening and engaging around the brace, and a spring coiled around the hook on the opposite side of the bracket to maintain the brace in position. 4th. In a machine for supporting and playing a guitar, the combination of a base frame upon which to rest an instrument, a main upright frame, a head frame over the base frame adapted to clamp the neck of the instrument, a finger frame hinged to the head frame, and fingers therein adapted to press the strings over the frets, substantially as shown and described. 5th. In a machine for supporting and playing a guitar, the combination with the base frame having a rest for the instrument, the body frame at one end thereof, a cushion bracket on the body frame bearing on the bridge of the instrument, the head frame, a curved cushion bar therein to receive the neck of the instrument, and a clamp for holding the neck, substantially as described. 6th. In a machine for supporting and playing a guitar, the combination of the head frame provided with a clamp for the neck of the instrument, the finger frame hinged to the head frame, a horizontal series of fingers, of one finger for each string, a stop behind each series, a spring for each key holding it independently back against said stop, three horizontal tumblers behind each series, springs for holding the tumblers individually out of contact with the fingers, points on each tumbler behind individual fingers in the series, treadles, and connections between the tumblers, substantially as described. 7th. In a machine for supporting and playing a guitar, the combination with the base frame, the main frame, a head frame, the finger frame pivoted thereto, fingers pivoted in the finger frame and normally held away from the string, tumblers for operating the fingers normally held away from the fingers, spring uphold treadles, and chains for each treadle, and branch chains connecting each of the chains with one or more

tumblers, substantially as described. 8th. In a machine for holding and playing a guitar, the combination of the head frame, having fixed and movable side bars for embracing the neck of the instrument, a clamp bar outside of the movable bar, a nut between the clamp bar and the movable bar, a long rivet passing through the movable bar and rigidly connecting the fixed bar with the clamp bar, substantially as described. 9th. In a machine for supporting and playing a guitar, the combination, of the fingers arranged in horizontal series, treadles arranged in a horizontal series, mutes arranged in a horizontal series, chains connecting the fingers with the treadles, and chains extending from the mutes across the series of treadles, and connected to one or more of the treadles, and to a rigid part of the machine beyond the series of treadles, substantially as described. 10th. In a machine for supporting and playing a guitar, the combination of the base frame, a horizontal series of treadles pivoted thereto, a main frame, three series of three rows each of pulleys pivotally mounted one above the other in the main frame, three series of fingers one series above the other for pressing the strings over the frets of the instrument, and branch chains leading from each series of fingers over the corresponding series of pulleys and merging into single chains connected to the treadles of the series, substantially as described.

No. 66,520. Carpet Sweeper. (*Balayeuse.*)



John F. Hardy, Chicago, Illinois, U.S.A., 7th March, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. A casing for a carpet sweeper or the like provided with a collapsible front end which includes as a part thereof the front ends of the side walls of the casing, so as to permit the sweeping brush to sweep entirely to perpendicular objects which are higher than the sweeper casing. 2nd. The combination with a casing for a carpet sweeper or the like and a brush in the forward end thereof, said casing being provided with a collapsible front end which includes as a part thereof the front ends of the side walls of the casing. 3rd. The combination with a casing and a brush in the front end thereof, the front end of the casing being made collapsible and the rigid part of the casing terminating in rear of the front of the brush. 4th. The combination with a casing and a brush in the front end thereof, said front end of the casing being made collapsible and extending below the centre of the brush and the rigid part of the casing terminating in the rear of front of the brush. 5th. The combination with the casing of a carpet sweeper or the like, and a brush in the front end of the casing, of a swinging guard connected at its upper edge of the case above the brush and having its free edge extending in front of the brush, to permit the brush to sweep entirely to a perpendicular object higher than the casing, and to return to its normal position when the sweeper is moved away from said object. 6th. A casing for a carpet sweeper or the like having the brush end thereof made of flexible material which is attached to the rigid part of the casing above the level of the brush. 7th. A casing for a carpet sweeper or the like having the brush end thereof made collapsible and which embraces, as a part of the collapsible brush end, a spring guard. 8th. A casing for a carpet sweeper or the like having the brush end thereof made of flexible material, and a guard located between the flexible end of the casing and the brush. 9th. The combination with a casing having the brush end thereof made collapsible, the rigid part of the casing terminating in rear of the front of the brush, a brush mounted in said casing adjacent to said collapsible end in a manner to have contact with the floor, a driving wheel, and mechanism for rotating said brush from the

driving wheel. 10th. In a carpet sweeper, the combination of a casing the brush end of which is made collapsible, a brush mounted in said casing adjacent to said collapsible end in a manner to have contact with the floor, a driving wheel, means for transmitting motion from the driving wheel to the brush, and mechanism for rotating the brush in the same direction in both the backward and forward movements of the sweeper. 11th. In a carpet sweeper, the combination of a casing having the brush end thereof made collapsible, a brush mounted in the casing adjacent to said collapsible end in a manner to have contact with the floor, a spring guard connected with the casing and lying between the collapsible end and the brush, a driving wheel, mechanism for transmitting motion from the driving wheel to the brush, and means for rotating the brush in the same direction in both the backward and forward movement of the sweeper. 12th. The combination with the casing of a carpet sweeper or the like, of a brush rotatively mounted in the front end thereof, the front edge of the top wall of the casing being bent downwardly in contact with the brush so as to form a scraper therefor and a dust shield for the brush. 13th. The combination with the casing of a carpet sweeper or the like, of a brush rotatively mounted in the front end thereof, the front edge of the top wall of the casing being bent downwardly with its lower edge adjacent to the brush on a line in rear of the central axle of the brush. 14th. The combination with a casing having a collapsible brush end, a brush mounted adjacent to said collapsible end, in a manner to have contact with the floor, and a driving wheel of a train of gears communicating motion from the driving wheel to the brush, and reversing mechanism operatively, connected with said train of gears for rotating the brush in the same direction in both the forward and backward movement of the sweeper. 15th. The combination with a casing and a rotative brush therein, of a transverse shaft in the casing, a driving wheel on said shaft laterally separated rotative gear wheels on said shaft, discs on the adjacent faces of the wheels and rigid therewith, annular gripping flanges rotating with the driving wheel and surrounding the discs, ball races in the peripheries of said discs, ball in said races adapted for engagement by the gripping flanges and connections between said gear wheels and the rotative brush. 16th. The combination with a casing and a rotative brush therein, of a transverse shaft in the casing, a driving wheel rotative on said shaft provided with an inwardly extending hub, a gear wheel rotating on said hub, a second gear wheel laterally inside of the hub rotating on said shaft, one of said gear wheels being adapted to be locked to and rotated with the driving wheel when the driving wheel is rotating in one direction, and the other gear wheel being adapted to be locked, and rotate when said driving wheel rotates in the opposite direction, and operative connections between said gear wheels and the rotative brush. 17th. The combination with a casing, a rotative brush therein and a pinion on the brush shaft, a transverse shaft in said casing, a driving wheel on said shaft provided with an inwardly extending hub, a gear wheel mounted to rotate on the driving wheel hub, a second gear wheel laterally inside of said hub which rotates on the shaft, a pinion on the brush shaft which meshes with said second gear wheel, a transverse shaft in front of said driving wheel shaft, an idle pinion which rotates on said shaft and which meshes with the first gear wheel, an idle gear wheel rotating with the idle pinion and meshing with the brush pinion, and means for locking said first gear wheel to rotate with the driving wheel when the sweeper is being moved in one direction, and for locking the second gear wheel to rotate with the driving wheel when the sweeper is being moved in the opposite direction. 18th. The combination with a casing, a rotative brush therein, and a pinion on the brush, of a transverse shaft in the casing, a driving wheel rotatively mounted on said shaft provided with an inwardly extending hub, a gear wheel loosely mounted on said hub, a second gear wheel rotatively mounted on said shaft laterally inside the hub and meshing with the brush pinion, discs on the proximate faces of the gear wheels and rotating therewith, two annular gripping flanges connected with the driving wheel and surrounding said discs, said discs being provided in their peripheries with ball races, balls in said races adapted for engagement by said gripping flanges, a second transverse shaft in front of the driving wheel shaft, an idle pinion rotating on said shaft and meshing with the first mentioned gear wheel, and an idle gear wheel rotating with the idle pinion and meshing with the brush pinion. 19th. The combination with a casing, a rotative brush therein, and a sweepings pan in rear of said brush, of a shaft extending transversely across and rigidly attached at its ends to the side walls of the pan, a driving wheel rotative on said shaft provided with an inwardly extending hub, a gear wheel rotative on said hub, a second gear wheel rotative on the shaft laterally inside the hub, annular gripping flanges rotating with the hub discs on the proximate faces of said gear wheels surrounded by said gripping flanges, and provided in their peripheries with ball races, balls in said races adapted for engagement by said gripping flanges, and operative connections between the said gear wheels and brush shaft. 20th. The combination with a casing and a brush journalled in the casing, of a driving wheel, and a support for said driving wheel which is pivoted on the axis of the brush. 21st. The combination with a casing, and a brush journalled in the casing, of a driving wheel, a support for the driving wheel pivoted on the axis of the brush, and yielding connections between the casing and the driving wheel. 22nd. The combination with a casing, a brush journalled in the casing and a pan pivoted on the axis of the brush.

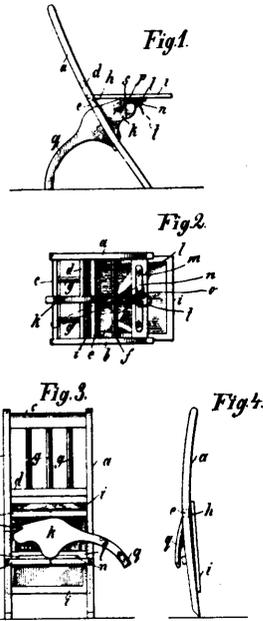
23rd. The combination with a casing, a brush journalled therein, a sweepings pan pivoted at one end on the axis of the brush and adapted to be supported at its other end on the floor independently of the casing and yielding connections between said sweepings pan and the casing. 24th. The combination with a casing, and a brush journalled therein, of a sweepings pan pivoted at one end on the axis of the brush, a wheel supporting the other end of the pan, and yielding connections between said wheel and casing. 25th. The combination with a casing and a brush journalled therein, of a sweepings pan pivoted at one end to the casing, a driving wheel supporting the other end of the pan, and operative connections between the driving wheels and brush. 26th. The combination with a casing and a brush journalled therein, of a sweepings pan pivoted at one end on the axis of the brush, a driving wheel supporting the other end of the pan, and operative connections between said driving wheel and brush, said driving wheel being movably connected with the casing in a manner to oscillate about a centre coincident with the axis of the brush. 27th. The combination with a casing and a brush journalled therein, of a driving wheel movably connected with the casing in a manner to oscillate about a centre which is coincident with the axis of the brush, driving connections between said wheel and brush, and a sweepings pan in the casing in position to receive the sweepings from the brush. 28th. The combination with a casing and a brush journalled therein, of a sweepings pan pivoted at one end on the axis of the brush, a driving wheel supporting the other end of the said pan, and operative connections between said driving wheel and brush. 29th. The combination with a casing and a brush journalled therein, of a sweepings pan pivoted at one end on the axis of the brush, a driving wheel supporting the other end of said pan, operative connections between said driving wheel and brush and yielding connections between said driving wheel and casing. 30th. The combination with a casing and a brush journalled therein, of a sweepings pan pivoted at one end on the axis of the brush, a driving wheel supporting the other end of the pan, and operative connections between the driving wheel and the brush which rotates the brush in the same direction in both the forward and backward movements of the sweeper. 31st. The combination with a casing and a brush mounted in the forward end of said casing, of a sweepings pan which is pivoted at its forward end on the axis of the brush. 32nd. The combination with a casing, the brush end of which is made collapsible, and a brush adjacent to the brush end of said casing, of a sweepings pan pivoted at one end on the axis of the brush. 33rd. The combination with a casing, the brush end of which is made collapsible, and a brush journalled in the said brush end of the casing, of a sweepings pan pivoted at one end on the axis of the brush and is adapted to be supported at its other end from the floor independently of the casing, and yielding connections between said pan and casing. 34th. The combination with a casing, the brush end whereof is made collapsible, and a brush journalled in said brush end of the casing, of a sweepings pan which is pivoted at one end on the axis of the brush, a driving wheel supporting the other end of the pan, operative connections between said driving wheel and the brush, and yielding connections between the driving wheel and the casing. 35th. The combination with a casing, the brush end whereof is made collapsible, and a brush mounted in said brush end of the casing, of a sweepings pan pivoted at one end on the axis of the brush, a driving wheel supporting the other end of the pan, operative connections between said driving wheel and brush which act to rotate said brush in the same direction in both the forward and backward movements of the sweeper, and yielding connections between the driving wheel and casing. 36th. The combination with the casing and a brush journalled therein, an operating handle pivoted on the axis of the brush, and operative connections between said pan and the handle of said sweeper, whereby the pan may be dumped by manipulation of the handle. 37th. The combination with a casing, a brush journalled therein and an operative handle, of a sweepings pan pivoted at its forward end on the axis of the brush, a gate pivoted to and closing the rear end of the pan, and operative connections between the said gate and said handle. 38th. The combination with a casing, a brush journalled therein and an operative handle, of a sweepings pan pivoted at its forward end on the axis of the brush, a driving wheel supporting the rear end of the pan, operative connections between the driving wheel and the brush, a gate pivoted to and closing the rear end of the pan and operative connections between said gate and the handle. 39th. The combination with a casing, a brush journalled therein, and an operating handle, of a pin pivoted at one end to the casing and adapted to be supported at its other end from the floor independently of the casing, a crank on the end of said handle, a gate pivoted to and closing the rear end of the pan, and a part rigid with said gate adapted for engagement by said crank. 40th. The combination with a casing, a brush journalled therein and an operating handle, of a pan pivoted at one end to the casing and adapted to be supported at its other end on the floor independently of the casing, a crank on one end of said handle, a gate pivoted to and closing the rear end of the pan, said gate being provided with an upward extension which extends almost to the top wall of the casing, which is adapted to be engaged by said crank to open the gate, and which prevents the sweepings from falling rearwardly past the sweepings pan. 41st. The combination with a casing, a brush journalled therein and an operating handle, of a sweepings pan pivoted to the casing, and operative connections between the operating handle and

pan acting to dump the pan by manipulation of the handle, said connections being constructed to maintain the sweeper substantially horizontal when the handle is substantially vertical and the sweeper is lifted from the floor thereby. 4nd. The combination with a casing, a brush journalled therein and an operating handle, of a sweepings pan pivoted at one end to the casing and adapted to be supported at its other end on the floor independently of the casing, and a crank on the end of the handle so arranged that when the handle is moved past the perpendicular towards the front end of the casing it will permit the rear end of the pan to be depressed into its dumping position. 43rd. The combination with a casing and brush journalled therein, an operating handle, of a sweepings pan pivoted at one end on the axis of the brush and supported at its other end on the floor independently of the casing, and a crank on the end of the handle so arranged that when the handle is moved past the vertical towards the front end of the casing it will engage and move the rear end of the pan into its dumping position. 44th. The combination with a casing, a brush journalled therein, and an operating handle, of a sweepings pan pivoted to the casing and adapted to be supported at its other end from the floor independently of the casing, a gate pivoted to and closing the rear end of the pan, a crank on said handle which, when the handle is moved past the perpendicular towards the front end of the casing, permits the rear end of the pan to be depressed into its dumping position and opens the gate. 45th. The combination with a casing, a brush journalled therein, and an operating handle, of a sweepings pan pivoted at one end of the axis of the brush and adapted to be supported at its other end from the floor independently of the casing, a crank on one end of the handle which, when the handle is moved past the vertical towards the front end of the casing, permits the rear end of the pan to be depressed into its dumping position, a gate pivoted to and closing the rear end of the pan, and means operating to open said gate when the pan is depressed. 46th. The combination with a casing, a brush journalled therein, and an operating handle, of a sweepings pan pivoted at one end on the axis of the brush and adapted to be supported at its other end from the floor independently of the casing, a crank on the end of the handle which is so constructed that when the handle is moved past the vertical towards the front end of the sweeper it permits the rear end of the pan to be depressed to its dumping position, a gate pivoted to and closing the rear end of said pan, and an arm rigid with said gate adapted for actuation by said crank. 47th. The combination with a casing, a brush journalled therein, and an operating handle, of a sweepings pan pivoted at one end to the casing, a crank on the handle, and a stop on the rear end of the pan, which is located over the crank when the handle is in its vertical position, and which engages the crank when the sweeper is lifted by the handle, to hold said sweeper in a substantially horizontal position. 48th. The combination with a casing, a brush journalled therein, and an operating handle, of a sweepings pan pivoted at one end on the axis of the brush, and adapted to be supported at its other end from the floor independently of the casing, a crank on the end of said handle and a stop on the rear end of the pan, which is located over the crank when the handle is in its vertical position and which engages the crank when the sweeper is lifted by the handle to lock said sweeper in a substantially horizontal position. 49th. The combination with a casing and a rotative brush therein, of a transverse shaft in the casing, a rotative driving wheel on said shaft, said driving wheel being provided with a wide rim and having the spokes thereof located on one side of the rim, a pinion on the brush shaft, and driving connections between the driving wheel and brush shaft pinion which are located within the space surrounded by said driving wheel rim. 50th. The combination with a casing and a rotative brush therein, of a pan located within the casing, said pan being made of less width than the casing and located at one side thereof, a driving wheel in the casing between the pan and one side wall of the casing, and operative connections between the driving wheel and the brush shaft which are located between the pan and said side wall of the casing. 51st. The combination with a casing and a rotative brush therein, of a sweepings pan in said casing, said pan being made narrower than the casing and located at one side thereof, a driving wheel within the casing between the pan and one side wall of the casing, operative connections between said driving wheel and the brush shaft, the spokes of the driving wheel being located at one side thereof, said operative connections being located in the space surrounded by the rim of the driving wheel. 52nd. The combination with a casing and a rotative brush therein, of a pan in the rear of the casing which is made narrower than the casing, an arm on the pan projecting laterally therefrom, said arm and the opposite wall of the pan being pivoted to the casing or the axis of the brush. 53rd. The combination with a casing and a brush in one end thereof, of a sweepings pan in the casing in rear of the brush, said pan being made narrower than the casing and located at one side thereof, a driving wheel between said sweepings pan and one wall of the casing, driving connections between the wheel and said brush, and an arm on the pad projecting laterally outside of said driving wheel and pivoted at its forward end to the casing wall in line with the axis of the brush, the opposite wall of the pan also being pivoted on the axis of the brush. 54th. The combination with a casing and a rotative brush in one end thereof, of a sweepings pan in the casing in rear of the brush, said pan being made narrower than the casing and located at one side thereof, a driving wheel between the pan and one side wall of the casing, a transverse shaft rigid with the pan

on which said driving wheel is mounted, operative connections between said driving wheel and the brush and an arm on the pan projecting laterally outside of said driving wheel and pivoted at its forward end to the casing in line with the axis of the brush, the opposite wall of the casing being also pivoted on the axis of the brush, and said driving wheel shaft being connected rigidly with said pan arm. 55th. The combination with a casing and a rotative brush in the forward end thereof, of a sweepings pan within the casing in rear of said brush, said brush being rotatively mounted at one end on a pintle which projects through the side wall of the casing, a shaft on the other end of the brush having bearing in the opposite wall of the sweepings pan, and an arm on the pan projecting laterally outside thereof and pivoted at its forward end to the casing in line with the axis of the brush. 56th. A carpet sweeper, comprising a casing, a brush rotatively mounted therein, a driving wheel, means for transmitting motion from the driving wheel to the brush constructed to rotate the brush in the same direction in both the forward and backward movement of the sweeper, and means for rotating the brush more rapidly when the sweeper is moving forwardly than when moving rearwardly. 57th. A carpet sweeper, comprising a casing, the brush end of which is made collapsible, a rotative brush in the casing adjacent to said collapsible end, a driving wheel, means for transmitting motion from the driving wheel to the brush, constructed to rotate the brush forwardly in both the forward and backward movement of the sweeper, and means for rotating the brush more rapidly when the sweeper is moving forwardly than when moving rearwardly. 58th. A carpet sweeper having a casing, the main portion of which is made rigid and the brush end of which is made collapsible, said collapsible end including the forward ends of the side walls, and means for removably attaching said collapsible brush end of the casing to the other part thereof. 59th. A carpet sweeper having a casing, the main portion of which is made rigid and the brush end is made flexible, a hem in the rear margin of said flexible brush end, and a strip inserted into said hem and bent to conform to the walls of the casing and removably attached thereto. 60th. A carpet sweeper having a casing, the main portion of which is rigid and the brush end of which is made flexible, hems in the rear margin of said flexible brush end which overlie the top and side walls of the casing, attaching strips inserted in the side hems and removably fastened to the side walls of the casing, said attaching strips being provided at their upper ends with bent over portions which overlie the upper wall of the casing, and a third attaching strip in the hem overlying the upper wall of the casing and removably attached to the upper wall of the casing. 61st. A carpet sweeper having a casing, the main portion of which is made rigid and the brush end of which is made flexible, hems in the rear margin of said flexible brush end which overlie the vertical walls of the casing, attaching strips in the hems and removably attached to the vertical walls of the casing, and a pintle rigid with one of said attaching strips and passing through the adjacent side wall of the casing and affording a bearing for one end of the brush core. 62nd. A carpet sweeper comprising a casing having a flexible brush end, a rotative brush adjacent to said flexible end, a sweepings pan in the casing in rear of and pivoted on the axis of the brush, a strip attached to the outer face of the side wall of the casing and affording means for securing the flexible front wall thereto, a pintle rigidly attached to said strip and projecting through the wall of the casing and affording one of the pivots for said sweepings pan. 63rd. A carpet sweeper comprising a casing, a brush rotatively mounted in the front end thereof, a sweepings pan in the casing in rear of said brush, which is made narrower than the casing, an arm on said sweepings pan projecting laterally therefrom and pivoted at its forward end to the casing in line with the axis of the brush, a pintle rigidly attached to one wall of the casing and engaging an axial bearing in one end of the brush core, a shaft driven tightly into the other end of the brush core and having bearing in the adjacent side wall of the pan, said shaft being provided with a pinion through which rotary motion is imparted to the brush. 64th. A carpet sweeper comprising a casing, a rotative brush in the front end thereof, a sweepings pan in the casing in rear of the brush, a driving wheel supporting one side of the pan and operatively connected with said brush, a wheel supporting the other side of the pan, and a wheel supporting the rear end of the casing and located between the sides thereof. 65th. A carpet sweeper comprising a casing, a rotative brush in the front end thereof, a sweepings pan in the casing pivoted on the axis of the brush, a driving wheel mounted on the sweepings pan at one side of the casing and operatively connected with the brush, a supporting wheel mounted on the opposite side of the pan, yielding connections between said sweepings pan and the casing, a supporting wheel at the rear of the casing located between the sides thereof. 66th. The combination with a casing, of a sweepings pan made of sheet metal and provided with an opening in the bottom wall thereof to receive a supporting wheel, in integral lug bent up from said bottom wall to receive the supporting wheel shaft, a shaft extending between said lug and side wall of the pan, and a supporting wheel rotative on said shaft. 67th. The combination with a casing, of a sweepings pan made of sheet metal and provided with an opening in the bottom wall thereof to receive a supporting wheel, an integral lug bent up from the bottom wall thereof to receive the supporting shaft, a shaft extending between said lug and the side wall of the pan, a supporting wheel rotative on said shaft,

and a shield attached to the side wall or the pan and covering said wheel. 68th. The combination with a casing and a rotative brush in the forward end thereof, of laterally separated wheels located between the ends of the casing and yieldingly connected with the casing in a manner to oscillate about a centre co-incident with the axis of the brush, operative connections between one of said wheels and the brush, and a supporting wheel located between the sides of the casing at the rear end thereof. 69th. The combination with a casing and a rotative brush in the forward end thereof, of two laterally separated wheels located between the ends of the casing and mounted on a frame which is pivoted to the casing, yielding connections between said casing and wheels permitting vertical movement of said casing, a supporting wheel located at the rear end of the casing between the side walls thereof, and yieldingly connected with the casing, and operative connections between one of the wheels and the brush. 70th. The combination with a casing and a brush in the forward end thereof, of a sweepings pan pivoted at its forward end to the casing, wheels supporting the rear end of said sweepings pan, operative connections between one of said wheels and the brush, and a leaf spring which is attached at its rear end to the sweeper casing and bears at its forward end against the rear portion of the sweepings pan. 71st. The combination with a casing, the brush end of which is made collapsible, and a brush adjacent to the brush end of the casing, of a driving wheel, a support for the driving wheel which is pivoted on the axis of the brush, and yielding connections between the driving wheel and casing. 72nd. The combination with a casing and an operating handle, of a sweepings pan pivoted at one end in the casing, a crank on the handle, a horizontal stop on the rear end of the pan which engages the end of the crank when the pan falls below its normal position, and a lateral stop also on the pan adapted at this time to engage with the rear side of the crank. 73rd. The combination with a casing, of a sweepings pan pivoted at its forward end in the casing and supported at its other end independently of the casing by means permitting vertical movement thereof, means permitting the depression of the rear end of the pan to dump the same, a stop arm on the rear end of the pan, and a stop stationary with the casing adapted for engagement by the stop arm to limit the depression of the pan. 74th. The combination with a casing and an operating handle, of a sweeping pan pivoted at the forward end in the casing, a grate closing the rear end of the pan, a crank on the handle adapted to engage the gate to open the same, means permitting depression of the rear end of the pan to dump the same and a stop arm on the pan adapted to engage the crank to limit the depression of the pan. 75th. The combination with a casing, and an operating handle, of a sweepings pan pivoted at its forward end in the casing, means permitting the depression of the rear end of the pan to dump the same, a crank on the handle, a stop on the rear end of the pan which engages the crank to hold the pan and casing substantially horizontal when the handle is substantially vertical and the sweeper is carried thereby, and a stop on the pan adapted to engage a stop stationary with the casing to limit the depression. 76th. The combination with the casing and a rotative brush therein, of a sweepings pan pivoted at one end to the casing, and supported at its other end from the floor, a gate closing the rear end of the pan, which is provided with a movable partition extending almost to the top wall of the casing, and a stationary partition depending from the top wall of the casing and overlapping said movable partition. 77th. The combination with a casing and a rotative brush therein, of a sweepings pan which is pivoted at one end to the casing and supported at its other end from the floor, and a stationary partition depending from the upper wall of the casing and overlapping the side wall of the pan.

to raise the seat in its turning and to engage fixing means provided at the lower side of the seat, a slot at the top end of the support



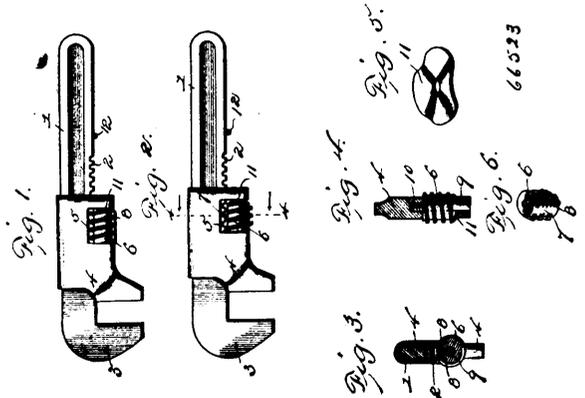
serving for preventing the seat from being raised or lowered when in position, substantially as and for the purposes set forth.

No. 66,522. Aluminium Precipitate.
(*Précipité d'aluminium.*)

John E. Thorntson and C. F. S. Semour Rothwell, both of Manchester, Lancaster, England, 7th March, 1900; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. The process of manufacturing a substance or compound applicable for various purposes by treating one or more of the aluminium or zinc salts of the fatty acids with a volatile solvent and drying or hardening the material, substantially as described. 2nd. As a new article of manufacture, a transparent substance or compound consisting of the dissolved salt of aluminium or zinc, and a fatty acid dried and hardened, substantially as described. 3rd. As a new article of manufacture, a transparent substance or compound consisting of an aluminium or zinc salt of one of the fatty acids treated with a volatile solvent dried or hardened. 4th. As a new article of manufacture, a transparent substance or compound consisting of an aluminium or zinc salt of one of the fatty acids dissolved in a volatile solvent, flowed or spread out into a thin film, then hardened and dried for photographic or other purposes.

No. 66,523. Wrench. (*Cle à érou.*)



No. 66,521. Chair. (*Siège.*)

Albert Rott, Freiheit, near Osterode, German Empire, 7th March, 1900; 6 years. (Filed 31st October, 1899.)

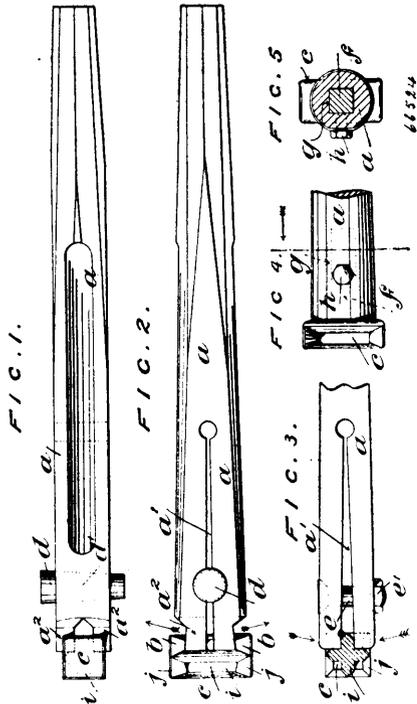
Claim.—1st. In a three legged folding chair having the third leg vertically supported in two of the cross bars of the back frame and the seat hingedly suspended so as to be raised by the action of turning, from either side, of the extension of the third leg, the combination of a pair of spring influenced levers pivoted to a ledge on the underside of the seat, said levers adapted to open outwards, but prevented from turning inwards when in alignment, and of a plate secured centrally to the ledge on the underside of the seat partly projecting inwardly and adapted to engage a slot in the extension of the third leg, substantially as and for the purposes set forth. 2nd. In combination with the seat of a three legged folding chair of the kind described, a ledge transversely secured to the underside thereof, said ledge carrying pivoted thereto, a pair of spring influenced levers and a plate centrally attached thereto, preventing the levers from further turning inwards when in alignment, substantially as and for the purposes set forth. 3rd. In combination with the back frame of a three legged folding chair of the kind described, a support forming the third leg, pivoted vertically rotatable to two of the cross bars of the back frame, the shorter end of the support adapted

Walter Gleason, Newaygo, Michigan, U.S.A., 9th March, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—In a sliding jaw wrench, the combination with a handle or shank having a fixed jaw, a movable jaw slidably upon the handle

or shank and provided with an opening or recess exposing the adjacent side of the handle or shank, of a smooth relatively fixed pivot pin having its opposite ends removably fitted in opposite walls of the recess or opening in the slidable jaw, a locking nut slidably mounted upon the pivot pin, and also having an axial movement thereon, and a spring washer fitted upon the pivot pin and bearing in opposite directions against one end of the nut and the adjacent wall of the recess or opening in the slidable jaw, and normally maintaining the opposite end of the nut in frictional engagement with the contiguous wall of the recess or opening, substantially as and for the purpose set forth.

No. 66,524. Rock Drill. (Machine à percer.)



W. M. McFarlane, Randfontein Estate, near Johannesburg, South African Republic, and Alfred Gozzard, 37 Wolsely Road, Sheffield, York, England, 9th March, 1900; 6 years. (Filed 8th March, 1899.)

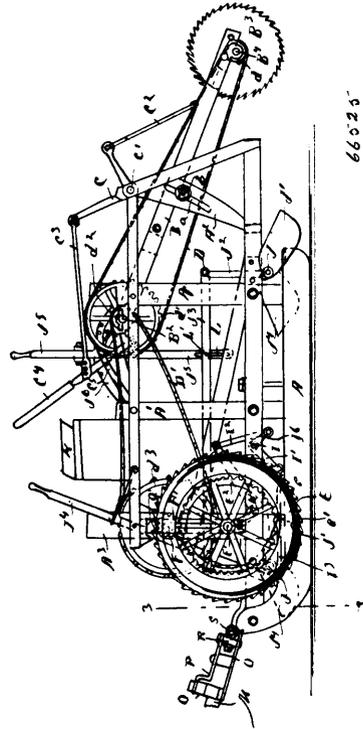
Claim.—1st. In combination with an interchangeable and detachable cutter for rock drilling and analogous drilling or boring apparatus, a holder provided with a flexible jaw and dovetailed parts by means of which the holder is securely attachable to the cutter and detachable therefrom in the manner and substantially as described. 2nd. A cutter comprising a central cutting edge and an edge at each end of the central edge extending transversely of and beyond the same with dovetailed abutments located to one side of the central edge to receive dovetailed parts on the holder. 3rd. A cutter comprising a central cutting edge and an edge at each end of the central edge extending transversely of and beyond the same with dovetailed abutments located to one side of the central edge to receive dovetailed parts on the holder, the said central edge being provided with oppositely arranged bevels, substantially as described. 4th. A cutter comprising a central cutting edge and an edge at each end of the central edge extending transversely of and beyond the same with dovetailed abutments located to one side of the central edge to receive dovetailed parts on the holder said central edge being provided with oppositely arranged bevels and being also produced beyond the transverse edges.

No. 66,525. Ice Cutter. (Coupe-glace.)

George A. Ames, Norwich, Vermont, U.S.A., 9th March, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. In an ice cutting apparatus, the combination with a carriage, of a traction gear, a shaft driven thereby, a sprocket wheel on the shaft, a second shaft mounted on the carriage, a frame mounted to swing about said second shaft, a sprocket wheel attached to the second shaft to drive it, a chain running between the two sprocket wheels to drive the second shaft, a saw shaft mounted on the free portion of the frame, a sprocket and chain gear: between the said second shaft and the saw shaft, a bell crank lever mounted on the carriage, a link connecting the bell crank lever with the swinging frame, a hand lever mounted on the carriage, and a link

extending between the hand lever and the bell crank lever. 2nd. In an ice cutting apparatus, the combination with a carriage and



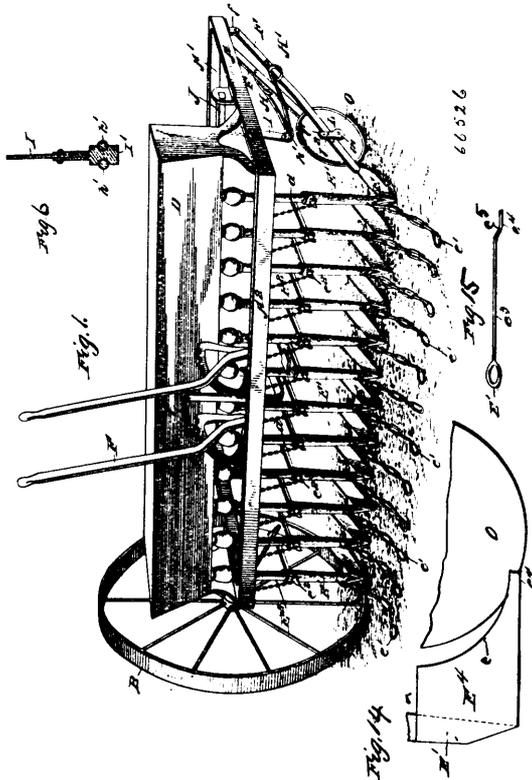
with the cutting tool, of a shaft, traction wheels attached to the shaft and serving to drive the same, boxes in which the shaft is carried, the boxes being vertically slidable in the carriage, a second shaft, boxes in which said second shaft is mounted, the boxes of the second shaft being also slidable in the carriage, means for connecting the two sets of boxes so that the two shafts move in unison, gearing for driving the second shaft from the first shaft, gearing between the second shaft and the ice cutting tool, to drive said tool, a hand lever mounted on the carriage, a link in connection with the hand lever, a rock shaft mounted on the carriage, a crank attached to the link and to the rock shaft, a second crank on the rock shaft, a bell crank lever mounted on the carriage and engaging one of the boxes to raise and lower the same, and a link between the second crank of the rock shaft and the bell crank lever. 3rd. In an ice cutting apparatus, the combination with the carriage and the ice cutting tool, of a shaft, traction wheels for driving the shaft, boxes in which the shaft is mounted, the boxes being vertically slidable on the carriage, a second shaft, gearing driving the same from the first shaft, boxes in which the second shaft is mounted, the boxes of the second shaft being vertically slidable in the frame, a connection between the two sets of boxes to move the same in unison, gearing for driving the ice cutting tool from the said second shaft, and means for raising and lowering the two shafts. 4th. In an ice cutting apparatus, the combination with a carriage and with the ice cutting tool, of a shaft, traction gearing for driving the same, the shaft being vertically movable with the traction gearing, gearing between the said shaft and the ice cutting tool to drive the latter, a bell crank lever mounted on the carriage and serving to raise and lower the traction gearing and the said shaft, a rock shaft mounted on the carriage and having connection with the bell crank lever, and a hand lever mounted on the carriage and having connection with the rock shaft. 5th. In an ice cutting apparatus, the combination with a carriage and with the ice cutting tool, of two rock shafts mounted on the carriage, two sets of guide blades, the members of which are respectively carried on the rock shafts, the guide blades swinging with the rock shafts to alternately throw the sets of blades into and out of engagement, an arm attached to each rock shaft, a link extending between the arms, and a hand lever having connection with the link.

No. 66,526. Grain Drill. (Semoir en ligne.)

Richard Hamilton Cotter and Thomas Dougan, both of Ingersoll, Ontario, Canada, 9th March, 1900; 6 years. (Filed 13th June, 1899.)

Claim.—1st. In a grain drill, the combination of a hoe, a drag frame connected to the hoe, and consisting of a pair of bars which are brought close together near their rear ends where they are connected with the hoe, and separated at their forward ends where they are connected with the main or draft frame, and a revolving

colter mounted between the drag bars in front of the hoe, substantially as set forth. 2nd. In a grain drill, the combination with a hoe,



and its drag bar on bars, of an adjustable revolving colter carried by the drag bar, whereby the colter and the hoe rise and fall together, substantially as set forth. 3rd. In a grain drill, the combination of a hoe, a drag frame connected with the hoe near its lower, forward position, and consisting of a pair of drag bars, which spread from their lower, rear ends to their upper, forward ends, where they are connected with the main or draft frame, and a brace or tire bar connecting the upper tubular portion of the hoe with the intermediate portion of the drag frame, substantially as set forth. 4th. In a grain drill, the combination of a hoe, a drag frame connected with the hoe near its lower end and consisting of a pair of drag bars which spread or separate from their lower rear ends, to their forward ends, where they are connected to the draft or main frame, a colter arranged in front of the hoe, and between the said drag bars and bearings in which the colter is supported, the said bearings being adjustable lengthwise of the drag frame, and the colter being adjustable vertically in its bearings, substantially as set forth. 5th. In a grain drill, the combination with a hoe, and its bar, of a revolving colter and a carrier comprising pivot bearing and plates having ribs adapted to engage with the edges of the drag bars to prevent rotation of the plates relative to the drag bars, substantially as set forth. 6th. In a grain drill, the combination with a hoe and its drag bar or bars, of a revolving colter, and a carrier comprising a pivot bearing which is supported at its ends in a plate which in turn is adjustably mounted on the drag bar, or drag bars, both vertically and lengthwise of the drag bar or bars, substantially as set forth. 7th. In a grain drill, the combination of a hoe, a drag frame having the separate drag bars, F, F, a colter mounted in front of the hoe, and between the drag bars, flanged plates K, secured to the drag bars F, F, and upright hangers L, L, in which the colter is mounted so as to be free to revolve, the hangers being secured to the plates K, and vertically adjustable, substantially as set forth. 8th. In a grain drill, the combination with the revolving colter, of a hoe having its forward end or sole disposed close to the lower part of the colter to travel in the groove formed by said colter, substantially as set forth. 9th. In a grain drill, the combination with a revolving colter, of a hoe having its forward end or sole extended to overlap the lower edge of said colter, substantially as set forth. 10th. A grain drill having its forward end or sole expanded and extended, substantially as set forth.

No. 66,527. Lamp Burner. (Bec de lampe.)

Mark Anthony, Providence, Rhode Island, U.S.A., 9th March, 1900; 6 years. (Filed 20th November, 1899.)

Claim.—1st. In a lamp burner, in combination, a burner tube inclosing a wick tube, a cap, secured to the burner tube, for closing the fluid chamber, a wick tube, a rack on the wick tube, a pinion

engaging with the rack on the wick tube, a pivotal support for the pinion and an extinguisher cap connected to and operated by the

Fig. 1.

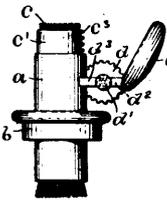


Fig. 3.

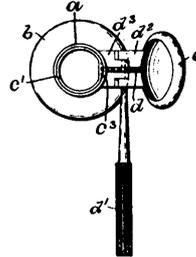


Fig. 2.

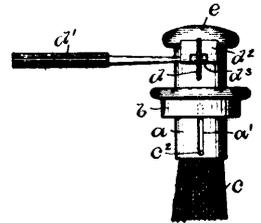
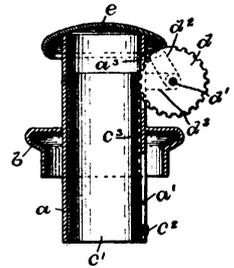


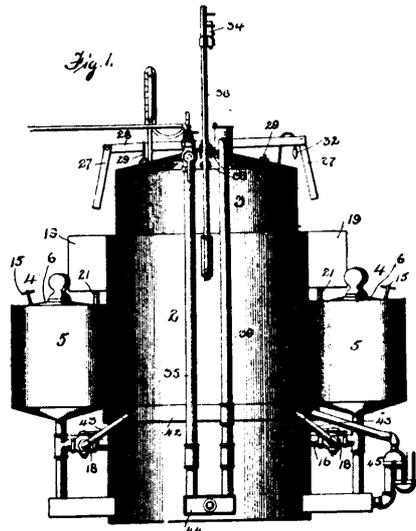
Fig. 4.



pinion, whereby the burner is supported on the fluid chamber and the cap connected with the pinion closes the upper end of the burner tube as the wick tube is moved down to extinguish the flame, as described. 2nd. In a lamp burner, in combination, the burner tube a, the slot a¹ in the burner tube, the cap b secured to the burner tube about midway its length, the wick c, the wick tube c¹, the rack c³ on the wick tube, the bracket d³ extending from the burner tube, the bracket d² pivoted on the bracket d³, the spindle a¹, the pinion d and the extinguisher cap e connected with the bracket d², whereby, in raising the wick, the burner tube is automatically uncovered and in lowering the wick the flame is extinguished, as described.

No. 66,528. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

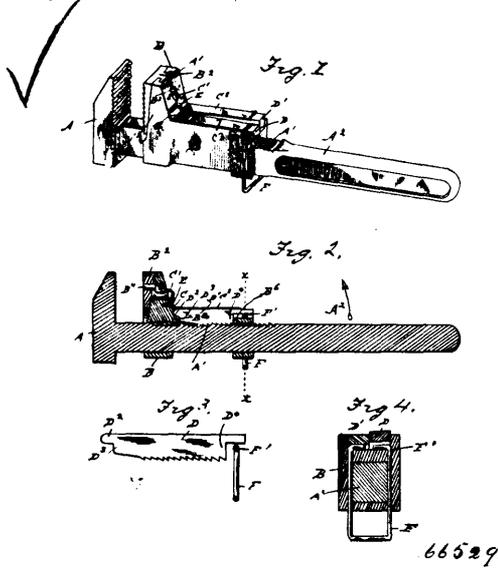


Anthyme Lucas, Edmundston, New Brunswick, Canada, 9th March, 1900; 6 years. (Filed 28th February, 1899.)

Claim.—1st. The combination with a gasometer, and a series of generators, the generators becoming active successively, of electrical connections, operated when one of said generators becomes inactive, whereby a warning will be given, substantially as described. 2nd.

The combination with a gasometer, and a series of generators, the generators being automatically brought into activity successively, of electrical connections, operated when one of said generators becomes inactive, whereby a warning will be given, substantially as described. 3rd. The combination with a telescoping gasometer, and a series of generators, the generators becoming active successively, of electrical circuit closing mechanism mounted on said gasometer, said mechanism being normally in inoperative position, alarm mechanism located in said electrical circuit, and a contact piece, carried by the telescoping section of the gasometer, said contact piece being adapted to close said circuit at a predetermined period in the movement of said section, whereby an alarm will be automatically given when one of said generators becomes inactive, substantially as described. 4th. An acetylene gas generating apparatus, comprising a telescoping gasometer, a series of generators, pipes, forming gas conduits, leading from said generators to said gasometer, a water reservoir for each of said generators, a pipe, forming water conduits leading from each of said reservoirs to its respective generator, valves located within said reservoir for closing the outlet therefrom, a rocking lever mounted on the telescoping section of said gasometer, said lever having downwardly extending arm, adapted to contact with and open said valves in said reservoir, said arms being adapted to contact successively, and catches, formed on said telescoping section, for holding said rocking lever in one of its adjustable positions, substantially as described.

No. 66,529. Wrench. (*Clé à écrou.*)



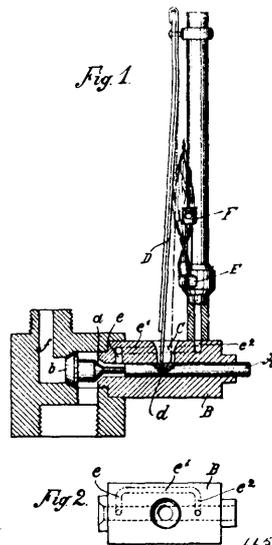
William H. Robinson, Marion, Iowa, U.S.A., 9th March, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a wrench, the combination with a jaw having a shank and handle rigidly attached thereto, the shank being serrated on one side, of a sliding jaw mounted on said shank, a pair of dogs mounted in a recess in said sliding jaw adjacent to the serrated side of the shank, with ends abutting on shoulders formed in said jaw slide, springs adapted to hold said dogs in engagement alternately with said shank, and a lifter extending through the slide portion of the jaw from the opposite side and engaging the free ends of the dogs, the teeth of said dogs being alternate, substantially as and for the purpose set forth. 2nd. In a wrench, the combination with the fixed jaw and its serrated shank, of a sliding jaw movable on said shank and having an angled plate fitted to slide on the angled face of the jaw to tighten the wrench on the work, serrated dogs mounted in a suitable recess in the slide portion of the jaw, a suitable lifter therefor adapted to be pressed by the thumb of the operator to disengage the dogs, and springs to hold the dogs normally in engagement with the shank and to force the inclined plate outwardly to normal position, substantially as described. 3rd. In a wrench, the combination with the fixed jaw and its serrated shank, of a sliding jaw movable on said shank and having an inclined face adjacent to the fixed jaw, an inclined plate having an interlocking sliding connection with said inclined jaw, a spring adapted to force it outwardly to normal position, a stop to limit its outward movement, a pair of alternately engaging dogs co-acting with the serrated shank, springs to hold them in engagement, and a lifter adapted to disengage them, substantially as described. 4th. In a wrench, the combination with the fixed jaw and its serrated shank, of a sliding jaw movable thereon and having an inclined face opposite the fixed jaw extending some distance below the face of the shank fronting said jaws, an inclined plate having an interlocking sliding connection with said inclined jaw and notched at its end adjacent to the shank so as to straddle the same when forced downwardly, a

spring to force it normally outwardly, a stop to limit its outward movement, and means substantially as described for retaining the sliding jaw in any desired position.

No. 66,530. Self-igniting Gas Burner.

(*Appareil automatique à allumer le gaz.*)



Richard Beese, Dresden, (Germany, 9th March, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—1st. In a self-igniting gas burner, the combination of a common valve stem and an actuating metallic plate in direct connection therewith, substantially as described. 2nd. In a self-igniting gas burner, the combination of two valves, a common stem in connection therewith, suitable gas channels through which the gas flow is adapted to be regulated by said valves, and an actuating metallic plate in direct connection with said stem, substantially as described. 3rd. In a self-igniting gas burner, the combination of two valves, a common horizontal stem in connection therewith, suitable gas channels formed in said burner, the gas flow through which being regulated by said valves, a self-igniting mass and an actuating metallic plate adjacent thereto and directly acting upon said stem, substantially as described. 4th. In a new and improved self-igniting gas burner, the combination of a block provided with a gas channel therein, a head piece in connection with said block and also provided with gas channels therein and in communication with said first, a horizontal stem in said block, a lip on said stem, valves on the forward end of said stem and engaging respectively seats formed in said block and head piece, a hollow tube, a self-igniting mass thereon, an expanding and contracting plate adjacent thereto and having its lower end passed through an opening in said block and directly engage said stem lip, substantially as described.

No. 66,531. Air Furnace or Heater.

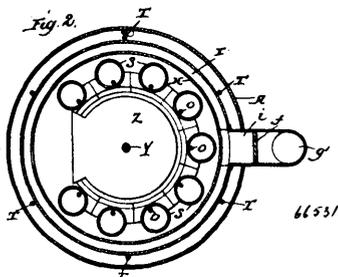
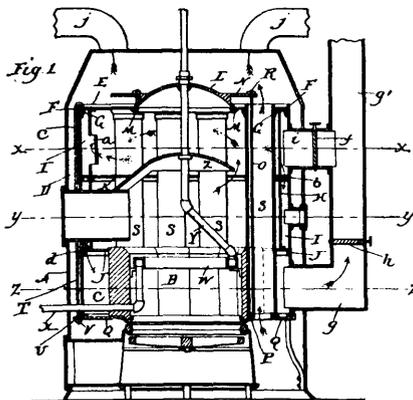
(*Fournaise à air ou chauffeur.*)

Urias S. Fortiner and William Chamberlain, Wells, both of Philadelphia, U.S.A., 9th March, 1900; 6 years. (Filed 16th February, 1900.)

Claim.—1st. A furnace consisting of an outer casing, an inner casing or partition so arranged as to form a space between the two casings, decks or horizontal partitions closing the inner casing at each end, a second inner casing or partition so arranged as to form a space inside of the first inner casing, a series of hot air pipes extending through the top and bottom deck, a fire pot formed of sections of cast iron having asbestos fibre packing therebetween, a water ring located with the fire pot so as to be completely exposed to the action of fire, an induction pipe leading to the ring, and a circulating pipe leading from the ring upward through the centre of the furnace, suitable flues for maintaining a draft, and dampers for regulating said draft, as specified. 2nd. In combination with a furnace of the character described, a water ring so located as to be completely exposed to the action of the fire, a pipe for conveying water to the ring, and a pipe for conveying water from the ring, as shown and described. 3rd. In combination with a furnace of the character described, an inner casing so disposed within the outer casing of the furnace as to produce a space therebetween, a deck for closing the upper end of the inner casing, a deck for closing the lower end of the inner casing, rods so arranged as to tie these parts together, but air pipes extending through the two decks so as to form passages for the air, a cone shaped deck head for closing the central opening in the upper deck, rods for securing this head in place, said rods being passed through the hot air pipes, a water ring so located

as to be entirely exposed to the action of the fire, a pipe leading thereto, a pipe leading therefrom which passes upward through the

veyed into a suitable receptacle, the construction being such that the centrifugal force of the wheel will cause the cylinders to compress

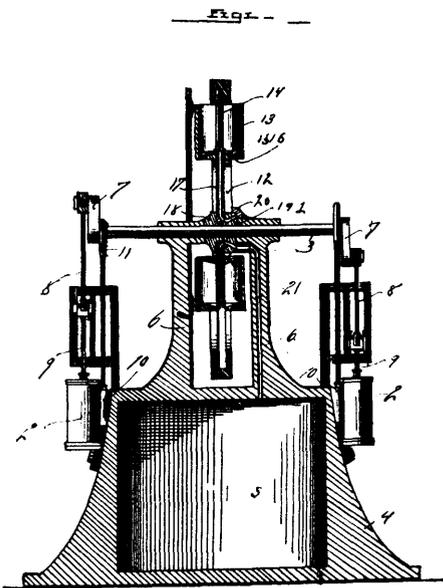


centre of the furnace, a baffle plate secured upon this last named pipe for deflecting the products of combustion, a circular partition located inside of the inner casing so as to form a space, a series of openings for causing the products of combustion to follow a circuitous outlet, draft flues leading from the furnace, and suitable dampers located therein for regulating the draft, as specified. 4th. In combination with a furnace of the character described, a fire pot composed of a series of cast iron sections having asbestos fibre interposed between their meeting edges, and an inner casing so arranged as to form a space around the fire pot whereby the products of combustion may be caused to pass through this space, as and for the purpose set forth. 5th. In combination with a furnace of the character described, decks or horizontal partitions formed in ring shape, the ends of which do not meet, a joint formed at these ends consisting of a plate, and a suitable packing of asbestos fibre so interposed as to make the joint air tight, as specified. 6th. In combination with a furnace of the character described, an inner casing having its ends closed by decks, the joints between the decks and casing consisting of annular grooves with asbestos fibre therein, upon which is seated the flanges of the decks, as and for the purpose set forth. 7th. In combination with an inner casing of a furnace of the character described, suitable decks connected therewith by joints containing asbestos fibre, of a dome shaped deck head closing the central opening of the upper deck, a suitable groove formed in the deck, asbestos fibre placed therein, and flanges formed upon the deck head for fitting within said groove against the fibre, as and for the purpose set forth. 8th. In combination with a furnace of the character described, a joint for connecting the interior parts of the furnace consisting of a suitable groove in which asbestos fibre is placed and against which the edge of the other member of the joint bears, as specified. 9th. In combination with a furnace of ordinary construction, a water ring of such diameter as to be passed through the grate space to the fire pot, and when in position be completely exposed to the action of the fire, a pipe leading to the water ring, a pipe leading therefrom and passing upward through the furnace, a baffle plate secured to this last named pipe, and a deck head secured upon the upper deck, as shown and described.

No. 66,532. Air Accumulator. (*Accumulateur d'air.*)

Harvy H. Houghland, Indianola, Nebraska, U.S.A., 9th March, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In an accumulator for compressing air comprising a series of cylinders mounted upon the spokes of the fly wheel of an engine, piston heads working in the said cylinders, and means connecting the interior of the pistons with a reservoir, the construction being such that the centrifugal power of the wheel may be utilized to compress air, substantially as described. 2nd. An accumulator for engines comprising cylinders adapted to slide upon the spokes of the engine fly wheel, piston heads, secured to the said spokes, a valve for admitting air in the said cylinders, passage ways passing through the said spokes for leading the air to a place where it may be con-

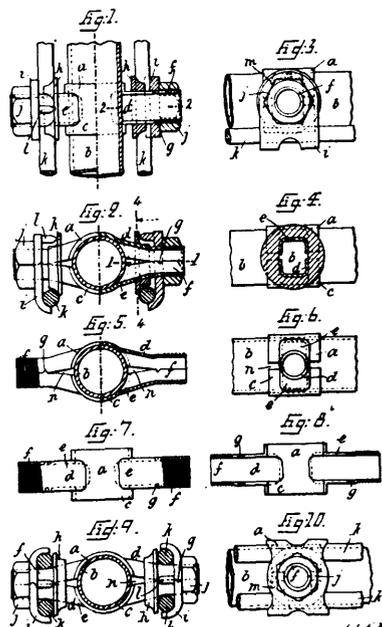


66532

air, substantially as described. 3rd. In an air accumulator, the combination with an engine, of a fly wheel having hollow spokes, pistons moving upon the said spokes and adapted to compress air into the hollow portion thereof, a hub having a ground face supported on said spokes, a pillow block having a corresponding ground face, said pillow block also being provided with a passageway leading from the hub of the wheel to an air accumulating reservoir, the passage in the spokes of the wheel being adapted to coincide at a suitable time with passageway in the pillow block whereby the air compressed by the cylinder may be forced into the said reservoir, substantially as described. 4th. In an air accumulator, the combination with a motor, of a fly wheel operated thereby, said fly wheel having hollow spokes, pistons moving upon the said fly wheel in one direction for compressing air into the spokes, a guide adapted to engage friction rollers on the cylinders for carrying them toward the hub of the wheel, and means for conveying air from the spokes into a suitable receptacle, substantially as described.

No. 66,533. Cycle Saddle Clip.

(*Appareil à assujétir les selles aux bicyclets.*)

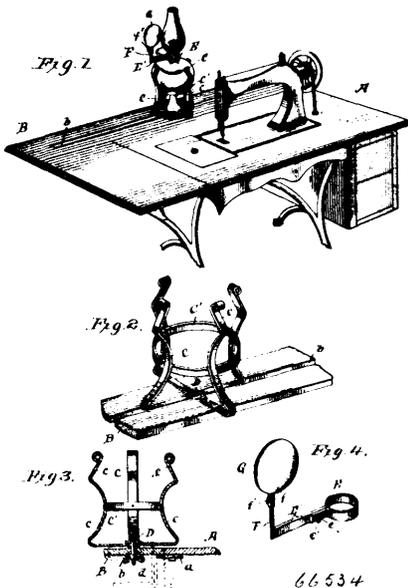


66533

John Thomas, 53 Bloemfontein Avenue, Uxbridge Road, London, England, 9th March, 1900; 6 years. (Filed 24th October, 1899.)

Claim.—1st. In saddle clips for cycles and the like, a saddle pillar yoke clip formed in half parts having sectional centre parts together adapted to engage the saddle pillar nearly all round with a radial grip at every part, and each having oppositely projecting lateral extensions tapering from an oblong shape to semi-circular and externally screwed end continuations and adapted, when the half parts are in situ, to together form oblong extensions spaced apart at their edges and interlocking tubular end continuations, as set forth. 2nd. In saddle clips for cycles and the like, in combination, a saddle pillar yoke clip formed in half parts having sectional centre parts together adapted to engage the saddle pillar nearly all around with a radial grip at every part, and each having oppositely projecting lateral extensions tapering from an oblong shape to semi-circular and externally screwed end continuations and adapted, when the half parts are in situ, to together form oblong extensions spaced apart at their edges and interlocking tubular end continuations, and a pair of co-acting washers and a nut for each such extension, the two pairs of washers being adapted to support the saddle frame between them in a variable position, and the two inner washers having their bores shaped and adapted to engage with the diverging oblong parts of the respective yoke clip lateral extensions, and the two outer washers being mounted on the cylindrical parts of such extensions in adjustable relation to the inner washers, and the nuts serving to press the respective outer washers against the inner washers so as to hold the saddle frame between them and to force the inner washers on the respective diverging oblong parts of the yoke clip extensions so as to cause the yoke clip centre parts to grip the saddle pillar circumferentially with a radially operating grip bearing equally at all parts, as set forth.

No. 65,534. Lamp Holding Device. (Porte-lampe.)



66534

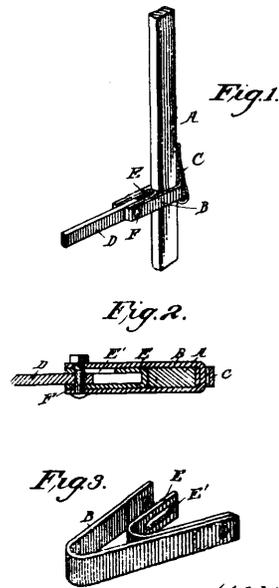
Martha M. W. Parvin, Muscatine, Iowa, 9th March, 1900; 6 years. (Filed 13th March, 1899.)

Claim.—1st. In a lamp holding attachment for sewing machines, the combination of the longitudinally slotted plate attached to the top of the machine, with a lamp holder, consisting of a series of spring strips united at their lower ends to a threaded bolt and having upwardly projecting portions bent substantially as described so as to clasp the globe of the lamp, said bolt depending through the slot in the plate so that the holder can be adjusted longitudinally of the machine top, and a nut on said bolt by which the holder is detachably and adjustably secured to the plate. 2nd. In a lamp holding attachment for sewing machines, the combination of the longitudinally slotted plate hinged to the table top of the machine, and means for holding said plate parallel with the top, with a lamp holder consisting of a series of spring strips united at the lower ends to a bolt and connected intermediate their ends to an annulus, and having projecting portions above their annulus bent so as to clasp the globe of a lamp, said bolt depending through the slot in the plate, by which the holder is detachably and adjustably secured thereto, substantially as described. 3rd. The herein described adjustable lamp support for sewing machines, consisting of the longitudinally slotted plate B hinged to the table top of the machine, and means for holding said plate in line with the top of the machine, with the lamp holder consisting of radial pieces C connected at their lower ends to a bolt D projecting through the slot in the plate, and having a nut d on its end below the plate, said strips being also bent upwardly and connected to an annulus C'

above the plate and extending above said annulus, the portions of the spring above said annulus being bent into clasps c adapted to clasp and hold the lamp, for the purpose and substantially as described.

No. 66,535. Attachment for Looms.

(Attache pour métiers.)



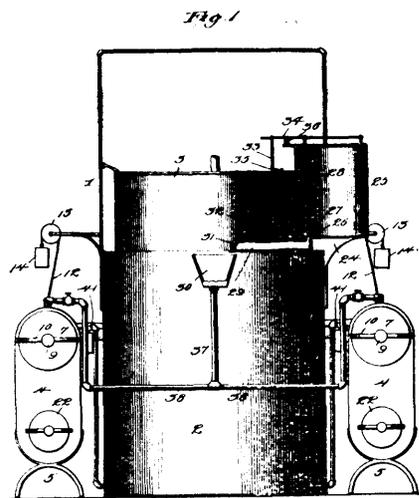
66535

Joseph Begins, Lisbon Centre, Maine, U.S.A., 9th March, 1900; 6 years. (Filed 6th May, 1899.)

Claim.—1st. In an attachment for looms, the combination with the picker stick, lug strap and pitman, of an adjustable bearing loop arranged within the lug strap, substantially as described. 2nd. In an attachment for looms, the combination with the pitman, of a picker stick, a lug strap embracing the picker stick and secured to the pitman, a bearing strap fastened to one end of the lug strap and longitudinally slotted at the other end, substantially as described. 3rd. The combination with the picker stick, loop and lug straps, of the longitudinally slotted looped bearing strap constructed as described and arranged within the lug strap and bearing against the picker stick, substantially as shown and described.

No. 66,236. Acetylene Gas Generator.

(Générateur à gaz acétylène.)



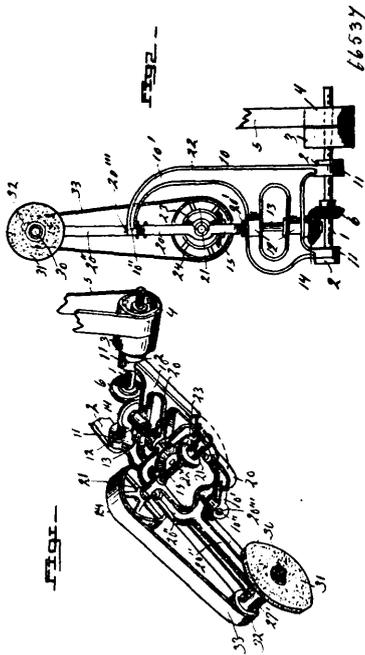
66536

James Presson, Schreiber, Ontario, Canada, 9th March, 1900; 6 years. (Filed 12th April, 1899.)

Claim.—1st. In an acetylene gas generating apparatus, the combination with a telescoping gasometer, a plurality of generators, and pipes connecting said generators and said gasometer, of a water

receptacle, a valve controlling the outlet port of said receptacles, a delivery tube located in juxtaposition to said outlet port, said delivery tube being normally closed against the escape port of water, said valve being open when said delivery tube outlet is closed, pipes leading from the delivery end of said delivery tube to said generators, and a lever, operated by the movement of said telescoping gasometer, for simultaneously closing the outlet port of said water receptacle and opening the outlet port of said delivery tube, whereby water will be delivered to said generators in regulated quantities, substantially as described. 2nd. The combination with a gasometer, of a generator, having a removable, revoluble carbide receptacle located therein, an escapement mechanism connected to said carbide receptacle, said mechanism extending into the path of movement of the bell of the gasometer, and operated thereby, and a weight connected to said carbide receptacle and to said mechanism, whereby when the said mechanism is operated by the bell of the gasometer, said receptacle will be given an intermittent rotary movement, substantially as described. 3rd. The combination with a generator, of an escape pipe, a flexible tube connecting said generator and said escape pipe, and a reversible water trap located within said flexible pipe or tube, said trap, when in operative position, serving to prevent the escape of gas from said generator during the normal gas pressure, but allowing of the escape of the surplus gas when said gas pressure is above the normal, said trap, when in reversed position, serving to form an open passage way between said generator and escape pipe, substantially as described.

No. 66,537. Horse Shoe Calk Sharpener.
(Appareil pour aiguiser les crampons de fer à cheval.)



Henry J. Stanley, East Berkshire, Vermont, U.S.A., 9th March, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a machine of the character described, the combination with a horizontal driving shaft mounted in bearings, a frame having ears journalled on said shaft next its bearings, a driven shaft journalled in said frame at right angles to the driving shaft and gearing between these shafts, of a cross shaft supported at right angles to the driven shaft, gearing between this cross shaft and the driven shaft, means for swinging the cross shaft bodily, the tool, and connections between it and the cross shaft, as and for the purpose set forth. 2nd. In a machine of the character described, the combination with a frame mounted on horizontal pivots, a driving shaft, a driven shaft journalled in the frame and connections between these shafts, of a yoke pivoted in the frame in axial alignment with the driven shaft, a cross shaft carried by said yoke, connections between this shaft and the driven shaft, an arm on the yoke projecting beyond the outer end of the frame, a tool carried by such arm, and connections between the tool and cross shaft, as and for the purpose set forth. 3rd. In a machine of the character described, the combination with a frame mounted on horizontal pivots, a driven shaft journalled longitudinally in said frame and driven from a suitable source, a yoke comprising a curved body standing within the frame and pivoted thereto in axial alignment with said shaft, and an arm on the yoke projecting beyond the outer end of the frame, of a tool supported by the outer end of such arm, a cross shaft journalled in the yoke between the centre of its

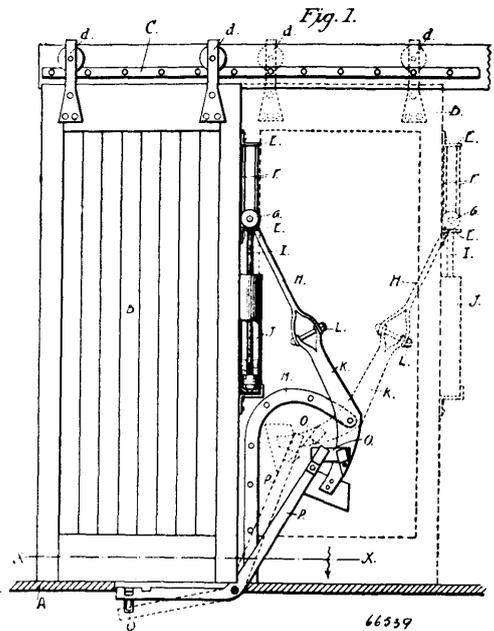
curved body and the inner end of said arm, pulleys on this shaft and on the tool shaft, as and for the purpose set forth. 4th. In a grinding machine, the combination with a frame having an open body and an extension from one side of the same with an eye at its outer end, a shaft journalled longitudinally in said body in alignment with the eye and means for rotating said shaft, of a yoke having a curved body with an eye at one end journalled on said shaft and a pin at the other entering said eye, such body standing within the body of the frame and extension, an arm carried by the outer end of the yoke opposite its pin, bearings on the yoke body and at the inner end of said arm, a cross shaft journalled therein, gears connecting this shaft with the driven shaft, a grinding tool at the outer end of the arm, and connections between the tool and cross shaft, as and for the purpose set forth. 5th. In a grinding machine, the combination with a frame having a longitudinal driven shaft and an eye at its outer end in alignment therewith, a yoke journalled on said shaft and in such eye, an arm carried by the yoke and a transverse bearing at the outer end of the arm, of a cross shaft journalled in the yoke and geared to the driven shaft, a pulley on the cross shaft, a grinder shaft journalled in the bearing of the arm, a grinding tool on that end thereof which stands in alignment with the driven shaft, a pulley on the other end, and a belt connecting the pulleys, as and for the purpose set forth.

No. 66,538. Means for Preventing Corrosive Action of Explosion in Guns. (Moyen d'empêcher l'action corrosive des gaz dans l'explosion des canons.)

Samuel Neal McClean, Washington, Iowa, U.S.A., 9th March, 1900; 6 years. (Filed 16th March, 1899.)

Claim.—1st. The method of preventing the corrosive action of gases of explosion upon guns or other metallic surfaces, which consists in coating said surfaces with a preparation containing graphite or plumbago. 2nd. The method of protecting guns or other metallic surfaces from the corrosive action of the gases of explosion, which consists in coating the surfaces to be protected with a compound of graphite or plumbago and a suitable oil. 3rd. The method of protecting guns and other metallic surfaces from corrosive action of gases of explosion, which consists in applying graphite or plumbago thereto.

No. 66,539. Door. (Porte.)



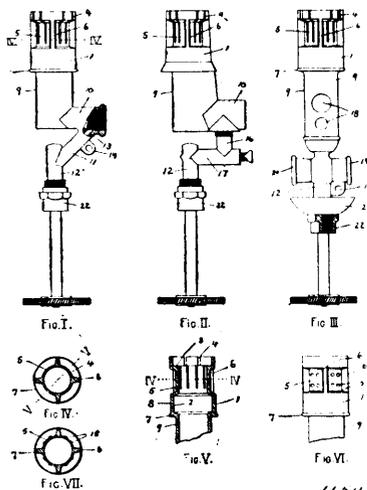
John H. Whitaker, Davenport, Iowa, U.S.A., 9th March, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. A sliding door in combination with a pivoted angular arm or lever whose upper end is loosely connected with the rear of said door, the lower end of said angular arm or lever provided with a weight and connected with a bell crank lever, and means for operating said bell crank lever, for the purposes stated. 2nd. In combination, a sliding door, brackets on the edge thereof, guide rods extending from one bracket to the other, a grooved wheel guided by the rods, a lever having an angular extremity on which a wheel is mounted, said lever comprising two members pivoted centrally, a weight on the lower member below its fulcrum, a bell crank connected with the lever, and means whereby the bell crank is operated, substantially as described. 3rd. In combination with a cylinder, piston and piston rod, a lever having an angular extremity to which

the piston rod is connected, a grooved wheel mounted on the extremity of the lever, upright rods forming a guide for the lever, brackets attached to the door and supporting the rods, a weight on one end of the lever below the fulcrum, a bell crank suitably pivoted, a link connecting the bell crank and lever, and means for manually operating the bell crank, substantially as described. 4th. In combination with the cylinder, piston and piston rod, a lever having an angular extremity to which the piston rod is connected, a grooved wheel mounted on the extremity of the lever, upright rods forming a guide for the wheel, brackets attached to the door and supporting the rods, a weight on the end of the lever below the fulcrum, a bell crank suitably pivoted, a link connecting the bell crank and lever, a series of levers having V-shaped apertures, a plurality of bars passing through said apertures and supporting said levers, and a platform connected to the outer end of the outer lever, substantially as described. 5th. In combination with the cylinder, piston and piston rod, a lever having an angular extremity to which the piston rod is connected, a grooved wheel mounted on the extremity of the lever, upright rods forming a guide for the wheel, brackets attached to the door and supporting the rods, a weight on the end of the lever below the fulcrum, a bell crank suitably pivoted, a link connecting the bell crank and lever, a series of levers pivoted in a suitable housing, and a platform connected with the outer lever, the bell crank being connected with the inner lever, substantially as described. 6th. In combination with a sliding door, a lever for operating the door comprising two sections loosely joined, a wheel mounted on an angular extremity of the pivoted arm and operating on a suitable guide on the door, a weight on the end of the lever below the fulcrum, and weight operated means for actuating the lever in one direction, substantially as described. 7th. In combination with a sliding door, a wheel mounted on an angular extremity of the lever and operating in a suitable guide on the door, said lever comprising two sections loosely joined, a weight on the end of the lever below the fulcrum, a bell crank suitably pivoted, a link connecting the bell crank and lever, a housing embedded on a line with the floor, levers mounted on rods arranged transversely in the housing, a hook connecting the inner end of the inner level with the end of the horizontal member of the bell crank, and a platform having its end resting on the outer end of the outer lever, substantially as described. 8th. In combination with a door, a cylinder, a piston comprising a perforated plate, a washer loosely arranged on the piston rod, a float on the rod below the washer, means for holding the parts on the rod, a lever having an angular extremity to which the piston rod is connected, a grooved wheel mounted on the extremity of the lever, upright rods supported on the door forming a guide for the wheel, a weight on the end of the lever below the fulcrum, a bell crank suitably pivoted, a link connecting the bell crank and lever, a series of levers pivoted in a suitable housing and a platform connected with the levers, substantially as described.

No. 66,540. Hydro Carbon Burner.

(Foyer à hydro-carbures.)



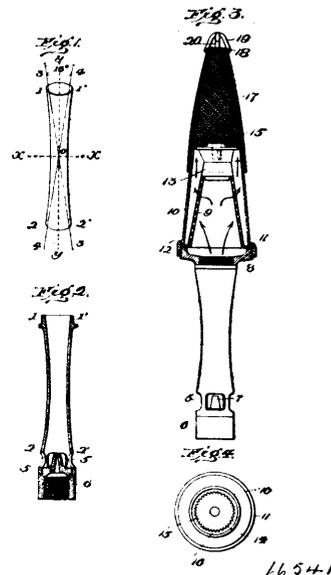
Hermann, Merkel, St. Louis, Missouri, U.S.A., 9th March, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a hydro carbon burner, a hollow cylinder forming a mixing chamber and having recesses in its outer face below the plane of the flame screen and having gas openings leading through its wall, the said recesses being in such a position that the gas coming from said gas openings and burning within the recesses, form sub flames which are within the lower end of the mantel and below the plane of the flame screen, substantially as specified. 2nd. In a hydro carbon burner, cylinder forming a mixing chamber and formed to receive the flame screen in its upper end, said cylinder having recesses in its outer face and gas openings leading through

its wall to said recesses, said recesses being below the plane of the flame screen and within the mantel. 3rd. In a hydro carbon burner, a cylinder forming a mixing chamber and formed to receive a flame screen in its upper end, and having gas openings leading through its wall below the plane of the flame screen and within the plane of the mantel, substantially as specified.

No. 66,541. Incandescent Gas Burner.

(Brûleur de gaz incandescent.)



Ottmar Kern, Paris, France, 9th March, 1900; 6 years. (Filed 23rd March, 1899.)

Claim.—1st. A bunsen burner having a gas conduit shaped as a hyperboloid that is generated by a hyperbola rotating about its axis of ordinates, substantially as described. 2nd. A bunsen burner having a gas conduit shaped as a hyperboloid that is generated by a hyperbola rotating about its axis of ordinates and the asymptotes of which form an angle of more than twelve degrees and less than twenty degrees, substantially as described. 3rd. A bunsen burner having a gas conduit shaped as a hyperboloid that is generated by a hyperbola, rotating about its axis of ordinates and the asymptotes of which form an angle of about sixteen degrees, substantially as described. 4th. In an incandescent gas burner, an annular gas outlet formed by a disc having a toothed edge and a tube concentrically surrounding the same, the disc being supported by and in good heat conducting relation to a heavy block, the said disc and block being made of a metal that is a good conductor of heat, for maintaining the disc at a moderate temperature, substantially as described. 5th. An incandescent gas burner having an annular gas outlet formed by the circular upper edge of the burner and a toothed disc of smaller diameter located within the same, whereby a steady annular flame composed of a continuous succession of thicker and thinner segments is produced, substantially as described.

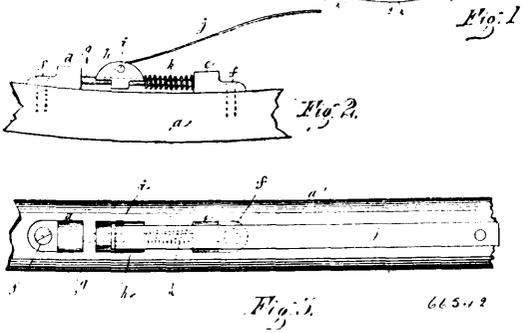
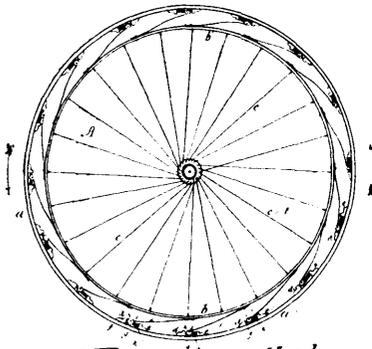
No. 66,542. Bicycle. (Bicycle.)

Michael James Donovan, Waterdown, and Daniel McNamara, Burlington, both in Ontario, Canada, 9th March, 1900; 6 years. (Filed 6th November, 1899.)

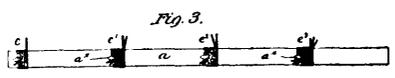
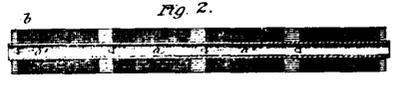
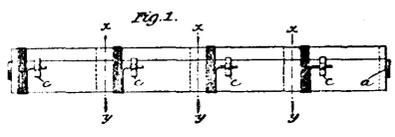
Claim.—1st. In a bicycle, constructed with an outer rim or tire and an inner rim to which the spokes are attached, a series of flat springs in the space between the two, one end of each spring being pivotally connected to a slide plate on the inner portion of the outer rim and the inner end of the said flat springs rigidly secured to the said inner rim, substantially as and for the purpose specified. 2nd. In a bicycle, lugs or blocks secured to the inner side of the outer rim, a wire rod connecting each two blocks, a movable plate made to slide on said wire, a compound curved flat spring pivotally connected to a cross pin of the sliding plate and to the inner rim, a spiral spring surrounding the wire in rear of the slide plate to prevent it going too far back, all constructed, substantially as and for the purpose specified. 3rd. A bicycle, constructed with an outer wooden tire *a*, and an inner metallic rim *b*, with a space between each, a series of projections or blocks *d*, *e*, attached to the outer tire, a wire *g*, held between the said blocks, a slide plate *h*,

made to be carried on said wire *g*, a compound curved nat spring *j*, pivotally connected to a pin *i*, on the side plates *h*, and the opposite

piece fixed to one of its edges, a side piece movable with relation to its opposite edge, telescoping leaf binding pins secured rigidly to the side pieces and arranged in parallel relation with the inner surface of the back piece, guide rods secured rigidly to the rear margin of the movable side piece and working in ways in the back piece so as to permit the movable side piece to be worked freely to and from the edge of the back piece, and a stop rod connected with the movable side piece and engaging a stop on the back piece, the stop rod and stop working free within the full limit of movement of the movable side piece, substantially as specified. 2nd. In a binder of the class mentioned, the combination with a back piece having a plain straight inner surface of the side piece fixed to one of its edges, a side piece movable with relation to its other edge, telescoping leaf binding pins secured rigidly to the side pieces and arranged in parallel relation with the inner surface of the back piece, guide rods secured rigidly to the rear margin of the movable side piece and working in ways in the back piece, a stop rod connected to the movable side piece, engaging a stop on the back piece and working free within the limit of movement of the side piece, a spring lock in the back piece adapted to automatically secure the movable side piece to the edge of the back piece when pressed in contact therewith, and springs adapted to automatically open the movable side piece when unlocked, as specified.

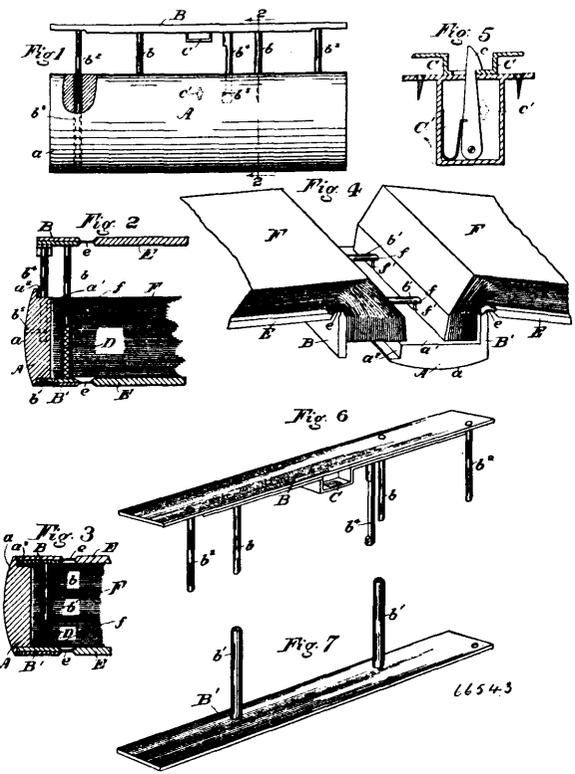


No. 66,544. Electric Helices. (Helice Electrique.)



end rigidly connected to the inner rim *b*, a spiral spring *k*, made to surround the wires *g*, and impinge on the slide plates *h*, and the rear block *e*, substantially as specified.

No. 66,643. Temporary Binder. (Relieure temporaire.)



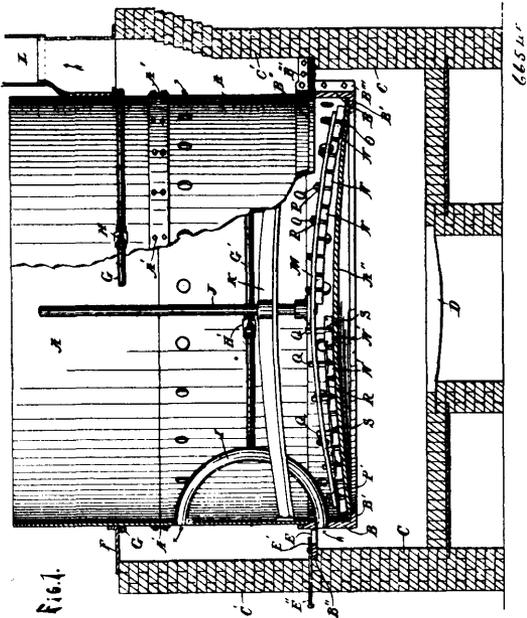
James Chris Anderson, Jersey City, New Jersey, U.S.A., 12th March, 1900; 6 years. (Filed 22nd January, 1900.)

Claim.—1st. An article of manufacture consisting of a plurality of helices for electrical purposes, wound in layers on a single core, in combination with individual sheets of insulating material inserted between the layers and extending throughout all the helices, substantially as described. 2nd. An article of manufacture consisting of a plurality of helices for electrical purposes, wound in layers on separated zones of a single core, in combination with layers of insulating material alternating with the layers of the helices and being common to all the helices, substantially as described. 3rd. The method of winding helices for electrical purposes, consisting in simultaneously winding a plurality of helices upon separated zones of a single core and inserting sheets of insulating material between the superposed layers of the helices, each sheet being common to all the helices. 4th. The method of winding helices for electrical purposes, consisting of simultaneously winding a plurality of helices upon separated zones of a single core, inserting sheets of insulating material between the superposed layers of the helices, each sheet being common to all the helices, and then separating the helices by transversely severing said sheets and core between the adjacent helices. 5th. The method of winding helices for electrical purposes, consisting of simultaneously winding one layer of each helix upon separated zones of a single core, then simultaneously wrapping all of said layers with insulating material, then simultaneously winding the second layers of the helices upon the insulating wrapper and over the first layers, then simultaneously wrapping all of the second layers with insulating material and so on until the desired length of helix has been formed, and finally separating the helices, substantially as described.

Frank Albert Gould and Nils F. Olson, assignees of William James Watters, all of Chicago, Illinois, U.S.A., 12th March, 1900; 6 years. (Filed 15th December, 1899.)

Claim.—1st. In a binder of the class mentioned, the combination with a back piece having a plain straight inner surface, of a side

No. 66,545. Calcining Apparatus. (*Appareil à calciner.*)

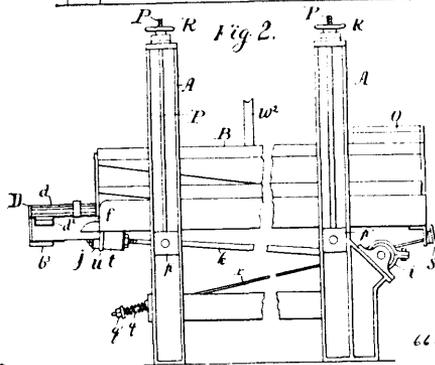
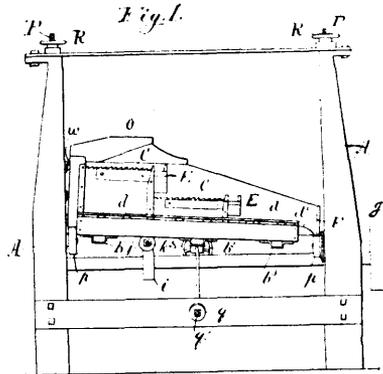


William Thompson Powers, Grand Rapids, Michigan, U.S.A., 12th March, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. In a calcining apparatus, the combination of a kettle, a flange surrounding the kettle, an imperforate bottom in said kettle, and flues extending through the side of the kettle above and below the flange, substantially as described. 2nd. In a calcining apparatus, the combination of a kettle, a setting surrounding the kettle, and at a distance therefrom, a flange dividing the space between the kettle and setting, an imperforate bottom in said kettle, a combustion chamber below the kettle, and flues extending through the side of the kettle at their respective ends and connecting the spaces at each side of the flange, substantially as described. 3rd. In combination with a calcining kettle, an outwardly projecting flange surrounding said kettle and having a series of flues in said kettle extending through the side thereof above and below said flange, substantially as described. 4th. A calcining kettle consisting of a cylindrical shell, a detached bottom, a bottom ring in detachable segments, and having an inwardly projecting flange to support the bottom, and an outwardly projecting flange to support the kettle, and detachable flues having elbows and nipples, and extending through said ring and shell at their respective ends and at each side of the outwardly projecting flange, and an expansion ring to hold said flues in place, substantially as described. 5th. A calcining apparatus consisting of a cylindrical shell, a bottom ring supporting the same and having an inner flange, an imperforate detached bottom supported by said flange, and an outer flange having a series of openings, dampers for said openings, a setting surrounding said kettle at a distance therefrom and engaging the last-named flange, flues extending through said ring between said flanges at their lower ends and through the shell at their upper ends, and a grate and combustion chamber below the kettle, substantially as described. 6th. In combination with a kettle having an imperforate bottom and supported within a setting at a distance therefrom, a series of vertical flues turned at substantially right angles at each end and extending through the side of the kettle at each end, and a ring engaging said flues and provided with a right and left threaded coupling, substantially as described. 7th. The combination of a kettle having a convex bottom, a sweep rotative above the bottom and at a distance therefrom, and vertically yielding paddles attached to the sweep and engaging the bottom and traversing the same, substantially as described. 8th. The combination of a kettle having a convex bottom, a shaft in the axis of the kettle, a curved sweep attached to the shaft and having openings therein, vertically movable pins in the openings, and paddles attached to the pins and engaging the bottom of the kettle, substantially as described. 9th. The combination of a kettle having a convex bottom, a rotative shaft in the axis of the kettle, a sweep having a curvature greater than the bottom and attached to the shaft, a series of paddles rigidly attached to the under side of the sweep at one end, a series of vertically movable paddles attached to the other end of the sweep, and a paddle adjustably secured to the outer end of the sweep, and chains connecting the movable paddle with the adjustable paddle, substantially as described. 10th. The combination of a kettle having a convex bottom, a rotative shaft in the axis of the kettle, a sweep attached to the shaft and having a series of openings, a series of pins vertically movable in the said openings and having longitudinal

slots in their lower end, paddles secured within the slots and traversing the surface of the bottom, a paddle adjustably secured to the outer end of the sweep, and chains connecting the respective ends of the adjustable paddle and the respective end of the vertically movable paddles, substantially as described.

No. 66,546. Concentrator. (*Concentrateur.*)



Frank Leslie Bartlett, Canon City, Colorado, U.S.A., 12th March, 1900; 6 years. (Filed 13th February, 1899.)

Claim.—1st. In an ore concentrator, the combination of a longitudinally reciprocating shaking table having a series of laterally inclined shelves provided with longitudinal riffles extending to the concentrates discharge end thereof, a separate water supply for each shelf, and means for conveying the unconcentrated material from the lower side of each of the upper shelves to the top of the next shelf below. 2nd. In an ore concentrator, the combination of a longitudinally reciprocating shaking table having a series of laterally inclined shelves provided with longitudinal riffles, a water supply for each shelf, and a spout having inclined partitions therein extending along the lower side of each of the upper shelves for delivering the unconcentrated material to the next shelf below. 3rd. In an ore concentrator, the combination of a longitudinally reciprocating shaking table having a series of laterally inclined shelves provided with longitudinal riffles, a water supply for each shelf, and a spout having inclined partitions and a perforated bottom separated from said partitions extending along the lower side of each of the upper shelves for delivering the unconcentrated material to the next shelf below. 4th. In an ore concentrator, the combination of a longitudinally reciprocating shaking table having a series of shelves and provided with longitudinal riffles extending to the concentrates discharge end thereof, a grading box extending across the end of the table for receiving the concentrates, said box being divided into several compartments each of which receives the ore from one of the shelves, openings in said compartments and guide strips for conducting the several grades of concentrates to said openings, a discharge spout for each grade of concentrates, and chutes connecting one or more openings in each section with a common discharge spout. 5th. In an ore concentrator, the combination of a shaking table, an eccentric and eccentric rod for reciprocating said table, a yielding spring or buffer on said rod for forcing the table forward, a buffer on said rod for returning the table of greater rigidity than said yielding buffer, and an independent adjustable spring for aiding the forward motion of the table.

No. 66,547. Hoisting and Conveying Apparatus. (*Ascenseur et transport.*)

Alexander Ephraim Brown, Cleveland, Ohio, U.S.A., 12th March, 1900; 6 years. (Filed 23rd February, 1900.)

Claim.—1st. A hoisting and conveying apparatus consisting of a trolley, and a cable or cables connected with suitable actuating

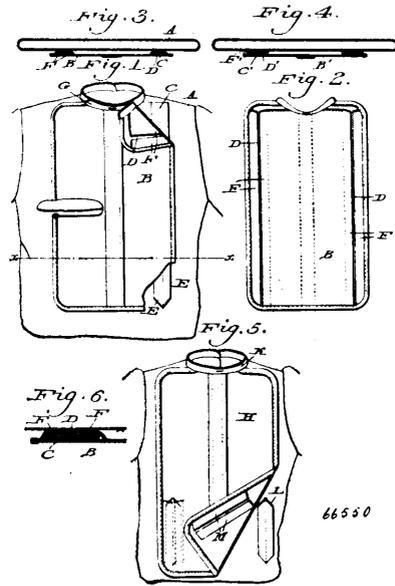
sheets slitted to receive the ears 15, and applied thereto, substantially as described. 2nd. A binding device, comprising a back 3, covers 1 and 2, flexibly connected therewith, a series of binding hinged to one of said covers and provided at the opposite end with barrels or hooks, a barrel secured to the other of said covers and having openings to receive the hooks of the binding strips, a rod to pass through said barrel and secure the binding strips therein, and attaching strips adapted to be made fast to sheets or leaves and provided with perforate ears to receive the binding strips. 3rd. In a binder or book cover, the combination of a back, covers or boards flexibly connected therewith, spring strips extending from board to board at or near the point of their connection with the back and permanently curved to conform to the rounding of the back, and means substantially such as described for attaching said spring strips to the binder or cover. 4th. In a binder or book cover, the combination of a back, boards or covers flexibly connected with said back, and spring strips extending from one board to the other to carry the sheets of which the book is composed, and permanently curved to conform to the back and to give the proper curve to the front of the body. 5th. In combination with a book cover, spring strips permanently curved to conform to the curvature of the back, connected at one end to the cover, and having a free end provided with an opening, and a fastening rod adapted to pass through the openings of the rods and to secure the free ends of the binding strips to the cover. 6th. In combination with a cover provided with plates 4, having barrels 5, provided with openings 6, binding strips 7, provided with barrels 8, and hooks or open barrels 11, and rods 9 and 18 for securing the binding strips to the plates 4. 7th. In combination with a cover provided with barrels 5, having openings or notches 6, binding strips 7 provided with barrels 8, and hooks or open barrels 11, attaching strips 14, provided with ears 15, having perforations 17, and rods 9 and 18 for attaching the binding strips to the barrels 5. 8th. In combination with a cover or binder, a hinged binding strip to carry of sustain the sheets, a barrel secured to the cover and having an opening to receive the free end of the binding strip, a rod passing through the barrel and serving to attach the binding strip thereto, and spurs projecting into the barrel and serving to prevent withdrawal of the rod. 9th. In combination with a book cover, a plate secured thereto and provided with a barrel 5 having an opening 6 a binding strip 7 provided with a barrel 8 seated in the opening 6 a rod passing through the barrels 5 and 8, and spurs 10 projecting into the barrel 5, and serving to prevent withdrawal of the rod, substantially as and for the purpose set forth. 10th. In a binder, the combination of a cover, binding strips secured to said cover and extending from board to board thereof, attaching strips strung upon the binding strips, and compressing devices serving to press the attaching strips closely together. 11th. In combination with a cover, binding strips attached thereto, attaching strips having perforated ears some of which are strung upon the binding strips, and elastic bands attached to the cover and having one end free to be passed through ears of the attaching strips, substantially as and for the purpose explained. 12th. In combination with a suitable cover, a series of perforated attaching strips adapted to carry leaves or sheets to be bound, and an elastic band attached to the cover, larger in cross section than the perforations, whereby it is adapted to be drawn through the perforations of the attaching strips when elongated and to expand laterally when released, causing it to bind in the perforations and by contracting longitudinally, draw the attaching strips firmly together. 13th. In a binder, the combination of a suitable cover, binding strips within said cover, single or unfolded sheets or leaves having perforations through them from face to face near the binding edge, and attaching strips having perforate ears passing through the sheets or leaves and strung upon the binding strips, substantially as described. 14th. In a binder, the combination of a series of single or unfolded sheets or leaves, and a series of attaching strips, one for each sheet or leaf, each strip having a tongue passing through one leaf from face to face at a point a short distance inward from the binding edge. 15th. In combination with a suitable cover provided with a notched barrel, a binding strip having a barrel to enter the notch of the main barrel, and a hinge rod for connecting the two barrels provided with a head or projecting portion to reach outside the barrel, and with a notch below said head to facilitate the removal thereof. 16th. In combination with a suitable cover, a series of attaching strips 14 provided with perforate ears 15, and an extensible and contractile band arranged to pass through the perforate ears, substantially as and for the purpose explained. 17th. In combination with a suitable covers a series of attaching strips provided with perforate ears, and an elastic band of larger cross section than the perforations of the ear, but provided with a tab of smaller section. 18th. In combination with a suitable cover, a series of resilient binding strips adapted to support the sheets or leaves, and means for firmly connecting both ends of said strips with the cover, said binding strips being permanently curved in the direction of their length, whereby the front edges of the leaves are caused to assume the curve common to books bound in the ordinary way.

No. 66,550. Shirt. (Chemise.)

John Jonas Hagedorn, Philadelphia, Pennsylvania, U.S.A., 12th March, 1900; 6 years. (Filed 24th February, 1900.)

Claim.—A shirt, a separable bosom therefor, and a fastening for said parts, consisting of a pocket member on one part, the same

having a longitudinally extending slit therein, and a tongue member on the other part adapted for entrance into said pocket, whereby

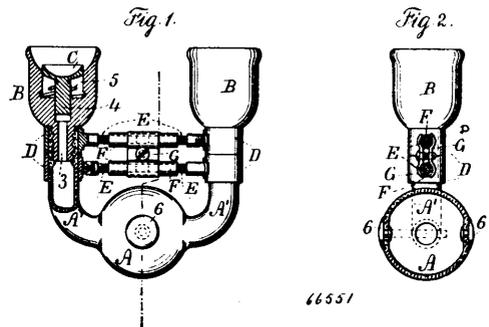


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said bosom may be withdrawn from the shirt longitudinal sliding movements.

No. 66,551. Device for Improving Eye Sight.

(Appareil pour ameliorer la vue.)



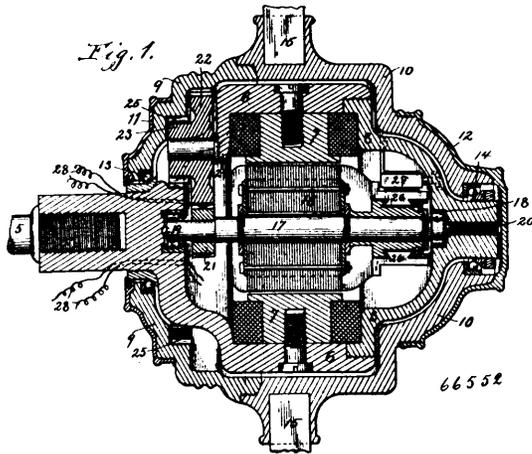
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Benjamin Fredenburgh Stephens, Brooklyn, New York, U.S.A., 12th March, 1899; 6 years. (Filed 8th April, 1899.)

Claim.—1st. The combination with the two eye cups and their tubes, of an expandible air ball and two flexible branches extending out from the air ball, one at each side thereof and having quarter circle bends for connecting the air ball with the tubular stems of the eye cups, substantially as set forth. 2nd. The combination with the air ball and its flexible tubular branches, of two eye cups, one attached to each of the tubular branches and adjusting and holding devices applied between the bases of the eye cups for adjusting and holding the same at the proper distances apart and with the axial lines of the cups parallel or diverging, substantially as set forth. 3rd. The combination with the eye cups, air ball and flexible tubular branches from the air ball to the eye cups, of screws and tubular nuts for adjusting the axial distances apart of the eye cups, substantially as set forth. 4th. The combination with the eye cups, the air ball and the flexible branches extending from the air ball to the eye cups, of bands surrounding the tubular bases of the eye cups, screws connected with the same, tubular nuts extending across from one screw to the other for varying the distances between the eye cups and their relative positions, substantially as set forth. 5th. The combination with the eye cups, the air ball and flexible connections, of bands around the bases of the eye cups, pairs of screws connected with such bands and two tubular nuts for adjusting the distances apart of the eye cups and a clamp for preventing the tubular nuts being revolved after the instrument has been adjusted, substantially as set forth. 6th. In an apparatus for improving eye sight, the combination with the two eye cups, a flexible air ball, and tubular curved branches extending from the air ball to the eye cups, of pressure discs at opposite sides of the air ball, said discs each having a stem passing through the rubber of the ball and a button head connected to the stem and within the ball, and against which discs the finger and thumb are applied in ejecting the air from the

ball, substantially as set forth. 7th. The combination with the eye cup and the interior surface approximately globular to correspond to the eye ball and having a cylindrical recess in the centre of the concave bottom, a button fitted to slide in said recess and having a concave surface corresponding approximately to the convexity of the cornea and a spring for pressing the button forward, of a tube at the base of the eye cup, an expansible air ball and a flexible tube extending from the air ball and connected to the tube of the eye cup, substantially as set forth.

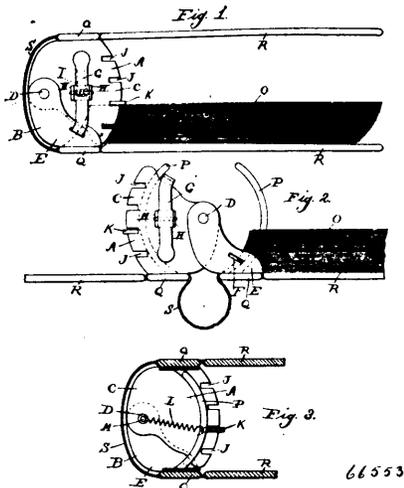
No. 66,552. Electrically Propelled Vehicle.
(Automobile.)



Frederick Jacob Newman and Josef Ledwinka, both of Chicago, Illinois, U.S.A., 12th March, 1900; 6 years. (Filed 24th November, 1899.)

Claim.—1st. The combination of an electric motor mounted on a vehicle axle, the hollow hub of a vehicle wheel enclosing said motor, said hub journaled about said motor, the armature of said motor connected with the interior of said hub, so that when said armature is caused to revolve its revolving motion will be transmitted to the vehicle hub. 2nd. The combination of a hollow hub of a vehicle wheel enclosing an electric motor, the stationary field magnets of said motor rigidly fastened to the vehicle axle, the armature of said motor carrying with it a gear meshing with intermediate gearing properly supported and journaled, said intermediate gearing meshing with an internal gear fastened rigidly to the interior of said hub, thus causing the said hub to rotate when an electric current is applied to said motor.

No. 66,553. Letter and Bill File. (Serre-papier.)

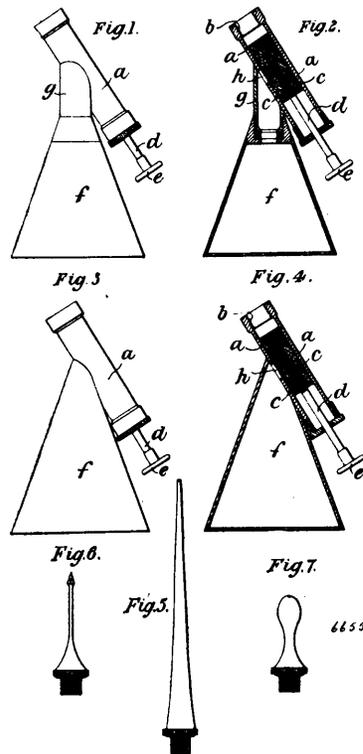


Fred Korsmeier, Chicago, Illinois, U.S.A., 12th March, 1900; 6 years. (Filed 23rd February, 1900.)

Claim.—1st. A letter or bill file, comprising two members, each consisting of a metallic strip provided at its ends with parallel flanges of greater width than said strip and curved on their rear edges, perforations adjacent the rear edges of each of said flanges, pins passing through said perforations to pivotally connect said

members with each other, a spring actuated latch carried by one of said flanges of one member, a perforation in the adjacent flange of said other member adapted to receive said latch, pins on each of said members parallel with said flanges and curved concentric with the pivotal connection between the same, a flexible book back carried by said members, and covers pivotally connected with said book back whereby said binder is given the appearance of and can be opened like a book without releasing said members to permit removal of the leaves, substantially as described. 2nd. A letter or bill file, comprising two members, each comprising a metallic strip provided at its ends with parallel flanges projecting rearwardly from the rear edges of said strips and pivotally secured to each other adjacent to their rear edges to form a book back, pins on each of said members parallel with said flanges and curved to be concentric with the pivots of said members, perforated leaves adapted to be mounted on said pins, recesses in the front edges of the flanges of one of said members, a bar adapted to enter said notches to retain said leaves in a block, springs for retaining said bar in said recesses, covers on said members, a flexible back, and a latch on one of said members adapted to engage the other thereof to hold said members relatively in position to prevent the removal of said leaves, substantially as described.

No. 66,554. Syringe. (Seringue.)



John Herbert Walker, Mary Street West, Charter Towers, North Queensland, Australia, 12th March, 1900; 6 years. (Filed 9th January, 1900.)

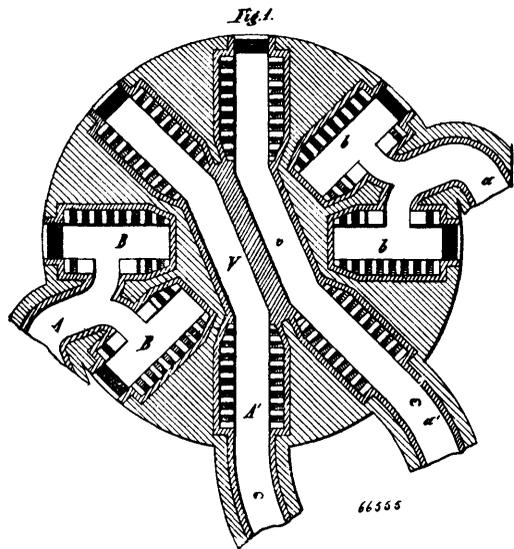
Claim.—1st. A syringe or injector, comprising a cylinder having a plunger, the said cylinder being secured at an inclination to a reservoir with which it is in communication by an orifice, substantially as hereinbefore described. 2nd. A syringe or injector, comprising a cylinder having a plunger and a conical reservoir, the upper part of which the said cylinder is secured at an inclination, and which is in communication with the said cylinder by an orifice adapted to be closed by the piston or plunger when the latter is forced forwards, substantially as hereinbefore described.

No. 66,555. Furnace for Glass Founding.
(Fournaise pour la fonte du verre.)

Wilhelm Paul Sauerland, 74b, Rotherbaum, Chaussee, Hamburg, Germany, 12th March, 1900; 6 years. (Filed 16th January, 1899.)

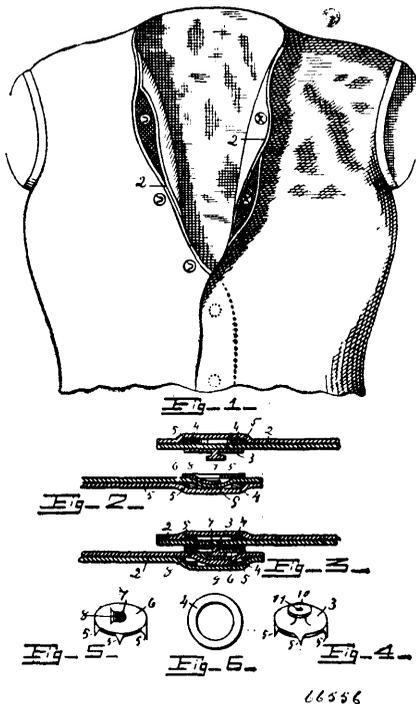
Claim.—The improved circular regenerative furnace for glass founding comprising the fire space or hearth carrying the glass pots and having exit passages for the flame, a vaulted roof overarchng same and forming an annular circular, a centrally placed burner shaft with a plurality of burners arranged out of radial line with the

aforsaid exit passages, so that the maximum efficiency from the flame for the enclosed space is produced, and the regenerators under-



neath the hearth and round the common centre of the furnace, all as a means of obtaining the maximum working space for the attendants and the maximum utilization of the heating fuel.

No. 66,556 Garment Fastener. (*Attache de vêtement.*)

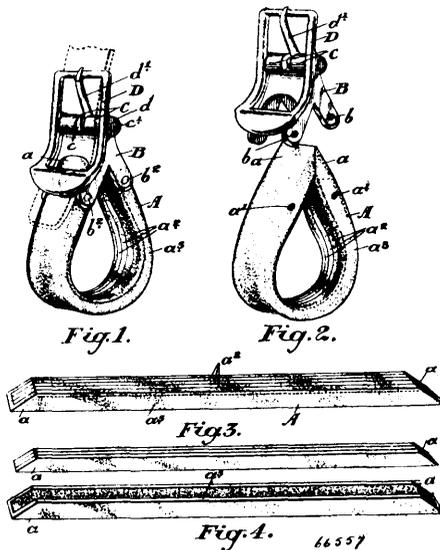


Carrie Pillsbury Parker, Minneapolis, Minnesota, U.S.A., 12th March, 1900; 6 years. (Filed 24th February, 1900.)

Claim.—1st. A garment fastener comprising two plates of substantially the same size adapted to be secured upon the opposing, meeting surfaces of a garment or other article and covered by the garment material, one of said plates being provided with a short necked stud having a head with a depression therein, and the other plate being provided with a key hole slot with a spring tongue cut out of the plate and extending back of said slot and provided with a projection adapted to engage the recess in the head of said stud, holding the two plates closely and firmly together, for the purpose set forth. 2nd. The combination, with the meeting surfaces of a garment, of the plates of substantially the same size secured upon said surfaces and covered, one of said plates being provided with a

stud having a recessed head and the other being provided with a key hole slot and a spring tongue cut out of the plate and lying between said plate and the material of the garment, said tongue being provided with a projection adapted to engage the recess in said head, for the purpose set forth. 3rd. The combination, with a garment and its meeting surfaces, of the plates secured to and covered by the material, forming the meeting surfaces of said garment, one of said plates being provided with a stud having a depression in its head and the other being provided with a key hole slot having a spring tongue cut out of the plate and arranged between said plate and the material of the garment, and provided with a projection adapted to engage the depression in the head of said stud, for the purpose set forth.

No. 66,557. Shaft Loop. (*Gânce de limonière.*)



Thomas Lee, Brandon, Manitoba, Canada, 12th March, 1900; 6 years. (Filed 23rd February, 1900.)

Claim.—1st. As an article of manufacture, a shaft loop comprising a strip formed of a laminated body portion arranged so as to present the inner edges of the said laminae to the shaft, said laminae being suitably secured together to form a united body, a suitable retainer in which the abutting ends of the loop are secured and means for connecting said retainer to the saddle strap of the harness, as and for the purpose specified. 2nd. As an article of manufacture, a shaft loop comprising a strip formed of a laminated body portion arranged so as to present the inner edges to the shaft, an outer reinforcing strip covering three sides of said loop, the laminae and strip being sown together to form a united body, a suitable retainer to hold the abutting ends of said strip, and means for connecting same to the saddle strap of the harness, as and for the purpose specified. 3rd. As an article of manufacture, a shaft loop comprising a strip formed of leather laminae arranged and secured together so as to present their exposed edges to the shaft, a retainer socket in which the edges of the strip are secured, journal lugs formed at the apex thereof in which is loosely held a pin, a buckle supported centrally on said pin and designed to connect the retainer with the saddle strap of the harness, as and for the purpose specified.

No. 66,588. Acetylene Gas Generator.

(*Générateur à gaz acétylène.*)

Leo Montel, Cincinnati, Ohio, U.S.A., Francis Celestin Maurin, 13th March, 1900; 6 years. (Filed 21st November, 1898.)

Claim.—1st. In an apparatus for producing acetylene gas from calcium carbide in the form of cartridges, the combination of a case having a closing cover, divided inside into sectors of equal capacity, adapted to receive cartridges of calcium carbide, one of said sectors adapted to communicate with the exterior by means of an opening provided in the side of the casing, substantially as described. 2nd. A cartridge case consisting of a drum shaped body having a central core or chamber, and divided into a plurality of sectors of equal capacity, said sectors adapted to receive each a cartridge of calcium carbide, and adapted to communicate with each other consecutively, one of said sectors having an inlet opening for the admission of water, and the last sector adapted to communicate with said central chamber and a suitable cover for said cartridge case, provided with an aperture for the escape of gas, substantially as described. 3rd. In an apparatus for producing acetylene gas from calcium carbide in the form of cartridges, the combination with the said apparatus, of a plurality of cylindrical cases, each of said cases being divided

into equal sectors, communicating with each other, and adapted to receive a cartridge of calcium carbide, said cases adapted to com-

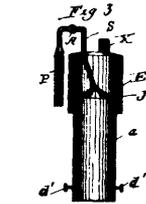
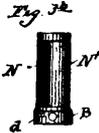
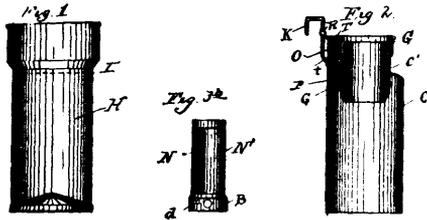
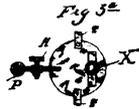
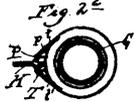
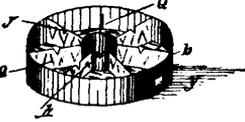


Fig 6

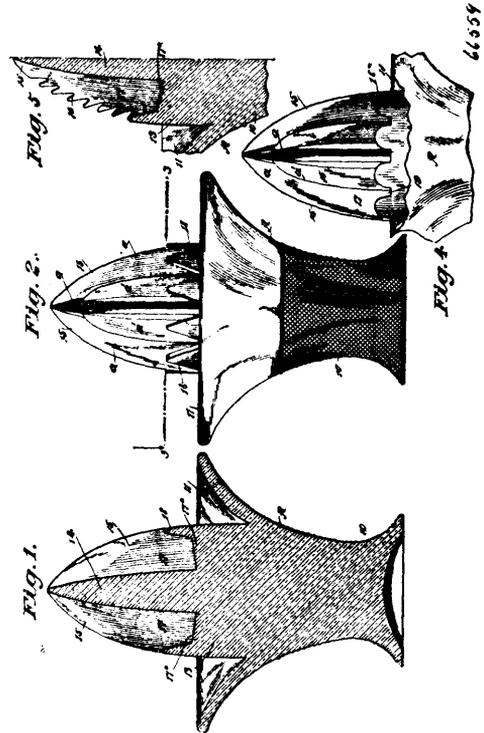


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municate with the exterior by means of an opening provided in the side of each case, and being adapted to be received in the body of the gasometer, as described, whereby each cartridge is attacked separately, substantially as described. 4th. In an apparatus for producing acetylene gas from calcium carbide in the form of cartridges, as described, a water receptacle provided with two vertical uprights connected at their top and carrying each a pulley, cords pendant from said pulleys, secured at one end to the top of the gasometer and carrying at the other end counter balance weights adapted to aid in the equilibrium of the gasometer, said receptacle being provided with means for securing the gasometer when in its lowest position, substantially as described. 5th. In an apparatus for producing acetylene gas from calcium carbide in the form of cartridges, as described, the combination of a bell or gasometer having the form of a cylinder and being surmounted by a smaller cylinder provided with double walls to form an annular well G, adapted to communicate with the gasometer, said smaller cylinder being provided at one side with a second well n, in open communication with well G, and provided with a pipe T leading to the gasometer, and suitable service pipes connected with said gasometer, substantially as described. 6th in an apparatus for producing acetylene gas from calcium carbide in the form of cartridges, as described, the combination of a gasometer, consisting of a cylinder open at its bottom and closed at its top by an inverted cylinder E, adapted to be received into the annular well G, of the gasometer, and closed at about 3/4 of its height by means of a conical partition J, a pipe secured in the apex of said partition and adapted to establish communication with the gasometer through suitable intermediate means, substantially as described. 7th. In an apparatus for producing acetylene gas by calcium carbide in the form of cartridges, as described, the combination of a basket N, consisting of a cylinder having openings in its side, and adapted to fit snugly into the generator and to be secured therein by suitable means, said basket adapted to receive a plurality of casings b, one above the other, said casings being divided into equal sectors adapted to receive cartridges of calcium carbide, substantially as described. 8th. In an apparatus for producing acetylene gas from calcium carbide in the form of cartridges, as described, a water receptacle comprising a bell or gasometer, adapted to be plunged into said receptacle, and a gas generator having a basket adapted to be telescoped into said gasometer, in combination with a plunger P, communicating with the interior of the gasometer and comprising with the well n, a complete element with separable parts, as described, said element forming with the well G, a hydraulic closure or cut-off adapted to prevent any leaks which may diminish the pressure, whereby means of an intermittent development of acetylene from each cartridge of calcium carbide, the gas is maintained at a constant pressure in the gasometer, substantially as described. 9th. In an apparatus for producing acetylene gas from calcium carbide in the form of cartridges, as described, the combination of a water receptacle a gasometer adapted to be plunged into said receptacle, and a gas generator adapted to be telescoped into the gasometer, said gas generator having a basket N, consisting of a cylinder having openings in its side and having a base B adapted to fit snugly into the generator and to be secured therein by suitable means, said basket adapted to receive a plurality of casings b, arranged one above the other, said

casings being divided into sectors communicating with each other by suitable means, and adapted to receive each a cartridge of calcium carbide, substantially as described. 10th. In an apparatus for producing acetylene gas by calcium carbide in the form of cartridges, as described, the combination of a water receptacle, a gasometer adapted to be plunged into said receptacle, and a gas generator adapted to be telescoped into the gasometer, said gasometer provided with a conical partition J, and with a lead-away pipe S, terminating in a plunger P, adapted to be guided over a pipe T, in direct communication with the gasometer, and said generator, having a basket N, consisting of a cylinder having openings in its side and having a base B, adapted to fit snugly into the generator and to be secured therein by suitable means, said basket being adapted to receive a plurality of casings b, arranged one above the other, said casings having an inner core or chamber, and divided into a plurality of sectors of equal capacity, said sectors adapted to receive each a cartridge of calcium carbide, and adapted to communicate with each other consecutively, and suitable means for feeding water to said cartridges in succession, substantially as described.

No. 66,559. Lemon Squeezer. (Pressoir à citron.)

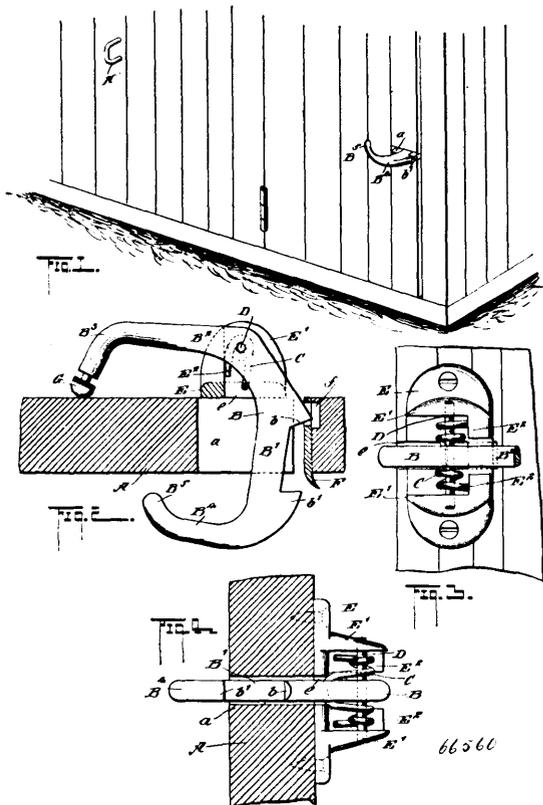


John Lawrence Easley and Max Loewenstein, both of New York City, New York, U.S.A., 13th March, 1900; 6 years. (Filed 23rd February, 1900.)

Claim.—1st. A lemon juice extractor, consisting of a body, a series of conically arranged blades having independent chambers between them, a barrier for each chamber of slightly less width at the base than the width of the chamber to which it belongs, and a basin constituting the base of the body, the bottom of the said chambers being at about the level of the top of the basin, whereby the chambers and their barriers effectually retain all the solid material while the liquid is drained therefrom and is free to escape into the said basin, and whereby the basin may be filled with liquid without contacting with the pulp separated therefrom. 2nd. A lemon juice extractor consisting of a cone extractor having juice extracting projections upon its surface, chambers between the extracting projections, arranged for the individual retention of solid matter, a barrier for the bottom portion of each chamber, said barriers defining the outer base line of the cone, being located between the base portions of the extracting projections, and a basin below the level of the bottom of said chambers. 3rd. A lemon juice extractor consisting of a cone extractor having juice extracting projections upon its surface, chambers between the extracting projections, arranged for the individual retention of solid matter, a barrier for the bottom portion of each chamber, said barriers defining the outer base line of the cone, being located between the base portions of the extracting projections, and a basin below the level of the bottom of said chambers, the said chambers having their bottom wall inclined from the outer periphery of the cone exterior downwardly toward the centre of the same. 4th. A lemon juice extractor, consisting of a cone extractor having juice extracting projections upon its surface, chambers between the extracting projections, arranged for the individual

retention of solid matter, a barrier for the bottom portion of each chamber, said barriers defining the outer base line of the cone and being located between the base portions of the extracting projections, a basin below the level of the bottom of the said chambers, a handle for the basin extending downwardly therefrom, said basin being adapted exclusively for the retention of juice and the handle simply as a means whereby the device may be placed upon a support and conveniently carried or held in the hand during the operation of extraction. 5th. A lemon juice extractor, consisting of a cone extractor having juice extracting projections upon its surface, chambers between the extracting projections, arranged for the individual retention of solid matter, the chambers being in series one above the other, each chamber being provided with a barrier at the outer edges of the extracting projections, said barriers being of such width that a space intervenes their said edges at the base and the opposing surfaces of the extracting projections, one chamber of a series being adapted to empty fluid into the next lowest chamber, and a basin located below the level of the lowermost chambers of said series, which basing is arranged to receive the fluid from all of the said chambers, for the purpose described. 6th. A lemon juice extractor consisting of a body provided with a basin, a column rising from the central portion of said basin and provided with a conical core, blades in conical arrangement carried by said core, and spaces between the blades, constituting chambers for the retention of seed and pulp, the bottom of which chambers are above the bottom of the said basin and are given an inward inclination, barriers at the front base portions of each chamber, located between the said blades, said barriers being arranged to permit the outward flow of juice at their sides from the chambers into said basin, yet retaining all solid matter and seeds within the chambers, each barrier being flush with the outer surface of the base of the cone, for the purpose specified.

No. 66,560. Door Latch. (Loquet de porte.)



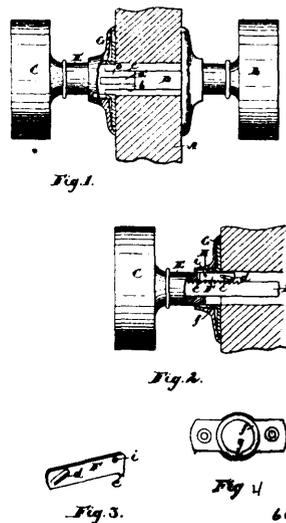
Frederick E. Richardson, and Charles Everett Smith, Manchester, Delaware County, Iowa, U.S.A., 13th March, 1900; 6 years. (Filed 23rd February, 1900.)

Claim.—1st. A door latch, comprising a bar pivoted intermediate its length upon a vertical pivot and located at one side of a door, one end of said bar extending towards the door edge and being adapted to engage the keeper, and the other end extending inward from the door edge, and then curving towards the door, an adjustable extension for this end of the latch bar, and a keeper adapted to be secured to the door jamb, substantially as described. 2nd. A door latch, comprising an internal yoke or stirrup-shaped bar, the ends of which embrace the door edge and are adapted to serve as handles for the two sides of the door, a locking tooth on the outer or bottom portion of the stirrup, a pivot for said bar at one side of the door near its edge, and a keeper on the door jamb adapted to

engage the tooth on the bar, substantially as described. 3rd. A door latch, comprising a yoke or stirrup-shaped bar which embraces the door edge and has a locking tooth on the outer or bottom portion of the stirrup, and a pivot for said bar at one side of the door near its edge, the pivoted side of the stirrup having an adjustable extension adapted to contact with the side of the door and thus to limit the projection of the locking tooth, substantially as described. 4th. A door latch, comprising a yoke or stirrup-shaped bar which embraces the door edge and has two locking teeth on the outer or bottom portion of the stirrup, a pivot for said bar at one side of the door near its edge, a keeper on the door jamb adapted to engage one of the teeth on the bar, and a keeper on the wall adapted to engage with the locking tooth when the door is swung open, substantially as described. 5th. A door latch, comprising a yoke or stirrup-shaped bar which embraces the door edge and has two locking teeth on the outer or bottom portion of the stirrup, a pivot for said bar at one side of the door near its edge, the pivoted side of the stirrup having an adjustable extension adapted to contact with the side of the door and thus to limit the projection of the locking tooth, a keeper on the door jamb adapted to engage one of the teeth on the bar, and a keeper on the wall adapted to engage the other locking tooth when the door is swung open, substantially as described. 6th. A door latch, comprising an integral yoke or stirrup-shaped bar, the ends of which embrace the door edge and are adapted to serve as handles for the two sides of the door, a locking tooth on the outer or bottom portion of the stirrup, a pivot for said bar at one side of the door near its edge, a keeper on the door jamb adapted to engage the tooth on the bar, and a spring acting on the stirrup to hold the locking tooth projected, substantially as described. 7th. A door latch, comprising an integral yoke or stirrup-shaped bar, the ends of which embrace the door edge and are adapted to serve as handles for the two sides of the door, a locking tooth on the outer or bottom portion of the stirrup, a pivot for said bar at one side of the door near its edge, a spring mounted on the pivot and engaging the stirrup to keep the locking tooth projected, and a keeper on the door jamb adapted to engage the tooth on the bar, substantially as described.

No. 66,561. Knob Attachment.

(Attachment de bouton de porte.)

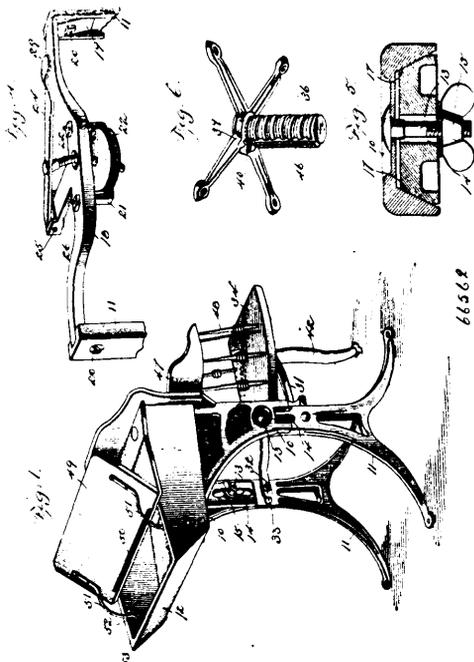


Joseph A. C. McCuaig, Toronto, Ontario, Canada, assignee of Oscar Stoddard of Detroit, Michigan, U.S.A., 13th March, 1900; 6 years. (Filed 23rd February, 1900.)

Claim.—1st. The combination of the knobs, the spindle fixed to one of said knobs and having ratchet teeth on the opposite end thereof, the dog pivoted to the knob stem and engaging the ratchet teeth of the knob spindle, said dog having an inclined slot therein through which its pivot pin passes, as and for the purpose specified. 2nd. The combination of the knobs, the spindle attached to one of said knobs and having ratchet teeth at its opposite end, one of said knobs being detachable from said spindle and having a hollow knob stem which receives the end thereof, the dog pivoted to the knob stem of the removable knob and engaging the ratchet teeth of the knob spindle, the collar or boss embracing said knob stem and dog, and having a notch or way therein into which the free end of said dog may be moved, as and for the purpose specified.

No. 66,562. School Desk and Chair.

(Pupitre et siége d'ecole.)



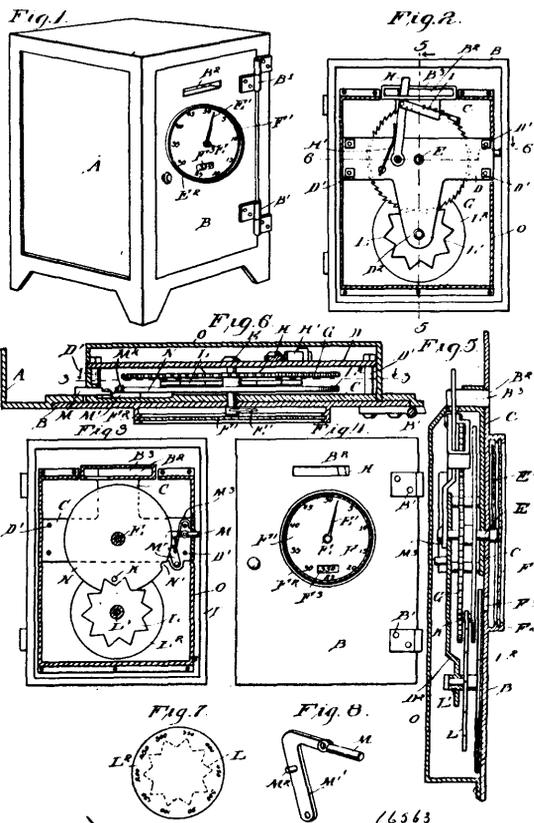
William T. Dodd and James W. Mullinix, both of Walla Walla, Washington, U.S.A., 13th March, 1900; 6 years. (Filed 22nd February, 1900.)

Claim.—1st. In a school desk, the combination with a supporting frame and a vertically adjustable desk top, of an adjusting lever fulcrumed at one end upon the frame and having bearing contact at the other end with the underside of the desk top, a feed screw depending from an intermediate portion of said lever, and a feed nut mounted upon the frame and engaging the feed screw to impart motion to said lever, substantially as specified. 2nd. In a school desk, the combination with a supporting frame and a vertically adjustable desk top, of an adjusting lever fulcrumed at one end upon the frame and having bearing contact at the other end with the underside of the desk top, a curved feed screw attached to and depending from an intermediate portion of the adjusting lever, and a feed nut mounted in the fixed bearings and engaged with the feed screw for imparting motion to the same to actuate the lever, substantially as specified. 3rd. In a school desk, the combination of standards having movable and stationary members, and means for securing the former in their adjusted positions, a desk top carried by the movable standard members, a cross bar connecting the stationary standard members, a keeper on said bar, both bar and keeper having guide openings, a desk top adjusting lever fulcrumed at one end upon said cross bar and terminally bearing against the under side of the desk top, a segmental feed screw depending from the adjusting lever and passing loosely through said guide openings, and a feed nut engaged with the feed screw for imparting motion to the lever, substantially as specified. 4th. In a school desk, the combination of standards having movable and stationary members, and means for securing the former in their adjusted positions, a desk top carried by the movable standard members, a cross bar connecting the stationary standard members, a desk top adjusting lever fulcrumed at one end upon said cross bar and having at its opposite end a rounded bearing surface, a bearing plate interposed between the bearing surface of said lever and the under surface of the desk top, a feed screw depending from the lever and a feed nut mounted upon the cross bar and engaging the feed screw for imparting motion to the lever, substantially as specified. 5th. In a school desk, the combination of standards having movable and stationary members, and means for securing the former in their adjusted positions, a desk top carried by the movable standard members, a cross bar connecting the stationary standard members, an adjusting lever fulcrumed at one end upon said cross bar and having at its opposite end a rounded bearing surface, a bearing plate interposed between the bearing surface of said lever and the under surface of the desk top, and having a depending guide pin engaged by the lever, a feed screw depending from the lever, and a feed nut mounted upon the cross bar and engaging the feed screw for imparting motion to the lever, substantially as specified. 6th. In a school desk, the combination of standards having movable and stationary members, and means for securing the former in their adjusted positions, a desk top carried by the movable standard members, a cross bar connecting the stationary standard members, an adjusting lever fulcrumed at one end upon said cross bar and provided at the other end with a

bearing surface and a longitudinal slot, a guide pin depending from the desk top through said slot of the lever, and engaged by a nut, a feed screw depending from the adjusting lever, and a feed nut mounted upon the cross bar and engaging the feed screw, substantially as specified. 7th. A school desk having its top constructed to form a book receptacle and having a hinged cover section of an area less than that of the desk top, a transverse book supporting strip secured to the inner surface of said cover section near its hinge, fixed stops projecting inwardly from the side walls of the book receptacle, and brackets having straight bodies secured across the inner surface of the cover section beyond the ends of said strip, thence curving around the hinge line and terminating in hooks for engagement with said stops to hold the cover section in a forwardly and upwardly inclined position. 8th. The combination with desk standards, of a forwardly extending yoke having a centrally depending interiorly threaded sleeve, a seat standard removably fitted upon said sleeve, a seat adjusting screw threaded in the sleeve and having a longitudinal channel, a set screw engaging registering openings in the seat standard and sleeve and terminally engaging said channel of the screw, and a seat upon the upper end of the screw, substantially as specified. 9th. The combination with desk standards, of a forwardly extending yoke having a centrally depending interiorly threaded sleeve, a seat standard removably fitted upon said sleeve, a seat adjusting screw threaded in the sleeve and having a longitudinal channel, a set screw engaging registering openings in the seat standards and sleeve and terminally engaging said channel of the screw, and a seat swivelled upon the upper end of the screw, and stop devices for limiting the independent rotation of the seat with relation to the screw, substantially as specified. 10th. The combination with desk standards and a yoke pivotally and adjustably connected to said standards and centrally provided with an interiorly threaded pendent sleeve, of a seat standard removably and adjustably connected to the sleeve, a seat screw fitted in said sleeve, a seat swivelled on the upper end of the screw, and stop devices for limiting the independent rotation of the seat with relation to the screw.

No. 66,563. Registering Toy Bank.

(Régistre de banque-jouet.)

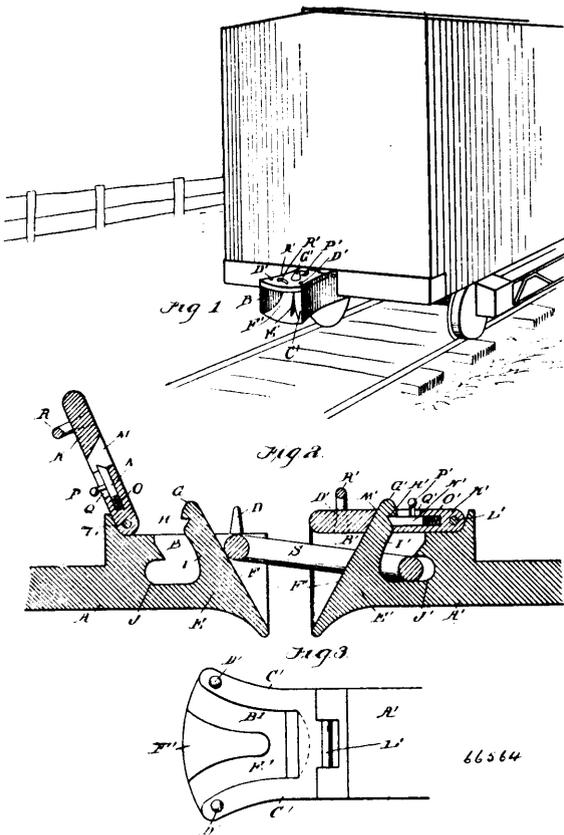


Philip Howell, William H. Mathias and Frank L. Mathias, all of Frank, Pennsylvania, U.S.A., 13th March, 1900; 6 years. (Filed 31st January, 1900)

Claim.—1st. In a bank, the combination with the body and door, of the coin chute, of a spring pressed operating lever provided with an offset and extending through a slot in the coin chute near the entrance thereof a pawl pivotally secured to the said lever and

adapted to engage a toothed wheel mounted concentrically with a pointer or dial, a disc mounted on the same shaft with the pointer, and provided with a lug or pin to engage the spurs of the spur wheel located beneath said toothed wheel to operate the lower registering dial mounted beneath said disc, and the pivoted locking bolt adapted to be thrown out of engagement with the door frame by the insertion of a coin or coins, substantially as described. 2nd. In a bank, the combination with the coin chute, of an operating lever provided with a forward offset and working in said chute near the entrance thereof, a link pawl pivoted to the lever the hooked end of which is adapted to engage a toothed wheel mounted concentrically with a pointer or dial, a disc mounted on the same shaft with the pointer and provided with a lug or pin to engage the spurs of the spur wheel mounted beneath said toothed wheel to operate the lower registering dial, and the pivoted locking bolt normally held in a locked position by the disc and adapted to be released at intervals, substantially as described. 3rd. In a bank, the combination with the coin chute, of an operating lever working in the chute at the entrance thereof, said lever being normally held in the path of the coin by suitable means, a pawl pivoted to the lever near the upper end and designed to engage a toothed registering wheel and move with the lever upon the insertion of a coin in the chute, a locking bolt pivotally connected to an elbow lever or pin or projection on said lever, a circular tumbler disc bearing against said pin to normally hold the bolt in a locked position, said disc having a notch in its periphery to be engaged at intervals, substantially as described.

No. 66,564. Car Coupler. (Attelage de chars.)

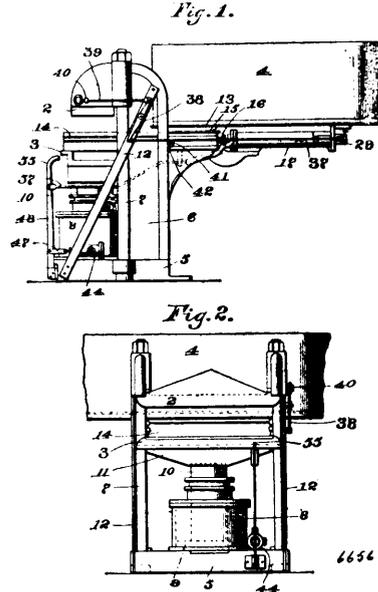


Joseph M. Brownfield and James H. Hill, both of Pinos Altos, New Mexico, U.S.A., 13th March, 1900; 6 years. (Filed 31st January, 1900.)

Claim—1st. In a car coupling, the combination with a recessed draw head, of a stationary inwardly inclined pin in said recess having a notch in its inner face, a pivoted latch plate with a hole to slip over the upper end of the pin, and a spring bolt in a recess in the latch plate adapted to engage in the notch in the pin, substantially as described. 2nd. In a car coupling, the combination with a recessed draw head, of a stationary pin in said recess projecting above the top thereof, teats projecting upwardly from the side walls of said recess, a latch plate pivoted to the draw head in position to cover the recess and provided with holes to receive the teats, a hole to receive the end of the pin, and a recess communicating with the last named hole, and a spring impelled bolt in said recess adapted to engage in a notch in the inner face of the pin when the latch plate is down, substantially as described. 3rd. In a car coupling,

the combination with a recessed draw head, of a stationary inwardly and upwardly inclined pin in said recess having a notch in its inner face, a pivoted latch plate secured to the top of the draw head and having a hole through which the inclined pin projects, a longitudinally arranged spring pressed locking bolt arranged in a slotted recess in the latch plate adapted to engage the notch in the pin, and an upwardly projecting pin on the locking bolt for withdrawing the same from engagement with the first named pin, substantially as described.

No. 66,565. Cake Former. (Moule à gâteau.)

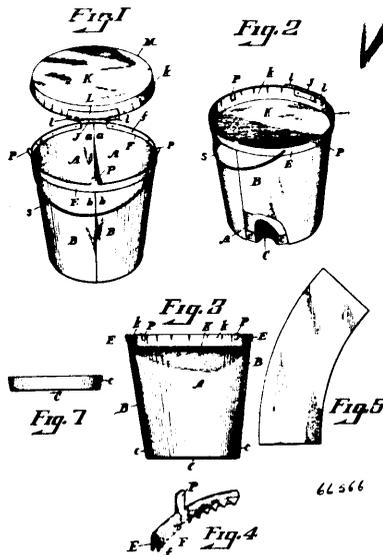


The Meridian Machinery Company, assignee of August Frederickson, both of Meridian, Mississippi, U.S.A., 13th March, 1899; 6 years. (Filed 27th January, 1900.)

Claim.—1st. A cake former adapted to be applied to ordinary receiving meal heaters, comprising a base, standards on said base, having forwardly extending head portions, vertical columns or bolts for binding the said standards to the said base, a stationary male die secured to and held in place by the forwardly extending head portions, a female die operating in conjunction with said male die and having a vertical movement on the said columns, the construction being such that ample space is left between the standards and above the male die to permit the said cake former to be adapted to an ordinary meal heater, substantially as described. 2nd. A cake former, comprising a base, standards on said base made up of vertical web strengthened portions at the rear having forwardly extending head portions at the top, vertical columns or bolts at the front passing through the forwardly extending head portions, inclined bars secured to the base at the bottom; and to the standards at the top to strengthen the structure, a male die supported between the forwardly extending projections, a female die adapted to move up and down beneath the male die and guided in said movement by the columns or bolts, projections for said standards for supporting a meal receiving heater, a heater supported on said projections and extending between the standards in close proximity to the dies, the open construction of the frame at the back and top permitting of this arrangement, the said heater having a discharge opening at its bottom, the exact size of the cake to be formed, a charging box of the same size as said opening operating beneath the discharge opening of the heater for receiving the proper amount of material and carrying it between the dies, and means for operating the charging box, substantially as described. 3rd. A cake former, comprising an upper and lower die, a charging box for supplying material to the same, a piston for operating the lower die, a valve controlling the admission of pressure to the said piston, a hand operating lever connected to said valve, a rod connected to said lever, a trip lever adapted to engage the said rod, the construction being such that when the charging box is in its forward position, the trip lever will prevent the admission of pressure to operate the piston carrying the die, and when the charging box is in its rearmost position, the trip lever will be moved so as to permit the operation of said valve, substantially as described. 4th. In a cake former, the combination with a suitable press, of a charging box for supplying material thereto, a cylinder for operating said charging box, a valve for controlling the admission of pressure to the said cylinder, a lever connected with the said valve for reciprocating it, a bracket upon the framing of the former for pivotally supporting the said lever, said bracket being provided with a slot, a pin secured to said lever and adapted to engage and move in the said slot,

whereby the movement of the lever is limited, a rod connected with the said lever and adapted to be engaged at one end by the charging box, a nut at the other end of the said rod, a spring interposed between the said nut and the said lever so as to take up the jar produced by the charging box coming in contact with the said rod, and means for holding the said lever under pressure at either extreme of its movement, substantially as described. 5th. A cake former having a suitable dies, a charging box for supplying material thereto, a piston for moving the charging box, a cylinder carrying the said piston, a valve for controlling the ports leading into the said cylinder, said valve being mounted in a suitable valve chest and being adapted to reciprocate therein, a passage leading to each end of the valve chest, said passage being connected with the pressure inlet so that steam or other pressure may be admitted at either end of the said valve chest, means for reciprocating the valve, the structure being such that the valve need only move a short distance to open the inlet ports at either end of the said valve chest, substantially as described. 6th. In a cake former, the combination with upper and lower dies and a charging box for supplying material thereto, of a piston for moving the lower die, a valve for admitting pressure to the said piston, said valve being mounted in a valve chest, a port for admitting pressure to the said valve chest, an exhaust port formed in the said chest, the valve in the said chest being formed with a passage extending from one end to the other, whereby an equal pressure will be secured at each end of the valve so that it will be readily moved and means for moving the said valve, substantially as described. 7th. In a cake former, the combination with upper and lower dies, of a piston rod for moving the lower die, said piston being mounted in a suitable cylinder, a valve chest secured to the base of the said cylinder and connected therewith by a suitable port, a valve in the said valve chest having an annular peripheral passage for controlling the exhaust from the cylinder, one end of the said valve being partially cut away so that when the valve is moved apart of its stroke, a small degree of pressure will be admitted to the cylinder, and means for moving the said valve, substantially as described. 8th. In a cake former, the combination with upper and lower dies, of a piston for moving the lower die mounted in a suitable cylinder, a valve for controlling the admission of power to the said cylinder, a valve chest secured to the lower end of the cylinder and enclosing the said valve, the said valve being provided with a passage from one end to the other, whereby the pressure may be made at each end of the valve, said valve also being provided with a partially cut away portion at one end and a hand lever connected with said valve and extending in close proximity with the lower die, the construction being such that when pressure is to be applied to the piston, the hand lever can only be moved far enough to bring the cut-away portion of the valve outside the port leading into the cylinder and thereby introduce only a small pressure and when the said lower die has almost reached its upper position, the lever may be moved so as to admit the full pressure beneath the said piston, substantially as described.

No. 66,566. Paper Vessel. (Ustensile en papier.)



Arthur Stem, Cincinnati, assignee of Will M. Kinnard, Dayton, both in Ohio, U.S.A., 13th March, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. A paper vessel having an outer and inner wall consisting of separate sheets of paper secured together substantially throughout their surfaces, and embracing between them the turned up edges of a disc forming a bottom, substantially as shown and described. 2nd. A paper vessel formed of two separate blanks

rolled one within the other and embracing between them the upturned edges of the bottom and having their upper edges braced and bound together by a strip of stiffer material, having the inner portion or leg partially cut-away or corrugated, substantially as shown and described. 3rd. A paper vessel circular in horizontal cross-section and having its upper edges braced and bound by a thin metal strip folded upon itself the inner portion or leg being partially cut-away or corrugated over the upper edges of the pail and locked in place, substantially as shown and described. 4th. The combination with a paper vessel or pail circular in horizontal cross-section, the sheet metal braces consisting of a strip folded upon itself with portions of the inner leg F, remaining upright or unfolded to form lugs to be bent down upon the lid to lock it in place, substantially as shown and described. 5th. A paper vessel having double walls secured together substantially throughout their surfaces and a bottom whose edges are bent up and embraced between the inner and outer side walls, substantially as shown and described. 6th. A paper vessel whose side walls consist of two pieces or blanks of paper rolled into a tapering cylinder one within the other the edges of each blank meeting but not registering with the edges of the other blank, and provided with a sheet metal brace for the top edges, having the legs P P, substantially as and for the purpose described. 7th. A paper vessel whose side walls consist of an inner and outer sheet of blank paper curved into a tapering cylindrical form until the edges of each overlap but do not register with the edges or the lap of the other, and whose bottom consists of a disc with edges turned up between said inner and outer walls, substantially as and for the purpose described. 8th. In combination with a paper vessel, the upper brace consisting of a strip of sheet metal folded upon itself with inner and outer legs E F, part of said inner leg cut-away to form lugs and a hinge, substantially as described. 9th. In combination with a paper vessel, the upper brace consisting of a strip of sheet metal folded upon itself with inner and outer legs E, F, the inner leg partially cut-away or corrugated and locked in place by burs slightly penetrating the walls of the vessel, substantially as shown and described. 10th. In combination with a paper vessel circular in horizontal cross-section, and tapering outwardly from the bottom toward the top, a hinged lid consisting of a single piece whose edges are turned up at an angle and slightly creased or crimped forming a flexible or yielding flange, which is held parallel with the walls of the vessel when the lid is forced down into the mouth of the same, substantially as and for the purpose described. 11th. In combination with a paper vessel circular in horizontal cross-section and tapering outwardly from the bottom toward the top, a saucer-shaped paper lid whose flexible edges are slightly creased or crimped fit within the top of the vessel, so as to press more tightly against the inner walls of the vessel as the lid is pressed downward, substantially as shown and described. 12th. A paper vessel, circular in horizontal cross-section provided with a brace embracing the upper edges to which is hinged a lid arranged to turn back when open, so that both vessel and lid will nest with others, for the purpose and in the manner specified. 13th. A paper pail consisting of an outer and inner wall embracing between them an intermediate wall consisting of a single blank of flexible material pressed into the desired shape, and extending up between the inner and outer walls and entirely across one end to form a seamless bottom, substantially as and for the purpose described. 14th. A paper pail consisting of an inner and outer wall provided with an intermediate wall, consisting of a sheet or single blank of flexible material pressed into the desired form extending entirely across one end to form a bottom, said bottom re-enforced or strengthened by a disc of heavier material, substantially as and for the purpose described. 15th. A paper pail consisting of an inner and outer wall provided with an intermediate wall, consisting of a sheet or blank of flexible material pressed into the desired form and the bottom re-enforced or strengthened by a disc of heavier material whose outer edges are bent upward to form a flange which is embraced by the outer wall, substantially as and for the purpose described. 16th. A paper pail consisting of an inner and outer wall embracing between them the edges or sides of a single blank of flexible material and the flange or upturned edges of a disc of heavier or stiffer material, substantially as and for the purpose described. 17th. A paper vessel whose side walls consist of two or three tubes of paper, the outer wall extending up beyond the other wall or walls and the upper edge bent or folded over inwardly and downwardly to meet the upper edge of the inner wall or walls, and embrace the intermediate wall or lining, substantially as and for the purpose described. 18th. A paper vessel provided with two or more side walls one wall extending up higher than the others and folded over and embracing the upper edge of the lower wall or walls, and intermediate wall or lining, substantially as and for the purpose described. 19th. A paper vessel consisting of an outer and inner wall, the inner wall consisting of a blank of flexible material creased and folded in the manner described, the outer wall being plain and extending up higher than the inner wall, the upper edges being crimped or corrugated and folded over inwardly to embrace the upper edges of the inner wall, substantially as and for the purpose described. 20th. In a paper vessel having a saucer-shaped lid, said lid provided with a double or re-enforced rim, substantially as and in the manner described. 21st. In a paper vessel provided with a lid with a triple flange, two folds of which embrace the upper edges of the vessel, the re-enforcing flap at the point of connection with the hinge, substantially as and in the manner described. 22nd. A paper vessel

consisting of an outer and inner wall, said inner wall consisting of a blank of flexible material creased and folded in the manner described, the outer wall overlapping the upper edge of the inner wall to retain same in place, and provided with a lip having a triple flanged rim, the two outer folds of which fit down over and embrace the upper edges of the wall, substantially as and in the manner described.

23rd. A hinged circular lid for a paper vessel circular in horizontal cross section, said lid fitting down within the upper edges of the vessel, and having a flange consisting of three folds, the two outer folds embracing and inclosing the upper edges of the vessel in the manner described, said outer flange being slightly cut away to permit the lid to swing back on its hinge when opened, substantially as and for the purpose described.

24th. A paper vessel provided with a lid, said lid constructed with an upright flange integral with the body of the lid and having permanently attached to and forming part of said flange the inner leg of a circular strip folded or bent upon itself longitudinally so that when the lid is closed the outer leg of this strip will embrace the upper edges of the vessel, substantially as and for the purpose described.

25th. A paper vessel provided with a lid fitting down within it a short distance, and having a double flange fitting over and inclosing the upper edges of the vessel, said flange formed by attaching to the upturned flange on the lid the inner leg of a circular strip folded upon itself, substantially as and for the purpose described.

26th. A vessel circular in horizontal cross section, in combination with a saucer shaped lid, the body of which fits down within the upper edges of the walls of the vessel and is provided with an upright flange, said flange having attached to it a circular strip bent upon itself substantially U-shaped in cross section so as to embrace or inclose the upper edges of the vessel when the lid is in place to close the same, substantially as and for the purpose described.

27th. A paper vessel having its walls made of ordinary sheet paper and circular in cross section, having the lower edge of the wall or walls spun inwardly upon themselves under pressure to form a bead or rim, substantially as and for the purpose described.

28th. A paper vessel having its inner walls made of ordinary sheet paper circular in horizontal cross section the lower edges of the upright walls being spun inwardly upon themselves under pressure to form a bead or rim, in combination with a bottom resting upon said bead, substantially as and for the purpose described.

29th. A paper vessel having its walls made of ordinary sheet paper circular in cross section whose walls are relatively thin and the lower edges of which are spun inwardly upon themselves to form a relatively thick and solid bead or rim, substantially as and for the purpose described.

30th. A paper vessel having its walls made of ordinary sheet paper circular in cross section, whose upright walls are relatively thin, the lower edges of which are spun inwardly upon themselves to form a relatively thick bead, a bottom resting upon said bead and a supplemental bottom inserted within the space formed by the bead, substantially as and for the purpose described.

31st. A paper vessel having its walls made of ordinary sheet paper circular in cross section, the upper edges of whose wall or walls are spun outwardly upon themselves under pressure to form a stiffening bead or rim, substantially as and for the purpose described.

32nd. A paper vessel having its walls made of ordinary sheet paper circular in horizontal cross section whose upright walls are relatively thin, and the upper edges of which are spun outwardly to form a relatively thick portion in the shape of a stiffening bead, or rim, substantially as and for the purpose described.

33rd. A saucer shaped lid for a paper vessel made of ordinary sheet paper, consisting of a circular disc with an upright flange, the upper edges of said flange being spun outwardly upon itself under pressure to form a solid stiffening bead, substantially as and for the purpose described.

34th. A saucer shaped lid for a paper vessel made of ordinary sheet paper consisting of a circular disc with an upright flange, provided at its upper edges with a substantially solid bead formed by spinning the edge of the flange upon itself under pressure, substantially as and for the purpose described.

35th. In the manufacture of paper vessels having their walls made of ordinary sheet paper, the art of producing a stiffening brace to the same by spinning the edges of the top or bottom or both upon themselves under pressure, to form a substantially solid stiffening bead, substantially as and for the purpose described.

36th. In the manufacture of circular vessels of paper, having their walls made of ordinary sheet paper, the art of spinning the edges of the vessel or lid upon themselves under pressure, for the purpose of producing a substantially solid stiffening brace for the same, substantially as and for the purpose described.

37th. A paper vessel or lid made of ordinary sheet paper whose upper edges are spun outwardly and whose lower edges are spun inwardly to produce a stiffening bead or brace, substantially as and for the purpose described.

38th. A paper vessel having its walls made of ordinary sheet paper circular in horizontal cross section, having double upright walls, the lower edges of the inner wall being spun to form a bead supporting an inner bottom, the lower edges of the outer wall being likewise spun inwardly upon themselves to form a bead and supporting an outer bottom, substantially as and for the purpose described.

39th. A paper vessel or lid having upright walls made of ordinary sheet paper, the lower edges of the inner wall being spun upon themselves under pressure to form a bead to receive and support an inner bottom, and the lower edges of the outer wall being likewise spun and an outer bottom provided with an upright flange extending between the two beads and upwardly between the walls, substantially as and for the purpose described.

40th. A paper vessel or lid having up-

right walls made of ordinary sheet paper, the lower edge of the inner wall being spun upon itself under pressure to form a stiffening bead to receive and support an inner bottom, and the lower edge of the outer wall being likewise spun inwardly upon itself in combination with an outer bottom consisting of a disc whose edges are inserted within the bead of the outer wall, substantially as and for the purpose described.

41st. A paper vessel having two or more walls made of ordinary sheet paper and provided with an intermediate wall of lighter material extending entirely across the bottom unbroken, the lower edges of the outer wall being spun inwardly within themselves to form a base, substantially as and for the purpose described.

42nd. A paper vessel having two or more walls made of ordinary sheet paper with an intermediate wall extending unbroken across the bottom, and up between the inner and outer walls, the lower edges of the outer wall being spun inwardly upon themselves to form a base or stiffening bead in combination with an outer bottom consisting of a disc inserted in the space formed by said bead, substantially as and for the purpose described.

43rd. A paper vessel circular in cross section, having two or more walls made of ordinary sheet paper, the upper edges of the outer and inner walls being spun together outwardly upon themselves under pressure to form a stiffening brace or bead, substantially as and for the purpose described.

44th. A paper vessel or lid having two or more walls made of ordinary sheet paper, the upper edges of the inner wall being spun upon themselves outwardly under pressure over the upper edges of outer wall or walls, substantially as and for the purpose described.

45th. A paper vessel or lid, the upper edges of whose upright walls made of ordinary sheet paper are strengthened or stiffened by a brace consisting of a circular strip one of whose edges is spun outwardly upon itself, substantially as and for the purpose described.

46th. In a paper vessel having its walls made of ordinary sheet paper and circular in horizontal cross section, provided with a lid extending down into the top of the vessel, and having its upper edge spun over to form a bead, said lid and the walls of the vessel provided with corresponding crimps to fit within one another, substantially as and for the purpose described.

47th. A paper vessel having its walls made of ordinary sheet paper, and provided with a saucer shaped lid, provided with a bead made by spinning the upper edge upon itself, the edges of the lid where contiguous with the walls, provided with a horizontal crimp to fit within a corresponding crimp in the walls of the vessel, substantially as and for the purpose described.

No. 66,567. Bicycle Pedal Cushion.

(Cousinet pour pedales de bicycles.)

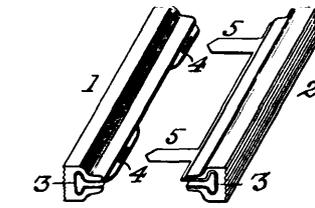


Fig. 1. Fig. 2.

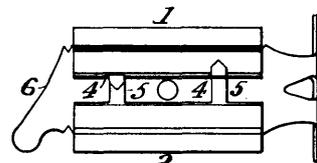


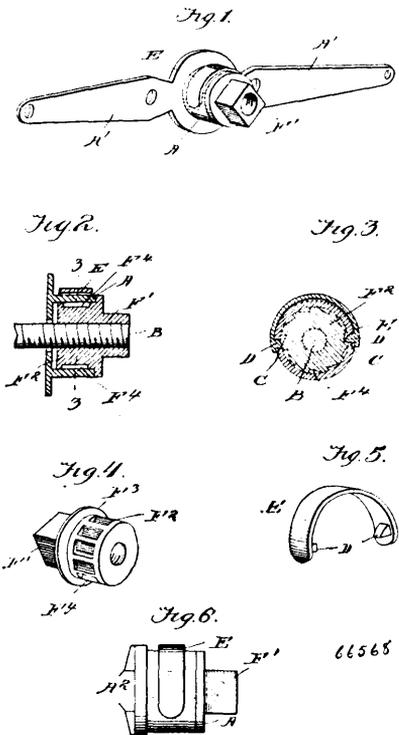
Fig. 3.

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Frederick Stewart, New York City, New York, assignee of Frank W. Kremer, Wadsworth, and Charles H. Wheeler, Akron, Ohio, U.S.A., 13th March, 1900; 6 years. (Filed 26th July, 1899.)

Claim.—1st. An improved bicycle cushion consisting of a piece of vulcanized rubber substantially a rectangle in section, of suitable length to fit the pedal blade, cut lengthwise on one side with an opening substantially pear-shaped in section, substantially as shown and described. 2nd. Improved bicycle pedal cushion consisting of a piece of vulcanized rubber, substantially a rectangle in section, of suitable length to fit the pedal blade, cut lengthwise on one side with an opening substantially pear-shaped in section, in combination with a sheet of metal, curved to conform to said opening and provided with means, such substantially as shown for uniting it with the oppositely disposed sheet, substantially as shown and described. 3rd. An improved bicycle pedal cushion consisting of two pieces of vulcanized rubber, each substantially a rectangle in section, of suitable length to fit the edges of the pedal blade, each cut lengthwise on one side with an opening substantially pear-shaped in section, in combination with malleable metallic plates curved to conform to said opening, one whereof has a projecting slotted edge and the other having projecting points adapted to be locked in the slots in the opposite plate, substantially as shown and described.

No. 66,568. Nut Lock. (Arrête-écrou.)



Francis M. McCartea and Mary C. Lester, both of San Juan, California, U.S.A., 13th March, 1900; 6 years. (Filed 30th October, 1899.)

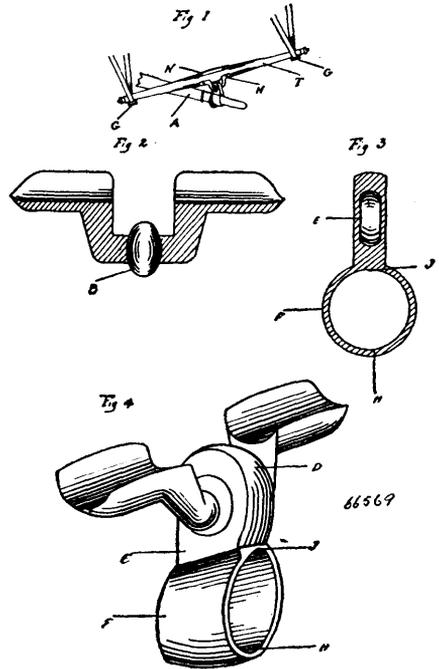
Claim.—1st. A nut lock comprising a socket and a nut adapted to fit therein, said nut having a series of ratched faced recesses, and a spring carrying a locking tooth or pawl adapted to engage said nut, substantially as shown and described. 2nd. A nut lock comprising a socket provided with means to prevent rotation, a spring embracing the exterior of the socket and provided with a tooth or pawl projecting through the side of the socket into the interior, and a nut adapted to fit within the socket and having a series of ratchet faced notches or recesses adapted to be engaged by the tooth or pawl carried by the spring, substantially as described. 3rd. In a nut lock, the combination with the socket having flanges or plates integral therewith, a nut having a portion thereof shaped to fit within the socket, said portion having a series of ratchet faced notches and a spring adapted to embrace the exterior of the socket, and having a pin arranged at one end of the spring and a tooth passing through an opening in the socket and engage the ratchet faced notches of the nut, substantially as shown and described.

No. 66,569. Neck Yoke. (Joug.)

George Arthur Landon, J. F. Eby, H. Blain, W. J. McMurtry and F. N. Tenant, all of Toronto, Ontario, Canada, 13th March, 1900; 6 years. (Filed 11th August, 1899.)

Claims.—1st In combination the neck yoke, pole and centre having a roller bearing connection between the neck yoke and pole, substantially as described. 2nd. In combination the neck yoke with collar and necessary means for attaching it to the neck yoke and the lock, the neck of which fits over the roller and in which is the ring through which the pole passes, substantially as described. 3rd. In combination, the neck yoke with roller and necessary means for attaching it to the neck yoke, the lock, the neck of which fits over the roller

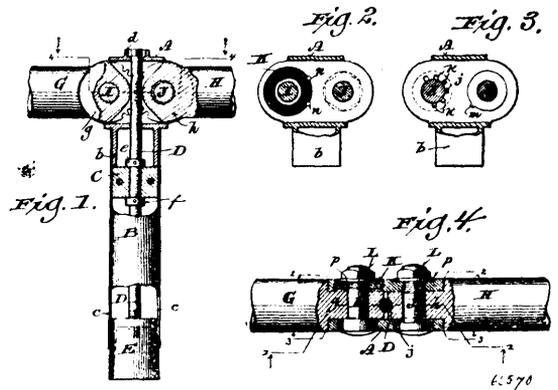
and in which is a ring through which the pole passes, and a socket in the neck of the lock so constructed as to allow the neck yoke a



partially rotary motion, and also a lateral motion backwards and forwards, as and for the purposes specified.

No. 66,570. Bicycle Handle Bar.

(Manche de barre de bicyclet.)

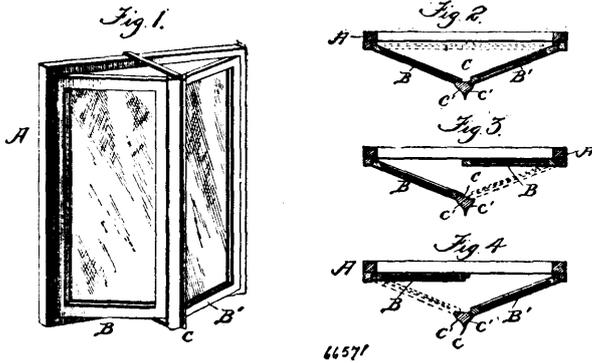


The Sauger Handle Bar and Plating Company, assignee of J. P. Schowalter and G. A. Rosenbauer, all of Milwaukee, Wisconsin, U.S.A., 13th March, 1900; 6 years. (Filed 7th August, 1899.)

Claim.—1st. A bicycle handle bar comprising a hollow head provided with a depending tubular shank longitudinally kerfed at intervals circumferentially of its lower end, a conical expander engaging the kerfed end of the shank, a rod that being in screw thread connection with the expander extends up through said head, grip members having rounded toothed ends in pivotally adjustable connection with the aforesaid head to mesh with each other therein, and means for maintaining pivotal adjustment of the grip members, the toothed faces of these grip members being peripherally grooved to afford clearance for the expander adjusting rod. 2nd. A bicycle handle bar comprising a hollow head provided with a depending shank, grip members having rounded toothed ends arranged on pivot bolts within the head to mesh with each other, one of these pivot bolts being partially eccentric, and a lug on the eccentric pivot bolt, engagable with any one of a series of radial notches in a side of said head. 3rd. A bicycle handle comprising a hollow head provided with a depending shank and pivot bolts, grip members having rounded toothed ends on the pivot bolts within the head and in mesh with each other, a series of radial wedge ribs on a side of a toothed end of a grip member, a disc made fast in said head and having a wedge ribbed surface in mesh with that on one of said grip members, and clamp nuts

engaging said pivot bolts. 4th. A bicycle handle bar comprising a hollow head provided with a depending shank, a pair of grip members having rounded toothed ends meshed with each other in the head, a pivot bolt that constitutes the support for one of the grip members and has an eccentric portion provided with a lug engagable with any one of a series of radial notches in a side of said head, another pivot bolt constituting the support for the other grip member, and provided with a feather engaging a head notch, a series of radial wedge ribs on a side of the toothed end of at least one grip member, an opposing series of radial wedge ribs provided in the head, and clamp nuts run on the pivot bolts outside the aforesaid head.

No. 66,571. Ventilator. (Ventilateur.)



John Maximilian Mackay, Ste Foy, and Jean Baptiste David Legaré, Quebec, both of the Province of Quebec, Canada, 13th March, 1900; 6 years. (Filed 4th April, 1899.)

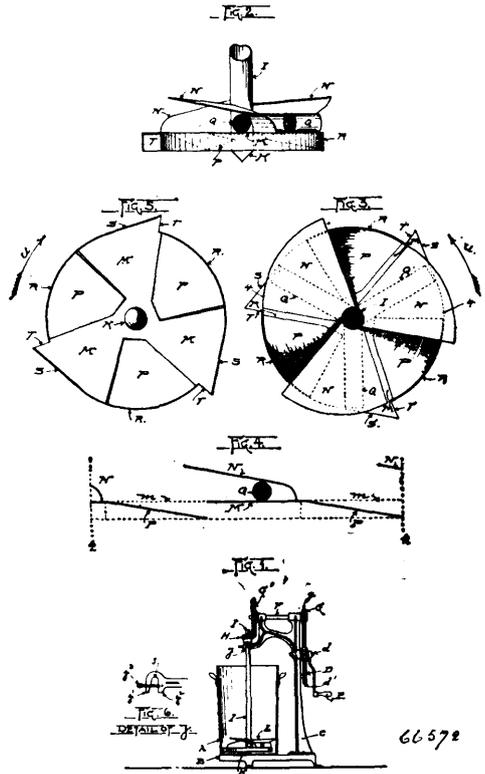
Claim.—1st. A car ventilator, comprising a window frame, a divided window sash hinged therein and a guard frame secured to said window frame, substantially as described. 2nd. A car ventilator, comprising a window frame, a divided window sash hinged thereto and a guard frame secured to said window frame the outer edges of said guard frame forming a deflector, substantially as described. 3rd. A car ventilator, comprising a window frame, a divided window sash hinged thereto a guard frame, and outwardly projecting extensions secured to the top and bottom of said window frame and said guard frame, whereby the guard frame is supported at a distance from said window frame, substantially as described.

No. 66,572. Machine for Separating Aerating and Agitating Liquids. (Machine pour la séparation l'aérage et l'agitation des liquides.)

James H. Folliot, C. B. Fraser, and G. H. White, all of Chicago, Illinois, U.S.A., 13th March, 1900; 6 years. (Filed 13th February, 1899.)

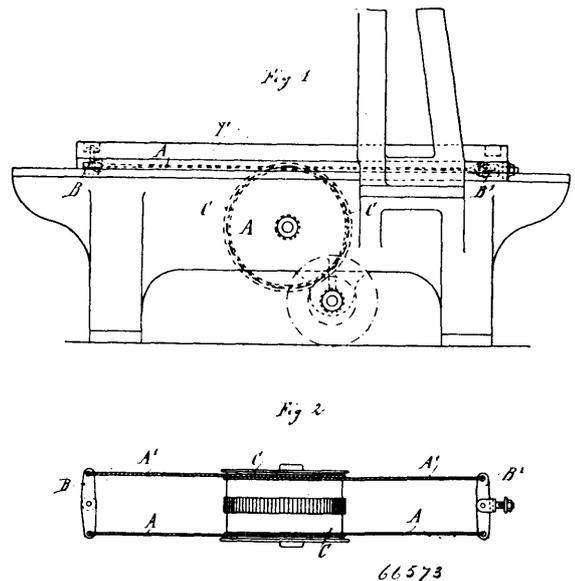
Claim.—1st. The combination, in a liquid agitator and aerator, of a hollow shaft rotatably mounted, a disc secured to the shaft, such disc having openings therethrough, radial blades converging toward and at their forward edges joined respectively, to the disc forward of the openings therethrough, pipes secured in the hollow shaft and communicating therewith and extending radially therefrom, such pipes discharging between the radial blades and the disc and between the shaft and the periphery of the disc, substantially as described. 2nd. The combination, in a liquid agitator and aerator, of a hollow shaft rotatably mounted, a disc secured to the shaft, such disc having openings therethrough, a peripheral rim to the disc, such rim having openings therein, tangential extensions to the peripheral rim forming mouths to the openings therein, radial blades converging towards and at their forward edges joined, respectively, to the disc, forward of the openings therethrough, pipes secured to the hollow shaft and communicating therewith and extending radially therefrom, such pipes discharging between the radial blades and the disc and between the shaft and the peripheral rim, and means to rotate the shaft, substantially as described. 3rd. The combination, in a liquid agitator and aerator, of a hollow shaft rotatably mounted, a disc secured to the shaft, such disc having openings therethrough, a peripheral rim to the disc, such rim having openings therein, tangential extensions to the peripheral rim, forming mouths to the openings therein, radial blades arranged with their rear edges respectively, joined to the disc to direct liquids from beneath the agitator and aerator upward through the openings in the disc, radial blades converging toward and at their forward edges joined with the disc, forward of the openings therethrough, pipes, located within the angle formed by the converging blades and the disc, extending radially from the hollow shaft and discharging between such converging blades and disc and between the hollow shaft and the peripheral rim, with means to rotate the shaft, substantially as described. 4th. The combination, in a liquid agitator and aerator, of a rotatably mounted hollow shaft, a disc secured to the shaft, such disc having openings therethrough, a peripheral rim to the disc, such rim having openings therein, tangential extensions to the peripheral rim, forming mouths to the openings therein,

radial blades arranged with their rear edges, respectively, joined to the disc to direct liquid from beneath the disc upwards through



certain of the openings through the disc when the shaft and disc are rotated, radial blades above the disc converging towards and at their forward edges, respectively, joined to the disc forward of such openings converging pairs of radial blades meeting at their forward edges and joined to the disc forward of the remaining openings therethrough, pipes located between the converging blades and between the blades and disc, respectively, such pipes secured in and extending radially from the hollow shaft and discharging between the hollow shaft and the peripheral rim, and means to rotate the shaft and disc, substantially as described.

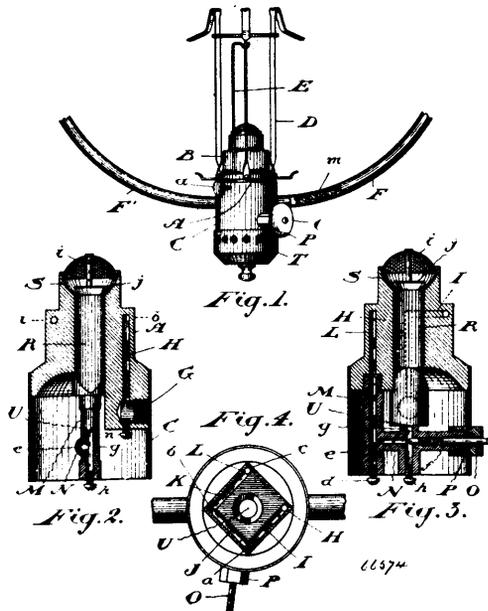
No. 66,573. Sliding Table. (Chariot pour machine-outils.)



Ernst Kirchner, Leipzig Sellerhausen and Otto Preissler, Leipzig-Volkmarshdorf, all of the Empire of Germany, 13th March, 1900; 6 years. (Filed 15th March, 1899.)

Claim.—Means of impulsion for sliding tables and carriages connected with machine tools, comprising a cylinder C, ropes A A' or the like running over the said cylinder, and cross pieces B B' pivotally attached to the sliding table or carriage T, substantially as described.

No. 66,574. Liquid Hydro-Carbon Burner. (Brûleur de liquide à hydro-carbures.)



William Thompson and Patrick O'Connor, both of Toronto, Ontario, Canada, 13th March, 1900; 6 years. (Filed 17th November, 1899.)

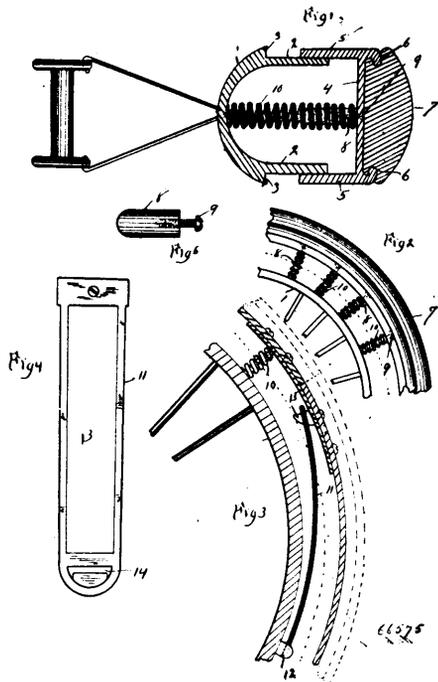
Claim.—1st. In a lamp for burning liquid hydro-carbons, the body provided with a vapourizing chamber formed therein by a series of communicating passageways forming a continuous channel, and an oil inlet and a vapour jet communicating with the opposite ends of the said channel, substantially as and for the purpose specified. 2nd. In a lamp for burning liquid hydro-carbons, the body provided with a vapourizing chamber comprising two vertical passageways formed in the said body, and passageways near the top of the body connecting the upper ends of the said vertical passageways to form a continuous channel, substantially as and for the purpose specified. 3rd. In a lamp for burning liquid hydro-carbons, the body provided with a vapourizing chamber comprising two vertical passageways bored in the said body and three passageways bored horizontally in the upper end of the body from the outside so as to communicate with one another and the vertical passageways, in combination with plugs adapted to close the ends of the said passageways, which extend to the outer surface of the body, substantially as and for the purpose specified. 4th. In a lamp for burning liquid hydro-carbons, the body A having a central opening R formed therein expanded at its upper end to form a mixing chamber S with flaring sides, in combination with a button i suspended in the said chamber near the bottom thereof, substantially as and for the purpose specified. 5th. In a lamp for burning liquid hydro-carbons, the body A having a central opening R formed therein expanded at its upper end to form a mixing chamber S, in combination with a gauze diaphragm covering the said chamber, and a button suspended from the said diaphragm in proximity to the bottom of the chamber, substantially as and for the purpose specified. 6th. In a lamp for burning liquid hydro-carbons, the body provided with a vapourizing chamber, a supply tube communicating with one end thereof, in combination with a pipe communicating with the other end of the said chamber, and provided with a horizontal portion counterbored to form a passageway of two different diameters, a valve spindle having its end adapted to close the end of the smaller portion of the passageway, and provided with a screw threaded portion adapted to engage a screw thread part of the enlarged bore of the passageway, and a vertical tube having a passageway bored therein set to one side of the enlarged portion of the horizontal passageway and communicating therewith, the said passageway being closed at its lower end and provided at its upper end with a fine jet, substantially as and for the purpose specified.

No. 66,575. Vehicle Wheel. (Roue de véhicules.)

August Schuch and Frank Gablenz, Hector, Minnesota, U.S.A., 13th March, 1900; 6 years. (Filed 25th October, 1899.)

Claim.—1st. The U-shaped rim formed with parallel walls, the tire formed with parallel walls, encompassing said rim and adapted

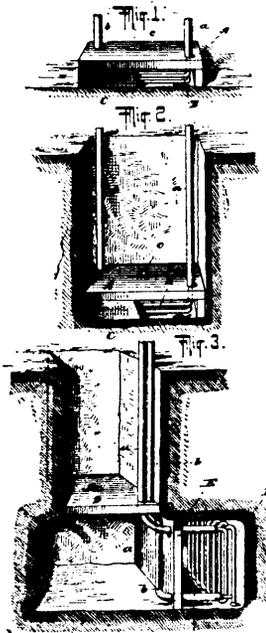
to play back and forth, and springs secured to the inner side of said tire having their free ends adapted to bear against the wheel rim,



substantially as shown and described. 2nd. In a vehicle wheel, the rim having outwardly projecting walls, a metallic tire having inwardly projecting walls, adapted to engage the walls of the rim, lugs secured to the inner surface of said tire, and springs adapted to fit over said lugs, substantially as shown and described. 3rd. In a vehicle, the U-shaped rim, the U-shaped tire having parallel walls adapted to engage the rim, the outer sides of said tire being flanged inwardly, lugs secured to the inner surface of the tire, springs adapted to fit over said lugs, and a metallic spring band secured to the inner surface of said rim, having its free end adapted to engage one of the lugs of the tire, substantially as shown and described.

No. 66,576. Mining and Excavating Apparatus.

(Appareil à miner et creuser.)

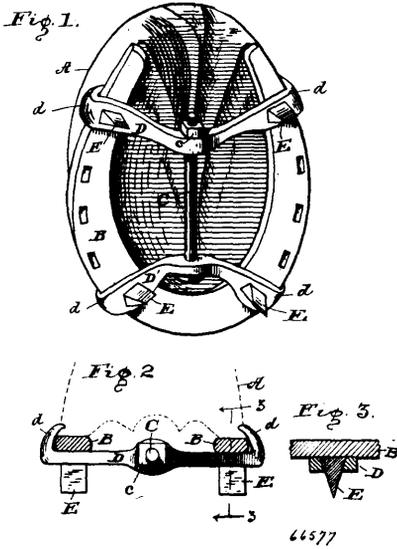


Harry Hoyt, Francis and Curtis Grubb Cullin, Crawford, New Jersey, U.S.A., 13th March, 1900; 6 years. (Filed 26th January 1998.)

Claim.—In an apparatus for facilitating mining operations in frozen soil, the combination of the descending add return pipes *a, b*, having horizontal lateral bends, an upright or perpendicularly presented movable coil *B*, forming the extremity or connection between the said pipes, the upright movable shield *E*, for confining the heat and protecting the operatives, and the movable non-conducting diaphragm or shield *D*, for preventing the displacement of the warm air by cold air, substantially as described.

No. 66,577. Calk for Horse Shoes.

(*Crampon de fer à cheval.*)



Sentenev S. Gastineau, John W. Stokes, and Paul Thomas and Gustav Kothe, all of Indianapolis, U.S.A., 13th March, 1900; 6 years. (Filed 4th January, 1900.)

Claim.—1st. The herein described calk attachment for horse shoes, consisting of a pair of bars having their ends bent up to form hooks, with inwardly sloping inside faces, to engage the end of the horse shoe, said bars being shorter than the maximum width of the shoes and having downwardly tapering holes near their ends and middle holes transverse to the end holes, wedge shaped calks seated in the tapering holes in the bars, and a threaded bolt passing through the middle holes, and a nut on said bolt whereby the bars are drawn toward each other and clamped to the shoe, substantially as described. 2nd. The herein described calk attachment for horse shoes, consisting of a pair of bars having their ends bent up to form hooks to engage the end of the horse shoe and having a sloping inner face as described, said bars being shorter than the maximum width of the shoes and being bent laterally toward the other for the purpose specified and applied transversely of the shoe from opposite directions, that is from toe and heel thereof, and said bars having downwardly tapering holes near their ends and middle holes transverse to the end holes, wedge shaped calks seated in the tapering holes and a threaded bolt passing through the middle holes and a nut on said bolt whereby the bars are drawn toward each other and are clamped to the shoe, said nut being normally locked in the concave of the bent bar, substantially as shown and described.

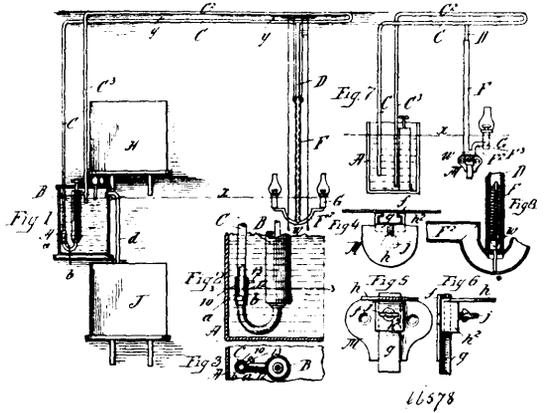
No. 66,578. Illuminating Apparatus.

(*Appareil d'éclairage.*)

Albert Wilbur Allen, Springfield, Massachusetts, assignee of Leslie Benjamin Allan, Bangor, Maine, U.S.A., 14th March, 1900; 6 years. (Filed 17th August, 1899.)

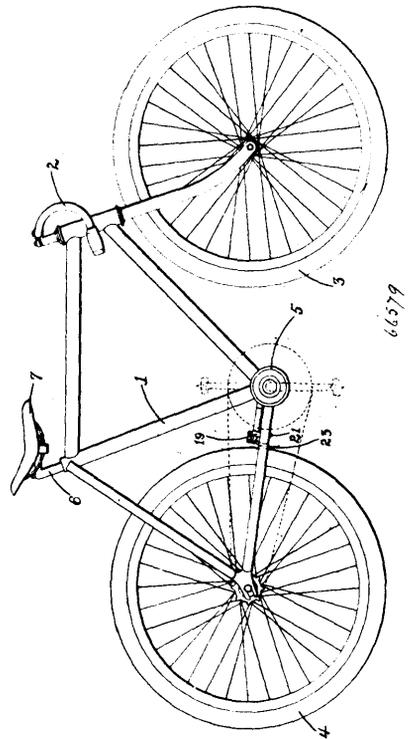
Claim.—1st. In a lighting system, the oil service tank, a lamp, an oil feed pipe running continuously from the tank upwardly, then horizontally over and beyond the lamp, having a return bend and a continuation therefrom back to and terminating within the tank, a depending branch pipe, between the said return bend and the tank, which connects the feed with the lamp, and a pump connected to the feed pipe for causing a flow of oil from the tank through said feed pipe back to the tank for expelling air accumulations in said pipe, the oil for the lamp being taken directly from the oil service tank through the pipes *C, C', D*, substantially as described. 2nd. In a lighting system, the oil service tank, a lamp, an oil feed pipe running continuously from the tank upwardly, then horizontally over and beyond the lamp, having a return bend and a continuation therefrom back to and terminating within the tank, a depending branch pipe between the said return bend and the tank which connects the feed pipe with the lamp, and provided with a valve for cutting off the connection between the feed pipe and lamp, and a pump connected to the feed pipe for causing a flow of oil from

the tank through said feed pipe back to the tank, for expelling air accumulations in said pipe, the oil for the lamps being taken directly



from the oil service tank through the pipes *C, C', D*, for the purpose set forth. 3rd. In an oil supplying device, in combination, an oil tank, an oil fount, a siphon adapted to carry oil by siphonic action from said tank to said fount, a pump adapted to create a flow of oil through said siphon, and an oil carrying return pipe connecting the outer end of the substantially horizontal portion of said siphon beyond its outer leg with said tank, substantially as described.

No. 66,579. Bicycle Brake. (*Frein de bicyclette.*)

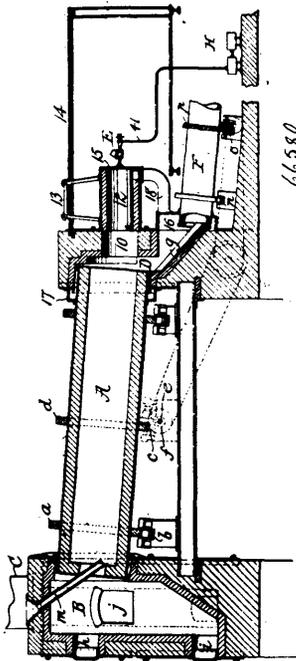


William Henry Penseyres, Buffalo, New York, U.S.A., 14th March, 1900; 6 years. (Filed 31st October, 1899.)

Claim.—1st. In a bicycle, the combination with the frame, the wheels, a clutch device for forward driving, a crank hanger having an opening in its upper rear portion, and a crank shaft rotatably supported in the crank hanger, of a clutch mechanism mounted upon the shaft and supporting a notched outer ring, a tubular enclosing case, a cap fitting in the rear end of the enclosing case, and having a central opening, a supporting standard, screws for detachably securing said standard to the frame, a brake rod passing through said standard, the enclosing case and the central opening in the cap and having its forward end fitting in the notch in the outer ring in the clutch mechanism, a brake spoon pivotally swung from a support and pivotally attached to the rear end of the brake rod and a spring within the enclosing case having one end in connection with the rod and the other abutting against the cap for holding the brake normally away from the tire, as set forth. 2nd. In a

bicycle having a brake adapted to be set by back pedalling, the combination with the frame, wheels, and a clutch device for forward driving, of a hanger having a crank shank rotatably supported in said hanger, a ball bearing clutch fitting on said shaft, the outer member of the clutch consisting of an annular ring having a grooved inner bearing adapted to operate on the balls of the clutch, the periphery of the said annular ring being provided with a rearwardly inclined notch, an opening in the rear of said hanger, a tubular spring enclosing case, a brake rod passing through the tubular casing and the opening in the hanger and having a reduced forward end fitting in the peripheral notch in the annular ring, a spiral spring within the casing encircling the rod, and a brake spoon having an upper handle pivoted at its upper end to a support and below said upper pivoting point to the brake rod, as set forth. 3rd. In a bicycle, the combination with the crank shaft having a ball bearing clutch mechanism, of an annular ring having a notch supported upon said ball bearing clutch mechanism and restrained thereby against independent rotation in one direction while permitted to revolve freely in the opposite direction, and a brake device having the end of its rod fitting in the notch in the annular ring whereby upon backward pressure being applied the annular ring is locked to the shaft by the clutch applied by the backward rotation of the notched ring. 4th. In a bicycle, the combination with the crank hanger having an opening and the crank shaft rotatably supported within said hanger, of a clutch mechanism supported upon the crank shaft, an annular ring having a notch supported upon the clutch mechanism and a brake having its rod extending through the opening in the crank hanger with its end resting in the notch, as set forth. 5th. In a bicycle, the combination with the crank hanger having an opening, the crank shaft rotatably supported within said hanger, and having a ring or enlargement provided with a series of peripheral grooves, a series of balls supported one in each groove and an outer annular ring supported upon said balls and having a peripheral notch, of a brake having its rod extending through the opening in the crank hanger with its end resting in the notch in the annular ring, as set forth. 6th. In a bicycle, the combination with the crank shaft, of clutch mechanism mounted thereon, a brake operated through said clutch mechanism, a spring for normally maintaining the brake in an inoperative position and means for regulating the tension of said spring, as set forth. 7th. In a bicycle, the combination with a crank hanger having an opening, of a crank shaft rotatably supported in said hanger, a clutch mechanism upon said shaft, an enclosing case, a standard supporting the rear end of said enclosing case, horizontal arms pivoted at their front end to the upper part of the standard, a brake having its handle pivoted to the rear ends of said horizontal arms, a brake rod mounted within the enclosing case with its front end extending into the crank hanger and its rear end pivoted to the brake handle, and a spring within the enclosing case for normally holding the brake away from the tire, as set forth.

No. 66,580. Apparatus for Burning Pulverized Fuel.
(Appareil à brûler le combustible pulvérisé.)



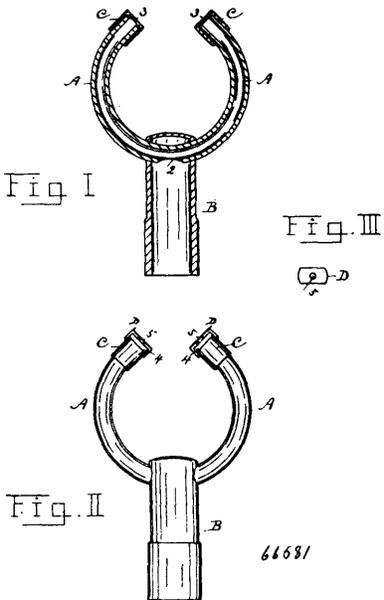
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Claim.—1st. The combination with a furnace having an elongated combustion chamber, of means for injecting axially thereto a jet of air of high pressure and small volume, means for feeding to such air jet pulverized carbonaceous fuel which is carried by and with the air jet into the furnace in a long and relatively compact stream of less cross section than the combustion chamber, and means for supplying an additional volume of air to the furnace whereby a core of pulverized fuel in combustion surrounded by air to support combustion is produced in the furnace to uniformly heat the walls of the furnace by radiation without impinging thereupon. 2nd. The combination with a furnace having an elongated combustion chamber, of means for injecting axially thereto a jet of air of high pressure and small volume, means for feeding to such air jet pulverized carbonaceous fuel which is carried by and with the air jet into the furnace in a long and relatively compact stream of less cross section than the combustion chamber, means for supplying around said air jet on its way to the furnace an additional volume of air, and means for supplying a further volume of air to the furnace whereby a core of pulverized fuel in combustion surrounded by air to support combustion is produced in the furnace to uniformly heat the walls of the furnace by radiation without impinging thereupon. 3rd. The combination with a rotary cement furnace having an elongated combustion chamber, of means for injecting axially thereto a jet of air of high pressure and small volume, means for feeding into the path of said air jet pulverized carbonaceous fuel suspended in the air so as to form a fuel cloud of uniform or substantially uniform density, which is carried by and with the air jet into the furnace in a long and relatively compact stream of less cross section than the combustion chamber, and means for supplying a further volume of air to the furnace whereby a core of pulverized fuel in combustion surrounded by air to support combustion is produced in the furnace to uniformly heat the walls of the furnace by radiation without impinging thereupon. 4th. The combination with a rotary cement furnace having an elongated combustion chamber, of means for axially injecting thereto a jet of air of high pressure and small volume, means for feeding into the path of said air jet pulverized carbonaceous fuel suspended in the air so as to form a fuel cloud of uniform or substantially uniform density which is carried by and with the air jet into the furnace in a long and relatively compact stream of less cross section than the combustion chamber, means for supplying around said air jet on its way to the furnace an additional volume of air, and means for supplying a further volume of air to the furnace whereby a core of pulverized fuel in combustion surrounded by air to support combustion is produced in the furnace to uniformly heat the walls of the furnace by radiation without impinging thereupon. 5th. The combination with a rotary cement furnace having an elongated combustion chamber, of means for feeding material to be treated therein at one end thereof, a conduit connected with the other or delivery end through which the material discharged from the furnace passes, means for axially injecting into the delivery end of the furnace a jet of air, means for feeding to said air jet pulverized carbonaceous fuel which is carried by and with the jet into the furnace, and a stack or draft device connected with the feed end of the furnace by which air is drawn into the furnace through the discharge conduit in contact with the heated material therein, whereby a core of pulverized fuel in combustion surrounded by air to support combustion is produced in the furnace to uniformly heat the walls of the furnace by radiation without impinging thereupon. 6th. The combination with a rotary cement furnace having an elongated combustion chamber, of means for feeding material to be treated therein at one end thereof, a conduit connected with the other or delivery end through which the material discharged from the furnace passes, means for injecting axially into the delivery end of the furnace a jet of air of high pressure and small volume, means for feeding to said air jet pulverized carbonaceous fuel which is carried by and with the jet into the furnace in a long and relatively compact stream, and a stack or draft device connected with the feed end of the furnace by which air is drawn into the furnace through the discharge conduit in contact with the heated material therein, whereby a core of pulverized fuel in combustion surrounded by air to support combustion is produced in the furnace to uniformly heat the walls of the furnace by radiation without impinging thereupon. 7th. The combination with a rotary furnace having an elongated combustion chamber, of means for feeding material to be treated therein at one end thereof, a conduit connected with the other or delivery end through which the material discharged from the furnace passes, means for injecting axially into the delivery end of the furnace a jet of air of high pressure and small volume, means for feeding to said air jet pulverized carbonaceous fuel which is carried by and with the jet into the furnace in a long and relatively compact stream, means for supplying around said jet on its way to the furnace a further volume of air to support combustion in the furnace, and a stack or draft device connected with the feed end of the furnace by which air is drawn into the furnace through the discharge conduit in contact with the heated material therein, whereby a core of pulverized fuel in combustion surrounded by air to support combustion is produced in the furnace to uniformly heat the walls of the furnace by radiation without impinging thereupon. 8th. The combination with a rotary cement furnace having at one end a draft device or stack, and means for feeding material to be burnt into the furnace, and at the other end a delivery opening for the discharge of the material, of means for axially injecting into the delivery end of the furnace a jet of air and means for feeding to said jet pulverized carbonaceous fuel, whereby

Edward Henry Hurry and Harry John Seaman, Catasauqua, Pennsylvania, U.S.A., 14th March, 1900; 6 years. (Filed 6th November, 1899.)

a core of pulverized fuel in combustion is produced in the furnace by radiation, and without impingement thereupon uniformly heat the walls of the furnace and the material passing therethrough. 9th. The combination with a rotary cement furnace, of means for axially injecting into its delivery end a jet of air, means for feeding to said jet pulverized carbonaceous fuel which is carried by and with the air jet axially into the furnace, and means for supplying around the jet or stream of air and pulverized fuel additional air to support combustion, whereby a core of pulverized fuel in combustion is produced in the furnace to by radiation and without impingement thereupon heat the walls of the furnace. 10th. The herein described means for feeding pulverized fuel to a burner, consisting of means for continuously supplying determined uniform quantities of pulverized fuel; means for receiving and violently mechanically agitating such received uniform quantities of said fuel into a fuel cloud, and for simultaneously positively conveying the fuel onwards to ward the burner. 11th. The herein described means for feeding and burning pulverized fuel, consisting of means for continuously supplying determined uniform quantities of pulverized fuel, means for receiving and violently mechanically agitating such received uniform quantities of said fuel into a fuel cloud and for simultaneously positively conveying the fuel cloud onward, a vertical conduit down which the fuel cloud passes, and an injector for directing high pressure air across the downward passing fuel cloud to convey it to the place of combustion, as set forth. 12th. The combination with a pulverized fuel burner, of a pulverized fuel feed therefor, consisting of a small primary conveyer for continuously feeding limited compact quantities of fuel, a longer secondary conveyer receiving the fuel from the primary conveyer and positively conveying it to the burner, and means for rotating the secondary conveyer at a speed to violently agitate the fuel and deliver it in a cloud to the burner, as set forth. 13th. The combination with a pulverized fuel burner, of a fuel feed therefor, consisting of a hopper having an opening, a worm conveyer in said opening to convey a limited compact quantity of fuel from the nopper, a secondary conveyer to receive such fuel to positively carry it forward to the burner, and means for rotating the secondary conveyer at a speed to violently agitate the fuel as it is carried forward, as set forth. 14th. The combination with a pulverized fuel burner, of a fuel feed therefor, consisting of a hopper having a plurality of vertical openings, a worm conveyer mounted vertically in each opening to convey limited compact quantities of fuel from the hopper, a driver for said worm, conveyers having means for connecting and disconnecting one or more of the worm conveyers therefrom, and a secondary conveyer receiving the fuel from said worm conveyers to carry it forward to the burner, as set forth.

No. 66,581. Gas Burner. (*Bec de gaz.*)

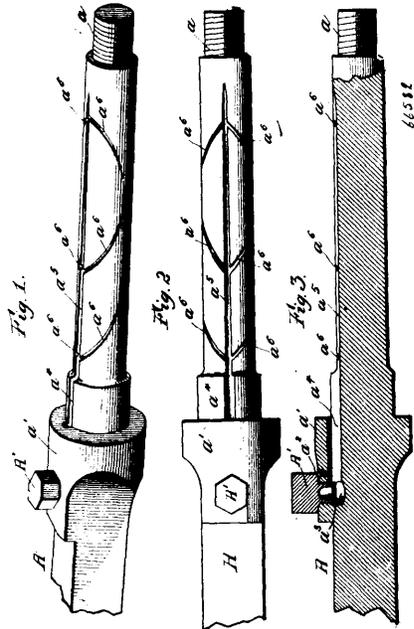


Frederick Chadwick, Hamilton, Ontario, Canada, 14th March, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—1st. A gas burner comprising a continuous circularly formed tube, a gas pipe with closed and open ends, said tube passing through the walls of said pipe in close proximity to the closed end thereof and rigidly secured thereto, an opening through the lower wall of the tube in the interior of said pipe, and caps with central gas apertures fitting rigidly over the end parts of the tube, all constructed and arranged, substantially as set forth. 2nd. A gas burner comprising a continuous circularly shaped tube of circular section, a vertical gas pipe with one end closed, said tube passing

through the walls of said pipe in close proximity to the closed end secured thereto, an opening through the lower wall of the tube in the interior of said pipe, caps with central gas apertures fitting rigidly over the end parts of the tube, and partial covers with central apertures over and secured to said caps to form air space between said caps and covers, all constructed and arranged, substantially as set forth.

No. 66,582. Axle Lubricator. (*Boite à graisse pour essieux.*)



Napoleon Augustin Cloutier, St. Ferdinand, Quebec, Canada, 14th March, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—A self lubricating axle, comprising an enlarged hub bearing having a threaded orifice, a threaded cap removably secured in said orifice, a receptacle for the lubricant formed at the bottom of said orifice, a passageway leading from said receptacle, a longitudinal groove communicating with said passageway, and a series of curved grooves extending from said longitudinal groove partially around the axle, substantially as described.

No. 66,583. Speed Varying Machine.

(*Machine variable de vitesse.*)

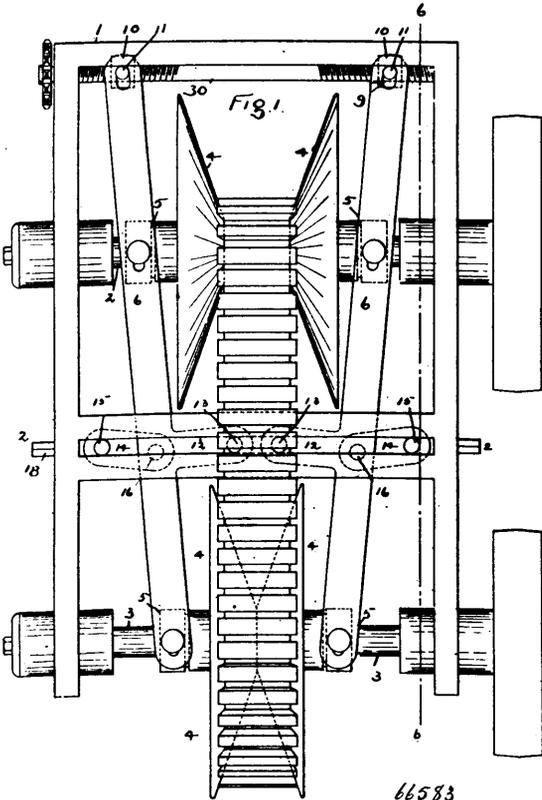
Milton O. Reeves Columbus, Indian, U.S.A., 14th March, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted thereon, a pair of cone shaped driving elements carried by each shaft, a belt connecting the pairs, levers pivot between the shafts and adapted to oscillate and simultaneously move one pair of driving elements together and the other pair apart, and means for concurrently advancing or receding the lever pivots towards or from each other, said means controlled by the levers, substantially as and for the purpose set forth. 2nd. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted thereon, a pair of cone shaped driving elements carried by each shaft, a belt connecting the pairs, levers pivoted between the shafts and adapted to oscillate and simultaneously move one pair of driving elements together and the other pair apart, and means controlled by the levers for advancing the pivots towards each other through a part of the oscillating of the levers and recede the pivots from each other through the remainder of their movement, substantially as and for the purpose set forth. 3rd. In a speed varying mechanism, the combination of a frame and two parallel shafts mounted thereon, a pair of cone shaped driving elements carried by each shaft, a belt connecting the pairs, thrust bearings taking against the driving elements, levers connecting the corresponding thrust bearings, an inwardly projecting teat formed on each lever, pivots formed in said teats, free to move laterally relatively to the frame, a link pivotally secured to a suitable support in rear of levers, and pivotally secured to the levers, and means for oscillating, substantially as and for the purpose set forth. 4th. In a speed varying mechanism, the combination of a frame, two parallel shafts mounted therein, a pair of cone shaped driving elements carried by each shaft, a belt connecting the pairs, thrust bearings taking against the driving elements, levers connecting the corresponding thrust bearings, an inwardly projecting teat formed on each lever, pivots formed in said teats free to move

laterally relatively to the frame, links pivotally secured to adjustable supports in the rear of the levers and pivotally secured to the

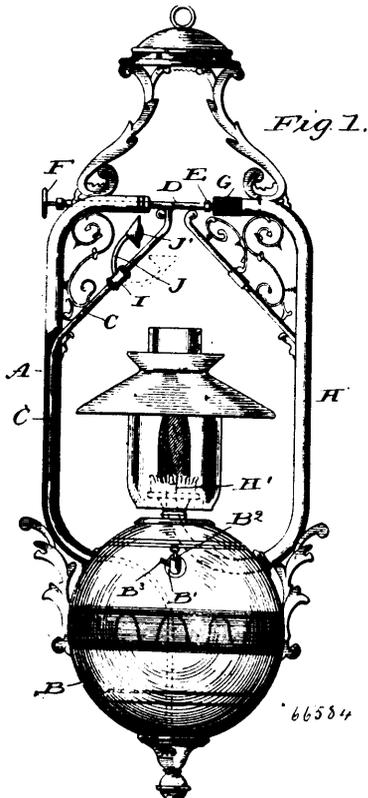
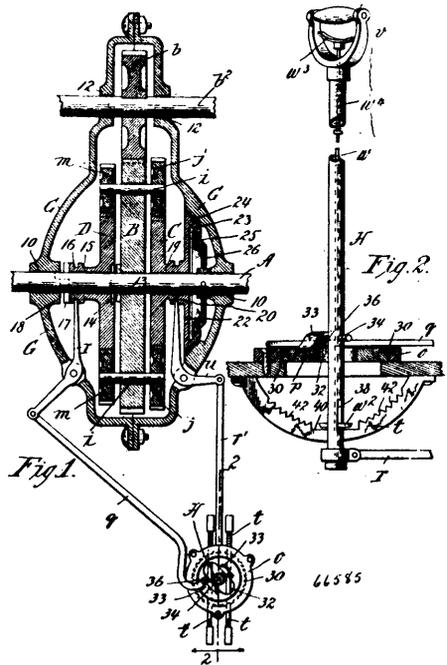
Claim.—1st. A vapour burning lamp, the combination with the lamp its connecting pipes and gas generator, of a fire basket filled with non-combustible absorbent material and provided with an inlet passage communicating with the gasolene pipe and means substantially as described, whereby the basket may be moved to a point beneath the gas generator, or to one side of the same, the moving of the basket serving to automatically operate the valve controlling the inlet passage of the same. 2nd. The pipe C, the collar I, the fire basket, the pipe interposed between the fire basket and the collar, the ratchet wheel carried by the collar and the locking dog L', adapted to engage the teeth of the ratchet wheel and to permit the collar to be turned in one direction only, substantially as described, and for the purpose specified.

No. 66,585. Variable Speed Gearing. (Engrenage variable de vitesse.)



lever, and means for oscillating the levers, substantially as and for the purpose set forth.

No. 66,584. Vapour Lamp. (Lampe à vapeur.)



Hinsdale Smith, Springfield, Massachusetts, U.S.A., 14th March, 1900; 6 years. (Filed 21st August, 1899.)

Claim.—1st. In a variable speed mechanism, a shaft mounted for rotation, a main or carrier wheel mounted upon and rotating freely on said shaft, a planet axle carried by said main wheel parallel with said shaft, a pair of united planet wheels on said planet axle, a gear on said shaft and gearing with one of said planet wheels, and means for locking said gear to the shaft, another gear loose on said shaft and engaging the other of said planet gears and means for both locking the last named gear to the shaft, and for locking it against rotation. 2nd. In a variable speed mechanism, a shaft mounted for rotation, a main or carrier wheel mounted upon and rotating freely on said shaft, a planet axle carried by said main wheel parallel with said shaft, a pair of united planet wheels on said planet axle, a gear on said shaft gearing with one of said planet wheels, and means for locking said gear to, and unlocking it from the shaft, another gear loose on said shaft and engaging the other of said planet gears and means for both locking the last named gear to the shaft, and for locking it against rotation. 3rd. In a variable speed mechanism, a rotatable part, a shaft about which it is rotatable having two gear wheels of varying sizes both directly mounted on said shaft, means for connecting one of said gears as a fixture to the shaft, gear wheels of varying sizes revolvably carried by the said first named rotatable part respectively in mesh with said gears concentrically on the shaft, and means for temporarily restraining the one of the two gears mounted on the shaft, that is not connected to the shaft from being turned. 4th. In a variable speed gearing, a rotatable part, a shaft relative to which it is rotatable, having two gears of varying sizes, directly and loosely mounted on said shaft, means for temporarily connecting and disconnecting each gear independently to form the shaft, united gear wheels of varying sizes revolvably carried by the first named rotatable part and rotatable thereon, and respectively in mesh with the said gears on the shaft, and devices independently operating to restrain or release said gears which are on the shaft. 5th. In a variable speed gearing, a shaft, a wheel B, loosely mounted thereon, gear wheels C and D, of a varying sizes loosely mounted on said shaft to turn, at opposite sides of said wheel, a journal shaft revolvably carried by said wheel B, and having fixed thereon at opposite sides of the wheel, gear wheels of different sizes in mesh

Louis Charles Hills, Washington, Columbia, U.S.A., 14th March, 1900; 6 years. (Filed 21st March 1899.)

with said gear wheels C D, clutch devices independently operating for temporarily connecting each said gear C and D, to the shaft, and independent restraining means for each said gear wheel C D, for preventing its rotation, substantially as described. 6th. In a variable speed mechanism, a shaft mounted for rotation, and a casing, frame, or suitable stationary support, a carrier wheel loosely mounted to rotate on said shaft and carrying at opposite sides thereof united planet gear wheels rotatable thereon, a gear wheel D, at one side of the carrier wheel in mesh with one of said planet gears, and means for locking it to the shaft, another gear wheel C, at the other side of the carrier wheel in mesh with the other of said planet gears, and provided with a hub extension having the rim or flange 23, with external and internal bevelled faces, a clutch member fixed on the shaft outside of the hub of said gear wheel C, and having the externally bevelled portion 35, and the internally bevelled friction clutch portion 24, provided on said stationary support, the said clutch portion 23, of the gear wheel D, alternately engaging the bevelled faces 24 and 35, and means for reversely moving the clutch member 23. 7th. In a variable spread mechanism, a shaft mounted for rotation, and a casing, frame or suitable stationary support, a carrier wheel loosely mounted to rotate on said shaft and carrying at opposite sides thereof, united planet gearing rotatable thereon, a gear wheel D, at one side of the carrier wheel in mesh with one said planet gear provided with clutch members and co-acting clutch members on the shaft and on the fixed support, another gear wheel C, at the other side of the carrier wheel in mesh with the other said planet gear and provided with a hub extension having the rim or flange 23, with external and internal bevelled faces, a clutch member fixed on the shaft outside of the hub of said gear wheel C, and having the externally bevelled portion 35, and the internally bevelled friction clutch face 24, provided on said support, the said clutch portion 23, alternately engaging the bevelled faces 24 and 25, and means for moving said gear and its clutch member. 8th. The combination with a speed gearing having a clutch member and a clutch operating arm therewith engaged, of a handle rod or post pivotally mounted and having a portion thereof movable alongside a guard, a pawl movably supported by said post and adapted to engage teeth which are provided in the adjacent guard, and a pawl releasing rod carried by the handle post, substantially as described. 9th. The combination with a speed gearing having a clutch member and a clutch operating arm therewith engaged, of a tubular bar, provided at its upper end with a spade handle pivotally mounted, a curved guard *t*, alongside which said bar moves, a pawl movably supported by said bar and adapted to engage teeth which are provided in the adjacent guard, and a pawl releasing rod arranged within the tubular bar, and having the handle *m*³, and the spring *n*⁴. 10th. In a speed gearing, the combination with double movable clutch members and operating rods connecting therewith, of a rotatable part with which one of said clutch operating rods is connected, a bar or lever pivotally mounted on said rotatable part, with which said other rod is connected, and means for permitting and preventing the swinging movement of the lever accordingly as the plate on which it is mounted is rotationally moved. 11th. In a variable speed gearing, the combination with double movable clutch members thereof, and operating rods respectively connected therewith, of a rotatable plate *p*, having the slot 32, and to which plate one of said clutch operating rods is connected, an operating handle lever H, pivotally secured to said plate and adapted to have its portion adjacent the plate movable through said slot, the opposing guard plates between which the extremity of said handle lever is extended serving to prevent the swinging movement of the lever while the slot of the plate is angular thereto, and a connection between the other clutch operating rod and the handle lever, substantially as described. 13th. The combination with the speed gearing, consisting of a fixed support and oppositely arranged clutch members thereto provided, the shaft A, mounted for rotation within said support and having the clutch members 13 and 25, a carrier wheel B, loosely rotatable on and relative to the shaft and carrying the united planet wheels *m*, and *j*, the gear wheel D, adapted to be clutched to said shaft clutch 13, or to one of the clutches of the stationary support, the gear wheel C, and the clutch member 23, thereof, adapted to engage either the adjacent shaft clutch or the fixed support clutch, clutch operating connections *q*, and *r*, a rotatable plate having the slot 32, to which one of said connections is secured, the handle bar H, pivotally mounted to swing relatively to and through the slot of said rotatable plate, and the opposing guards between which said handle lever is extended, and parallel with or angular to which the said slot of the plate may be brought by a rotational movement of the handle lever, substantially as and for the purposes set forth.

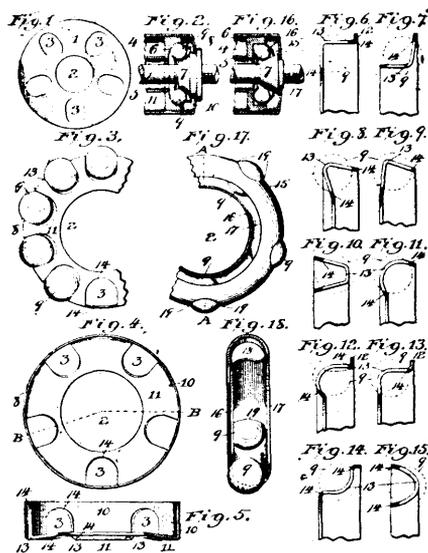
No. 66,586. Ball Bearings Retainer.

(Appareil à retenir les coussinets à roulettes.)

Edwin Francis Creager, Lancaster, Pennsylvania, U.S.A., 14th March, 1900; 6 years (Filed 21st August, 1899.)

Claim.—1st. In a ball bearing, the combination of a ball retainer and balls, the ball retainer comprising a ring having perforations to receive the balls, the space included within the circumference of a perforation being greater than the area included within the equator or circumference of a ball, and any point of contact between a ball and the wall of a perforation being a less distance from any other point of contact than the diameter of a ball. 2nd. In a ball bearing

the combination of a ball retainer and balls, the ball retainer comprising a ring having openings to receive the balls, the circumfer-

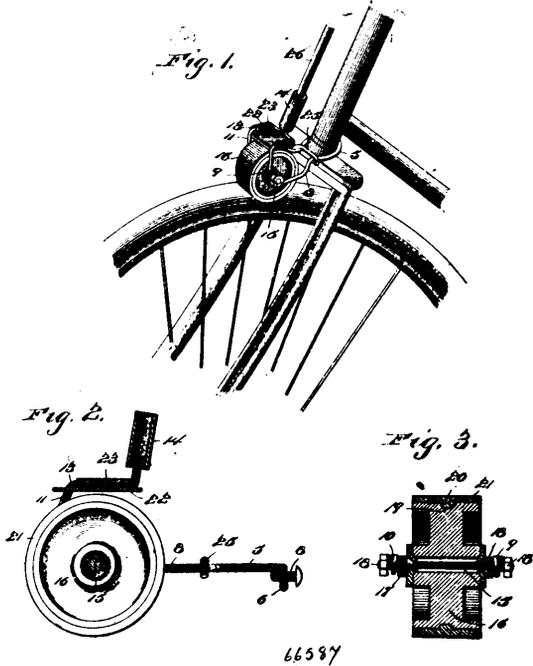


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ence of an opening including a space of larger area than that included within the equator or circumference of a ball, the ring being bent so that all opposite points of contact of a ball in an opening are less distance apart than the length of the diameter of a ball. 3rd. In a ball bearing, the combination of a ball retainer and balls, the ball retainer comprising a ring bent to retain balls by approaching walls or portions, and having perforations to receive the balls, the circumference of a perforation being greater than the equator or circumference of a ball, but the distance between the axial points being less than the diameter of a ball. 4th. A ball retainer comprising a ring having substantially elliptical perforations to receive balls, the transverse diameter of a perforation being less than the diameter of a ball, the ring being bent substantially on the line of the transverse diameter of each perforation, so that the perforation may retain and yet permit free movement of the balls. 5th. The combination in a ball bearing, of a cup, a cone, balls and a ball retainer comprising a ring having walls in different planes constructed to fit between the cup and cone and having perforations to receive the balls, all the relative points of contact upon the wall of a perforation being a less distance apart than the length of the diameter of a ball. 6th. A ball retainer comprising a ring having ap; roaching walls or portions and intermediate perforations to receive the balls, the walls of the perforations serving to retain and yet permit a free movement of the balls. 7th. A ball retainer comprising a ring of a substantially cylindrical form and having perforations to receive and retain the balls, each perforation being divided between the walls and portions of the retainer. 8th. In a ball bearing, the combination of a ball retainer and balls, the ball retainer comprising a ring bent to retain the balls by approaching walls or portions, and having perforations to receive the balls, the shortest diameter of a perforation being less than the diameter of a ball, but the circumference of a perforation including a larger area than that included within the equator or circumference of a ball, substantially as described. 9th. A ball retainer comprising a ring having a series of substantially elliptical perforations to receive balls, the ring being bent along the line of the short axis of each perforation to form approaching walls or portions to guard the balls. 10th. A ball retainer for ball bearings comprising a ring bent to form approaching walls or portions to retain balls and having perforations to receive balls, each perforation extending beyond the line of division between the walls. 11th. A ball retainer for ball bearings comprising a ring having perforations to receive balls, the ring being bent to form approaching walls to guard the balls, the line of bending being practically dividing each perforation between the walls. 12th. A ball retainer comprising a ring substantially in the form of a curved tubular annulus minus a segment so that it has two opposing walls to retain balls in one direction and perforations to receive and retain balls in the opposite direction. 13th. A ball retainer comprising a ring substantially in the form of a curved tubular annulus minus a segment so bent that it has two opposite walls in different meridians to retain balls and perforations to receive and to retain balls in the opposite direction. 14th. A ball retainer comprising a ring substantially in the form of a tubular annulus having perforations to receive and retain balls in one direction and approaching circular walls at different diameters to retain its balls in the opposite direction. 15th. A ball retainer comprising a ring substantially in the form of tubular annulus minus an

interior segment, and having perforations to receive and retain balls in one direction and continuous opposing walls to retain balls in the opposite direction.

No. 66,587. Bicycle Brake. (*Frien de bicyclet.*)



(George M. Collins, Davenport, Washington, U.S.A., 14th March, 1900; 6 years. (Filed 29th September, 1899.))

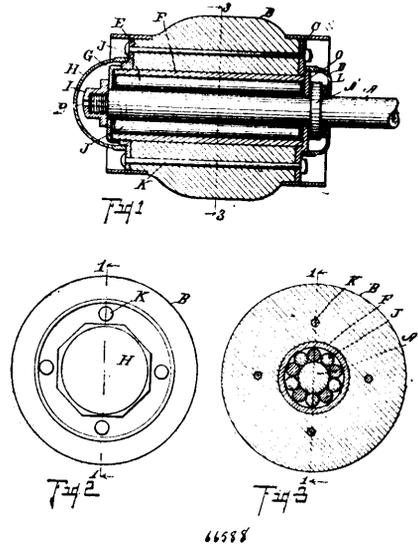
Claim.—1st. A bicycle brake, comprising an elastic frame including a loop adapted to receive the stem of a fork crown, arms extending from the ends of the loop and having additional co-axial loops therein, said frame being continued upwardly from the second loops and then rearwardly and then upwardly to receive an operating rod, an axle in thesecond loops, a rotatable body mounted on said axle, and a plate fixed to said rearwardly extending portion of the frame and adapted to engage and depress the rotatable body. 2nd. A bicycle brake, comprising a wire the central portion of which is bent to form a loop and having a downwardly extending portion provided with a threaded eye adapted to receive a clamping screw, the ends of said loop being bent outwardly and then parallel and having additional and co-axial loops at the ends of said parallel portions, the ends of the wire being then bent upwardly and rearwardly and then inwardly and having their terminals extending upwardly and in mutual contact an operating rod connected with said terminals, an axle arranged in the co-axial loops, a rotatable body mounted upon the axle, a plate fixed to the rearwardly extending portions of the wire, and a link enclosing the wire at the ends of the first named loop.

No. 66,588. Roller Bearing. (*Coussinet à roulettes.*)

(Herbert B. Gillette, Benton Harbor, Michigan, U.S.A., 14th March, 1900; 6 years. (Filed 3rd October, 1899.))

Claim.—1st. In a roller bearing, the combination of the hub B, the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange C, an outer flange plate E screw threaded to fit the outer end of the tube, bolts K extending through the hub B, plates to retain the same in position, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange C, a nut I on the outer end of the axle being provided with a perforation P to admit oil, a dust band D screw threaded to engage suitable threads upon the flange plate C, a felt pad L between the dust band and the collar A¹, and a dust cap H screw threaded to engage the plate E and encase the outer end of the bearing, all co-acting for the purpose specified. 2nd. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 3rd. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D screw threaded to engage suitable threads upon the flange plate C, a felt pad L between the dust band and the collar A¹, and a dust cap H screw threaded to engage the plate E and encase the outer end of the bearing, all co-acting for the purpose specified. 4th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 5th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 6th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 7th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 8th. In a roller bearing, the combination of an axle or shaft, a boxing, means of retaining said boxing in position in a hub or wheel, an inwardly projecting flange at the inner end of said boxing adapted to fit the said shaft or axle, an inwardly projecting flange removable at the outer end of said boxing, a collar to the inside of said flanges on said axle, suitable means outside of the removable flange to retain the boxing in place on the axle or shaft, anti-friction rollers chambered between the boxing and the shaft, the said rollers being of such size as to closely fit or impinge against the axle, the boxing, and against each other, co-acting for the purpose specified. 9th. In a roller bearing, the combination of an axle or shaft, a boxing, means of retaining said boxing in position in a hub or wheel, an inwardly projecting flange or shoulder at the inner end of said boxing adapted to fit the said shaft or axle, an inwardly projecting flange or shoulder at the outer end of said boxing, a collar or stop for the inside of said flange on said axle, suitable means outside of the outer flange to retain

co-acting for the purpose specified. 3rd. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof,

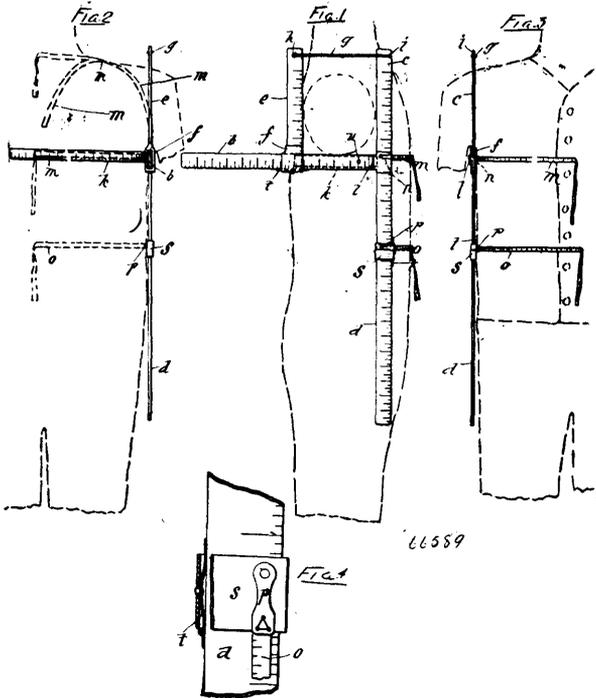


screw threaded to fit the said box and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D screw threaded to engage suitable threads upon the flange plate C, a felt pad L between the dust band and the collar A¹, and a dust cap H screw threaded to engage the plate E and encase the outer end of the bearing, all co-acting for the purpose specified. 4th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 5th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 6th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box, and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 7th. In a roller bearing, the combination of the box F, the flange plate C to the inner end thereof, screw threaded to fit the said box and having an inwardly projecting flange O, an outer flange plate E screw threaded to fit the outer end of the tube, an additional flanged plate G secured to the outer end of the box F by suitable means, an axle A with a collar A¹ thereon outside of the flange O, a nut I on the outer end of the axle, a dust band D supported upon the flanged plate C, and a dust cap H carried by the plate E to encase the outer end of the bearing, all co-acting for the purpose specified. 8th. In a roller bearing, the combination of an axle or shaft, a boxing, means of retaining said boxing in position in a hub or wheel, an inwardly projecting flange at the inner end of said boxing adapted to fit the said shaft or axle, an inwardly projecting flange removable at the outer end of said boxing, a collar to the inside of said flanges on said axle, suitable means outside of the removable flange to retain the boxing in place on the axle or shaft, anti-friction rollers chambered between the boxing and the shaft, the said rollers being of such size as to closely fit or impinge against the axle, the boxing, and against each other, co-acting for the purpose specified. 9th. In a roller bearing, the combination of an axle or shaft, a boxing, means of retaining said boxing in position in a hub or wheel, an inwardly projecting flange or shoulder at the inner end of said boxing adapted to fit the said shaft or axle, an inwardly projecting flange or shoulder at the outer end of said boxing, a collar or stop for the inside of said flange on said axle, suitable means outside of the outer flange to retain

the boxing in place on the axle or shaft, anti-friction rollers chambered between the boxing and the shaft, the said rollers being of such size as to closely fit or impinge against the axle, the boxing and against each other, co-acting for the purpose specified. 10th. In a roller bearing, the combination of an axle or shaft, a boxing, an inwardly projecting flange or shoulder at the inner end of said boxing adapted to fit the said shaft or axle, an inwardly projecting flange or shoulder at the outer end of said boxing, a collar or stop to the inside of said flanges on said axle, suitable means outside of the outer flange to retain the boxing in place on the axle or shaft, anti-friction rollers chambered between the boxing and the shaft, the said rollers being of such size as to closely fit or impinge against the axle, the boxing and against each other, co-acting for the purpose specified. 11th. In a roller bearing, the combination of an axle or shaft, a boxing, means of retaining said boxing in position in a hub or wheel, an inwardly projecting flange or shoulder at the inner end of said boxing, an inwardly projecting flange or shoulder at the outer end of said boxing, suitable means at each end and outside of the flange to retain the boxing in position on the shaft, anti-friction rollers chambered between the boxing and the shaft, the said rollers being of such size as to closely fit or impinge against the axle, the boxing and against each other, a passage for oil formed through the shaft and leading to the outside, and opening within the bearing, all co-acting for the purpose specified. 12th. In a roller bearing, the combination of an axle or shaft, a boxing, an inwardly projecting flange or shoulder at the inner end of said boxing, an inwardly projecting flange or shoulder at the outer end of said boxing, suitable means at each end and outside of the flanges to retain the boxing in position on the shaft, anti-friction rollers chambered between the boxing and the shaft, the said rollers being of such size as to closely fit or impinge against the axle, the boxing, and against each other, a passage for oil formed through the shaft and leading to the outside, and opening within the bearing, all co-acting for the purpose specified.

No. 66,589. Tailor's Square or Measure.

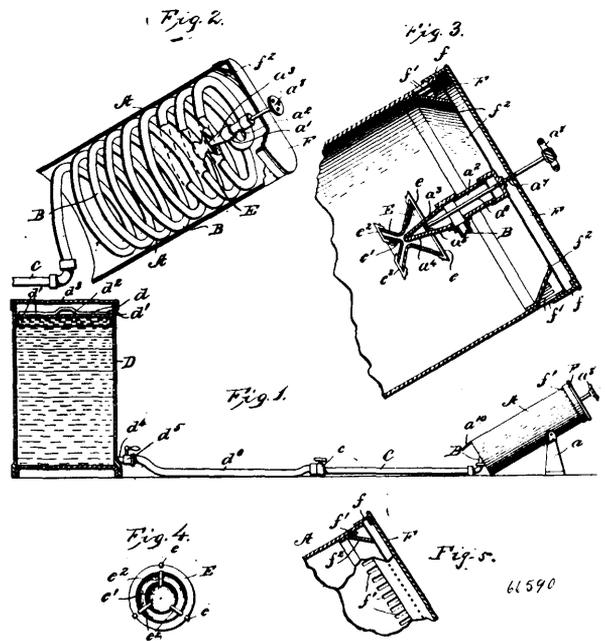
(*Equerre ou mesure pour tailleurs.*)



François Xavier Almanzar Langlois, Montreal, Quebec, Canada, 14th March, 1900; 6 years. (Filed 5th October, 1899.)

Claim.—1st. A tailor's measure comprising a main portion in the form of a T square having a graduated cross arm, a graduated tape pivotally connected at one end to said T square adjacent to the angle thereof, a block slidable along said cross arm, and a graduated tape pivotally connected to said block, substantially as described and for the purpose set forth. 2nd. A tailor's measure comprising a main portion in the form of a T square having a graduated leg *b*, and a graduated cross arm *c d*, a graduated tape *m*, pivotally connected by means of a socket piece *n*, at one end to said T square adjacent to the angle thereof, a block *s*, slidable along the portion *d*, of said cross arm, a graduated tape pivotally connected by means of a socket piece *p*, to said block, and adjustable graduated arm *e*, carried by said leg *b*, and extending parallel to the portion *c*, of said cross arm, and an elastic loop *g*, attached to the end of said arm *e*, substantially as described and for the purpose set forth.

No. 66,590. Oil Burner. (Bruleur d'huile.)



Ferdinand N. Bergen, Tacoma, Washington, U.S.A., 14th March 1900; 6 years. (Filed 23rd March, 1899.)

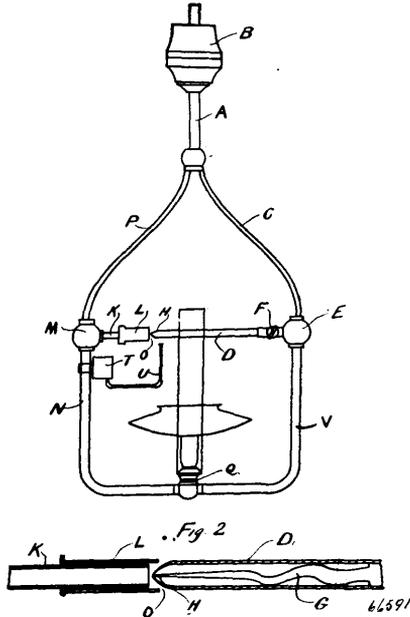
Claim.—1st. In an oil burner, the combination of a suitable shell, of a coil mounted therein and adapted to conduct the supply of oil, a burner attached to the said coil, and a spreader comprising a collar and a cone for flaring the flame, and feeding air thereto, substantially as described. 2nd. In an oil burner, the combination with a shell, of a coil mounted therein, a burner secured to one end of the coil and extending into the same, and a flaring collar mounted upon the burner inside the said coil opposite the orifice of the burner, the said collar being adapted to direct air to the said orifice and to spread the flame that issues therefrom, substantially as described. 3rd. In an oil burner, the combination with a suitable shell, of a burner nozzle mounted therein and having a flaring device mounted upon the said nozzle comprising a double conical shell, the rear portion of said shell being adapted to collect air and pass it to the flame, and the forward portion of the shell having a flaring passage adapted to flare the said flame outwardly, substantially as described. 4th. In an oil burner, the combination with a suitable shell, of a supply pipe entering therein, a nozzle mounted upon the said supply pipe, a spreading device secured upon the said nozzle comprising a double conical shell, the rear portion of said shell being adapted to direct air to the flame, and a cone mounted in the forward portion of the said shell and adapted to assist in spreading the flame through the outer enclosing shell, substantially as described. 5th. In an oil burner, the combination with a shell, of a coil mounted therein, a nozzle mounted upon the end of the said coil and directed interiorly thereof, and a spreader mounted upon the said nozzle comprising a collar and a cone adapted to admit air to the same and to direct the flame through the coil and out of the open end of the shell so as to impinge upon the inner surfaces of the coil and the object to be heated, substantially as described. 6th. In an oil burner, the combination with a supply pipe, of a nozzle thereon, a shell adapted to surround the same, the said shell being provided with air inlet passages at its rear end, a telescoping cover adapted to regulate the passage of air through the said opening, and an annular deflector mounted interiorly of the said shell for preventing the incoming air from impinging directly upon the burner, substantially as described. 7th. In an oil burner, the combination with a feed pipe, of a nozzle mounted thereon, a shell for enclosing the same having adjustable passages formed at its rear end, and a flaring annular deflector mounted interiorly of the said shell and arranged opposite the said inlet, passages for directing the air toward the closed end of the shell, substantially as described.

No. 66,591. Gas Lamp. (Lampe à gaz.)

William Stewart Latimer, Toronto, Ontario, Canada, 14th March, 1900; 6 years. (Filed 3rd May, 1899.)

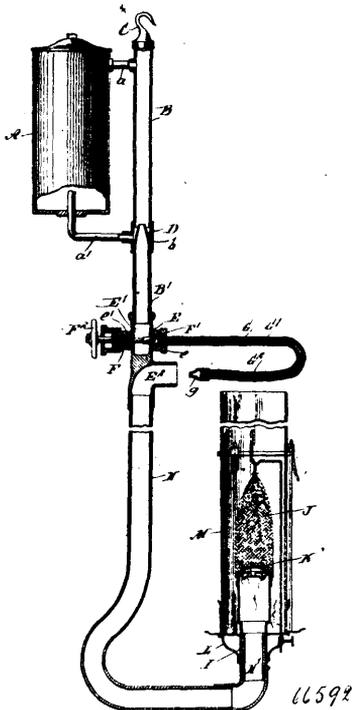
Claim.—1st. The herein described lamp comprising in combination reservoir B, a supply pipe C, a generator D, supplied with valve F, a mixing pipe K with means of controlling the supply of air, a conducting pipe N, a pipe Q, on which is fixed a burner and chimney, and an auxiliary lamp T, provided with a pipe U, all arranged substantially as described and for the purposes herein before set forth. 2nd. The combination in a lamp of reservoir, a suitable supply pipe,

a generator connected thereto, a mixing pipe with means of admitting the air thereto, a conducting pipe, a burner, and an auxiliary



lamp, substantially as described. 3rd. In a lamp of this kind, the combination of a suitable supply pipe, a gas generator provided with an internal spiral shaped hollow tube, the discharge end of which forms a conical converging tube having a minute outlet, substantially as described. 4th. In a device for generating and burning hydrocarbons, the combination of a suitable supply pipe, a generator provided with a vapourizing tube having a conical converging mouth-piece, a mixing chamber with means for regulating the supply of air thereto, and an auxiliary lamp, substantially as described.

No. 66,592. Oil Gas Lamp. (Lampe de gaz à huile.)



James Andrew Yarton, Kansas City, Kansas, U.S.A., 14th March, 1900; 6 years. (Filed 16th June, 1899.)

Claim.—1st. A valve casing for oil gas lamps, comprising a body having a chamber formed therein adapted to receive an oil supply pipe, and a lateral intersecting passage adapted to receive at one end

a valve and its stem, and at the other a gas generator, said casing body also having a separate passage therein adapted to receive the mixing pipe at one end and the discharge from the generator at the other. 2nd. In an oil gas lamp, a valve casing comprising a body having a chamber formed therein adapted to receive an oil supply pipe and having a laterally intersecting passage adapted to receive at one end a valve and its stem, and at the other end a gas generator, a threaded bar in the lateral passage carrying a valve, said casing body also having a separate passage therein adapted to receive the mixing pipe at one end and the discharge from the generator at the other, and the said mixing pipe being attached at one end to the casing a burner attached at one end to the casing, a burner attached to the other end of the mixing pipe and a gas generator connected at one end with the lateral passage in the casing and discharging at its other end into the mixing passage in the casing, the body of the said generator extending over the lamp and being heated thereby.

3rd. A gas generator for oil gas burners comprising a tube having a slight downward bend immediately over the burner, or at the point of greatest heat whereby a pocket is formed to which the oil drains and is thus vapourized, substantially as described. 4th. In a vapour burner, the combination with a valved supply tube, of a recurved generator extending from and revolvably held within said supply tube, said generator being provided with a drop or bend forming a settling chamber which is located immediately over the burner, an open ended mixing pipe, the upper end of said pipe forming an interrupted continuation of said recurved generator, and a burner secured to the lower end of said mixing pipe, said burner being positioned adjacent to and below said generator, substantially as described. 5th. The combination with a generator, and a tank having a vent, of a pipe leading from the generator and connected with the tank at top and bottom, whereby the gases escaping from the generator can pass into the tank at top without impeding the flow of the oil, as set forth. 6th. The combination with the generator, and a tank, of a pipe connected with the generator and having a chamber around its upper end, a pipe leading from the tank to said chamber and a pipe in direct communication with the upper end of the pipe connected with the generator and into which the gas escaping from the generator passes, as and for the purpose set forth. 7th. The combination with a generator, and a tank having a vent, of a pipe leading from the generator and connected with the top and bottom of the tank, said pipe having within it an annular wall extending above the connection of the pipe with the bottom of the tank and forming a settling chamber, as and for the purpose set forth. 8th. The combination with a generator, and a tank having a vent, of a supply pipe leading from the generator and having a reduced upper end, a fitting on the end of the supply pipe, a pipe leading from the fitting to the bottom of the tank, pipe secured to the fitting in line with the supply pipe and into the lower end of which the reduced end of the supply pipe projects, and a pipe leading from said pipe into the top of the tank, substantially as described.

No. 66,593. Dock Crib. (Caisson.)

Fig. 1.

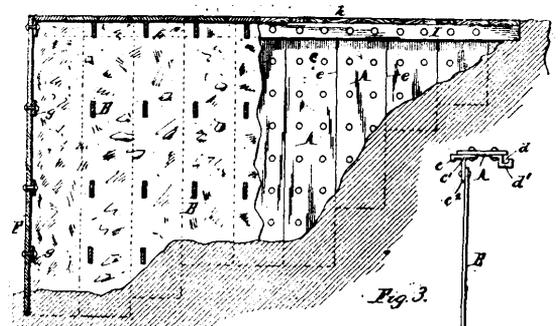
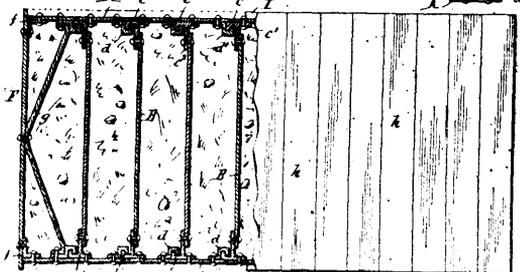


Fig. 2.



Albert Douglass Garretson, Buffalo, New York, U.S.A., 14th March, 1900; 6 years. (Filed 17th July, 1899.)

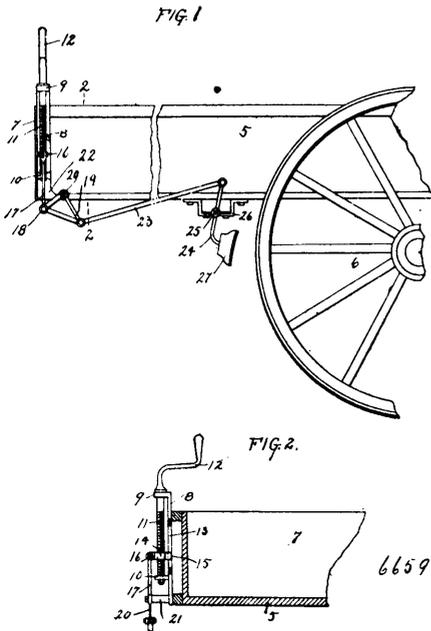
Claim.—1st. A crib for docks, etc., composed of separate sections, each of which consists of a pair of upright side plates and a cross bar or tie which connects said plates near one end of the section, the section being provided at its front and rear ends with locking devices adapted to engage with corresponding locking devices of adjoining crib sections, substantially as set forth. 2nd. In a sectional crib for docks, etc., a crib section composed of upright side plates and a cross bar or tie which connects the side plates near one of their upright edges, whereby said plates are allowed to yield laterally to a limited extent at their opposite free edges, said plates being provided at their free edges with locking devices which are adapted to engage with corresponding locking devices of an adjoining crib section, substantially as set forth. 3rd. The combination of a pair of adjoining crib sections, each having upright side plates which are connected with the plates of the adjoining section by an upright tenon and mortise joint, the mortise member of the joint being arranged on one of the interlocked plates and the tenon being arranged on the adjoining plate and confined in a lateral direction between the mortise member and the opposing side of the plate which carries the mortise member, substantially as set forth. 4th. The combination of a pair of adjoining crib sections each having upright side plates which are connected with the plates of the adjoining section by an upright tenon and mortise joint, the mortise member consisting of a channel bar secured to the inner side of one of the interlocked plates, and the tenon being secured to the inner side of the adjoining plate, and having a neck which extends across the joint between the interlocked plates, and a head which engages with the groove of said channel bar and the inner side of the plate which carries the bar, substantially as set forth.

No. 66,594. Extraction of Bismuth and Antimony.
(*Extraction de bismuth et d'antimoine.*)

John Ranald, 62 Streatham Hill, London, England, 14th March 1900; 6 years. (Filed 19th July, 1899.)

Claim.—The extraction of bismuth, or antimony, from their sulphide ores, or of bismuth from its oxide, or oxide or sulphide ores, by subjecting the crushed ores to the action of a solution of ferric chloride at, or about, boiling temperature, and then precipitating the metal by means of iron, and recovering the iron for use in the process, the same solvent ferric chloride being also used repeatedly, substantially as hereinbefore explained.

No. 66,595. Vehicle Brake. (*Frcin de vehicule.*)

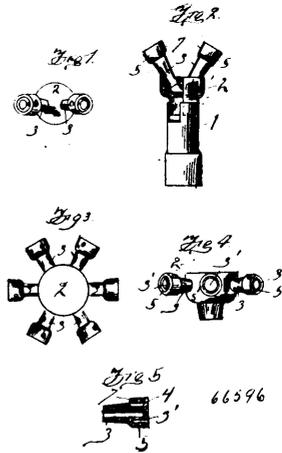


66595

William C. Griesbach, West New York, New Jersey, U.S.A., 14th March, 1900; 6 years. (Filed 17th November, 1899.)

Claim.—In a vehicle brake, the combination with a bracket consisting of a plate or web provided with arms projecting forwardly therefrom and having bearings in said arms, the web being provided with a longitudinal arranged slot intermediately between said arms, of a revoluble screw shaft operating in the bearings in the arms of the plate, a threaded collar mounted upon said shaft and having the inwardly projecting extension which is received by and guided in the slot and an outwardly projecting arm or extension, and connecting rods extending directly from said outwardly projecting arm or extension to the brake mechanism, substantially as and for the purpose set forth.

No. 66,596. Acetylene Gas Burner.
(*Bruleur de gaz à acétylène.*)

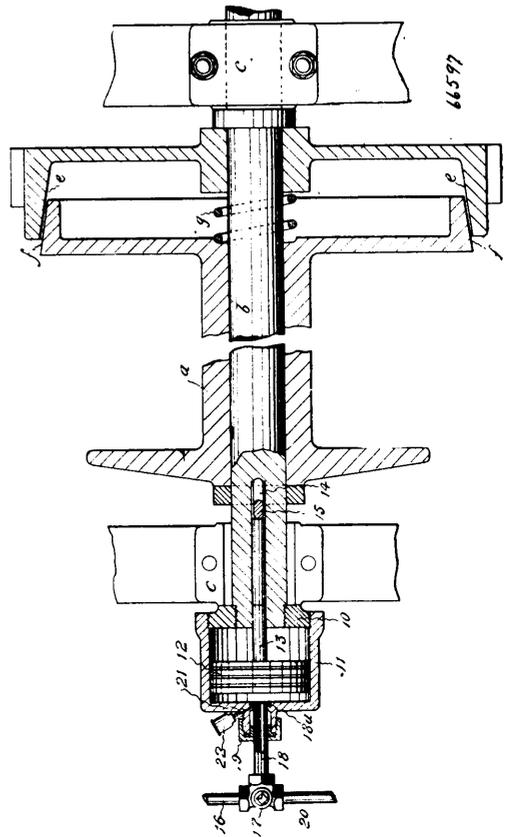


66596

Demetrius M. Steward, Chattanooga, Tennessee, U.S.A., 14th March, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—1st. In combination with a metal pillar head fitted therein, burner stems extending from said head diverging from each other and arranged in pairs and jet openings in each stem adapted to direct the jet toward that of the adjacent stem, substantially as described. 2nd. In combination, the pillar, the head, the stem fitted at one end in said head and having its opposite end reduced and having a discharge opening leading therefrom and an integral annular flange surrounding said reduced end, said flange having an opening in line with the discharge opening whereby an enlarged cup shaped end is provided at the outer extremity of the stem, substantially as described.

No. 66,597. Friction Clutch. (*Embrayage à friction.*)

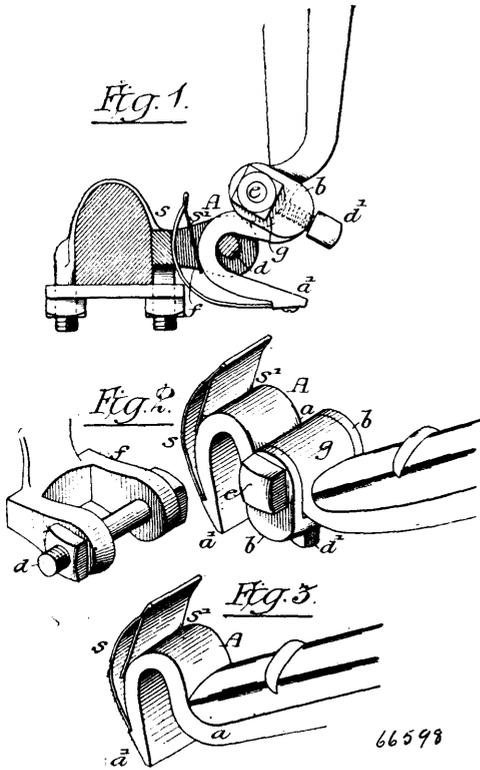


66597

Alexander McNair, Vancouver, British Columbia, Canada, 14th March, 1900; 6 years. (Filed 21st December, 1899.)

Claim.—1st. In a friction clutch having a drum *a*, loosely mounted on a shaft *b*, and a gear wheel *d* secured on said shaft, said wheel and the end of the drum forming a cone clutch, in combination with a cylinder *11* fixed to the opposite end of the shaft *b*, a piston *12* working in said cylinder, a stem *13* on the piston passing into an opening in the end of the shaft and engaging a cotter-pin lying in a slot in the shaft, which cotter-pin engages the end of the loose drum, pipes *16* and *18* to allow pressure to the cylinder, whereby the cones of the clutch will be contacted and a waste pipe for releasing the pressure, substantially as specified. 2nd. In a cone friction clutch, having a drum loosely mounted on a shaft and a gear wheel fixed to said shaft and a spring interposed between the loose drum and the fixed wheel, in combination with a cylinder *11* on the opposite end of the shaft, a piston in said cylinder, a stem on the piston having communication with the drum through an aperture in the shaft, a pressure pipe *16* connecting with a three-way cock, a pipe *18* connecting between said cock and the cylinder and a waste pipe *20* connected with the three-way cock, all substantially for the purposes set forth.

No. 66,598. Thill Coupler. (*Armon de limonière.*)

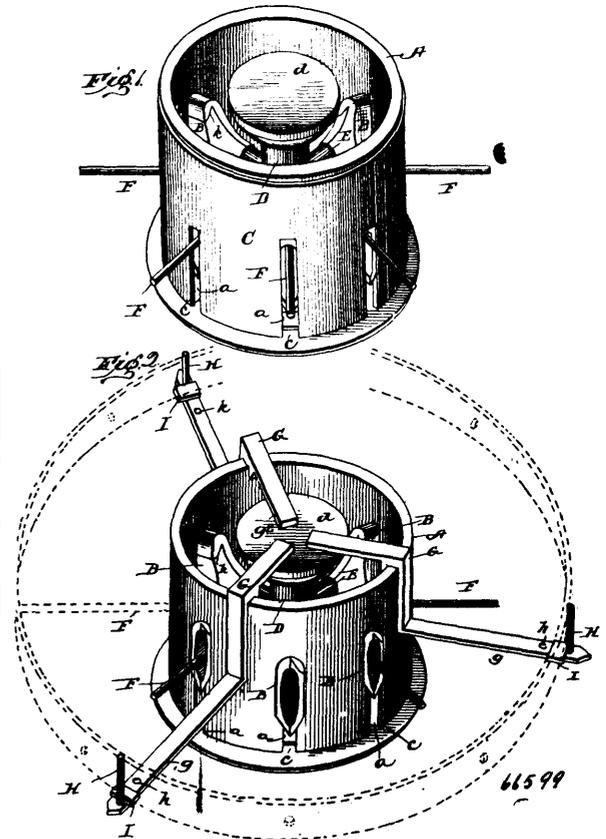


A. L. Grant and G. H. Colket, assignees of Lewis Prideux, all of Philadelphia, Pennsylvania, U.S.A., 15th March, 1900; 6 years. (Filed 9th January, 1900.)

Claim.—1st. In a thill coupling, an adjustable intermediate hook comprising a box rigidly attached to the said hook, with upwardly extending ears and transverse bolt provided therethrough for securing the eye of the end of the shaft or tongue, and the upwardly and outwardly extending plate spring secured to the outer face of the hook at the lower end, the free end of said spring being bent over and impinging between the other member of the spring and the outer face of the hook, substantially as described. 2nd. In a thill coupling, an adjustable hook construction comprising a hook, eye box provided upon the shank of the hook having ears or lugs on opposite sides and transverse bolt provided therethrough for the reception of the eye of the shaft or tongue, and set screw provided in the shank of the hook adapted to impinge upon or protrude into the eye of the shaft or tongue when in position for more rigidly securing the same, and convex plate spring provided on the outer face of said hook for engagement upon the axle bed when the hook is in position in the axle clip to prevent rattling or displacement, substantially as described. 3rd. A thill coupling, comprising hook *A*, lugs *b* provided upon the shank *a* of the hook, transverse bolt *c* provided through said lugs for securing the hook upon the eye of the shaft or tongue, and spring *s* provided upon the outer face of the downwardly projecting member *a*¹ of said hook, substantially as described. 4th. A thill coupling, comprising hook *A*, lugs *b* provided upon the shank *a* of the hook, transverse bolt *c* provided through said lugs for securing the hook upon the eye of the shaft or tongue, and spring *s* provided upon the outer face of the upwardly

projecting member *a*¹ of said hook, and set screw *d*¹ provided through the shank *a*, substantially as described. 5th. In a thill coupling, an adjustable intermediate hook having the portion *a*¹ formed at such an angle as to prevent displacement from the bolt *d* when the shaft is in position in use, said intermediate hook having in the forward part of the same upwardly extending ears forming an eye box rigid with the hook carrying a transverse bolt provided therethrough for securing the eye of the end of the shaft or tongue of a vehicle, substantially as described. 6th. In a thill coupling, an adjustable hook construction comprising a hook, a shaft box provided upon the shank of the hook, and an upwardly and outwardly extending plate spring secured to the outer face of said hook, substantially as described.

No. 66,599. Apparatus for Casting Metallic Wheels.
(*Appareil pour couler les roues métalliques.*)

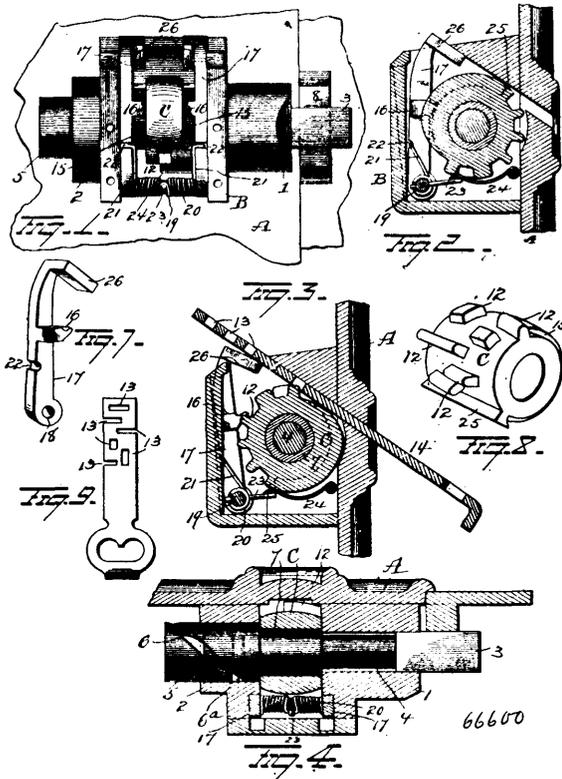


Clement Bush, Quincy, Illinois, U.S.A., 15th March, 1900; 18 years. (Filed 14th October, 1899.)

Claim.—1st. In an apparatus for forming metallic wheels, the combination with a flask having slits extending inwardly from the edge for the insertion and removal of the wheel spokes, of a series of radially arranged chills mounted in said slits and having openings at their inner ends for the wheel spokes, substantially as described. 2nd. In an apparatus for forming metallic wheels, the combination with a flask having a series of openings in its side wall, and slits extending from said openings to the edge of the flask, of a series of tapering chills mounted in said openings and converging towards the centre of the flask, substantially as described. 3rd. In an apparatus for forming metallic wheels, the combination with a flask having openings in its side wall, and slits extending from said openings to the edge of the flask, of a series of sectional chills mounted in said openings and having apertures at their inner ends for the passage of the spokes, substantially as described. 4th. In an apparatus for forming metallic wheels, the combination with a flask having a series of slits therein extending to the edge for the admission and escape of the wheel spokes, of a series of sectional converging chills having apertures at their inner ends for the admission of the spokes, substantially as described. 5th. In an apparatus for forming metallic wheels, the combination with a flask having a series of apertures in its side walls, and slits extending from said apertures to the edge of the flask, of a series of sectional converging chills mounted in said apertures, the sections of said chills having interlocking projections, substantially as described. 6th. In an apparatus for forming metal wheels, the combination with a flask having apertures and slits connecting said apertures with one edge

of the flask and converging chills mounted in said apertures and in turn having apertures for the admission of the spokes, of a series of spiders having outwardly extending arms for supporting the wheel rim with which the spokes co-operate, substantially as described. 7th. In an apparatus for forming metallic wheels, the combination with a flask having openings in its wall, of a series of chills converging inwardly from said openings and having outwardly flaring openings within them for the admission of the spokes, substantially as described. 8th. In an apparatus for forming metallic wheels, the combination with a flask having a series of slots extending out to the edge for the escape of the wheel spokes, a series of inwardly converging chills having apertures for the passage of the spokes, a central hub pattern and a series of independent stub patterns for bridging spaces between the hub pattern and the inner end of the chills, substantially as described. 9th. In an apparatus for forming metallic wheels, the combination with a flask, of a central hub pattern, a series of converging chills and stub patterns bridging the spaces between the hub pattern and the inner ends of the chills, said chill, stub patterns and hub pattern having apertures in alignment with each other, and temporary spokes or retainers for holding said parts in their adjusted positions, substantially as described. 10th. In an apparatus for forming metallic wheels, the combination with a flask having slits in its wall extending out to one edge for the escape of the spokes, of spiders mounted on said flask and having outwardly extending arms for supporting the wheel rim and inwardly extending arms for retaining the central core, substantially as described.

No. 66,600. Lock. (Serrure.)



Allan Robb Ferguson, New York City, New York, U.S.A., 15th March, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. In a lock, the combination with a sliding bolt, of a tumbler adapted to turn thereon and operate the same and means on the tumbler to be engaged by a key movable tangentially to said tumbler. 2nd. In a lock, the combination with a sliding bolt, of a tumbler adapted to turn thereon and operate the same and provided with a rack adapted to be engaged by a key movable tangentially to said tumbler. 3rd. In a lock, the combination with a bolt and a revoluble tumbler for removing it, of means adapted to be actuated by the key after the tumbler has been partially turned for releasing said tumbler to permit the complete withdrawal of the bolt. 4th. In a lock, the combination with a bolt and a revoluble tumbler adapted to operate said bolt, of a spring actuated device adapted to prevent the full movement of the tumbler and bolt and a key adapted to rotate the tumbler, move said device out of line therewith and effect

the full withdrawal of the bolt. 5th. In a lock, the combination of a bolt, a revoluble tumbler adapted to operate the bolt, and a shoulder on said tumbler, of a spring actuated arm having a portion normally in line with the shoulder on the tumbler and adapted to be moved out of line with said shoulder by a key after the tumbler shall have been partially rotated. 6th. In a lock, the combination of a bolt, a revoluble tumbler adapted to operate said bolt, and having shoulder, a series of independently movable spring pressed arms having portions in the path of said shoulders and a key constructed and adapted to rotate the tumbler and move said arms out of the path of the shoulder thereon. 7th. In a lock, the combination with a revoluble tumbler, of a locking bolt adapted to be moved by said tumbler, an arm pivotally connected in proximity to the tumbler, a lug on the arm in the path of a projection on the tumbler and an enlargement on said arm in the path of the key to be inserted so that when the key is inserted it will strike the enlargement on the arm and force the lug out of the path of the projection on the tumbler and permit the complete revolution thereof to withdraw the bolt. 8th. In a lock, the combination with a revoluble tumbler having peripheral projections, and a key to rotate said tumbler by engagement with said peripheral projections, a bolt means intermediate of the bolt and tumbler into longitudinal movement of the bolt, means for arresting the tumbler before the complete withdrawal of the bolt and key for rotating the tumbler and actuating said arresting means to permit the complete movement of the tumbler. 9th. In a lock, the combination of a tumbler, a key adapted to rotate said tumbler by engagement with the periphery thereof, pivoted arms adapted to arrest the rotation of the tumbler when the latter is rotated otherwise than by the key, said arms having portions normally in the path of the key and adapted to be engaged by said key to move said arms away from the tumbler, a bolt and connections intermediate of the tumbler and bolt for moving the latter. 10th. In a lock, the combination of a revoluble tumbler and a key adapted to rotate said tumbler, a spring bearing against the periphery of said tumbler to insure its retention in normal starting position, a bolt and connections between the bolt and tumbler. 11th. In a lock, the combination of a tumbler having its peripheral face curved transversely, projections on said peripheral face, a bolt, connected between the tumbler and bolt for operating the latter, spring actuated devices adapted to arrest the tumbler and a key curved transversely to conform to the peripheral face of the tumbler and the tumbler and a key curved transversely to conform to the peripheral face of the tumbler and having openings to receive the projections on said peripheral face when moved tangentially thereto to rotate said tumbler and move said spring actuated devices away from the same. 12th. In a lock, the combination of a tumbler, a key adapted to rotate said tumbler by engagement with the peripheral face thereof, shoulders on the tumbler, two independently movable arms having portions normally in line with said shoulders and also having portions in line with the key way, a bolt and means for transmitting motion from the tumbler to the bolt. 13th. In a lock, the combination with a revoluble tumbler having peripheral projections and a bolt actuated by said tumbler, of a pivoted arm adapted to arrest the tumbler, a shutter bearing against the tumbler to retain it in normal starting position, a spring serving to press the pivoted arm and the shutter toward the periphery of the tumbler and a key for rotating the tumbler and moving said pivoted arm away from the same.

No. 66,601. Knob Lock. (Bouton-serrure.)

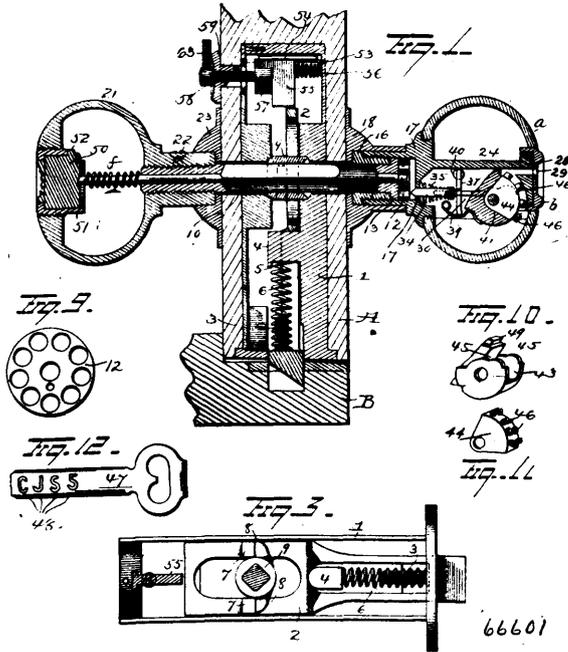
Alan Robb Ferguson, New York City, New York, U.S.A., 15th March, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. The combination with a spindle and a revoluble tumbler having a cam thereon, of a slide having a portion actuated by said cam, and a locking pin projecting from the slide and adapted to engage the spindle. 2nd. The combination with a spindle, of a revoluble tumbler having a cam, peripheral projections on said tumbler adapted to mesh with a key moved tangentially thereto, a slide engaged by said cam, and a locking pin projecting from said slide and adapted to engage the spindle. 3rd. In a knob lock, the combination with a knob, a spindle and a locking bolt adapted to be operated by the spindle, of a revoluble tumbler in the knob, a slide mounted in the knob, a locking pin projecting from the slide to lock the spindle to the knob, cams on the tumbler to operate the slide, and a shutter mounted in the knob and normally locking the slide. 4th. In a lock, the combination with a knob, a spindle and a locking bolt adapted to be operated by the spindle, of a tumbler revolubly mounted in the knob, a cam at each side of the tumbler, a slide embracing the tumbler and engaging said cams, a locking pin projecting from said slide and adapted to engage the spindle, and a shutter in the knob adapted to normally lock said slide. 5th. In a knob lock, the combination with a knob, a spindle and a locking bolt operated by the spindle, of a locking pin, a slide to which said pin is secured, a tumbler for operating said slide and locking pin, a shutter having recesses therein for the passage of the slide, and a spring adapted to force the shutter to position with the recesses out of alignment with the slide and prevent any movement of the slide until the shutter has been operated. 6th. In a knob, the combination with a locking bolt, of a hollow spindle, knobs on the respective ends of said spindle, a rod in the spindle adapted to be locked to the outer knob, the inner end of the rod disposed in

the inner knob, a button in said inner knob, a spring normally holding said rod against the button, a sleeve in said knob having a

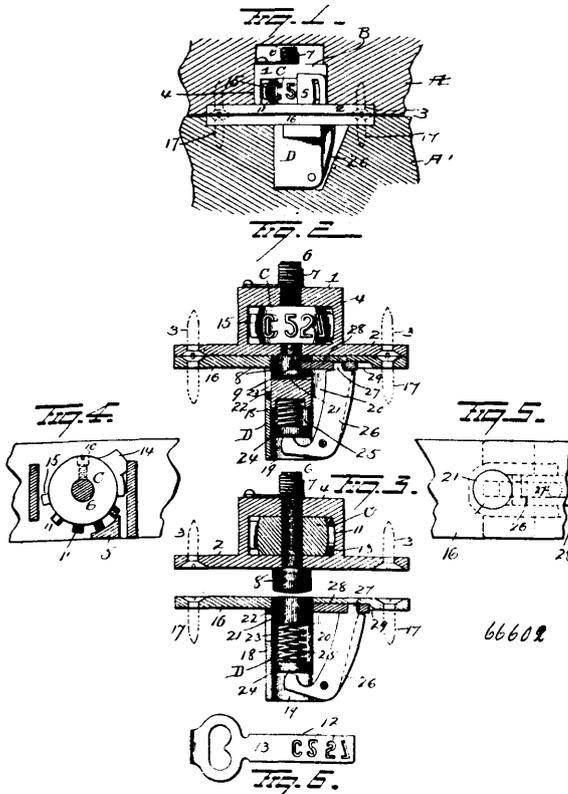
ment on said shaft having a groove or recess therein, and a locking bar adapted to be disposed in the groove or recess to lock the parts together. 2nd. In a lock, the combination with a frame, of a shaft revolvibly mounted in the casing and carrying a tumbler, a recessed or grooved bar head or enlargement on the shaft, and a spring pressed locking bar adapted to engage said recessed or grooved head or enlargement to lock the parts together. 3rd. In a lock, the combination of two frames, one frame carrying a revolvable shaft having an enlarged recessed head at its end and means for turning said shaft, and the other frame carrying means for locking said recessed head therein. 4th. In a lock, the combination of two frames, one frame carrying a revolvable shaft, a tumbler on said shaft and an enlarged recessed head on one end of the shaft, and the other frame carrying a locking bar adapted to spring into the recessed head on the shaft, and means for operating said locking bar. 5th. In a lock, the combination with a frame, of a shaft revolvibly mounted therein, an enlarged recessed head on the shaft, a revolvable tumbler secured to the shaft, a spring secured respectively to the shaft and frame, and projections on the tumbler adapted to limit the movement of the shaft, and means for engaging said recessed head to lock the parts together. 6th. In a lock, the combination of a revolvable recessed headed shaft, a locking bar adapted to engage the recessed head, a block normally holding said bar in its unlocked position, an L-shaped pivoted lever connected at the end of its long arm to the locking bar, a disc on the end of the short arm of said lever, and a spring disposed between the disc and block to press said locking bar forward and at the same time to hold the block in the path of the locking bar. 7th. In a lock, the combination with a locking tumbler, of projections on the periphery of said tumbler to mesh with cut out portions in a key, and a projection on said tumbler adapted to receive the end of the key and also to limit the return movement of said tumbler. 8th. In a lock, the combination of a locking tumbler, projections on said tumbler to mesh with cut out portions in a key, and another projection on the tumbler adapted to abut against the key when inserted to limit its inward movement.

No. 66,603. Padlock. (Cadenas.)



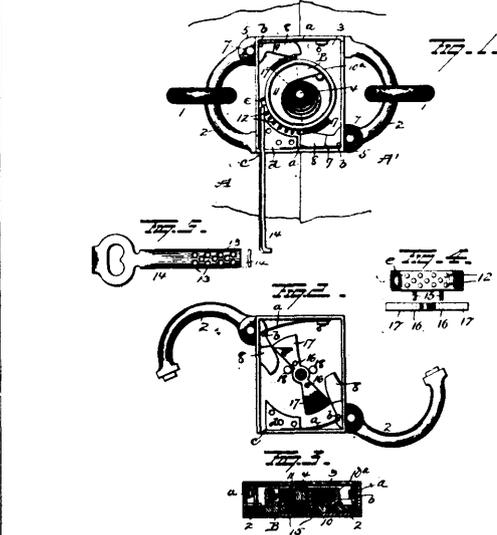
cut out portion to form shoulders, and a lug or projection on the button adapted to be held against either one of said shoulders to hold the rod in or out of engagement with the outer knob.

No. 66,602. Lock. (Serrure.)



Alan Robb Ferguson, New York City, New York, U.S.A., 15th March, 1900; 6 years. (Filed 26th February, 1900.)

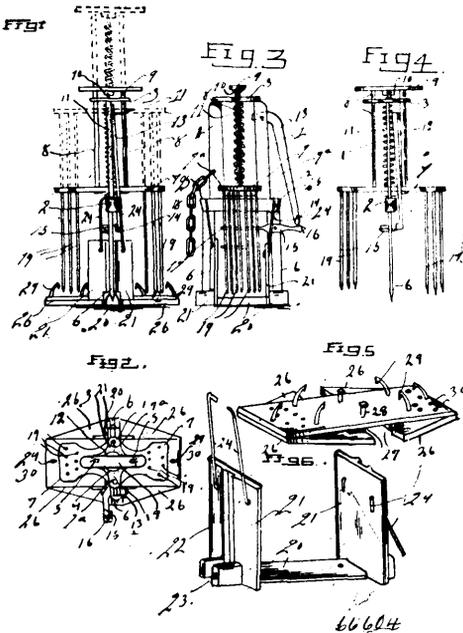
Claim.—1st. As an article of manufacture, a lock comprising a revolvable shaft, a tumbler secured on the shaft, a head or enlarge-



Alan Robb Ferguson, New York City, New York, U.S.A., 15th March, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. A padlock comprising a casing, a shackle pivoted thereto, an arm projecting into the casing from the pivoted end of the shackle, a tumbler having a rack, a locking arm movable with the tumbler, and adapted to engage the shackle arm, and a key movable tangentially to the tumbler and adapted to co-operate with the rack thereon to rotate said tumbler and move the locking arm out of line with the shackle arm, substantially as set forth. 2nd. A padlock comprising a casing, two shackles pivoted independently thereto and each provided with an arm projecting into the casing, a shaft mounted in the casing, locking arms projecting in opposite directions from said shaft and co-operating with the shackle arms to retain the shackles locked, a tumbler on said shaft and adapted to rotate said arms, a rack in the tumbler and a key adapted to engage said rack to rotate the tumbler. 3rd. In a padlock, the combination with a casing, a shackle pivoted thereto and an arm projecting from said shackle and entering the casing, of a revolvable tumbler mounted in the casing, a coiled spring disposed within the tumbler for rotating said tumbler in one direction, an arm movable with the tumbler, said arm co-operating with the shackle arm to normally lock the shackle, peripheral projections on the tumbler and a key adapted to mesh with said peripheral projections to rotate the tumbler.

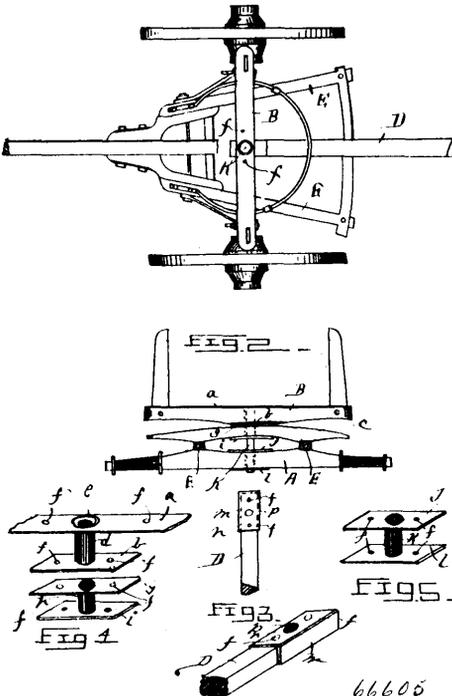
No. 66,604. Animal Trap. (Piège.)



Welter R. Griffin, Atlanta, Texas, U.S.A., 15th March, 1900; 6 years. (Filed 3rd January, 1900.)

Claim.—1st. The combination with the frame having a trigger, and the spring controlled vertically slidable plate having impalement spears, of a base comprising a ground piece having slotted ends, plates secured to said ends and having vertical grooves in which, and the slots of the said ends, the legs of the said frame fit, and the hook rods for connecting the base to the frame, as set forth. 2nd. In an animal trap, the combination with the frame, and the base frame, and the base detachably secured to the frame, of the perforated bottom detachably secured to the base independent of the said frame and having barbed spikes, and wings with an interval or space between them, the inner edge of the wings having slots which with the said space receive the said base, and means for securing the bottom of the base, as set forth.

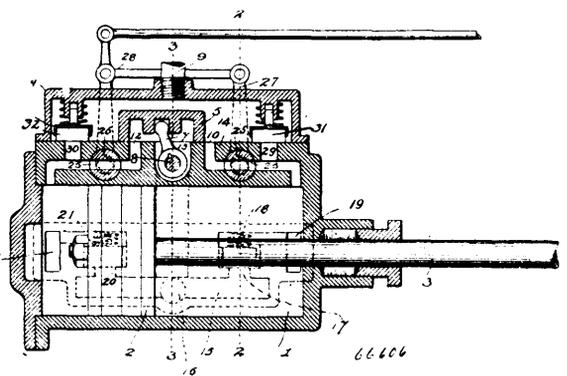
No. 66,605. Wagon Coupling. (Atelage de wagon.)



Oliver L. Beckett, Orting, Washington, U.S.A., 15th March, 1900; 6 years. (Filed 12th January, 1900.)

Claim.—1st. The combination with the three bolts of plates and tubular connections, each set composed of an upper and lower plate and an intermediate connecting metallic tube, the top plate of the uppermost set having a depressed socket around the upper end of the connecting tube, of the bolster lying between the plates of the uppermost set, and receiving the metallic tube thereof, the sand board lying between the plates of the middle set and receiving the metallic tube thereof, the axle lying between the plates of the lowermost set and receiving the metallic tube thereof, and the king bolt or pin passing through the metallic tubes of the three sets of bolts which register one with the other, the head of said bolt lying within the socket of the top plate of the uppermost set of plates, substantially as described. 2nd. The combination with the bolster, the sand board, and the axle, each formed with a king bolt hole and provided with a top and bottom plate connected by a metal tube, the tubes of the several plates registering with one another and passing through the king holes of the bolster, sand board and axle, of the reach provided at its front end with a metallic box-like case, *m*, formed with a metallic tube passing through the king bolt hole formed in the reach and having a top piece constituting a cover to the box like case *m*, and overlying the top of the reach and bolted in position, substantially as described.

No. 66,606. Power Transmitting Mechanism. (Mécanisme à transmetteur de la force.)



Benjamin Smith Lawson, Syracuse, New York, U.S.A., 15th March, 1900; 6 years. (Filed 19th January, 1900.)

Claim.—1st. A cylinder provided with a main inlet and exhaust ports, and independent valved inlet ports opening into the atmosphere, a valve chest and valved branch ports connecting the cylinder ends of said main inlet ports with said chest, and means for simultaneously interrupting communication between the opposite ends of each main inlet port, substantially as and for the purpose set forth. 2nd. A cylinder provided with the usual main inlet and exhaust ports, having independent valved inlet ports communicating with said exhaust port, a valve chest and independent valved branch ports connecting said chest and cylinder, and means for simultaneously cutting off communication between said branch ports and the inlet ends of said main inlet ports, substantially as and for the purpose set forth. 3rd. A cylinder provided with main inlet and exhaust ports, and auxiliary valved inlet ports, a valve chest and a slide valve mounted therein, independent valved branch ports connecting said main inlet ports and chest, and the plug cocks mounted in said main inlet ports, substantially as and for the purpose set forth. 4th. The cylinder provided with the usual inlet ports 10 and 12, the usual exhaust port 13, and the independent valved inlet ports 19-15 and 22-15 connecting the opposite ends of said cylinder with the atmosphere, the valve chest 4, the valved branch ports 29 and 30, and the intercepting plug cocks 25 and 26 located in main inlet ports 10 and 12 respectively, substantially as and for the purpose set forth.

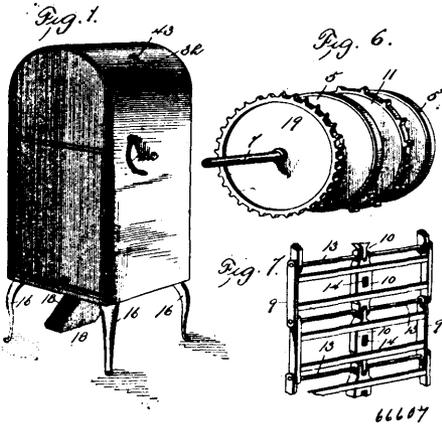
No. 66,607. Coin-Controlled Vending Apparatus.

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

Charles W. Bankes, Middleport, Pennsylvania, U.S.A., 15th March, 1900; 6 years. (Filed 2nd January, 1900.)

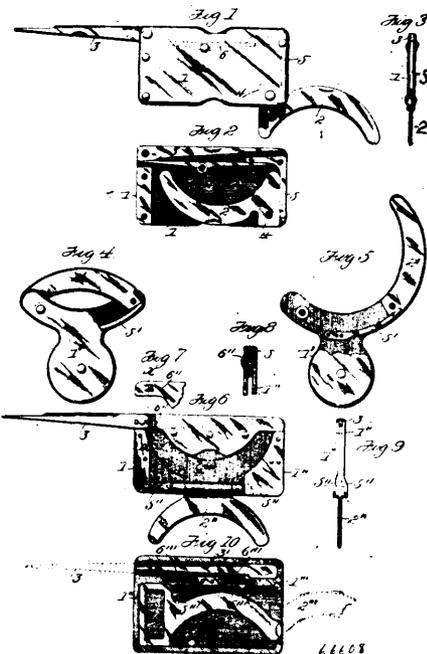
Claim.—1st. An apparatus of the class described, comprising a casing, a carrier, coin-controlled mechanism for operating the same, a spring-actuated indicating bar provided with a rack, a pawl for engaging the rack, a tripping lever, and a projection connected with the carrier and arranged to engage the lever, substantially as described. 2nd. An apparatus of the class described, comprising a casing, a spring-actuated indicating bar adapted to extend through the casing and provided with a rack, a pawl engaging the rack, a tripping lever pivoted between its ends and having one end engaging the said bar, its other end being curved, a carrier, coin-controlled mechanism for operating the same, and a projection moving with the endless carrier for engaging the tripping lever, substantially as described. 3rd. In apparatus of the class described, com-

prising upper and lower shafts, band wheels arranged in pairs and mounted on said shafts, upper and lower sprocket wheels located



between the band wheels, an endless chain arranged on the band wheels and composed of supporting links, and sprocket links engaging the sprocket wheels, receptacles carried by the endless chain operating mechanism for actuating the endless chain, and coin-controlled operating mechanism, substantially as described. 4th. An apparatus of the class described, comprising a casing, upper and lower band wheels arranged in pairs, sprocket wheels located between the band wheels, an endless chain composed of supporting links arranged on the band wheels and provided with side bars and connecting bars, sprocket links mounted on the supporting links and engaging the sprocket wheels, and coin-controlled operating mechanism, substantially as described. 5th. An apparatus of the class described, comprising a casing, upper and lower band wheels arranged in pairs, sprocket wheels, an endless chain composed of supporting links having overlapping side bars, and pintle rods hinging the overlapped portions of the side bars together, sprocket links pivoted together by the said pintle rods and engaging the sprocket wheels and coin-controlled operating mechanism, substantially as described.

No. 66,608. Pneumatic Tire Cleaner.
(*Nettoyeur de bandage pneumatique.*)

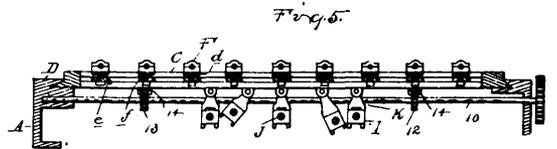
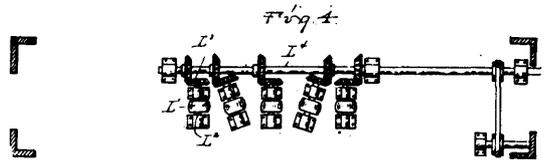
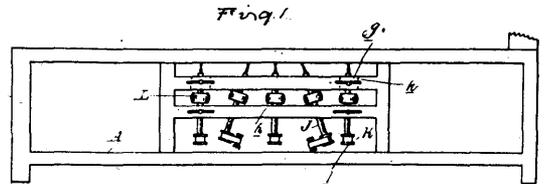


William Glasgow, Chicago, Illinois, U.S.A., 15th March, 1900; 6 years. (Filed 29th December, 1899.)

Claim.—1st. A pneumatic tire cleaner, comprising a haft or body portion, and a cleaning blade having a crescent form, the concaved scraping edge of which is formed to fit the curved exterior of a

pneumatic tire connected thereto and adapted to move into the haft when not required for use, the concaved cleaning edge of the crescent shaped blade being of a blunt nature and the face edge of the same being of a rounded nature, so as to avoid accidental cutting or puncture of the pneumatic tire, substantially as described. 2nd. A pneumatic tire cleaner, comprising in combination, a haft or body portion, a crescent shaped cleaning blade, the concaved scraping edge of which is formed to fit the curved exterior of a pneumatic tire, and a tapering or pointed blade, both connected to the haft at opposite ends thereof and adapted to move into said haft when not required for use, the concaved cleaning edge of the crescent shaped blade being of a blunt nature, and the free end of the same being of a rounded nature, so as to avoid accidental cutting or puncture of the pneumatic tire, substantially as described. 3rd. A pneumatic tire cleaner, comprising in combination, a haft or body portion, a crescent shaped cleaning blade, the concaved scraping edge of which is formed to fit the curved exterior of a pneumatic tire having a non circular shank, and a spring attached to the haft and having engagement against said non-circular shank to hold the cleaning blade in an open and closed condition, the concaved cleaning edge of the crescent shaped blade being of a blunt nature, and the free end of the same being of a rounded nature, so as to avoid accidental cutting or puncture of the pneumatic tire, substantially as described. 4th. A pneumatic tire cleaner, comprising in combination, a haft or body portion, a crescent shaped cleaning blade, a tapering or pointed blade, both connected to the haft at opposite ends thereof, and adapted to move into said haft when not required for use, and springs attached to the haft and having engagement against non-circular parts of the blades to hold the same in their open and closed conditions, the concaved cleaning edge of the crescent shaped blade being of a blunt nature, and the free end of the same being of a rounded nature so as to avoid accidental cutting or puncture of the pneumatic tire, substantially as described.

No. 66,609. Multiple Boring Machine.
(*Machine multiple à forer.*)

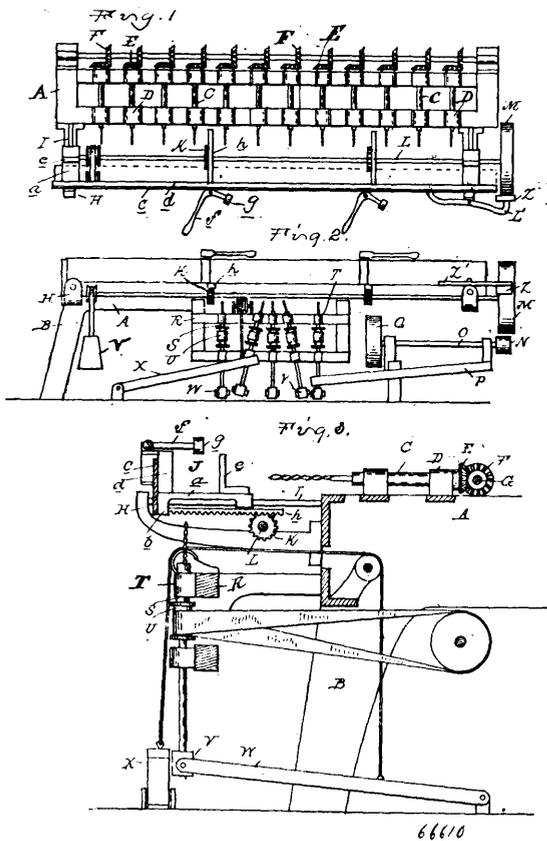


Wilkinson D. Neville, Bay City, Michigan, U.S.A., 15th March, 1900; 6 years. (Filed 29th December, 1899.)

Claim.—1st. In a multiple boring machine, the combination of a reciprocating head or slide, a series of boring spindles and a common drive shaft to which each of said spindles is geared carried by said slide, a series of spindles longitudinally slidable in stationary bearings and an actuating connection between said head and spindles whereby the latter are caused to reciprocate simultaneously with said head. 2nd. In a multiple boring machine, the combination with a reciprocating head or slide, of a series of boring spindles carried thereby, a second series of angularly arranged boring spindles longitudinally, slidingly secured in stationary bearings and swinging links connecting said angular spindles to said slide and adapted to cause them to reciprocate therein. 3rd. In a multiple boring machine, the combination of a reciprocating head or slide, a series of boring spindles carried thereby, a boring spindle longitudinally slidable in stationary bearings and angularly arranged in relation to the spindles on said head, and a laterally movable connection between said head and angular spindle. 4th. In a multiple boring machine, the combination of a series of angularly arranged boring spindles, bifurcated

stationary bearings in which said spindles are longitudinally slidably journaled, a pulley feathered upon each spindle between the bifurcations of its bearing, a series of shafts having pulleys thereon arranged parallel respectively with said angular spindles and adapted to be bolted thereto, a drive shaft, bevel gear connections between said pulley shafts and drive shaft. 5th. A work holder comprising separated heads, each having an angle bearing formed therein, a clamping lever pivoted to each head on one side of said angle bearing and having oppositely extending clamping and actuating arms and rock arms on a common rock shaft journaled in said heads adapted to respectively swing in the path of the actuating arms of said levers and move the same in their clamped positions. 6th. In a rotary work holder, a head having a series of radial arms bifurcated at their outer ends to form L-shaped bearings, levers pivoted respectively to one of the bifurcations of each radial arm, and having oppositely extending clamping and actuating arms, and rock arms pivoted to said head between said radial arms and adapted to be rocked in the path of said actuating arms to move said levers into their clamping position. 7th. A rotary work holder comprising a shaft, heads thereon having L-shaped bearings formed thereon, a clamping lever pivoted to one arm of each of said bearings, and rock arms on a rock shaft common to corresponding L-shaped bearings of the respective heads journaled in said heads adapted to be turned to respectively lock said levers in their clamped position.

No. 66,610. Multiple Boring Machine.
(Machine multiple à forer.)

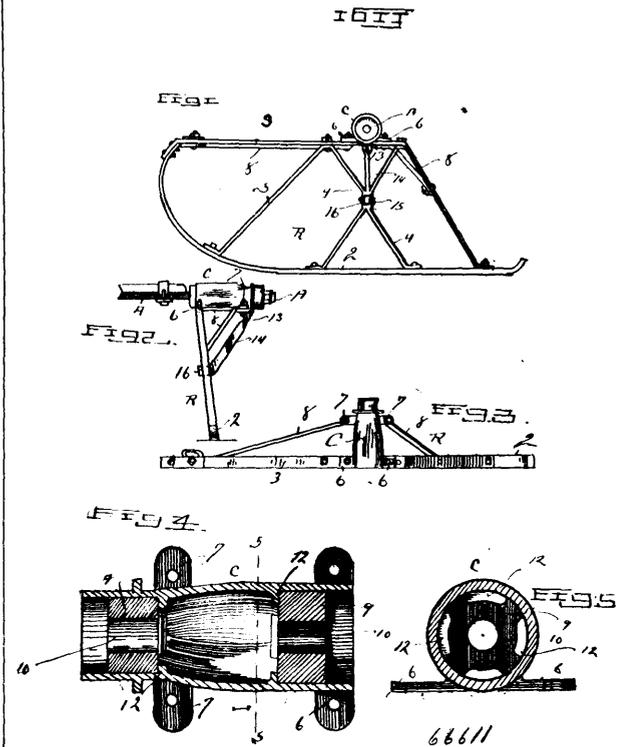


Joseph C. Neville, Bay City, Michigan, U.S.A., 15th March, 1900
6 years. (Filed 29th December, 1899.)

Claim.—1st. A multiple boring machine comprising a stationary gang of parallel boring spindles arranged in a horizontal plane, a gang of upright angularly arranged spindles, a series of levers connected to the lower ends of said upright spindles respectively, each adapted to swing in the plane of its spindle, a travelling work holder adapted to its initial position to hold the work directly above said upright spindles, a foot lever and a flexible connection between said lever and each of the levers for simultaneously raising said upright spindles to operate upon the work, and a friction feed mechanism for subsequently moving said holder laterally to carry the work against said stationary spindles. 2nd. In a multiple boring machine, the combination of a work holder, laterally slidingly secured on guideways, a rack bar on said holder, the shaft L, and pinion K,

thereon meshing with said rack, the pulley M, on said shaft, the frictional drive pulleys N, adapted to be moved into contact with said pulley M, to rotate said shaft and feed the holder forward, a counterweight for rotating said shaft in the opposite direction to return said holder and a brake adapted to be engaged with the pulley M, by the return of said holder for the purpose described.

No. 66,611. Sleigh. (Traineau.)



Hans P. Jensen, Mankato, Minnesota, U.S.A., 15th March, 1900;
6 years. (Filed 26th December, 1899.)

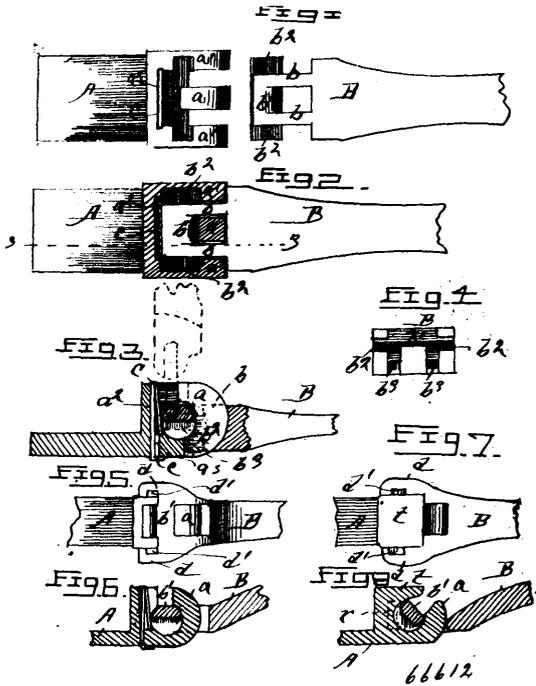
Claim.—1st. In a sleigh, the combination with a runner, of a hub having terminal offstanding lugs and inner extensions, the outer end portions of the bore being of uniform diameter, bearings removably fitted in the end portions of the bore against said inner extensions, oppositely off standing projections upon the hubs for securing the inner end of the hub to the runner, additional oppositely offstanding projections upon the hub, brace rods attached to the last named projections of the hub and inclining inwardly and downwardly on divergent lines and attached at their lower ends to the ends of the runner, a pendent lug upon the hub and a third brace attached at its outer end to the pendent lug and having its lower end secured to the runner. 2nd. In a sleigh, the combination of a runner, a hub having terminal offstanding lugs and inner extensions, the outer end portions of the bore being of uniform diameter, bearings removably fitted in the end portions of the bore against said inner extensions, means for securing the inner end of the hub to the runner, and brace rods attached to the outer end of the hub and inclining inwardly and downwardly on the divergent lines and attached at their lower ends to the runner, substantially as described.

No. 66,612. Thill Coupling. (Amon de limonière.)

Alfred Bixby, Evansville, Indiana, U.S.A., 15th March, 1900; 6
years. (Filed 26th December, 1899.)

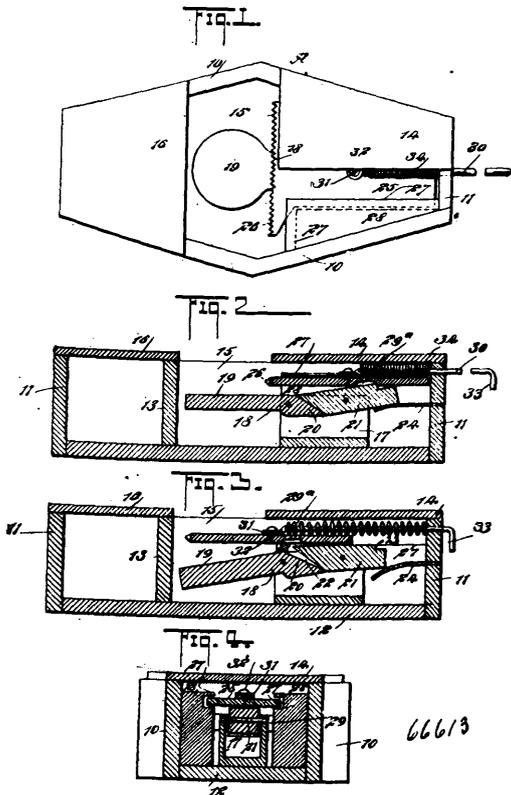
Claim.— 1st. A thill coupling composed of an axle portion having a middle hook and a circular bearing on each side of said hook and a shaft portion having a slot to receive said hook, and lugs fitting into said side bearings whereby a part of the draft strain is carried by said side bearings substantially as shown and described. 2nd. A thill coupling composed of an axle portion with hook and circular bearing with narrow outlet, a side bearing on each side of the hook and a recess *a*², opposite said hook, and a shaft portion having a cross head and slot to receive the said hook lugs engaging the side bearings to carry a part of the draft strain and a spring arranged in the recess opposite the cross head, substantially as and for the pur-

pose described. 3rd. A thill coupling consisting of a part A having a box or casing with hook a¹, a², and recess a³, and



a shaft portion having shanks *b b*, cross head *b¹*, lugs *b² b²*, and shoulder *b³*, substantially as and for the purpose described.

No. 66,613. Trap. (Piège.)

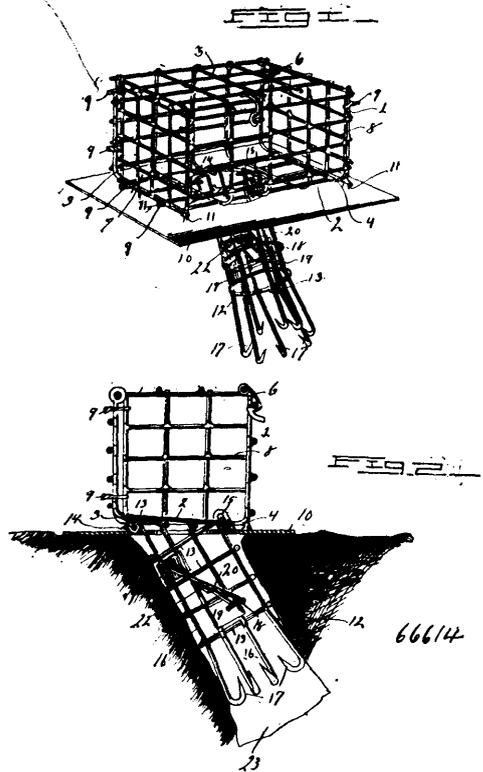


John Daniel Olinger, Fincastle, Kentucky, U.S.A., 15th March, 1900; 6 years. (Filed 26th January, 1900.)

Claim.—1st. In a trap, a casing having its sides, ends and bottom closed, and a portion of its top closed, a jaw mounted to

slide horizontally within the casing, a spring controlling the movement of the jaw in one direction, the said spring being also located within the casing, a latch lever arranged in locking engagement with the said jaw a second lever arranged to trip the latch lever, both of said levers being located within the casing and below the jaw, the tripping lever being provided with a trigger arranged below the opening in the top of the casing. 2nd. In a trap, a casing having its sides, ends and bottom closed, a jaw mounted to slide horizontally in the said casing, a partition in direction of which the jaw travels, a spring controlling the movement of the jaw in one direction, a latch lever arranged for locking engagement with the said jaw, and a second lever arranged to trip the latch lever and provided with a trigger over which the jaw is adapted to move, the pivotal point of the latch lever being above the pivot of the trigger carrying lever, as specified. 3rd. In a trap, the combination with a casing, a jaw held to slide in said casing, having a keeper at its bottom surface, a handle bar attached to the said jaw and extending out through the casing, having bearing at one end against a portion of the said bar and at its opposite end against a fixed object, of a latch lever arranged for direct locking engagement with the keeper of the jaw, a spring for normally maintaining the latch lever in position to lock with the jaw, a trigger over which the jaw is arranged to slide, and a lever constituting a portion of said trigger and arranged when the trigger is depressed to force the latch lever from locking engagement with the sliding jaw, as described.

No. 64,614. Animal Trap. (Piège.)

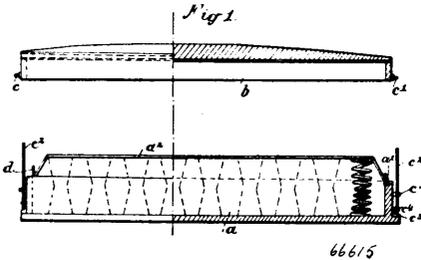


Thomas I. Hall, Abilene, Texas, U.S.A., 15th March, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. In an animal trap, the combination with a body part and a chute projecting therefrom, of inwardly and upwardly projecting points upon the extremity of the chute remote from the body part, adapted to prevent the retreat of an animal after it has begun to enter the chute, substantially as set forth. 2nd. In an animal trap, the combination of a body part and chute projecting therefrom, said chute being provided with a series of longitudinally disposed wires provided respectively, with sharp, inwardly and upwardly bent resilient ends, substantially as set forth. 3rd. In an animal trap, the combination with a body part mounted upon a plate adapted to rest upon the ground, of a chute communicating with the interior of the body part through the plate, and means for preventing escape of an animal from the body part through the chute, substantially as set forth. 4th. In an animal trap, the combination with a body part and chute projecting therefrom, of successive series of inwardly extending sharpened projections within the chute, the first of the series being located near its lower end, whereby an animal after entering the chute is prevented from retreating, and is goaded through the chute into the body part,

substantially as set forth. 5th. In an animal trap, the combination with a body part and a chute projecting therefrom at an oblique angle, of a gravity gate provided upon its free end with sharpened projections, and a strap upon the chute against which the sharpened projections normally rest, and by which the gate is supported in the operative position, substantially as set forth.

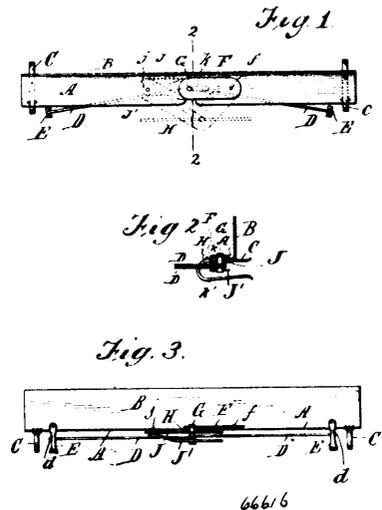
No. 66,615. Upholstering Goods. (*Objets de tapisserie.*)



Wilhelm Kiel, Nördlingen, German Empire, 15th March, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. Improvements in upholstery goods, mattresses and the like, in which the upholstery proper is contained in the upper portion and the lower portion of the horizontally divided frame is to contain the springs which said two parts may be connected and disconnected at will by any suitable means, the lower portion being recessed or tapered off at the top for the reception of the cords or straps used for fixing the springs to the top of the lower portion, substantially as and for the purpose set forth. 2nd. In a horizontally divided piece of upholster, mattress and the like the lower portion of which serves for the reception of the springs while the upholstery proper is contained in the upper portion, a bent lever pivotally attached to the lower portion and made to engage with a stud attached to the upper portion for effecting the union of both parts, substantially as and for the purpose set forth. 3rd. In a horizontally divided piece of upholstery mattress and the like the studs *d* which prevent the lateral displacement of the parts, substantially as and for the purpose set forth.

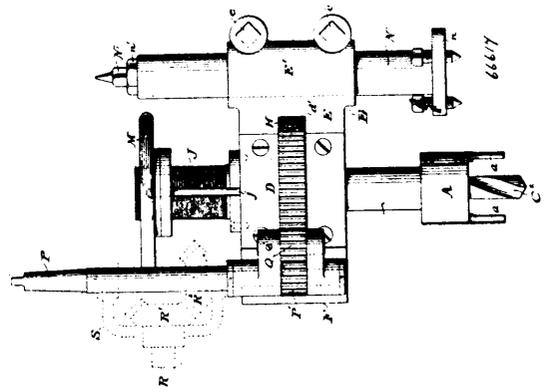
No. 66,616. Leaf Turner. (*Tourne-feuille.*)



James E. Wize, Rossland, British Columbia, Canada, 15th March, 1900; 6 years. (Filed 17h February, 1900.)

Claim.—1st. In a leaf turner the combination of a base plate, and means for securing the same to a support, a plurality of arms each provided with means for attachment to the music leaves, a pivot for said arms, and a support for said pivot movable toward or from the base plate. 2nd. In a leaf turner, the combination of a base plate and means for securing it to a support, a plurality of arms having means for attachment to the leaves, a pivot for said arms, a plate pivoted to the base plate to which said pivot is secured, and a second plate secured to the first plate and provided with an elongated slot in which said pivot works. 3rd. In a leaf turner, the combination of a base plate, having intermediate its ends a slot, a plate pivoted to the base plate at one side of said slot and on top of the base plate, a plate pivoted on the under side of said base plate at the opposite side of said slot, a plate *J* secured to and movable with said second plate, a pivot carried at the free end of the first mentioned plate and working in elongated slots in the other plates, a plurality of arms hinged on said pivot, and clips one on each arm for attachment to the leaves.

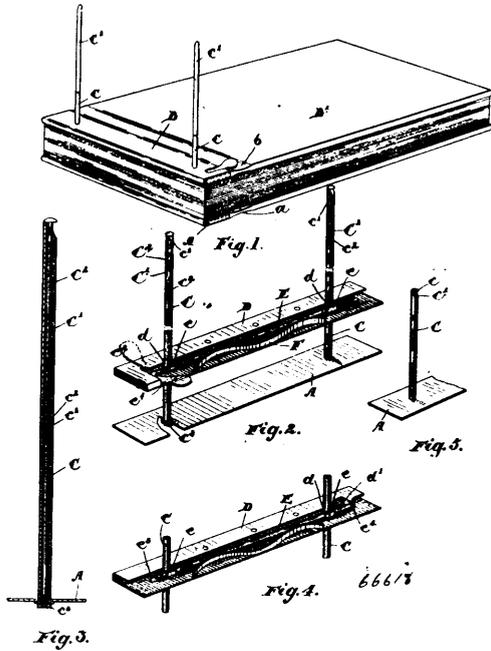
No. 66,617. Boring Machine. (*Machine à forer.*)



Joseph James Tynan, Philadelphia, Pennsylvania, U.S.A., 15th March, 1900; 6 years. (Filed 16th February, 1900.)

Claim.—1st. In a boring apparatus for cutting a circular hole or recess in a solid body, a cutter head mounted on a shaft and formed with a series of recesses in parallelism with its axis, each of which recesses has an inwardly extending or overhanging lip, parallel tapped openings formed in said head and opening through the end of the same and also opening laterally into said recesses, screws mounted in said tapped openings, cutter blades mounted in said recesses and controlled by said screws, and holding blocks mounted in said recesses and extending in parallelism with the cutter blades and provided each as to its inner edge with an overhanging lip which overlies the adjacent edge of a cutter blade to secure it in position, the outer edges of the several cutter blades extending beneath the overhanging lips of the recesses, substantially as set forth. 2nd. In a boring tool, in combination, a main frame, a cutter shaft provided with a cutter head, means for occasioning the rotation of the cutter shaft, a fixed externally threaded cage or shell connected with or forming part of the main frame and enclosing the outer portion of the cutter shaft, a manually rotated device mounted upon and in threaded engagement with said cage or shell and adapted to be advanced along the same, and a connection between said manually rotated device and the cutter shaft through which the advance movement of the manually rotated device is communicated to the cutter shaft, substantially as set forth. 3rd. In a boring tool, in combination, a main frame, a cutter shaft provided with a cutter, means for occasioning the rotation of the cutter shaft, a fixed externally threaded cage or shell connected with or forming part of the main frame and enclosing the outer portion of the cutter shaft, a manually rotated device mounted upon and in threaded engagement with said cage or shell and adapted to be advanced along the same, a swivel connection between said manually rotated device and the cutter shaft through which the advance movement of the manually rotated device is communicated to the cutter shaft, and balls disposed between the rotating and non-rotating parts of said swivel connection, substantially as set forth. 4th. A main frame, a cutter shaft mounted in said frame, means for occasioning the rotation of said shaft, a threaded cage embodying a longitudinal slot secured to said main frame and enclosing the rear end of said shaft, a follower on the end of the shaft and having an arm projecting through the slot of the cage, a hand wheel in threaded engagement with the cage and embodying a channel or recess in which the arm of the follower is entered, substantially as set forth. 5th. A main frame, a cutter shaft mounted in said frame, means for occasioning the rotation of said shaft, a threaded cage embodying longitudinal slots secured to said main frame and enclosing the rear end of said shaft, a follower mounted on the end of the shaft and swivelled to the same, and having arms which project through the slots of the cage, a hand wheel in threaded engagement with the cage and embodying a channel or recess in which the arms of the follower are entered, substantially as set forth. 6th. A main frame, a cutter shaft mounted on said frame, means for occasioning the rotation of said shaft, a threaded cage embodying longitudinal slots secured to said main frame and enclosing the rear end of said shaft, a follower mounted in the end of the shaft and connected thereto by a screw or pivot passing centrally through the follower and into the end of the shaft, balls disposed between the follower and shaft, end arms connected to the follower which project through the slots of the cage, and a hand wheel in threaded engagement with the cage and embodying a channel or recess in which the arms of the follower are entered, substantially as set forth. 7th. A cutter head for cutting a circular hole or recess in a solid body formed with a lateral recess in parallelism with its axis, a cutter blade of breadth inferior to that of the recess mounted in said recess, a holding block mounted in said recess in parallelism with the blade and overlying the lateral edge of said blade, means for securing said block in said recess, and a screw mounted in a tapped opening in said head and adapted to bear against the end portion of the cutter blade to adjust the set of the latter, substantially as set forth.

No. 66,618. Paper File and Binder. (File ou relieure.)



The R. J. Lovell Company, assignee of John Robinette Collins, all of Toronto, Canada, 16th March, 1900; 6 years. (Filed 8th June, 1899.)

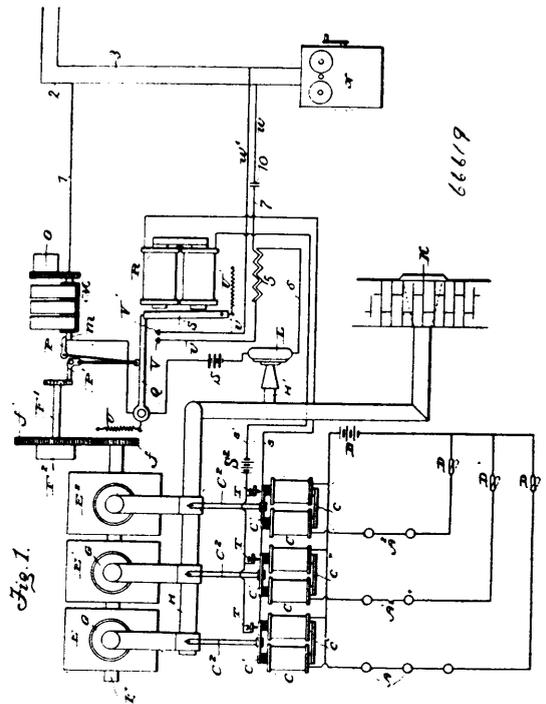
Claim.—1st. In a binder for papers and the like, the combination with the bottom plate and retaining pins, of the double clamping plate, the clamping bar located therein and provided with notches set opposite to the retaining pins, means for turning the clamping bar, and a spring located behind the clamping bar between it and one of the sides of the double plate and designed to exert a pressure upon such bar, as and for the purposes specified. 2nd. In a binder for papers and the like, the combination with the bottom plate and retaining pins, of the double clamping plate, provided with a slot at one end, the clamping bar located in the plate provided with notches set opposite to the retaining pins, and the tongue-shaped arm extending through the slot in the clamping plate, and a spring located behind the clamping bar between it and one of the sides of the double plate, and designed to exert a pressure upon such bar, as and for the purpose specified. 3rd. In a device of the class described, the combination with the bottom or base plate, of the hollow retaining pins securely held in the bottom plate and provided with beveled upper ends, the hollow tubular extensions provided with beveled ends designed to fit the beveled ends at the top of the retaining pins proper, and the pins extending through the extension tube and hollow pin, and provided with nuts at their lower end for securely holding the parts together, as and for the purpose specified. 4th. In a binder for papers and the like, the combination with the bottom plate and retaining pins, of the double clamping plate, the clamping bar located therein provided with notches set opposite to the retaining pins, means for turning the clamping bar and means for exerting a resilient action onto the bar, as and for the purpose specified.

No. 66,619. Fire Alarm. (Avertisseur d'incendie.)

George C. Hale and Morton Wollman, both of Kansas City, Missouri, U.S.A., 16th March, 1900; 6 years. (Filed 9th August, 1899.)

Claim.—In an automatic fire alarm apparatus, the combination of a telephone system, a thermostat, a phonograph having a cylinder bearing a record indicating the location of the thermostat, means controlled by the thermostat for normally holding the reproducer of the phonograph in inoperative position, and a transmitter in the telephone system adapted to receive vibrations from the phonograph, substantially as set forth. 2nd. In an automatic fire alarm apparatus, the combination of a telephone system or circuit, a series of electric circuits each including a suitable number of thermostats, a series of phonographs, corresponding in number to the number of said circuits and each having on its cylinder a record indicating the location of the thermostats in the circuit with which the phonograph is associated, means, controlled by said circuits for normally holding the phonograph reproducers in inactive positions, a transmitter arranged in the telephone circuit, and a conduit or tube connecting each of the phonograph reproducers with said transmitter, substantially as set forth. 3rd. In an automatic fire alarm apparatus and system, the combination of a telephone system, a thermostat, a normally closed electric circuit including the thermostat, a phonograph having on its cylinder a record indicating the location of the

thermostat, means for normally holding said cylinder stationary, a normally open electric circuit adapted to be closed when the



thermostatic circuit is broken and when closed to release the locking means of the phonograph cylinder, and a transmitter arranged in the telephone circuit and adapted to receive vibrations from the phonograph, substantially as set forth. 4th. In an automatic fire alarm apparatus and system, the combination of a telephone system or circuit, a series of local electric circuits, each including a suitable number of thermostats, a series of phonographs corresponding in number to said local circuits and each having on its cylinder a record containing information as to the location of the thermostats in that circuit with which the particular phonograph is associated, means normally locking said phonograph cylinders against rotation, an electric circuit common to all of said thermostatic circuits and connected with the locking means for the phonograph cylinders, whereby when any one of the thermostats is actuated the locking means will be withdrawn from the phonograph cylinder associated with that thermostat, and a transmitter arranged in the telephone circuit to receive the vibrations produced by the phonographs, substantially as set forth. 5th. In an automatic fire alarm signal apparatus and system, the combination of a telephone circuit, a thermostat, a phonograph having on its cylinder a record giving the location of the thermostat, an electric circuit including the reproducer of the phonograph in an inactive position, a telephone transmitter arranged to receive vibrations from the phonograph, and another electric circuit including said transmitter and adapted, upon the action of the thermostat, to connect said transmitter with the telephone system, substantially as set forth. 6th. In an automatic fire alarm signal apparatus and system, the combination of a telephone system, a thermostat, a phonograph having on its cylinder a record giving the location of the thermostat, an electric circuit including the thermostat and devices for normally holding the reproducer of the phonograph in an inactive position, power devices for rotating the phonograph cylinder, means for normally holding the cylinder stationary, a magneto generator connected with a telephone in the telephone system, a motor for driving said generator, means for normally holding said generator stationary, a telephone transmitter arranged to receive sound vibrations from the phonograph, and another electric circuit including means for actuating the stop devices for the phonograph and magneto generator motors, and adapted, on the action of the thermostat, to release said stop and connect the phonograph transmitter with the telephone system, substantially as set forth. 7th. In an automatic fire alarm signal apparatus and system, the combination of a thermostat, an electric circuit including the thermostat and an electro-magnet, a phonograph having on its cylinder a record giving the location of the thermostat, connections between the armature of the electro-magnet, and the reproducer of the transmitter, whereby the latter is normally held in an inactive position, power devices for rotating the phonograph cylinder, a telephone system, a telephone transmitter arranged to receive sound vibrations from the phonograph, and means controlled through the thermostatic circuit for setting in motion the phonograph power devices and for con-

necting said telephone transmitter with the telephone system, substantially as set forth. 8th. In an automatic fire alarm signal apparatus and system, the combination of a thermostat, a phonograph having on its cylinder a record giving the location of the thermostat, means controlled by the thermostat for normally holding the phonograph cylinder stationary, and a speaking tube or conduit adapted to conduct sound from the phonograph, substantially as set forth. 9th. In an automatic fire alarm signal apparatus and system, the combination of a thermostat, a phonograph having on its cylinder a record giving the location of the thermostat, power devices for rotating the phonograph cylinder, means controlled by the thermostat for normally holding the phonograph reproducer out of contact with the cylinder, and a speaking tube or conduit leading from the phonograph reproducer, substantially as set forth. 10th. In an automatic fire alarm signal apparatus and system, the combination of a thermostat, a phonograph having on its cylinder a record giving the location of the thermostat, means controlled by the thermostat for setting the phonograph in motion, and a tube or conduit leading from the phonograph to the exterior of the building or apartment in which the apparatus is placed, substantially as set forth. 11th. In an automatic fire alarm signal apparatus, the combination of a thermostat, a phonograph cylinder bearing a record giving the location of the thermostat, an electric circuit including the thermostat and an electro-magnet, a pivotally mounted armature for said magnet, a pivotally mounted reproducer for the phonograph cylinder, a link connecting the said pivoted armature with the reproducer, means controlled by the thermostat circuit for driving the phonograph cylinder, and a speaking tube leading from the phonograph reproducer, substantially as set forth. 12th. In a fire alarm apparatus, the combination of a series of thermostats, a series of phonographs each having on its cylinder a record giving the location of one of the thermostats, a tube or conduit arranged adjacent to the phonograph for receiving messages or signals therefrom, the reproducers of the phonograph being provided with laterally projecting tubular trunnions that engage with adjacent sections of said tube, connections between the thermostats and phonograph reproducers whereby the latter are normally held out of contact with the respective cylinders, and means controlled by the thermostats for driving the phonograph cylinders, substantially as set forth. 13th. In an automatic fire alarm signal apparatus and system, the combination of a telephone system, a series of thermostats, a series of local normally closed electric circuits, each including one or more of said thermostats, and an electro-magnet, a manual switch in each of said local circuits, a series of phonographs, corresponding in number to the local circuits, each having on its cylinder a record giving the location of the thermostat in the local circuit with which that phonograph is associated, connection between the armature of the electro-magnet in each local circuit and the reproducer of the phonograph associated with that circuit, whereby said reproducer is normally held out of contact with its cylinder, a speaking tube for conducting the signals produced by either of the phonographs, to another apartment or to the exterior of the building in which the apparatus is located, a telephone transmitter L, arranged to receive vibrations from said tube, a magneto generator for sounding the signal bell of a telephone in a telephone system, power devices for driving the phonograph cylinders, stop means for normally holding said power devices stationary and preventing action of the magneto generator, a normally open electric circuit adapted to be closed by the breaking of either of the local circuits, said circuit including said stop, and a branch circuit adapted to connect the transmitter L, with the telephone system, substantially as set forth.

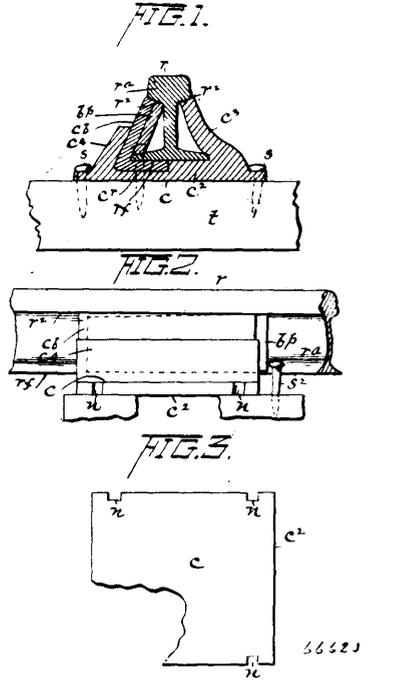
No. 66,620. Rail Chair and Brace.

(*Coussinet et tirant de rails.*)

Lewis Lesher and Charles E. Christ, both of Tamaque, Pennsylvania, U.S.A., 16th March, 1900; 6 years. (Filed 19th February, 1900.)

Claim.—1st. A track rail, a chair or rail receiver which at one side has an upwardly and inwardly extending flange, which flange at its base directly engages the flange of the rail, and which bears against the shoulder of the rail, which chair at its opposite side has a corresponding flange which extends toward the opposite shoulder of the rail, and which chair on such opposite side has a horizontal recess, an angular brace plate which in one portion is adapted to the recess in the receiver and constitutes with the receiver a flat bearing for the flange of the rail, and a slightly tapered bar or brace plate which is insertible longitudinally, and which bears against the angular brace plate, against the flange of the rail, and against the shoulder of the rail, in combination, substantially as described and shown. 2nd. A track rail, a rail chair or receiver which is flat in its base or lower portion, and is recessed in such portion, which is upturned or inwardly and upwardly extended to constitute a retaining flange which bears against the corresponding shoulder of the rail, and at which its opposite side is upturned and extended, in a like direction, but to a lesser extent, to form a secondary retaining flange, an angular holder block or bar, within the recess and within the secondary flange, and a slightly tapered flat

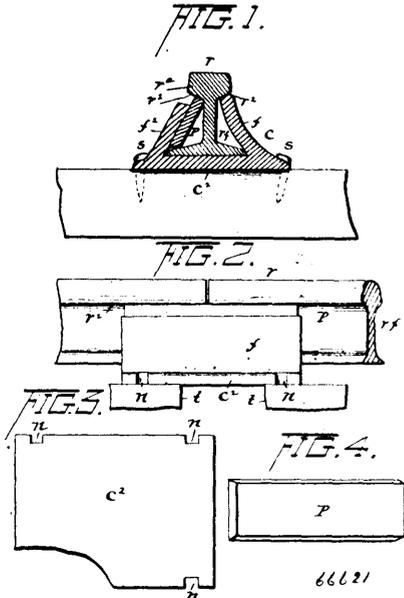
brace or bar, within the angle of the angular holder bar, bearing against the flange of the rail at the bottom, and bearing against the



shoulder of the rail at the top, in combination, substantially as shown and described.

No. 66,621. Rail Chair and Brace.

(*Cousinets et tirant de rails.*)



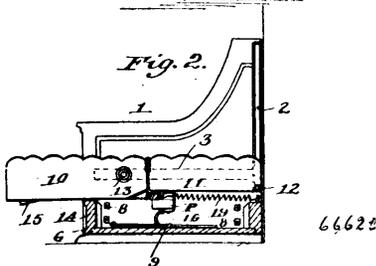
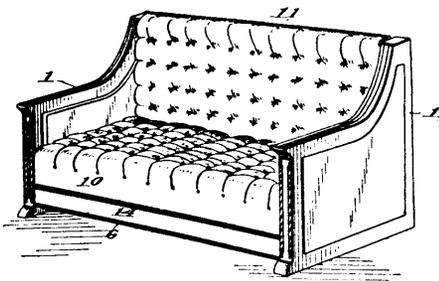
Lewis Lesher and Charles E. Christ, both of Tamaqua, Pennsylvania, U.S.A., 16th March, 1900; 6 years. (Filed 19th February, 1900.)

Claim.—1st. A railway rail, a rail chair or receiver which upon one of its margins has an upwardly and inwardly extending flange which in its main portion is not in contact with the web or body of the rail, which at its upper extremity bears against the coincident shoulder of the rail, and which at its opposite margin has a corresponding flange which is flat upon its inner surface, and which is similarly inclined toward but which comes short of the opposite shoulder of the rail, and an inclined brace plate or bar which has flat, parallel, inner and outer surfaces, which is longitudinally received intermediately of the rail and its receiver, in face-to-face contact with such opposite corresponding flange, which by its edges bears against the shoulder and against the flange of the rail, and

which in its main portion is remote from the body or web of the rail, in combination, substantially as specified. 2nd. A railway rail, a rail chair or receiver which upon one of its margins has a retaining flange which at its upper extremity bears against the shoulder of the railway rail, and which upon its opposite margin has a corresponding similarly inclined flange which extends toward the opposite shoulder of the rail, and a flat or straight sided inwardly inclined brace plate or bar which is longitudinally received between the rail and its chair, which by its outer face bears flatly against the inner face of such corresponding flange, and which by its edges bears against the shoulder and against the flange of the rail, the brace plate, and each of such inner and outer flanges, being not in contact with the vertical body of the rail, in combination. 3rd. The combination with a track rail, of a rail chair or receiver which at one side has an inclined marginal flange or brace plate which bears against the tread of the rail, and which at its opposite side has an inclined marginal flange which extends toward the tread of the rail, and a flat brace plate or bar, unprovided with recess or projection, which is insertible endwise between the rail and its receiver, and which bears only by its upper extremity against the tread or shoulder of the rail, by its lower extremity against the flange of the rail, and by its main body against the inner face of the opposite inclined marginal flange of the chair or receiver, substantially as set forth. 4th. A combined chair and rail brace which consists of a horizontal rail supporting portion or base, an upwardly and inwardly extending marginal flange or brace which at its upper extremity is adapted to bear against the shoulder of the rail, an opposite marginal flange, of like inclination, when the rail is in place, extends nearly to the shoulder thereof, and a flat parallel sided brace plate or bar which is adapted to be inserted between the rail and such opposite flange, and to bear only against the same, and against the shoulder and against the flange of the rail, substantially as specified.

No. 66,622. Sofa Bedstead. (Lit-canapé.)

Fig. 1.



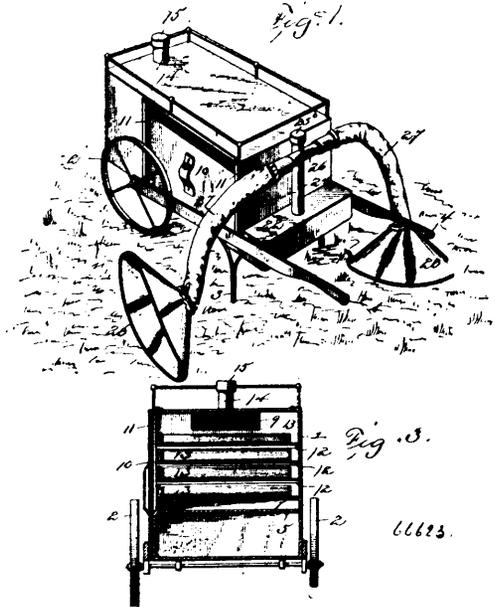
J. A. Kelly & Bros., assignee of William John Kelly, Clinton, Iowa, U.S.A., 16th March, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. In a sofa bedstead, the combination with sections movably connected together, of a pusher, means for interposing the same between said sections when the article is to be converted into a sofa, substantially as described. 2nd. In a sofa bedstead, the combination with sections hinged together, one of said sections provided with a hinged supported pusher which automatically interposes itself between the sections when the article is being converted into a sofa, substantially as described. 3rd. In a sofa bedstead, the combination with a back section and a seat section hinged together and having studs guided in vertical and horizontal channels in end pieces, of a pusher hinged to the rear edge of the seat section and means for pressing the seat upward, substantially as described. 4th. In a sofa bedstead, the combination with end pieces having raceways, of a back section and seat section having studs running in said raceways, a pusher hinged to the rear edge of the seat section, and a spring to press the same upward between the seat section and back when the article is being converted into a sofa bedstead, substantially as described. 5th. In a sofa bedstead, the combination with end pieces having raceways, and a base frame uniting the same, of a seat section and a back section hinged together, studs on said sections running in said raceways, a pusher hinged to the rear edge

of the seat section, and a spring attached to said pusher bearing upon the base section to press the pusher upward between said seat section and back section when the article is being converted into a sofa bedstead.

No. 66,623. Insect Destroyer.

(Appareil destructeur d'insectes.)

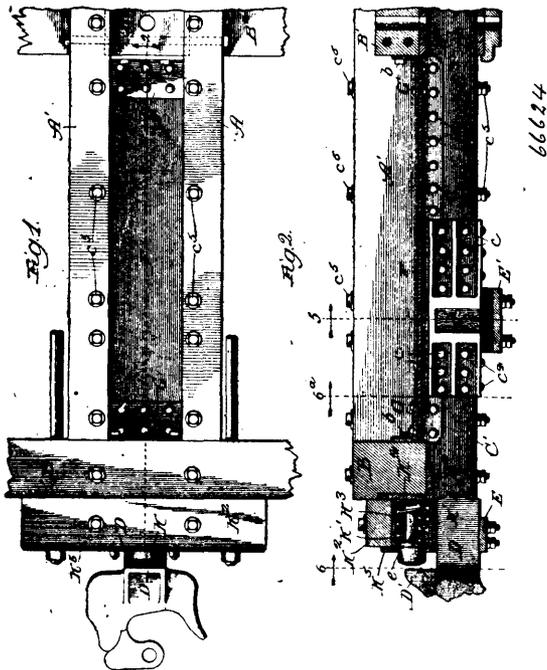


Adelbert Everts, assignee of Albert C. Richardson, both of South Frankfort, Michigan, U.S.A., 16th March, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. An insect destroyer, comprising a casing provided with a main chamber for containing burning material and having a cooling chamber, said casing being provided with discharge openings at opposite sides of the cooling chamber, whereby smoke may be directly discharged from the casing or caused to pass through the cooling chamber, substantially as and for the purpose described. 2nd. An insect destroyer, comprising a casing provided with a chamber for containing burning material and having a cooling chamber, said casing being provided with discharge openings located at points at opposite sides of the cooling chamber so that smoke may be discharged directly from the casing or caused to pass through the cooling chamber, a discharge pipe or hose adapted to be connected with either discharge openings, and a cap adapted to cover the opening for the direct discharge of smoke, substantially as described. 3rd. An insect destroyer, comprising a casing having a main chamber for containing burning material, a cooling chamber and a sliding door at one side of the main chamber to provide an opening at the top thereof, and pans or trays arranged within the main chamber in suitable supports or ways, substantially as described. 4th. An insect destroyer, comprising a casing provided with a main chamber and having a cooling chamber located at one end of the main chamber, said casing being provided beneath the main chamber and the cooling chamber with a space forming a smoke conduit and communicating with the cooling chamber at the bottom thereof, vents arranged at the top of the casing and at the front thereof, the vent at the top being adapted for the direct discharge of smoke and the other vent communicating with the space at the bottom of the casing, and a discharge pipe or tube adapted to be connected with either vent, substantially as described. 5th. An insect destroyer, comprising a casing, a horizontal partition arranged adjacent to the bottom of the casing, a vertical partition dividing the casing into a main chamber and a cooling chamber, the cooling chamber communicating at its top with the main chamber and at its bottom with the space below the horizontal position, and vents arranged at the top of the cooling chamber and at the bottom of the casing to communicate with the space beneath the horizontal partition, substantially as described. 6th. An insect destroyer, comprising a casing, a horizontal partition arranged adjacent to the bottom of the casing, a vertical partition dividing the casing into a main chamber and a cooling chamber, a series of pans arranged within the main chamber, a sliding door arranged at one side of the main chamber and adapted to form a draft opening at the top thereof, and a discharge tube adapted to be connected with the top of the casing and with the space beneath the horizontal partition, substantially as described. 7th. An insect destroyer, comprising a casing provided with a main chamber and having a cooling chamber, and provided with vents arranged to discharge smoke directly from the casing and to cause the same to

pass through the cooling chamber, a coupling connected with the latter vent and provided with laterally extending arms, and discharge pipes connected with the arms of the coupling, and provided with hoods adapted to be placed over plants, substantially as described. 8th. An insect destroyer, comprising a casing having a cooling chamber and provided at one end with handles and having legs depending from it adjacent to the handles, wheels mounted on the casing at the other end thereof, and a discharge pipe or tube connected with the casing, substantially as described. 9th. An insect destroyer, comprising a casing having a main chamber and provided with a cooling chamber, a substantially cross shaped coupling mounted on the casing and connected with the cooling chamber and consisting of a vertical stem and horizontal arms adapted to be closed by removable caps, and a discharge pipe or tube, substantially as described.

No. 66,624. Car Constructor. (*Construction de chars.*)

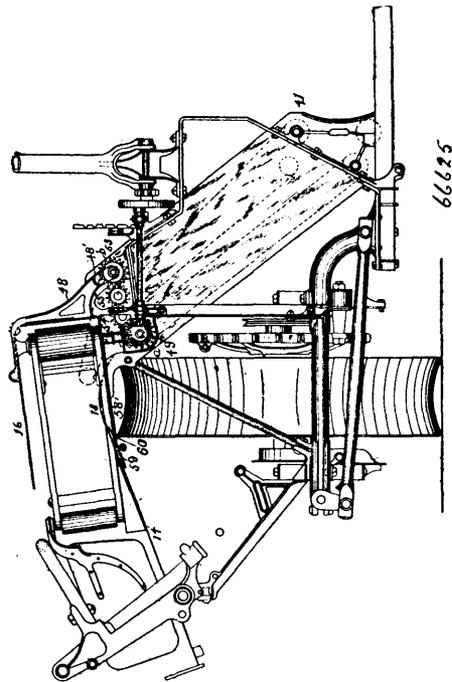


The Standard Coupler Company, New York City, New York, assignee of Henry Howard Sessions, Chicago, Illinois, U.S.A., 16th March, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. In a car, the combination with the sills, draft beams, and a block joining the centre sills, of a channel bar provided with downturned flanges riveted to said draft beams and secured at its outer end to the end sill, and at its inner end to said block, bolt connection between draft beams and centre sills, a draw bar, and spring connection between draw bar and draft beams, substantially as and for the purpose set forth. 2nd. In a car, the combination with the sills, draft beams, and a block joining the centre sills, of a channel bar provided with downturned flanges riveted to said draft beams, angles riveted to said channel bar and secured to the end sill and to said block, bolt connection between draft beams and centre sills, a draw bar, and spring connection between draw bar and draft beams, substantially as and for the purpose set forth. 3rd. In a car, the combination with the sills and draft beams, of a draw bar provided with a clevis lying in a vertical plane and provided with a channel, a block extending through said channel and secured at its ends to said draft beams, said blocks being out of contact with the walls of said channel, springs confined between said block and the ends of said channel, and carrier yokes supporting and acting as guides for said clevis, substantially as and for the purpose set forth. 4th. In a car, the combination with the sills and draft beams, of a channel bar between the centre sills, having downward flanges riveted to said draft beams, said flanges being provided with recesses, draft plates set into said recesses and secured to said draft beams, a draw bar, and spring connection between said draw bar and draft plates, substantially as and for the purpose set forth. 5th. In a car, the combination of an end sill, centre sills, a block B¹ connecting the centre sills, a metallic body bolster member B², a channel bar F having downturned flanges and abutting at its inner end against said member B², angles G¹ securing said channel bar to the end sill and block B¹, metallic draft beams extending beneath the member B² and secured to said centre sills and to the downturned flanges of said channel bar, a draw bar, and spring connection between draw bar and draft beams, substantially as and for the purpose set forth. 6th. In a car, the combination with an end sill provided with a spring

bearing plate K⁴, a block K² containing a metallic sleeve K¹, a spring K³ a buffer head provided with a flange, a retaining plate K⁵, a draw bar provided at its head with a lug D¹, draft beams, and spring connection between the inner end of said draw bar and the draft beams, substantially as and for the purpose set forth.

No. 66,625. Grain Harvester. (*Moissonneuse.*)

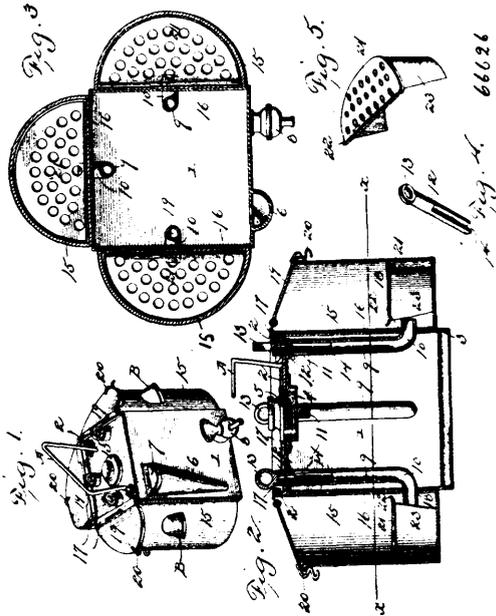


The Milwaukee Harvester Company, assignee of Henry F. Crandall and Edward J. Birkett, all of Milwaukee, Wisconsin, U.S.A., 16th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—1st. In a harvester, a platform and a platform carrier adapted to convey the grain to the receiving end of the elevator, a driving roller for the platform carrier having its rear end journal supported by a bracket secured to said platform, a chain wheel on said journal, a counter shaft parallel with said roller and located behind said platform carrier, a chain wheel on said counter shaft, means for driving said counter shaft, and a flexible connection between said chain wheel, substantially as and for the purposes set forth. 2nd. In a harvester, a platform and a platform carrier adapted to convey the grain to the receiving end of the elevator, a driving roller for the platform carrier having its rear journal supported by a bracket secured to said platform, a chain wheel on said journal, the lower roller of the elevator carrier having its rear journal supported in said bracket, a chain wheel on the journal of said elevator roller, a countershaft parallel with said carrier and elevator rollers and located behind said carriers, a chain wheel on said counter shaft, means for revolving said counter shaft, and a flexible connection between said chain wheels, substantially as and for the purposes set forth. 3rd. In a harvester, a driving mechanism for the platform and elevator carriers comprising the following instrumentalities in combination, a platform carrier roller at the stubbleward end of the platform, lower and upper rollers on the lower elevator carrier, a counter shaft located behind said carriers, a supporting bracket which is adjustably secured to the rear sill and in which said counter shaft is journaled, a step piece supporting the journals at the rear end of said carrier rollers, chain wheels on said journals, a chain wheel on the front end of said counter shaft, a flexible connection between said chain wheels, a chain wheel on the rear end of the counter shaft, a chain wheel on the rear journal of the upper roller of the lower elevator carrier, a chain wheel on the rear end of the harvester crank shaft, means for driving said shaft, and a flexible connection between said chain wheels, substantially as and for the purposes set forth. 4th. In a harvester, the combination of the step part 26, the parts 31 and 31¹, the parts 32 and 34, brace rod 37 and brace piece 35, angle iron 27, metal sheet 36, part 38, and removable journal box 33, substantially as and for the purpose set forth. 5th. In a harvester, the combination of the upper roller of the lower elevator, a journal supporting piece with means for supporting it, said journal supporting piece having an aperture of greater diameter than the diameter of said roller, and a journal box adapted to fill the aperture in said supporting piece, substantially as and for the purpose set forth. 6th. In a harvest elevator designed to receive the grain from a platform carrier and elevate it to a plane above the drive wheel between two

moving carriers, an upper carrier comprising two members, the lower member being supported at its lower end by pivotal supports above the delivery end of the platform carrier, and the upper member being jointed at its lower end to the upper end of the lower member, substantially as and for the purpose set forth. 7th. In a harvester elevator designed to receive the grain from a platform carrier and elevate it to a plane above the drive wheel between two moving carriers, an upper carrier comprising two members, the lower member being supported at its lower end by pivotal supports above the delivery end of the platform carrier, and the upper member being connected with the lower member by links pivoted on the journals of the upper roller of the said lower member and the journals of the grainward roller of said upper member, said links being secured to opposite ends of a rock shaft, substantially as and for the purposes set forth. 8th. In a harvester elevator adapted to receive the grain from a platform carrier and elevate it to a plane above the drive wheel between two moving carriers, the combination of an upper carrier comprising two members, the lower member being supported at its lower end by pivotal supports above the delivery end of the platform carrier, and the upper member being connected with the lower member by links pivoted on the journals of the upper roller of said lower member and the journals of the grainward roller of said upper member, said links being secured to opposite ends of a rock shaft and supported at their upper ends in segmental guide slots, substantially as and for the purposes set forth. 9th. In a harvester elevator of the class described, a jointed two part upper elevator hinged at its lower end to portions of the harvester frame and adapted to float upon the stream of grain at its upper end, substantially as and for the purposes set forth. 10th. In harvester elevator of the class described, a jointed two part upper elevator hinged at its lower end to portions of the harvester frame and adapted to float upon the stream of grain at its upper end, in combination with a radius bar connecting the front journal of the upper roller of the lower elevator carrier with the front journal of the grainward roller of the upper member of said upper elevator, pinions on said journals, and intermediate pinions carried by said radius bar, substantially as and for the purposes set forth. 11th. In a harvester elevator adapted to receive the grain from the delivery end of a platform carrier and elevate it between two moving surfaces to a plane above the drive wheel, an upper elevator carrier comprising two members having the axes of their driving rollers connected by links which are secured to opposite ends of a rock shaft and having portions of the upper member of said upper elevator carrier frame adapted to engage said rock shaft and limit the downward movement of the stubbleward end of said upper member, substantially as and for the purposes set forth. 12th. In a harvester, an upper elevator carrier frame comprising two sections having a hinged connection, said frame consisting of the metal side sheets 6, 8, 40 and 47, the journal box plates 7 and 39, secured to the lower ends of the side sheets 6 and 40 and connected by the tension rod 42, the journal box plates 21 and 43 secured to the upper ends of the side pieces 6 and 40 and connected by the tension rod 44, the journal box plates 20 and 46 secured to the grainward ends of sheets 8 and 47 and connected by the tension rod 58, the journal box plates 22 and 56 secured to the stubbleward end of said sheets and connected by the tension rod 57, the rock shaft 19 with parts 18 and 45 adapted to receive the extended ends of the journal boxes forming parts of journal box plates 21, 43, 20 and 46, the whole arranged and constructed, substantially as and for the purposes set forth. 13th. In a harvester, the combination of an elevator adapted to receive the grain from the platform carrier and elevate it to a plane above the drive wheel between two moving carriers, the upper elevator carrier comprising two parts hinged together and adapted to float upon the stream of grain, said upper elevator carrier being supported at its rear side by the depending bracket piece 5, in which the lower end of the rear side of the lower member is pivoted, said bracket piece being secured to the bar 3, and said bar being secured to the bracket piece 4, which is secured to the seat supporting pipe 2, a part 17 secured to the bar 3, and a link 18 supported and guided by the part 17 and connecting the two parts of the upper elevator carrier, substantially as and for the purposes set forth. 14th. In a harvesting machine, an elevator adapted to receive the grain from the platform carrier and elevate it to a plane above the drive wheel between two moving carriers, the upper elevator carrier being composed of two parts hinged together, in combination with a supporting frame having guideways adapted to guide said upper elevator in a manner, substantially as and for the purposes set forth. 15th. In a harvester elevator, the frame piece 48, the journal of the elevator roller in combination with the journal box 50, the thimble 51 and the radius bar 52, pivoted upon the journal box 50, substantially as and for the purposes set forth. 16th. In a harvester, a moving butt adjuster in combination with a fixed or stationary deck extending from a point near the delivery end of the elevator to a point stubbleward of the drive wheel in a curved form, and having a depressed portion, substantially as and for the purposes set forth. 17th. In a harvester, in combination with a moving butt adjuster adapted to swing toward or from the trying mechanism at its delivery end, a curved deck extending across and bridging the space between the delivery end of the elevators and the movable binder deck, said curved deck being provided with a depressed portion approximately in the same plane as the lower surface of said butt adjuster, substantially as and for the purposes set forth.

No. 66,626. Steam Cooker. (Cuisiniere à vapeur.)



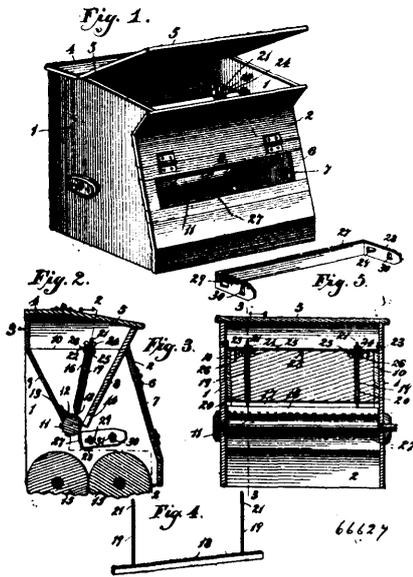
John Walter and Robert Batstone, both of Jacksonville, Florida U.S.A., 16th March, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. In a steam cooker, the combination with a steam boiler or generator, having a plurality of steam passages projecting laterally at the outer sides thereof, and also provided with means for controlling the supply of steam therethrough, of a plurality of cookers detachably fitted in contact with the sides of the generator, and having openings receiving the projecting ends of the respective steam passages, said projecting ends also bracing the cookers against accidental lateral movement, substantially as shown and described. 2nd. In a steam cooker, the combination with a steam boiler or generator, having an upstanding peripheral flange at the top thereof, and steam supply passages, of a plurality of cookers provided with hooked flanges engaging the flange of the boiler or generator, and removably connecting the cookers in engagement with the sides of the generator, each cooker being connected to one of the steam supply passages, substantially as shown and described. 3rd. In a steam cooker, the combination with a steam boiler or generator, having steam supply pipes located interiorly and branch passages projecting outwardly through the sides thereof, of a plurality of cookers pendent from the upper end of the boiler or generator and provided with openings adapted to receive the respective projections of the branch passages, substantially as shown and described. 4th. In a steam cooker, the combination with a steam boiler or generator having internal steam passages pendent from the top of the boiler or generator, each passage being provided near its upper end with a steam inlet opening and at its lower end with a transverse passage projecting outwardly through the adjacent side of the generator, means for controlling the supply of steam through the inlet opening, and cookers pendent from the top of the generator and provided near their lower ends with transverse steam passages, substantially as shown and described. 5th. In a steam cooker, the combination with a steam boiler or generator having interior steam pipes pendent and opening outward through the same, each pipe being provided at its lower end with a transverse branch projecting outwardly through the adjacent side, and at its upper end with a steam inlet opening, hollow turning plugs fitted in the upper ends of the respective steam pipes and provided with transverse openings, and steam cookers fitted to the sides of the generator and provided with transverse openings, adapted to receive the projecting ends of the respective transverse steam pipes, substantially as shown and described. 6th. In a steam cooker, the combination with a steam boiler or generator having steam pipes projecting outwardly through the sides thereof, of cookers fitted to the sides of the generator and receiving the outer ends of the respective steam pipes near the lower end of the cooker, and perforate racks fitted in the respective cookers and located above the discharge end of the respective steam pipes, substantially as shown and described. 7th. In a steam cooker, the combination with a steam boiler or generator having steam supply pipes projecting outwardly through the sides thereof, of cookers fitted to the sides of the generator and receiving the projecting ends of the respective steam pipes, and racks located within the respective cookers, each rack comprising a flat perforate plate and a pendent fitted flange, the latter being adapted to rest upon the bottom of the cooker and to support the perforate plate immediately above the discharge of the respective steam supply pipes, substantially as

described. 8th. In a steam cooker, the combination with a steam boiler or generator of angular form, having steam supply pipes projecting laterally through the respective sides of the generator and provided with a peripheral upstanding flange at the top thereof, of independent cookers, each cooker having a flat side provided with a transverse opening adapted to receive the projecting ends of the respective steam pipes, whereby the cooker may rest flat against the adjacent side of the generator and provided at the top edge of the flat side with a hooked flange adapted to engage the upstanding flange of the generator and thereby removably connect the cooker thereto, substantially as shown and described.

No. 66,627. Roller Mill Feeder.

(Alimentateur pour moulins.)



66627

Henry Bernhard, Strasburg, Illinois, U.S.A., 16th March, 1900; 6 years. (Filed 26th February, 1900.)

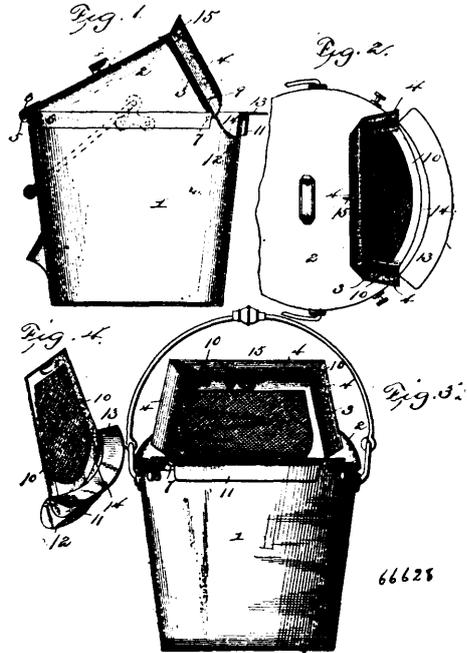
Claim.—1st. A feeder for roller mills, comprising a casing having downwardly converging walls and a feed roller adjacent to the bottom edges thereof, one of said walls being provided in its bottom edge with a longitudinal groove facing downward, a feed gate mounted to move up and down in said groove and provided with a stem extending upward through an opening included within said wall, and an adjusting device contained within the casing and co-operating within said stem for setting the gate, whereby the gate may be adjusted toward and away from the feed roller and held when adjusted, substantially as specified. 2nd. In a feeder for roller mills, the combination with a casing, and a feed roller mounted therein, of a scraper having its body portion arranged parallel to the feed roller, rigid angular extensions at the ends of the scraper each provided with longitudinal and transverse slots, and clamping fasteners passing through said slots into the casing, substantially as and for the purpose specified.

No. 66,628. Milk Pail. (Seau à lait.)

James E. Johnston, Oberlin, Ohio, U.S.A., 16th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—In a milk pail, an elevated cover therefor, provided with an inclined opening in front, flanges about three sides of the opening and flanges adapted to fit over the rim of the pail, in combination with a strainer plate and strainer placed in said inclined opening, a pocket in the lower edge of the strainer plate, a flange extending

outwardly therefrom, and flanges extending downward on either side of the rim of the pail from the front edge of said plate, and

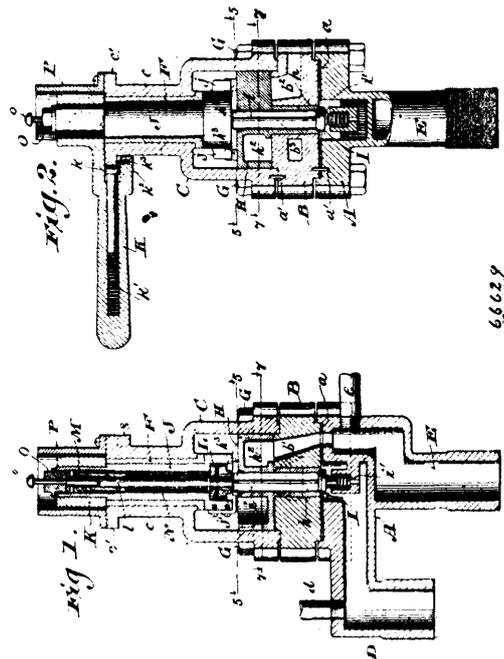


66628

catches for securing the cover to the pail and the strainer plate to the cover, substantially as described.

No. 66,629. Engineer's Valve for Air Brakes.

(Soupape pour freins à air.)



66629

Niels Anton Christensen, Milwaukee, Wisconsin, U.S.A., 16th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—1st. In an engineer's valve, the combination of a valve case having main reservoir and train pipe connections and an exhaust port, a main valve controlling communication between the train pipe and the main reservoir and between the train pipe and the exhaust

port, a single supply passage leading from the main reservoir connection into the main valve chamber, a regulating valve in said passage controlling the entire supply of air from the main reservoir to the train pipe, a movable part exposed to train pipe pressure and adapted to cause the opening of said regulating valve when such pressure falls below a predetermined limit and to admit air from the main reservoir into the train pipe when the main valve is in releasing and running position, and a spring acting on said movable part in opposition to the train pipe pressure and tending to open said regulating valve, substantially as and for the purposes set forth.

2nd. In an engineer's valve, the combination of a valve case having main reservoir and train pipe connections and an exhaust port, a main valve controlling the admission and release of air to and from the train pipe, a supply passage leading from the main reservoir connection into the main valve chamber, a regulating valve in said passage controlling the entire supply of air from the main reservoir to the train pipe, a movable part adapted to cause said regulating valve to open when the train pipe pressure falls below a certain limit and to admit air from the main reservoir into the train pipe when the main valve is in releasing and running position, a spring acting upon said movable part in opposition to the train pipe pressure and tending to open said regulating valve, and means for adjusting the tension of the spring, substantially as and for the purposes set forth.

3rd. In an engineer's valve, the combination with a suitable case having main reservoir and train pipe connections and an exhaust passage and provided with a valve seat having supply, train pipe and exhaust ports, the exhaust port having a graduating groove or notch on one side, of a disc-shaped valve having a through supply passage or port, a cavity in its working face and a tubular stem fitted to turn in an opening in the valve seat and forming a passage between the main reservoir connection and the valve chamber, the supply port of the valve seat being connected by a passage with the train pipe port, substantially as and for the purposes set forth.

4th. In an engineer's valve, the combination with a suitable valve case having main reservoir and train pipe connections and an exhaust port or passage, of a disc-shaped main valve having a tubular stem fitted to turn in an opening through the valve seat into the main reservoir passage and forming a continuation of said passage into the main valve chamber, a regulating valve adapted to close the passage in said tubular stem and provided with a stem which is guided in said tubular stem, a tubular valve operating stem fitted to turn in the valve case, provided at its outer end with an operating handle and engaging at its inner end with the main valve, and a movable part fitted to work in the inner end of said valve operating stem and adapted to open the regulating valve when the train pipe pressure falls below a predetermined limit, substantially as and for the purposes set forth.

5th. In an engineer's valve, the combination with the main valve of a passage leading from the main reservoir connection into the main valve chamber, a regulating valve controlling said passage, a movable part adapted to open said regulating valve when the train pipe pressure falls below a certain limit, and means for manually opening said regulating valve, substantially as and for the purposes set forth.

6th. In an engineer's valve, the combination with a suitable case having main reservoir and train pipe connections, and an exhaust opening, of a main valve controlling the supply and release of the fluid pressure medium to and from the train pipe, a regulating valve adapted to close a passage leading from the main reservoir connection into the main valve chamber, means for automatically opening and closing said regulating valve when the train pipe pressure falls below and rises above a certain limit, and means for manually opening said regulating valve, substantially as and for the purposes set forth.

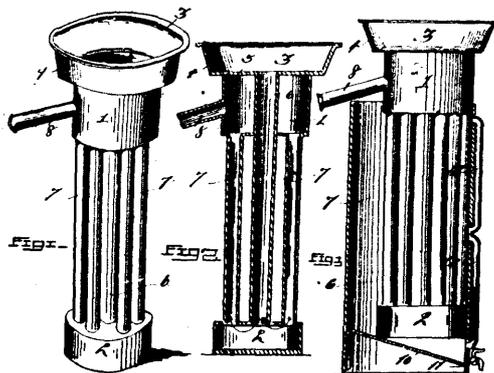
7th. In an engineer's valve, the combination with a valve case having main reservoir and train pipe connections and an exhaust opening, of a main valve having a tubular stem which is fitted in an opening through the valve seat into the main reservoir passage and forms a continuation of said passage into the main valve chamber, a regulating valve adapted to close the passage in the stem of the main valve, and having a stem guided therein, a spring tending to close the regulating valve, a tubular valve operating stem fitted to turn in the valve case and engaging at its inner end with the main valve, a movable part fitted in the inner end of said valve operating stem, exposed on one side to the pressure in the main valve chamber and adapted when said pressure falls below a certain limit to open the regulating valve, and a spring contained in said valve operating stem and acting against said movable part in opposition to the fluid pressure on its opposite face, substantially as and for the purposes set forth.

8th. In an engineer's valve, the combination of a valve case having main reservoir and train pipe connections and an exhaust opening, of a main valve controlling the admission and release of the fluid pressure medium into and from the train pipe, a regulating valve controlling a passage from the main reservoir connection into the main valve chamber, a hollow stem fitted to turn in the valve case, engaging at its inner end with the main valve, and provided at its outer end with an operating handle, a movable part in the inner end of said stem adapted to open the regulating valve when the train pipe pressure falls below a certain limit, a tubular adjusting screw threaded in said stem, a spring interposed between said screw and movable part, and acting thereon in opposition to the fluid pressure in the main valve chamber, and a push pin projecting through the upper end of said stem for manually pressing said movable part into position to open the regulating valve, substantially as and for the purposes set forth.

9th. In an engineer's valve, the combination

of a valve case provided with an outwardly projecting flange and with stops, a valve for controlling the admission and release of fluid under pressure to and from the train pipe, and a handle detachably connected with the valve operating stem and having a spring actuated detent adapted to indicate by its engagement with shoulders or notches in the flange on the valve case, the lap and service positions of the valve and having a projection extending below said flange and adapted by the engagement with the stops on the valve case to limit the movement of the valve in both directions, in release and running position in one direction, and in emergency position in the other direction, the flange on the valve case being notched or cut away to permit the removal of said handle only when the valve is on lap between release and service positions, substantially as and for the purposes set forth.

No. 66,630. Cream Separator. (*Séparateur pour la crème.*)



Robert H. Emry, Washington, Iowa, U.S.A., 16th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—A separator, comprising upper and lower drums connected by a plurality of pipes opening at their opposite extremities into the drums, the upper drum being larger than the lower drum and having a closed top formed by the flat bottom of a receiver, said bottom being of greater diameter than the said upper drum and having a flaring rim to thereby provide means for permitting the receiver to be charged with the cooling medium in excess of the quantity required by the working capacity of the separator, said bottom also preventing the contents of the upper drum slopping over into the milk, a central pipe extending downwardly from the centre of the bottom of the receiver and incommunicably through the upper drum to the centre of the top of the lower drum and of greater diameter than the plurality of pipes spaced apart and concentrically surrounding the same, and a downwardly inclined out-flow spout attached to an intermedial portion of the upper drum and having a diameter considerably less than the inflow devices to the said upper drum.

No. 66,631. Window Chair. (*Saureteur d'incendie.*)

David E. Owen, Garlo, Ohio, U.S.A., 16th March, 1900; 6 years. (Filed 26th February, 1900.)

Claim.—1st. A device of the class described, comprising the side bars have their inner ends conforming to the configuration of a window sill, the cross bar secured to the lower edges of the side bars and adapted to engage the outer face of the window sill, the transverse bars connecting the side bars, one of the transverse bars being extended beyond the side bars and adapted to engage the inner face of a window frame or casing, and the upright pieces secured to the ends of the extended transverse bar, substantially as described.

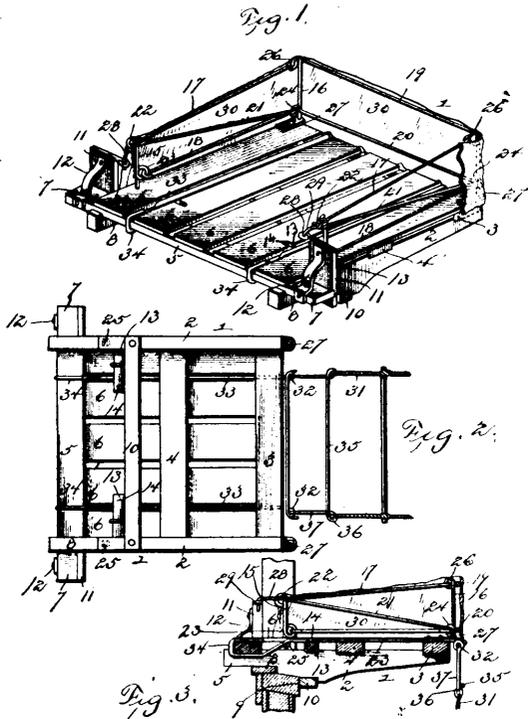
2nd. A device of the class described, comprising the side bars having their inner ends conforming to the configuration of a window sill, the cross bar secured to the lower edges of the side bars and adapted to engage the outer face of the window sill, the transverse bars connecting the side bars, one of the transverse bars being extended beyond the side bars and adapted to engage the inner face of a window frame or casing, the upright pieces secured to the ends of the extended transverse bar, a floor supported by the transverse bars, and sliding bolts mounted beneath the floor and adapted to project laterally from the device to engage the wall of a house, substantially as described.

3rd. A device of the class described, comprising a platform designed to be mounted in a window, and a folding railing detachably secured to the platform and comprising the inner posts or rods, the outer posts or rods provided with upper and lower eyes, the upper and lower side rods linked into said eyes, the upper and lower end rods connecting the outer rods or posts, and the inclined braces arranged at the sides of the platform and hinged to the outer rods or posts, substantially as described.

4th. A device of the class described, comprising a platform provided at its inner end with upright pieces having eyes,

plates projecting from the outer end of the platform, and a folding railing composed of inner and outer rods or posts provided with

fastened thereon, and means for connecting the rings to hold the belt in place, substantially as described. 3rd. As an article of



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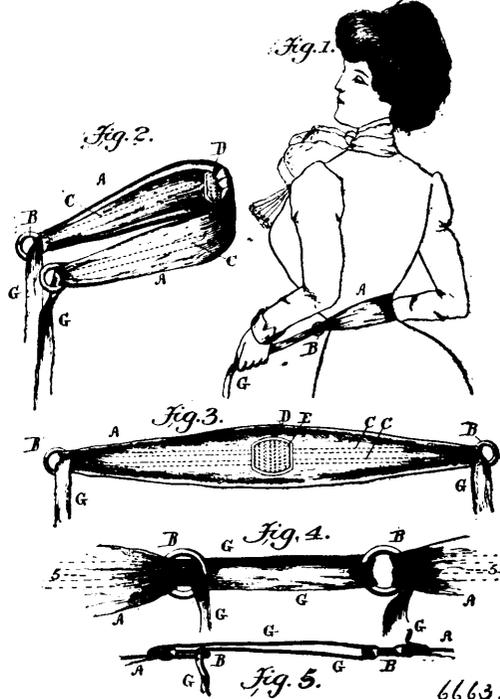
upper and lower eyes and having their lower ends threaded and extended respectively through the platform and the said plates, the upper and lower side rods linked into the eyes of the rods or posts, the inclined braces arranged between the side rods, formed integral with the inner rods or posts and extending downward from the upper eyes thereof, and linked into the lower eyes of the outer rods or posts, the upper and lower end rods, the upper rod being formed integral with the outer end rods or posts and the lower end rod being linked into the lower eyes thereof, nuts engaging the threaded ends of the posts or rods, and hooks linked into the upper eyes of the inner rods or posts and detachably engaging the eyes of the upright pieces, substantially as described. 5th. A device of the class described, comprising a platform having transverse bars, the oblong frame extending longitudinally of the platform, provided at its outer end with a cross piece, and having hooks at its inner end engaging the adjacent transverse bar, and a foldable ladder connected with the cross piece of the oblong frame, substantially as described. 6th. A device of the class described, comprising a platform, an oblong frame extending longitudinally of the platform and secured to the same, a rectangular link provided with eyes hinged to the outer end of the oblong frame, and a ladder connected with the eyes of the link and adapted to be folded, substantially as described. 7th. A device of the class described, comprising a platform provided at its inner end with uprights or supports, and a railing detachably mounted on the platform and comprising the end portion, and the sides hinged to the end portion, adapted to fold inward on the same and provided at their free ends with fastening devices detachably engaging the uprights or supports, substantially as described.

No. 66,632. Ladies' Belt, Collar, Etc.

(Ceinture, collet, etc. de dames.)

Monroe Koch, New York City, New York, U.S.A., 16th March, 1900; 6 years. (Filed 26th February, 1900.)

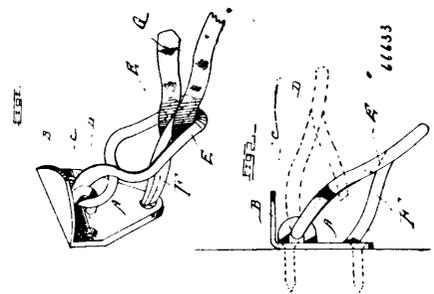
Claim.—1st. As an article of manufacture, a belt, the body of which is of suitable flexible material, such for example, as ribbon, and having reduced ends, a stiffening pad D at the mid length of the belt body, rings at the opposite ends of the latter and means for connecting the rings to hold the belt in operative position, substantially as set forth. 2nd. As an article of manufacture, a belt, the body of which is of suitable flexible material, such, for example, as ribbon, a group of stays permanently fixed in the belt for holding the back of the belt distended laterally, the stays being gradually shortened in length upon opposite sides of the central stay at the back, to determine the gradual taper of the belt from the back toward the front, rings at the opposite ends of the body of the belt, the said rings being of such size as to diminish the width of the belt



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manufacture, a belt composed of a body which is of suitable flexible material, such as ribbon, for example, and is provided with stays permanently fixed in the belt for holding the back of the belt distended laterally and has its ends reduced in width, rings fastened to said reduced ends, and means for connecting the rings to hold the belt in place, the said means consisting of strips of greater width than thickness, such as ribbon, for example, so flexible as to admit of tying in a bow knot, one such connecting strip being permanently fastened at one end to each end of said body independently of the corresponding ring, substantially as described. 4th. The herein described belt, composed of a body portion of suitable flexible material, such, for example, as ribbon, transverse stays permanently fixed in the said body portion at the middle thereof, longitudinal stays disposed on opposite sides of said transverse stays, and means for connecting the ends of said body portion to hold the belt in place, substantially as set forth. 5th. The herein described belt, composed of a body portion of suitable flexible material, such, for example, as ribbon, a group of transverse stays permanently fixed in said body portion at the middle thereof for holding the back of the belt distended laterally, the said transverse stays being gradually shortened in length upon opposite sides of the middle line of the group to determine the gradual taper of the belt from the back toward the front, longitudinal stays disposed on opposite sides of said transverse stays, rings at the opposite ends of the said body portion, the said rings being of a diameter less than the width of the said body portion at its middle, and means for connecting the rings to hold the belt in place, substantially as set forth.

No. 66,633. Halter Grip. (Lien de licou.)



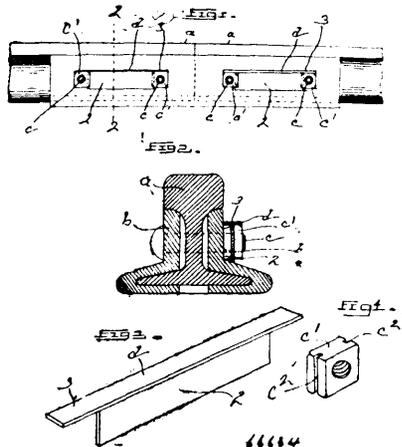
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Gilbert A. Stanton, Newcomb, New York, U.S.A., 16th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—1st. A rope or strap grip formed from a single piece of metal and comprising an eye, two V-shaped gripping jaws, and a tongue extending upward between the sides of the grip and thence

rearward, substantially as described. 2nd. A rope or strap grip comprising an eye, two V-shaped gripping jaws and a tongue extending upward between the sides of the grip and thence rearward, and a plate provided at its upper end with a loop engagement with the eye of the grip, substantially as described. 3rd. A rope or strap grip comprising an eye, two V-shaped jaws and an upwardly and rearwardly extending tongue arranged between said jaws, a plate having a loop at its upper end with which the eye of the gripper engages, and a flange projecting outward from the upper edge of said plate over said loop, substantially as described.

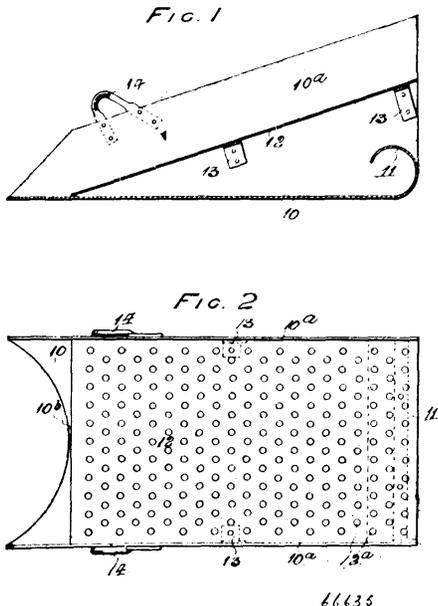
No. 66,634. Nut Lock. (Arrête-écrou.)



Everett T. Perry, North Wilmington, Massachusetts, U.S.A., 16th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—A device of the character specified, comprising the plate *b*, bolts *c c'*, the nuts *c' c''*, grooved on their side faces, and a locking bar or plate *d* consisting of a vertical portion having end edges adapted to simultaneously engage the groove in each of the two nuts and a horizontal portion having its ends projecting over and lying flatwise upon the top of the nuts, one edge of said horizontal portion closely shutting the outer face of the plate *b*.

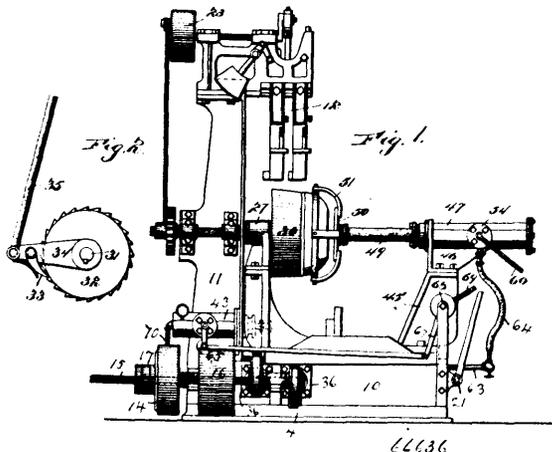
No. 66,635. Gold Saving Device. (Appareil à recueillir l'or.)



Alexander Mathew Lyon, New Westminster, British Columbia, Canada, 16th March, 1900; 6 years. (Filed 26th August, 1899.)

Claim.—A gold saving dredging and sluicing device consisting of a box open at both ends having vertical sides sloping upwardly and rearwardly, a trap 11, extending across the rear part of the bottom, being of crescent form, in combination with a grid or grizzly placed within the walls of the box with its front end resting on the bottom of the same and rigidly supported on a plane parallel with the plane of the top edges of the sides, as specified.

No. 66,636. Basket Making Machine. (Appareil à faire les paniers.)



William Jackson, Traverse City, Michigan, U.S.A., 16th March, 1900; 6 years. (Filed 2nd February, 1900.)

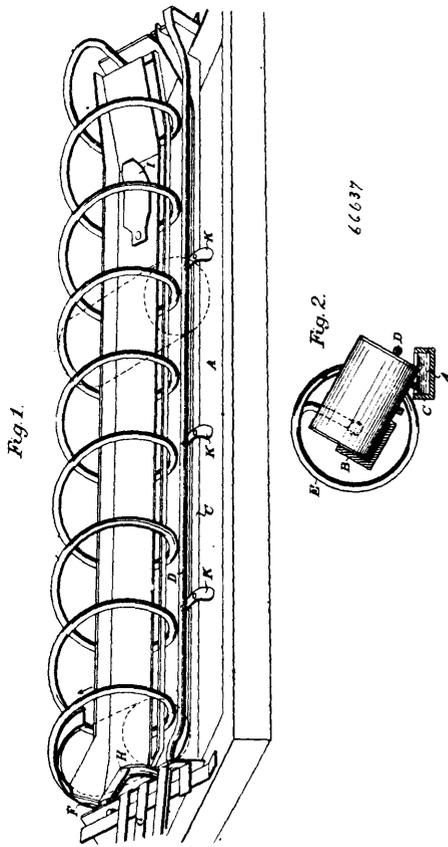
Claim.—1st. In a basket making machine, the combination with a base and with stapling mechanism mounted thereon, of a slidable carriage, a basket form revolvably mounted thereon and moving therewith, means for turning the form with a step by step movement, a basket mould mounted on the carriage, and means for moving the mold toward and from the form. 2nd. In a basket making machine, the combination with a base having a fluid reservoir therein, of a pump serving to charge the same, a carriage mounted on the base, a motor cylinder, a piston, a rod therefor by which to drive the carriage, the motor cylinder being in communication with the reservoir, a form mounted on the carriage, a motor cylinder mounted on the carriage and having communication with the reservoir, a piston rod working in the motor cylinder, and a mold carried by the rod of the last named cylinder. 3rd. In a basket making machine, the combination with the base and with stapling mechanism carried thereon, the base having a reservoir therein, of a carriage sliding on the base, a cylinder held by the base and having communication with the reservoir, a piston rod driven by the cylinder and connected with the carriage to move the same, a form mounted on the carriage, a second cylinder, the second cylinder being mounted on the carriage and having communication with the reservoir, a rod driven by the second cylinder, and a mold carried by the rod and movable toward and from the form and rotatable therewith. 4th. In a basket making machine, the combination with a base, of a carriage movable thereon, a revolvable shaft mounted on the base, a bearing held by the carriage, a basket form the hub of which has a hollow extension mounted in the bearing, the said shaft being splined in the hollow extension, means for sliding the carriage, and means for turning the shaft. 5th. In a basket making machine, the combination with a base and with stapling mechanism mounted thereon, of a sliding carriage, a basket form carried on the carriage, a revolvable shaft mounted on the base and having splined connection with the basket form to turn the same, and means for driving the said shaft from the stapling mechanism. 6th. In a basket making machine, the combination with a base, of a carriage mounted thereon, a motor cylinder for driving the carriage, a basket form mounted on the carriage, a basket mold, and a second motor cylinder mounted on the carriage and supporting the basket mold to move the same toward and from the form. 7th. In a basket making machine, the combination of a form having a hub with a bushing like extension, a longitudinally moving carrier having a bearing in which said extension is revolvably mounted, a revolvable shaft splined in the extension, a ratchet disc fixed to the shaft, a pawl driving the ratchet disc, and stapling mechanism having connection with the pawl to move the same. 8th. In a basket making machine, the combination with a base having a guideway thereon, of a carriage mounted to move thereon, a form mounted on the carrier and moving with the same, a mold also mounted on the carrier, and means for moving the mold toward or from the form, substantially as described.

No. 66,637. Can Soldering Machine. (Machine à souder les boîtes.)

Erik Manula, Astoria, Oregon, U.S.A., 16th March, 1900; 6 years. (Filed 28th March, 1899.)

Claim.—1st. The combination in a soldering machine of a solder bath, an inclined track and support for the cans and an open spiral inclosing said support and between the turns of which the can bodies are received, and means for rotating the spiral so that the cans are advanced from one end to the other of the solder bath. 2nd. A solder bath, an inclined support for the cans whereby the lower edge of the can is caused to dip into the solder, a rotatable open

spiral essentially parallel with the can support and solder bath, said spiral inclosing said support and between the turns of which the



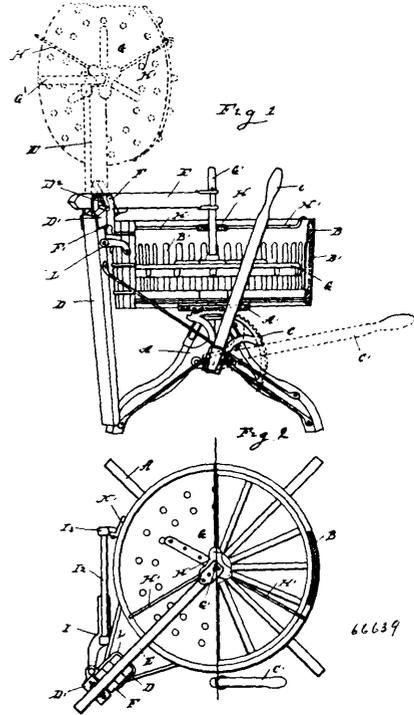
bodies of the cans project, mechanism by which the spiral is rotated and guides by which the cans are admitted singly and successively between the turns of the spiral. 3rd. In a soldering machine, a solder bath, an inclined support, the body of which extends essentially parallel with the solder bath so that the edges of the cans lying thereon will dip into the solder, an inclined end in connection with the feed chute, down which the cans roll upon the horizontal portion, and an inclined end at the discharge by which the cans are raised out of the solder bath, a rotary centrally open spiral journaled essentially parallel with the solder trough and can support, and inclosing said support, devices at the receiving end whereby the cans are delivered successively between the turns of the spiral and the device at the discharge end by which they are delivered outwardly from the machine. 4th. In a soldering apparatus, an essentially horizontal solder trough, an inclined can support parallel with the solder trough upon which the cans are carried with their lower edges dipping in the solder, inclined receiving and discharge ends connected therewith, an open spiral journaled and rotatable essentially parallel with the solder trough and can support with the can bodies projecting between the turns of the spiral and inclosing said support, and devices upon the can support whereby the cans are straightened and kept in line during their progress from end to end. 5th. In an apparatus of the character described, an essentially horizontal solder trough, an inclined can support parallel therewith adapted to receive and support the can bodies with the lower edges dipping into the solder, an open spiral journaled and revoluble parallel with the can support and solder bath with the bodies of the cans projecting between the turns of the spiral, and stops disposed at intervals below the bodies of the cans whereby the lower edges of polygonal cans will be intercepted and the cans turned by the advance of the spiral so as to present all their edges successively to the solder bath.

No. 66,638. Aluminum Alloy. (*Alliage d'aluminium.*)

William Albert McAdams, Brooklyn, New York, U.S.A., 17th March, 1900; 6 years. (Filed 11th September, 1899.)

Claim.—A composition of matter consisting of aluminum, copper, zinc and nickel, in substantially the following proportions, viz., aluminum, 108 ounces, copper, 12 ounces, zinc, 36 ounces, and nickel, one ounce.

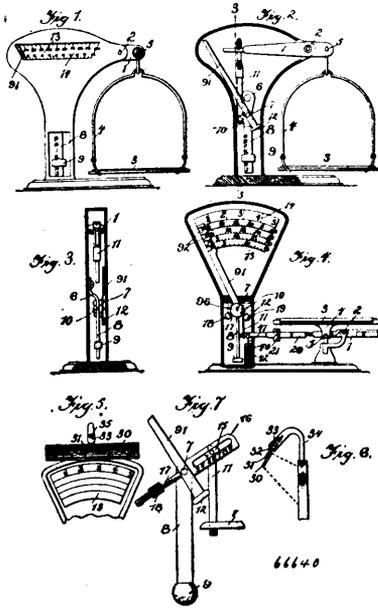
No. 66,639. Washing Machine. (*Machine à laver.*)



Philo William Casler, Little Falls, New York, U.S.A., 17th March, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. In a washing machine, a supporting frame, a tub revolubly mounted thereon, a standard secured at one side of the supporting frame, a supporting bracket for the wringer secured to said standard, substantially as described. 2nd. In a washing machine, a supporting frame, a tub revolubly mounted thereon, a standard secured at one side of the supporting frame, a supporting bracket for the wringer pivotally secured to said standard, means for locking said bracket to the tub, substantially as described. 3rd. In a washing machine, a supporting frame, a tub revolubly mounted thereon, a standard secured at one side of the supporting frame, a supporting arm pivotally secured to the upper end portion of the standard, means for locking the supporting arm in upright and horizontal positions, a follower for the tub having an upright shaft slidably mounted in the supporting arm, substantially as described. 4th. In a washing machine, a supporting frame, a tub revolubly mounted thereon, a vertically adjustable but non-rotating follower for the tub, an angular upright shaft connected to the follower, a guide bearing connected to the top of the tub so as to revolve therewith and which has a circular opening therethrough, substantially as described. 5th. In a washing machine, a revoluble tub provided with a series of grooves which is formed in its inner side and extend from the bottom upward a suitable distance, combined with a stationary follower, and means for holding the follower in position as the tub is revolved, substantially as described. 6th. In a washing machine, a supporting frame, a tub, revolubly mounted thereon, an upright standard secured at one side of the frame, combined with a bracket secured to the upper end portion of said standard and provided with lugs on the forward side thereof, a supporting arm, and an automatic locking device pivotally secured at its upper end to the supporting arm, and provided with suitable notches to engage said lugs, substantially as described. 7th. In a washing machine, a supporting standard, a bracket secured to the upper end and pivoted with projecting lugs on the forward side of the bracket, combined with the supporting arm and an automatic locking device which is pivoted to the arm provided with a series of notches in its rear edge, and which locking device as the supporting arm is raised adjusts its lower notches through the projections upon the bracket for the purpose of holding the arm in a raised position, substantially as described. 8th. In a washing machine, a supporting frame, a tub revolubly mounted thereon, a mechanism for causing the tub to have a horizontal reciprocating movement upon the supporting frame, a standard secured at one side of the frame, the bracket D¹ secured to the upper end of the standard, the pivoted arm E connected to the bracket, the automatic locking device F pivotally connected to the arm, and provided on its rear edges with the notches F¹ which are adapted to engage the two projecting lugs D² formed as a part of the bracket, the parts being combined and arranged to operate, substantially as described.

No. 66,640. Weighing Scales. (Bata *icc.*)

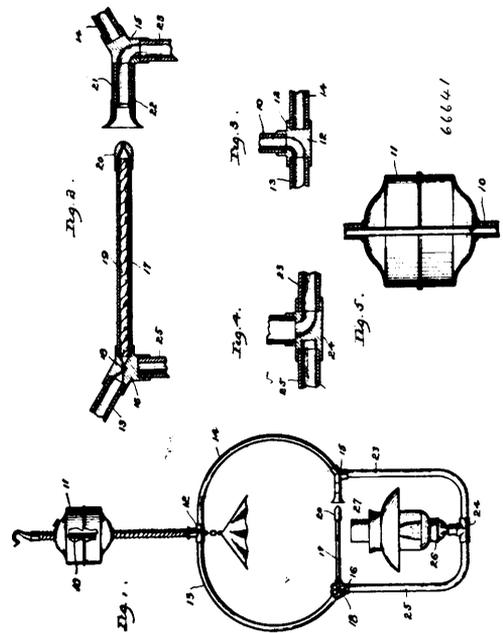


The De Vilbiss Computing Scale Company, assignee of Allen de Vilbiss, all of Toledo, Ohio, U.S.A., 17th March, 1900; 6 years. (Filed 23rd February, 1899.)

Claim.—1st. In a scale, the combination with the beam, the pan carried thereby, the pendulum, a lateral arm thereon adjacent its pivot, the connections between said beam and arm for moving the outer end of the arm past the pivot of the pendulum and causing the swinging of the latter in irregular steps as weight is added to the pan, of means for adjusting the degrees of movement in the steps of the pendulum, an index moved by the pendulum, and a table over which the index passes, substantially as described. 2nd. In a scale the combination with the beam, the pan carried thereby, the poise, and connections between the beam and poise for causing the swinging of the latter in irregular steps as weight is added to the pan, of an index secured to the poise and projecting from the pivot thereof, and a straight table having regularly spaced graduations over which the index moves, substantially as described. 3rd. In a scale, the combination with the beam, the pan carried thereby, the poise having a lateral arm adjacent its pivot, and connections between said beam and arm for moving the outer end of the arm past the pivot of the poise and causing the swinging of the latter in irregular steps as weight is added to the pan, of an index connected and turning with the poise around the pivot thereof, and a straight table having regularly spaced graduations over which the index moves, substantially as described. 4th. In a scale, the combination with the beam, the pan carried thereby, the pendulum, a weight adjustable on the pendulum, and connections between the beam and pendulum for causing the swinging of the latter, of an index rigidly secured to the pendulum and projecting from the pivot thereof, and a straight line computing table having a plurality of rows of graduations over which said index moves, substantially as described. 5th. In a scale, the combination with a beam, the pan carried thereby, the pendulum, a weight adjustable on the latter, the graduations thereon for setting the weight to regulate the degree of movement of the pendulum, of connections between the beam and pendulum for causing the swinging of the latter, an index mounted on the pendulum, and a straight line computing table having regularly spaced graduations over which said index moves, substantially as described. 6th. In a scale, the combination with the beam, the pan carried thereby, the poise, and connections between the beam and poise for causing the swing of the latter in irregular steps as weight is added to the pan, of an index secured to the poise and projecting from the pivot thereof, and a straight table having a plurality of rows of regularly spaced graduations over which the index moves, substantially as described. 7th. In a scale, the combination with the beam, the pan carried thereby, the poise having a lateral arm adjacent its pivot, a weight adjustable on the poise, graduations thereon for setting the weight to regulate the degree of movement of the poise, and connections between said beam and arm for moving the outer end of arm past the pivot of the poise and causing the swinging of the latter in irregular steps as weight is added to the pan, of an index connected and turning with the poise around the pivot thereof, and a straight table having a plurality of rows of regularly spaced graduations over which the index moves, substantially as described. 3rd. In a scale, the combination with the beam, the pan carried thereby, the pendu-

lum, a weight adjustable on the pendulum, and connections between the beam and pendulum for causing the swinging of the latter, in irregular steps as weight is added to the pan, of an index rigidly secured to the pendulum and projecting from the pivot thereof, and a straight line computing table having a plurality of rows of regularly spaced graduations over which said index moves, substantially as described. 9th. In a scale, the combination with a beam, the pan carried thereby, the pendulum, a weight adjustable on the latter, and graduations thereon for setting the weight to regulate the degree of movement of the pendulum, of connections between the beam and pendulum for causing the swinging of the latter, an index mounted on the pendulum, and a straight line computing table having graduations over which said index moves, substantially as described. 10th. In a computing scale, the combination with the beam and pan, a pendulum swung by the movements of the beam, and a straight multi-lined table, of a pivoted index moved by the pendulum over said table, as and for the purpose set forth. 11th. In a scale, the combination with the beam, the pan carried thereby, the pendulum, a lateral arm thereon adjacent its pivot, the connections between said beam and arm for moving the outer end of the arm past the pivot of the pendulum and causing the swinging of the latter in irregular steps as weight is added to the pan, of means for adjusting the degree of movement in the steps of the pendulum, an index moved by the pendulum, and a table, having regularly spaced graduations over which the index passes, substantially as described.

No. 66,641. Vapour Lamp. (Lampe à vapeur.)

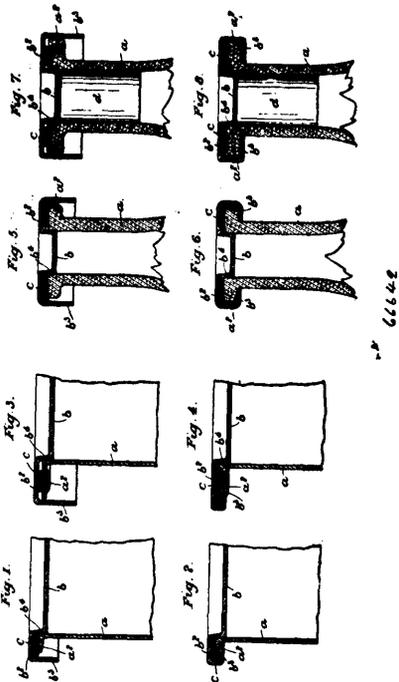


The Magic Light Company, assignee of Clarence Ross Gillett, all of Chicago, Illinois U.S.A., 17th March, 1900; 6 years. (Filed 30th March, 1899.)

Claim.—1st. In vapour lamps, the combination with a tubular standard and its supply font, of the vapourizing pipe exposed to the lamp flame crosswise above the chimney and connected by control valve with the tubular standard, the non-conducting, non-combustible capillary filler extended through said pipe, the internally spaced nozzle beyond such filler mounted upon the free terminal of the vapourizing pipe, the lamp tube having an open end to confront said nozzle and a suitable burner located at the opposite terminal of such tube with its chimney in proper position to direct the flame combustion products against the nozzle whereby the nozzle becomes super heated and co-acts with the filler to render the capillary feed of the liquid uniform under tension of the confined vapours emerging at the nozzle, substantially as described. 2nd. In vapour lamps, the combination with the tubular standard and its supply font, of the wrought iron vapourizing pipe exposed to the lamp flame crosswise above the chimney and connected by control valve with the tubular standard, the non-conducting, non-combustible capillary filler extended through said pipe, the internally spaced brass nozzle beyond such filler mounted upon the free terminal of the vapourizing pipe, the lamp tube having an open end to confront said nozzle and a suitable burner located at the opposite terminal of such tube with its chimney in proper position to direct the flame combustion products against the nozzle whereby the nozzle becomes super heated and co-acts with the filler to render the capillary feed of the liquid uniform under tension of the confined vapours emerging at the nozzle while the vapourizing tube remains cool at its inlet end near the control valve, substantially as described. 3rd. In vapour lamps,

the combination with the tubular standard and its supply font, of the vapourizing pipe exposed to the lamp flame crosswise above the chimney and connected by control valve with the tubular standard, the non-conducting, non-combustible capillar filler extended through said pipe, the internally spaced nozzle beyond such filler mounted upon the free terminal of the vapourizing pipe, the lamp tube having an open end to confront said nozzle and a suitable burner located at the opposite terminal of such tube with its chimney in proper position to direct the flame combustion products against the vapourizing tube whereby such tube and its nozzle become super heated and co-act with the filler to render the capillary feed of the liquid uniform under tension of the confined vapours emerging at the nozzle.

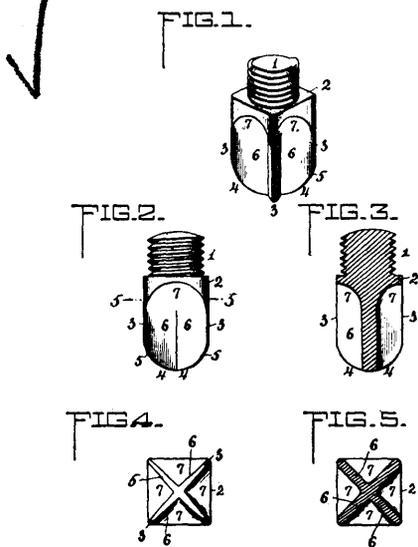
No. 66,642. Means of Closing Tins, Bottles, Jars, etc.
(Moyen de fermer les bouteilles, jarres, bidon, etc.)



Maconochie Brothers, assignee of William Mackie and Archibald White Maconochie, all of London, England, 17th March, 1900; 6 years. (Filed 7th June, 1899.)

Claim.—1st. A tin, bottle, jar or other receptacle having a body provided with a flange with a recess in its upper surface, and having a lid or cover provided with a depending flange or turned down part around its periphery, and elastic, pliable or yielding material placed within the recess between the top of the flange on the body part and the under side of the lid or cover, the depending flange or turned down part on the lid or cover being turned under the flange on the body part, and the elastic, pliable or yielding material being compressed between the lid or cover and the top surface of the flange or rim or neck of the body part, substantially as hereinbefore described and illustrated in the accompanying drawings. 2nd. A tin, bottle, jar or other receptacle having a body part provided with a flange with a recess in its upper surface, and having a lid or cover provided with a depending flange or turned down part around its periphery, and with a part, as at *b*⁴, to bear against the inside of the body part, and elastic, pliable or yielding material placed in the said recess in the upper surface of the flange, rim or neck, the depending flange or turned down part on the lid or cover being turned under the flange on the body part, and the elastic, pliable or yielding material being compressed between the under side of the lid or cover and the top surface of the flange, rim or neck of the body part, substantially as hereinbefore described and illustrated in the accompanying drawings. 3rd. A tin or like receptacle having a body part consisting of a bottom and sides provided with a flange all made by stamping from one piece of metal, and having a lid or cover provided with a depending flange or turned down part around its periphery, and a part, such as that marked *b*⁴, to bear against the inside of the body part, and elastic, pliable or yielding material placed between the flange on the body part and the lid or cover, the depending flange or turned down part on the lid or cover being turned under the flange on the body part, so that the elastic, pliable or yielding material is compressed between the under side of the lid or cover and the top surface of the flange of the body part, substantially as hereinbefore described and illustrated in the accompanying drawings. 4th. A tin or like receptacle having a body part with flared inside surface to receive the inclined surface *b*⁴ of the lid *b*, substantially as shown and for the purpose set forth.

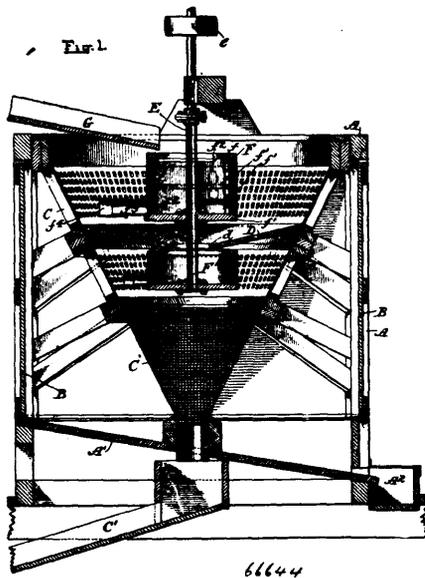
No. 66,643. Horse Shoe Calk.
(Crampon de fer à cheval.)



John R. Williams, Scranton, Pennsylvania, U.S.A., 17th March, 1900; 6 years. (Filed 26th January, 1900.)

Claim.—1st. A horse shoe calk provided with an attaching shank, a suitable base and vertical sided blades radiating from the centre and formed on their lower ends with bevels 5, substantially as set forth. 2nd. A horse shoe calk comprising an attaching shank 1, a base 2, and the integral straight sided blades 3, symmetrically arranged about the centre, projecting downwardly from the base 2, and having the lower rounded ends 4, substantially as herein set forth. 3rd. A horse shoe calk comprising a threaded attaching shank 1, a square base 2, and straight sided blades 3, projecting downwardly from the base and attached thereto by the thickened or arching portions 7, whereby a slipping of the shoe announces the necessity of removal before the wrench hold of the calk has worn away, as herein explained.

No. 66,644. Ore Separator. (Separateur de mineral.)

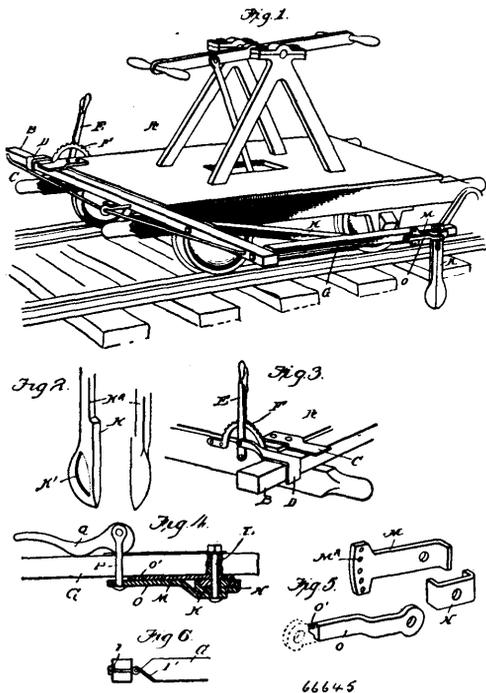


Frederick A. Pratt, Butte, Montana, U.S.A., 17th March, 1900; 6 years. (Filed 30th November, 1900.)

Claim.—1st. A machine for separating ores comprising a funnel shaped screen and a rotating bucket or distributor centrally disposed within said screen, said bucket or distributor having an opening its side wall and an extensible delivery pipe through which the material is thrown against the screen, substantially as shown and

described. 2nd. A machine for separating ores comprising a funnel shaped screen and a rotating bucket or distributor centrally disposed within said screen, said bucket or distributor being divided by partitions into separate compartments, said compartments having floors at different heights, and each of said compartments having an opening in its side wall above its floor through which the material is thrown against the screen, substantially as shown and described.

No. 66,645. Ditch Line Marker. (Marqueur de fossé.)



John Vance, Franklin, Tennessee, U.S.A., 17th March, 1900; 6 years. (Filed 31st January, 1900.)

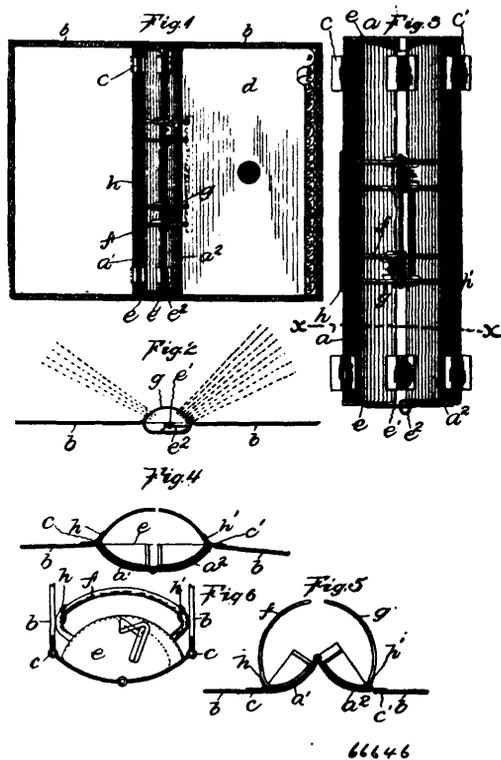
Claim.—1st. A marker of the kind described, comprising a transverse beam, a longitudinal beam pivotally connected to a marker attached to the rear end of the longitudinal beam, and adjustable vertically and obliquely thereon, substantially as shown and described. 2nd. In a marker of the kind described, the transverse combination with the transverse beam, of the plate attached to the hand car and beneath which the beam fits, the hook and the lever to which the hook is attached, substantially as shown and described. 3rd. In a marker of the kind described, the combination with the longitudinal beam, of the marking cutter attached thereto, adjustable plate and clip plate, the locking bar, tie rod and eccentric lever, substantially as shown and described. 4th. The combination with the transverse beam, of the longitudinal and brace beams having tapered ends, the bolts passing through the transverse beam and having the hinge plate pivoted, said hinge plate being secured to the lower bevelled end of the longitudinal and brace beams, substantially as shown and described. 5th. The combination with the plate having a shoulder at its rear end and perforations at its forward end, of the clip plate and locking bar, said locking bar having a stud or pin adapted to engage the perforations in the plate, the tie bolt and eccentric lever and the marking cutter made in two sections having a central slot, said marking cutter being arranged against the shoulder plate and within the clip plate, and the fastening bolt passing through the locking bar, clip plate, shoulder plate and slotted cutter, substantially as shown and described.

No. 66,646. Letter File. (File à lettre.)

Clarence Henry Wiley, Hartford, Connecticut, U.S.A., 17th March, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. In combination in a letter file, a back piece formed in sections connected by a hinge, binder hooks hinged to the back piece on the line of the connecting hinge, covers hinged to the outer edge of the respective sections of the back piece, and means for locking the sections of the back piece in a closed position. 2nd. In

combination in a letter file, a back piece formed in sections connected by a hinge, binder hooks hinged to the back piece on the



line of the connecting hinge, and covers hinged on the outer edge of the respective sections of the back piece. 3rd. In combination in a letter file, a back piece formed in sections connected by a hinge, binder hooks hinged to the back piece on the line of the connecting hinge and projecting crosswise of the back in opposite directions, and covers hinged to the outer edge of the respective sections of the back piece. 4th. In combination in a letter file, a back piece formed in sections pivotally connected, covers hinged to the outer edge of the respective sections of the back piece, binder hooks pivoted on the line of connection of the sections of the back piece and projecting crosswise of the back in opposite directions and having a cross bar connecting each pair of hooks. 5th. In combination in a letter file, a back piece formed in sections pivotally connected, covers hinged to the outer edge of the respective sections of the back piece, binder hooks pivoted on the line of connection of the sections of the back piece and projecting crosswise of the back in opposite directions and having a cross bar connecting each pair of hooks.

No. 66,647. Compounds of Titanium. (Composé de titanium.)

Howard Spence, F. M. Spence and D. D. Spence, all of Manchester, England, 17th March, 1900; 6 years. (Filed 17th June, 1899.)

Claim.—1st. The herein described process for the production of new soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) which consists in fluxing a suitable titanic-acid-containing compound or mixture with an acid sulphate of the alkali, allowing the fluxed mass to cool, and treating the cooled mass to dissolve the soluble matter. 2nd. The herein described process for the production of new soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) which consists in fluxing a suitable titanic-acid-containing compound or mixture with an acid sulphate of the alkali, allowing the fluxed mass to cool, treating the cooled mass to dissolve the soluble matter, maintaining in the fluxed mass and in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the undissolved matter from the liquor and concentrating the solution by evaporation. 3rd. The herein described process for the production of new soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) which consists in fluxing a suitable titanic-acid-containing compound or mixture with an acid sulphate of the alkali, allowing the fluxed mass to cool, treating the cooled mass to dissolve the soluble matter, maintaining in the fluxed mass and in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the undissolved matter from the liquor and concentrating the solution by evaporation.

mass to dissolve the soluble matter, maintaining in the fluxed mass and in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the undissolved matter from the liquor, concentrating the solution by evaporation, and removing the crystalline compound formed. 4th. The herein described process for the production of new soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) which consists in fluxing with an acid sulphate of the alkali the titanic-acid-containing waste solid product which results from the manufacture of aluminous compounds from bauxite, allowing the fluxed mass to cool, treating the cooled mass to dissolve the soluble matter, maintaining in the fluxed mass and in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the undissolved matter from the liquor, concentrating the solution by evaporation and removing the crystalline compound formed. 5th. The herein described process for the production of new soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) which consists in subjecting titanic-acid-containing material to a preliminary treatment in order to render the titanic acid therein readily attackable by an acid sulphate fluxing the resulting solid product with an acid sulphate of an alkali, allowing the fluxed mass to cool, treating the cooled mass to dissolve the soluble matter, maintaining in the fluxed mass and in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the undissolved matter from the liquor, concentrating the solution by evaporation, and removing the crystalline compound formed. 6th. The herein described process for the production of new soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) from a titanic-acid-containing compound or mixture in which the titanic acid is readily soluble in sulphuric acid, which consists in digesting said titanic-acid-containing compound or mixture with sulphuric acid in the open or under pressure, and maintaining in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the solution of titanic acid in sulphuric acid from the insoluble matter, adding to the resulting solution sufficient sulphate of the particular alkali employed, preferably combined as neutral or normal sulphate, to potentially form into an acid sulphate or bi-sulphate some or all of the free or uncombined sulphuric acid. 7th. The herein described process for the production of new soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) from a titanic-acid-containing compound or mixture in which the titanic acid is readily soluble in sulphuric acid, which consists in digesting said titanic-acid-containing compound or mixture with sulphuric acid in the open or under pressure, maintaining in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the solution of titanic acid in sulphuric acid from the insoluble matter, adding to the resulting solution sufficient sulphate of the particular alkali employed, preferably combined as neutral or normal sulphate, to potentially form into an acid sulphate or bi-sulphate some or all of the free or uncombined sulphuric acid, and concentrating the solution by evaporation. 8th. The herein described process for the production of soluble compounds of titanic acid, sulphuric acid, and alkali (soda, potash, or ammonia) from a titanic-acid-containing compound or mixture in which the titanic acid is readily soluble in sulphuric acid, which consists in digesting said titanic-acid-containing compound or mixture with sulphuric acid in the open or under pressure, maintaining in the liquor a sufficient degree of acidity to retain the titanic acid in solution, separating the solution of titanic acid in sulphuric acid from the insoluble matter, adding to the resulting solution sufficient sulphate of the particular alkali employed, preferably combined as neutral or normal sulphate to potentially form into an acid sulphate or bi-sulphate some or all of the free or uncombined sulphuric acid, concentrating the solution by evaporation and removing the crystalline compound formed. 9th. As a new article of manufacture, the new soluble compound of titanic acid, sulphuric acid and alkali having the general formula $Ti_2O_3, Q(SO_3), X_2O$ (where X represents sodium, potassium or ammonium (N, H₄)).

No. 66,648. Hydro-Carbon Vapourizer and Burner.

(*Brûleur et vaporiseur à hydro-carbure.*)

The Diamond Light and Heating Company of Canada, Montreal, Quebec, assignee of C. C. Bruckner, New York City, New York, U.S.A., 16th March, 1900; 6 years. (Filed 3rd July, 1899.)

Claim.—1st. In combination with a hydro-carbon burner, an initial vapourizer consisting of a filamentary tube or conduit. 2nd. In combination with a vapour burner an initial vapourizer consisting of a filamentary tube, the thickness of the walls of which is substantially equal to the diameter of the bore. 3rd. In combination with a vapour burner, an initial vapourizer consisting of a filamentary tube in the form of an open coil, the thickness of the walls of which substantially equal to the diameter of its bore. 4th. In combination with a Bunsen burner and its incandescent mantle, a generator consisting of a circularly curved independent tube arranged concentric with the burner and substantially in plane with the openings in its top. 5th. In combination with a Bunsen burner and incandescent mantle, a mixing chamber beneath the burner, a source of oil supply under pressure, a circularly curved independent tube arranged concentric with the burner and substantially level with its top and connected with the source of oil supply, and an

initial vaporizer having a filamentary bore and positioned intermediate of, and connected with, the tube and mixing chamber.

Fig. 1

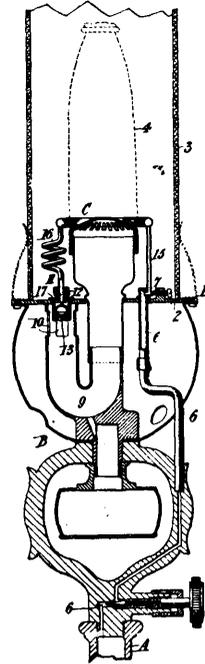
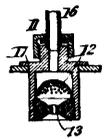


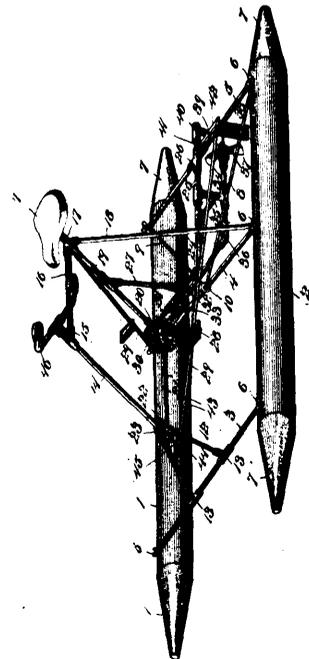
Fig. 2



66648

6th. A vapour jet fitting consisting of a perforate non-metallic mineral, substantially as described. 7th. A vapour jet fitting consisting of a piece of quartz or crystal with a polished orifice there-through.

No. 66,649. Marine Velocipede. (*Vélocipède marin.*)



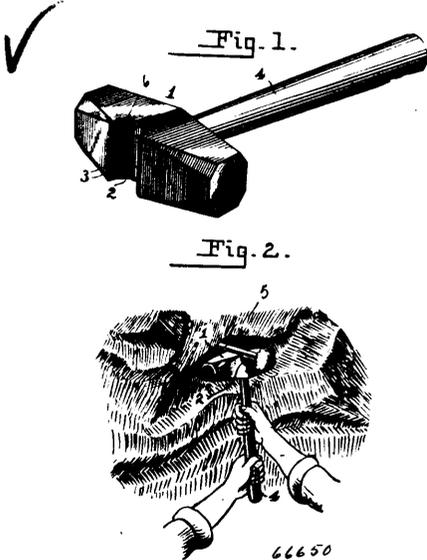
66649

Charles Clark and Alexander H. Canning, both of Toronto, Ontario, Canada, 17th March, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. In a marine velocipede, the combination with opposite floats, and cross bars connecting the same, of a rider supporting frame, driving mechanism provided upon the frame, a downwardly inclined drive shaft, a horizontal propeller shaft connected to the drive shaft, and a downwardly inclined drive shaft supporting bar, a horizontal propeller shaft supporting bar, bearing brackets pendent from the supporting bars and receiving the respective drive and propeller shafts, a rudder carried by the propeller shaft supporting

bar, and steering mechanism carried by the frame. 2nd. In a marine velocipede, the combination with opposite floats, and cross bars connecting the same, of a rider supporting frame, comprising front and rear forks supported upon the respective cross bars, upper and lower reach bars connecting the forks, drive mechanism carried by the frame, a downwardly and rearwardly inclined drive shaft, a horizontal propeller shaft connected to the rear end of the drive shaft, a downwardly inclined supporting bar located above the drive shaft and connected to the frame, a horizontal supporting bar located above the propeller shaft, and connected to the rear end of the inclined support and also to the rear cross bar, brackets pendent from the supporting bars and carrying the respective drive and propeller shafts, a rudder carried by the rear end of the horizontal supporting bar, rudder connections running forward from the rudder, a steering head carried by the front fork and operatively connected to the rudder connections, and means for operating the steering head. 3rd. In a marine velocipede, the combination with supporting floats, of a frame comprising a front fork, a head rising therefrom, an upper reach, a seat post cluster supporting one end of the reach, diverging tubular members extending from the seat post cluster to the floats, a crank hanger, a seat post and a lower reach extending respectively from the crank hanger to the seat post cluster and front fork cluster, an angular shaft supporting bar extending from the crank hanger and having a horizontal extremity, a cross bar carried by the float and supporting the shaft supporting bar, a twin tube coupling adjacent to the upper end of the shaft supporting bar, a power shaft journaled in said coupling, a drop tube coupling carried by the horizontal end of the shaft supporting bar, a propeller shaft journaled in said coupling and connected with the power shaft by a universal joint, and steering mechanism supported by the frame.

No. 66,650. Mining Hammer. (Marteau à miner.)



Daniel S. Williams and Frederick R. Waters, and Grant W. Bennett, all of Salida, Colorado, U.S.A., 17th March, 1900; 6 years. (Filed 6th October, 1899.)

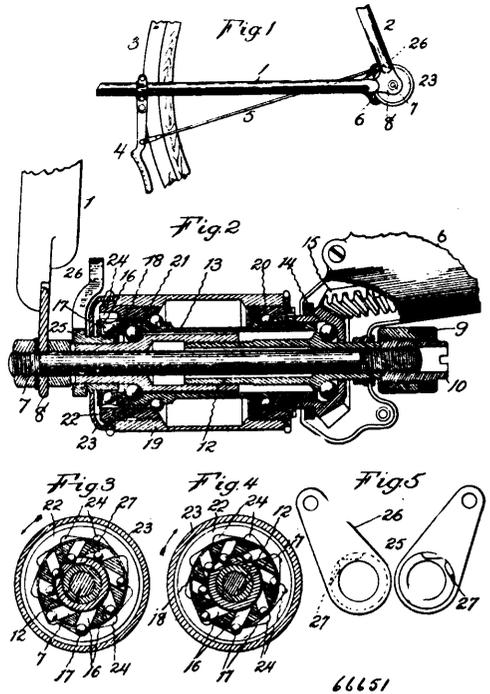
Claim.—1st. A miner's hammer having its head provided with a transverse flat sided groove extending across its outer side, the same being central or equidistant from the end portions of the hammer which are similar in form and size, as shown and described. 2nd. A hammer head for miner's use having a transverse and cross sectionally polygonal groove in its outer side, the same being sunk into the body of the head, whereby the latter is adapted for use upon a drill, as and for the purpose specified.

No. 66,651. Bicycle Brake. (Frein de bicyclet.)

The American Bicycle Company, New York City, New York, assignee of James Samuel Copeland, Hartford, Connecticut, U.S.A., 17th March, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. In a driving and brake mechanism, in combination, a driving member consisting of a gear wheel, a pawl carrier operated by the driving member and having a pawl socket, a driven clutch member and having a pawl socket, a driven clutch member located on one side of the carrier and having a ratchet recess, another clutch member located on the opposite side of the carrier and having a pawl recess, brake mechanism connected to the last-mentioned clutch member, and a free moving pawl located in the socket in the carrier, said pawl being adapted to engage the recesses in either of the driven clutch members. 2nd. In a driving and brake mechanism, in combination, a driving member, a pawl carrier operated by the driving member, a plural number of independently movable

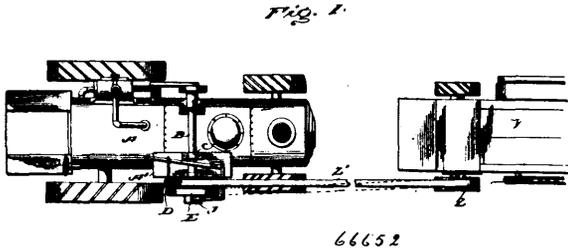
driven clutch members located concentric and on opposite sides of the carrier, and each having a ratchet recess formed therein, and a pawl borne by the carrier and adapted to engage the recesses in the respective oppositely operating driven clutch members. 3rd. In a driving and brake mechanism, in combination, a driving member, a pawl carrier operated by the driving member and having pawl sockets, a plural number of independently movable driven clutch members located on opposite sides of the carrier and having ratchet recesses formed in the surface adjacent to the carrier, a wheel hub secured to one of said driven clutch members, a brake mechanism connected to the opposite clutch member, and pawls borne in the pawl sockets in the carrier and adapted to engage the ratchet recesses in the respective driven clutch members. 4th. In a driving and brake mechanism, in combination, a driving member, a pawl carrier operated by the driving member and having pawl sockets extending therethrough and inclined in the direction of rotation of the carrier, a driven clutch member located on one side of the mounted concentric with the carrier and having ratchet recesses, a wheel hub secured to said driven clutch member, a driven clutch member located on the opposite side of and concentric with the carrier and having a shouldered recess, brake mechanism connected to the last-mentioned clutch member, and free moving pawls located in the sockets in the carrier, each pawl being adapted to engage a shouldered recess in the respective driven clutch members. 5th. In a driving and brake mechanism for a bicycle, a driving wheel having a hub, a ring-shaped clutch member having ratchet recesses and means for securing it to said hub, a sprocket wheel having a carrier secured thereto and mounted on said clutch member, the carrier having pawl sockets adapted to register with the ratchet recesses in the ring-shaped clutch member, a cap-shaped brake clutch member fitting the outside of the carrier and having a ratchet recess adapted to register with the ratchet sockets in the carrier, pawls located in the sockets in the carrier, each pawl being adapted to engage the ratchet recesses in the respective clutch members, a tire brake mounted on the frame and means connecting the movable member of the brake clutch and said tire brake. 6th. In a driving and brake mechanism, in combination, a driving wheel having a hub, a driving clutch member having ratchet recesses and means for securing the member to said hub, a gear wheel having a carrier secured thereto and mounted on said driving clutch member, a carrier having pawl sockets adapted to register with the ratchet recesses in the driving clutch member, a brake clutch member concentric with the carrier and having ratchet recesses adapted to register with the pawl sockets in the carrier, free moving pawls located in the sockets in the carrier, each pawl being adapted to engage the ratchet recesses in the driving and brake clutch members respectively, a tire brake supported on the frame of the bicycle in operative relation to the tire of the rear driving wheel, and means connecting the clutch brake member and said tire brake. 7th. In a driving and brake mechanism, in combination, a fixed axle, a sectional cone sleeve borne on the axle, cones located near opposite ends of said sleeve, a carrier sleeve rotatably mounted on the sectional sleeve, a bevel gear



driven clutch members located concentric and on opposite sides of the carrier, and each having a ratchet recess formed therein, and a pawl borne by the carrier and adapted to engage the recesses in the respective oppositely operating driven clutch members. 3rd. In a driving and brake mechanism, in combination, a driving member, a pawl carrier operated by the driving member and having pawl sockets, a plural number of independently movable driven clutch members located on opposite sides of the carrier and having ratchet recesses formed in the surface adjacent to the carrier, a wheel hub secured to one of said driven clutch members, a brake mechanism connected to the opposite clutch member, and pawls borne in the pawl sockets in the carrier and adapted to engage the ratchet recesses in the respective driven clutch members. 4th. In a driving and brake mechanism, in combination, a driving member, a pawl carrier operated by the driving member and having pawl sockets extending therethrough and inclined in the direction of rotation of the carrier, a driven clutch member located on one side of the mounted concentric with the carrier and having ratchet recesses, a wheel hub secured to said driven clutch member, a driven clutch member located on the opposite side of and concentric with the carrier and having a shouldered recess, brake mechanism connected to the last-mentioned clutch member, and free moving pawls located in the sockets in the carrier, each pawl being adapted to engage a shouldered recess in the respective driven clutch members. 5th. In a driving and brake mechanism for a bicycle, a driving wheel having a hub, a ring-shaped clutch member having ratchet recesses and means for securing it to said hub, a sprocket wheel having a carrier secured thereto and mounted on said clutch member, the carrier having pawl sockets adapted to register with the ratchet recesses in the ring-shaped clutch member, a cap-shaped brake clutch member fitting the outside of the carrier and having a ratchet recess adapted to register with the ratchet sockets in the carrier, pawls located in the sockets in the carrier, each pawl being adapted to engage the ratchet recesses in the respective clutch members, a tire brake mounted on the frame and means connecting the movable member of the brake clutch and said tire brake. 6th. In a driving and brake mechanism, in combination, a driving wheel having a hub, a driving clutch member having ratchet recesses and means for securing the member to said hub, a gear wheel having a carrier secured thereto and mounted on said driving clutch member, a carrier having pawl sockets adapted to register with the ratchet recesses in the driving clutch member, a brake clutch member concentric with the carrier and having ratchet recesses adapted to register with the pawl sockets in the carrier, free moving pawls located in the sockets in the carrier, each pawl being adapted to engage the ratchet recesses in the driving and brake clutch members respectively, a tire brake supported on the frame of the bicycle in operative relation to the tire of the rear driving wheel, and means connecting the clutch brake member and said tire brake. 7th. In a driving and brake mechanism, in combination, a fixed axle, a sectional cone sleeve borne on the axle, cones located near opposite ends of said sleeve, a carrier sleeve rotatably mounted on the sectional sleeve, a bevel gear

secured to one end of the carrier sleeve, a carrier mounted at the other end of said sleeve with pawl sockets extending therethrough, a clutch member located concentric with the carrier having clutch recesses and secured to the driving wheel hub, a second clutch member with ratchet recesses and located concentric with the carrier, a brake operating lever connected to the brake clutch, a brake mechanism, means connecting the brake mechanism and the operating lever, and free moving pawls located in the sockets in the carrier, and adapted to engage the ratchet recesses in each of the respective driven clutch members.

No. 66,652. Belt Placer and Tightener.
(Appareil à placer et roidir les courroies.)



A. Luke and A. H. Gordon, both of Elkhart, Indiana, U.S.A., 17th March, 1900; 6 years. (Filed 27th December, 1899.)

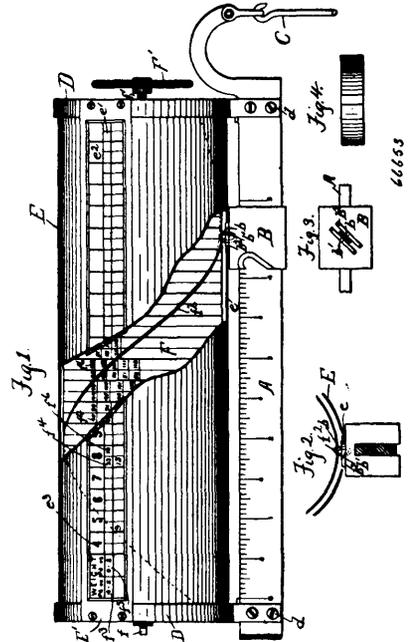
Claim.—1st. The combination, with a belt pulley of a machine to be driven, of a portable engine provided with a drive shaft, a drive pulley fixed on said shaft and carrying a clutch member, a loose supplemental pulley, slidably mounted on the shaft and carrying a complementary clutch member, a drive belt passed around the said pulley of the machine to be driven and supplemental pulley, and means for operating the supplemental pulley to throw the clutch member thereof into and out of engagement with the clutch member on the drive pulley, whereby when the said supplemental pulley is out of alignment with the belt pulley on the machine to be driven and is thrown into operation, the belt will creep therefrom on to the drive pulley, substantially as described. 2nd. The combination, with the belt pulley of a machine to be driven, of a portable engine provided with a drive shaft extended at one side thereof, a drive pulley fixed on said shaft and carrying a clutch member, a loose supplemental pulley slidably mounted on the extended end of the shaft exteriorly of the drive pulley and carrying a complementary clutch member, a shifting collar detachably mounted on the projecting hub of the supplemental pulley, a drive belt passed around the said pulley on the machine to be driven and supplemental pulley, and a lever connected with the collar for operating the supplemental pulley to throw the clutch member thereof into and out of engagement with the clutch member on the drive pulley, whereby when the said supplemental pulley is out of alignment with the belt pulley on the machine to be driven and is thrown into operation, the belt will creep therefrom into the drive pulley, substantially as described. 3rd. In a portable engine, the combination of a drive shaft extended at one end thereof, a drive pulley fixed on said shaft and provided on its outer side with a clutch member, a relatively smaller supplemental pulley slidably mounted on the extended end of the shaft and provided on its inner side with a complementary clutch member, a bracket on the engine, and a lever mounted on said bracket and connected with the supplemental pulley to move the same toward and from said drive pulley, said lever being provided with a handle arranged so as to be conveniently operated from the engineer's position, substantially as described.

No. 66,653. Computing Scales.

M. A. Wise, Buffalo, and John R. Keim, New York City, U.S.A., 17th March, 1900; 6 years. (Filed 2nd January, 1900.)

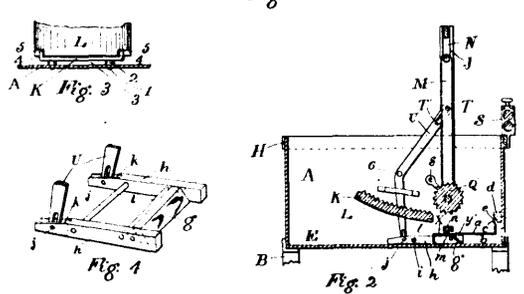
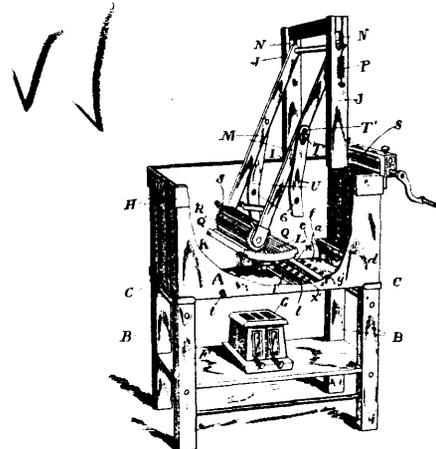
Claim.—1st. In combination with a scale beam, a sliding poise on said beam, and a rotative computing cylinder carried by said beam, said cylinder and poise being provided with a tongue and groove mechanism through which the cylinder is rotated by the direct engagement of the surface of the computing cylinder with the poise. 2nd. In combination with a scale beam, a sliding poise on said beam, a rotative computing cylinder carried by said beam having a spiral on the surface thereof, and means carried by the sliding poise for directly engaging said spiral. 3rd. In combination with a scale beam, a sliding poise on said beam, a rotative computing cylinder carried by said beam, said cylinder having a spiral on the surface thereof, and a wheel journaled on the poise and adapted to directly engage the spiral on the cylinder, the axis of said wheel being perpendicular to the surface generated by the radial lines perpendicular to the axis of the cylinder and extending through said spiral at the place of engagement of said wheel with said spiral. 4th. In a computing attachment for scale beams, the combination of the beam A, sliding poise B having the V-shaped wheel *b* journaled thereon, end supports D, D secured to said scale beam, a

cover E carried by said supports having the groove *e* and opening *e'* therein, a rate scale on said cover, a cylinder F pivoted on the



end supports, said cylinder having the columns of weight indicating figures *f*³ and *f*⁵, said figures being of different colours, and the columns of product indicating *f*⁴ and *f*⁶, being of the same colour as the figure *f*³, said cylinder also having the spiral groove *f*² arranged to engage the wheel *b* and the hanger C.

No. 66,654. Washing Machine. (Machine à laver.)



Fred D. Harding, Baldwin, Maine, U.S.A., 17th March, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. In a washing machine, a suitable tank, a corrugated crubbing board, an angle plate forming, with the bottom end of

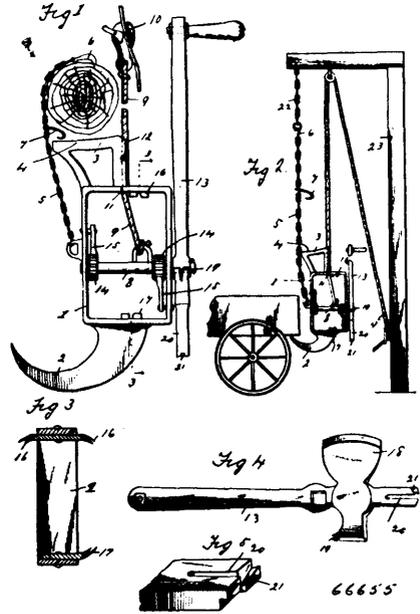
the tank, a conduit for discharge of water upon the board, a frame adapted to reciprocate in the horizontal part of said conduit, a plunger pivotally mounted in said frame, a swinging corrugated roller and means for reciprocating said frame and plunger, substantially as and for the purposes set forth. 2nd. In a washing machine, a tank, a corrugated scrubbing board, an angle plate in one end of said tank forming, with the end and bottom of the tank, a conduit for discharge of water upon the board, the upper end of said angle plate being bent forward, and a second plate secured to the end of the tank above said first nained plate and forming therewith a long narrow orifice through which the water is thrown upon said board, a swinging frame carrying a scrubbing roller, a reciprocating frame carrying a plunger operating in the horizontal part of said conduit, and a lever connecting said frames, whereby the reciprocating frame is operated by the swinging frame, substantially as and for the purposes set forth. 3rd. In a washing machine, a tank, a corrugated scrubbing board, a horizontal and vertical conduit arranged in one end thereof, a frame having a plunger eccentrically and pivotally mounted therein and adapted to reciprocate in the horizontal part of said conduit, a swinging frame carrying a corrugated roller adapted to mesh with said board, standards secured to the sides of the tank and a lever pivotally mounted on said standards, one end secured to the reciprocating frame which carries the plunger and the other secured to the swinging roller frame by a pivot and sliding connection, substantially as and for the purposes set forth. 4th. In a washing machine, a tank, brackets secured to the sides of the tank, open spaces between the brackets and sides, a scrubbing board supported in said brackets, an angle plate forming, with the end and bottom of the tank, a conduit for the discharge of water upon the board, a frame carrying a plunger adapted to reciprocate in the horizontal portion of said conduit, a swinging frame having a scrubbing roller journaled therein, and levers pivotally connected to the tank and extending downwardly through said open spaces between the brackets and sides of the tank, one end connected with the swinging frame and the other with the reciprocating frame, substantially as and for the purposes set forth. 5th. In a washing machine, a tank, a corrugated scrubbing board, and angular conduit in one end of the tank, a plunger adapted to reciprocate in the horizontal part of said conduit, uprights secured to said tank, a swinging frame carrying a scrubbing roller, and sweeps connecting said frame and adapted to operate said plunger, said sweeps being bent and pivotally secured to the tank between the frame and plunger, substantially as and for the purposes set forth. 6th. In a washing machine, a tank, a scrubbing board removably mounted on brackets secured to the sides of the tank and a swinging fluted scrubbing roller adapted to register with said board when in position on said brackets, substantially as and for the purposes set forth. 7th. In a washing machine, a tank, a scrubbing board mounted therein, upright bars secured thereto, a swinging frame pivotally mounted in said bars and carrying a scrubbing roller on its free end, sweeps pivotally mounted in said tub and secured at the top to said swing frame, a reciprocating frame carrying a plunger, the lower extremity of said sweeps being adjustably secured to said frame, and a conduit in which said plunger reciprocates, substantially as and for the purposes set forth. 8th. In a washing machine, a tank, a scrubbing board mounted therein, upright bars secured thereto, a swinging frame pivotally mounted in said bars and carrying a scrubbing roller at the lower extremity, sweeps pivotally secured to the tank, means connecting the upper extremities of said sweeps with said swinging frame, means for giving vertical adjustment to the ends of said links in said swinging frame, a plunger secured to the lower extremity of said sweeps and a conduit in which said plunger reciprocates, substantially as and for the purposes set forth. 9th. In a washing machine, a tank, a scrubbing board mounted therein, upright bars secured thereto, a swinging frame mounted in said bars and carrying a scrubbing roller on its lower extremity, sweeps pivotally secured to said tank, means for connecting the upper extremities of said sweeps with said swinging frame, an angular conduit in said tank, an upwardly projecting flange at the edge of said conduit, a plunger carrying frame adapted to reciprocate in said conduit and means for connecting said plunger frame with the lower extremities of said sweeps, a shield having an offset on one edge adapted to removably engage said flange and means for admitting water to the conduit behind the plunger, substantially as and for the purposes set forth. 10th. In a washing machine, a tank, a scrubbing board mounted therein, a swinging frame pivotally mounted and carrying a roller adapted to reciprocate on said board, sweeps pivotally mounted in said tank, and adapted to be operated by said swinging frame, a plunger adapted to be reciprocated by said sweeps and a conduit in which said plunger reciprocates, means for admitting water into said conduit back of said plunger and means for admitting the water into said conduit in front of said plunger when the roller is off the scrubbing board, substantially as and for the purposes set forth.

No. 66,655. Wire Stretcher. (Tendeur de fil.)

Benjamin Columbus Hancock, Mexia, Texas, U.S.A., 17th March, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. The combination with a windlass frame, of a horn projecting laterally from the plane of the frame, and a bolster also projecting laterally from the same side of the frame, having a concaved bearing face, substantially as described. 2nd. The combination of a windlass frame, a bolster projecting laterally from one side

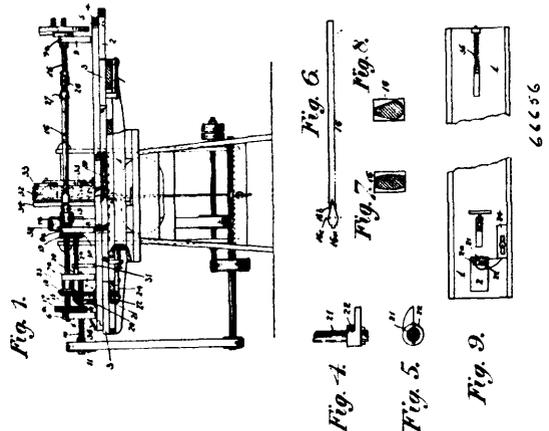
of the frame and extending to some distance from the end of the frame, a chain, and a grappling hook for holding the frame in posi-



tion against a post, against strain or tension, substantially as described. 3rd. The combination of a windlass frame, a bolster extending a distance from the end of the frame, an extensible or adjustable chain connected with the frame, and a grappling hook for holding the frame in position against the post, substantially as described. 4th. In a fence wire stretching machine, the combination of a windlass frame, a bolster extending from the end of the frame, a chain and grappling hook for connecting the frame with a post, and a claw or wire holder connected with the frame, substantially as described. 5th. In a fence wire stretching machine, the combination of a windlass frame and windlass, means for locking the frame to post, and wire claws connected with opposite sides of the frame to adapt the apparatus for operation in reverse positions, substantially as described. 6th. In a fence wire stretching machine, the combination of a windlass frame and windlass having a longitudinally projecting bolster, means for coupling the frame with a post, wire holding claws on both sides of the frame, and reversely arranged ratchets and pawls connected with the windlass shaft, substantially as described. 7th. In a fence wire stretching machine, the combination of a windlass frame having a longitudinally extending bolster, means for coupling the frame with a post, a windlass cable, a wire grip or grail connected with the cable, and wire holding claws connected with the frame, substantially as described.

No. 66,656. Spoke Finishing Machine.

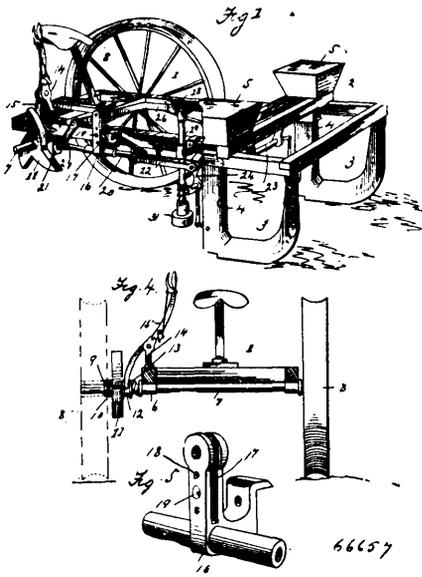
(Machine à finir les rais.)



The Woodburn Sarven Wheel Company of Canada, St. Catharines, Ontario, Canada, assignee of Frederick Unkrich, Galion, Ohio, U.S.A., 17th March, 1900; 6 years. (Filed 19th February, 1900.)

Claim.—1st. A spoke-finishing machine, comprising a table, a sliding plate movable endwise on the table, a swinging or vibrating plate pivoted to the sliding plate, means secured to the swinging or vibrating plate for supporting a pattern shaft and a spoke, means for rotating the pattern shaft and spoke in unison, a standard provided with sand belt pulleys adapted to hold the sand belt adjacent to the spoke, a stop against which the pattern bears for controlling the bearing of the spoke against the sand belt, means for imparting an endwise movement to the sliding plate, and means for operating the swinging or vibrating plate, substantially as described. 2nd. A spoke-finishing machine, comprising a table having a block, a sliding plate, a swinging plate pivoted to the sliding plate, a bearing box secured to the swinging plate, a vertical shaft extending through said bearing box having a cam at its lower end adapted to engage the block, the frames, the counter shaft, the pattern shaft, the main shaft, the gearing connecting the counter shaft with the vertical shaft, the gearing connecting the pattern shaft with the counter shaft, the gearing connecting the main shaft with the counter shaft, the sockets for supporting a spoke, a stop, and means connected with the swinging plate, whereby the pattern shaft is caused to bear against the stop, substantially as described.

No. 66,657. Corn Planter. (*Planteur de blé-d'inde.*)



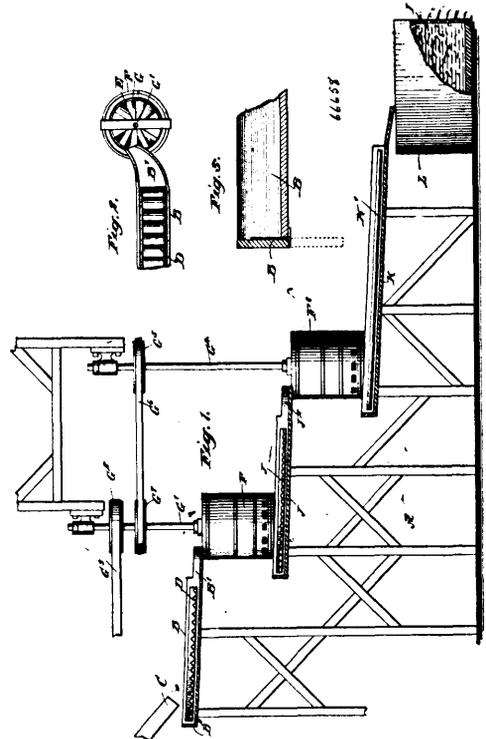
ford and Isaac N. Lang, Mendon, Missouri U.S.A., 17th March, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. In a check row planter, the combination with a main frame, of a revoluble axle carried thereby, a reciprocating rod mounted on said frame and connected to a cut off in the spout in the supplemental frame, a marker secured to the main frame in rear of the cut off, a connection between the rod and the marker, and means carried by said axle for actuating the rod and cut off, substantially as described. 2nd. In a check row planter, the combination with the main frame, of a revoluble axle carried by said frame, a reciprocating rod secured to the side of said frame, a dropper in the spout on the supplemental frame and connected to the rod, a pivoted lever secured to the main frame and carrying a marker and means for operating the rod, substantially as described. 3rd. In a check row planter, the combination with the main frame, of a revoluble axle carried thereby, of a sleeved bracket secured to the side of the main frame, a reciprocating rod carried by said sleeve and connected to the feed mechanism of the planter, of a marker in operative engagement with the reciprocating rod, and a cam carried by the axle for operating the rod and marker, substantially as described. 4th. In a check row planter, the combination with the sleeved bracket secured to the side of the main frame, of a reciprocating rod carried in said sleeve, a pivoted lever secured in said bracket and carrying a marker at one end, a linked connection at the other end of said lever and rod, and means for operating the same, substantially as described. 5th. In a check row planter, the combination with a main frame, of a revoluble axle mounted thereon carrying a cam, a longitudinally arranged reciprocating rod on said main frame engaging a cut off in the seed tube at one end and carrying a shoe at the other end adapted to be engaged by the cam, a marker connected to the rod and operated thereby, and a spring returning the rod rearwardly after it has been projected forward by the cam. 6th. In a check row corn planter, the combination with the frame, of a reciprocating dropper rod on the frame, a sleeved bracket in which the rod is mounted having upwardly extending arms, a lever carried by the said arms for operating a marker and connected to the rod by a link, means for projecting the rod for-

ward, and a coiled spring adjustably secured in the arms of the bracket for returning the rod to its normal position, substantially as described. 7th. In a check row corn planter, the combination with a main frame and a supplemental frame, a reciprocating rod carried by the side of the main frame, of a revoluble axle carried by the main frame, a dropper in the spout on the supplemental frame and connected to the rod, a bracket having two upright arms, a spring for holding the rod in its normal position, an adjusting hook positioned between the arms and adjustably held therein and engaged by one end of the spring, and means for operating the rod, substantially as described. 8th. In a check row corn planter, the combination with the main frame and revoluble axle carried thereby, of a sleeved bracket secured to the side of the main frame, a reciprocating rod carried by said sleeve and connected to the feed mechanism of the planter, of a marker in operative engagement with the reciprocating rod, a spring *c* connected to the rod and adjustably secured in the bracket, whereby the tension of the spring can be regulated, a cam carried by the axle for operating the rod and marker, and a clutch mechanism for disengaging the cam with the rod, substantially as described.

No. 66,658. Precious Metals.

(*Appareil à concentrer et amalgamer les métaux précieux.*)

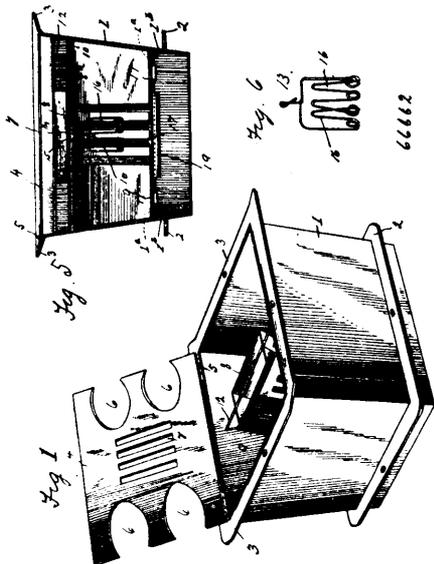


William Waring Habersham, Gainsville, Georgia, U.S.A., 19th March, 1900; 6 years. (Filed 6th December, 1900.)

Claim.—1st. In an ore concentrator, the combination of a tub provided with perforations at its lower portion, through which material may escape from the tub, a vessel mounted in the tub and having at its lower end a mouth or funnel discharging upon the bottom of the tub, a shaft mounted to turn in the vessel and located centrally therein, a sieve held at the lower portion of the shaft and extending across the lower portion of the vessel, arms mounted on the shaft and located in the vessel to form an eddy therein, a propeller wheel attached to the upper portion of the shaft and engaged by the pulp as it flows into the vessel whereby to drive the shaft, and a curved sieve supported in the upper portion of the vessel and located directly beneath the propeller wheel. 2nd. In an ore concentrator, the combination of a tub having perforations in its lower portion, a false bottom situated within the tub and having an upwardly extending central projection surrounded by an annular groove, the false bottom also having radial channels leading to a second annular groove in the outer portion of the false bottom, whereby to connect the two grooves with each other, a vessel mounted in the tub and having an open upper end and having a mouth or funnel at the centre of its lower portion, the mouth or funnel discharging upon the projection of the false bottom of the tub, a shaft mounted to turn within the vessel, a sieve held stationary within the vessel, agitating arms attached to and driven by the shaft, and a propeller wheel attached to the shaft and located at the upper portion of the vessel.

or apertures, a trough adapted to contain a bait and arranged beneath the openings or apertures at the centre of the top, a

of the setting device, and the other extending above block 1 and setting rod 26, its upper end secured to block 9 and its lower end

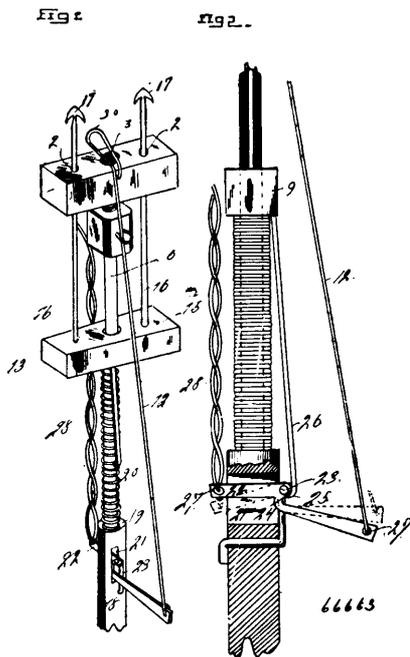


partition supporting the trough, and trap doors arranged at the bottom of the casing, substantially as described. 4th. A trap, comprising a casing provided at the top with apertures and having an entrance, a trough or receptacle arranged beneath the apertures and adapted to contain a bait, and a trap door located beneath the top of the casing, substantially as described. 5th. A trap, comprising a casing, a partition arranged within the casing and dividing the same into two compartments, said partition being provided with an interior space or compartment adapted to receive a bait, and a top having entrance openings, substantially as described. 6th. A trap, comprising a casing, a substantially inverted V-shaped partition arranged within the casing and dividing the same into compartments and forming a central bait receiving space, a trough seated upon the apex of the partition, and a top having entrance openings, substantially as described. 7th. A trap, comprising a casing, an inverted V-shaped partition mounted in the casing and dividing the same into compartments and adapted to receive a bait between its sides, a bait receiving trough provided at its bottom with a V-shaped bend or groove forming a seat and arranged upon the partition, and a top having apertures located above the trough, substantially as described. 8th. A trap, comprising a casing, a substantially inverted V-shaped partition arranged within the casing, a horizontal rod located within the crotch of the partition and supporting the same, a bait receiving trough seated upon the partition and provided at its end with recesses or openings, a rod passing through the recesses or openings of the trough and retaining the latter on the partition, and a top having entrance openings, substantially as described. 9th. A trap, comprising a casing, a horizontal rod arranged within the casing and having a bend, a partition composed of two sides and suspended from the rod, a bait holder arranged between the sides of the partition and having a supporting device engaging the said bend, and a top having entrance openings, substantially as described. 10th. A trap, provided with a bait holder constructed of resilient material and comprising a frame, resilient fingers located at opposite sides of the bait holder and adapted to support a bait, and spring coils connecting the fingers with each other and with the frame, substantially as described. 11th. A trap provided with a bait holder comprising a series of substantially U-shaped fingers located at opposite sides of the holder, the fingers at one side being located opposite the intervals of the fingers at the other side, spring coils arranged at the side of the fingers and connecting the same, and a frame connected with the end coils, substantially as described.

No. 66,663. Spring Spear Gun. (Fusil.)

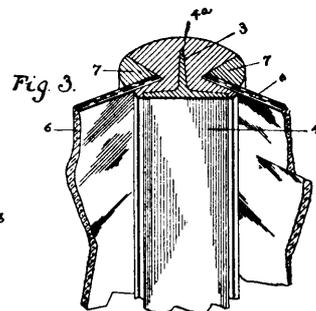
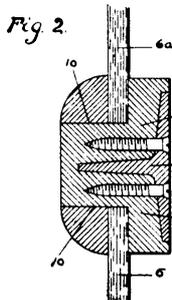
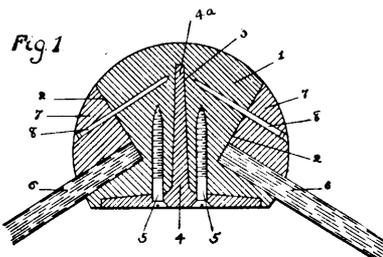
Willam Henry McWhirter, Algoma, Mississippi, U.S.A., 19th March, 1900; 6 years. (Filed 2nd March, 1900.)

Claim.—The combination of the block 1, having perforations 2, 3 and 4, rod 6 secured in perforations 3, block 9 secured near the upper end of rod 6, spiral spring 10 between blocks 1 and 9, block 13 adapted to work up and down on rod 6, spears 16 secured in the block 13, and working through perforations 2 of block 1, handle 18, having holder 19 and slot 21, spiral spring 20, working around rod 6 and between block 13 and handle 18, setting device 22, pivoted in slot 21, wire 28, on the end secured to the setting device and the other to block 1, baiting wire 12, having one end secured to end 27



looking under the shoulder 24 of setting device 22, substantially as shown and described and for the purpose set forth.

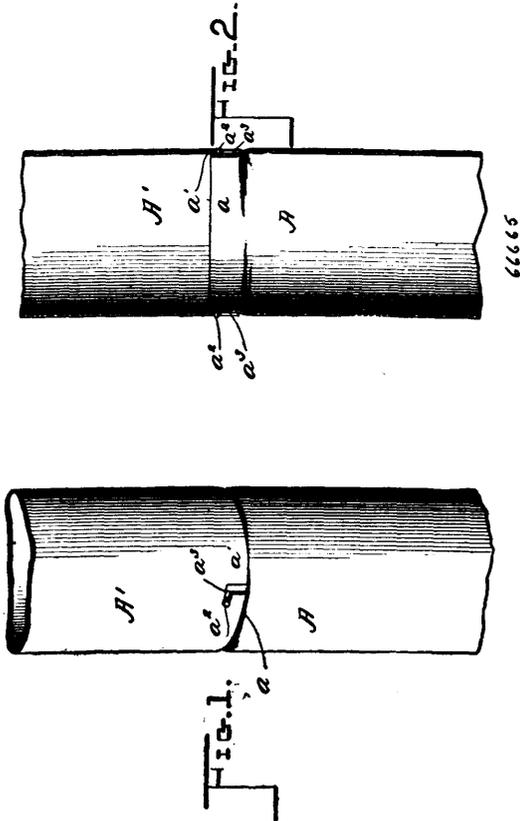
No. 66,664. Window and Transom Corner Posts and Bars. (Poteau de fenetre, etc.)



John Wesley Coulson, Columbus, Ohio, U.S.A., 19th March, 1900; 6 years. (Filed 3rd March, 1900.)

Claim.—In a window post or transom bar, the combination with a post or bar of wood having recessed sides, of a metallic T-bar having its web or tongue portion inserted within a corresponding recess of said post or bar and having its head portion abutting against the inner side of said post or bar and filling strips adapted to be secured in said angular recesses, substantially as set forth.

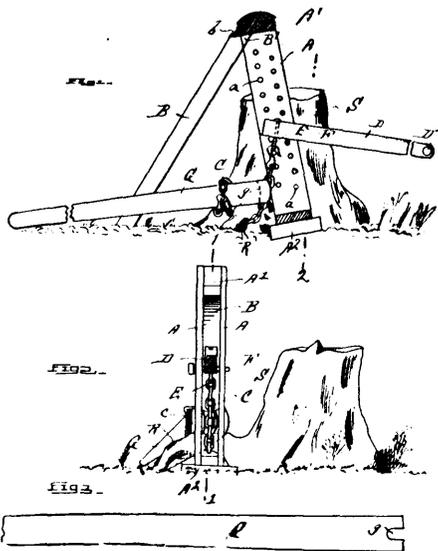
No. 66,665. Stove Pipe. (Tuyeau.)



Thomas Hunt, Vernon, British Columbia, Canada, 19th March, 1900; 6 years. (Filed 5th March, 1900.)

Claim.—A stove pipe, the sections of which are provided with interlocking flanges, a pin secured upon one of said flanges, a slot formed in the other of said flanges, one portion of said slot being at right angles to the other portion, said pin being adapted to engage said slot, whereby the sections are removably locked together, substantially as described.

No. 66,666. Stump Puller. (Arrache-souche.)

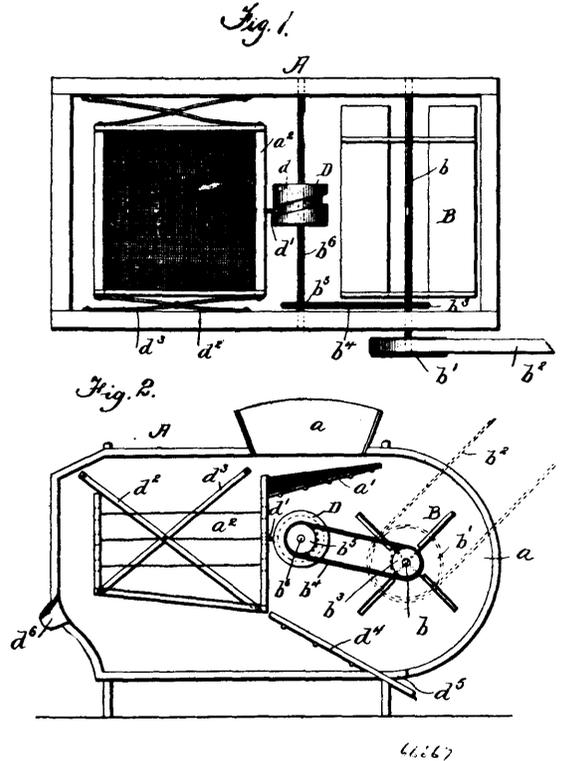


Solomon J. Fletcher, Cedar Falls, Wisconsin, U.S.A., 19th March, 1900; 6 years. (Filed 2nd March, 1900.)

Claim.—1st. A stump puller, consisting of a standard having two separate members joined at their upper ends by a head plate and at

their lower ends by a base plate, and provided with adjustable fulcrums or lever supports extending between said members, a sole brace therefor lying in substantially the plane of the standard and operating lever, and having its upper end tenoned, the tenon entering between the standard members and engaging the head plate, the shoulders at the side of the tenon engaging the edges of the standard at their upper end, an operating lever engaging said fulcrums, and a chain secured by one end to the lever and adapted to be secured to the stump, substantially as described. 2nd. A stump puller, consisting of a standard having two parallel and separated members joined at their upper ends by a head plate and at their lower ends by a base plate, movable fulcrum pins adapted to be supported by the standard, a sole brace lying in substantially the same plane as the standard and having its upper end tenoned, the tenon entering between the side members of the standard and engaging the head plate, the shoulders at the side of the tenon engaging the bars of the standard, an operating lever engaging said fulcrum pins, a lifting chain secured by one end of the lever, and a bar adapted to receive the other end of the chain and provided with a notch at one end, adapted to embrace the lifting chain, as described.

No. 66,667. Grain Cleaner. (Cylindre émotteur.)



Joseph Euclide Landry, Sabrevois, Quebec, Canada, 19th March, 1900; 6 years. (Filed 1st March, 1900.)

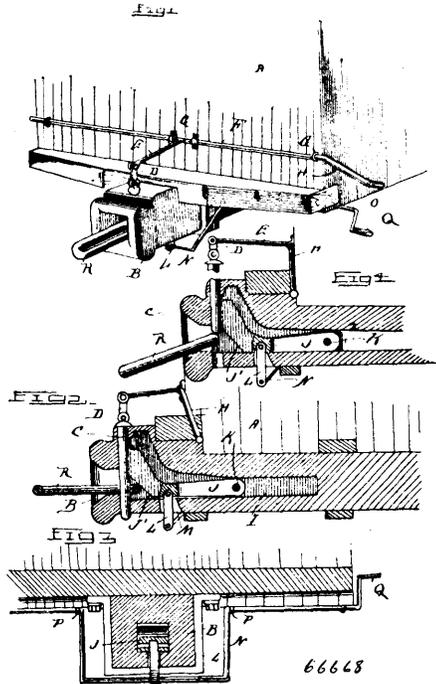
Claim.—1st. A machine for cleaning grain, comprising a casing, a power driven fan mounted therein, a screen loosely supported therein, and a vibrating device connected to said screen and operated by the rotation of the fan, substantially as described. 2nd. A machine for cleaning grain, comprising a casing, a power driven fan mounted therein, a vibrating screen supported by means of spring arms to the side of the casing, a shaft journaled in said casing a drum fixed upon said shaft and having an eccentric groove formed therein, a lug secured to said screen and extending into said groove, and an operative connection between said drum shaft and the fan shaft, substantially as described.

No. 66,668. Car Coupler. (Attelage de chars.)

George W. Vickery, Butter Springs, Alabama, U.S.A., 19th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—The combination with the drawhead provided with the vertical bore, of an ordinary coupling pin fitting said bore, a link pivoted to the top of the coupling pin, a horizontal rod pivoted in bearings on the end of the car, a crank pin projecting from the centre of said rod and pivotally connected to said link, crank handles on said rod at the sides of the car, a door J pivoted at its rear end within the drawhead having a vertical face adapted to bind against the inside of the pin to hold it in a raised position, and a downward rearwardly inclined face to bear against the inner end of a coupling link when engaged on the pin, a link pivotally connected

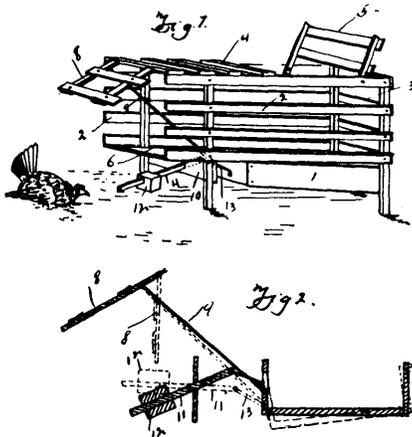
with the dog and passing through a slot in the bottom of the draw-head, and a horizontal rod pivoted under the car provided with



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crank handles at the sides of the car and bent to form a crank in the centre portion to pivotally connect with the lower end of the link depending from the dog, substantially as described.

No. 66,669. Hen Nest. (Nid de poules.)



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Jesse B. Williams, Alum Bank, Pennsylvania, U.S.A., 19th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—1st. An automatic nest, having a housing with a box journalled in its bottom at one end, a rod connected at one end to said box and at its other end to a hinged door, and a rod hingedly connected to the forward end of said box, and having an adjustable weight on its forward end, substantially as shown and described. 2nd. In a hen's nest, a housing having a hinged door at one end, a platform beneath said door and a box hinged at its rear end to the housing and its forward end secured to the door by means of a rod, and having a weighted bar secured to its forward end and journalled in the forward end of said housing, substantially as described.

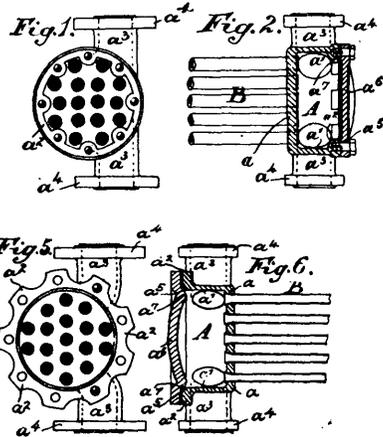
No. 666,70. Water Tube Steam Boilers.

(Chaudière à vapeur à tube à eau.)

John B. Furneaux, Victoria Works, Gateshead, Durham, England, 19th March, 1900; 6 years. (Filed 8th September, 1898.)

Claim.—1st. A water tube steam boiler comprising an upper water and steam drum, a lower water chamber, and a plurality of

vertical tubular elements connecting said drum and chamber, and each comprising a number of sections connected together at their

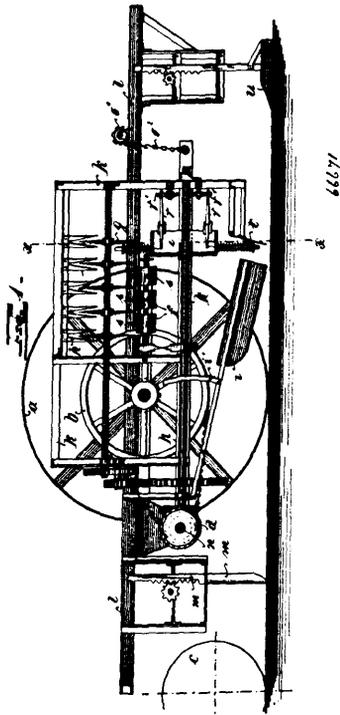


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ends and each composed of end boxes connected by a bundle of slightly inclined straight tubes, substantially as described. 2nd. A water tube steam boiler comprising an upper water and steam drum, a lower water chamber, a fire box and a plurality of vertical elements connected at the top to said drum and at the bottom to said chamber and consisting of end boxes connected together vertically, and bundles of tubes connecting said end boxes and arranged to leave free spaces between adjacent bundles, substantially as described for the purpose specified. 3rd. A water tube steam boiler comprising a comparatively large upper water and steam drum, a comparatively small lower water chamber, a fire box, and a number of removable slightly inclined sections arranged at right angles to the axis of said drum and chamber and above said fire box, and each composed of end boxes provided with tubular projections and a bundle of straight tubular projections and a bundle of straight tubes of small diameter connecting said end boxes, said sections being connected together in vertical series to form independent elements connected at top and bottom to said drum and chamber respectively, substantially as described. 4th. A water tube steam boiler comprising an upper water and steam drum, a lower water chamber, a fire box, inclined bundles of straight tubes arranged parallel with one another above said fire box with intermediate spaces free from tubes between said bundles and end walls each composed of a plurality of boxes connected together and to said bundles of tubes, one of said walls being connected at the bottom to the water chamber and the other at the top to the said water and steam drum, substantially as described. 5th. A water tube steam boiler comprising an upper water and steam drum, a lower water chamber, a fire box, inclined bundles of straight tubes arranged parallel with one another above said fire box with intermediate spaces free from tubes between said bundles, end walls each composed of a plurality of boxes connected together and to said bundles of tubes, one of said walls being connected at the bottom to the water chamber and the other at the top to said water and steam drum, and baffle arranged relatively to said tubes so as to impart a zigzag course to the hot gases and product of combustion flowing past the tubes to the chimney or uptake, substantially as described. 6th. In a water tube boiler, removable tubular sections each consisting of a pair of boxes of circular cross-section provided on their outer sides with removable covers secured by bolts, and with flanged tubular unions projecting from their periphery, and a bundle of straight tubes secured to the inner side walls of said pair of boxes, substantially as described. 7th. In a water tube boiler, removable tubular sections each consisting of a pair of boxes of circular cross-section provided on their outer sides with removable end covers secured by bolts, and with flanged tubular unions projecting tangentially from their periphery, and a bundle of straight tubes secured to the inner side walls of said pair of boxes, substantially as described. 8th. In a water tube boiler, a tubular section comprising two end boxes A and a bundle of tubes B secured to the inner side walls of said boxes, said boxes being made of cylindrical shape with tangentially arranged flanged tubular projections, and provided with removable end covers that are removably secured to the box by bolts, adjacent parts of each box and cover being adapted to receive and hold jointing material between them, substantially as described. 9th. A water tube steam boiler comprising an upper water and steam drum, a lower water chamber, inclined return tubes connecting the lower side of the drum to the upper side of said chamber at the end portions of each inclined supports arranged at an angle to said return tubes and connected to said drum, and a boiler casing located between the two pairs of return tubes and supports and enclosing the furnace or furnaces and the steam generating elements connecting said drum and chamber, substantially as described. 10th. A water tube boiler comprising an upper water

and steam drum, a lower water chamber, a fire box, steam generating elements connecting said drum and chamber and a casing enclosing said fire box and steam generating elements, said elements being arranged vertically side by side and each being built up of tubular sections that are arranged in zig-zag order one below the other so that each section will be to one side of the section or sections above it, substantially as described. 11th. In a water tube boiler, the combination with an upper water and steam drum and a lower water chamber, and a casing, of a plurality of steam generating elements connecting said drum and chamber, enclosed within said casing, and built up of a number of sections each of which comprises a pair of boxes connected by a bundle of straight tubes and provided with tangential tubular unions the sections in each element being connected up by their tubular unions so that they are alternately to right and left of one another, substantially as described. 12th. A water tube boiler comprising a comparatively large water and steam drum D, a lower water chamber C, a combustion chamber with fire grate and hollow transversers perforated division *i*, a plurality of steam generating elements connecting said drum and chamber and built up of removable sections composed of boxes A and bundles of straight tubes B slightly inclined downward from front to back of the boiler, and arranged to leave spaces 5 between them, baffle plates *l* and *m* on said tubes, inclined return tubes *g* connecting the ends of said drum and chamber together, inclined supports *h* for said drum, and a casing enclosing said combustion chamber, steam generating elements and baffle plates and provided with a chimney or uptake, all substantially as described and shown.

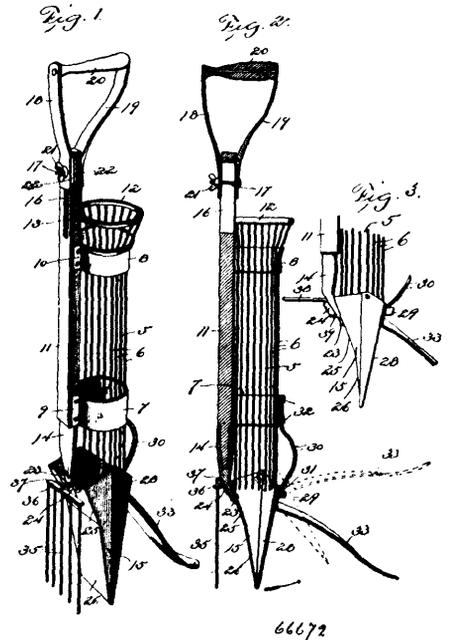
No. 66,671. Instrument for Pulling Potato Plants.
(*Instrument pour arracher les plantes à patates.*)



Anton Dambascher, Munich, Bavaria, Germany, 19th March, 1900; 6 years. (Filed 5th March, 1900.)

Claim.—1st. An implement for pulling up potato plants, comprising a suitable framework *l* mounted on wheels *a*, *c*, and carrying a device *m* to separate the plants, and an adjustable frame *k* on which is pivoted a device *i* to bend over the plants, said frame having mounted on it a wheel driven by means of suitable gearing from the main axle, provided with: hooks *e*¹ and a spring device *q* and operating mechanism *r*, *r*¹, in combination with a transporter *f* and cutting device consisting of rotary blades *g* co-operating with stationary blades *h* and a raking device *t*, with or without the addition of a device *u* for working through the rows or hills, all substantially as described and for the purposes set forth. 2nd. In an implement for pulling up potato plants, a wheel for seizing and raising the plants from the ground, comprising a central part or case having radial hooked arms *e*¹ and bowed springs *q* pressed outwards by spiral springs *p* and drawn inwards by lever and roller device *r*, *r*¹, all arranged and operating substantially as set forth.

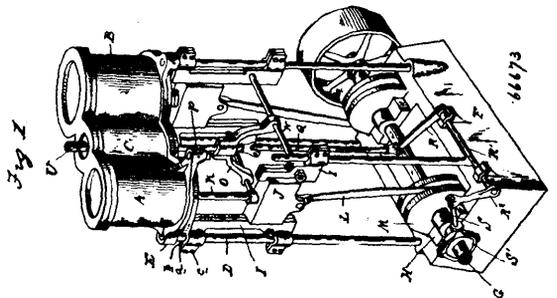
No. 66,672. Hand Planter. (*Plantoir à main.*)



Henry H. Wabers, Racine, Wisconsin, U.S.A., 19th March, 1900; 6 years. (Filed 3rd March, 1900.)

Claim.—1st. In a hand planter, the combination with a hopper, of a jaw rigidly fixed thereto and movable therewith, a second jaw pivoted with respect to the hopper and the first named jaw, and a coverer rigidly connected to the first named jaw and movable therewith to cover the planted seed. 2nd. In a hand planter, the combination with a hopper having a jaw rigidly fixed thereto and movable therewith, of a handle fixed to the hopper, a second jaw pivotally connected with the first named jaw, a foot fixed to the pivoted jaw and adapted to engage the earth to move the pivoted jaw, and a coverer rigidly connected to the first named jaw and movable therewith to cover the planted seed. 3rd. In a hand planter, the combination with a longitudinally slotted hopper having a handle fixed thereto, of a jaw rigidly fixed to the handle and movable therewith, a second jaw pivoted to the first named jaw and movable with respect thereto, means for moving the pivoted jaw, and a coverer rigidly and removably connected with the fixed jaw and movable therewith to cover the planted seed. 4th. In a hand planter, the combination with a hopper having a handle fixed thereto, of fixed and movable jaws at the lower end of the hopper, the fixed jaw being adapted to receive interchangeably a foot piece and a coverer. 5th. A hand planter, comprising a hopper having a handle fixed thereto and provided with a hand-hold extending above and over the hopper, a jaw fixed to the handle, a second jaw pivoted to the first named jaw and having an operating foot, a seat upon the pivoted jaw, a spring connected with the hopper and entering the seat and adapted to hold the jaws normally in rigid engagement, and a coverer removably connected with the fixed jaw.

No. 66,673. Engine. (*Machine à vapeur.*)

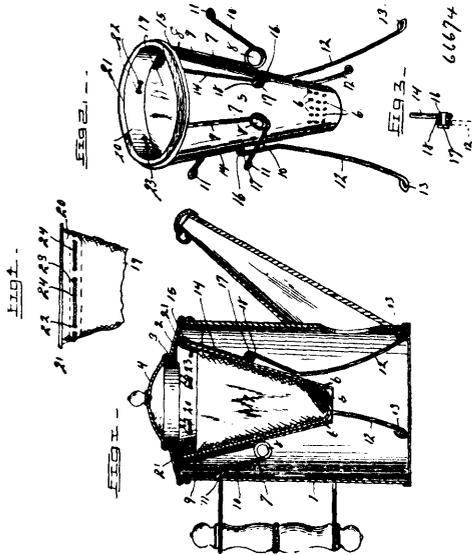


Michael E. Durman, Woodmere, Michigan, U.S.A., 19th March, 1900; 6 years. (Filed 2nd March, 1900.)

Claim.—In a compound engine, the combination with a base, a pair of vertically arranged guide rods fixedly secured at each end of the base, a high pressure cylinder mounted upon and connecting

one pair of rods, a low pressure cylinder arranged upon and connecting the opposite pair of rods, a valve chest intermediate the cylinders and connecting the same, a yoke-shaped slide adjustably secured to each guide rod, each slide being formed in two parts, clamped to each other and to the rods, and arranged in pairs, as shown, a vertically reciprocating cross head engaging each pair of guides, a main drive shaft mounted upon the base, disc cranks upon said shaft and a connecting rod between each crank and its respective cross head.

FO. 66,674. Percolator for Tea and Coffee Pots.
(*Filtre pour théières et cafetières.*)



Brutus A. Bowrie, Fort Wayne, Indiana, U. S. A., 19th March, 1900; 6 years. (Filed 2nd March, 1900.)

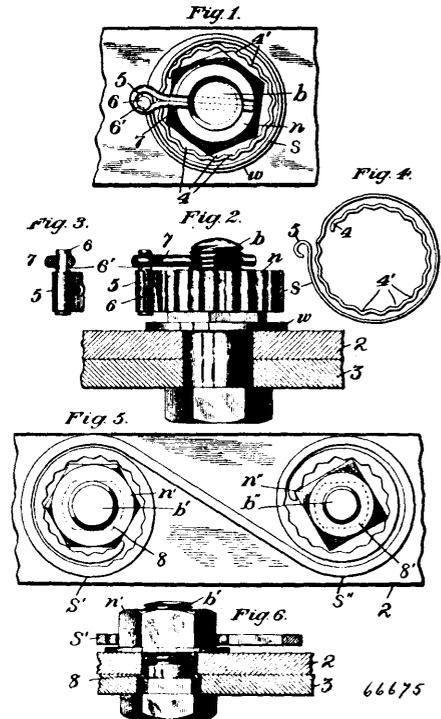
Claim.—1st. A percolator, comprising a substantially rigid body, open at opposite ends, and having imperforate bag supporting walls, and a strainer bag open at its upper end only, suspended within the body, sitting snugly, the imperforate bag supporting walls thereof, and having its interior surface entirely exposed or uncovered, substantially as and for the purpose set forth. 2nd. A percolator, comprising a body, fixed eyes provided upon the exterior thereof, pivot pins carried by the respective eyes and supporting legs formed of wire and provided with eyes loosely embracing the respective pivot pins, substantially as shown and described. 3rd. A percolator, comprising a body, a plurality of arms soldered or otherwise secured longitudinally to the exterior of the body, each arm being formed from a single length of wire, having its lower end bent into an eye located at substantially right angles to the body, headed pivot pins fixedly carried by the eyes of the respective arms, and supporting legs, each of the latter being formed from a single length of wire having an eye formed at its lower end and provided a foot, and another eye formed at the upper end of the leg and loosely embracing one of the pivot pins, substantially as shown and described.

No. 66,675. Nut Lock. (*Arrêt-écrou.*)

Constant Francis de Redon, Manhattan, New York City, New York, U. S. A., 19th March, 1900; 6 years. (Filed 21st February, 1900.)

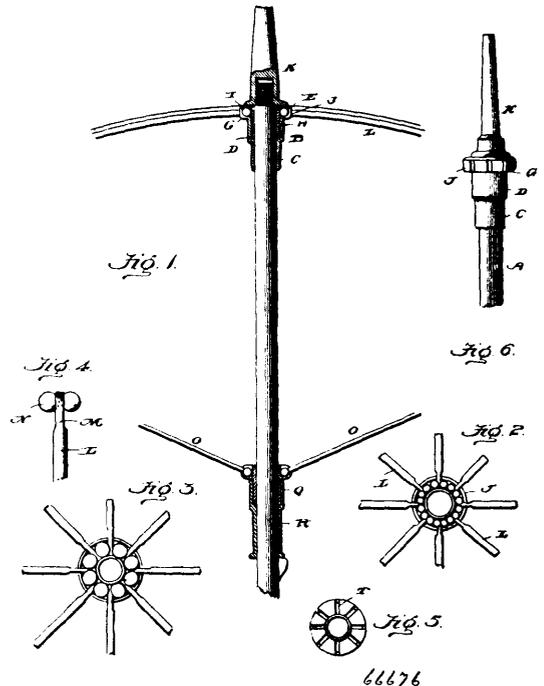
Claim.—1st. In a nut lock, the combination with a nut and a bolt, of a resilient locking member having in its inner face a recess for receiving a corner of one of such co-acting parts. 2nd. In a nut lock, the combination, with a nut, of a coiled nut encircling locking spring, having in its nut engaging face a plurality of recesses for receiving corners of the nut. 3rd. In a nut lock, the combination, with a nut, of a wide spiral nut encircling band spring having a corrugated nut engaging coil for engaging corners of the nut. 4th. In a nut lock, the combination, with a nut, of a coiled nut encircling locking spring having in its nut engaging face a recess for receiving a corner of the nut, and means for holding the spring in position. 5th. In a nut lock, the combination, with a nut, of a bolt carrying said nut, and a coiled nut encircling locking spring secured to said bolt and having in its inner face a recess for receiving a corner of

the nut. 6th. In a nut lock, the combination, with a nut, of a transversely recessed bolt carrying said nut, and a coiled nut encircl-



ing locking spring seated at its free end in the recess in the bolt and having in its inner face a recess for receiving a corner of the nut.

No. 66,676. Umbrella. (*Parapluie.*)

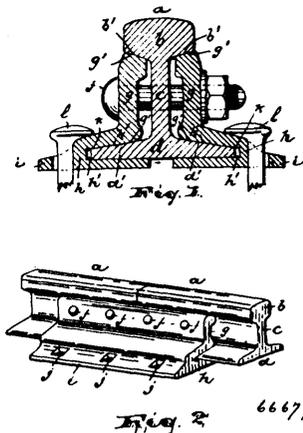


Worth Howard Gurney, Mansfield, Ohio, U. S. A., 19th March, 1900; 6 years. (Filed 5th March, 1900.)

Claim.—1st. The herein described umbrella rib having its notch end terminal provided with two opposing faces, each face having countersunk therein a spherical depression, said depressions being opposite each other, as set forth. 2nd. The herein described umbrella, the combination with a circular disc provided with a runway and a series of notches formed in the disc of a rib adapted

to fit in said notches having its end formed with two opposing faces, each face having countersunk therein a spherical depression upon opposite sides, and balls adapted to rest in said runway of the disc and fit in said depressions of the ribs to hold the same in the disc.

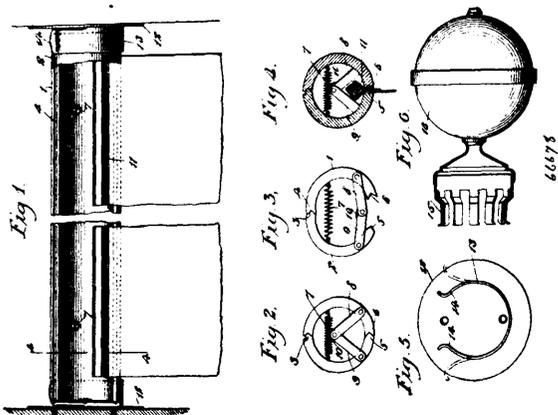
No. 66,677. Railway Rail Joint.
(*Joint de rail de chemin de fer.*)



Frederick T. Fearey, Newark, New Jersey, U.S.A., 19th March, 1900; 6 years. (Filed 5th March, 1900.)

Claim.—The combination with the adjacent ends of railway rails, of a fish plate having a vertical portion standing away from the webs of the rails and bearing at its upper and lower parts against the heads and flanges, respectively, of the rails, means for drawing said fish plate nearer to the web of the rails as the said bearing surfaces wear away, said fish plate having a doubled lowered portion receiving the flange of the rail without engaging its edge, and a horizontal outwardly projecting flange, integrally formed at the turn of said doubled portion and being perforated, spikes passing through said perforations, said flange entirely surrounding the spikes and the perforations being in a direction at right angles to the length of the fish plate of greater width than the spikes therein, whereby movement with respect to the spikes is permitted when the fish plate is tightened to take up wear, substantially as set forth.

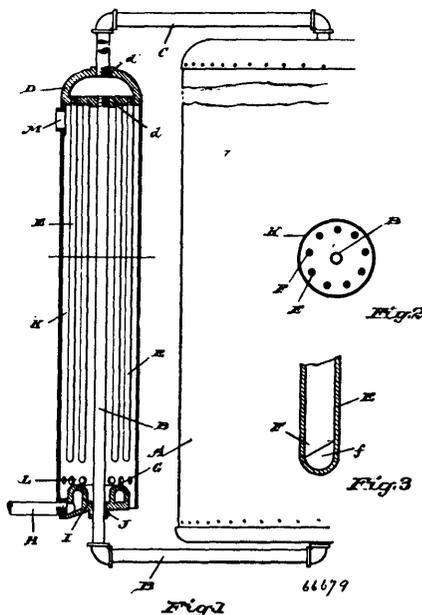
No. 66,678. Curtain Pole. (*Baton de rideau.*)



Almon Stone Venen, Forest Grove, Oregon, and Albert Lincoln MacLeod, Julietta, Iowa, both in the U.S.A., 20th March, 1900; 6 years. (Filed 23rd February, 1900.)

Claim.—A curtain pole, formed of two hollow and approximately semi-cylindrical sections engaging with each other at one edge to permit the sections to be moved toward and from each other to engage and disengage the remaining edges of the sections, a retractile spring located within the sections and attached to the sections, the spring serving to draw the sections into closed position, and toggle links pivoted to each other and respectively pivotally connected with the sections, one of the links being provided with a lug serving to engage the other link to hold them in extended position, thus holding the sections of the roller open against the tension of the spring, the links moving upward to work the toggle and permit the sections of the roller to be moved into closed position.

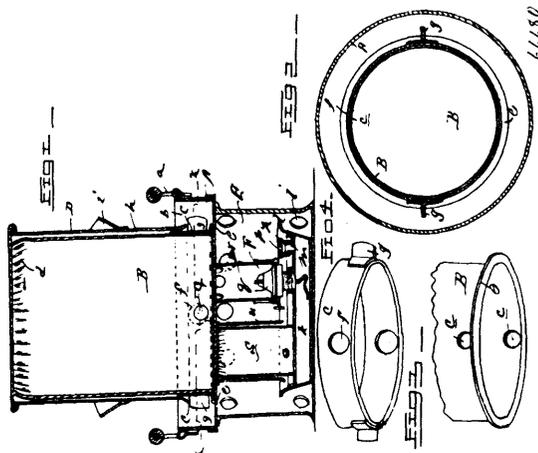
No. 66,679. Water Heater for Range Boilers.
(*Chauffageur d'eau pour chaudières de poêles.*)



The Gurney Foundry Company, assignee of John Joseph Cunningham, all of Toronto, Ontario, Canada, 20th March, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. A water heater for range boilers, embracing in its construction a water head, a series of water tubes depending from the water head and in circulation therewith, a heater below the water tubes and a casing for the water tubes and heater, substantially as specified. 2nd. A water heater for range boilers, embracing in its construction a water head, a series of water tubes depending from the water head, a partition in each tube forming two water legs in circulation at the lower end of the tube, a heater below the water tubes, and a casing for the water tubes and heater, substantially as specified. 3rd. A water heater for range boilers, embracing in its construction a water head connected to the return and flow pipes, of a range boiler, a series of water standards or tubes depending from the water head, the lower end of each of which is hermetically sealed, a partition in each water standard or tube forming two water legs in circulation at the lower end of the tube, a heater below the water tubes, and a casing enclosing the water tubes and return pipe between the water head and heater, substantially as specified.

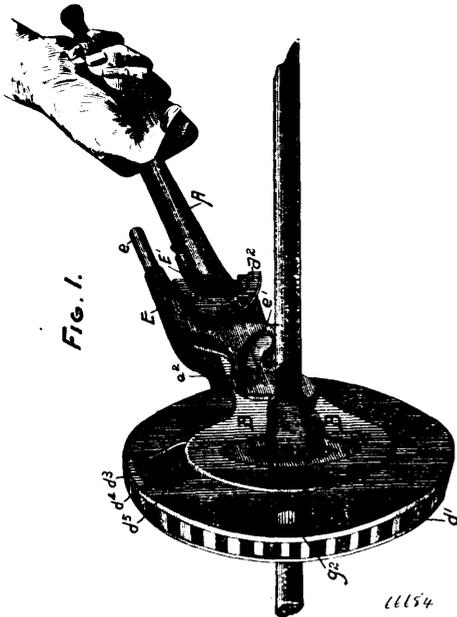
No. 66,680. Poultry Feeding Device.
(*Appareil à nourrir les volailles.*)



Wilber R. Magee, Ceres A. Dix, Paulding, Ohio, U.S.A., 20th March, 1900; 6 years. (Filed 2nd March, 1900.)

Claim.—The device described for supplying poultry with water or food of a fluid nature, comprising the pan, the reservoir rising from the bottom of the pan and having its upper end open, and a dis-

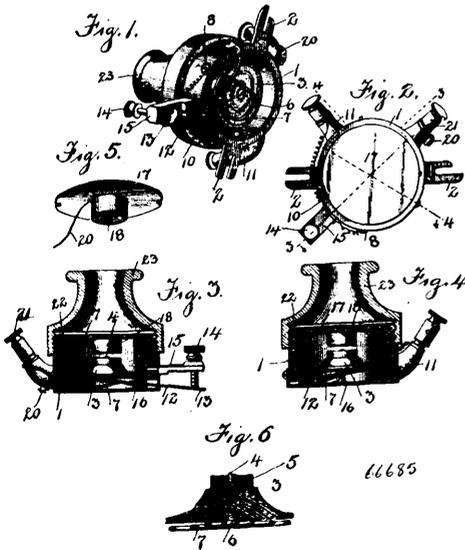
spring catch carried by one of said sections and adapted to engage a notch in the other of said sections, and a cam disk mounted in said



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wrench head adjacent to said catch, whereby the catch is held in its locked position, substantially as described.

No. 66,685. Telephone Transmitter.
(*Transmetteur téléphonique.*)



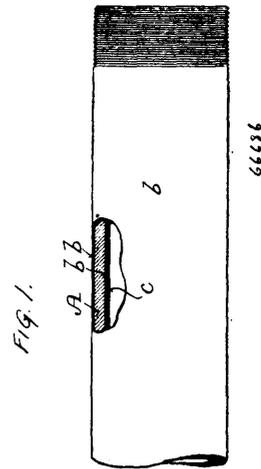
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Joseph Gaudiose Dallaire, St. Laurent, Isle d'Orleans, Montmorancy, Quebec, Canada, 20th March, 1900; 6 years. (Filed 16th February, 1899.)

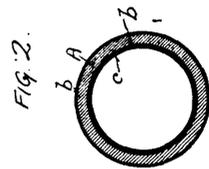
Claim.—1st. A telephone transmitter, comprising a casing, a vibrating member, a coiled spring connected at one end to said member, by means of which said member is yieldingly mounted in said casing, and, at its other end, directly connected to the casing and in electrical communication with the battery, means for limiting and regulating the vibrations of said member, a diaphragm, having a carbon disc, removably connected with said casing, said disc being adapted to impart vibrations to said member, substantially as described. 2nd. A telephone transmitter, comprising a casing, a vibrating member, a coiled spring connected at one end to said member and by means of which it is yieldingly mounted in said casing, the other end of said spring being connected with the said casing and in electrical communication with the battery, a spring wire secured at one end to the casing and bearing at its central portion upon said coiled spring, an adjusting screw mounted upon the casing and adapted to bear against the other end of said wire,

whereby the vibrations of said member are limited and regulated, a diaphragm having a carbon disc, removably connected with said casing, said disc being adapted to impart vibrations to said members, substantially as described.

No. 66,686. Electro Galvanized Tubing.
(*Tube electro-galvanique.*)



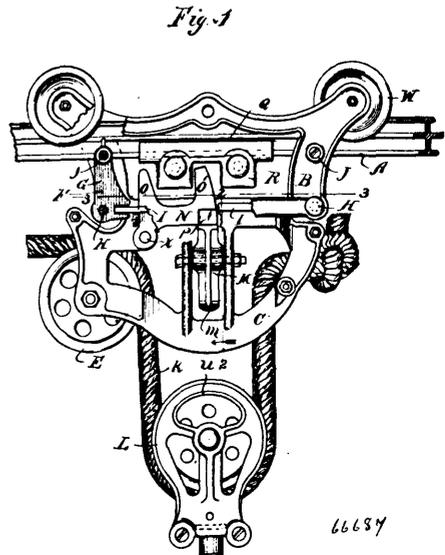
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C. D. Richmond, Milwaukee, Wisconsin, U.S.A., 20th March, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. A manufacture of electric galvanized iron or steel, having a flexible, non-corrosive coating adherent on the zinc. 2nd. An electro galvanized iron or steel tubing, having a flexible, non-corrosive and insulating coating adherent on the zinc.

No. 66,687. Hay Carrier. (*Transport à foin.*)



6667

William Loudon, Fairfield, Iowa, U.S.A., 20th March, 1900; 6 years. (Filed 26th February, 1900)

Claim.—1st. In the combination of an upper and lower frame swivelled together, two end pieces and two side pieces composing the upper frame, the end pieces running across from one side piece to the other and joining their ends together, and the lower edges of said four pieces forming a swivel connection for the lower frame.

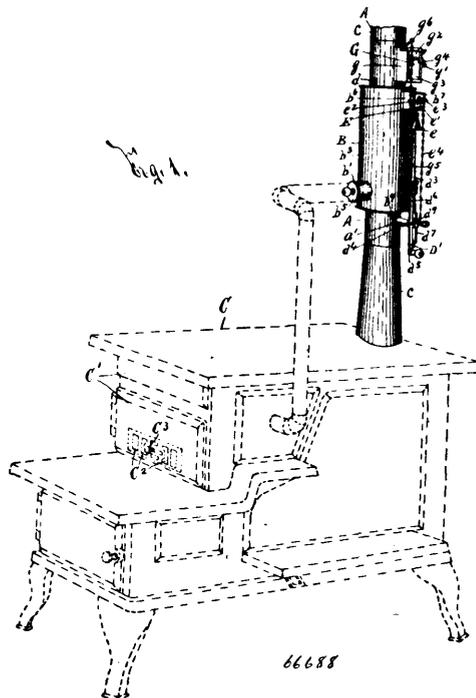
2nd. The combination of an upper frame and a lower frame swivelled together, said upper frame being composed of two side pieces and two end pieces secured together, and the end pieces having upwardly extending arms secured to the side pieces, substantially as set forth. 3rd. The combination of an upper frame and a lower frame and a lower frame swivelled together, said upper frame being composed of two side pieces and two end pieces having upwardly projecting arms secured to the side pieces and their lower ends being perforated for the passage of bolts therethrough, substantially as described. 4th. The combination of a dog hinged at one end to the carrier frame, and having upwardly projecting prongs adapted to engage a stop on a hay carrier track, an elevating pulley frame with a lip on each side of its frame and a pair of pivoted grappling hooks set at right angles to the dog and adapted to alternately support and be supported by the free end of the dog, and to engage and to release the lips of a pulley frame, substantially as set forth. 5th. The combination of a dog hinged at one end to the carrier frame, having upwardly projecting prongs adapted to engage a stop on a hay carrier track, and downwardly projecting points on opposite sides of its free end, an elevating pulley frame with a lip on each side of its frame and a pair of pivoted grappling hooks set at right angles to the dog and adapted to alternately engage and be engaged by said downwardly projecting points, and to engage and release the lips of the pulley frame substantially as described. 6th. The combination of a dog hinged at one end to the carrier frame, having upwardly projecting prongs adapted to engage a stop on a hay carrier track, and downwardly projecting points on opposite sides of its free end, and a pair of pivoted grappling hooks set at right angles to the dog and adapted to alternately engage and be engaged by said downwardly projecting points, and said hooks having intermediate inwardly pointing arms adapted to move up into the space between said downwardly projecting points, substantially as described. 7th. The combination of a pair of grappling hooks pivoted in opposite sides of a carrier frame and having intermediate inwardly projecting arms, and a dog or dogs adapted to alternately engage and be engaged by the upper end of said hooks, said arms being lapped on each other and each having laterally set fingers adapted to ride on the upper side of the opposite arm, substantially as set forth. 8th. The combination of a pair of grappling hooks pivoted in opposite sides of a carrier frame, and having intermediate inwardly projecting arms, and a dog or dogs adapted to alternately engage and be engaged by said hooks, the inner ends of said arms being upwardly curved and lapped on each other, and each having laterally set fingers adapted to ride on the upper side of the opposite arm, substantially as described. 9th. The combination of a pair of grappling hooks pivoted in opposite sides of a carrier frame and having intermediate inwardly projecting arms, an dog or dogs adapted to alternately engage and be engaged by said hooks, the inner ends of said arms being upwardly curved and lapped on each other, and each having laterally set fingers adapted to ride on the upper side of the opposite arm, and flanges on their lower edges adapted to catch on the under sides of said arms, substantially as set forth. 10th. The combination of a dog hinged at one to the frame of a carrier, and a pair of grappling hooks pivoted in opposite sides of said frame, and at right angles to said dog, said grappling hooks having inwardly and upwardly projecting arms, and the free end of the dog being adapted to drop between the upper ends of said hooks, and its central portion being cut away to receive the upwardly projecting points of said arms, substantially as described.

No. 66,888. Heating Apparatus. (Appareil de chauffage.)

Leonidas Doty West, Dundee, New York, U.S.A., 20th March, 1900; 6 years. (Filed 6th March, 1900.)

Claim.—1st. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, and a chamber heated by the products of combustion passing through the conduit, said chamber being provided with an inlet opening and with an outlet opening communicating with the combustion chamber beneath said means, substantially as and for the purpose described. 2nd. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, and a chamber heated by the products of combustion passing through the conduit, said chamber being provided with an inlet opening and with an outlet opening communicating with the combustion chamber beneath said means, substantially as and for the purpose specified. 3rd. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, and a chamber arranged adjacent to the conduit beneath said means and heated by the products of combustion passing through the contiguous portion of the conduit, said chamber being provided with an inlet opening and with an outlet opening communicating with the combustion chamber beneath said means, substantially as and for the purpose set forth. 4th. A heating apparatus comprising a combustion chamber, an outer shell surrounding the combustion chamber and provided with a conduit for supplying air to the combustion chamber and with a closure for said conduit, a conduit communicating with the combustion chamber for conduct-

ing the products of combustion therefrom, means for controlling the passage of the products of combustion through the second conduit



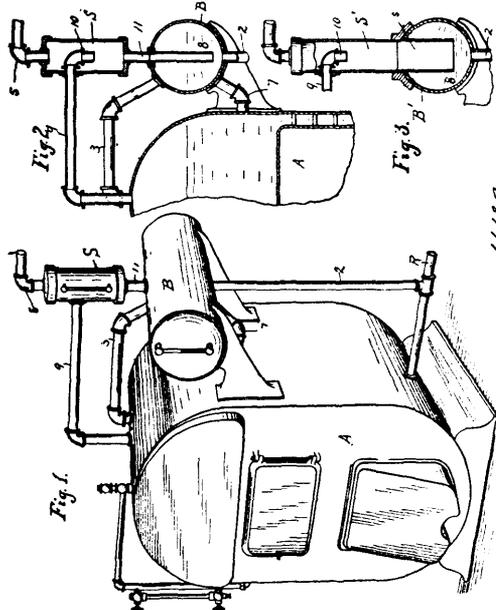
and a chamber heated by the products of combustion passing through the second conduit, said chamber being provided with an inlet opening and with an outlet opening communicating with the combustion chamber beneath said means, substantially as and for the purpose described. 5th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, and a chamber heated by the products of combustion passing through the conduit, said chamber being provided with an inlet opening in its outer wall and with an outlet opening in its inner wall discharging directly into the conduit in a substantially horizontal plane, substantially as and for the purpose specified. 6th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber beneath said means, and means for controlling the flow through the inlet opening, substantially as and for the purpose specified. 7th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, and means for controlling the flow through the outlet opening, substantially as and for the purpose set forth. 8th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, and means for automatically controlling the draft in the conduit, substantially as and for the purpose described. 9th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, means for controlling the flow through the inlet opening, and connections between the first and second means for operating the second means simultaneously with the first means substantially as and for the purpose specified. 10th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion pass-

ing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, means for automatically controlling the draft in the conduit, and connections between the first and second means for adjusting the second means when operating the first means, substantially as and for the purpose set forth. 11th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a damper for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, a damper for controlling the flow through the inlet opening, an operating member, a connection between the first damper and the operating member, and a connection between the second damper and the operating member, said latter connection being adjustable for varying the operation of the second damper, substantially as and for the purpose described. 12th. A heating apparatus comprising a combustion chamber, a conduit communicating with a damper for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with outlet opening communicating with the combustion chamber, a damper for controlling the flow through the inlet opening, a rocking operating member, means for holding the operating member in its adjusted position, a connection between the first damper and the operating member, and a connection between the second damper and the operating member, said latter connection being adjustable for varying the operation of the second damper, substantially as and for the purpose specified. 13th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a damper for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, a damper for automatically controlling the draft in the conduit, an operating member, a connection between the first damper and the operating member, and a connection between the second damper and the operating member, substantially as and for the purpose set forth. 14th. A heating apparatus, comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a tube extending crosswise of the conduit, a damper, a rocking operating member journaled in the conduit and passed through the tube, said operating member being connected to the damper, and a spring for holding the operating member in its adjusted position, substantially as and for the purpose described. 15th. A heating apparatus, comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, a damper, a rocking operating member having an arm provided with a lengthwise guide, and a connection between the damper and the arm, said connection being adjustable lengthwise of the guide, substantially as and for the purpose described. 16th. A heating apparatus, comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a damper for controlling the passage of the products of combustion through the conduit, a chamber heated by the products of combustion passing through the conduit and provided with an inlet opening and with an outlet opening communicating with the combustion chamber, a damper, a rocking operating member having oppositely projecting arms, one arm being provided with a lengthwise guide, a connection between the first damper and one of the arms of the operating member, a connection between the second damper and the arm of the operating member provided with the lengthwise guide, said connection being adjustable lengthwise of the guide, and a connection between the third damper and one of the arms of the operating member, substantially as and for the purpose specified. 17th. A heating apparatus, comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a chamber heated by the products of combustion passing through the conduit, said chamber being provided with an outlet opening, an inlet chamber communicating with the first chamber and having an inlet opening and a movable closure for the inlet opening, said closure being provided with an inlet opening, and a second chamber mounted on the first closure for controlling the flow through the inlet opening in the first closure, substantially as and for the purpose set forth. 18th. A heating apparatus, comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, an inlet chamber communicating with the conduit and having an inlet opening, and a movable closure for the inlet opening, said closure consisting of an upper section pivoted at its top portion, and a lower section pivoted at its top portion to the upper section above the bottom edge thereof, and having a part thereof movable into and out of engagement

with the contiguous portion of the upper section, substantially as and for the purpose described.

No. 66,689. Steam Heating Boiler.

(Chaudière pour chauffage à vapeur.)

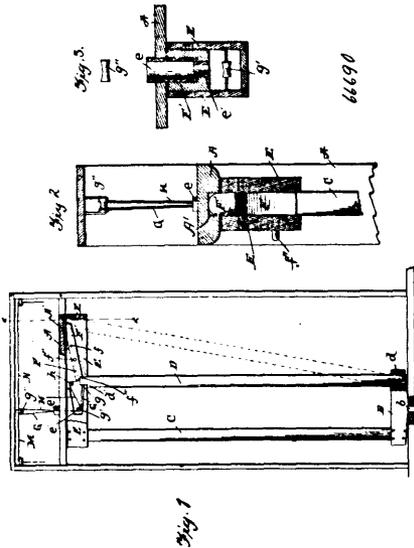


M. R. Jacobus and D. S. Jacobus, both of Ridgefield, New Jersey, U.S.A., 20th March, 1900; 6 years. (Filed 6th March, 1900.)

Claim.—1st. The combination with a steam heating boiler, of a water supply and receiving vessel located at a level with respect to the boiler to be only partially filled with water at all times, and said vessel being connected below the water level with the water space of the boiler and above the water level with the steam space of the boiler, a separator having a connection with the water supply and receiving vessel below its water level, and a connection with the steam space of the boiler, and a steam main connected with said separator, substantially as described. 2nd. The combination with a steam heating boiler, of a water supply and receiving vessel located at a level with respect to the boiler to be only partially filled with water at all times, and said vessel being connected below the water level with the water space of the boiler and above the water level with the steam space of the boiler, and also connected at another level with the water space of the boiler so as to induce circulation of water, a separator having a connection with the water supply and receiving vessel below its water level, and a connection with the steam space of the boiler, and a steam main connected with said separator, substantially as described. 3rd. The combination with a steam heating boiler, of a water supply and receiving vessel located at a level with respect to the boiler to be only partially filled with water at all times and said vessel being connected below the water level with the water space of the boiler, and above the water level with the steam space of the boiler, a separator having a connection with the water supply and receiving vessel below its water level, a steam main connected with the top of said separator, and a connection with the steam space of the boiler and said separator arranged intermediate of its connection with the steam main and its connection with the water supply and receiving vessel, substantially as described. 4th. The combination with a steam heating boiler, of a water supply and receiving vessel located at a level with respect to the boiler to be only partially filled with water at all times, and said vessel being connected below the water level with the water space of the boiler, and above the water level with the steam space of the boiler, a separator having a connection with the water supply and receiving vessel below its water level and a connection with the steam space of the boiler having a downwardly turned discharged end in said separator, and a steam main connected with said separator, substantially as described. 5th. The combination with a steam heating boiler, of a water supply and receiving vessel located at a level with respect to the boiler to be only partially filled with water at all times and said vessel being connected below the water level with the water space of the boiler, and above the water level with the steam space of the boiler, a separator having a connection with the water supply and receiving vessel below its water level, a discharge opening for steam at the top of said separator, and a connection with the steam space of the boiler and said separator arranged intermediate of its connection with the steam main and its connection with the water supply and receiving vessel, substantially as described. 6th. The combination with a

steam heating boiler, of an automatic water supply and receiving vessel placed in constant communication below the water level with the water space of the boiler and also placed in constant communication above the water level with the steam space of the boiler, so that when the water level falls in the boiler, water from said vessel will pass into the boiler, and when there is an excessive return of water to the boiler, it will flow from the boiler into the vessel, a separator having a connection with the water supply and receiving vessel below its water level and a connection with the steam space of the boiler, and a steam main connected with said separator, substantially as described.

No. 66,690. Stanchion. (Etançon.)

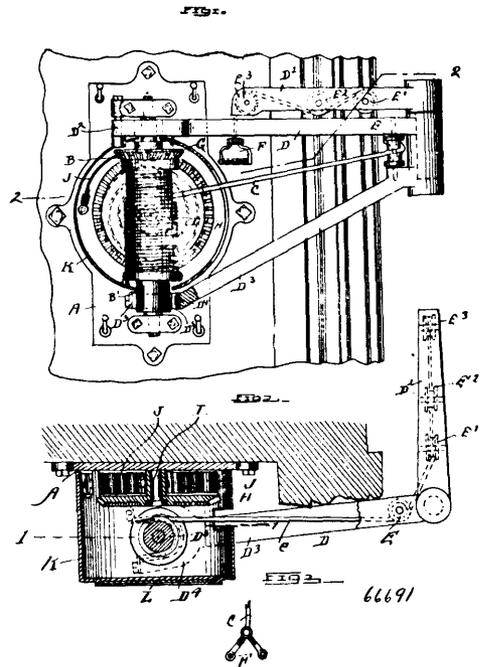


John J. Thurston and John T. Thurston, both of Friendship, New York, U.S.A., 20th March, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. In a stanchion, the combination with the framework, and top and bottom blocks mounted on pivots in said framework of which the uppermost is tubular, one upright bar connecting said blocks, and a second bar pivoted in the lower block and having its upper end movable in the upper block, of a catch within the upper block adapted to engage the pivoted bar when the latter is vertical, and a cord leading from said catch out through said tubular pivot, as and for the purpose set forth. 2nd. In a stanchion, the combination with the framework, and the stanchion proper consisting of top and bottom blocks mounted on aligned pivots on said framework, of which the uppermost is tubular, one upright bar connecting said blocks and fixed thereto, and a second bar pivoted in the lower block and having its upper end movable in the upper block, of a catch pivoted within the upper block and having a notched inner end adapted to engage the upper end of the pivoted bar when the latter is vertical, a cord leading from said inner end of the catch out through said tubular pivot for the upper block, and pulleys therefor, as and for the purpose set forth. 3rd. In a stanchion, the combination with the framework having a notch in its lower side, and the stanchion proper consisting of top and bottom blocks mounted on aligned vertical pivots in said framework, one upright bar connecting said blocks and fixed thereto, and a second bar pivoted in the lower block and having its upper end movable in a slot in the upper block, of a catch pivoted within the upper block and having its inner end adapted to engage the upper end of the pivoted bar when the latter is vertical and its outer end adapted to engage said notch in the framework when the pivoted bar is released, and means for raising said inner end of the catch, as and for the purpose set forth. 4th. In a stanchion, the combination with the framework, the top and bottom blocks pivoted in said framework on aligned pivots of which the uppermost is tubular, said top block being in two spaced members, a rigid bar connecting said blocks, and a pivoted bar, of pulleys between the members of the upper block, and a cord leading

from the upper free end of the pivoted bar, over said pulleys, out through the tubular upper pivot to the main cord, as and for the purpose set forth. 5th. In a stanchion, the combination with the framework, the top and bottom blocks pivoted therein on aligned pivots, the uppermost of which is tubular and shouldered into the upper block, a fixed bar connecting the blocks, and a second bar pivoted in the lower block and moving between the members of the upper block, of a main cord passing over said stanchion, a branch cord leading down through said tubular upper pivot and connected with the upper end of the pivoted bar, a catch pivoted within the upper block and engaging the end of said pivoted bar when the latter is upright, a second main cord, and a cord branched from the second main cord and connected with the free end of this catch, as and for the purpose set forth. 6th. In a stanchion, the combination with the framework, the top and bottom blocks pivoted therein on aligned pivots, a fixed bar connecting the blocks, and a second bar having a reduced lower end pivotally and removably seated in a socket in the lower block and moving at its upper end between the members of the upper block, of means for operating the pivoted bar, a catch pivoted within the upper block and engaging the end of said pivoted bar when the latter is upright, a main cord, and a cord branched from the main cord and connected with the free end of this catch, as and for the purpose set forth.

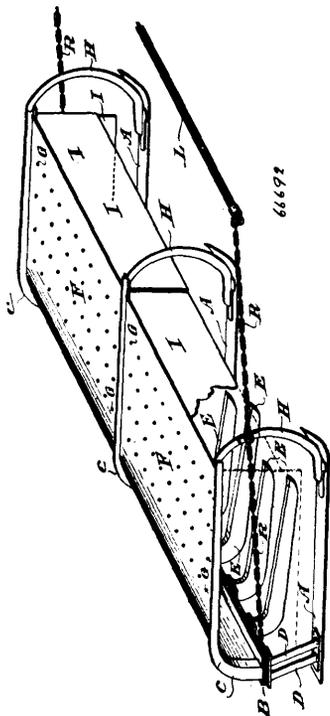
No. 66,691. Fire Escape. (Sauveteur d'incendie.)



Duaref Norwood Jerauld, Buffalo, New York, U.S.A., 20th March, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. A fire escape, comprising a reel, a lever pivoted adjacent to one end of the reel, and provided with a brake arm engaging the other end of the reel, and a lowering device winding and unwinding on said reel and passing in engagement with said lever. 2nd. A fire escape, comprising a reel, a lowering rope winding on said reel and adapted to unwind therefrom, and a lever for guiding the rope from the reel to the outside of the building, said lever having a forked brake arm straddling one of the reel trunnions and provided with a brake band engaging said trunnion, substantially as shown and described. 3rd. A fire escape, comprising a reel, a lowering rope winding on said reel and adapted to unwind therefrom, a lever for guiding the rope from the reel to the outside of the building, said lever having a brake arm with a brake band engaging said reel, and a rewinding device for said reel and comprising a reel gear wheel secured on the reel, a spring, and a second gear wheel and connected with one end of said spring, as set forth.

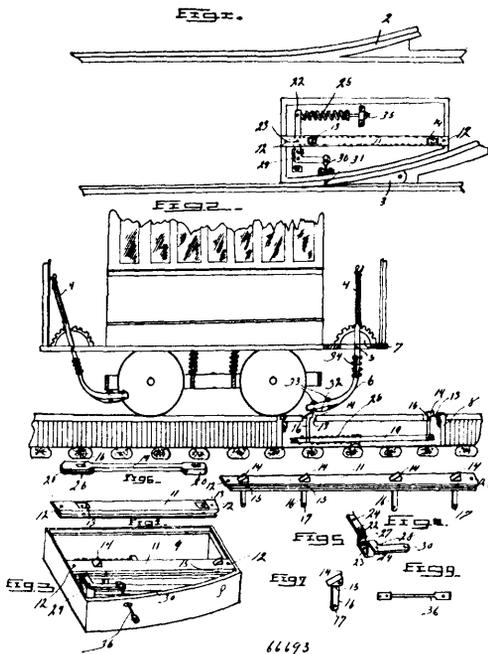
No. 66,692. Stubble Burning Machine.
(Machine à brûler le chaume.)



Edgar Canniff, Winnipeg, Manitoba, Canada, 20th March, 1900 ; 6 years. (Filed 6th March, 1900.)

Claim.—The combination of a fire proof box on runners with side apron and swinging front aprons, fire grates or forks, all substantially as and for the purpose set forth.

No. 66,693. Railway Switch. (Aiguille de chemin de fer.)

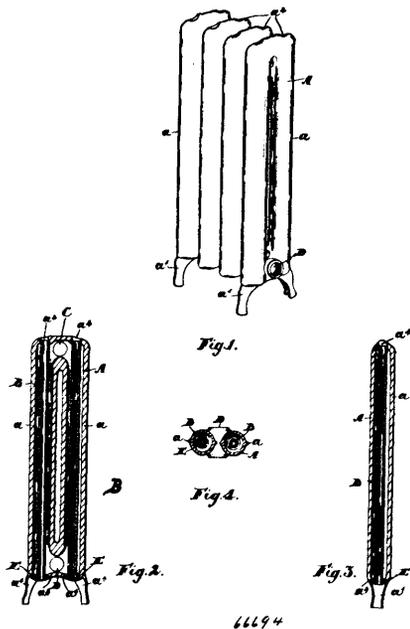


John E. Peter, Thomas, West Virginia, U.S.A., 20th March, 1900 ; 6 years. (Filed 7th March, 1900.)

Claim.—1st. In a switch turning mechanism, the combination of a casing and a supplemental casing, a block arranged therein having inclined faces at each end thereof, shoes arranged in slots formed in said block and pivotally secured therein, shanks arranged on said shoes and formed integral therewith, a lever arm connecting said

shanks, a switch operating arm pivotally connected to said lever arm, the end of said switch operating arm connected to a switch tongue, and curved rearwardly extending levers suspended from the platform of the car adapted to engage said shoes, substantially as described. 2nd. In a switch operating mechanism, the combination with a car platform, of a lever having a rearwardly extending curved extension pivotally secured to the said platform, a casing, a supplemental casing formed integral therewith, a block supported by the first named casing, shoes pivotally secured to a block supported by the said block, a lever arm connecting the said shoes, a switch operating arm connected to the said lever, and a retractile spring having one end connected to the bottom of the first named casing and its opposite end connected to the said switch arm, substantially as set forth.

No. 66,694. Radiator. (Calorifère.)



Frederick Clare, Preston, Waterloo, Ontario, Canada, 20th March, 1900 ; 6 years. (Filed 7th March, 1900.)

Claim.—1st. In a loop radiator, the combination with the loop having holes at the top and bottom of each member thereof, of pipes extending through the centre of each member and securely fastened in the top and bottom holes and open at the top and bottom, as and for the purpose specified. 2nd. In a loop radiator, the combination with the loop having holes at the top and bottom of each member thereof, the top holes of which are threaded, of pipes extending through the centre of each member and securely fastened into the top threaded holes and open at the top and bottom and means for securely holding the bottom of the pipe in position, so as to hold it steam and water tight, as and for the purpose specified. 3rd. In a loop radiator, the combination with the loop having holes at the top and bottom of each member thereof, the top holes of which are threaded, of pipes extending through the centre of each member and securely fastened into the top threaded holes and open at the top and bottom and the thimbles surrounding the bottom of the pipe and fitting into the corresponding holes at the bottom of each member of the loop, as and for the purpose specified. 4th. In a loop radiator an air circulation orifice extending through the top and bottom of each member of the loop and having the wall thereof surrounded by the water or steam jacket of the member, as and for the purpose specified.

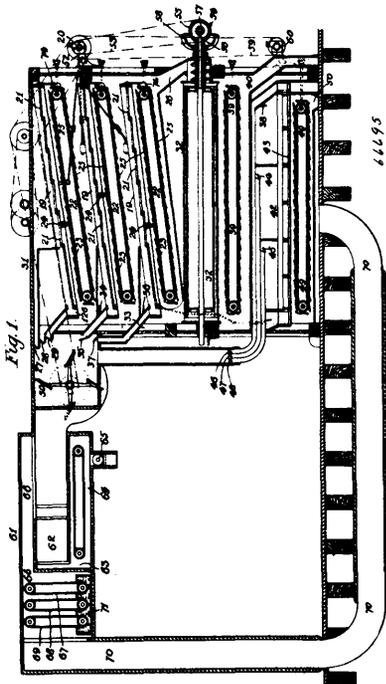
No. 66,695. Flour Mill Scalper, Grader Dresser.

(Appareil de réglage de traitement des moulins à farine.)

George Thomas Smith and William Gardner, Bristol Road, (Gloucester, England, 20th March, 1900 ; 6 years. (Filed 5th March, 1900.)

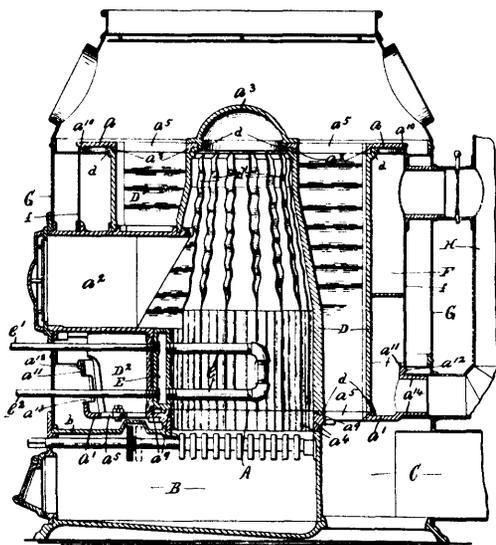
Claim.—1st. The improved combined scalper, grader and dresser constructed and operating substantially as specified, and as shown in the drawings. 2nd. The improved combined scalper, grader and dresser constructed and operating substantially as specified, and as shown in the drawings. 3rd. The improved combined scalper, grader, dresser, purifier and dust collector with a return air device, constructed and operating substantially as specified, and as shown

in the drawings. 4th. The improved carrier for flour or other products consisting in an endless travelling chain of overlapping slats



working over chain wheels or pulleys, substantially as described, and as shown in the drawings.

No. 66,696. Furnace. (Fournaise.)



Elziver O. Rickard, Syracuse, New York, U.S.A., 20th March 1900; 6 years. (Filed 6th March, 1900.)

Claim.—1st. In a furnace, the combination of upper and lower separable walls provided with openings extending vertically therethrough and having their adjacent faces formed with substantially vertical flanges, the flange of the upper wall being of less diameter than said upper wall, and the flange of the lower wall being provided with a peripheral shoulder, a tubular shell surrounding the flange of the upper wall and the upper portion of the flange of the lower wall, and having its end edges engaged with the upper wall

and the peripheral shoulder of the flange of the lower wall, upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, and a water heating chamber also arranged between the upper and lower walls, substantially as and for the purpose described. 2nd. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough and aligned with each other, the lower wall being provided with an upwardly extending flange having outwardly projecting tubular branches or extensions, a closure for one of the branches or extensions, a smoke conduit connected to another of said branches or extensions, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall above the tubular branches or extensions, upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, and a water heating chamber also arranged between the upper and lower walls, said water heating chamber being mounted on the lower wall at the inner side of the upwardly extending flange, substantially as and for the purpose specified. 3rd. In a furnace, the combination of upper and lower separable walls provided with openings extending vertically therethrough and having their adjacent faces formed with substantially vertical flanges, the flange of the upper wall being of less diameter than said upper wall, and the flange of the lower wall being provided with a peripheral shoulder and with outwardly extending tubular branches or extensions arranged beneath said peripheral shoulder, a closure for one of the branches or extensions, a smoke conduit connected to another of said branches or extensions, a tubular shell surrounding the flange of the upper wall and the upper portion of the flange of the lower wall and having its end edges engaged with the upper wall and the peripheral shoulder of the flange of the lower wall, upright air heating conduits arranged between the upper and lower walls and communicating with the openings in said walls, and a water heating chamber also arranged between the upper and lower walls, said water heating chamber being mounted on the lower wall at the inner side of the upwardly extending flange, substantially as and for the purpose set forth. 4th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, a tubular shell interposed between the upper and lower walls, upright air heating conduits forming the upright wall of a part of the combustion chamber of a furnace, said conduits being arranged between the upper and lower walls within the tubular shell and communicating with the openings in said walls, and a water heating chamber also forming the upright wall of a part of the combustion chamber, said water heating chamber being arranged within the tubular shell between two of the air heating conduits, substantially as and for the purpose described. 5th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, the lower wall being provided with an upwardly extending flange, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall, upright air heating conduits forming the upright wall of a part of the combustion chamber of the furnace, said conduits being arranged between the upper and lower walls within the tubular shell at the inner side of the upwardly extending flange of the lower wall and communicating with the openings in said walls, and a water heating chamber also forming the upright wall of a part of the combustion chamber, said water heating chamber being detachably mounted on the lower wall within the tubular shell at the inner side of said upwardly extending flange and between two of the air heating conduits, substantially as and for the purpose specified. 6th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, a tubular shell interposed between the upper and lower walls, upright air heating conduits forming the upright wall of a part of the combustion chamber of the furnace, said conduits being arranged between the upper and lower walls within the tubular shell and communicating with the openings in said walls, a water heating chamber also forming the upright wall of a part of the combustion chamber, said water heating chamber being arranged within the tubular shell between two of the air heating conduits, and a supplemental water heating chamber projecting from the inner face of the former water heating chamber into said combustion chamber, substantially as and for the purpose set forth. 7th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, a tubular shell interposed between the upper and lower walls, upright air heating conduits forming the upright wall of a part of the combustion chamber of the furnace, said conduits being arranged between the upper and lower walls within the tubular shell and communicating with the openings in said walls and having the lower portions of their contiguous sides formed substantially flat and engaged with each other, and the upper portions of said sides corrugated and separated, and a water heating chamber also forming the upright wall of a part of said combustion chamber and arranged within the tubular shell between two of the air heating conduits, substantially as and for the purpose described. 8th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, the lower wall being provided with an upwardly extending flange, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall, upright air heating conduits forming the upright wall of a part of the combustion chamber of the furnace, said conduits being arranged between the upper and lower walls

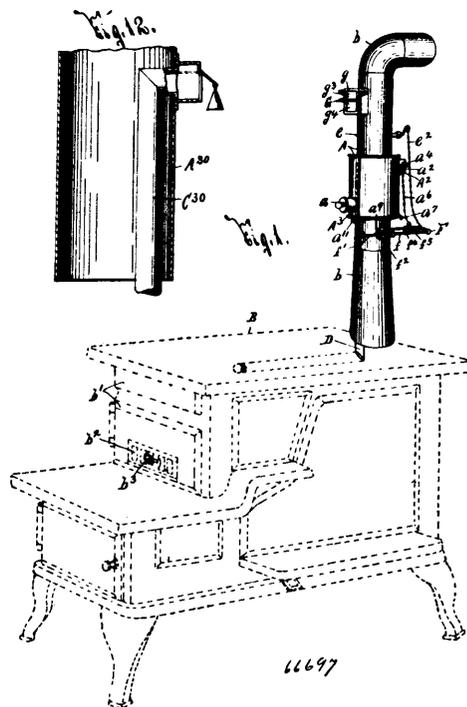
within the tubular shell at the inner side of the upwardly extending flange of the lower wall and communicating with the openings in said walls, a water heating chamber also forming the upright wall of a part of said combustion chamber, said water heating chamber being detachably mounted on the lower wall within the tubular shell at the inner side of said upwardly extending flange and between two of the air heating conduits, and water circulating pipes connected to the water heating chamber, one of the pipes being arranged above said upwardly extending flange, substantially as and for the purpose specified. 9th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, a tubular shell interposed between the upper and lower walls, upright air heating conduits forming the upright wall of a part of the combustion chamber of the furnace, said conduits being arranged between the upper and lower walls within the tubular shell and communicating with the openings in said walls, a water heating chamber also forming the upright wall of a part of the combustion chamber, said water heating chamber being arranged within the tubular shell between two of the air heating conduits, and an air heating chamber arranged within the tubular shell at the outer side of the water heating chamber, substantially as and for the purpose set forth. 10th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough, the lower wall being provided with an upwardly extending flange of the lower wall, upright air heating conduits forming the upright wall of a part of the combustion chamber of the furnace, said conduits being arranged between the upper and lower walls within the tubular shell at the inner side of the upwardly extending flange of the lower wall and communicating with the openings in said walls, a water heating chamber also forming the upright wall of a part of the combustion chamber, said water heating chamber being detachably mounted on the lower wall within the tubular shell at the inner side of said upwardly extending flange and between two of the air heating conduits, an air heating chamber arranged within the tubular shell between said upwardly extending flange and the water heating chamber, a supplemental water heating chamber projecting from the inner face of the former chamber into said combustion chamber and connected to the water heating chamber, and connected to the water heating chamber, one of the pipes being arranged above said upwardly extending flange, and the other being passed through said flange, substantially as and for the purpose described. 11th. In a furnace, the combination of upper and lower separable walls having openings extending vertically therethrough and aligned with each other, the lower wall being provided with an upwardly extending flange formed with an opening extending horizontally therethrough, a tubular shell interposed between the upper wall and the upwardly extending flange of the lower wall, upright air heating conduits forming the upright wall of a part of the combustion chamber of the furnace, said conduits being arranged between the upper and lower walls within the tubular shell at the inner side of the upwardly extending flange of the lower wall and communicating with the openings in said walls, a water heating chamber also forming the upright wall of a part of the combustion chamber, said water heating chamber being detachably mounted on the lower wall within the tubular shell at the inner side of said upwardly extending flange and between two of the air heating conduits, and an air heating chamber arranged within the tubular shell between said upwardly extending flange and the water heating chamber and formed with upper and lower openings communicating with one of the openings extending vertically through the lower wall and the opening extending horizontally through the upwardly extending flange of said lower wall, substantially as and for the purpose specified.

No. 66,697. Heating Apparatus. (Appareil de chauffage.)

Leonidas Doty West, Dundee, New York, U.S.A., 20th March, 1900; 6 years. (Filed 8th March, 1900.)

Claim.—1st. A heating apparatus combining a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a second conduit arranged in the first conduit and communicating with the combustion chamber, said second conduit being provided with an inlet opening, and means for controlling the passage through the inlet opening, substantially as and for the purpose specified. 2nd. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, and a second conduit arranged in the first conduit beneath said means and communicating with the combustion chamber, said second conduit being provided with an inlet opening, substantially as and for the purpose specified. 3rd. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a chamber heated by the products of combustion passing through the conduit, a second conduit arranged in the second chamber and communicating with the combustion chamber, said second conduit being provided with an inlet opening, and means for controlling the passage through the inlet opening, substantially as and for the purpose described. 4th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage

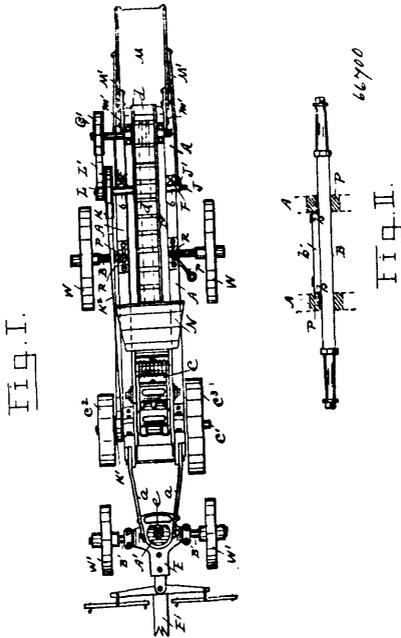
of the products of combustion through the conduit, a chamber arranged beneath said means and heated by the products of com-



bustion passing through the conduit, and a second conduit arranged in the second chamber and communicating with the combustion chamber, said second conduit being provided with an inlet opening, substantially as and for the purpose specified. 5th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, a chamber heated by the products of combustion passing through the conduit, a second conduit arranged in the second chamber and provided with an inlet opening, a third conduit arranged in the first conduit and communicating with the combustion chamber and the second conduit, and means for controlling the passage through the inlet opening, substantially as and for the purpose set forth. 6th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, means for controlling the passage of the products of combustion through the conduit, a chamber arranged beneath said means and heated by the products of combustion passing through the conduit, a second conduit arranged in the second chamber and provided with an inlet opening, and a third conduit arranged in the first conduit and communicating with the combustion chamber and the second conduit, substantially as and for the purpose described. 7th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, said conduit being provided with an enlargement forming a heating chamber, and a second conduit arranged in the enlargement of the first conduit and communicating with the combustion chamber, said second conduit being provided with an inlet opening, substantially as and for the purpose specified. 8th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, said conduit being provided with an enlargement forming a heating chamber, means arranged above the enlargement for controlling the passage of the products of combustion through the conduit, a second conduit arranged in the enlargement of the first conduit, and communicating with the combustion chamber, said second conduit being provided with an inlet opening, and means for controlling the passage through the inlet opening, substantially as and for the purpose set forth. 9th. A heating apparatus comprising a combustion chamber, a conduit communicating with the combustion chamber for conducting the products of combustion therefrom, said conduit being provided with an enlargement forming a heating chamber, means arranged above the enlargement for controlling the passage of the products of combustion through the conduit, a second conduit arranged in the enlargement of the first conduit and provided with an inlet opening, a third conduit arranged in the first conduit beneath the second conduit and communicating with the combustion chamber and the second conduit, and means for controlling the passage through the inlet opening, substantially as and for the purpose described. 10th. A heating apparatus comprising a combustion chamber, a conduit communicat-

block comprising an independent encompassing iron frame and the wooden pin block proper suitably held therein, and bolts extending through the tension bars and frame whereby it is secured to the plate, as and for the purpose specified. 3rd. The combination with the plate proper and tension bars, of a composite pin block comprising an independent encompassing iron frame provided with the inwardly extending retaining flanges at the bottom of the sides and the upper overhanging flange at the outside and having the point of the frame extending into a corresponding recess in the tension bar, the pin block proper comprised of a plurality of layers of wood fitting on the top of the flanges of the frame and within the upper outside flange, and means for securing the composite pin block to the tension bars, as and for the purpose specified. 4th. The combination with the sounding board, of a rim designed to support the sounding board on the edges so as to leave it free to vibrate all around, as and for the purpose specified. 5th. The combination with the sounding board, of a rim having grooved sides designed to support the sounding board on the edges so as to leave it free to vibrate all around, as and for the purpose specified. 6th. The combination with the plate and sounding board, and means for holding the sounding board in position, of the resonator suitably secured to the frame and the pilot pin extending through the plate, sounding board and resonator, as and for the purpose specified. 7th. The combination with the plate and strings of the damper, the lifting pin, the pivot rod connected thereto and the rod of the echo pedal, as and for the purpose specified. 8th. The combination with the plate proper and tension bars, of a composite pin block comprising an independent encompassing iron frame provided with the lower flanges at its sides and the upper overhanging flange at the outside and having the point of the frame extending into a corresponding recess in the tension bar, and means for securing the composite pin block to the tension bars, as and for the purpose specified.

No. 66,700. Rock Crusher. (*Machine à broyer la roche.*)



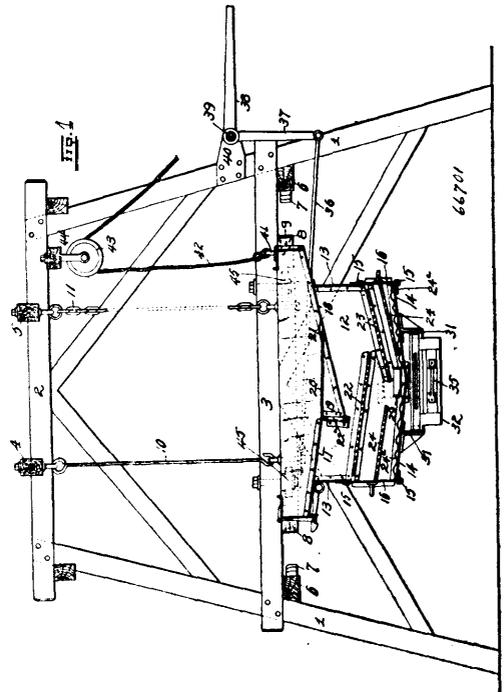
John Challen, Kennett Square, Chester, Pennsylvania, U.S.A., assignee of John Challen, Hamilton, Ontario, Canada, 22nd March, 1900; 6 years. (Filed 27th November, 1899.)

Claim.—1st. In a portably mounted rock crusher mechanism, in combination as described, a carrying frame provided with carriage axles and wheels, said frame consisting of two longitudinal carrier beams suitably united with the pintle block, the rock crusher seated at its respective sides upon the forward portion of the respective carrier beams, its working jaws and delivery rearward, an upright standard attached to and rising from the rear end of each of said carrier beams, the upper part of said standards fitted with seats for the elevator frame thereon, the upward, rearwardly inclined elevator frame in central longitudinal alignment with said crusher and carrying frame, and having its lower end secured between the carrier beams adjacently below the crusher by a transverse rod or pivot, the upper part of said elevator frame embraced between and by the seating faces of said standards, and removable fastenings for rigidly securing the same, the elevator bucket train mounted on suitable guide rolls upon said frame, the train operating wheel and shaft at the top end of the elevator frame, the intermediately disposed countershaft, its sprocket and pulley thereon, and the connecting belts or chains for operating said elevator mechanism, all constructed and organized, substantially as set forth. 2nd. In a portable mechanism of the character specified, comprising the carrying

frame pivotally mounted at its front end upon the rocker plate of the front axle, and having the rock crusher, the rear supporting standards and the upward rearwardly inclined elevator frame fixed thereon all in central longitudinal alignment, as described, the combination of the two carrier beams, an upwardly standing transversely slotted housing fixed upon each of said carrier beams between the elevator foot and the rear support standard, the carriage axle extending through the housing slots, non rotatable but vertically adjustable therein, and having an enlargement whereby it is confined from endwise displacement, between the sides of the opposite housings, the rear travelling wheels running on the ends of said axle, the adjusting screws threaded in the top of said housings with their ends impinging upon said axle, and means for turning and locking said screws, substantially as shown and described. 3rd. In combination with the bed or carrier frame having the rock crushing mechanism and elevator mechanism thereon, of the front bearing neck having its end block provided with a hole or opening, the front axle carrying the tongue attaching pintle plate provided with an upwardly projecting knob or stud that enters said opening as a pintle, said stud disposed in rear of the vertical central plane of the axle, said parts adapted to permit the tongue to be used as a lever for raising or depressing the fore end of the machine, or detaching the axle support, as and for the purpose set forth. 4th. In a portably mounted rock crusher and elevator, the combination with the carrier frame, the rock crusher with crushing jaws, elevator bucket train and its supporting frame, and the upright standards with bars H, extending from said standards to the crusher frame, of the feed platform N, secured upon said bars adjacent to the crusher mouth and forming a guard for the lower part of the elevator, substantially as set forth. 5th. In a portably mounted rock crushing mechanism, comprising a wheeled carrier, a crusher and an elevator mechanism supported in relation to the carrier, as described, the combination with the carrier frame and the elevator frame pivotally attached thereto near its lower end, of the oppositely disposed elevator supporting standards F, having shoulders f, the countershaft J, arranged in bearings fixed at mid-height on said standards, the adjustable collar J', on said shaft, and the removable fastenings m, said parts adapted for adjustment and support of the elevator frame, substantially as set forth.

No. 66,701. Ore Washers and Concentrators.

(*Concentrateur de minerai.*)

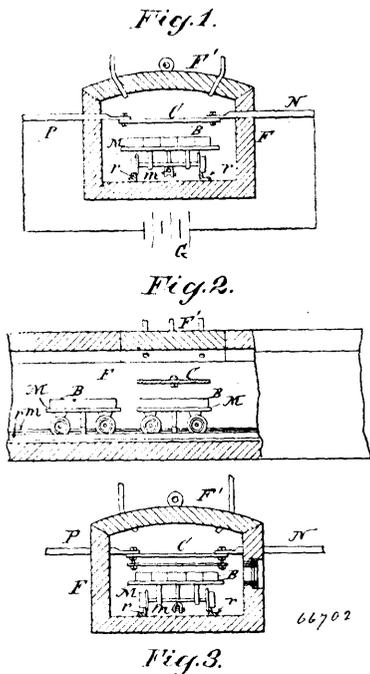


John Charles Freeman, Boston, Massachusetts, assignee of Arthur L. Dana, Roswell, Colorado, U.S.A., 22nd March, 1900; 6 years. (Filed 27th January, 1900.)

Claim.—1st. An ore washer and concentrator, comprising a suitable supporting frame, an oscillating frame carried by said frame, a receptacle carried by said oscillating frame, false inclined bottoms for said receptacle, screens within said receptacles below the said false bottoms, and a means for oscillating the said oscillating frame and receptacles, substantially as specified. 2nd. A device of the class described, comprising a supporting frame, a frame carried by said supporting frame, which frame is adapted to be oscillated, a receptacle carried by said oscillating frame, false bottoms within

said receptacle, screens within said receptacle below said false bottoms, which screens are of various mesh, and a hand lever for oscillating frame and receptacle, substantially as specified. 3rd. A device of the class described, comprising a supporting frame, an oscillating frame carried by said supporting frame, a receptacle rigidly carried by said oscillating frame, false bottoms within said receptacle, screens of various mesh within said receptacle, said receptacle having covered apertures leading therefrom, an auxiliary receptacle removably carried below the first mentioned receptacle, said auxiliary receptacle having an inclined bottom, a slide carried at one end of said receptacle, and means for oscillating the said frame and all of said receptacles, substantially as specified. 4th. A device of the class described, comprising a supporting frame, an oscillating frame carried by said supporting frame, a receptacle rigidly carried by said oscillating frame, a means for oscillating said frame and receptacle, and a means for elevating one end of the said oscillating frame and receptacle, substantially as specified.

No. 66,702. Enamelling. (Emaillure.)



Charles Henry Waterman, Pompton Plains, New Jersey, U.S.A., 22nd March, 1900; 6 years. (Filed 19th February, 1900.)

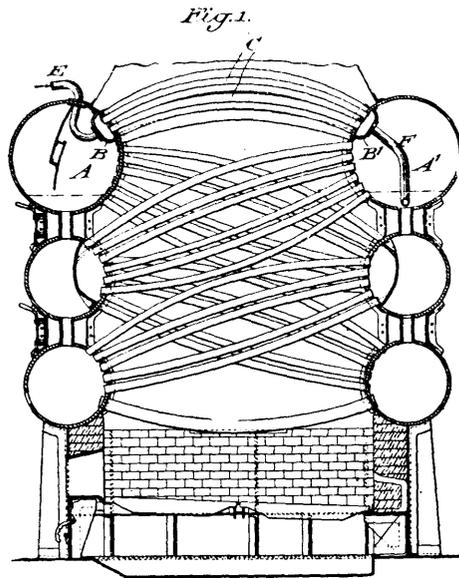
Claim.—The process herein set forth of flashing enamel onto surfaces of a refractory material, which consists in applying the enamelling material to the desired surface and subjecting such surface to the action of uniform electric heat delivered at once on and over the entire coated surface in a plane parallel thereto, whereby all the enamelling material is instantaneously and simultaneously fused over the whole surface to which it is applied while the body of the article is left relatively cool.

No. 66,703. Feed Water Heater. (Chauffeur d'eau d'alimentation.)

Jiro Miyabara, Tokio, Japan, 22nd March, 1900; 6 years. (Filed 8th March, 1900.)

Claim.—1st. In a water tube boiler the combination with the front and back top drums or steam chambers thereof, of hollow casings located within the said top drums, feed water heating tubes crossing between the two drums and communicating with the hollow casings, a feed water inlet pipe arranged to enter one of the said hollow casings and a feed water outlet pipe arranged to lead from the other hollow casing, the said feed water outlet pipe having open communication with the interior of the drum within which it is located, substantially as set forth. 2nd. In a water tube boiler, the combination with the front and rear top drums thereof, of feed water heating tubes crossing between the two drums, hollow casings located within the said top drums, the said casings being provided with partitions so as to form junction pockets for said feed water tubes, a feed water inlet pipe leading to the end compartment in one of the hollow casings and a feed water outlet pipe leading from the end compartment of the other hollow casing, the said water outlet pipe having open communication with the hollow drum within which it is located, substantially as set forth. 3rd. In a water tube boiler the combination with the two drums thereof and tubes connecting

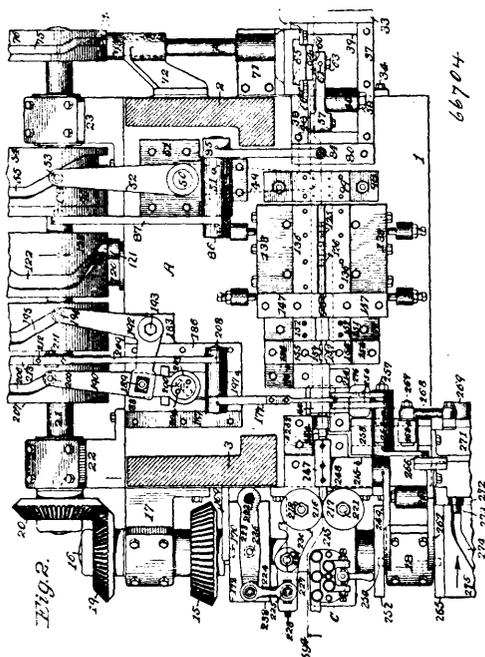
the drums at the extreme side of the boiler, of feed water heating tubes crossing between the two drums intermediate the first men-



66703

tioned side tubes, hollow casings located within the top drums for receiving the ends of the feed water heating tubes, a feed water inlet pipe leading to one of the hollow casings and a feed water outlet pipe leading from the other of the hollow casings and in open communication with the interior of the drum within which it is located, substantially as set forth.

No. 66,704. Machine for Manufacturing Sheet Metal Hinges. (Machine pour la fabrication de penture de feuille metallique.)



66704

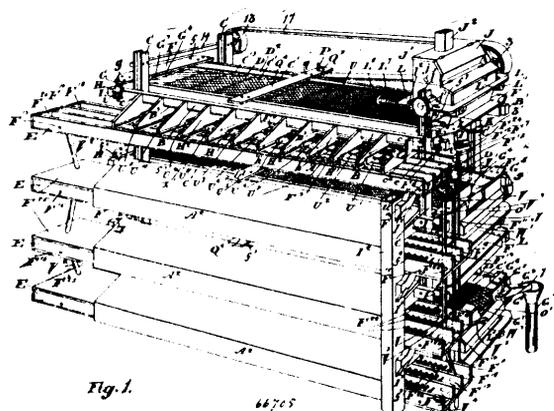
Charles F. Smith and George Morton, both of Hartford, Connecticut, U.S.A., 22nd March, 1900; 6 years. (Filed 15th April, 1899.)

Claim.—1st. In a machine of the class specified, the combination of means for feeding a metal strip at predetermined intervals, devices for slitting and forcing members below the plane of the metal strip, means for carrying the members above the plane of the metal strip, devices for completing the circular form of the members to form knuckles, devices for severing the leaves from the endless strip,

means for bringing one leaf toward the other and means for inserting the pin, substantially as described. 2nd. In a hinge making machine, comprising in combination, a reciprocating feed slide for supporting a metal strip, means for alternately holding and releasing that strip on that feed slide, means for slitting and forcing the members below the plane of the metal strip, means for carrying the members above the plane of the metal strip, devices for completing the circular form of the members to form knuckles, devices for severing the leaves from the endless strip, means for bringing one leaf toward the other, means for feeding a wire at predetermined intervals in the opposite direction to that of the metal strip, and inserting the same into the knuckles, all substantially as set forth. 3rd. In a hinge making machine, the combination of a longitudinal reciprocating feed slide, the arm 43 engaging said feed slide, shaft 44, and arm 45, the connecting rod 48, arm 49, shaft 50, arm 51, and cam 54, the clamping lever 57, pivoted in the feed slide one of the ends of the clamping lever adapted to press on the metal strip and the feed slide, the other end provided with the projection engaging the track parallel to the motion of the feed slide, devices for moving the track vertical to the motion of the feed slide, all combined and operating, so that the clamping finger alternately engages and disengages the metal strip while the feed slide reciprocates. 4th. In a hinge making machine, the combination of a longitudinal reciprocating feed slide, the arm 43, engaging said feed slide, shaft 44, and arm 45, means whereby the distance from the fulcrum to the shaft is adjustable to vary the longitudinal motion of the feed slide, the rod 48, arm 49, shaft 50, and arm 51 and cam 54, the clamping lever pivoted in the feed slide having one of its ends adapted to press on the metal strip and feed slide, the other end provided with the projection engaging the track parallel to the motion of the feed slide, devices for moving the track vertically to the motion of the feed slide, all combined and operating so that the clamping finger alternately engages and disengages the metal strip while the feed slide reciprocates. 5th. In a hinge making machine, the combination of a longitudinal reciprocating feed slide, the arm 43 engaging said feed slide, shaft 44 and arm 45, the connecting rod 48, arm 49, shaft 50, arm 51 and cam 54, the clamping lever 57 pivoted in the feed slide, one of the ends of the clamping lever adapted to press on the metal strip and the feed slide, means for adjusting the block vertically to increase or decrease the grip on the metal strip, the other end provided with the projection engaging the track, located parallel to the motion of the feed slide, all combined and operating so that the adjustable clamping finger alternately engages and disengages the metal strip while the feed slide reciprocates. 6th. The combination of a set of dies capable of a vertical reciprocation toward and from each other, of tools mounted in the upper press gate and so operating with a stationary set of dies, devices to sever the members from the strip and bring the same in a plane below the plane of the feed, means for moving first one member, and finally moving both members in unison. 7th. The combination of the upper and lower press gates supported in the bed of the machine and capable of vertical reciprocation toward and away from each other, of tools mounted in the upper press-gate and co-operating with a stationary set of dies, means for severing the members from the metal strip and forcing the same below the plane of the feed on the anvil 164, devices for moving first one member and finally moving both members in unison in a line vertical to the motion of the feed, substantially as described. 8th. In a hinge making machine, the combination with sheet metal strip feeding mechanism, mechanism for forming the knuckles on the members before severing from that strip, devices for severing the members to form the leaves for the hinge, mechanism for transferring first one member, wire fed mechanism for feeding the wire in the opposite direction to the feed of the metal strip, and mechanism for automatically discharging the two leaves with the inserted pintle, substantially as described. 9th. In a hinge making machine, the combination with the sheet metal strip feeding mechanism, mechanism for forming the knuckles on the members before severing from that strip, devices for severing the members to form the leaves for the hinge, mechanism for transferring first one member in a vertical line to the motion of the sheet metal strip, wire feed and severing devices for inserting the pintle in the opposite direction to the feed of the metal strip, and mechanism for discharging the assembled leaves with the inserted pintle, substantially as described. 10th. In a machine of the class specified, the combination of means for performing successive steps in the formation of several pairs of hinge leaves from opposite sides of the longitudinal median line of the strip of metal, while the leaves remain integral with the strip, means for cutting off the leaves of each pair as they are completed, a device for transferring one of said leaves laterally to bring its knuckles into line with the knuckles of the other leaf, and a pintle feeding mechanism to feed a pintle forward and insert the same into the knuckles of the assembled leaves, substantially as described. 11th. In a hinge machine, the combination of means for performing successive steps in the formation of several pairs of hinge leaves from a strip of metal while the leaves remain integral with the strip, means for cutting off and assembling the opposite leaves to bring their knuckles into line, a pintle feeding mechanism in the line of travel of the strip to feed a pintle in the opposite direction and insert it into the knuckles of the assembled hinge, and means for removing the completed hinge from the line of travel of the strip, substantially as described. 12th. The combination in a hinge machine, of means for performing successive steps in the formation

dinal median line of the strip of metal while the leaves remain integral with the strip, means for assembling the opposite leaves to bring their knuckles into line, a pintle feeding mechanism in the line of travel of the strip to feed a pintle in the opposite direction and insert it into the knuckles of the assembled leaves, and means to pinch the knuckles of one of the leaves upon the pintle, substantially as described. 13th. The combination in a hinge machine, of a step-by-step strip feeding mechanism, reciprocating tools for slitting and bending members from opposite sides of the longitudinal median line of the strip out of the plane of the strip, reciprocating tools for bending said members into circular form to constitute knuckles, a reciprocating cutter to sever the opposite leaves from the strip, and means for assembling the opposite leaves of each pair. 14th. The combination of the carriage 188, means for reciprocating that carriage, the auxiliary slide 197 mounted in that carriage, means for reciprocating the auxiliary slide at predetermined intervals, the assembling finger pivotally mounted on that slide, means for vibrating that assembling finger, all combined and operating so that the assembling finger grips one member and carries the same forward two predetermined successive distances, substantially as described. 15th. The combination of the carriage 188, means for reciprocating the carriage, the auxiliary slide 197 mounted on that carriage, means for reciprocating the auxiliary slide, the arm 190 provided with the annular shouldered ring, the grooves 201, the assembling finger pivotally mounted in the auxiliary slide, means for vibrating that assembling finger, all combined and operating so that the assembling finger grips one member to assemble the one with the other, and finally moves both members in unison. 16th. The combination of the carriage 188, means for reciprocating that carriage, the auxiliary slide 197 mounted on the carriage and capable of a reciprocatory motion by a cam, the arm 190 with an adjustable throw, consisting of the annular ring provided with the angular groove, means for operating the arm 190 by the cam, the assembling finger pivotally mounted on the auxiliary slide, and means for operating the same by the cam, all substantially as described and for the purpose set forth. 17th. The combination of the reciprocating slide 258, provided with the shaft 257, adapted to receive the gripper finger 256 and arm 259, the arm 262 provided with the jaws 266 and engaging the cam 265, whereby an operative connection is effected between the cam and the gripper fingers, and means for reciprocating the slide 258, consisting of the cam 275, substantially as described. 18th. The combination of the reciprocating slide 258, the connecting rod 268 pivotally attached thereto, the arm 269, shaft 270, arm 272 and cam 275, the slide adapted to receive the shaft 257, provided with the gripper finger 256 and arm 259, the arm provided with a projection engaging between the jaws 266, devices for giving the jaws a vertical movement to the line of movement of that slide, substantially as described.

No. 66,705. Roller Flour Mill. (Moulin à farine.)



George Fenson, Chesley, Ontario, Canada, 22nd March, 1900; 6 years. (Filed 15th February, 1900.)

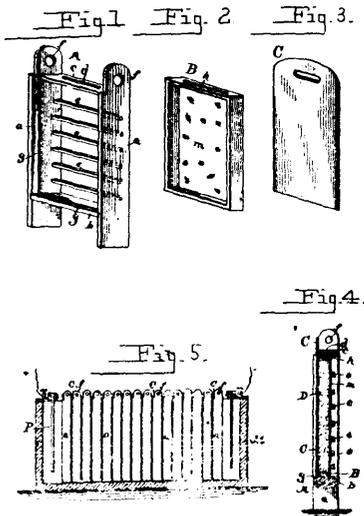
Claim.—1st. A roller flour mill, comprising a horizontally held and movable sieve frame suitably supported and operated, said sieve frame being provided with a series of sieves of different mesh, for sorting the stock, suitable break rolls for grinding the stock, journaled in a suitable cabinet, and situated above said sieve frame, suitable means for operating said break rolls, suitable means situated underneath the series of sieves in said movable sieve frame so as to receive the stock passing through the said series of sieves, and convey it away, and suitable means for operating the same, as set forth and for the purpose specified. 2nd. A roller flour mill, comprising a series of horizontally held and movable sieve frames, suitably supported and provided with the described means for grinding the stock, said sieve frames being held one above the other

so that a vertical line will pass through the balancing centre of each sieve frame, each sieve frame being provided with a series of sieves of different mesh placed in tiers, for sorting the stock, each of the sieve frames being moved in the contrary direction to the sieve frames immediately above or underneath it, suitable means for operating said sieve frames, and suitable means for disposing of the stock, as set forth and for the purpose specified. 3rd. A roller flour mill, comprising a series of horizontally held and movable sieve frames, suitably supported and operated, said sieve frames being held one above the other as described, and each sieve frame being moved in contrary direction to the sieve frames immediately above or underneath it, said sieve frames being provided with a series of sieves of different mesh placed in tiers, for the purpose of sorting the stock, suitable break rolls for grinding the stock, journaled in suitable cabinets situated above one end of each sieve frame, suitable means for operating said break rolls, a series of suitable receptacles situated underneath the series of sieves in said movable sieve frame so as to receive the stock passing through said sieves, suitable means operating in said series of receptacles for conveying the stock to suitable side receptacles, suitable means for operating the conveying means in said receptacles, suitable means operating in said side receptacles for conveying the stock to suitable spouts by means of which it is either conveyed out of the machine, or further down the machine to break rolls supported and operated as described, and suitable means for operating said conveying means in said side receptacles, as set forth and for the purpose specified. 4th. A roller flour mill, comprising a series of horizontally held and movable sieve frames, suitably supported and operated, each sieve frame being provided with a series of sieves of different mesh for sorting the stock, placed in tiers, each of the said sieve frames being moved in the contrary direction to the sieve frame immediately above or underneath it, a suitable cabinet provided with break rolls for grinding the stock suitably supported above each sieve frame and at one end thereof, the ends of the sieve frames into which the stock is first introduced being provided with the sieves of the mesh, and being held above or beneath the ends of the sieve frames through which the unseparated stock passes into the said cabinets and between the said break rolls, as set forth and for the purpose specified. 5th. In a roller flour mill, the combination with the series of movable sieve frames placed and operated as described, supports for the same, means for operating said sieve frames, the series of sleeves of different mesh held in tiers in said sieve frames, described means for grinding the stock and suitable means for operating the same, of suitable receptacles placed so as to receive the stock that passes through the said series of sieves in said sieve frames, suitable means operating in said receptacles for conveying the stock from underneath said series of sieves, and suitable means for operating the same, as set forth and for the purpose specified. 6th. In a roller flour mill, the combination with the series of sieve frames placed and operated as described, supports for same, means for operating said sieve frames, the series of sieves of different mesh placed in tiers supported in said sieve frames, means for grinding the stock, and suitable means for operating the same, of suitable cross conveyor receptacles placed so as to receive the stock that passes through the said series of sieves, suitable means operating in said cross conveyor receptacles for conveying the stock therefrom, suitable side conveyor receptacles placed underneath said cross conveyor receptacles, and at their outer ends thereof for receiving the said stock, and suitable means for operating the conveying means in the cross conveyor receptacles placed underneath the series of sieves, as set forth and for the purpose specified. 7th. In a roller flour mill, the combination with the series of sieve frames placed and operated as described, supports for same, means for operating said sieve frames, the series of sieves of different mesh placed in tiers supported in said sieve frames, means for grinding the stock, and suitable means for operating the same, of suitable cross conveyor receptacles placed so as to receive the stock that passes through the said series of sieves, suitable means operating in said cross conveyor receptacles for conveying the stock therefrom, suitable side conveyor receptacles placed underneath the cross conveyor receptacles and at their outer ends thereof for receiving the said stock, suitable means for operating the conveying means in the cross conveyor receptacles, spouts suitably held and supported for receiving the stock from the side conveyor receptacles, and conveying said stock to the described grinding means, or else out of the machine, suitable means operating in said side conveyor receptacles for conveying the stock to said spouts, the suitable means for operating said conveying means in said side conveyor receptacle, all arranged as set forth and for the purpose specified. 8th. In a roller flour mill the combination of a series of suitable break rolls suitably supported, means common to said break rolls for operating the same, a series of sieve frames, said sieve frames being one above the other, as described, means common to said sieve frames for operating the same, as set forth and for the purpose specified. 9th. In a roller flour mill the combination of a series of movable sieve frames placed as described, supports for same, means common to said sieve frames for operating the same, said sieve frames being operated so that a predetermined number will move together in one direction, while a predetermined number will move together in a contrary direction, of suitable feeders for the purpose described, supports for same common to said feeders for operating the same, all the feeders at both ends of the machine being moved outwardly or inwardly at the same time, all arranged as set forth and for the purpose specified.

10th. The combination with the sieve frame, constructed as described, and means for operating same, of the ball bearing brackets, supports for said ball bearing brackets, said ball bearing brackets supporting said sieve frame at its four corners, as set forth and for the purpose specified. 11th. In a roller flour mill the combination with the sieve frame placed and operated as described, supports for same, means for operating said sieve frame, the series of sieves of different mesh supported in said sieve frame, rectangular openings in the frame of each sieve, and suitable means for grinding the stock, of suitable receptacles suitably supported and placed underneath said sieves so as to receive the stock from each sieve at any stage of its movement, as set forth and for the purpose specified. 12th. A roller flour mill comprising the combination of any suitable number of sections or machines, each section or machine comprising a sieve frame, constructed or described, supports for the said sieve frame, standards for same, means common to said sieve frames for operating the same, cabinets, break rolls journaled in said cabinets, one of said cabinets, being suitably supported above one end of each sieve frame, means common to said break rolls for operating the same, feeders for said cabinets, supports for same, means common to said feeders for operating the same, cross conveyers, supports, and operating means for same, side conveyers, supports, and operating means for same, and spouting suitably supported, the standards of each section being capable of being secured to the standards of the succeeding section, and the spouting of each section being capable of being connected to the spouting of each succeeding section, the several parts of each section being connected and so operated as to make the sections or machines into one complete machine, as set forth and for the purpose specified. 13th. In a roller flour mill the combination with the sieve frames held, supported, and operated as described, and breakrolls supported and operated as described, of suitable cross conveyers supported and adjusted as described, means in said cross conveyers for conveying the stock therefrom, means for operating the same, and suitable means for conveying away said stock, as set forth and for the purpose specified. 14th. In a roller flour mill the combination with the horizontally held sieve frames operated as described, supports for same, and series of sieves C¹, of the tail sieves, tailings guides, and passageways from said sieve frames, conveying spout, and spout connecting said sieve frames to said conveying spout, all arranged as set forth and for the purpose specified. 15th. In a roller flour mill the combination with the horizontally held sieve frames operated as described, supports for same, and series of sieves C¹, held therein, of the tail boards G³, openings G⁴, feed shakers O¹, break rolls described supports for same, means for operating said break rolls, all arranged as set forth and for the purpose specified. 16th. In a roller flour mill the conveyor mechanism comprising a series of cross conveyers suitably supported underneath the series of sieves in the before described sieve frames, so as to receive the stock passing therethrough, suitable means operating in said cross conveyers to convey the stock into a series of side conveyers suitably supported underneath the discharging ends of said cross conveyers, suitable means operating in said conveyers for disposing of the stock, the said operating means in the said side and cross conveyers being operated by any suitable means, as set forth and for the purpose specified. 17th. In a roller flour mill the combination with the sieve frames constructed, supported and operated as described, described means for grinding the stock, side conveyers, suitable supports for same, shafts journaled in said side conveyers, sprocket wheels keyed thereto, means for operating said shafts, scraper chains F²², operated by said shafts, cross conveyers placed as described, suitable supports for same, shafts journaled in said cross conveyers sprocket wheels keyed thereto, means for operating said shafts, and scraper chains F²⁰, operated by said shafts, of the false bottom Y, suitably supported in the side conveyers, all arranged as set forth and for the purpose specified. 18th. In the combination of the sleeves C¹, T-shaped supports C³, staples C⁴, and sieve frame side boards D¹ and D², all arranged as set forth and for the purpose specified. 19th. The combination with the standards C, and brackets K, of the yokes L, bearings L¹, shafts I¹ and I², break rolls L⁶, and K¹, caps L², lugs L³, rod L⁵, spring L⁷, nuts L⁸ and L¹¹, screws L³ and slots L⁴, all arranged as set forth and for the purpose specified. 20th. The combination of the ball bearing bracket portions G and I, supports for same, and means for securing the said ball bearing portions to said supports, races T, conical-shaped raised centres T¹, and ball T², all arranged as set forth and for the purpose specified. 21st. The combination with the standard C, yoke L, bearing L¹, and shaft of break roll held in same, of the bracket K, slots F, lugs M, screws K, and screw O, all arranged as set forth and for the purpose specified. 22nd. The combination with the sieve frames, supports for same, as described, cross bars G¹, and side bars B¹, of the shaft P, suitable means for driving same, boss Q², eccentric Q³, and set screw Q¹, all arranged as set forth and for the purpose specified. 23rd. The combination of the standards C, C, sieve frames D, bars F, side bars B and B¹, cross conveyor frames H¹, side bars B³ and B⁴, side conveyers E, all arranged as set forth and for the purpose specified. 24th. The combination of the sieve frames D, operated as described, supports for same, sieve C¹, rectangular openings G², and cross conveyers supported as described underneath said sieves, all arranged as set forth and for the purpose specified. 25th. A ball bearing bracket for giving the movement required which consists of an upper and lower portion, each portion being provided with a ball race in which the ball operates, and a suitable raised portion so that

when the upper portion of the bracket is placed upon the ball resting in the race of the lower portion of the bracket, the said ball is between the two suitable shaped raised portions so that when the upper portion of the bracket is moved, the suitable raised portion thereof is caused to describe a circular movement around the lower suitable shaped raised portion of the lower portion of the bracket which is held stationary, and consequently transmits this motion to its support, as described. 26th. The combination of the shaft P, support and means for operating said shaft, eccentric Q², keyed thereto, sieve frame D, portions G and I of the ball bearing bracket constructed and supported as described, all arranged as set forth and for the purpose specified. 27th. The combination of the upper portion G, and lower portion I, of the ball bearing bracket, suitable supports for said ball races T, conical shaped centre projections T¹ and ball T², all arranged as set forth and for the purpose specified.

No. 66,706. Electrolytic Apparatus.
(Appareil électrolytique.)



66706

Friedrich A. Thum, Newark, New Jersey, U.S.A., 22nd March, 1900; 6 years. (Filed 21st November, 1899.)

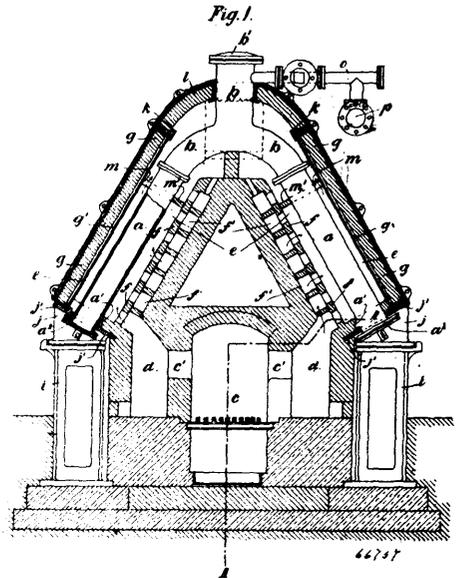
Claim.—1st. An element of an electrolytic series plant, consisting of a non-conducting frame adapted to hold the material to be treated, said frame being closed at one side by a removable plate of conducting material, and at the opposite side by a non-conducting foraminous material, such as muslin, substantially as and for the purpose specified. 2nd. An element of an electrolytic series plant, consisting of a non-conducting frame adapted to hold the material to be treated, said frame being closed at one side by a removable plate of conducting material, such as metal or carbon, and at the opposite side by a non-conducting foraminous material, such as muslin, and also being provided with a charging opening at top, substantially as and for the purpose specified. 3rd. A casing for an electrolytic series plant, adapted to receive and hold the material to be treated, and consisting of a frame A formed of side pieces *a a* and bottom *b* with grooves *g*, top *c* with opening *d* and cross bars *e e*, frame B with opening *h* at the top and closed at the outer end by a diaphragm of muslin *m*, said frame B inserted into the frame A so that the muslin *m* is supported by the cross bars *e e* and that the opening *h* is beneath the opening *d*, and a plate C of metal or carbon removably inserted into the grooves *g*, substantially as and for the purpose specified. 4th. An electrolytic apparatus embodying a tank adapted to receive and hold the electrolytic liquid, terminal conductors and suitable connections, elements arranged in series between the conductors, each element consisting of a casing closed at the end facing the positive pole by a plate of metal or carbon and at the opposite end by foraminous non-conducting material, such as muslin properly supported, said casings adapted to receive and hold the material to be treated, substantially as and for the purpose specified.

No. 66,707. Electrode for Storage Batteries.
(Electrode pour accumulateur d'électricité.)

Edouard Perrot, Chateau de Padron Nautua, France, 22nd March, 1900; 6 years. (Filed 23rd December, 1899.)

Claim.—As an improvement in the method of making electrodes, forming an active plastic mass, and enclosing the same within a closed porous vessel, whereby the gases given off by the mass form an inner pressure, thereby insuring a contact of the molecules and

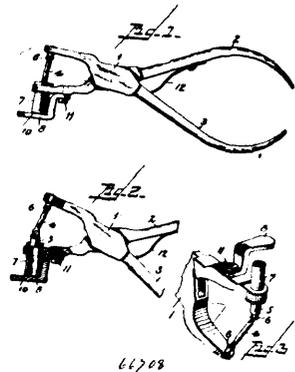
the conductor they surround, filling said porous vessel to near the top thereof, with oxide metallic powder, leaving only a small space



66707

at the top, hermetically sealing the vessel and then placing the same in an acidulated liquid, which penetrates through the pores of the vessel, impregnates the oxide metallic powder and forms a plastic mass thereof and causes the same to entirely fill the vessel, substantially as described.

No. 66,708. Dental Tool. (Outil dentaire.)



66708

David Aiken, Wynnboro, South Carolina, U.S.A., 22nd March, 1900; 6 years. (Filed 5th February, 1900.)

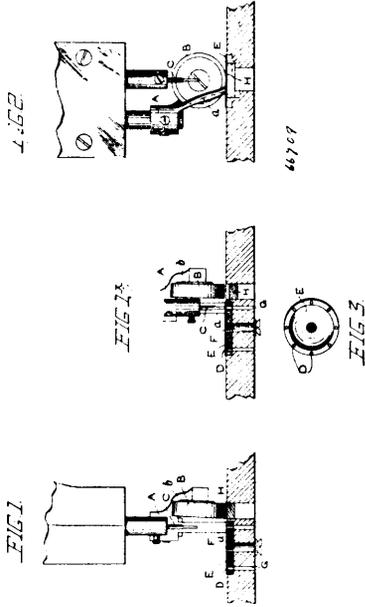
Claim.—1st. In a dental tool, a receptacle for the material, means for compressing the same, a base piece, and openings at the lower end of the receptacle to permit the mercury to escape. 2nd. In a dental tool, a receptacle for the material, a plunger operating in the same, means to actuate the plunger, and a movable base piece to retain the material in the receptacle but permit the mercury to escape. 3rd. In a dental tool, a receptacle for amalgam or the like, a hinged plunger operating in the same, pivoted levers for operating the plunger, and a movable base piece adapted to retain the amalgam but permit the escape of the mercury. 4th. In a dental tool, a receptacle for amalgam or the like, a plunger operating in the same, an opening to permit escape of mercury, a base piece to retain the amalgam, a pivot upon which said base piece may be swung away from the receptacle, and means for operating the plunger.

No. 66,709. Machine for Perforating Lays or Templates for Marking Cloth, etc. (Machine pour perforer les patrons à marquer le drap, etc.)

James Marsden, The Lines, Standish, near Wigan, Lancaster, England, 22nd March, 1900; 6 years. (Filed 7th June, 1898.)

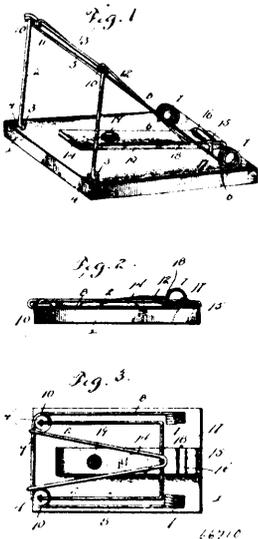
Claim.—1st. In a machine for perforating templates for marking cloth and the like, the combination with a vertically reciprocating punch and a matrix die accurately fitting said punch, of a feed dog

to feed the material, a presser bar, and two presser feet rigidly mounted upon the presser bar and arranged over the die and feed



dog respectively to alternately hold or press the material as the feed dog is moved out or into operation, substantially as hereinbefore described. 2nd. In a machine of the kind described for perforating templets for marking cloth and the like, a presser foot for holding or pressing the material, consisting of a bracket rigidly fixed on the presser bar and having a straight foot bearing on the material to one side of the feed dog, and a second foot carrying revolubly mounted thereon a roller or wheel bearing on the material over the feed dog when the latter is in its highest position, substantially as hereinbefore described. 3rd. In a machine for perforating templets for marking cloth and the like, the combination with a vertically reciprocating punch and a matrix die accurately fitting said punch and the feed dog and presser roller device, of sewing machines, of a vertically sliding spring propelled bracket carrying the presser roller and a second presser foot immediately above the die and carried rigidly by the bracket, and of such length that when the feed dog is depressed the second presser foot bears on the material, but when the feed dog rises and raises the feed roller the second presser foot rises with it clear of the material, whereby there is always one presser foot holding the material.

No. 66,710. Animal Trap. (Piège.)

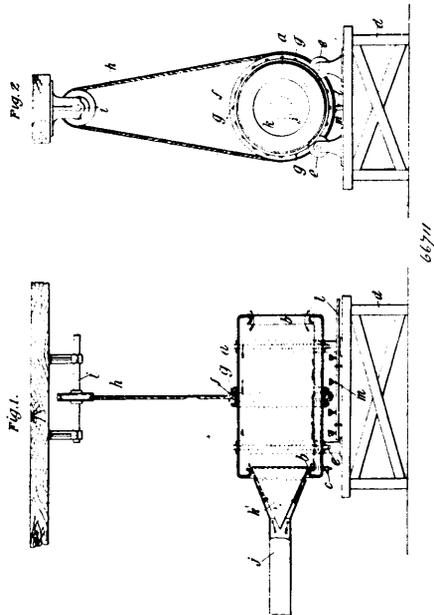


William C. Hooker, Abington, Illinois, U.S.A., 22nd March, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. In a trap, the combination of a base, a treadle movably secured to the base and having means for holding bait, a

a spring gripping jaw having guides at its free end, a freely movable loosely connected setting jaw having portions extending through said guides of the gripping jaw, and a trigger movably attached to the free end of the gripping jaw, the rear terminal of the said trigger being loosely applied to the treadle when the trap is set to hold the latter elevated. 2nd. In an animal trap, the combination of a base, a spring jaw secured to said base and having a trigger movably attached to the free end thereof, a treadle having a transverse abutment and movably connected to the base, the rear terminal of the trigger being brought to bear against the abutment on the treadle to hold the trap in set position, and a freely movable setting jaw having opposite portions thereof extending through the free end of the gripping jaw, the said setting jaw being pivoted and without spring action. 3rd. In an animal trap, the combination of a base, a treadle movably attached thereto and having an upper rear abutment and a bait seat, a spring actuated gripping jaw having coils at the opposite portions of its free end, a loosely mounted setting jaw having opposite members freely movable through the said coils of the spring jaw, and a trigger loosely attached to the free end of the spring jaw and adapted to bear upon the adjacent portion of the movable setting jaw and having its rear terminal contact with the abutments of the treadle when the trap is set.

No. 66,711. Apparatus for Drying Liquid Substances by Evaporation. (Appareil à sécher des substances liquides par évaporation.)



James Mecredy, Brick Court Temple, London, 22nd March, 1900; 6 years. (Filed 16th August, 1899.)

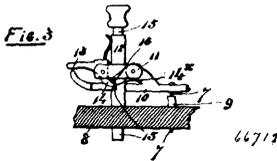
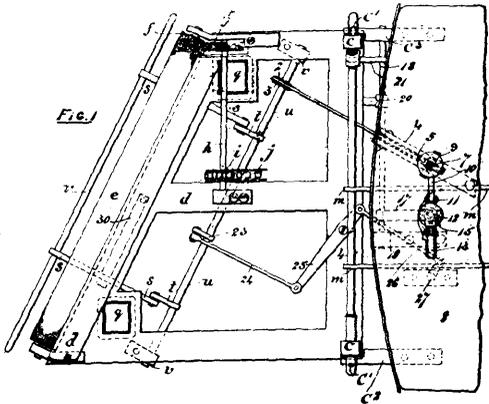
Claim.—1st. In evaporating apparatus the combination of a rotary hollow cylinder for containing the substance to be treated, means for rotating said cylinder, and means for distributing a current of air upon the inner periphery of said hollow cylinder, substantially as described for the purpose specified. 2nd. In evaporating apparatus the combination of a rotary hollow cylinder for containing the substance to be treated, means for rotating said cylinder, inwardly curved flanges on the ends of said cylinder, means for distributing a current of air upon the inner periphery of said cylinder, and means for heating said cylinder, substantially as described for the purpose specified. 3rd. In evaporating apparatus the combination of a rotary cylinder for concentrating the substance to be treated, roller bearings for supporting said cylinder, a pulley secured to said cylinder and connected to a rotary shaft and pulley by an endless band, inwardly curved flanges on the ends of said cylinder, an air pipe having a funnel shaped mouth, a cone situated in said funnel shaped mouth and having its base extending into one end of the cylinder, a gas pipe provided with burners for externally heating said cylinder, and a draw off cock for removing the contents from said cylinder, substantially as described for the purpose specified.

No. 66,712. Street Car Fender. (Defense de char.)

Alphonse Vegiard dit Labonte, Gilbert Vegiard dit Labonte and Marie M. P. Craig, assignee of Joseph Ambrose Isaie Craig, all of Montreal, Quebec, Canada, 23rd March, 1900; 6 years. (Filed 6th December, 1899.)

Claim.—1st. A street car fender, the front thereof extends diagonally of the front of the car for the purpose set forth. 2nd. In combination with a street car fender, a rotary brush carried by

the front of said fender, and extending diagonally thereof, and means for rotating said brush outwardly, substantially as

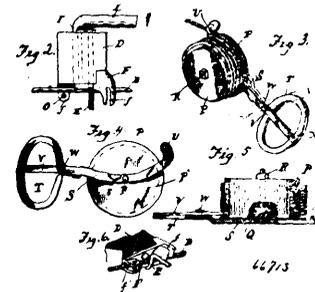


described and for the purpose set forth. 3rd. In combination with a drop fender and means for supporting said fender of means for causing said fender to automatically drop when striking a body, said dropping means consisting of a rearwardly movable leader frame, and a device adapted to be operated by the leader frame to disengage said supporting means upon the rearward movement of said leader frame substantially as described and for the purpose set forth. 4th. In combination with the front axle of a car and a gear wheel mounted rigidly thereon, of a drop fender, means for dropping said fender, a rotary brush carried at the front of said fender, a gear wheel mounted rigidly upon said shaft, a shaft carried by the fender, a gear wheel mounted rigidly upon said shaft and intermeshing with said last mentioned gear wheel, a sprocket wheel mounted rigidly upon said shaft, a rearwardly projecting frame formed in one with said fender, a shaft carried by said frame, a sprocket wheel mounted rigidly upon said shaft, a chain operatively connecting said sprocket wheel, to one another, and gear wheel mounted rigidly upon said last mentioned shaft normally free of the gear wheel mounted upon the car axle and adapted to intermesh with said gear wheel when the fender is dropped, substantially as described. 5th. In combination with a drop fender and means for supporting said fender of means for causing said fender to automatically drop when striking a body, said dropping means consisting of a rearwardly movable leader frame, a rotatable rod carried by the fender, and having a pair of rigid arms pivotally connected to said leader frame, a cam arm carried rigidly by said rod, a lever fulcrumed adjacent to said supporting means, and connected at its upper end thereto and the lower of said lever extending over said cam arm, substantially as described and for the purpose set forth. 6th. In combination with a drop fender, of means for supporting said fender consisting of a slotted tubular standard carried by the platform of the car, a vertically movable rod 13, located in said standard and notched, a bracket carried by said slotted standard, through said slotted standard, in the notch in said rod, a rotatable bar 18, carried adjacent to said rod, an arm 17 rigidly upon said bar 18, and borne upon by the lower end of said rod 15, and rigid arms 20 and 21, bearing upon and supporting said fender, substantially as described and for the purpose set forth. 7th. In combination with a drop fender, of means for supporting said fender consisting of a slotted tubular standard carried by the platform of the car, a vertically movable rod 15, located in said standard and notched, a bracket carried by said standard, a pawl fulcrumed to said bracket and engaging, through said slotted standard, in the notch in said rod, a rotatable bar 18 is carried adjacent to said rod, an arm 17 rigidly upon said bar 18, and borne upon by the lower end of said rod 15, and rigid arms 20 and 21 bearing upon and supporting said fender, and means for disengaging and supporting means comprising a bracket carried by said standard, a lever 10, fulcrumed to said bracket and bearing at one end upon said pawl, a lever fulcrumed adjacent to the other end of said lever 10, a rod connecting said last mentioned lever to the adjacent end of said lever 10, a rotatable bar *u*, carried by said fender, an arm mounted rigidly upon said rotatable bar and bearing

upon the underside of the end 3, of said last mentioned lever, and arms *t*, mounted rigidly upon said bar *u*, a rearwardly movable frame carried by and projecting beyond the front of said fender, and pivotally connected to said arms *t*, substantially as described and for the purpose set forth. 8th. In combination with a drop fender of a leader, having arms *s s*, a rotatable bar *u*, carried by the fender near the front thereof, arms *t*, carried rigidly by the bar *u*, and pivotally connected to said arms *s s*, an arm 23, also mounted on said bar *u*, a lever 25, fulcrumed upon the fender near the rear thereof, a link connecting said arm 23, to one end of said lever, a bar, 27, rigidly mounted upon the underside of the car body, and a link, 26, connecting the other end of said lever to said bar, substantially as described and for the purpose set forth.

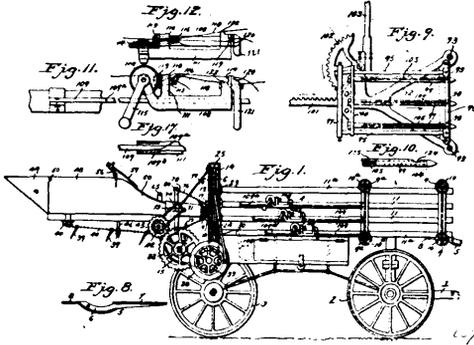
No. 66,713. Wire Fencing Tools.

(Outil pour clôtures en fer.)



C. A. Burnham, Holly, Michigan, U.S.A., 23rd March, 1900; 6 years. (Filed 20th September, 1899.)

Claim.—1st. In the machine herein described, an upright spacer, a series of studs attached thereto, means for pivotally connecting one end of these studs with the stringer wires, heads at the other ends of these studs having slots open at their front, and means for detachably preventing the turning of said spacer on its pivot, as and for the purpose set forth. 2nd. In the machine herein described, an upright spacer, a series of studs attached thereto and having aligned eyes at one edge of the spacer and slotted heads at the other, a locking pin removably passing through said eyes for pivotally supporting the spacer on the stringer wires at one end of said studs, and a crank in the spacer adapted to engage one stringer wire upon and near the opposite end of one of said studs, as and for the purpose set forth. 3rd. In the machine herein described, an upright spacer, a series of studs attached thereto and having aligned eyes at one edge of the spacer and slotted heads at the other, a locking pin removably passing through said eyes for pivotally supporting the spacer on the stringer wires, and means for turning the spacer on said pivot, as and for the purpose set forth. 4th. In the machine herein described, an upright spacer, a series of studs attached thereto, means for pivotally connecting one end of these studs with the stringer wires, heads at the other end of these studs having slots open at their front, and a handle pivoted to the back of the spacer and adapted to be turned out at right angles thereto, as and for the purpose set forth. 5th. In the machine herein described, a stay carrier comprising a drum, a shank with an eye at one end and a handle at the other, and a pin or bolt on the shank passing through the drum and forming a pivot therefor at such point as to permit the eye to stand beyond the drum, as and for the purpose set forth. 6th. The herein described carrier for a coiled stay, the same comprising a drum having a flange at one end, a handle having a shank secured to said flange, said handle being provided with a notch in its body, and a tongue pivoted to the handle with one end adapted to engage the convolution of the coil next said flange, while the other end rests detachably in the notch, as and for the purpose set forth. 7th. The herein described carrier for a coiled stay, the same comprising a drum, a handle having a pivotal point for said drum and projecting beyond it where it carries an eye, said handle being provided with a notch in its body, and a tongue pivoted to the handle with one end adapted to engage the convolution of the coil next said flange, while the other end rests detachably in the notch, as and for the purpose set forth.

No. 66,714. **Baling Press.** (*Press à ballot.*)

Charles G. Overmyer, Topeka, Kansas, U.S.A., 23rd March, 1900; 6 years. (Filed 14th February, 1900.)

Claim.—1st. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having a throat to receive a web of material to be baled, inwardly and outwardly reciprocating feeders extending through the throat, and means for reciprocating the folder, substantially as specified. 2nd. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having a throat to receive a web of material to be baled, feeding devices having oppositely located members provided with drag forks, and actuated to traverse the mouth of the folder alternately in opposite directions, and means for reciprocating the folder, substantially as specified. 3rd. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having a throat to receive a web of material to be baled, feeding devices including flexibly connected drag forks extending through the throat and actuated to traverse the same alternately in opposite directions, and means for reciprocating the folder, substantially as specified. 4th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having a throat to receive a web of material to be baled, series of drag forks connected by chains, attached at one end to a fixed object and yieldingly held at the other end for movement alternately in the opposite directions into and out of said throat, and means for reciprocating the folder, substantially as specified. 5th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having a throat to receive a web of material to be baled, drag forks connected in series by chains fixed at one end, an equalizing lever connecting the chains at the other end, and means for reciprocating the folder, substantially as specified. 6th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having a web of material to be baled, inwardly and outwardly reciprocating feeders extending through the throat and means for reciprocating the folder, substantially as specified. 7th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and spaced inwardly convex jaws forming a throat to receive a web of material to be baled, feeding devices having oppositely located members provided with drag forks, and actuated to traverse the mouth of the folder alternately in opposite directions, and means for reciprocating the folder, substantially as specified. 8th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having spaced inwardly convex jaws forming a throat to receive a web of material to be baled, feeding devices including flexibly connected drag forks extending through the throat and actuated to traverse the same alternately in opposite directions, and means for reciprocating the folder, substantially as specified. 9th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having spaced inwardly convex jaws forming a throat to receive a web of material to be baled, flexibly connected drag forks traversing said jaws to move in opposite directions thereover during the reciprocation of the folder, and means for operating the folder, substantially as specified. 10th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having spaced inwardly convex jaws forming a throat to receive a web of material to be baled, series of drag forks connected by chains, attached at one end to a fixed object and yieldingly held at the other end for movement alternately in opposite directions into and out of said throat, and means for reciprocating the folder, substantially as specified. 11th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having spaced inwardly convex jaws forming a throat to receive a web of material to be baled, drag forks connected in series

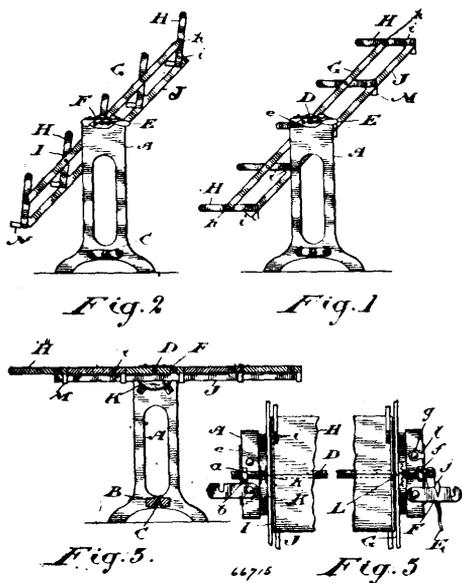
by chains to traverse the jaws of the folder, said chains being fixed at one end, an equalizing lever connecting the chains at the other end, and means for reciprocating the folder, substantially as specified. 12th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having spaced inwardly convex jaws forming a throat to receive a web of material to be baled, feeders having opposite series of drag forks and flexible connections between the same, extending through the throat and arranged at intermediate points to traverse said jaws, the connections at one end being fixed, an equalizing lever between the other ends of the connections, and means for reciprocating the folder, substantially as specified. 13th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and having spaced inwardly convex jaws forming a throat to receive a web of material to be baled, flexibly connected drag forks extending through the throat and arranged to traverse said jaws alternately in opposite directions, the drag forks being foldably mounted upon said connections, and means for reciprocating the folder, substantially as specified. 14th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber and having a feed throat to receive a web of material to be baled, a series of drag forks extending through said throat for reciprocation alternately in opposite directions, and means for alternately folding and extending the drag forks when moved in opposite directions, substantially as specified. 15th. A baling press having a feed throat, series of folding drag forks extending through said throat and traversing the walls thereof, operating devices for reciprocating said series of drag forks alternately in opposite directions, and means for alternately folding and extending the forks when moving in opposite directions, substantially as specified. 16th. A baling press having a feed throat, oppositely located series of connected drag forks extending through the feed throat for reciprocatory movement, and operating devices for moving the opposite series of drag forks simultaneously in opposite directions, and means for alternately folding and extending the forks when moving in opposite directions, substantially as specified. 17th. A baling press having a feed throat, flexible feeding devices extending through the feed throat and consisting of opposite series of drag forks, and chains connecting the forks in each series, the forks being pivotally mounted upon the chains to fold during the movement thereof in one direction, operating devices for moving the chains alternately in opposite directions through the feed throat and means for alternately folding and extending the forks when moving in opposite directions, substantially as specified. 18th. A baling press having a feed throat, a reciprocatory feeding device having a flexible carrier extending through the feed throat and drag forks supported by the carrier, means for applying a strain in opposite directions to the carrier, and connections between the carrier and the drag forks, whereby the latter are alternately extended and folded as the direction of strain upon the carrier varies, substantially as specified. 19th. A baling press having a feed throat, a feeding device having a flexible carrier extending through the feed throat, and drag forks mounted upon the carrier, means for applying a strain in opposite directions to the carrier, and connections between the carrier and the drag forks including links extending from each drag fork in opposite directions to the carrier, substantially as specified. 20th. A baling press having a feed throat, a feeding device extending through the feed throat for reciprocation, and including a flexible carrier and drag forks having spindle portions mounted upon the carrier, means for straining the carrier alternately in opposite directions, and connections between the carrier and each drag fork including eyes 84, 85, and connecting links 86, 87 extending in opposite directions from said eyes to the carrier, substantially as specified. 21st. A baling press having a feed throat, a feeding device extending through the feed throat and having a flexible carrier and drag forks mounted upon the carrier and having spindle portions, means for straining the carrier alternately in opposite directions, and connections between the carrier and each drag fork including connecting links extending in opposite directions from the drag fork to the carrier, and connected equalizing links attached at one end to the carrier and slidably mounted at the other end upon the remote connecting link, substantially as specified. 22nd. A baling press having a baling chamber, and a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, in combination with stationary web forming devices, means for transversely compressing material as it passes toward the outlet of the web forming devices, and an oscillatory conveyer connecting the outlet of the web forming devices with said folder, substantially as specified. 23rd. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, and feeding devices for conveying a web of material through the folder, into the baling chamber, combined with web forming devices including a stationary outlet, and a conveyer slidably connected with said outlet and pivotally connected with the folder in alignment with the throat thereof, substantially as specified. 24th. A baling press having a baling chamber, a reciprocatory folder mounted to traverse the mouth of the baling chamber transversely, combined with web forming devices including a feed table having a reduced outlet, means for advancing material toward the discharge end of the feed table, and means for transversely compressing the material as it approaches said outlet, substantially as specified. 25th. In a baling press, the combination with a baling

chamber and means for advancing and folding a web of material, of web forming devices including a feed table having a reduced outlet, a yielding pressure plate between which and the floor of the feed table the material is adapted to pass, and endless feeding devices for conveying the material toward said reduced outlet of the feed table, substantially as specified. 26th. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a table having a reduced outlet, feeding devices for conveying material upon said feed table toward the reduced outlet thereof, and detaining or trimming rakes arranged adjacent to the path of material traversing the table, to remove surplus material, substantially as specified. 27th. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a feed table having a reduced outlet, compressing devices for transversely reducing the material as it approaches said outlet, feeding devices for advancing material upon the feed table toward the outlet, and detaining or trimming rakes located contiguous to the path of material traversing the feed table, substantially as specified. 28th. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a feed table having a reduced outlet, means for transversely compressing the material as it approaches the outlet, feeding devices for advancing the material upon the feed table toward its outlet, and side and top detaining or trimming rakes for removing surplus material as it approaches the outlet, substantially as specified. 29th. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a feed table having a reduced outlet, means for advancing material upon the feed table toward its outlet, and detaining or trimming devices including a rake having a shank or tang, a supporting arm, and a clamp for securing said shank or tang at the desired adjustment with relation to the supporting arm, substantially as specified. 30th. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a feed table having a reduced outlet, means for advancing material upon the feed table towards its outlet, and detaining or trimming devices including a rake having a hinged carrying plate, a securing rod connected to said plate, and spaced keepers for engagement by a hooked extremity of the securing rod, substantially as specified. 31st. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a feed table having a reduced outlet and inclined side walls, means for advancing material upon the table toward its outlet, and detaining or trimming devices including side rakes having carrying plates hingedly mounted upon said inclined side walls of the feed table, and means for securing said rakes at the desired inclination, substantially as specified. 32nd. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a longitudinally slotted feed table having a reduced outlet, means for transversely compressing material as it approaches said outlet, and means for advancing material toward said outlet, the same including an endless carrier, feed forks foldably mounted upon said carrier, means for holding said forks in their operative positions throughout a portion of the path traversed thereby, and operating devices for the carrier, substantially as specified. 33rd. In a baling press, the combination with a baling chamber and means for advancing and folding a web of material, of web forming devices including a longitudinally slotted feed table having a reduced outlet, means for transversely compressing material as it approaches said outlet, the same including an endless carrier and operating devices therefor, feed forks pivotally mounted upon said carrier and having trip fingers, and a guide plate arranged in the path of said trip fingers for maintaining the feed forks in their operative positions throughout a portion of the path traversed thereby, substantially as specified. 34th. In a baling press, the combination with a baling chamber, of frame bars secured to the baling chamber near its mouth and including uprights or standards and forwardly extending arms, a reciprocatory folder mounted upon said uprights or standards, web forming devices including a feed table and an endless feeding device co-operating with the feed table, and operating devices for said folder and feeding device mounted upon the forwardly extending arms of said frame bars, substantially as specified. 35th. In a baling press, the combination with a baling chamber, of slotted uprights or supports, a reciprocatory folder having oppositely positioned jaws mounted to reciprocate between said uprights or standards and having guide pins mounted in the slots of the uprights or standards, anti-friction bearing devices for said pins, and means for communicating reciprocatory movement to the folder, substantially as specified. 36th. In a baling press, the combination with a baling chamber, of slotted uprights or standards, pairs of parallel facing semi-tubular guides supported by the uprights, a reciprocatory folder mounted between the uprights and having pins extending laterally through the slots thereof, anti-friction rollers carried by said pins and operating in said tubular guides, and means for communicating reciprocatory movement of the folder, substantially as specified. 37th. In a baling press, the combination with a baling chamber, frame bars 15 arranged at the front end of the baling chamber and provided at their lower ends with forwardly and upwardly extending members, a feed table supported by said frame bars and extending forwardly

from the baling chamber, and baling devices of baling press, supporting devices consisting of a wheeled truck having its front and rear wheels arranged under the baling press respectively at its rear and front ends, whereby said feed table extends beyond the rear truck wheels, and draft devices connected with the front end of the truck, substantially as specified. 38th. In a baling press, the combination with a baling chamber and baling devices, of bale binding devices including a tier mounted upon the baling chamber for movement parallel therewith and proportionate to the movement of material within the chamber, and means for extending a tie wire transversely across the baling chamber, substantially as specified. 39th. In a baling press, the combination with a baling chamber, and baling devices, of bale binding devices including a tier mounted for movement parallel with the baling chamber and proportionate to the movement of material within the chamber, and provided with means for engaging the extremity of a tie wire, and a needle supporting carriage mounted upon the opposite side wall of the baling chamber, and provided with means for advancing wire carrying needles transversely through the baling chamber, substantially as specified. 40th. In a baling press, the combination with a baling chamber and baling devices, of bale binding mechanism having its members, including needles and tiers, mounted upon the baling chamber for movement parallel therewith and proportionate to the advance of material into the baling chamber, substantially as specified. 41st. In a baling press, the combination of a baling chamber and baling devices, said baling chamber being provided with a longitudinally disposed scale, and bale binding mechanism including a tier, and reciprocatory needle frame mounted upon the baling chamber adjacent to said scale for longitudinal movement, whereby the interval between the transverse portion of a tie wire and the needle frame may be regulated by the scale to form bales of the desired length, said needle frame carrying reciprocatory needles, substantially as specified. 42nd. In a baling press, the combination with a baling chamber and baling devices, of bale binding mechanism including tiers, a reciprocatory needle frame having needles, and mounted upon the baling chamber for longitudinal movement to arrange the needles opposite the desired points thereof, and wire feeding devices including housed spools, and tubular wire guides for conveying the wire from the spools, substantially as specified. 43rd. In a baling press, the combination with a baling chamber and baling devices, of bale binding mechanism including tiers, a needle frame having needles and mounted upon the baling chamber for movement longitudinally thereof, and stationary wire guards carried by the baling chamber to convey the tie wire to the needles, substantially as specified. 44th. In a baling press, the combination with a baling chamber and baling devices, of bale binding devices including a tier, a carriage mounted upon guides parallel with the baling chamber and carrying guide pins, a needle frame mounted upon said guide pins and having wire engaging needles, a rock attached to the needle frame, and a toothed segment mounted upon the carriage and meshing with the rack bar, said toothed segment being provided with an operating lever, substantially as specified. 45th. In a baling press, the combination with a baling chamber and baling devices, of a bale binding device including a needle, a tier provided with a wire twister consisting of a spindle having a laterally open groove and a clamp carried by said spindle, for respectively receiving and engaging a wire at an intermediate point and engaging the same at its extremity, and means for operating the twister, substantially as specified. 46th. In a baling press, the combination with a baling chamber and baling devices, of a wire engaging needle, and twisting mechanism comprising a rotary twister having a grooved spindle and a clamp mounted upon the spindle for respectively engaging a wire at an intermediate point and at its extremity, and a retaining hook for engaging the wire and adjacent to said clamp, substantially as specified. 47th. In a baling press, the combination with a baling chamber and baling devices, of bale binding devices including a needle, and a twisting mechanism comprising a twister having a grooved spindle and a clamp carried by the spindle, for respectively engaging a tie wire at an intermediate point and at its extremity, a wire cutter, and means for communicating motion to the twister, substantially as specified. 48th. In a baling press, the combination with a baling chamber and baling devices, of bale binding devices including a reciprocable needle bar mounted adjacent to one wall of the baling chamber, and having needles provided with terminal eyes to form running guides for tie wires, and tiers mounted adjacent to the opposite wall of the baling chamber for movement parallel therewith, and each having a twister with means for engaging the extremity of the tie wire at an intermediate point, and also provided with means for engaging the extremity of the tie wire, a retaining hook, and a wire cutter, substantially as specified. 49th. In a baling press, a baling chamber having slotted side walls and cross sectionally angular corner bars of which the horizontal flanges are notched or kerfed at intermediate points, and tension devices connecting the side walls of the baling chamber respectively at opposite sides of the transverse plane of said kerfed or notched portions of the corner bars, substantially as specified. 50th. In a baling press, the combination with a portable supporting truck, of a baling chamber mounted thereon and provided at its front end with frame bars and at its rear end and parallel with its floor, with a transverse rod, baling and feeding devices carried by said frame bars at the front end of the baling chamber, and a bale rest having side arms provided with reduced extensions removably fitted be-

tween said transverse rod and the floor of the baling chamber at its rear end, substantially as specified.

No. 66,715. Table. (Table.)



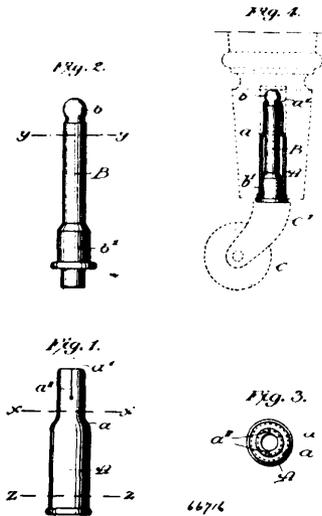
Edwin Morton Marshall, Strathroy, Ontario, Canada, 23rd March, 1900; 6 years. (Filed 24th February, 1900.)

Claim.—1st. In an adjustable table, a series of shelves and a pair of supporting bars between which the shelves are pivoted at their ends, in combination with a connecting bar provided with a series of lugs to one of which each shelf is pivoted, substantially as and for the purpose specified. 2nd. In an adjustable table, a series of shelves and a pair of supporting bars between which the shelves are pivoted at their ends, in combination with a connecting bar provided with a series of lugs to one of which each shelf is pivoted, the lugs being so placed that they are not in the same plane as either of the pair of supporting bars, substantially as and for the purpose specified. 3rd. In an adjustable table, a series of shelves and a pair of supporting bars between which the shelves are pivoted at their ends, in combination with a connecting bar provided with a series of lugs to one of which each shelf is pivoted, a stand upon which the supporting bars are pivoted, means for holding the supporting bars at various angles to the stand, and means for adjusting one of the shelves at different angles to the supporting bars without altering the angle of the latter to the stand, substantially as and for the purpose specified. 4th. In an adjustable table, a series of shelves, and a pair of supporting bars between which the shelves are pivoted at their ends, in combination with a connecting bar provided with a series of lugs to one of which each shelf is pivoted, the lugs being so placed that they are not in the same plane as either of the pair of supporting bars, a stand upon which the supporting bars are pivoted, means for holding the supporting bars at various angles to the stand, and means for adjusting one of the shelves at different angles to the supporting bars without altering the angle of the latter to the stand, substantially as and for the purpose specified. 5th. In an adjustable table, a series of shelves and a pair of supporting bars between which the shelves are pivoted at their ends, in combination with a connecting bar for each end of the series of shelves, each connecting bar being provided with a lug for each shelf to which the latter is pivoted, inside the adjacent supporting bar, substantially as and for the purpose specified. 6th. In an adjustable table, a series of shelves and a pair of supporting bars between which the shelves are pivoted at their ends, in combination with a connecting bar provided with a series of lugs to one of which the shelf is pivoted, the lugs being so placed that they are not in the same plane as either of the pair of supporting bars, and a ledge secured to one or more of the shelves at or near one edge, substantially as and for the purpose specified. 7th. In an adjustable table, a series of shelves and a pair of supporting bars between which the shelves are pivoted at their ends, in combination with a connecting bar for each end of the series of shelves, each con-

necting bar being provided with a lug for each shelf to which the latter is pivoted, inside the adjacent supporting bar, a stand on which the supporting bar is pivoted, means for holding the supporting bars at different angles to the stand, and means for adjusting one of the shelves at different angles to the supporting bars without altering the angle of the latter to the stand, substantially as and for the purpose specified. 9th. In an adjustable table, a series of shelves, a pair of supporting bars to which the ends of the shelves are pivoted, and a connecting bar pivotally connected to each shelf, in combination with a stand, a clamp rod on which the supporting bars are journaled so that the clamp rod forms also the pivotal connection between one of the shelves and the supporting bars, means for securing one end of the clamp rod to one side of the stand, and means engaging the other end of the rod and the other side of the stand to clamp together the stand, supporting bars and the said shelf, substantially as and for the purpose specified. 10th. In an adjustable table, a series of shelves, a pair of supporting bars to which the ends of the shelves are pivoted, and a connecting bar pivotally connected to each shelf, in combination with a stand, a clamp rod on which the supporting bars are journaled so that the clamp rod forms also the pivotal connection between one of the shelves and the supporting bars, means for securing one end of the clamp rod to one side of the stand, means engaging the other end of the rod and the other side of the stand to clamp together the stand, supporting bars and the said shelf, a sleeve rigidly connected to one end of the said shelf and extending through one of the supporting bars, a notched wheel rigidly connected to the said sleeve, and a latch carried by the stand and adapted to engage the said notched wheel, substantially as and for the purpose specified. 11th. In an adjustable table, a series of shelves, a pair of supporting bars to which the ends of the shelves are pivoted, a connecting bar pivotally connected to each shelf, and a stand on which the supporting bars are carried, in combination with means for holding the supporting bars at different angles to the stand, a sleeve rigidly connected to one end of a shelf and extending through one of the supporting bars, a notched wheel rigidly connected to the said sleeve, and a latch carried by the stand and adapted to engage the said notched wheel, substantially as and for the purpose specified. 12th. In an adjustable table, the combination of the stand, provided with the end pieces A, the clamp rod D, lying in notches or slots in the ends of the side pieces, the square nut a, threaded on one end of the clamp rod and lying in a corresponding recess in one of the end pieces A, a shelf through which the said clamp rod passes from end to end, a supporting rod journaled on the clamp rod at each end of the shelf, and means engaging the other end of the clamp rod and the end piece of the frame to draw on the clamp rod and clamp the parts together, substantially as and for the purpose specified. 13th. In an adjustable table, the combination of the stand, provided with the end pieces A, the clamp rod D, lying in notches or slots in the ends of the side pieces, the square nut a, threaded on one end of the clamp rod and lying in a corresponding recess in one of the end pieces A, a shelf through which the said clamp rod passes from end to end, supporting bar journaled on the clamp rod at each end of the shelf, and notched semi-circles K, arranged between the supporting bars and the stand at one or both sides, and means engaging the other end of the clamp rod and the end piece of the frame to draw on the clamp rod and clamp the parts together, substantially as and for the purpose specified. 14th. In an adjustable table, the combination of the stand, provided with the end pieces A, the clamp rod D, lying in notches or slots in the ends of the side pieces, the square nut a, threaded on one end of the clamp rod and lying in a corresponding recess in one of the end pieces A, a shelf through which the said clamp rod passes from end to end, a supporting bar journaled on the clamp rod at each end of the shelf, means engaging the other end of the clamp rod and the end piece of the frame to draw on the clamp rod and clamp the parts together, a square nut f, loose on the clamp rod near the last-mentioned end thereof, and fitting into a corresponding recess in the end piece of the stand, and movable latches adapted to engage the nuts a and f, to retain them in position, substantially as and for the purpose specified. 15th. In an adjustable table, the combination of the stand, provided with the end pieces A, the clamp rod D, lying in notches or slots in the ends of the side pieces, the square nut a, threaded on one end of the clamp rod and lying in a corresponding recess in one of the end pieces A, a shelf through which the said clamp rod passes from end to end, a supporting rod journaled on the clamp rod at each end of the shelf, the notched semi-circles K, arranged between the supporting bars and the stand at one or both sides, means engaging the other end of the clamp rod and the end piece of the frame to draw on the clamp rod and clamp the parts together, a square nut f, loose on the clamp rod near the last-mentioned end thereof and fitting into a corresponding recess in the end piece of the stand, and movable latches adapted to engage the nuts a and f, to retain them in position, substantially as and for the purpose specified. 16th. In an adjustable table, the combination of the stand, provided with the end pieces A, the clamp rod D, lying in notches or slots in the ends of the side pieces, the square nut a, threaded on one end of the clamp rod and lying in a corresponding recess in one of the end pieces A, a shelf through which the said clamp rod passes from end to end, a supporting rod journaled on the clamp rod at each end of the shelf, the notched semi-circles K, arranged between the supporting bars and the stand at one or both sides, means engaging the other end of the clamp rod and the end

piece of the frame to draw on the clamp rod and clamp the parts together, and a coil spring *k*, arranged between one of the supporting bars *G*, and an end piece *A*, substantially as and for the purpose specified. 17th. In an adjustable table, the combination of the stand, provided with the end pieces *A*, the clamp rod *D*, lying in notches or slots in the ends of the side pieces, the square nut *a*, threaded on one end of the clamp rod and lying in a corresponding recess in one of the end pieces *A*, a shelf through which the said clamp rod passes from end to end, a supporting rod journaled on the clamp rod at each end of the shelf, the notched semi-circles *K*, arranged between the supporting bars and the stand at one or both sides, and means engaging the other end of the clamp rod and the end piece of the frame to draw on the clamp rod and clamp the parts together, a square nut *f*, loose on the clamp rod near the last-mentioned end thereof, and fitting into a corresponding recess in the end piece of the stand, movable latches adapted to engage the nuts *a* and *f*, to retain them in position, the notched wheel *L*, fast on a sleeve extending through one of the supporting bars *G*, and secured to the said shelf, and a projection on one of the latches adapted to engage the notches of the said wheel, substantially as and for the purpose specified. 18th. In an adjustable table, the combination of the stand, provided with the end pieces *A*, the clamp rod *D*, lying in notches or slots in the ends of the side pieces, the square nut *a*, threaded on one end of the clamp rod and lying in a corresponding recess in one of the end pieces *A*, a shelf through which the said clamp rod passes from end to end, a supporting rod journaled on the clamp rod at each end of the shelf, and the cam lever *E*, pivoted in the end of the clamp rod *D*, and adapted to engage an end piece of the frame, substantially as and for the purpose specified. 19th. In an adjustable table, a stand comprising the end pieces *A*, the cross bar *B*, and the tie rod *D*, set in a groove in the said cross bar and provided with a suitable head and nut in combination with the table proper removably journaled in the upper parts of the end pieces, substantially as and for the purpose specified. 20th. In an adjustable table, a series of shelves, a pair of supporting bars to which the ends of the shelves are pivoted, and a connecting bar provided with a series of lugs to one of which each shelf is pivoted, the lugs being so placed that they are not in the same plane as either of the pair of supporting bars in combination with the stand to which the supporting bars are connected, and means engaging the stand and one of the shelves for changing the angle of the latter relative to the supporting bars, substantially as and for the purpose specified.

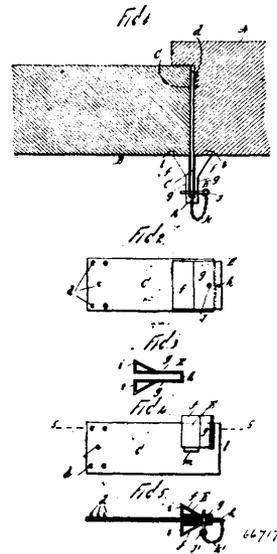
No. 66,716. Caster Socket. (Emboiture de roulette.)



George D. Clark, Plainville, Connecticut, U.S.A., 23rd March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—1st. A caster socket comprising a lower non-yielding portion of substantially cylindrical form, an upper portion integral therewith but contracted to a less diameter, the lower part of said upper portion being substantially non-yielding, the upper part of said upper portion being substantially yielding and arranged to grasp and detachably hold a caster pintle. 2nd. In a caster socket, a tubular portion having a plurality of circular non-yielding bearings, the uppermost of said bearings being of the smallest diameter, and yielding arms integral with said socket but above said uppermost bearing and arranged to grasp and detachably hold a caster pintle. 3rd. A caster socket comprising a lower non-yielding portion of a substantially cylindrical form, an upper portion integral therewith but contracted to a less diameter, the lower part of said upper portion being substantially non-yielding, the upper part of said upper portion being substantially yielding, and intumed jaws carried by said yielding portion for grasping a caster pintle.

No. 66,717. Door Check. (Arrête-porte.)



Joachim Forget dit Despatie, New York City, New York, U.S.A., 23rd March, 1900; 6 years. (Filed 27th February, 1900.)

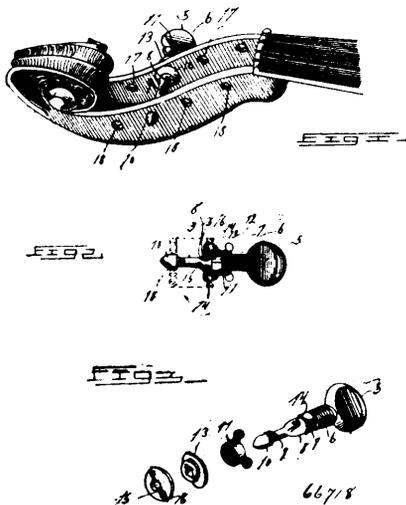
Claim.—1st. A door check of the class described, comprising a supporting member adapted to be attachably mounted with relation to the door and door frame, and a check or locking member supported upon or sustained by said supporting member and embodying bearing heads or ends adapted when in operative position to respectively bear against the door or movable member and against the frame or fixed member. 2nd. An improved door check of the class described, comprising a plate adapted to engage the door or frame and project from the joint between said parts, and a check or locking member sustained in operative position by said plate and embodying a plurality of bearing heads or ends adapted to respectively bear against the door or movable member and the frame or fixed member. 3rd. An improved door check of the class described, comprising a member adapted to be attachably mounted within the joint between the door and its frame and projecting therefrom, and a check or locking member carried by said projecting member and adapted to form a bearing across said joint, whereby the check or locking member bears against both the door or movable member and the frame or fixed member. 4th. An improved door check of the class described, comprising a supporting plate adapted to be attachably secured within the joint between the door and frame and projecting therefrom, and a check or locking member straddling the projecting portion of said plate and adapted thereby to bear against both the door or movable member of the frame or fixed member. 5th. An improved door check of the class described, comprising a check or locking member adapted to have a double bearing both against the door or movable member and the door frame or fixed member, and attachable means adapted when mounted in position to sustain said check or locking member. 6th. An improved door check of the class described, comprising a supporting plate adapted to be attachably secured within the joint between the door and the frame, and projecting therefrom and slotted at the end and a check or locking member straddling the projecting portion of the plate and fitting in the slotted part of said plate to be retained thereby against detachment. 7th. An improved door check of the class described, comprising a supporting plate adapted to be attachably secured within the joint between the door and the frame, and projecting therefrom and slotted at the end, and a check or locking member straddling the projecting portion of the plate and fitting in the slotted part of said plate to be retained thereby against detachment therefrom, and a detachable key passing through said locking member and plate.

No. 66,718. Violin Key. (Clé de violon.)

Crittenden John Beauvais, Phenix, Arizona, U.S.A., 23rd March, 1900; 6 years. (Filed 2nd March, 1900.)

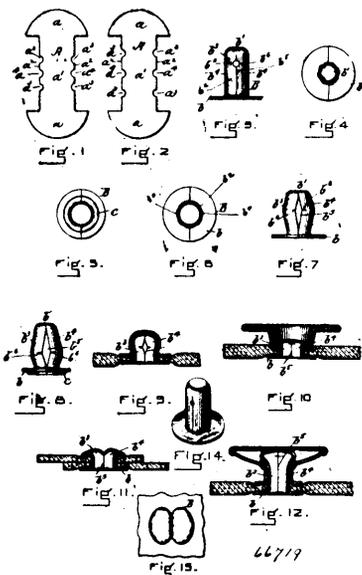
Claim.—1st. A key comprising a stem having a string receiving drum, a clamping element mounted upon the stem, and a nut upon the stem and adapted to move one of the said elements to exert a clamping action relatively to the other element. 2nd. A key comprising a stem having a head and a string receiving drum, a portion of the stem adjacent the head being threaded, a clamping element upon the stem, a second clamping element upon the stem and a nut upon the threads of the stem and adapted to move one of the elements to exert a clamping action relatively to the other clamping

element. 3rd. A key comprising a stem having a head and a string receiving drum, a portion of the key being threaded adjacent



the head, a clamping plate upon the key, a sleeve slidably mounted upon the stem of the key, and a nut upon the threaded portion of the stem and adapted to engage and move the sleeve in the direction of the clamping plate. 4th. A key comprising the stem having a head and a string receiving drum, a clamping plate removably connected with the stem, threads upon the stem, and a nut engaging the threads of the stem and adapted to exert a clamping action in the direction of the plate. 5th. A key comprising a stem having a head and a string receiving drum, the stem being threaded adjacent the head, a clamping plate removably connected with the stem, a sleeve slidably mounted upon the stem and adapted to co-operate with the clamping plate, and a winged nut upon the threads of the stem and adapted to engage the sleeve and move it in the direction of the clamping plate. 6th. A key comprising a stem having a head and a string receiving drum, a clamping plate upon the stem, threads upon the stem adjacent the head, and a thumb nut engaging the threads and adapted for movement in the direction of the clamping plate to exert a gripping action there against. 7th. A key comprising a stem having a head and a string receiving drum, and stem having threads adjacent the head, a clamping plate removably connected with the stem, a sleeve slidably disposed upon the angular portion of the stem, and a thumb nut engaging the threads and adapted to engage the sleeve and move it in the direction of the clamping plate.

No. 66,719. Tubular Fastening. (Attache tubulaire.)

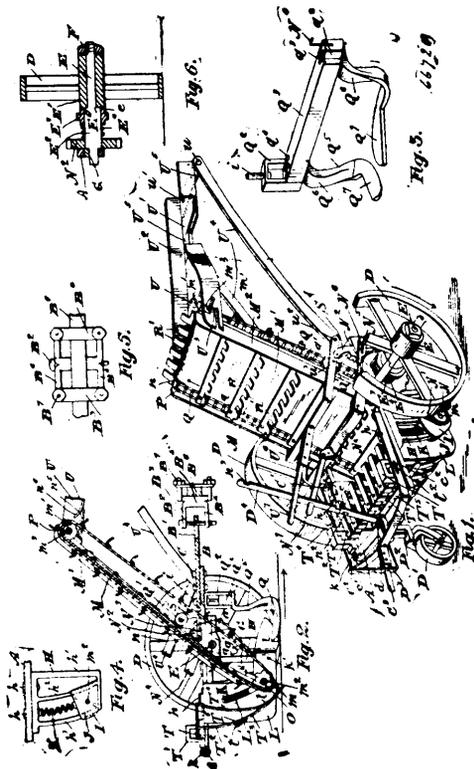


William Streeter Richardson, Boston, Massachusetts, U.S.A., 23rd March, 1900; 6 years. (Filed 3rd March, 1900.)

Claim.—1st. As an improved article of manufacture a fastening having a preformed flange and a tubular shank separated into sections

or parts by longitudinal slits, which sections or parts are provided with the fold determining recesses b⁶ extending from said longitudinal slits, whereby the said sections or parts are given a disposition to fold outwardly upon the application of end pressure to the fastening. 2nd. A blank from which a tubular fastening of the character specified is formed, having the sections a which provide a preformed fastening flange, the intermediate section a¹ which forms the tubular part of the fastening and the sides of which are adapted to be folded outward to form a fastening flange, which section a¹ has shallow recesses a³ in its edges for determining the place of said fold, and the recesses a⁴ for assisting in the formation of the closed end of the fastener. 3rd. In a tubular fastening a hollow shank having side parts united at their ends and separated from each other by longitudinal slits, the said side parts having recesses extending into them from the slits to form predetermined places upon which they will fold outward on the application of end pressure to the fastening.

No. 66,720. Stone Picker. (Pic à pierre.)

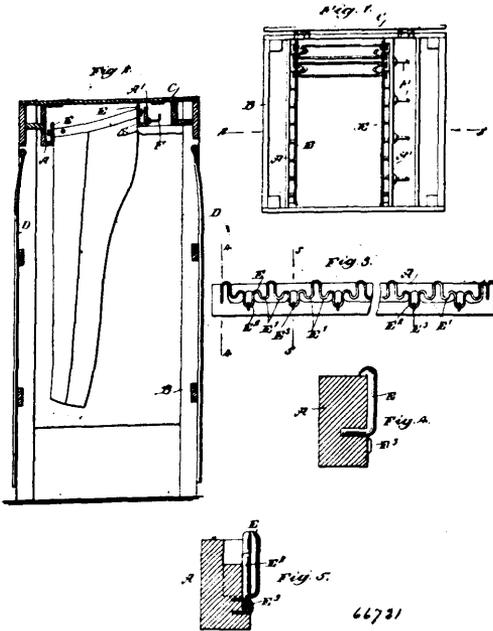


Henry Hardcastle, Chesley, Ontario, Canada, 23rd March, 1900; 6 years. (Filed 3rd March, 1900.)

Claim.—1st. A stone picker, comprising a suitably supported main frame, an axle having bearing therein, drive wheels journalled on said axle, a suitable held and operated picker held in said main frame, an elevator supported in said main frame and operated so as to receive the stones from said picker and elevate them into a suitable chute, suitable means operated from said axle for operating said elevator, as set forth and for the purpose specified. 2nd. A combined turnip detacher and picker, comprising a suitably supported main frame, an axle having bearing therein, drive wheels journalled on said axle, suitably supported knives for detaching the turnips supported at the front of the machine and in the path of movement of a picker, a suitably held and operated picker, an elevator supported in said main frame and operated so as to receive the turnips from said picker and elevate them into a suitable chute, suitable means operated from said axle for operating said elevator, as set forth and for the purpose specified. 3rd. In a stone picker, the combination with the suitably supported main frame, axle having bearing therein, and drive wheels journalled on said axle, of an elevator supported in said frame, suitable means for feeding the stones into said elevator, and suitable means operated from said axle for operating said elevator, as set forth and for the purpose specified. 4th. In a stone picker, the combination with the suitably supported main frame, axle having bearing therein, and drive wheels journalled on said axle, of an elevator supported in said main frame, a suitably held chute connected to the top of said elevator, a picker suitably held in said main frame so as to feed the stones into said elevator, and suitable means operated from said axle for operating said elevator, as set forth and for the pur-

pose specified. 5th. In a combined turnip detacher and picker, the combination with the suitably supported main frame, axle having bearing therein, and drive wheels journalled on said axle. of an elevator supported in said main frame, a suitably held chute connected to the top of said elevator, suitable knives supported at front end of said main frame and in the path of movement of a picker, the said picker being suitably held in said main frame so as to feed the turnips into said elevator, and suitable means operated from said axle for operating said elevator, as set forth and for the purpose specified. 6th. In a machine of the class described, the combination with the main frame A, axle E having bearing therein, and drive wheels D, of the elevator M, standards S, roller Q¹, spring clutches E, support for same, sprocket wheels N², supports for same, sprocket chains N¹, sprocket wheels N, shaft m², bracket bearings H, bearing blocks I, springs K, side plates J, side plates L, slots L¹, sprocket chains Q, picker bar R, sprocket wheels O, spindle m³, rollers P, and suitable means for feeding stones into said elevator, as set forth and for the purpose specified. 7th. In a machine of the class described, the combination with the main frame A, axle E, drive wheels D, elevator M, and described means for operating same, of the picker bar T, bearing brackets Q², spring teeth T³ and T⁴, bar T⁵, bearings C¹, spring frame C² having bearing therein, handle C³, supporting arm D³, notches c¹, slots c², and pins t², all arranged as set forth and for the purpose specified. 8th. In a machine of the class described, the combination with the main frame A, suitable supports for same, elevator M, chains Q, described means for operating same, picker bars R, teeth R¹, standards S, roller Q¹, spindle n² and picker T, of the spindle m², bearings m¹, chute U, L-shaped slot U³, slide U⁵, passageway n⁴, teeth n⁵, side bars U⁴, frame U⁶, handle U⁷, notches n³ and supporting arm D⁴, all arranged as set forth and for the purpose specified. 9th. In a combined turnip detacher and picker, the combination with the main frame A, axle E, drive wheels D, elevator M, supported as described, described means for operating same, and picker T², supported and operated as described, of the bracket bearings Q², knife bar Q³, knives Q⁵, constructed as described, bearings N³, pins n¹, spring frame N⁴, bent rods N⁶, slots N⁵, handle N⁷, supporting arm D⁴ and notches n², all arranged as set forth and for the purpose specified.

No. 66,721. Trousers Support or Stretcher.
(Support et tendeur de pantalons.)

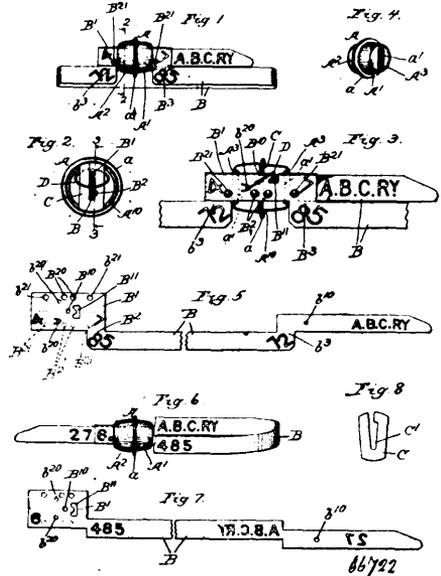


Archia Lemon Ross, New York City, New York, U.S.A., 23rd March, 1900; 6 years. (Filed 5th March, 1900.)

Claim.—1st. The herein described trousers support or stretcher, provided with spaced parallel stretching bars, each being formed of wire having upwardly extending loops, the said loops of the respective bars being arranged in pairs for receiving a pair of buttons of the trousers, the bars further having downwardly extending loops alternating with the upwardly extending loops and projecting below the said upwardly extending loops, substantially as shown and described. 2nd. The herein described trousers support or stretcher, comprising a supporting structure and spaced parallel stretching bars therein, the bars being each formed of a single piece of wire having upwardly extending loops, the said loops of the respective bars being arranged in pairs for receiving a pair of buttons of

the trousers, the bars further having outwardly extending loops and projecting below the said upwardly extending loops, the lower ends or bends of the downwardly projecting loops being secured to the supporting structure.

No. 66,722. Seal. (Seau.)

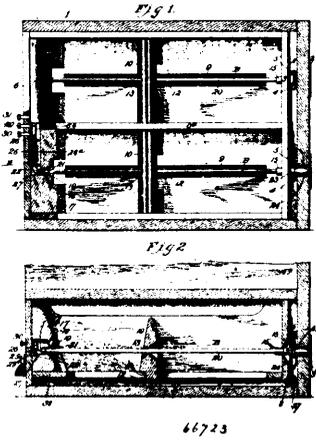


Emil Tyden, Hastings, Michigan, U.S.A., 23rd March, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. In a self locking seal, in combination with a shell or body and a strap joined fast to the shell at one end and deflected or offset edgewise close to the junction, the shell having a throat or passage for the free end of the strap in position causing the latter when inserted to stand with a portion which is exposed outside said shell edgewise, adjacent to the offset portion of the secured end of the strap. 2nd. In a self locking seal, in combination with a shell or body and a strap joined fast to the shell at one end, the shell having a throat or passage through it for the free end, the strap being offset edgewise a distance back from the extremity of the free end, and a securing device in the shell which engages the free end when inserted, substantially to the offset shoulder. 3rd. In a self locking seal, in combination with a shell or body and a strap joined fast thereto at one end and deflected or offset edgewise close to said junction, the shell having a throat or passage through it for the free end, the strap being offset edgewise a distance back from the extremity of the free end, and a securing device in the shell which engages the free end when inserted, substantially to the offset shoulder. 4th. In a self locking seal, in combination with a shell or body and a strap joined fast to the shell at one end and deflected or offset edgewise close to its said junction outside the shell, the shell having a throat or passage through it for the free end of the strap in position causing the strap when inserted through such throat, to stand exposed alongside the offset portion of the strap outside the body, and having an identifying character or characters on its face at such exposed portion. 5th. In a self locking seal, in combination with a shell or body and a strap joined fast to the shell at one end and deflected or offset edgewise close to its said junction outside the shell, the shell having a throat or passage through it for the free end of the strap in position causing the strap when inserted through such throat, to stand exposed alongside the offset portion of the strap outside the body, the offset portion of the strap and such exposed portion alongside the same having each portions of the complete identifying mark or marks pertaining to the seal. 6th. In a self locking seal, in combination with a body or shell, a strap extending therefrom and offset edgewise outside the shell, and having an identifying character or number, one part or figure of which is just outside the shell, another part or figure being at the commencement of the offset portion of the strap. 7th. In a self locking seal, in combination with the body or shell, a strap extending therefrom to the shell and offset edgewise outside the shell, having an identifying number or other mark, one figure or character of which is just outside the shell, another part being on the offset portion of the strap, the latter portion having the figures or characters inclined so that they are overhung by the adjacent figures. 8th. In a self locking seal, in combination with a self locking shell or body, a strap having one end inserted through the shell or body and having a prominent boss struck up from one face immediately exterior to the shell securing the end of the shaft to the shell, the shell having a throat or pas-

sageway through it for the free end of the strap alongside the secured end. 9th. In a self locking seal, in combination with a shell or body, a strap having one end made fast in the body and extending therefrom, and a diaphragm in the shell transverse to the length of the strap, and interlocked therewith. 10th. In a self locking seal, in combination with a body or shell, a diaphragm therein, the strap having one end secured in the shell and interlocked with the diaphragm, the shell and diaphragm being suitably apertured to admit the free end of the strap, and suitable devices in the shell to engage said end when inserted. 11th. In a self locking seal, in combination with a shell or body, a strap having one end portion made fast to the shell or body and emerging therefrom, such shell or body being composed of two parts of sheet metal, united at a plane transverse to the direction of the lengthwise extent of the strap in the body. 12th. In a self locking seal, in combination with a shell or body, a strip having one end portion made fast in the shell or body and emerging therefrom, such shell or body being composed of two parts of sheet metal united at a plane transverse to the longitudinal direction of the strap to the body, the part through which the strap emerges at the free end having a shoulder adjacent to the seal and facing toward the other part, and a diaphragm lodged on such shoulder and interlocked with the strap. 13th. In a self locking seal, in combination with a shell or body, a strap which is provided at one end with a sheath adapted to receive the other end, said end having the sheath made fast to the body, the remainder of the strap protruding therefrom, and said sheath constituting a throat or passageway through the body for the free end of the strap, a diaphragm in the shell transverse to the length of the strap and interlocked with the sheath, whereby the strap is made fast to the body. 14th. In a self locking seal, in combination with a shell or body, a strap which is provided at one end with a sheath adapted to receive the other end, said end having the sheath being inserted through the shell or body, and the sheath forming a throat or passageway through the body for the free end of the strap, a diaphragm in the shell through which the sheath extends and with which it is interlocked and by which it is secured to the shell, a locking ring having its ends spread by the sheath, located transversely encompassing the diaphragm. 15. In a self locking seal, in combination with a shell or body, the strap having one end provided with a sheath adapted to receive the other end, said end having the sheath being extended through the shell or body, said sheath constituting a throat or passageway through the body for the free end of the strap, a diaphragm in the shell or body through which the sheath extends, one side of the sheath having prominent bosses struck up outwardly at opposite sides of the diaphragm to engage the sheath with the diaphragm, the opposite side of said sheath having apertures in position opposite the bosses to permit such bosses to be struck up outwardly as described, without obstructing the throatway or passage through the sheath for the free end of the strap.

No. 66,723. Card Index File. (*Carte pour files d'index*)

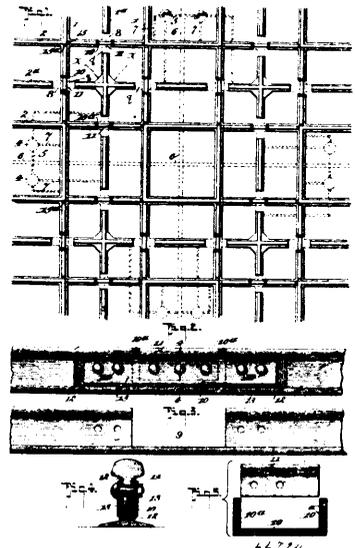


Charles Wesley Scarritt, Belton, Missouri, U.S.A., 23rd March, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. A card index file, comprising a cabinet, a drawer therein, and a file rod carried by said drawer and detachably connected to the cabinet, substantially as described. 2nd. A card index file, comprising a cabinet, a drawer therein, a locking device attached to the cabinet, and embodying a spring, and a file rod carried by the drawer and provided with an approximately acorn-shaped head with its reduced or neck portion clasped firmly by said spring, substantially as described. 3rd. A card index file, comprising a cabinet, a drawer therein, a locking device attached to the cabinet, consisting of a tubular arm or sleeve and a spring, and a file rod carried by the drawer and provided with a substantially acorn-shaped head to enter said arm or sleeve and have its neck

portion embraced by said spring, substantially as described. 4th. A card index file, comprising a cabinet, a drawer therein, and a file rod anchored to said cabinet and detachably connected to said drawer, substantially as described. 5th. A card index file, comprising a cabinet, a drawer, a ratchet headed rock arm or lever carried by the drawer, and a file rod connected at its rear end to the cabinet and extending through said drawer and provided at its front end with a head engaged by said arm or lever, substantially as described. 6th. A card index file, comprising a cabinet, a drawer, a ratchet headed rock arm or lever carried by the drawer, a file rod connected at its rear end to the cabinet and extending through said drawer and provided at its front end with a head engaged by said arm or lever, and a push button to effect the disconnection of said arm or lever from the head of said file rod, substantially as described. 7th. A card index file, comprising a cabinet, a double drawer therein, a file rod extending through each compartment of the drawer and anchored at its rear end to the cabinet and provided at its front end with a head, a rock shaft or level suitably journaled in each compartment of the drawer and provided with crank arms at their inner and outer ends, the crank arms at the outer ends being formed with ratchet heads, springs to hold said ratchet headed arms in engagement with the heads of the file rods, a push button arranged to engage the inner crank arm of each shaft, and a push button arranged to simultaneously engage the inner crank arms of both of said shafts, substantially as described. 8th. A card index file, comprising a cabinet, a drawer therein, and a file rod extending longitudinally through the drawer and detachably connected to the same at its front end and to the cabinet at its rear end, substantially as described. 9th. A card index file, comprising a cabinet, a drawer therein, a card follower in said drawer, guide sleeves carried by said drawer and said follower and provided with rearwardly flaring mouths, and a file rod anchored at its rear end to the cabinet and extending forward through said sleeve and connected at its front end to the drawer, substantially as described. 10th. A card index file, comprising a cabinet, a support projecting upward from the bottom of the cabinet near its front end, a drawer in the cabinet, a file rod anchored at its rear end to the cabinet and extending forward into the drawer and adapted when the drawer is removed to sag down at its front end towards said support, and a flaring mouthed guide sleeve in the rear end of the drawer, provided with a guide extension, substantially as described. 11th. A card index file, comprising a cabinet, a slotted drawer therein, a file rod extending through the drawer and anchored at its opposite ends to the cabinet and the drawer and a card follower mounted in the drawer upon said rod and provided with a neck portion engaging a slot in the drawer and with a spring plate bearing up against the bottom of the drawer, substantially as described.

No. 66,724. Roadway Structure for Electric Railways. (*Construction de voie pour chemins électriques.*)

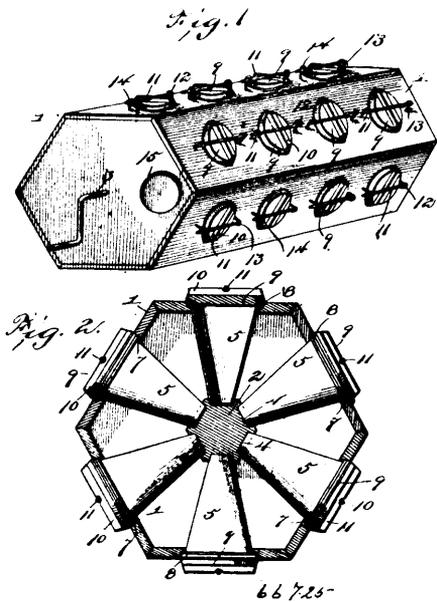


The Safety Third Rail Electric Company, assignee of John McL. Murphy, Torrington, Connecticut, U.S.A., 24th March, 1900; 6 years. (Filed 2nd September, 1898.)

Claim.—1st. In a cross over for surface contact electric railway systems, in combination with the main crossing rails having insulated portions at their point of intersection with the third or contact rails, of a contact rail section comprising a cross member, the ends of which terminate short of the main rails and adjacent the insulated portions, an independent non-electric section forming a part of the third or contact rails, and connecting the ends of the cross portion

of the contact rail with the main line rails, substantially as shown and described. 2nd. In a railway structure for surface contact electric railway systems, a continuous main or track rail having a cut out or seat portion in line with the third or contact rail or buttons, an insulated chair fitted in such seat, a rail portion fitted on the chair, and means for securing such insulated and rail portion to the main rail, substantially as shown and described. 3rd. The herebefore described improvement in reed way structures for surface contact electric railway systems, comprising in combination, the intersecting main or track rails, having insulated portions at their point of intersection with the conductor rails, said conductor rails at their point of intersection, comprising a cross member having the ends stopped short of the insulated portions of the main rails, and non-electric members connecting the ends of the conductor rails sections with the main or track rails, substantially as shown and for the purposes described. 4th. In a roadway structure of the character described, a main rail having a cut out portion, a U-shaped insulator chair fitted therein, a metallic rail section seated in the chair, the insulated fish plates, the metallic fish plates and the insulated bolt and nut connection, all being arranged substantially as shown and for the purposes described.

No. 66,725. Ice Cream Freezer. (*Congélateur de crème.*)



Edward A. Gilbert, of Kissimmee, and John Emig, Jacksonville, Florida, U.S.A., 24th March, 1900; 6 years. (Filed 15th May, 1899.)

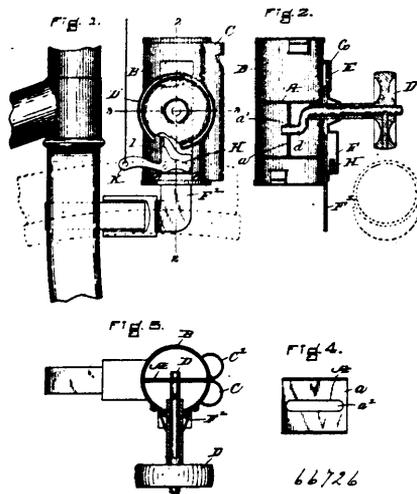
Claim.—1st. In a device of the class described, the combination of a rotary casing provided with series of openings, radially arranged cans extending through the openings of the casing, and a centrally arranged support mounted within the casing and having the inner ends of all the cans abutting against it, whereby the said cans are supported, substantially as described. 2nd. In a device of the class described, the combination of a rotary polygonal casing having an annular series of flat sides provided at intervals with openings, radially arranged cans extending into the casing through the said openings, and a centrally arranged polygonal support having its faces corresponding with the sides of the casing and having the inner ends of all the cans abutting against it, said support being provided at intervals with recesses forming sockets for the cans, substantially as described. 3rd. In a device of the class described, the combination of a rotary casing provided at intervals with openings, radially arranged cans extending through the openings of the casing and having exterior covers, a longitudinal bar arranged centrally of the casing and having the inner ends of the cans abutting against it, and provided with recesses forming sockets for the same, and fastening devices mounted on the casing and retaining the covers on the cans, substantially as described.

No. 66,726. Alarm. (*Avertisseur.*)

The Butcher Signal and Alarm Company, Denver, Colorado, assignee of William E. Coles, Attleboro, Massachusetts, U.S.A., 24th March, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. In a device of the character described, the combination with a cylinder provided with a whistle or whistles, of a piston formed of two cylinder heads connected by a slotted diaphragm, and a crank, the end of which lies within the slot of said diaphragm, and a wheel connected with said crank to operate the

same and oscillate the said piston, as set forth. 2nd. In a device of the character described, the combination with a post adapted to



be attached to the frame of a bicycle, of a cylinder, piston, whistle chamber or chambers, and operating wheel, all being connected together and adapted to slide vertically upon said post, and a pawl pivoted upon said post whereby the cylinder and connected parts may be depressed when desired, said pawl being provided with an extension adapted to interlock with and support the said cylinder, for the purpose set forth.

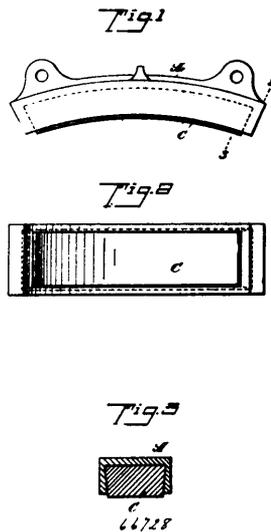
No. 66,727. Metallic Ore Treatment.

(*Traitement de minerais.*)

Albert Gardner Clark, Cincinnati, Ohio, U.S.A., assignee of Benjamin Sadtler, Denver, Colorado, U.S.A., 24th March, 1900; 6 years. (Filed 30th January, 1900.)

Claim.—1st. The improvement in the process of treating ores wherein zinc is combined with iron or other corrosive agents, consisting in distilling such ores in a retort wherein chemical reactions between ingredients of the ores and of the retort are excluded by the basic lining of the retort, substantially as described. 2nd. The herein described improvement in the process of treating ores wherein precious metals are combined with zinc and iron or other corrosive agents, consisting in distilling such ores in a retort adapted to resist the action of such corrosives, thereby extracting the zinc, and thereafter treating the residue in a smelting furnace for the recovery of the remaining metals, substantially as described.

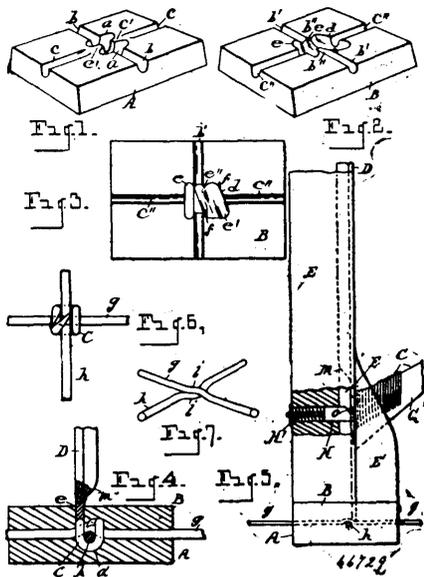
No. 66,728. Brake Shoe. (*Sabot de frein.*)



James Francis Morrison, Andrew Jackson Allen, James Francis Hill and Henry Rawstron, all of Chicago, Illinois, U.S.A., 24th March, 1900; 6 years. (Filed 8th March, 1900.)

Claim.—1st. A composition for brake shoes, consisting of comminuted iron or steel, asphaltum, and an ingredient for rendering the asphaltum impervious to oil, acid or any other substance tending to disintegrate the asphaltum, and to allow of subjecting the shoe to an increased temperature when in use. 2nd. A composition for brake shoes, consisting of comminuted iron or steel, asphaltum and sulphur intermixed in about the proportions specified.

No. 66,729. Device for Tying Intersecting Wires.
(Appareil pour attacher les fils d'intersection.)



George L. Hosie, Delos M. Baker, David Metcalf, William H. Shearson, and Ira Waterman, all of Adrian, Michigan, U.S.A., 24th March, 1900; 6 years. (Filed 27th February, 1899.)

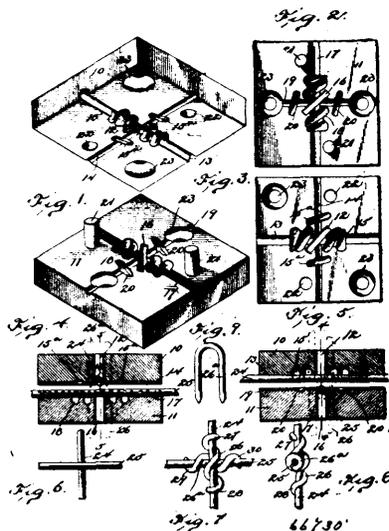
Claim.—1st. In a device for the purpose set forth, the combination of the lower die having in the upper face thereof two oblong recesses spaced some distance apart and provided with rounded bottoms, the upper die having a central concaved recess in its upper face divided by diagonal ribs, said upper die being also provided with a slot therethrough which communicates with one end of said central recess, said slot in said upper die registering with one end of the oblong recesses in the lower die to direct the legs of the staples therein. 2nd. In a device for the purpose set forth, the combination of the lower die having a recess therein and transverse channels crossing its face at right angles, the upper die having a recess in its under face and transverse channels crossing its under face and said recess at right angles, said recess provided with a diagonal way at each end thereof, said upper die having a slot formed therethrough at one end of said recess. 3rd. In a device for the purpose set forth, the combination of the opposed dies having in their meeting faces right angled channels adapted to register one with the other, one of said channels in the face of each die being of lesser depth near its longitudinal centre, whereby said dies are adapted to embrace and crimp cross wires lying between them at their point of crossing, said dies having recesses in their opposed faces through which said channels pass adapted to receive and direct a staple round said wires. 4th. In a device for the purpose set forth, the combination of the upper and lower die adapted to receive and confine cross wires and having recesses in their opposed faces adapted to receive a tying staple, a vertically movable standard having the upper die mounted thereon, said standard having a way therein, a vertically movable plunger in said way, said plunger having an inclined shoulder, a staple feeding device for delivering staples into the path of said plunger, a spring actuated detent adapted to arrest and maintain said staples in the way of said plunger, which detent is adapted to be depressed by a downward movement of the plunger and returned to its normal position as the plunger is withdrawn.

No. 66,730. Die for Joining Intersecting Wires.
(De pour joindre les fils d'intersection.)

The Lamb Wire Fence Co., assignee of Hiram R. Lamb, all of Adrian, Michigan, U.S.A., 24th March, 1900; 6 years. (Filed 27th February, 1899.)

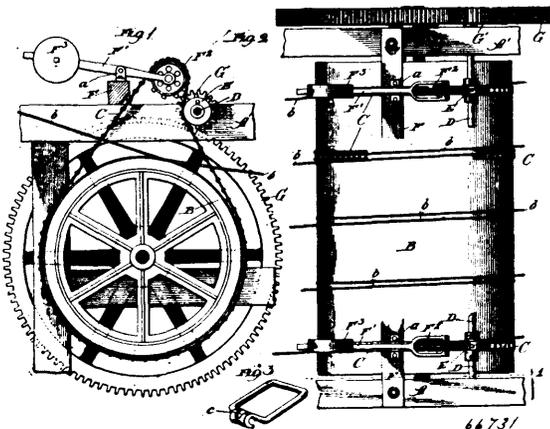
Claim.—1st. Co-acting dies for joining intersecting wires having diagonal feed slots, intersecting wire receiving channels and arranged for the feed slot and channel of one die to lie in planes at right angles

to the feed slot and channel respectively, of the other die, each die having twist forming grooves, whereby locking wires may be fed



through both dies, substantially as described. 2nd. Co-acting dies for joining intersecting wires, each having a diagonal feed slot, a wire channel which intersects with the feed slot, and a semi spiral groove extending in the general direction of the wire channel and intersecting therewith, one of the dies arranged to present its several parts at right angles to the plane of the corresponding parts in the companion die, substantially as described. 3rd. Co-acting dies for joining intersecting wires, each having a diagonal central feed slot, a wire channel intersecting with the feed slot, and the semi-spiral groove intersecting with the wire channel and having its parts or sections on opposite sides of the feed slot inclined in reverse directions, one die arranged to present its parts at right angles to the plane of the corresponding parts in the companion die, substantially as described. 4th. Co-acting dies for joining intersecting wires each having the semi-spiral twisting groove intersecting with a wire channel and the oblique recesses on opposite sides of such twisting channel, and means to insure registration of the companion dies for the shallow recesses in each die to register with certain portions of the twisting groove in the other die, substantially as described. 5th. Co-acting dies for joining intersecting wires each having a diagonal feed slot, the deep and shallow wire channels intersecting with the diagonal slot at right angles to each other, and the semi-spiral twisting groove intersecting with the deep wire channel, combined with guide devices to insure registration of the companion dies for the shallow channels of each die to coincide with the deep channel of the other die and for the feed slot and deep channel of each die to lie in planes at right angles to the corresponding parts of the other die, substantially as described.

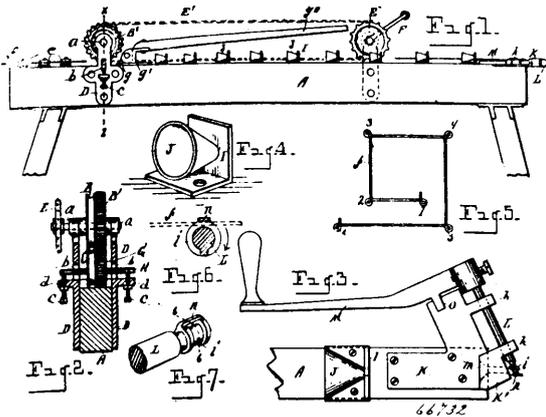
No. 66,731. Feed Mechanism for Wire Fabric Machines.
(Appareil d'alimentation pour machines à tissus métallique.)



The Page Woven Wire Fence Company, assignee of Charles Morehouse Lamb, all of Adrian, Michigan, U.S.A., 24th March, 1900; 6 years. (Filed 25th September, 1899.)

Claim.—1st. In a machine of the character mentioned, the combination with a rotary feed member about which the warp wires pass in their course through the machine, of an endless belt passing about an arc of said rotary member, and means for holding said belt in firm contact with the warp wire to which it is applied to clamp the wire to said feed member, substantially as and for the purpose set forth. 2nd. In a machine of the character mentioned, the combination with a rotary feed member about which the warp wires pass in their course through the machine, of an endless belt passing about an arc of said rotary member, and yielding tension means for said belt, substantially as and for the purpose set forth. 3rd. In a machine of the character mentioned, the combination with a rotary feed member about which the warp wires pass in their course through the machine, of an endless belt passing about an arc of said rotary member, a gear engaging said belt, a lever in which said gear is journaled, and means connected with the lever for applying tension to the belt, substantially as and for the purpose set forth. 4th. The combination with the rotary feed member of a wire fabric machine, of positively driven belts for clamping the warp wires to said member, at the arc of action of the belts, and means for applying tension to said belts, substantially as and for the purpose set forth. 5th. The combination with the rotary feed member of a wire fabric machine, of a shaft geared thereto, a sprocket wheel on said shaft, a clampingly acting sprocket chain engaging said sprocket wheel and passing about an arc of the surface of said feed member, and means for applying tension to said chain, substantially as and for the purpose set forth. 6th. The combination with the rotary feed and measuring drum of a wire fence machine, of a shaft geared thereto, sprocket wheels on said shaft, clampingly acting chains in engagement with said sprocket wheels and passing about an arc of the surface of said drum to bear on the warp wires of the fence, pivoted levers, idlers journaled in said levers, and counterweights, or the like connected with the levers for applying tension, substantially as and for the purpose set forth. 7th. The combination with the rotary feed and measuring member of wire fence machine, of clampingly acting sprocket chains passing about an arc of its circumference, pivoted levers provided with yokes through which said chains pass, idlers journaled in said yokes, and counterweights, or the like, for applying tension through the medium of the levers, substantially as and for the purpose set forth.

No. 66,732. Machine for Making Fence Stays.
(Machine pour la fabrication des étuis de clôture.)



The American Wire Fence Company, Detroit, assignee of Evan W. Cornell, of Adrian, both of Michigan, U.S.A., 24th March, 1900; 6 years. (Filed 28th August, 1899.)

Claim.—1st. In a machine for forming stay wires for fences, the combination with the feeding mechanism, a series of guides in line therewith through which the stay wire is adapted to pass, and means for forming a series of loops or coils in said stay wires. 2nd. In a device for forming stay wires for fences, the combination with the feeding mechanism, means for placing successive coils or bends in said wire, and a series of guides and stops adapted to permit of the passage of the wire therethrough and spaced from one another to form stops for the end of said wire to determine the distance between the coils formed therein. 3rd. In a device for forming stay wires for fences, the combination with the feeding mechanism, a series of guides for directing the wire standing in line with said feeding mechanism, the shaft supported to rotate, said shaft having a spiral way in the end thereof adapted to receive said wire, and means for retaining said wire in said way. 4th. In a device for forming stay wires for fences, the combination with the feeding mechanism, a series of guides for directing the stay wire through the machine, a shaft at the end of said machine supported to rotate, said shaft having a spiral way in the end thereof adapted to receive the end of said stay wire, and a projection from said way adapted to engage the end of said wire. 5th. In a device for forming stay

wires for fences, the combination with the feeding mechanism, a series of guides for directing the stay wire through the machine, a shaft at the end of the machine supported to rotate, said shaft having a spiral way in the end thereof adapted to receive the end of said wire, and a bridge crossing said spiral way under which the end of the wire is adapted to be confined. 6th. In a device for forming stay wires for fences, the combination with the feeding mechanism, a series of guides for directing the wire through the machine, a shaft at the tail of the machine supported to rotate, said shaft standing at an angle to the line of said stay wire and having in the end thereof a spiral way adapted to receive the end of said wire, and means for engaging the end of said wire to retain it in said way. 7th. In a machine for forming stay wires for fences, the combination with the guiding mechanism, of the feeding mechanism consisting of engaging gears carrying the peripheral grooved pulleys, the lower gear and pulley mounted on a vertically movable spring shaft, and means for forcing said shaft upward to confine the wire between said grooved pulleys. 8th. In a device for forming stay wires for fences, the combination with the rotary shaft having a way therein, means for directing the end of the wire into the way in said shaft, and a projection extending from the side of said way under which the wire is adapted to be engaged to retain it therein.

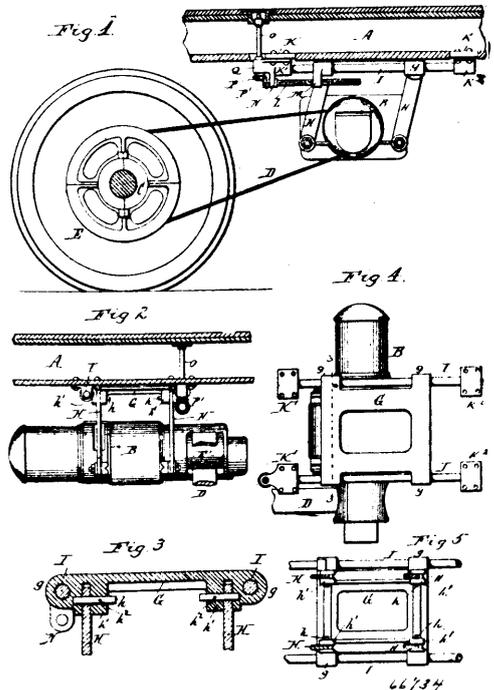
No. 66,733. Wrench. (Clé à écrou.)



David C Johnston, Marietta, Ohio, and Joseph M. Cooper, Pittsburgh, Pennsylvania, U.S.A., 24th March, 1900; 6 years. (Filed 13th October, 1899.)

Claim.—A wrench comprising a long shank having at one end a stationary jaw and at the other an integral or grip portion, the said shank being recessed on its inner side to constitute a stop for a movable jaw, and having a right hand half screw thread on its outer side, a movable jaw having a short shank moving in said recess and abutting against the stop to limit the outward movement thereof, and provided with a left hand half screw thread, and an adjusting device or sleeve fitting around both shanks and threaded internally in accordance with the threads on the shanks, substantially as described.

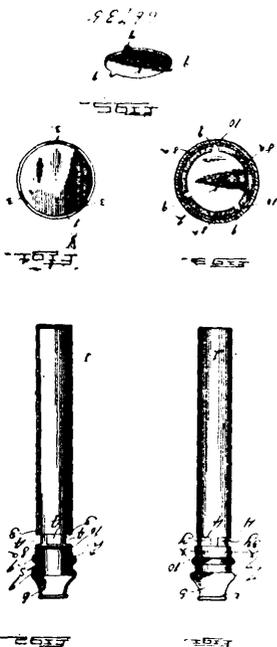
No. 66,734. Electric Lighting Apparatus.
(Appareil d'éclairage électrique.)



Charles M. Gould, New York City, assignee of Willard Fillmore Richards, Buffalo, both of New York, U.S.A., 24th March, 1900; 6 years. (Filed 22nd November, 1899.)

Claim.—1st. The combination with the driving axle, a driving pulley mounted thereon and a driving belt, of a carriage which is adjustable toward and from the driving axle, suspension links pivoted to said carriage, and a dynamo supported by said links and provided with a belt pulley, substantially as set forth. 2nd. The combination with the driving axle, a driving pulley mounted thereon and a driving belt, of a carriage which is adjustable toward and from the driving axle, suspension links pivoted to said carriage, a dynamo supported by said links and provided with a belt pulley, and a longitudinal adjusting screw engaging with said carriage, substantially as set forth. 3rd. The combination with the driving axle, a driving pulley mounted thereon and a driving belt, of longitudinal guide-ways arranged underneath the car frame, a carriage movably mounted on said guide-ways, suspension links pivoted to said carriage, a dynamo supported by said links and provided with a belt pulley, and a longitudinal adjusting screw engaging with said carriage, substantially as set forth.

No. 66,735. Whistle. (Siffler.)



Frederick L. Johnson and Thomas Brosnan, both of Wallingford, Connecticut, U.S.A., 24th March, 1900; 6 years. (Filed 21st February, 1900.)

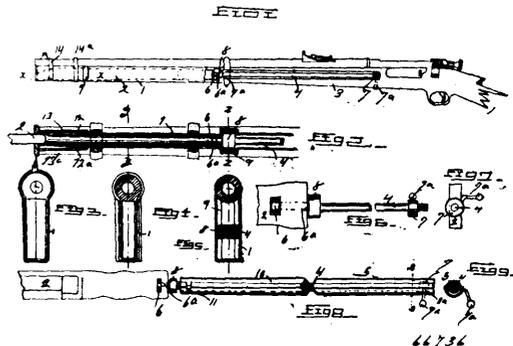
Claim.—1st. In a whistle, the combination with a barrel, valve chamber and mouthpiece, of a flat valve having radially extended arms with outer reduced ends to engage the wall of said valve chamber in a plane at a right angle thereto. 2nd. In a whistle, the combination with a barrel and a valve chamber having openings in the wall thereof, of a flat valve having radially extended arms with outer pointed ends to engage the openings in said wall of the valve chamber. 3rd. The combination with a whistle having a valve chamber, of a flat valve mounted in said chamber and having arms radially projecting outwardly from the periphery thereof to engage the wall of said valve chamber and thereby form passages or open spaces between said arms and wall. 4th. In a whistle, the combination of a barrel and a valve chamber of the same diameter and formed primarily from the same piece of stock, the valve chamber having openings in the wall thereof and held intact with the barrel by stays formed by openings in said barrel at regular intervals, a flat valve mounted in the valve chamber and having arms radially projecting from the periphery thereof provided with outer reduced ends to fit in the openings in the wall of said chamber, passages or open spaces being formed between the wall of the chamber and the arms and periphery of the valve, and a mouthpiece fitted over the valve chamber.

No. 66,736. Bayonet. (Baionnette.)

William C. Laird and David F. Campbell, both of Bay City, Michigan, U.S.A., 24th March, 1900; 6 years. (Filed 2nd March, 1900.)

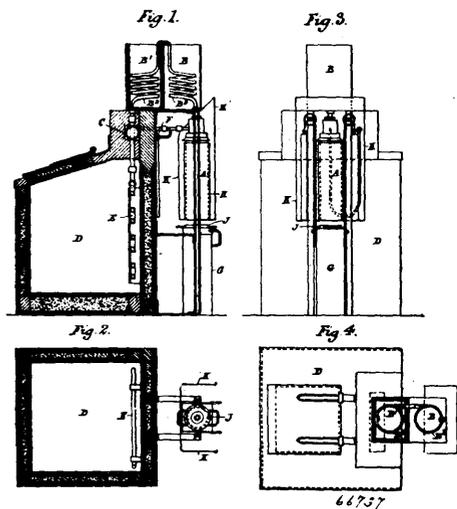
Claim.—1st. In a sliding bayonet, the combination with a gun, of a sheath arranged below the barrel of the gun, a bayonet longitudinally movable within said sheath, a rod removably attached to the handle of said bayonet and adapted to operate the bayonet, a cam upon said rod for receiving the thrust of the bayonet, a recess

in the walls of said sheath adapted to engage with the cam, substantially as and for the purpose set forth. 2nd. In combination



with a sliding bayonet, an operating rod removably attached to the handle of said bayonet, a sheath surrounding said rod, a lever for rotating the rod, a cam fixed to said rod and adapted to rotate by the movement of said lever, and a bayonet sheath having recesses adapted to engage the projecting portion of said cam and to lock the bayonet in position, substantially as described.

No. 66,737. Refrigerating Apparatus. (Appareil refrigerant.)



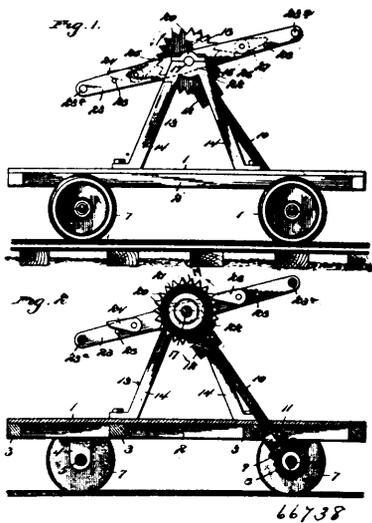
Paul Pfeiderer, 7 Thurlby Road, West Norwood, London, assignee of William Wallington Harris, 43 Regent's Square, Gray's Inn Road, Middlesex, England, 24th March, 1900; 6 years. (Filed 11th July, 1899.)

Claim.—1st. The combination of a vertical annular chamber, a central chamber within it and in communication with its lower end, a condenser in communication with the upper end of the central chamber, and a receiver in communication with the condenser. 2nd. The combination of a vertical annular chamber, a central chamber within it and having numerous fine perforations at its lower end, a condenser in communication with the upper end of the central chamber, and a receiver in communication with the condenser. 3rd. The combination of an annular chamber, a central chamber within it and in communication with its lower end, a perforated pipe within the central chamber extending from near its bottom to about the highest liquid level, deflecting plates above the pipe and perforations, a condenser in communication with the upper end of the central chamber, and a receiver in communication with the condenser. 4th. The combination of an annular chamber, a central chamber within it and having numerous fine perforations at its lower end, a perforated pipe within the central chamber extending from near its bottom to about the highest liquid level, deflecting plates above the pipe and perforations, a condenser in communication with the upper end of the central chamber, and a receiver in communication with the condenser. 5th. The combination of an annular chamber, a central chamber within it and having numerous fine perforations at its lower end, a lining forming a passage within the central chamber and extending from just below the bottom of its solid part up to a point at some distance below the highest liquid level, a condenser in communication with the upper end of the

central chamber, and a receiver in communication with the condenser. 6th. The combination of an annular chamber, a central chamber within it and having numerous fine perforations at its lower end, a perforated pipe within the central chamber extending from near its bottom to about the highest liquid level, deflecting plates above the pipe and perforations, a lining forming a passage within the central chamber and extending from just below the bottom of its solid part up to a point at some distance below the highest liquid level, a condenser in communication with the upper end of the central chamber, and a receiver in communication with the condenser. 7th. The combination of an absorber, a tank of conducting material, a tank of non-conducting material, a receiver, and coils in the tanks having their upper ends connected together and their lower ends connected respectively to the absorber and receiver. 8th. The combination of an absorber, a counterbalanced tank which is beneath the absorber when in its lower position and has the absorber immersed in it when it is in its higher position, a condenser connected to the absorber and a receiver connected to the condenser. 9th. The combination of an absorber, a condenser connected to it, refrigerating pipes, a receiver having its top connected to the condenser and its bottom to the refrigerating pipes, a pipe opening into the top and bottom of the receiver, and a branch pipe connecting this pipe to the absorber.

No. 66,738. Railway Hand Car.

(Chars à bras pour chemins de fer.)



Barnhart Van Treeck, Crawford, Nebraska, U.S.A., 24th March, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. In a hand car, the combination with one of the axles, of a shaft geared thereto, upper oppositely disposed independently movable gears for operating the said shaft, and hand bars having pawls thereon adapted to be thrown in mesh with the said gears in diagonal pairs, a reversal of the pawls operating to change the direction of movement of the car by a similar oscillation of the hand bars or levers. 2nd. In a hand car, the combination of an axle, upper gears connected thereto by intermediate driving devices, hand bars or levers pivotally mounted adjacent said gears, and pairs of pawls or dogs pivotally attached to the inner portion of each hand bar or lever and adapted to be thrown into engagement with the said gears in diagonal pairs in alternation to reverse the movement of the car without changing the direction of oscillation of the said hand bars or levers. 3rd. In a hand car, the combination of a platform having axles, a gear on one of said axles, a shaft obliquely arranged and having connection with the said gear on the axle, and also provided with a motion imparting device at its upper end, oppositely disposed compound gears supported above the platform of the car and each comprising outer peripheral ratchet teeth and inner gear teeth in continual mesh with the motion imparting device on the upper end of the said shaft, the said compound gears having independent movement, hand bars or levers pivotally supported adjacent the said compound gears and each having a pair of pawls or dogs pivotally attached to the inner portion thereof, the said pawls or dogs being adapted to engage the ratchet teeth of the compound gears in diagonal pairs, and means for supporting the said compound gears and hand bars above the car platform or bed. 4th. A hand car having an axle with a gear thereon, gears supported above the bed or platform of the car and in operative connection with the said gear on the axle, hand bars or levers movably mounted adjacent the said gears above the bed or platform, and means in connection with the said hand bars or levers for operating the said gears and the axle, said means being adjustable alternately in diagonal lines to change the plane of rotation of the said gears.

No. 66,739. Lock. (Serrure.)

Fig. 1.

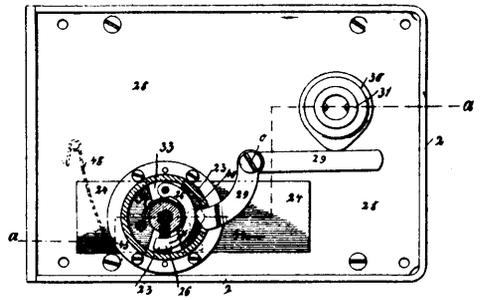
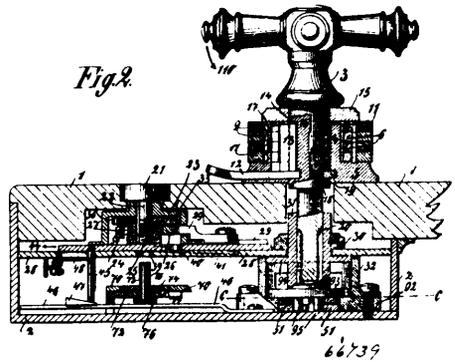


Fig. 2.

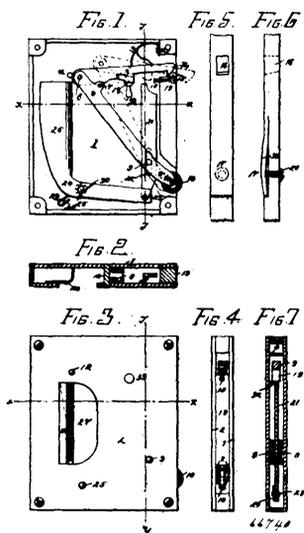


Carl Kunzelmann, Schullhausstrasse, 4 Sackingen, Baden, German Empire, 24th March, 1900; 6 years. (Filed 8th March, 1900.)

Claim.—1st. A safety lock for safes, strong rooms and the like having several bolts operating in different directions, and which are dependent on each other, so that after the disengagement of various safety devices by the operation of an organ provided on one of the bolts the catch of the lock is engaged with the operating organs of the other bolts so that the catch can be drawn back by the handle and other devices for operating the other bolts, constructed and arranged, substantially as hereinbefore described. 2nd. A safety lock for safes, strong rooms and the like, having a bolt 50 operated by a key and a bolt 51, operated by a rotary or other handle which are connected to and dependent on each other so that when the safety device of the rotary handle 3 has been disengaged in the manner of Bramah locks, and the key hole in the door 1 has been set free by the handle 3, and the key after the setting free of the key hole of the casing 2, has effected the disengagement of the safety devices of the tumblers and bolts 50 by the pins A B, the pressure of the bit of the key on a lever 88 hinged to the bolt 50, engages a movable piece 99 of the catch 90 by mechanism operated by the rotary handle 3, so that by turning the latter the withdrawal of the catch 90 can be effected when the bolts 50, 51 have been unlocked, constructed and arranged, substantially as hereinbefore described. 3rd. A safety lock for safes, strong rooms and the like as claimed in claim 1, having a bolt 26, attached in the casing 23 on the rotary piece, and adapted to be acted on by a cam 30 fixed to the shaft 16 of the rotary handle 3, in order to engage in the recesses 27 of the shaft 22 of the device 21 to hold the latter in the position for closing the key hole, so that when the bolt 26 is disengaged the spring 25 arranged in the shaft of the device 21, effects the removal of the latter from the key hole, constructed and arranged, substantially as hereinbefore described. 4th. A safety lock for safes, strong rooms and the like, as claimed in claim 1, having a plate 24, carried in the casing 23, and closing the key hole 39 of the lock casing, which plate 24 is operated, after a spring 41 has been disengaged therefrom, in such a manner that the key hole 39 in the lock casing to allow of the insertion of the key, a pin 45 in the plate 24 securing the mechanism in the final position, constructed and arranged, substantially as hereinbefore described. 5th. A safety lock for safes, strong rooms and the like as claimed in claim 1, having a sleeve 31 fixed to the shaft of the rotary handle and having at its lower side two pins 95 arranged concentrically which engage in recesses of the parts of the bolt 51, placed against each other arranged oppositely to each other the recesses 96 of one part commencing where the recesses 96 of the lower part end, so that when the rotary handle is rotated the parts of the bolt 51 diverge or converge, constructed and arranged substantially as hereinbefore described. 6th. A safety lock for safes, strong rooms and the like, as claimed in claim 1, having a double lever 88 hinged to the bolt 50 and adapted to be acted on at its end by the key, the other end turning a piece 99 movable in the catch 90 in

such a manner that when the handle 3 and with it the sleeve 31 are turned, a projection 100 provided between flanges 93, 94, bears against pin 105 of the piece 99 to effect the withdrawal of the catch 90, constructed and arranged, substantially as hereinbefore described. 7th. A safety lock for safes, strong rooms and the like, as claimed in claim 1, having a disc 74 with a bevelled edge carrying the guiding pin 73 and arranged in the plate 70 on which are so arranged the safety devices for the tumblers and bolts 51, so that the pin B entering through the hole 75 of the plate 74 allows a movement of the lever 64 and the safety device 66 of the tumblers 49 and the operation of the safety devices 85 of the bolt, constructed and arranged, substantially as hereinbefore described. 8th. A safety lock for safes, strong rooms and the like, as claimed in claims 1 and 6, having an arm 76, fixed to the disc 74, which arm when rotated operates a safety lever 85 subjected to spring pressure so that one end of the lever sets free the bolt 51, constructed and arranged, substantially as hereinbefore described. 9th. A safety lock for safes, strong rooms and the like, as claimed in claim 1, having a safety device of the Bramah class for the rotary handle of the lock, in which discs are arranged on a sleeve 4 having a flange 5 and serving as guide for the shaft 5 and supporting the rotary handle by the arrangement of a bolt 19 guided in the flange 5 and engaging in a circular groove 18 of the shaft, constructed and arranged substantially as hereinbefore described.

No. 66,740. Sliding Door Lock. (Serrure de porte.)

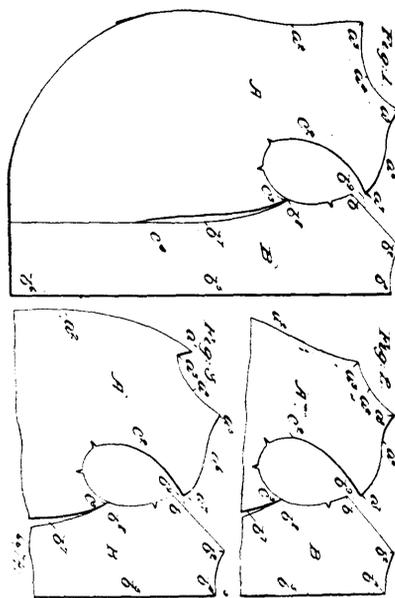


Albert Brundage Clay, Scranton, Pennsylvania, U.S.A., 24th March, 1900; 6 years. (Filed 9th March, 1900.)

Claim.—1st. A lock of the kind described, having a latch bolt provided with a catch adapted to engage with the socket of a jamb, the inner end of said latch bolt being pivoted to a lever, the said lever being fulcrumed and provided with a roller extending outward of the lock and said roller adapted to strike a portion of the jamb with which the latch bolt engages and automatically to throw the latch bolt out into engagement, substantially as specified. 2nd. In a lock for sliding doors, the combination of a latch bolt pivoted to one end of a lever, the said lever being provided with an external projection at its other end adapted to strike against a jamb and provided with a fulcrum between the external projection and the latch bolt, whereby the latch bolt may automatically be thrown outward into engagement with a socket in the jamb when the door is slid shut, substantially as specified. 3rd. In a lock for sliding doors, a lock case, a latch bolt pivoted to a lever, the said lever fulcrumed within the lock case and having a projection extending beyond the confines of the lock case and adapted to be driven inward automatically in the process of closing the door for the purpose of throwing the latch bolt outward and means for releasing said latch bolt, substantially as specified. 4th. In a lock for sliding doors, a lever, a projecting roller on the end of said lever in combination with a hooked latch bolt pivoted to the other end of said lever and adapted to hook into a socket, means for disengaging said latch bolt, and a spring adapted to draw said latch bolt within the lock case automatically when disengaged, substantially as specified. 5th. In a lock of the kind described, the combination of a hooked latch bolt pivoted to a lever, the said lever being provided with a stop determining its angle with the latch bolt and a spring constraining the said latch bolt to impinge on said stop, and the said spring also adapted to hold the said latch bolt and lever to the inner limit of their course, with means for driving said latch bolt outward into engagement, as specified. 6th. In a lock, the combination of a spring and lever controlled latch bolt 3, the said latch

bolt having a projection 13, adapted to act as a stop, limiting its outward motion, with a lock case having an adjustable screw 18 secured to a portion thereof and adapted to engage with the said projection and limit the outward motion of the said latch bolt, together with means for engaging and releasing said latch bolt, substantially as specified. 7th. In combination with a lock for sliding doors, a latch bolt adapted to project therefrom and engage with a socket in a jamb, a jamb having a suitable socket for said purpose, a projection from said lock adapted to strike the jamb aforesaid and be driven inward, of the lock, and automatically to drive the said latch bolt out into engagement, together with a portion of said jamb capable of adjustment at the contact point of the aforesaid projection, for the purpose specified.

No. 66,741. Coat Pattern. (Patron d'habit.)

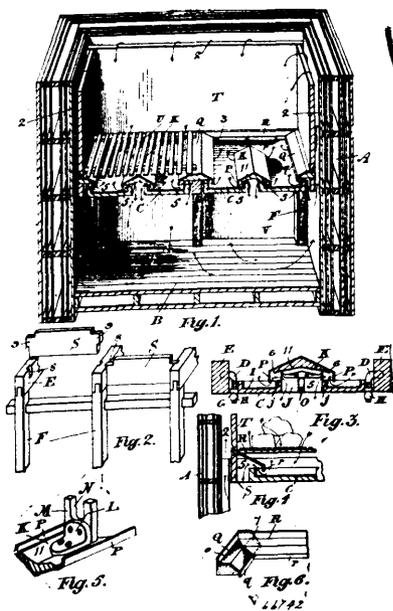


Fred W. Beberdick, West Hoboken, New Jersey, U.S.A., 24th March, 1900; 6 years. (Filed 14th September, 1899.)

Claim.—1st. A pattern for coats, constructed with a curved outer edge, an upper edge having a downward curve forming the neck portion, a compound curve adjacent to said neck portion forming the shoulder seam, a sleeve opening constructed on a full curve, connecting with said compound curve, an upwardly inclined straight edge adjacent to said sleeve opening and a downwardly curved edge located at the upper portion of the pattern and connecting the said upwardly inclined edge with the back seam of the pattern, substantially as set forth. 2nd. A pattern for coats, constructed with a curved outer edge, an upper edge having a downward curve forming the neck portion, a downwardly inclined straight line connecting the said curved outer edge with the said upper edge, a compound curve adjacent to the said neck portion forming the shoulder seam, a sleeve opening constructed on a full curve connecting with said compound curve, an upwardly inclined edge adjacent to said sleeve opening and a downwardly curved edge located at the upper portion of the pattern and connecting the said upwardly inclined edge with the back seam of the pattern, substantially as set forth. 3rd. A pattern for coats, constructed of a front and a back portion, the said front portion having a curved outer edge, an upper edge having a downward curve forming the neck portion, a compound curve adjacent to said neck portion forming the shoulder seam, a sleeve opening constructed on a full curve connecting with said compound curve, the said back portion having a full curve at its outer edge completing the sleeve opening, an upwardly inclined straight edge adjacent to said sleeve opening, and a downwardly curved edge located at the upper portion of the pattern and connecting the said upwardly inclined edge with the back seam of the pattern, substantially as set forth. 4th. A pattern for coats, constructed of a front and a back portion, the said front portion having a curved outer edge, an upper edge having a downward curve forming the neck portion, a compound curve adjacent to said neck portion forming the shoulder seam, a sleeve opening constructed on a full curve connecting with said compound curve, the said back portion having a full curve at its outer edge completing the sleeve opening, the adjacent edges of the front and back portions being provided with compound curves forming a separating space, said back portion being also provided with an upwardly inclined straight edge adjacent to said sleeve opening, and a downwardly curved edge located at the upper portion of the pattern and connecting

the said upwardly inclined edge with the back seam of the pattern, substantially as set forth. 5th. A pattern for coats, constructed with a curved outer edge, an upper edge having a downward curve forming the neck portion, a compound curve adjacent to said neck portion forming the shoulder seam, a sleeve opening constructed on a full curve connecting with said compound curve, straight inclined edge extending downwardly from said sleeve opening forming a tapering space, straight horizontal edges communicating with said downwardly extending edges forming a horizontal space communicating with said tapering space, an upwardly inclined straight edge adjacent to said sleeve opening, and a downwardly curved edge located at the upper portion of the pattern and connecting the said upwardly inclined edge with the back seam of the pattern, substantially as set forth. 6th. A pattern for coats, constructed with a straight outer edge, an upper edge having a slight curve at its upper extremity forming the neck portion, a compound curve adjacent to said neck portion forming the shoulder seam, a collar portion located adjacent to said neck portion having an irregularly curved inner edge forming an irregular space between the said neck portion and the said collar portion, the outer edge of the said collar portion being formed with an upwardly extending outward curve, and a compound curve adjacent thereto but separated therefrom by an inwardly extending notch, the upper extremity of said collar portion extending over the said shoulder seam, substantially as set forth. 7th. A pattern for coats, constructed of a front portion, a back portion, an intermediate portion and a bottom portion, the curvatures of the meeting edges of said portions forming irregular spaces which separate said portions, substantially as set forth. 8th. A pattern for coats, constructed of a front portion, a back portion, an intermediate and a bottom portion, the curvatures of the meeting edges of said portions forming irregular spaces, and a collar portion located adjacent to the said front portion having a straight inner edge and a curved outer edge, the said inner edge of the collar portion being separated from the outer edge of the said front portion by upper and lower irregular spaces, substantially as set forth. 9th. A pattern for coats, constructed of a front portion having a curved outer edge, an upper edge having a downward curve forming the neck portion, a compound curve adjacent to said neck portion forming the shoulder seam, a sleeve opening constructed on a full curve connecting with said compound curve, an inner edge extending vertically downward on an inner curve, a lower edge extending substantially horizontal on an irregular curve, a back portion having an outer edge curved to correspond with the said sleeve opening, an intermediate portion having an outer edge curved to correspond with the said sleeve opening and having its opposite vertical sides irregularly curved and separated from said front and back portions by irregular spaces, the bottom edges of said intermediate portion located adjacent to the upper edge of the said bottom portion and separated therefrom by an irregular space, substantially as set forth.

No. 66,742. Refrigerator. (Refrigerateur.)

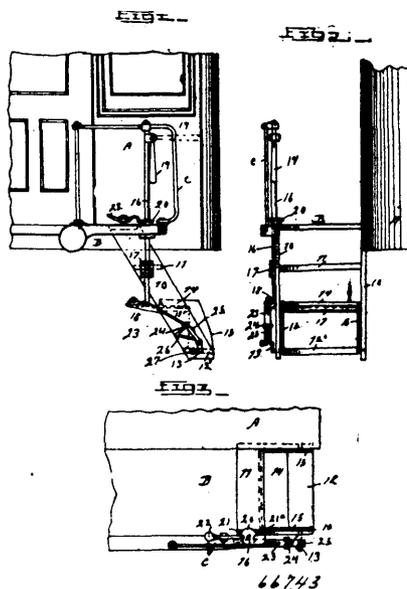


Wilbert Hovey, Toronto, Ontario, Canada, 24th March, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. In a refrigerator, the combination with any suitable frame having dead-air spaces therein, the ice chamber and a cooling chamber, the said ice chamber being surrounded on its four sides and on its top, with warm air flues and situated immediately above

said cooling chamber and within the same building, of drip pans, supports for same, cold air tubes 5, passageways J, and adjustable ventilator hoods K, supported over said passageways, all arranged as set forth and for the purpose specified. 2nd. In a refrigerator of the class described, the combination with the drip pans C, supports for same, and passageways J, of the ventilator hoods K, constructed as described, standards M, brackets L, slots N, and screws O, all arranged as set forth and for the purpose specified. 3rd. In a refrigerator of the class described, the combination of any suitable frame having dead-air spaces therein, end boards S, cross spaces E, supports for same, the said end boards being situated so as to form a flue between themselves and the refrigerator walls, all arranged as set forth and for the purpose specified. 4th. The combination of the drip pans C, supported as described, raised edges j, passageways J, ventilator hoods K, supported as described, the said ventilator hoods being wider than the passageways J, and flanges P, secured to said ventilator hoods, supported over said drip pans and designed to extend below the top of the raised edges j, all arranged as set forth and for the purpose specified. 5th. The combination of the drip pans C, supported as described, raised edges j, aprons Q and R, supports for same, flanges 7, and flanges q and r, suspended over said drip pans and designed to extend below the top of the raised edges j, all arranged as set forth and for the purpose specified.

No. 66,743. Car Step. (Marche de chars.)



Stephan Olinger, Burkettsville, Ohio, U.S.A., 24th March, 1900, 6 years. (Filed 7th March, 1900.)

Claim.—1st. The combination with car steps, the lowermost step being pivoted, and an extension step carried by said pivoted step, of means for moving said pivoted and extension steps, said means consisting of a shaft mounted upon the car platform, a flexible pitman having a crank connection with said shaft and connected to said pivoted step by a link, and means connected to said pitman for springing said pivoted step past the centre of its pivot, as and for the purpose specified. 2nd. The combination with car steps, the lower one of which is pivoted, and an auxiliary step carried by said pivoted step, of a shifting shaft, a pitman of spring material connected with said shaft and pivoted stem to turn the same, and means for springing said pivoted step past the centre of its pivot, as and for the purpose specified. 3rd. The combination with car steps, the lowermost step being pivoted, and an auxiliary step attached to the pivoted step moving therewith, the auxiliary step in the upper position being adapted to rest upon one of the fixed steps, of a shifting shaft provided with a locking device, a pitman having a crank connection with the shifting shaft, a link pivoted to the said pitman, and having a crank connection with the pivoted step, and a block of triangular shape attached to the rear of the said link, and adapted in one position of the link to engage with the said pitman, as and for the purpose set forth. 4th. The combination with car steps, the lowermost step being pivoted, and an auxiliary step attached to the pivoted stem and moving therewith, the auxiliary step in its upper position being adapted to rest upon one of the fixed steps, of a shifting shaft provided with a locking device, a pitman having a crank connection with the shifting shaft, a link pivoted to the said pitman and having a crank connection with the pivotal step, a block of triangular shape attached to the rear of the said link, and adapted in one position of the link to

engage with the said pitman, a pivoted handle for the shifting shaft, and a stop attached to the supports of the steps, the said stop being adapted for engagement with the block attached to the link when the auxiliary step is in its lower position, for the purpose specified. 5th. The combination with car steps, the lower one of which is pivoted, and an auxiliary step carried by said pivoted step, of a shifting shaft, a flexible pitman connected to said shaft, a link connecting said pitman with said pivoted step and a block attached to said link and engaging with said pitman to change the direction of its movement whereby the pivoted step will be moved past the centre of its pivot, as and for the purpose specified.

No. 66,744. Road Scraper. (Grattoir de chemin.)

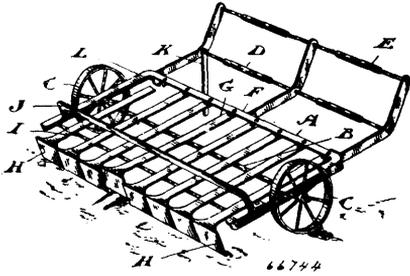


Fig. 1.

James Garden, Galt, Ontario, Canada, 24th March, 1900; 6 years. (Filed 8th March, 1900.)

Claim.—1st. In a road scraper, a frame in combination with a series of hoes set side by side to form a continuous scraper and so connected to the said frame that they may rise and fall independently, as and for the purpose specified. 2nd. In a road scraper, a frame in combination with a series of hoes set side by side to form a continuous scraper, and independent drag bars connecting the hoes with the frame, substantially as and for the purpose specified. 3rd. In a road scraper, a frame in combination with a series of hoes set side by side to form a continuous scraper, and independent spring drag bars, each rigidly connected at one end to a hoe and at the other end to the frame, substantially as and for the purposes specified. 4th. In a road scraper, a frame, and a pair of ground wheels journaled on the said frame in combination with a series of hoes set side by side to form a continuous scraper and so connected to the said frame that they may rise and fall independently, substantially as and for the purpose specified. 5th. In a road scraper, a frame, and a pair of ground wheels journaled on the said frame in combination with a series of hoes set side by side to form a continuous scraper, and independent drag bars connecting the hoes with the frame, substantially as and for the purpose specified. 6th. In a road scraper, a frame, and a pair of ground wheels journaled on the said frame in combination with a series of hoes set side by side to form a continuous scraper, and independent spring drag bars, each rigidly connected at one end to a hoe and at the other end to the frame, substantially as and for the purpose specified. 7th. In a road scraper, a frame, and a pair of ground wheels journaled on the said frame in combination with a series of hoes set side by side to form a continuous scraper and so connected to the said frame that they may rise and fall independently, and two transverse handle bars secured to the front of the frame at different heights, substantially as and for the purpose specified. 8th. In a road scraper, a frame, and a pair of ground wheels journaled on the said frame in combination with a series of hoes set side by side to form a continuous scraper, independent drag bars connecting the hoes with the frame, a cross bar limiting the downward motion of the drag bars, and a cross bar limiting the upward motion of the drag bars, substantially as and for the purpose specified.

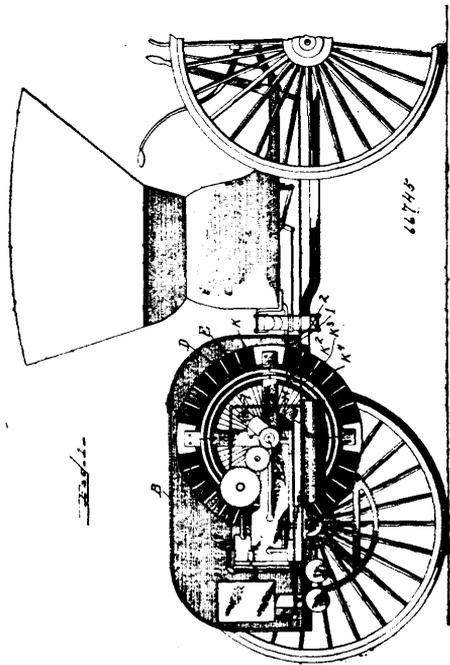
No. 66,745. Power Transmission.

(Transmission de la force.)

John M. Scott, Philadelphia, Pennsylvania, assignee of William Morrison, Chicago, Illinois, U.S.A., 26th March, 1900; 6 years. (Filed 2nd September, 1899.)

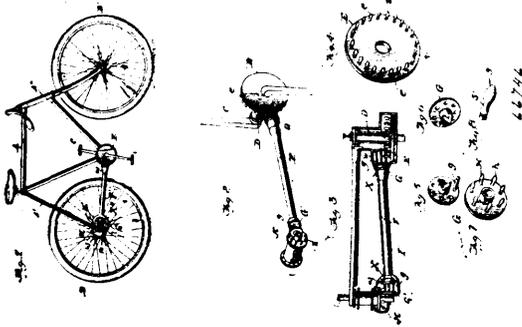
Claim.—1st. In an apparatus for propelling vehicles, the combination with a gas or gasoline engine, or other prime mover, of an electrical machine comprising a combined rotatable field magnet and balance wheel with which the explosive engine is connected and by which said combined balance wheel and field magnet is continuously driven, and a rotatable armature connected with the work which is attracted and rotated in the same direction by the field magnet when the speed of the said field magnet exceeds that of the armature, as and for the purpose set forth. 2nd. In an apparatus for propelling vehicles, the combination with a gas or gasoline

engine or other prime mover of a two part electrical machine, one part of which is wound with wire, mounted to rotate and connected



with the explosive engine whereby this member acts as the balance wheel for the engine and also as a rotatable field magnet, and an armature connected with the work, which is attracted and rotated in the same direction by the field magnet, when the latter is rotated, at a greater speed than the armature, as and for the purpose set forth. 3rd. In an apparatus for propelling vehicles, the combination with a continuously moving or movable explosive engine, of an electrical machine comprising a rotatable field magnet formed or made up by winding the balance wheel of the engine with wire thereby producing a combined balance wheel and field magnet, whereby this element is continuously rotated by the engine, and a rotatable armature connected with the work, which is attracted and rotated to propel the vehicle, when the speed of the said field magnet exceeds that of the armature, as and for the purpose set forth. 4th. In an apparatus for propelling carriages, the combination of two rotatable members, capable of generating electric current, mounted to rotate in the same direction, a mechanical prime mover connected with and constantly rotating one of said members at such a greater rate of speed, relative to the other member, as to generate currents of electricity by the combined action of the two members, resulting from a difference of speed between them, whereby the member driven by the prime mover electrically attracts and rotates the other member in the same direction, and means for connecting the electrically attracted and rotated member to the carriage to be driven, thereby combining in one and the same machine the functions of an electric generator and an electric motor, for the purpose set forth. 5th. The method of generating electric currents and transmitting the energy thereof to propel a carriage, which consists in constantly rotating by a mechanical prime mover, one of two currents generating members of an electrical machine, in the same direction as the other rotates, as and at such a greater rate of speed than the other member as to generate electric currents by the combined action of said members, whereby the member mechanically rotated at a greater rate of speed than the other, electrically attracts and rotates said member by the current generated by said members, and then transmitting the energy of the electrically attracted and rotated member to the traction wheel of the carriage. 6th. In an apparatus for propelling carriages, the combination of two rotatable members capable of generating electric current, mounted to rotate in the same direction, a mechanical prime mover connected with and constantly rotating one of said members at such a greater rate of speed, relative to the other member, as to generate currents of electricity by the combined action of the two members, resulting from a difference of speed between them, whereby the members driven by the prime mover electrically attracts and rotates the other member in the same direction, and means for connecting the electrically attracted and rotated member to the carriage to be driven, thereby combining in one and the same machine the functions of an electric generator and an electric motor, together with a regulating device introduced in the circuit between the two said members.

No. 66,746. Bicycle. (Bicycle.)



Edward Everett White, Oshkosh, Wisconsin, U.S.A., 26th March, 1900; 6 years. (Filed 23rd November, 1899.)

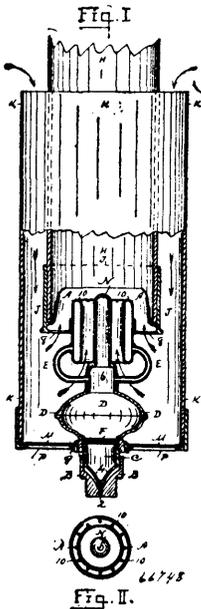
Claim.—1st. In a gear for cycles, the combination of a pedal shaft, a gear wheel carried thereby and provided with pins having prolate spheroidal ends, a gear wheel on the driving hub provided with pins having prolate spheroidal ends, and a shaft provided on each end with rollers which engage the pins on the gear wheels, substantially as described. 2nd. In a gear for cycles, the combination of a pedal shaft, a gear wheel carried thereby and provided with pins having prolate spheroidal ends, a gear wheel on the driving hub provided with outwardly extending divergent pins having prolate spheroidal ends, and an outwardly extending divergent shaft provided on each end with revoluble rollers which engage the pin on the gear wheels, substantially as described.

No. 66,747. Porous Vessel. (Vaisseaux poreux.)

Eduard Perrot, Chateau de Padron, Nantua, France, 26th March, 1900; 6 years. (Filed 23rd December, 1899.)

Claim.—1st. As an article of manufacture, a light and porous vessel of any desired size and configuration, the wall of which are made of crushed pumice stone combined with a carbonizable agglutinant, substantially as described. 2nd. As an article of manufacture, a vase having light and porous walls, made of crushed pumice stone and a carbonizable agglutinant, as molasses combined with lamp black, substantially as described. 3rd. As an improvement in the manufacture of porous vessels, forming a paste or plastic mass of pumice stone and a carbonizable agglutinant, pouring the same in closed moulds having porous walls to permit the escape of gases or vapours, baking the moulded objects at a temperature of about 100 degrees C, and thereafter removing the same from the moulds and subjecting them to a higher temperature to eliminate the useless and carbonising bodies present to promote porosity of the vessels, substantially as specified.

No. 66,748. Gas Burner. (Bec à gaz.)

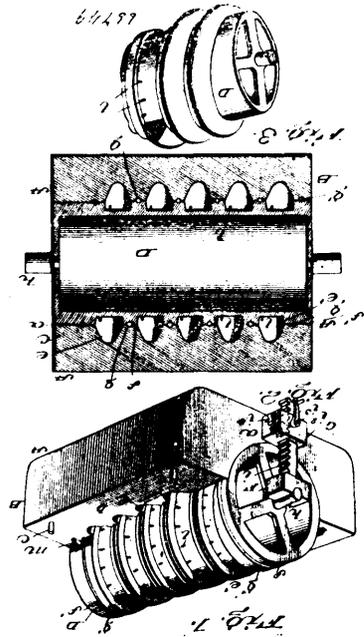


Robert T. Dickinson, Hamilton, Ontario, Canada, 26th March, 1900; 6 years. (Filed 18th March, 1899.)

Claim.—1st. A gas burner of the character described, comprising the circular chambered burner having apertures and a central vertical core, and connected to the smaller upper part of the gas reservoir by two or more gas pipes, the regulating valve admitting the gas, and the glass cylindrical air receiver, positioned as described. 2nd. In a gas burner, the lower gas regulating valve screwed onto the lower apertured part of the gas reservoir, the circular apertured burner having its central vertical core, and connected to the upper part of gas reservoir by pipes, a glass chimney, and a glass cylindrical air receiver, substantially as described and set forth. 3rd. A gas burner, comprising the burner with its central core, and connected to the smaller upper part of the gas reservoir by gas pipes, the regulating valve admitting the gas, layers of gauze in the reservoir, and the glass cylindrical air receiver with a transparent base on a supporting frame connected to said reservoir, substantially as described.

No. 66,749. Mould for Making Cushion Tires.

(Moule pour la fabrication de bandage elastique.)



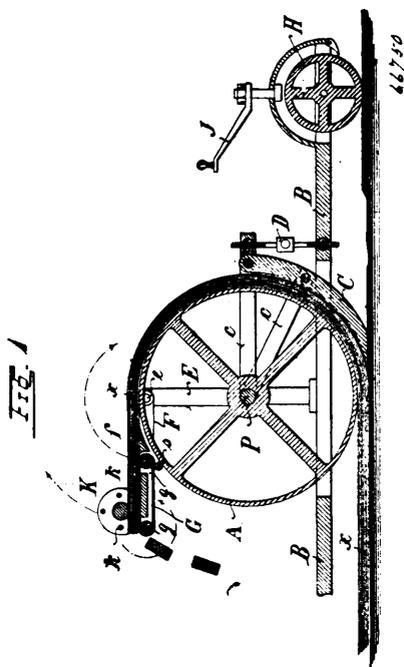
Jules August Collet, Brooklyn, New York, U.S.A., 26th March, 1900; 6 years. (Filed 4th October, 1899.)

Claim.—1st. A mould for making elastic bands of the character set forth, comprising co-operating parts having a spiral forming cavity. 2nd. A mould for making elastic bands of the character set forth, comprising co-operating parts having a spiral forming cavity, and devices for holding a wire plate to be imbedded in the band. 3rd. A mould for making elastic bands of the character set forth, comprising co-operating parts having a spiral forming cavity, and a groove or grooves for receiving surplus material. 4th. A mould for making elastic bands of the character set forth, the same having a cavity for forming the band in spiral shape. 5th. A mould for making elastic bands of the character set forth, having a spiral cavity formed by a groove or grooves in one or all of its co-operating parts. 6th. A mould for making elastic bands, having a spiral cavity formed by a groove or grooves in one or more of its parts, and devices located in said cavity for holding a wire or plate to be vulcanized in or to the band. 7th. A mould for making elastic bands, having a forming cavity, and grooves for taking up the surplus material forced out of said cavity during vulcanization. 8th. A mould for making elastic bands, having a spiral cavity formed by a groove or grooves in one or more of its parts, and grooves in the walls of said cavity for the reception of surplus material. 9th. A mould for making elastic bands, having a spiral cavity, and pins in said cavity for holding a plate or wire to be embedded in the band. 10th. A mould for making elastic bands, having a spiral cavity, devices in said cavity for holding a plate or wire to be vulcanized in or to the band, and a device at or near one end of the cavity for holding one end of the plate or wire. 11th. A mould, having a groove or grooves forming a spiral cavity, with an auxiliary groove or grooves to receive the surplus material forced out of said cavity during vulcanization. 12th. A mould for making elastic bands of the character set forth, comprising a drag and cope having corresponding recesses, and a forming mandrel adapted to fit in said recesses and having a spiral groove. 13th. A mould for making elastic bands of the character set forth, comprising a mould box and

a forming mandrel adapted to be fitted therein, one of said parts being provided with a spiral forming cavity. 14th. A mould for making elastic bands of the character set forth, comprising a separable box, a mandrel adapted to be fitted therein, and bearings in which the mandrel is rotatably mounted. 15th. A mould for making elastic bands, etc., comprising a box composed of a recessed drag and cope, and a forming mandrel adapted to be fitted therein, a spiral forming cavity being formed in one or both of said parts. 16th. A mould for making elastic bands, etc., comprising a recessed drag and cope, a forming mandrel fitted therein, bearings in which the mandrel is rotatably mounted, and means for adjusting said bearings to raise and lower the mandrel. 17th. A mould for making elastic bands, etc., comprising recessed drag and cope portions provided with interior grooves forming a spiral cavity and auxiliary grooves in the parting ribs or walls of said cavity, and a mandrel having a spiral forming groove co-acting with the spiral forming groove of the drag and cope and also with an auxiliary groove co-acting with the said auxiliary grooves of the latter. 18th. A mould for making elastic bands, etc., comprising a recessed drag and cope, a forming mandrel fitted therein and having a spiral forming cavity, a groove in the wall of said cavity to receive surplus material, pins in said cavity to retain a binding plate or wire therein, a holding device at or near one end of the plate or band, bearings in which the mandrel is rotatably mounted, and means for adjusting the bearings to raise and lower the mandrel.

No. 66,750. Clay and Loam Drag.

(*Drague à argile et terre à moules.*)



Johann Georg Harster, Speyer-on-the-Rhine, German Empire, 26th March, 1900; 6 years. (Filed 16th October, 1899.)

Claim.—1st. A machine for use in making bricks, tiles, drain pipes and the like, comprising a vertical roller or drum rotating on its axis on a clay soil or above a mass of clay or loam, a device at or near the bottom of said roller for cutting or separating the clay adhering to the said roller from the main body of clay, a device at or near the top of said roller for pressing or moulding the clay carried up by the same, a system of small rollers and an endless apron or band for conveying the clay, with or without the addition of one or more conveyers of any suitable construction for further transporting the moulded clay, all substantially as described. 2nd. A machine for use in making bricks, tiles, drain pipes, and the like, comprising a vertical roller or drum rotating on its axis on a clay or loam, a device at or near the bottom of said roller for cutting or separating the clay adhering to the said roller from the main body of clay, a device at or near the top of said roller for pressing or moulding the clay carried up by the same, and for cutting it into pieces of any desired size, a system of small rollers and an endless apron or band for conveying the clay with or without the addition of one or more conveyers of any suitable construction for further transporting the moulded and cut clay, all substantially as described. 3rd. A machine for use in making bricks, tiles and the like, comprising a vertical roller or drum rotating on its axis on a clay or loam soil or above a mass of clay or loam, said roller or drum having projections of any suitable form on its surface adapted to make

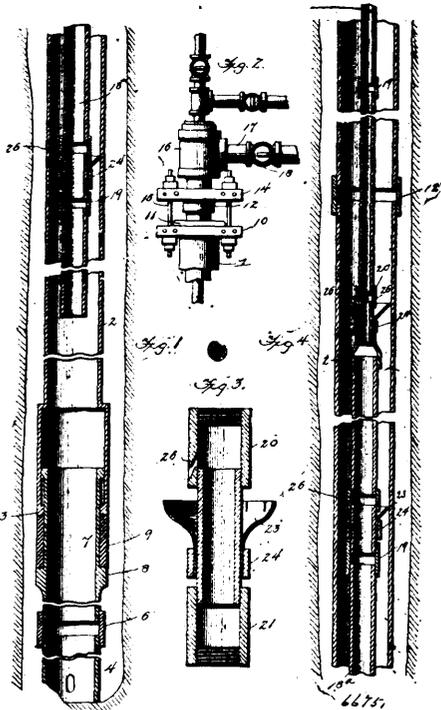
hollows or indents in the clay, a device at or near the bottom of said roller for cutting or separating the clay adhering to the said roller from the main body of clay, a device at or near the top of said roller for pressing or moulding the clay carried up by the same and for cutting it into pieces of any desired size, a system of small rollers and an endless apron or band for conveying the clay, said apron or band being provided with holes corresponding to the projections on the main drum or roller, with or without the addition of one or more conveyers of any suitable construction for further transporting the moulded and cut clay, all substantially as described. 4th. A machine for use in making bricks, tiles, drain pipes and the like, comprising a vertical roller or drum rotating on its axis on a clay or loam soil or above a mass of clay or loam, a device at or near the bottom of said roller for cutting or separating the clay adhering to the said roller from the main body of clay, a device at or near the top of said roller for pressing or moulding the clay carried up by the same and for cutting it into pieces of any desired size, a system of small rollers and an endless apron or band for conveying the clay, and means for reversing said moulding, cutting and conveying devices from one side of the main drum or roller to the other, comprising two parallel arms which carry said devices, secured with capability of turning to a crosspiece carried by a support at the centre of the main drum or roller, with or without the addition of one or more conveyers for further transporting the moulded and cut clay, all substantially as described. 5th. A machine for use in making bricks, tiles, drain pipes and the like, comprising a vertical roller or drum rotating on its axis above a mass of clay or loam, a device for conducting said clay or loam to the said roller consisting of a system of rollers, or a system of rollers and endless band, a device at or near the bottom of said roller for cutting or separating the clay adhering to the said roller from the main body of clay, a device at or near the top of said roller for pressing or moulding the clay carried up by the same, a system of small rollers and an endless apron or band for conveying the clay, with or without the addition of one or more conveyers of any suitable construction for further transporting the moulded clay, all substantially as described. 6th. A machine for use in making bricks, tiles and the like, comprising a vertical roller or drum A, mounted on a frame B, capable of being run of a natural clay or loam soil, or artificially deposited clay X, a knife C, carried by the said frame, for cutting or separating the clay adhering to the said roller from the main body of clay, a knife f, above the said roller for separating the clay, carried up by the same, a travelling band or apron G, passing around rollers g, for the purpose of conveying the clay from the said main roller A, and driven by a friction roller s, and a device K, for moulding and cutting the clay into pieces of suitable size, with or without the addition of one or more conveyers of any suitable construction for further transporting the moulded and cut clay, all substantially as described. 7th. The device for cutting and separating the clay on the drum or roller from the main body of clay, comprising radial arms N, turning on the axle P, of the main drum or roller A, and adjusted by means of screws t, in a crosspiece T, of the standard R, carrying the said axle P, and knives O, adjustably affixed to the said arms, and a wire or wires or band M, sketched between said knives, substantially as described and shown in fig. 4. 8th. The device for moulding drain pipes and the like comprising two horizontal rollers W, suitably grooved so as to receive between them and turn round into annular shape the travelling band or apron L, conveying the clay, a central spindle or core w¹, for forming the hole in the pipe and a device or finger v, for closing the edges of the clay bent round by the band L, and rollers W, all substantially as described and shown in figs. 5 and 7.

No. 66,751. Gas Well. (Puits à gaz.)

Alonzo J. Simmons, Indianapolis, Indiana, U.S.A., 26th March, 1900; 6 years. (Filed 20th October, 1899.)

Claim.—1st. A device of the class described, comprising a casing, a tube within the casing divided vertically into sections, a valved opening leading from each section into the one next above, and a passage having connection with each of said sections. 2nd. The combination with the tubing having a closed upper end of the conveyer pipe disposed within the tubing and passed upwardly through the upper end thereof, a series of upwardly flaring flexible valves fixed to the conveyer pipe, and openings through the conveyer pipe above each valve. 3rd. In a well, the combination with the tubing having a bushing therein provided with a central perforation and with a concentric depression in the upper end, of a conveyer pipe passed through said depression and perforation and having a peripheral projection adapted to enter said depression and rest upon the packing therein. 4th. In a well, the combination with the tubing having a bushing at its upper end, said bushing having a central perforation and a concentric depression, of a conveyer pipe comprising sections connected by collars, said pipe being passed through the perforation and resting with a collar in said depression and upon the packing therein. 5th. In a well, the combination with the tubing having a packing between it and the wall of the well, of the conveyer pipe within the tubing and extending upwardly and through the end thereof, and packing arranged between the tubing and pipe. 6th. In a device of the class described, a cup shaped valve having its edges serrated to permit expansion of the valve. 7th. In a device of the class described, a hollow stem having a flexible cup fixed thereon. 8th. In a device of the class described, a cup shaped

valve having its upper edge serrated on lines at an angle to the radi of the valve whereby said valve may be expanded, and the edges of



the separations will mutually engage to prevent leakage. 9th. In a well, the combination with the tubing, of a cage having a tubular extension disposed within the tubing and adapted to slide therein, flanges upon the tubing and the tubular extension, and compressible packing material disposed between the flanges and adapted to be expanded radially as the extension is moved into the tubing. 10th. In a well, the combination with the tubing of conveyer pipe therein, packing between the pipe and tubing at the upper end of the latter, a plurality of cup valves inserted in line of conveyer pipe and engaging through the pipe above each valve, said perforations being disposed upwardly and inwardly. 11th. In a well, the combination with the tubing of a conveyer pipe therein, packing between the pipe and tubing at the upper end of the latter, immediately below which and the first valve downward therefrom is formed a chamber for excessive pressure a plurality of cup valves upon the conveyer pipe and engaging through the inner surface of the tubing, and one or more perforations through the conveyer pipe and above each valve, said perforations being disposed upwardly and inwardly.

No. 66,752. Lime Treatment. (Traitement de la chaux.)

Carl Straub, Otisco, New York, U.S.A., 26th March, 1900; 6 years. (Filed 26th October, 1899.)

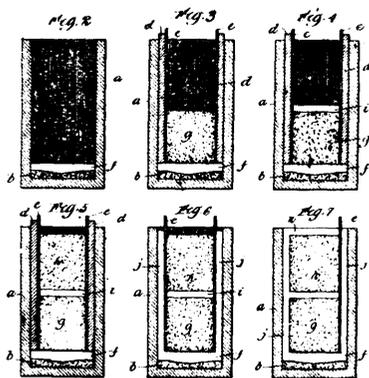
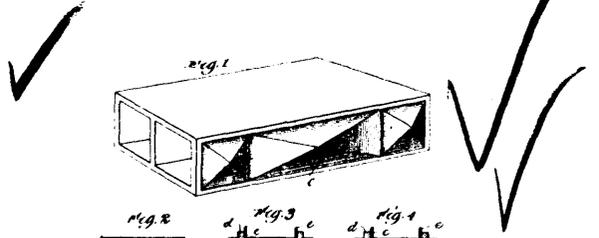
Claim.—1st. The herein described process of treating calcium oxide, which consists, first, in softening the same by partial hydration, and second, in reducing the mass to an indurated granular form by heating. 2nd. The herein described process of treating calcium oxide, consisting of partially hydrating the same, and then recalcining it until all moisture is expelled. 3rd. The herein described process of treating calcium oxide, consisting of partially hydrating the same, then checking hydration, by finally recalcining it until all moisture is expelled. 4th. The herein described process of treating calcium oxide, consisting of partially hydrating the same, and then expelling all moisture, thereby reducing it to a crystallized granular form. 5th. The herein described process of treating calcium oxide, consisting of partially hydrating the same, then removing the partially hydrated calcium oxide from the water, then subjecting it to the action of heat to expel the moisture and reduce it to a crystallized granular form, and finally pulverizing it. 6th. The herein described process of treating calcium oxide, consisting of partially hydrating the same in cool water, then removing it from the water, and then suddenly subjecting it to the action of heat until all moisture is expelled. 7th. The herein described process of treating calcium oxide, consisting of partially hydrating the same in water, combined with a substance which will prevent undue slacking, then removing the partially hydrated calcium oxide, and finally subjecting the treated calcium oxide to the required degree of heat to remove all moisture. 8th. As a new article of manufacture, lime which has been partially hydrated, then recalcined to a crystallized granular form, by having all moisture expelled therefrom, and then reduced to powdered form.

No. 66,753. Glue. (Colle forte.)

Victorien Médéric Bouthillier, Montréal, Québec, Canada, 26 de mars, 1900; 6 ans. (Déposé le 27 janvier, 1900.)

Résumé.—Une colle composée de colle forte ou colle de poisson, de potasse et d'alun, réduite en poudre et soluble à froid tel que ci-dessus décrit et dans les proportions données, pour les fins indiquées.

No. 66,754. Artificial Stone. (Pierre artificielle.)



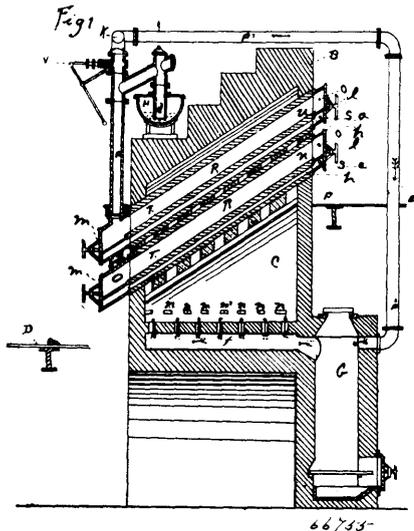
66754

Charles W. Stevens, North Harvey, Illinois, U.S.A., 26th March, 1900; 6 years. (Filed 31st October, 1899.)

Claim.—1st. The process of forming artificial stone consisting in moulding the stone compound in or on the mould formed of moulding material, one of which shall be in a wet or plastic state and the other in a relatively dry state, and then allowing the mass to set until the dry element absorbs the surplus moisture from the wet element, thereby converting the stone compound to a solid or non-liquid form, substantially as and for the purpose set forth. 2nd. The process of forming artificial stone, consisting in moulding the stone compound while in a plastic or semi-liquid state, in or on a mould formed of relatively dry moulding material, and then allowing the mass to set until the moulding material absorbs the surplus moisture from the compound, thereby converting the latter to a solid or non-liquid form, substantially as and for the purpose set forth. 3rd. The process of forming artificial stone, consisting in moulding stone compound, while in a plastic or semi-liquid state, in or on a partial mould formed of relatively dry moulding material, and then covering the compound with relatively dry moulding material and finally allowing the mass to set until the moulding material absorbs the surplus moisture from the compound, thereby converting the latter to a solid or non-liquid form, substantially as and for the purpose set forth. 4th. The process of forming artificial stone, consisting in moulding layers of stone compound while in a plastic or semi-liquid state between or on layers of relatively dry moulding material, and then allowing the mass to set until the moulding material absorbs the surplus moisture from the compound, thereby converting the latter to a solid or non-liquid form, substantially as and for the purpose set forth. 5th. The process of forming artificial stone, consisting in first moulding layers of stone compound while in a plastic or semi-liquid state between or on layers of relatively dry moulding material, then removing a portion of such layers of compound and moulding material and replacing such removed portions with stone compound in a plastic or semi-liquid state and finally allowing the mass to set until the moulding material absorbs the surplus moisture from the compound, thereby converting the latter to a solid or non-liquid form, substantially as and for the purpose set forth. 6th. The process of forming artificial stone, consisting in first forming in relatively dry moulding material, a partial mould of one or more faces of such stone, next filling into the partial mould thus formed a lining or layer of stone compound in a dry powdered state, then moulding thereon a layer of stone compound in a plastic or semi-liquid state, next covering the compound with relatively dry moulding material, and finally allowing the mass to set until the moulding material absorbs the surplus moisture from the compound, thereby converting the latter to a solid or non-liquid form, substantially as and for the purpose set forth.

No. 66,755. Apparatus for the Manufacture of Gas.

(Appareil pour la fabrication du gaz.)

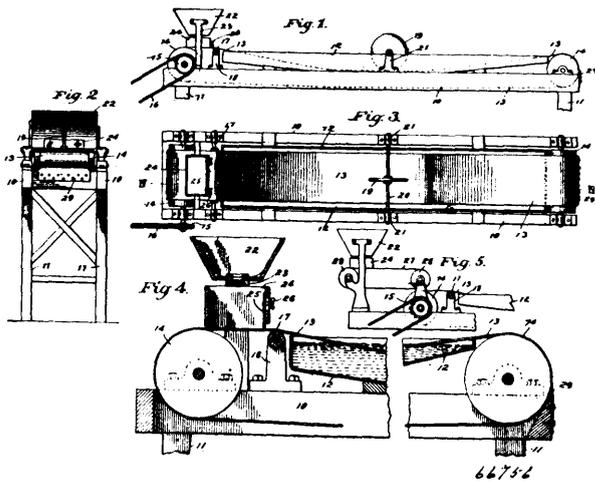


Frederick Egner, Morristown, New Jersey, U.S.A., 26th March, 1900; 6 years. (Filed 2nd June, 1899.)

Claim.—In an apparatus for the manufacture of gas, the combination of a retort furnace, a number of retorts set therein at an angle from the horizontal, each retort being divided into an upper and lower chamber by means of perforated removable tiles, means to heat the retorts simultaneously and constantly externally, and at will internally, one end of the retorts provided with means whereby oil, steam and air may be injected into them, and the other end furnished with means whereby the gas produced may be conducted either to the hydraulic main or into the combustion chamber of the retort furnace or elsewhere, substantially as shown and for the purpose set forth.

No. 66,756. Process of Mixing Cement, Plaster, etc.

(Procédé pour le mélange de ciment et plâtre.)



Augustine Sackett, New York City, New York, U.S.A., 26th March, 1900; 6 years. (Filed 17th April, 1899.)

Claim.—The herein described process of mixing plaster, cement or similar material, which consists in moving through a liquid bath in an unagitated condition a substantially even or suent layer of material to be mixed at such a rate of speed that the said material is thoroughly saturated, and then discharging the same.

No. 66,757. Manufacture of Acetone.

(Fabrication d'acétone.)

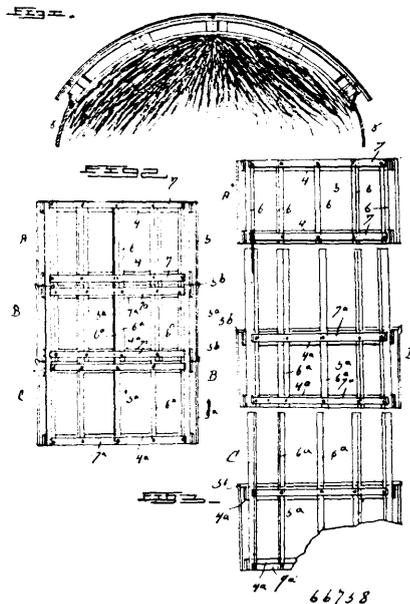
Ludwig Hawliczek, Liverpool, Lancaster, England, 26th March, 1900; 6 years. (Filed 4th April, 1899.)

Claim.—1st. The manufacture of acetone direct from organic substances yielding acetic acid on being heated, by subjecting such

substances to distillation in closed vessels, and bringing the products of distilling directly into contact with an alkaline earth or equivalent heavy metal at an elevated temperature, substantially as set forth. 2nd. In the manufacture of acetone, the herein described process consisting in incorporating or combining an organic substance as described with an alkaline earth or equivalent heavy metal, subjecting these combined substances to heat in a closed and externally heated vessel, and subsequently artificially cooling the said resultant gases of distillation. 3rd. The manufacture of acetone by subjecting wood and lime, together with heat in a closed externally heated vessel, and subsequently condensing the products of distillation, substantially as set forth. 4th. Apparatus for the manufacture of acetone, comprising a duplex set of inclined closed retorts *a*, and overhanging chamber *e* in which the said retorts are set, the said lower end of the retort projecting out of the lower part of said casing, a bifurcated charging part *b*, connected with the upper parts of the retorts *a*, and a heating furnace *c* below the said chamber *e*, and disposed within the same, substantially as set forth.

No. 66,758. Cover for Hay Stacks.

(Couverture pour meules à foin.)



Samuel Garret Rayl, Tunis, Iowa, U.S.A., 26th March, 1900; 6 years. (Filed 10th March, 1900.)

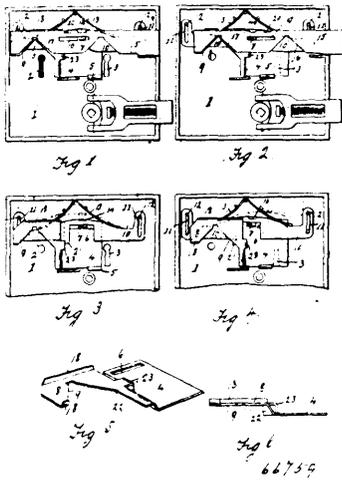
Claim.—1st. A temporary roof, formed of separable sections provided with stringers projected beyond one of the sections and respectively running in planes immediately adjoining the planes of the stringers of the other sections, and having lateral engagement with the stringers of said other sections. 2nd. A temporary roof, having a roof proper, strips attached to the roof proper, and stringers of one section being projected beyond the same and respectively running in planes of the stringers of the other section, and having lateral engagement with the stringers of the said other section.

No. 66,759. Door Lock. (Serrure de porte.)

Willis J. Boon, Perry, Georgia, U.S.A., 26th March, 1900; 6 years. (Filed 10th March, 1900.)

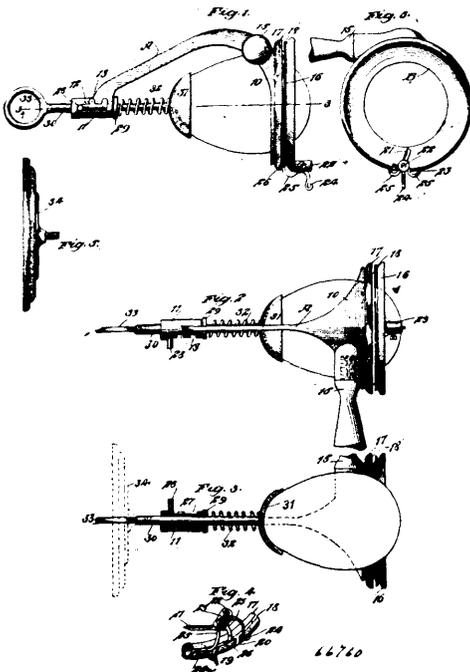
Claim.—1st. In a lock, the combination of the lock bolt, a spring actuated bar having engagement with said bolt, the guard plate adapted to slide over the outer keyhole and having a raised portion thereof lying between said spring actuated bar and said lock bolt, said plate being adapted to be engaged by the key together with said bar and lock bolt and moved simultaneously therewith. 2nd. In a lock, the combination of a movable plate adapted to cover the outer keyhole, a spring actuated bar adapted to have vertical movement at both ends, the lock bolt lying adjacent to said spring actuated bar having notches in the edge thereof, a lug on said bar adapted to lie in said notches, said movable plate having a raised projecting wing which extends parallel with and lies adjacent to the key engaged end of the lock bolt and between said bolt and said spring actuated bar whereby said plate is caused to slide when said bolt is actuated by the operation of the key. 3rd. In a lock, the combination of the spring actuated bar each end of which is adapted to move vertically against the action of said spring, a movable plate the body of which lies under said bar and is adapted to close the

keyhole opening, said plate having a raised projecting wing which extends onto the upper surface of said bar and is notched to receive



the key, and a bolt lying upon the upper surface of said wing and notched to register therewith, said bolt being adapted to be engaged by a lug projecting from said spring actuated bar. 4th. In a lock, the combination of a spring actuated bar, a movable plate adapted to close the keyhole opening having opposed shoulders adapted to be engaged by a projection on the lower edge of said bar, a lock bolt lying adjacent to and registering with the wing of said plate, said wing and lock bolt standing in the plane of said spring actuated bar whereby all of said parts may be engaged and operated by the key, substantially as set forth.

No. 66,760. Device for Opening Eggs.
(Appareil pour ouvrir les œufs.)

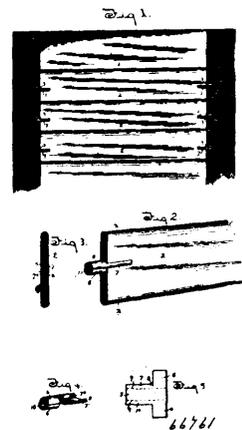


Wilbur R. Noxon, Picton, Ontario, Canada, 26th March, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. A device for opening eggs, comprising a frame provided with a handle, one portion of the frame being arranged to receive an end of an egg, a knife mounted to travel around the said receiving section of the frame and extend therein, a tension controlled cup adapted to receive the opposite end of the egg, and means for locking the cup in position. 2nd. A device for opening

eggs, consisting of a frame provided with a handle, one portion of the frame being arranged to receive an end of an egg, a knife mounted to travel around said receiving section of the frame and extend therein, a tension controlled cup adapted to receive the opposite end of the egg, a locking device for the cup, and a support for the frame, whereby the said frame may be held in an upright position, as described. 3rd. A device for opening eggs, consisting of a frame having a cupped ring section at one end and a sleeve at the opposite end, having a slot therein and recesses in an edge of the said slot, a track located at the cupped ring section of the frame, a knife arranged to extend downwardly and inwardly within the cupped ring section to a point at its inner edge, a support for the said knife, having guided movement in the said track, a stem passed through the said sleeve of the frame, movable to and from the cupped ring section, said stem being provided at its forward end with a cup, a bushing loosely mounted on the said stem and held to slide in the said sleeve, a spring around the stem, engaging with the cup and the bushing, and a pin carried by the bushing, being adapted to slide in the opening of the said sleeve and to enter the recesses communicating with the said opening, substantially as and for the purpose set forth. 4th. In a device for opening eggs, the combination with a holder in the form of a cupped ring and having an annular peripheral guideway, of a knife support mounted to travel and rock in said guideway, said support extending over and beyond the front edge of the ring, and a knife rigidly secured to said support and extending within the cupped ring, substantially as described. 5th. In a device for opening eggs, the combination with a holder in the form of a cupped ring and having an annular peripheral guideway, of a knife support mounted to travel and rock in said guideway, and a knife having its shank at an angle to the blade, and secured to the support with the blade extending into the cupped ring, substantially as described. 6th. In a device for opening eggs, the combination with a holder provided with an annular peripheral guideway having recesses therein, of a knife support provided with legs projecting into the guideway and having balls or rollers on their ends within the guideway, and a knife carried by the support, substantially as described. 7th. In a device for opening eggs, the combination with a holder provided with a tubular and slotted ring on its periphery, of a knife socket provided with a handle and with legs extending through the slot of the ring into the same, said legs being provided with balls or rollers on their ends, and a knife having its shank secured in the said socket, substantially as described. 8th. In a device for opening eggs, the combination with a frame, having a sleeve at one end and a ring at its other end, and a knife arranged to travel round the ring, of a thimble mounted to slide in the sleeve, a stem sliding in the thimble and sleeve and carrying a cup at its inner end, a spring surrounding the stem between the cup and thimble, and means for locking the thimble, substantially as described. 9th. In a device for opening eggs, the combination, with a frame having a ring at one end and a sleeve at its other end, the said sleeve being formed with a longitudinal slot and recesses in one edge of the slot, and a knife arranged to travel around the ring, of a thimble in the sleeve and provided with a flange at one end and a laterally projecting pin extending into the slot of the sleeve, a stem sliding in the sleeve and thimble and provided with a cup at its inner end, and a spring surrounding the stem between the cup and the flange of the thimble, substantially as described.

No. 66,761. Pivot for Blind Slats.
(Pivot pour barreau de jalousies.)

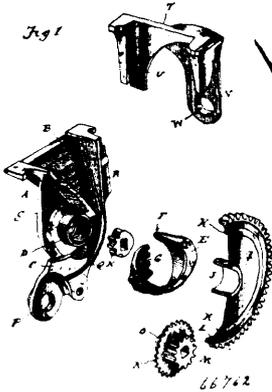


Edmund Randolph, Jacksonville, Florida, U.S.A., 26th March, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. A metallic pivot for blind slats formed from a single blank of metal, and comprising a flat slats attaching shank having

lateral wings located at one end thereof and projecting in opposite directions from opposite edges thereof, said wings being bent in reverse directions and forming semi-tubular members, the latter being located at opposite sides of the shank, and the combined semi-circular members forming a tubular pivot, substantially as shown and described. 2nd. A metallic pivot for blind slats formed from a substantially T-shaped blank, the shank thereof having longitudinally extending flanges, and the opposite wings forming the head of the T-shaped blank being bent into semi-circular shape at opposite sides of the shank and forming a tubular pivot, the adjacent end of the shank being located within the tubular pivot and forming a diametric brace therefor, substantially as shown and described. 3rd. A metallic pivot for blind slats, comprising a tubular pivot proper having a diametric brace and an attaching shank projecting from one end of the tubular pivot, substantially as shown and described.

No. 66,762. Grain Distributor. (Distributeur de grain.)

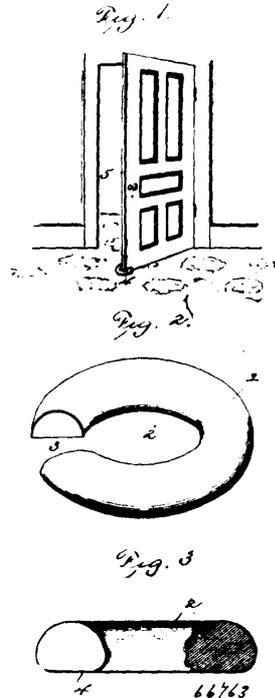


Edwin D. Mead, Phelps, New York, U.S.A., 26th March, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. In a force feed grain and seed distributor, the combination of a feed wheel or disc provided with teeth upon its periphery, and a driving pinion therefor meshing with said teeth. 2nd. In a force feed grain and seed distributor, the combination of a feed wheel or disc provided with teeth upon its outer edge, a driving pinion meshing therewith, and a stirrer wheel also driven by said pinion. 3rd. In a grain and seed distributor, the combination of a main frame or casing, operative parts mounted therein, and an interlocking plate or cover serving to hold the parts in their operative relation without the use of other fastening devices. 4th. In a grain and seed distributor, the combination of a main frame or casing, a feed wheel mounted thereon, a driving pinion for said feed wheel, and an interlocking cover adapted to be connected to said frame and to hold the parts in position without the use of bolts, rivets or the like. 5th. In a grain and seed distributor, the combination of a two-part frame or casing arranged to interlock when assembled, and operative mechanism adapted to be mounted in said casing and to be held thereby, substantially as described. 6th. In a force feed grain and seed distributor, the combination of a feed wheel, a pinion for driving the same, and a stirrer wheel formed integral with said pinion. 7th. In a force feed grain and seed distributor, a disc or feed wheel provided with teeth upon its outer edge, a driving pinion meshing with said teeth, a stirrer wheel formed integral with said pinion, and a gate serving to regulate the feed of the distributor. 8th. In a force feed grain and seed distributor, the combination of a pivoted gate, and a pinion mounted centrally within the case of the distributor for regulating the position of the gate. 9th. In a force feed grain and seed distributor, the combination of a main frame or casing, a feed wheel journaled centrally therein, a gate pivoted to one side of the journal bearing of the wheel, and a pinion for actuating the gate, said pinion being placed in line with the journal of the wheel. 10th. In a force feed grain and seed distributor, the combination of a main frame or casing, a feed wheel journaled therein and provided with a hollow journal or axle, a gate pivoted to one side of the bearing of the wheel, and a pinion serving to regulate the position of the gate, said pinion being located in line with the journal of the wheel, substantially as described. 11th. In a force feed grain and seed distributor, the combination of a frame or casing, a feed wheel journaled therein, said wheel being provided with an offset or shoulder K, substantially as described, and a pivoted gate mounted intermediate the frame and the feed wheel adapted and designed to swing across the inner face of the feed wheel, substantially as described. 12th. In a force feed grain and seed distributor, the combination of a main frame or casing, a feed wheel journaled therein, said wheel being provided with teeth upon its periphery, and an offset or shoulder K, a pivoted gate mounted intermediate said wheel and the casing, and a pinion meshing with the teeth upon

the feed wheel. 13th. In a force feed grain and seed distributor, the combination of a main frame or casing provided with a central hub or bearing member D, a gate E pivoted adjacent to said member and provided with teeth G upon its free end, a pinion H mounted within said central hub or bearing member, and meshing with the teeth G upon the gate, a feed wheel provided with a hollow hub J adapted to enter said hub or bearing D, a driving pinion for said feed wheel, and a cover adapted to interlock with the main frame or casing and hold the parts in position. 14th. In a force feed grain or seed distributor, the combination of a main frame or casing provided with a central hub or bearing D, a gate pivoted adjacent thereto and provided with teeth upon its free end, a pinion H mounted within said central hub or bearing and meshing with the teeth upon the gate, a feed wheel journaled in said central hub or bearing and provided with teeth upon its outer periphery, a combined pinion and stirrer wheel, said pinion meshing with the teeth upon the feed wheel, and a cover adapted to pass down to one side of the feed wheel and to interlock with the main frame or casing, substantially as described. 15th. In a force feed grain distributor, the combination of a pivoted gate, a pinion mounted centrally within the case of the distributor for moving said gate, and an actuating shaft passing through said pinion. 16th. In a force feed grain distributor, the combination of a pivoted gate mounted centrally within the shell or casing, an actuating shaft passing centrally through said casing, and means for connecting said shaft and the gate.

No. 66,763. Door Securer. (Arrête-porte.)



William H. Phillips, Bridgeton, New Jersey, U.S.A., 26th March, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. A door stop or check, comprising a movable body to rest upon the floor, and provided with an opening to receive the free edge of the door. 2nd. A door stop or check, comprising a movable weighted body, which has a flat under face to rest evenly upon the floor, and also provided with a longitudinal slot or bifurcation to removably receive the free edge of the door.

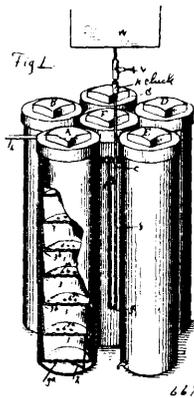
No. 66,764. Calculating Machine. (Machine à calculer.)

Max Blunn, San Francisco, assignee of Adam Hoch, Alameda, California, U.S.A., 27th March, 1900; 6 years. (Filed 9th January, 1899.)

Claim.—1st. An adding machine having a series of re-adding devices, one for each numerical order, a paper holding and feeding device, a printing device having a series of type figures from cipher to nine inclusive, and adapted by its movements in one direction to make contact with the paper and imprint any one of its type figures on the paper, and by its movement in the opposite direction to engage and actuate the adding devices, and means for separately shifting said printing device transversely of the paper by which it is set to print from the highest order of numbers in the row, and for actuating said printing device to successively add and print the

with a paper strip, said printing wheels being arranged to print ciphers in all the spaces to the left of the highest figure in the line at the same operation of imprinting the sum total on the paper. 21st. In an adding machine, adding devices corresponding to the numerical orders, a carriage for moving successively from order to order and determining the adding devices to be actuated, and an order key for each order bringing said carriage into engagement with the desired adding device to begin the registration of a number. 22nd. In an adding machine, adding devices corresponding to the numerical orders, a carriage movable step by step to cause the orders successively to be in operative position, and an order key for each order, all operatively connected to the carriage and independently movable to bring the carriage into position to secure the action of the adding wheel of the order corresponding to that of the key actuated.

No. 66,765. Acetylene Gas Generator.
(Générateur à gaz acétylène.)



Benjamin F. Bailey and Peter W. Shute, Lidgerwood, North Dakota, U.S.A., 27th March, 1900; 6 years. (Filed 16th February, 1899.)

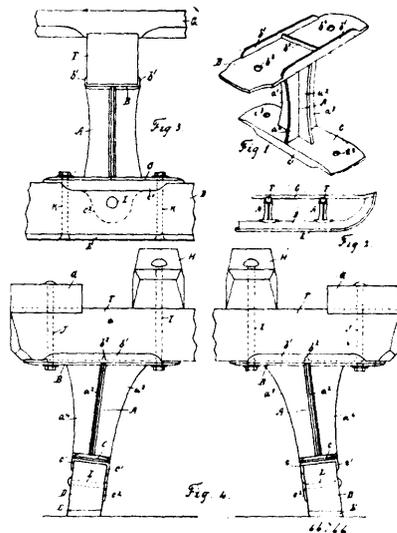
Claim.—1st. In a generator for the production of acetylene gas by the chemical action of a liquid on a solid, the combination with an inclosing tank, of a series of cups arranged in a stack stationarily supported in said tank, each of said cups being provided with openings through the bottom and with means for admitting the liquid at the top thereof, a pipe adapted to deliver liquid into the tank at or near the top thereof, a valve adapted to control the inflow of the liquid into the tank through said pipe, means whereby said valve is actuated by the pressure of gas in said tank, and a gas outlet communicating with said tank a or near the top thereof, substantially as described. 2nd. In a machine for producing acetylene gas by a chemical action of a liquid on a solid, a combination of a series of tanks for holding the material, a liquid supply connected to the first tank at or near its top, a single pipe connecting each tank with the next succeeding tank and constituting the gas escape and liquid supply pipe from each tank to the next succeeding, said pipes being arranged at or near the tops of said tanks and each succeeding pipe being on slightly lower level than the next preceding pipe and all being lower than the liquid supply for the first tank, a drawing off pipe from the last tank of the series, and means in said liquid supply adapted to be operated by back pressure of the gas to control the supply of liquid to the tanks, substantially as described. 3rd. In a generator for the production of acetylene gas by the chemical action of a liquid on a solid, the combination with an enclosing tank, a series of cups adapted to be arranged in a stack, each of said cups being provided with openings through the bottom and means for admitting liquid at the top thereof, a pipe adapted to deliver the liquid into the said tank near the top thereof, a valve adapted to control the inflow of liquid to the tank and means whereby said valve is actuated by the pressure of gas in said tank, said tank being provided with an inverted siphon between the valve and its outlet into said tank, whereby the gas pressure on the valve is made constant.

No. 66,766. Sleigh Knee. (Courbe de traîneau.)

Peter Smith, Wellburn, Ontario, Canada, 27th March, 1900; 6 years. (Filed 2nd September, 1898.)

Claim.—1st. A sleigh knee consisting of a post or standard A, formed cruciform in cross section or with the flanges, a^1 , a^2 , a^3 and a^4 , and the plates B and C provided with the flanges b^1 and c^1 respectively, substantially as and for the purpose set forth. 2nd. A sleigh knee consisting of the post or standard A, formed cruciform in cross section, or with the flanges a^1 , a^2 , a^3 and a^4 , the plate B provided with the flanges b^1 , and rib b^2 , and the plate C, provided with the flanges c^1 and the extension flange c^2 , substantially as and

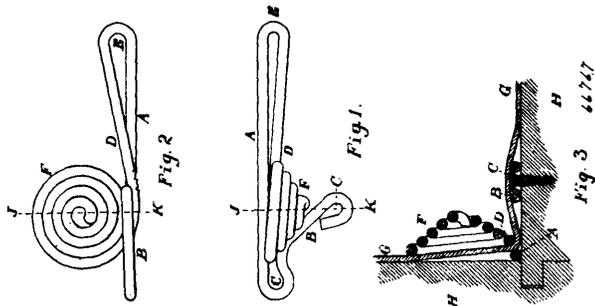
for the purpose set forth. 3rd. A sleigh knee consisting of the post or standard A, and the plate B, provided with the flanges b^1 , and in



which the bolt hole b^4 is formed, in combination with the bench F, bolster block H and bolt I, extending through said hole b^4 , in the plate B, bench F, and the bolster block H, substantially as and for the purpose set forth. 4th. A sleigh knee consisting of the post or standard A, and the plate B, provided with the flanges b^1 , and in which the bolt hole b^3 is formed in connection with the bench F and rave G and the bolt J extending through the bolt hole b^3 in the plate B, bench F and rave G, substantially as and for the purpose set forth. 5th. A sleigh knee consisting of the post or standard A, the plate B, provided with the flanges b^1 and the plate C, provided with the flanges c^1 , and in which the bolt holes c^3 , are formed in combination with the bench F, runner E, and the bolts K extending through the bolt holes c^3 , in the plate C, runner D and shoe E, substantially as and for the purpose set forth. 6th. A sleigh knee consisting of a post or standard A, the plate C provided with the flanges c^1 and extension flange c^2 , in combination with the runner D, and the bolt L, extending through the extension flange c^2 and runner D, substantially as and for the purpose set forth. 7th. A sleigh knee consisting of a post or standard A, plate B, provided with the flanges b^1 , rib b^2 , and in which the bolt holes b^3 and b^4 are formed, the plate C, provided with the flanges c^1 , extension flanges c^2 , and in which the bolt holes c^3 are formed, in combination with the runner D, shoe E, bench F, rave G, bolster block H, and bolts I, J, K and L, substantially as and for the purpose set forth.

No. 66,767. Stair Carpet Fastener.

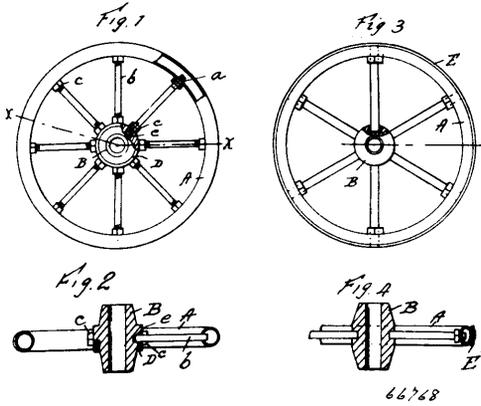
(Attache pour tapis d'escalier.)



James Boomer Hall, Toronto, Ontario, Canada, 27th March, 1900; 6 years. (Filed 7th October, 1898.)

Claim.—A stair carpet fastener with screw holes and a loop of spring material extending from the base, for the purpose specified, substantially as described.

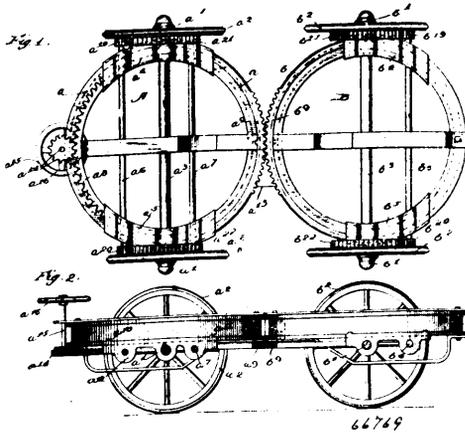
No. 66,768. Vehicle Wheel. (Roue de vehicules.)



James Lloyd, Blandon, Pennsylvania, U.S.A., 27th March, 1900; 6 years. (Filed 2nd August, 1899.)

Claim.—1st. A vehicle wheel, comprising a hub having semi-circular openings or recesses in its periphery, tubular spokes having their inner ends inserted in said openings, a tubular rim having openings into which the outer ends of said spokes are secured, a collar designed to fit over said hub and close said openings, and means for securing said collar in position, substantially as set forth. 2nd. A vehicle wheel comprising a hub having a peripheral shoulder provided with semi-circular openings or recesses, tubular spokes having their ends screw threaded, the inner ends of said spokes being inserted in said openings, a tubular rim having openings into which the outer ends of said spokes are also projected, a collar adapted to fit over said hub and also having semi-circular recesses formed therein and designed to coincide with the recesses in the hub, and threaded nuts working on the ends of said spokes, substantially as set forth.

No. 66,769. Motor Vehicle. (Vehicule motocr.)

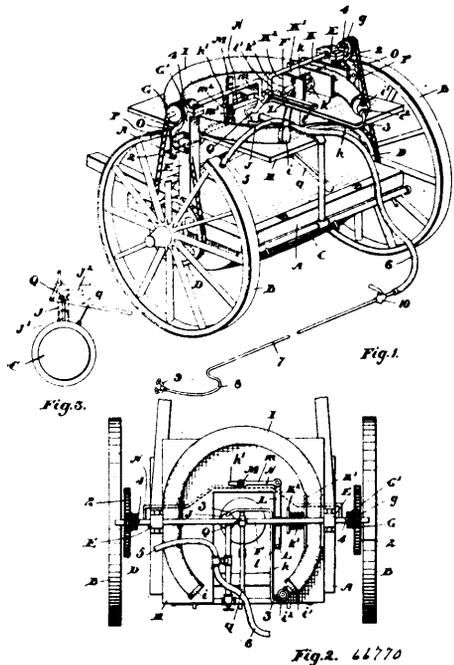


James T. Dougine, Chicago, Illinois, U.S.A., 27th March, 1900; 6 years. (Filed 3rd August, 1899.)

Claim.—1st. A vehicle running gear consisting of two pair of traction wheels, a frame for each pair of traction wheels, a path around the vertical axis of said frame through which it is adapted to be moved and a motor operatively connected with said wheels and bodily moving with said frame, substantially as set forth. 2nd. A vehicle running gear consisting of two pair of traction wheels, a frame for supporting each pair of traction wheels, a path around the vertical axis of said frames through which they are adapted to be moved, a guide to retain the said frames within said path, and a means for moving said frames, so that each pair of wheels may occupy a position in which lines drawn through their respective horizontal axis will radiate from a common point, substantially as set forth. 3rd. A vehicle running gear consisting of two rings, or equivalent, loosely attached together, a pair of traction wheels associated with each ring, a frame for supporting each pair of traction wheels, a path around said rings in which said frames are adapted to be circumferentially moved, and means for moving said frames coincidentally, substantially as set forth. 4th. A vehicle running

gear consisting of two rings, or equivalent, loosely attached together, a pair of traction wheels associated with each ring, a frame for supporting each pair of traction wheels, a part around said rings in which said frames are adapted to be circumferentially moved, a means for moving one of the frames and a segmental gear attached to each frame and meshing into each other for moving the second frame, substantially as set forth. 5th. A vehicle running gear consisting of two rings, or equivalent, loosely attached together, a pair of traction wheels associated with each ring, a frame for supporting each pair of traction wheels, a path around said rings in which said frames are adapted to be circumferentially moved, a means for moving one of the frames, and rods connecting diagonally opposite ends of said frames together for moving the second frame, substantially as set forth. 6th. A vehicle running gear consisting of two rings, or equivalent, loosely attached together, a pair of traction wheels associated with each ring, a frame for supporting said traction wheels, a path in which said frames moves around its own vertical axis, an independent motor attached to each traction wheel and means for independently or collectively controlling said motor, substantially as set forth. 7th. In a self propelled vehicle the combination of a traction wheel, a projecting annulus fixed to said traction wheel intermediate of its hub and rim, brake shoe within said annulus, and a means for forcing said brake shoe into contact with the interior surface of said annulus, substantially as set forth. 8th. In a self propelled vehicle the combination of a traction wheel, a friction surface on said traction wheel, a brake shoe adapted to engage with said friction surface, a propelling motor adapted to rotate said traction wheel, a friction surface on the moving member of said propelling motor, a means for positively applying the brake to the said traction wheel, and a yielding connection for applying the brake to the said propelling motor operated by the same mechanism, substantially as set forth. 9th. A vehicle running gear consisting of two trucks, a pair of propelled traction wheels associated with each truck, and a means, such as a bolt, for securing the two trucks together, but leaving the said trucks free to oscillate with respect to each other, substantially as set forth. 10th. A vehicle running gear consisting of two trucks, each truck being provided with a single pair of traction wheels, a motor attached to and moving with each traction wheel, a means such as a bolt for connecting said two trucks together, whereby they are rigidly held in longitudinal direction, but are free to oscillate with respect to each other, substantially as set forth.

No. 66,770. Sprayer. (Pulverisateur.)



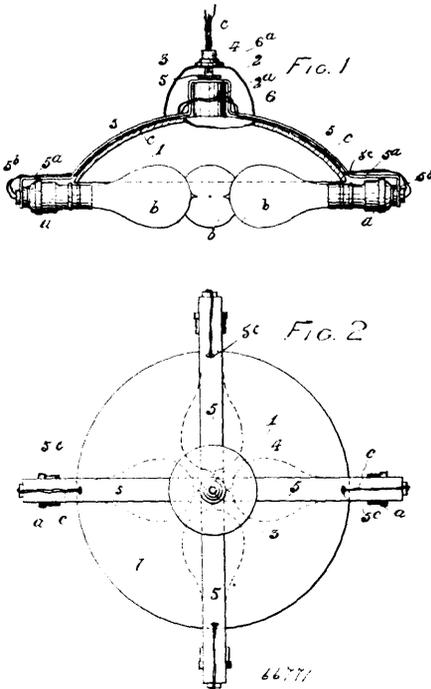
John Sutcliffe Proctor, Linton, York, Ontario, Canada, 27th March, 1900; 6 years. (Filed 15th September, 1899.)

Claim.—1st. The combination with the pump and a suitable drive therefor, and the spraying tubes connected thereto, of a pneumatic tube suitably supported, a pressure applying device to such tube designed to be overcome by the expansion of the tube, and means connected to the pressure applying device and the driving gear for the pump for throwing the latter out of gear upon undue pressure in the tube, as and for the purpose specified. 2nd. The combination with the pump and a suitable drive therefor and the spraying tubes

connected thereto, of a pneumatic tube suitably supported, the stationary board lying along one side of the tube, the adjustable pressure board on the opposite side, the stationary guide board and spring extending between the same and the adjustable board and suitable guiding rods extending through the boards, and means connected to the adjustable board and the driving gear of the pump for throwing the latter out of gear upon undue pressure in the tube, as and for the purpose specified. 3rd. The combination with the crank shaft and sprocket pinion located thereon, and sprocket wheels on the main axle and sprocket chains connecting the pinions and wheels, the ratchet attached to or forming part of the sprocket wheel, the annular groove between the ratchet wheel and sprocket wheel, the engaging pins on the crank shaft and the force pump operated from the crank shaft, of a pneumatic tube suitably supported and connected by pipe to the pump, the stationary board lying along one side of the tube, the adjustable pressure board on the opposite side, the stationary guiding board and spring extending between the same and the adjustable board, and suitable guiding rods extending through the boards, and means connected to the adjustable board and to the ratchet wheels, whereby the latter are thrown out of engagement with the pins on the crank shaft upon an undue pressure arising in the pneumatic tube, as and for the purpose specified. 4th. The combination with the crank shaft and sprocket pinion located thereon, and sprocket wheels on the main axle and sprocket chains connecting the pinions and wheels, the ratchet wheel attached to or forming part of the sprocket wheel, the annular groove between the ratchet wheel and sprocket wheel, the engaging pins on the crank shaft and the force pump operated from the crank shaft, of a pneumatic tube suitably supported and connected by pipe to the pump, the stationary board lying along one side of the tube, the adjustable pressure board on the opposite side, the stationary guiding board and spring extending between the same and the adjustable board and suitable guiding rods extending through the boards, the bracket attached to the adjustable board and extending through the guiding board, the lever suitably pivoted and connected to the end of the bracket, the vertically placed lever connected by link to the horizontal lever, the forked levers suitably pivoted on the standards and having their upper ends extending into the annular groove between the ratchet wheel and the sprocket wheel, and the bars connecting the forked lever with the vertically placed lever, as and for the purpose specified.

No. 66,771. Electric Light Hanger.

(*Pendant de lumière électrique.*)

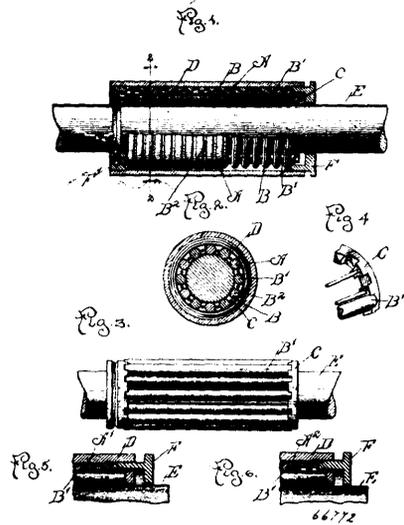


Duncan Brown, Vancouver, British Columbia, Canada, 27th March, 1900; 6 years. (Filed 17th October, 1899.)

Claim.—1st. An electric light hanger, having a reflector 1 with a boss and a hollow stem communicating with an aperture through the boss, in combination with arms 5 fixed to the stem and radiating beyond the outer rim of the reflector, a cap 6 over the boss and receiving the stem through an aperture therein and a nut 4 threaded on the stem, and sockets fixed to the deflected ends of the arms 5, whereby the lights are held in a converged position on a plane in front of the lower plane of the reflector's rim. 2nd. In combina-

tion with a reflector having a hollow boss on its rear side and a stem communicating therewith, arms 5 radiating from said stem and passing outwards and downwards, and lights secured to the deflected ends of the arms and placed in a converging position on a plane in front of the plane of the reflector's rim, substantially as specified. 3rd. In an electric light hanger, having a reflector 1 with a hollow boss 2 on its rear side, in combination with radial arms 5 projecting beyond the rim of said reflector, said arms being to support incandescent bulbs *b* converging beneath or before the reflector so that their sockets *a* will not intervene between the reflector and the light radiated, as set forth.

No. 66,772. Roller Bearing. (*Coussinet à rouleau.*)



Frank Whitney, Lakeside, Illinois, U.S.A., 27th March, 1900; 6 years. (Filed 15th December, 1899.)

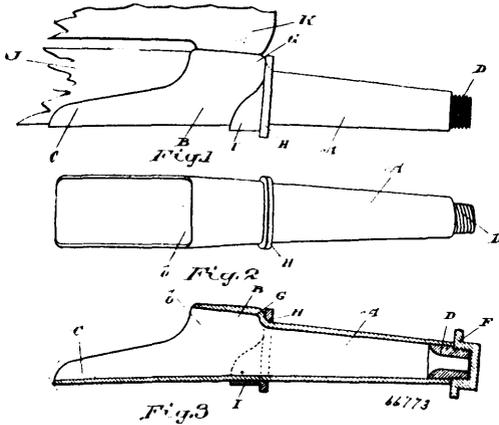
Claim.—1st. In a roller bearing, a slack take-up, consisting of a series of coils of beveled or wedge shaped wire adapted to be expanded, and means for expanding the coils, substantially as described. 2nd. In roller bearings, a take-up, consisting of two coils of wire, a cross section of which is pyramidal in form, the inner coil wound with the flat surface next the rollers and the outer coil with the flat surface next the boxing, with the two beveled sides matching and overlapping each other, and means for compressing said coils longitudinally and thereby expanding said coils laterally, substantially as specified. 3rd. A roller bearing tightener, composed of coils of wire, and means for expanding said coils laterally, substantially as described. 4th. A roller bearing, composed of the following elements—the usual cage and rollers and wound thereon, one or more coils of wire, a boxing having a permanent stop at one end and an adjustable holder at the other, substantially as described. 5th. In a roller bearing, the combination of the rollers, an outer casing, series of annular wedges having their wedging surfaces reversely arranged and interposed between the rollers and casing. 6th. In a roller bearing, the combination of the rollers, an outer casing, two series of wedges surrounding the rollers and having their wedging surfaces reversely arranged. 7th. In a roller bearing, the combination of the rollers, an outer casing, two series of wedges surrounding the rollers having their wedging surfaces reversely arranged, and means to move the wedges relatively to each other. 8th. In a roller bearing, the combination of the rollers, an outer casing, two series of spirally wound wedges surrounding the rollers and having their wedging surfaces opposed to each other, and means to move the spirals relatively to each other.

No. 66,773. Steel Axle Arm. (*Bras d'essieu en acier.*)

Henry Marsh, King, Ontario, Canada, 27th March, 1900; 6 years. (Filed 15th November, 1899.)

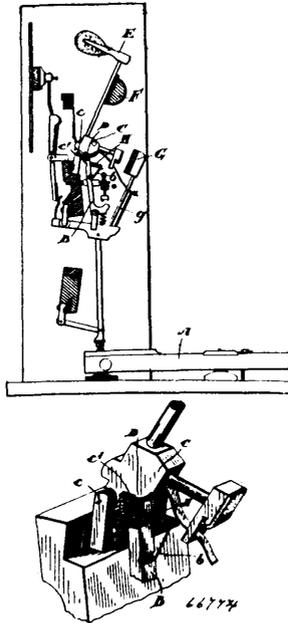
Claim.—1st. An axle, consisting of a tubular axle arm and sheath integrally formed, the sheath being of substantially the same dimensions from the open end to the shoulder where it joins the axle arm, a flange projecting from the underside of the sheath to underlap the axle tree, and an abutting collar fitted on the axle arm and bearing against the shoulder, substantially as specified. 2nd. An axle, consisting of a tubular axle arm and sheath integrally formed, the sheath being of substantially the same dimensions from the open end to the shoulder where it joins the axle arm, a flange projecting from the underside of the sheath to underlap the axle tree, an abutting collar fitted on the axle arm and bearing against the shoulder, and a flange projecting from the collar underlapping the adjacent end of the sheath, substantially as specified. 3rd. An axle, consisting of a tubular axle arm and sheath integrally

formed, the teeth being of substantially the same dimensions from the open end to the shoulder where it joins the axle arm, a flange



projecting from the underside of the sheath to underlap the axle tree, an abutting collar fitted on the axle arm and bearing against the shoulder, a flange projecting from the collar underlapping the adjacent end of the sheath, and a plug fitted into the end of the axle arm to receive the axle nut, substantially as specified.

No. 66,774. Piano Action. (*Action de piano.*)



Lewis Nelson Soper, Guelph, Ontario, Canada, 27th March, 1900; 6 years (Filed 17th November, 1899.)

Claim.—In actions for upright pianos, the combination of a hammer arranged to vibrate in an arc entirely above its axis, a hammer butt, a jack, a spring attached to the jack, and a flexible connection being attached to the butt in a plane below the axis of movement of the hammer butt, substantially as described.

No. 66,775. Process of Growing Early Potatoes. (*Procédé pour la croissance hâtive des patates.*)

George S. Bristol, Ancaster, Wentworth, Ontario, Canada, 27th March, 1900; 6 years. (Filed 23rd January, 1900.)

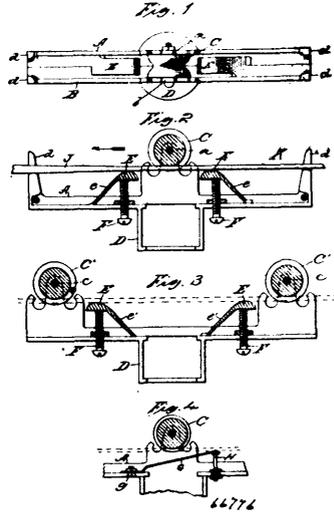
Claim.—A compost for germinating and rooting seed potatoes, consisting of wood fibre or sawdust, plaster, and water in which a quantity of fertilizer shall have been dissolved, substantially as and for the purpose specified.

No. 66,776. Carrier. (*Transport.*)

Moses C. Swezey, West Haven, Connecticut, U.S.A., 27th March, 1900; 6 years. (Filed 12th March, 1900.)

Claim.—1st. A carrier consisting of a frame, a supporting wheel or wheels held to the frame, a yielding head attached to the frame

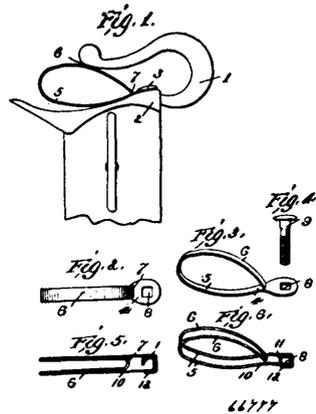
and extending upwardly adjacent to the support, and an adjusting screw engaging the yielding head so as to hold it in a fixed position,



substantially as described. 2nd. A carrier consisting of a frame, a centrally arranged supporting wheel held to the frame, a yielding head arranged below the wheel and between the wheel and the outer end of the frame, and an adjusting screw mounted in the frame and engaging the head in such manner as to hold it in a fixed position with relation to the wheel, substantially as described. 3rd. A carrier consisting of a frame, means for supporting the carrier, a yielding head formed integral with the frame and arranged adjacent to the supporting means, and an adjusting screw mounted in the carrier and engaging the head in such manner as to hold it in a fixed position with relation to the supporting means, substantially as described. 4th. A carrier consisting of a centrally arranged supporting wheel, a frame provided at each end with a notch, a yielding head arranged below and between the wheel and one end of the frame, and an adjusting screw mounted in the frame below the head and adapted to hold the head in a fixed position with relation to the wheel, substantially as described. 5th. A carrier consisting of a frame, a supporting wheel held to each end of the frame, a yielding head attached to the frame and extending adjacent to each wheel, and an adjusting screw abutting against each head in such a manner as to hold it in a fixed position with relation to the adjacent wheel, substantially as described.

No. 66,777. Check Hook Spring.

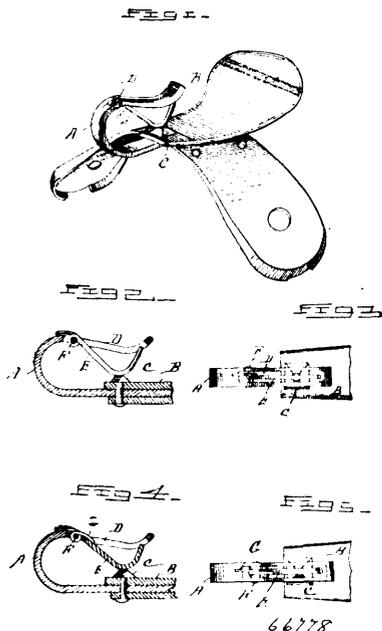
Crochet à ressort pour rênes.



Royal P. Faries, Wichita, Kansas, U.S.A., 27th March, 1900; 6 years. (Filed 13th March, 1900.)

Claim.—The combination with a check rein hook, of a spring fixed at one end to the base of said hook having its free end bent around to form a complete loop with the extreme end of said free portion in contact with the fixed portion and the upper side of said loop normally in engagement with the end of said hook.

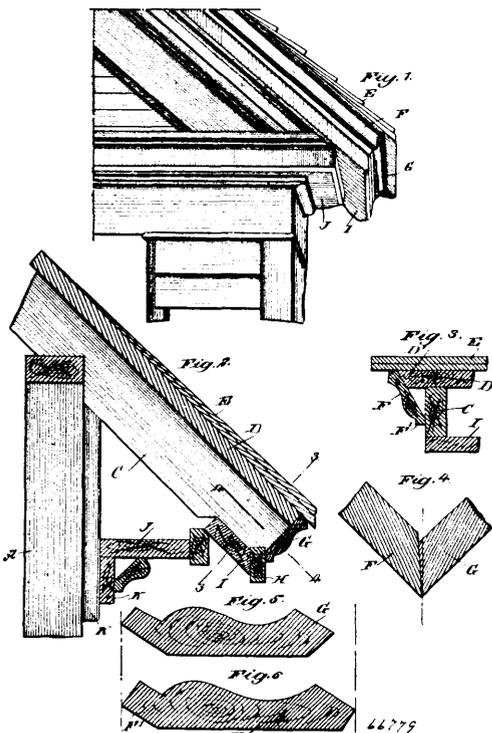
No. 66,778. Check Rein Hook. (Crochet he rénes.)



John L. Simpson, Hemill, Pennsylvania, U.S.A., 27th March, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. A check reign hook having its upper member slotted longitudinally and a spring actuated tongue pivoted within the slot near the forward end, said tongue being curved downwardly and then upwardly, the free end also resting within the slot near the rear end, substantially as shown and described. 2nd. In a check reign hook, a hook member A, having its upper portion slotted longitudinally, a substantially V-shaped tongue, pivoted in said slot, the free end being adapted to extend through the slot for the purpose set forth. 3rd. In a device of the character described, the combination with the hook A having an elongated slot in the upper portion thereof, of a spring pressed, substantially V-shaped tongue pivoted at one end in said slot and adapted to project through the same, substantially as described.

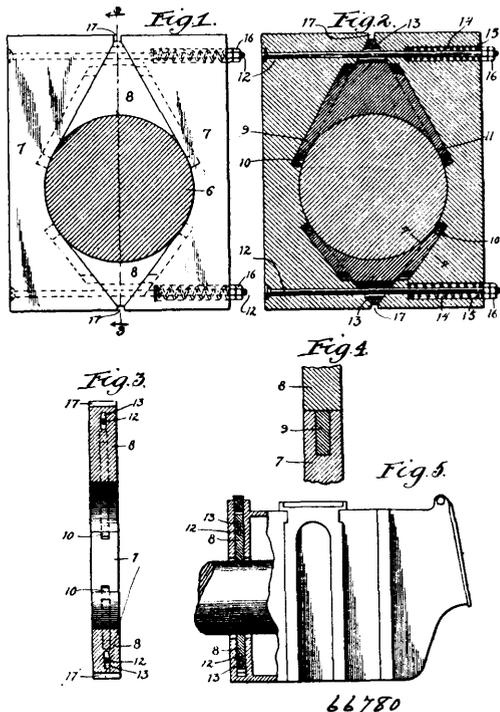
No. 66,779. Box Cornice. (Boîte de corniche.)



Christian Miller Prutsman, Lexington, Nebraska, U.S.A., 27th March, 1900; 6 years. (Filed 12th March, 1900.)

Claim.—1st. A box cornice or trimming, comprising a rake moulding and an eave moulding, the mouldings being of different width and the rake moulding being arranged for attachment to the side of the rafter and at an angle thereto, the eave moulding being arranged for attachment to the square end of the rafter, the moulding being jointed at the corner in mitre fashion, substantially as shown and described. 2nd. The combination with a rafter, of a box trimming or cornice for the rafter, and comprising a rake moulding and an eave moulding, the mouldings being of different width, but approximately of the same ogee form, the eave moulding being secured flat against the square end of the rafter, and the rake moulding being provided with an angular nailing flange resting against the side of the rafter for the moulding to stand at an angle thereto, the moulding being jointed at the corner, substantially as shown and described. 3rd. The combination with the rafters and the roof sheathing thereof, of a rake moulding and an eave moulding, the mouldings being of different width and the rake moulding being provided with a nail flange for attachment to the side of the rafter, to hold the rake moulding at an angle to the rafter and to join with the bevelled outer edge of said sheathing, the eave moulding being secured flat against the rafter and to the flush lower edge of said sheathing, substantially as shown and described.

No. 66,880. Dust Guard. (Garde-poussière.)

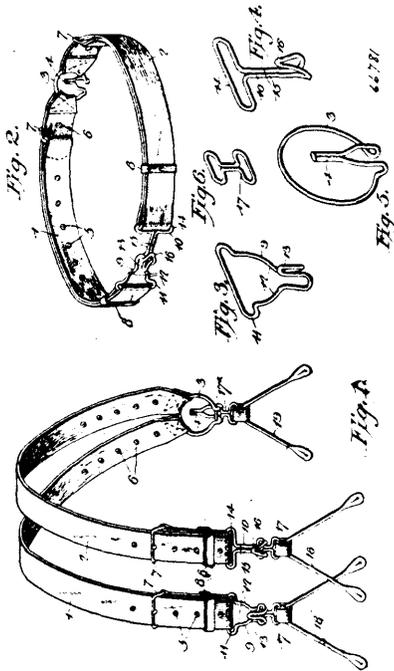


William Matthew Ryan, Chicago, Illinois, U.S.A., 27th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. A dust guard comprising the combination with two side pieces, of a wedge piece between said side pieces, said wedge having an opening in the point thereof and a rod connecting said side pieces and passing through said opening and means for holding the said side pieces together at the ends opposite said wedge piece. 2nd. A dust guard for axles comprising the combination with two side pieces, of wedge piece between the two side pieces, a rod connecting said side pieces and a spring surrounding said rod and operating to draw the side pieces together, and thereby project the wedge piece against the axle, and means for holding the side pieces together at the end opposite said wedge piece. 3rd. A dust guard for axles comprising the combination of two side pieces, two wedge pieces embraced between the ends of said side pieces on opposite sides of said axle, a rod passing through each of the two adjacent ends of said side pieces and a spring acting upon each of said rods, whereby to hold the side pieces and wedge pieces all against the axle with evenly distributed pressure. 4th. A dust guard for axles, having two side pieces, two wedge pieces embraced between the adjacent ends of said side pieces, and a spring device at each end of the guard constructed to connect the side pieces and at the same time force the wedge pieces against the axle. 5th. A dust guard for axles, having two side pieces, two wedge pieces embraced between the adjacent ends of said side pieces, and spring pressed rods passing through holes in the points of the wedges arranged at each end of the guard constructed to connect the side pieces and at the same time force the wedge pieces against the axle. 6th. A dust guard for axles comprising the combination

with a journal box having a containing recess, of a guard composed of vertical side pieces one on each side of the axle, and wedge pieces between the two side pieces one arranged to bear against the top and the other against the bottom of the axle, and means whereby to hold both the side pieces and the wedge pieces against the axle with evenly distributed pressure.

No. 66,781. Suspender and Belt. (Bretelles et ceinture.)



Howard J. Bloomer, Norwalk, Connecticut, U.S.A., 27th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. A combined belt and pair of suspenders, consisting of two main parts or straps movably connected at their rear extremities by an intermediate coupling, said fastenings freely movable on the front terminals of the said main parts or straps having removably interlocking ends to form a clasp, one of the said fasteners having a reduced neck and open bill and the other an open neck and reduced bill to removably fit in the open bill, the said fastenings being disposed in the same plane when interlocked and adapted to receive, together with the coupling suspender ends. 2nd. A combined belt and pair of suspenders, consisting of two main parts having doubled portions for lengthening and shortening the same, means for maintaining the desired adjustment of the parts, a coupling to which the single extremities have movable attachment, and fastening devices loosely held by the folded extremities of the said main parts and adapted to extend outwardly clear of the latter, said fastenings having removably interlocking members at their outer extremities in the same plane when interlocked to form a connecting clasp without interior projections when the device is arranged in belt form, one of said fastener having a reduced neck and open bill and the other an open neck and reduced bill to removably fit in the open bill, the said fastenings and coupling also having means for quick application and release of suspender ends.

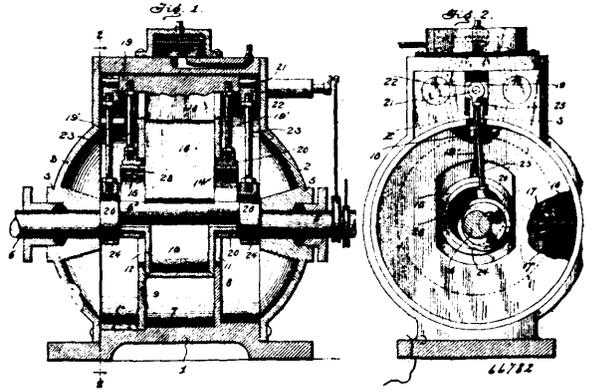
No. 66,782. Rotary Steam Engine.

(Machine rotatoire à vapeur.)

Charles E. Miller, Scranton, Pennsylvania, U.S.A., 27th March, 1900; 6 years. (Filed 14th March, 1900.)

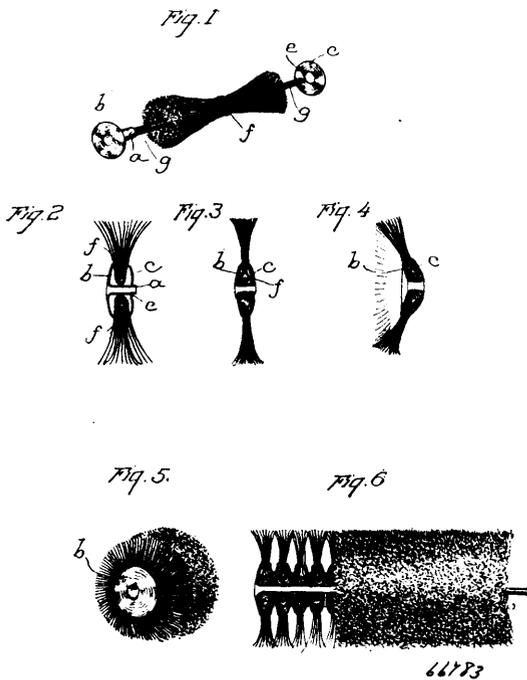
Claim.—1st. In a rotary engine, the combination with a steam cylinder having inlet and outlet ports, of an axially mounted shaft extending through said cylinder, a piston secured to said shaft, a rotatable drum surrounding the shaft within the cylinder and having an opening through which the piston extends, a movable abutment plate in contact with said drum, and means for moving said drum toward and from the periphery of the cylinder. 2nd. In a rotary engine, the combination with a steam cylinder having inlet and outlet ports, of an axially mounted shaft extending through said cylinder, a piston secured to said shaft, a rotatable drum surrounding the shaft within the cylinder and having an opening through which the piston extends, a movable abutment plate in contact with and mechanically connected to said drum, and means for moving said drum toward and from the periphery of the cylinder. 3rd. In a rotary engine, the combination with a steam cylinder having inlet and outlet ports, a radially moveable abutment plate between said ports, of an axially mounted shaft extend-

ing through said cylinder, a piston secured to said shaft, a rotatable drum surrounding the shaft within the cylinder and having an



opening through which said piston extends, hubs upon either end of said drum, bearings surrounding said hubs and adjustably connected to the abutment plate, and means operated from the shaft for imparting a reciprocating motion to the abutment plate. 4th. In a rotary engine, the combination with a steam cylinder having inlet and outlet ports, and a radially moveable abutment plate between said ports, of an axially mounted shaft extending through said cylinder, a piston secured to said shaft, a rotatable drum surrounding the shaft within the cylinder and having an opening through which said piston extends, hubs upon either end of said drum, bearings surrounding said hubs and adjustably connected to the abutment plate, eccentric parts upon the shaft, straps surrounding said eccentric parts, and adjustable rods connecting said straps with the abutment plate. 5th. In a rotary engine, the combination with a steam engine casing having a shaft mounted therein, of a cylinder arranged transversely to the shaft, and having end walls provided with openings through which the shaft extends, the opposite walls of said opening forming guideways, a vertically movable drum within the cylinder surrounding the shaft and having hubs, bearings for said hubs movable within the guideways, an abutment plate in contact with the drum and mechanically connected to said bearings, eccentric parts upon the shaft, straps upon said parts, and rods connecting said straps with the abutment plate. 6th. In a compound rotary engine, a casing having a shaft mounted therein, pistons secured to said shaft, a series of concentric cylinders arranged transversely to the shaft and separated by partition plates, the end walls of the cylinders and the partition plates having openings therein through which the shaft extends, a rotatable drum surrounding the shaft within the cylinders and having slots through which the piston extends, said drum having a section fitting within each cylinder, and contracted portions connecting said sections and extending through the openings in the partition plates, a movable abutment plate having sections in contact with the sections of the drum, bearings suspended from said abutment plate and in which said drum is mounted, eccentric parts upon the shaft, and connections between said eccentric parts and the abutment plate. 7th. In a compound rotary engine, a series of concentric cylinders separated by partition plates, the ends of said cylinders and partition plates having openings therein, an axially mounted shaft extending through said cylinders and having pistons connected thereto, a rotatable drum surrounding the shaft and having a section fitting within each cylinder, and contracted portions connecting said sections and extending through the openings in the partition plates, slots in the drum sections through which the pistons extend, an abutment plate having sections in contact with the sections of the drum, bearings suspended from said plate in which the drum is mounted, and means for imparting a reciprocating motion to the abutment plate. 8th. In a compound rotary engine, a series of concentric cylinders separated by partition plates, each cylinder having an inlet and outlet port, a radially moveable abutment plate having a section arranged between the ports of each cylinder, an axially mounted shaft extending through the cylinders, pistons upon said shaft, a rotatable drum surrounding the shaft and having sections fitting within the cylinders, and contracted portions connecting said sections and extending through openings in the partition plates, said drum being suspended from the abutment plate, a slot in the drum through which the pistons protrude, and means operated from the shaft for imparting a reciprocating motion to the abutment plate. 9th. In a rotary engine, a shaft having an offset central portion and a piston formed integral therewith, in combination with a drum having hubs at either end, one of said hubs having a removable section, and a slot extending through the face and ends of the drum in line with said removable section, substantially as described. 10th. The piston having a slot 75, in combination with the duplex dovetail slide covering said slot, the spring 76 arranged within the slot, and the separate packing caps 80 and 81, substantially as described.

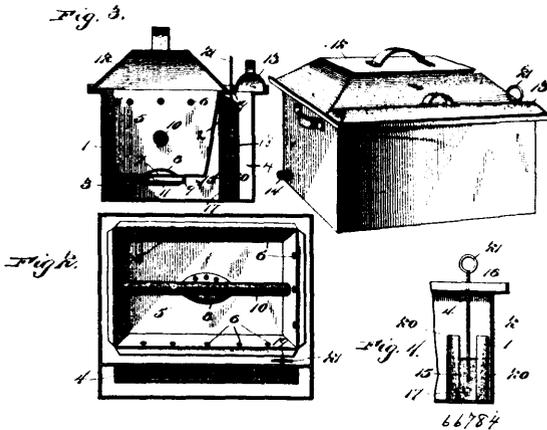
No. 66,783. **Manufacture of Circular Brushes.**
(Fabrication de brosses circulaires.)



William Hamilton Robinson, Alameda, California, U.S.A., 27th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—In the manufacture of circular brushes, a central tube, a flange or disc on one end of the tube, a layer of fibres arranged lengthwise around said tube and bound around their middles to said tube, a centrally perforated disc adapted to slide on the opposite end of said tube and force the ends of the fibres outward radially between said discs, the end of the tube being clinched for securing the discs together after the fibres are doubled and clamped between them, substantially as described.

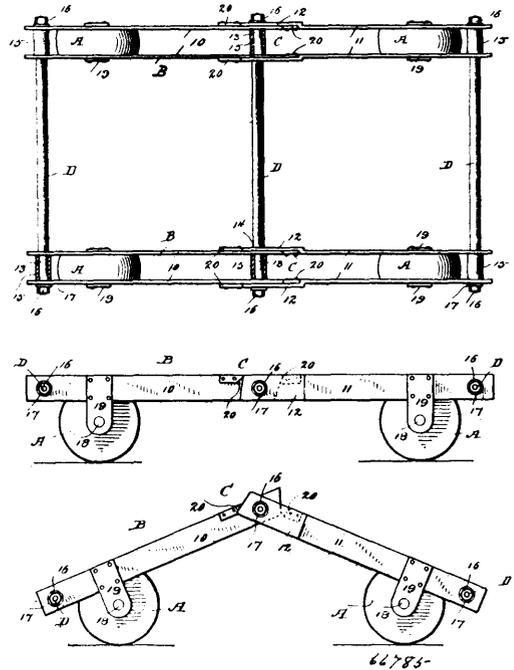
No. 66,784. **Washing Machine.** (Machine à laver.)



Washington Poe Burke, Quitman, Georgia, U.S.A., 27th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—In a steam washer, the combination of a body provided at the upper edges of its walls with supporting flanges, a vertical partition extending upward from the bottom of the body adjacent to one side thereof and having a valve opening, and provided at its upper edge with a supporting flange having a guide opening, vertical strips secured to the partition at opposite sides of the valve opening and forming ways, a vertically movable valve consisting of a plate mounted in the ways and arranged to cover and uncover the valve opening, the separate covers 12 and 13 arranged on the supporting flanges, and the vertically movable operating rod passing through the guide opening and connected with the valve and adapted to operate the same without removing the covers, the latter being adapted to be removed without affecting the valve, substantially as and for the purpose described.

No. 66,785. **Truck.** (Camion.)



Joseph Mayers Sons, New York City, New York, and Henry Orange Warner, New Milford, Connecticut, assignees of Egbert H. Northrop, of New Milford, aforesaid, 28th January, 1900; 6 years. (Filed 11th September, 1899.)

Claims.—1st. A truck frame of the character described jointed substantially at the centre and having stops for preventing it from folding together, each section of the frame being provided with a plurality of wheels or rollers adapted to support the frame against lateral tilting whether the frame is bent up at the joint or not, the two sections of said frame being held in alignment when the truck is loaded. 2nd. A truck frame of the character described jointed substantially at the centre and having stops for preventing it from folding together, and mounted on wheels located solely under the sections of the frame near each end thereof and adapted to support the frame against lateral tilting when the middle portion of the frame is raised, said wheels being located sufficiently within the end margins of the frame to permit either end of said frame to approach close to the ground when the central portion of the frame is raised, the two sections of said frame being held in alignment when the truck is loaded. 3rd. A truck frame consisting of side pieces jointed at the centre and cross pieces, each side piece comprising two side strips 10 and two strips 11 whose ends are offset and lie outside of strips 10. 4th. A truck frame consisting of side pieces jointed at the centre and cross pieces, each side piece comprising two straight strips and two offset strips, and the offsets lapping past the inner ends of the straight strips on the outer sides thereof so as to leave each pair of straight strips and parallel upon their inner sides, substantially as shown, for the purpose specified. 5th. The combination with side pieces B having joints C and stops which limit the movement of the joints in both directions, of wheels A carried by the side pieces and cross pieces D between said side pieces, the two sections of said frame being held in alignment when the truck is loaded. 6th. The combination with side pieces B having joints C, each side piece comprising strips 10 and 11 offset as shown, of wheels carried by the side pieces, cross pieces between said side pieces, and sleeves 15 lying between the strips in each side piece. 7th. The combination with side pieces B having joints C, each side piece comprising strips 10 and 11 offset as shown, of wheels carried by the side pieces, cross pieces having reduced ends which pass through the strips and shoulders against which the inner strips rest, sleeves lying between the strips in each side piece, and nuts on the cross pieces which engage the outer faces of the outer strips and retain the parts of the frame in place.

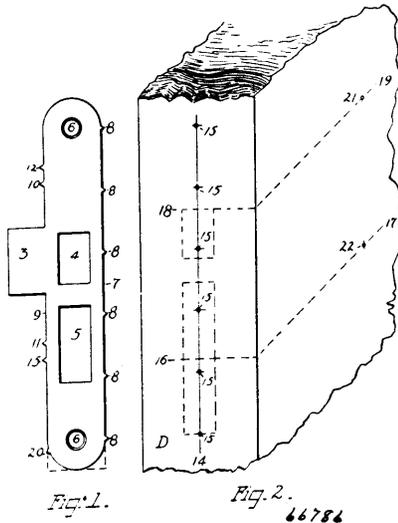
No. 66,786. **Keepers for Locks and Latches.**

(Gâche de serrures.)

The Russell and Erwin Manufacturing Company, assignee of Henry Gustave Voight, all of New Britain, Connecticut, U.S.A., 28th March, 1900; 6 years. (Filed 12th March, 1900.)

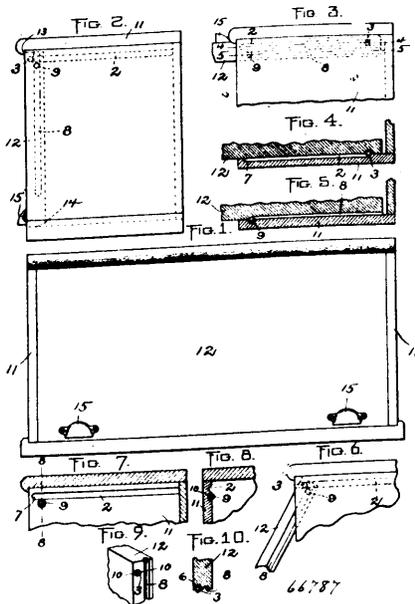
Claim.—1st. A keeper for locks, having on one edge marking spur gauges and gauging shoulders for marking the middle line of doors of various thicknesses, substantially as described. 2nd. A keeper for locks, having gauges therein for marking the height of

the key hole and knob spindle centre, substantially as described. 3rd. A keeper for locks, having on one edge a shoulder and a



marking spur gauge for marking off the distance of the key hole and knob spindle centres from the edge of the door, substantially as described. 4th. A keeper for locks, having on one edge a series of spur gauges for marking the centres for boring the holes of the face plate mortise and also having a gauge for marking the height of the key hole centre from one of the said centres, substantially as described. 5th. A keeper for boring the holes for putting on the lock, substantially as described.

No. 66,787. Book Case. (Bibliothèque.)

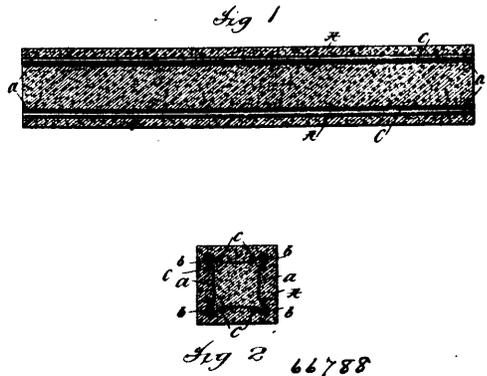


Frederick Edison Allen and Frank E. H. Gary, all of Boston, Massachusetts, U.S.A., 28th March, 1900; 6 years. (Filed 12th March, 1900.)

Claim.—1st. A casing, a slide movable therein, and anti-frictional coupling members connecting said parts and comprising grooves formed in opposed surfaces of said parts, and balls projecting from each part into grooves in the other part, said balls and grooves having substantially horizontal guide grooves, and balls arranged out of alignment with said grooves, combined with a slide having grooves arranged to engage the balls on the casing, and balls arranged to engage the grooves in the casing, substantially as described. 2nd. A casing, a slide movable therein and having grooves in its ends, substantially horizontal grooves in the casing, the outer ends of the grooves constituting hinge members, balls carried by and projecting from the ends of the slide and entering

said grooves, the balls co-operating as hinge members with the outer ends of the grooves when the slide is at the forward end of its horizontal movement, and balls journalled in the casing and entering the grooves in the slide, the casing balls and the slide grooves constituting anti-frictional means for preventing the slide from swinging when the slide balls are separated from the outer ends of the casing grooves, said balls and grooves co-operating both as side and end thrust bearings. 4th. A casing, a slide movable therein, substantially horizontal grooves in the casing, their outer ends constituting hinge members, side balls carried by and projecting from the ends of the slide and entering said grooves, the slide balls co-operating as hinge members with the outer ends of the grooves when the slide is at the forward end of its movement, casing balls supported by and projecting inwardly from the ends of the casing, said casing balls being below and back from the hinge member ends of the casing grooves, and grooves in the ends of the slide receiving the said casing balls, the slide grooves and casing balls co-operating with each other and with the casing grooves and slide balls in supporting the slide horizontally, the series of balls and grooves constituting anti-frictional slide and end thrust bearings.

No. 66,788. Railway Tie. (Traverse de chemin de fer.)



The New Jersey Wire Cloth Company, Trenton, assignee of Abraham Lincoln Artmann Himmelwright, Newark, New Jersey, U.S.A., 28th March, 1900; 6 years. (Filed 10th March, 1900.)

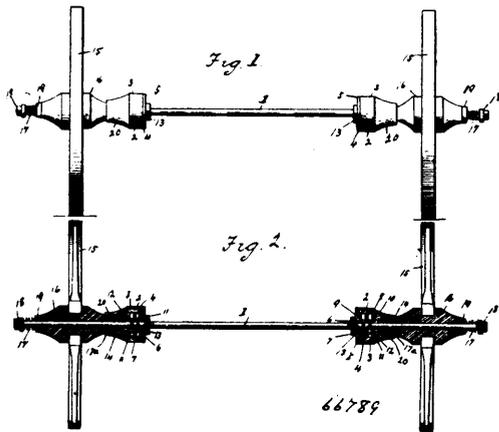
Claim.—1st. A railroad tie formed of a solid block of moulded material having embedded therein and within the faces of the tie a metal frame formed of reticulated metal with strengthening bars extending longitudinally of the tie, substantially as described. 2nd. A railroad tie formed of a solid block of moulded material containing steam ashes and a suitable binding material, such as cement, having embedded therein and within the faces of the tie a metal frame formed of reticulated metal with strengthening bars extending longitudinally of the tie, substantially as described. 3rd. A railroad tie having embedded therein a metal frame bent to rectangular form and lying at approximately uniform distances inside each of the faces of the tie, in combination with one or more strengthening bars at each corner of the rectangle formed by the metal frame and extending longitudinally of the tie, substantially as described. 4th. Tie A formed of moulded material having embedded therein the rectangular frame a and having at each corner strengthening bars b inside the frame and strengthening bars c on opposite sides of the bars b outside the frame, substantially as described.

No. 66,789. Axle. (Essieu.)

Patrick Sharkey and James H. Sharkey, both of Indianapolis, Indiana, U.S.A., 28th March, 1900; 6 years. (Filed 3rd January, 1900.)

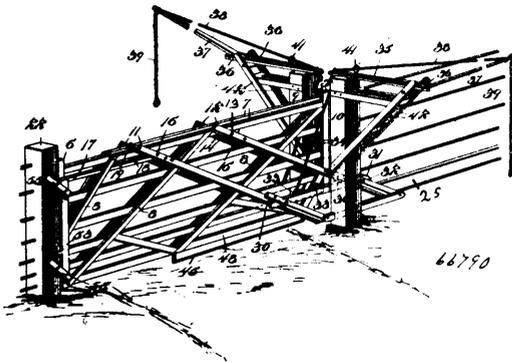
Claim.—1st. The combination with journal boxes, of an axle mounted therein and provided with adjustable ratchet flanges in contact with said boxes, hubs provided with ratchet collars designed to engage the flanges, and means for yieldingly urging the hubs in the direction of the flange, substantially as specified. 2nd. The combination with a journal box provided with a closed end and with a cap screwed into its opposite end, of a bearing plate within the box and balls arranged upon opposite sides of the bearing plate, substantially as specified. 3rd. The combination with journal boxes provided respectively with a closed end, a cap, and an intermediate bearing plate, balls arranged upon opposite sides of the bearing plate, an axle passing axially through the cap, the closed end of the box and bearing plate, and an adjustable flange upon the shaft designed to contact with one side of the journal box, substantially as specified. 4th. The combination with a journal box provided with a closed end, an adjustable cap and an intermediate bearing plate, an axle passing axially through the journal box, a conical ratchet flange adjustable upon the axle and designed to bear

against the journal box, a hub provided with a ratchet collar designed to engage the ratchet flange, an adjustment nut screwed



upon the extremity of the axle, a compression plate imposed against the outer end of the hub, and a spring intermediate of the compression plate and nut, substantially as specified.

No. 66,790. Gate. (Barrière.)

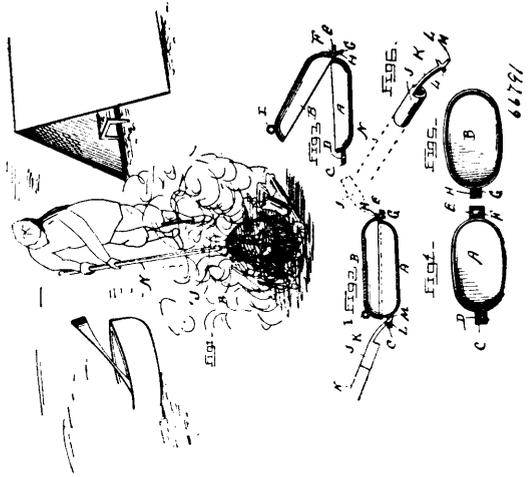


Henry H. Gorton, Wallace, Missouri, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. The combination with a gate and an adjacent latch post, of a latch pivoted to the gate and adapted for engagement with the post, a rock lever pivoted to the latch and adapted to operate the latch and raise the gate, a second latch adapted to engage the latch post, an additional rock lever connected with the gate, a tie bar adjustably connected with the levers, additional levers, and adjustable connections between the tie bars and the last named levers for transmitting motion from one to the other. 2nd. The combination with a gate, of a rock lever pivoted thereto and to a support, a latch pivotally connected with the gate, a second rock lever pivoted upon a suitable support and pivotally connected with the latch, and a second latch upon the gate disengaged from the post by the action of the first named lever. 3rd. The combination with a gate and an adjacent latch post, of a latch having a swinging and pivotal connection with the gate and provided with a hook adapted to engage a keeper upon the post, a rock lever pivotally connected with the latch, means for operating said lever to move the latch upon its connection, from the keeper and the post and to move the gate, and a second lever pivotally connected with the gate, and connected with the operating means of the first lever, the second lever being adapted to exert a raising action upon the gate in advance of the first lever. 4th. The combination with a gate and an adjacent latch pivoted to the gate and adapted for engagement with the post, a rock lever pivotally connected with the latch and having initially lost motion with respect to the gate, to operate the latch in advance of the gate, and a second rock lever pivoted to the gate and having means in common with the first named lever for operating it. 5th. The combination with a gate, of a rod fixed thereto and lying therebelow, and at a sufficient distance therefrom to permit rooting of an animal between it and the gate. 6th. The combination with a gate and an adjacent post, of uprights pivotally connected with the post to lie at various distances from the points of the post to which they are attached, and adapted to receive between them the adjacent end of the gate. 7th. The combination with a gate and an adjacent post, of uprights pivotally connected with post and adapted to project therefrom at various elevations and to receive between them the adjacent end of

the gate, a cross bar adapted to limit the movement of the gate between the uprights. 8th. The combination with a gate and an adjacent post, of uprights adjustably connected therewith and adapted to lie at various distance from the points of the post to which they are attached and to receive between them the adjacent end of the gate.

No. 66,791. Cooking Utensil. (Ustensile de cuisine.)



John Dennis Coon, Nathrop, Colorado, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. The herein described cooking utensil, comprising the pan A provided with horizontal ear or lug C having a downwardly and inwardly inclined opening D and a horizontal ear E with downwardly and outwardly inclined opening F, and the cover pan B, provided with outwardly inclined lug G having opening H inwardly inclined, the opening F being adapted to receive lug G and form a hinge and the opening D being adapted to receive a handle, substantially as described. 2nd. The herein described cooking utensil, comprising a pan proper provided at one end with a horizontal ear or lug having a downwardly and inwardly inclined opening, and at its opposite end with a horizontal ear or lug having a downwardly and outwardly inclined opening and a cover pan provided at one end with an outwardly inclined lug or ear projecting from its edge adapted to engage in the downwardly and outwardly inclined opening within the ear in the lug of the pan proper to form a hinge and at its opposite end with an eye to facilitate lifting, the over pan being slightly larger than the pan proper, whereby it will overlap its edge when in position, the opening in the lugs at either end of the complete utensil being adapted to receive a removable handle, substantially as described.

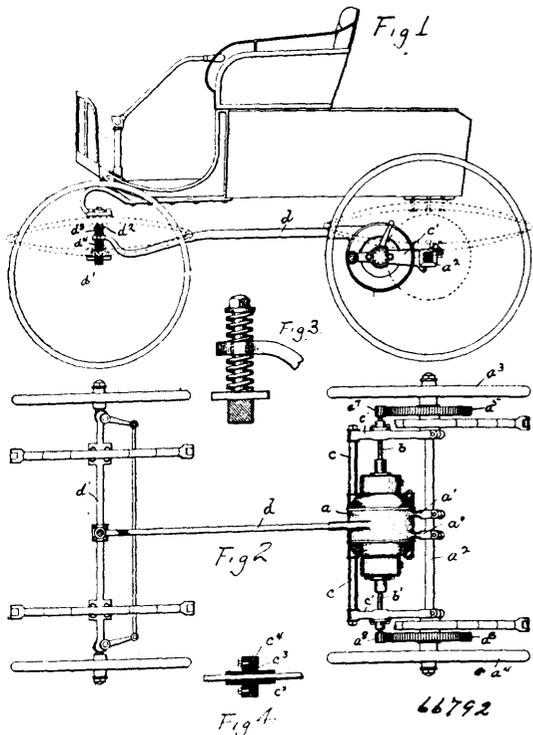
No. 66,792. Electrical Vehicle. (Vehicule électrique.)

Charles E. Corrigan, assignee of Karsten Knudsen, both of Chicago, Illinois, U.S.A., 28th March, 1900; 6 years. (Filed 26th August, 1899.)

Claim.—1st. In an electric vehicle, the combination with an electric motor, of a hollow shaft upon which the rotating element thereof is mounted, a pair of shafts arranged concentric with said hollow shaft and geared respectively with the opposite wheels of the vehicle, gear mounted on the opposite ends of said shafts, a gear engaging therewith and mounted on the frame or casing secured to and rotating with said hollow shaft, substantially as described. 2nd. In an electric vehicle the combination with an electric motor, of a hollow shaft upon which the rotating element thereof is mounted, a pair of shafts journaled within said hollow shaft and geared respectively with the opposite wheels of the vehicle, bevel gears mounted on the opposed ends of said shafts, a pair of pinions engaging therewith and mounted on the frame or casing secured to and rotating with said hollow shaft, substantially as described. 3rd. In an electric vehicle, the combination with an electric motor, of a hollow shaft upon which the rotating element thereof is mounted, a pair of shafts journaled therein, a pinion mounted upon the outer end of each of said shafts, a pair of vehicle wheels each carrying a gear wheel meshing with one of said pinions, a pair of bevel gears mounted upon the opposed ends of said shafts, a pair of pinions engaging therewith and mounted on the frame or casing, secured to and rotating with said hollow shaft, substantially as described. 4th. The combination with the rear axle, of the motor mounted to oscillate about the same, the driving wheels mounted to rotate about said axle and carrying gear wheels, pinions meshing with said respective gear wheels and mounted upon driving shafts and a differential gearing between said driving shaft and the armature of the motor, substantially as described. 5th. The combination with the driving wheels and the gear wheels mounted thereon, of the pinions engaging the gear wheels, the driving shafts connected with the pinions, the differential gearing between said driving shafts and the armature of

the electric motor and journals for said driving shafts mounted in boxes having spherical bearing whereby the driving shafts are

water overflow chambers, a steam tube or nozzle secured to the partition between the steam and suction chambers, and a lifting



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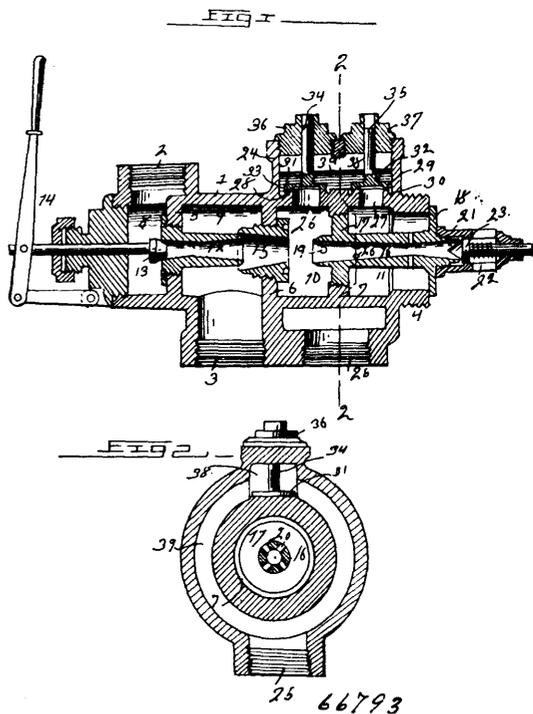
maintained parallel to the rear axle, substantially as described. 6th. The combination with the rotating part of an electric motor, of a pair of driving shafts, a differential gearing between said driving shafts and said rotating part, the casing of said differential gearing being arranged to rotate with said rotating part, and a brake adapted to be applied to said casing, substantially as described. 7th. The combination with the armature, of the driving shafts the differential gearing between the driving shafts and the armature, the casing of said differential gearing being extended to form a braking surface, brake shoes adapted to engage the same, and a rocking arm for throwing said brake shoes into and out of action, substantially as described.

No. 66,793. Injector for Steam Boilers.

(*Injecteur de chaudières à vapeur.*)

Lovern E. Hogue, Greenville, Pennsylvania, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

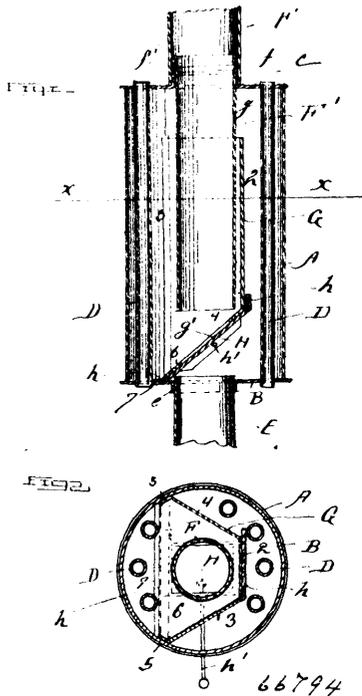
Claim.—1st. In an injector, the combination with the shell thereof having hot and cold water overflow chambers therein, of a valve casing outside said overflow chambers, but communicating therewith, valves in said casing for controlling the passages between said chambers and said casing, and means for indicating from without the position of said valve. 2nd. In an injector, the combination with the shell thereof having hot and cold water overflow chambers therein, of a valve casing outside said overflow chambers, but communicating therewith, valves in said casing for controlling the passages between said chambers and said casing, and means for indicating from without the position of said valve. 3rd. In an injector, the combination with the shell thereof having hot and cold water overflow chambers therein, of a valve casing outside said overflow chambers, but communicating therewith, valves in said casing for controlling the passages between said chambers and said casing, and caps in said valve casing having openings therein in which the stems of said valves fit and move, and by means of which the position of said valves may be indicated from without. 4th. In an injector, the combination with the shell thereof having hot and cold water overflow chambers, valve seats having annular recesses surrounding them in the passages between said casing and said chambers, and valves having projecting lips thereon adapted to fit within said recesses, as and for the purpose set forth. 5th. In an injector, the combination with the shell thereof having hot and cold water overflow chambers therein, of a valve casing outside said chambers communicating therewith, valve seats in the passages between said chambers and said casing having annular recesses surrounding them for the reception of water, valves having projecting lips thereon adapted to fit in said recesses, a passage between the spaces in which said valves work, a hot and cold overflow discharge pipe on the under side of the shell, and a conduit leading from said passage to said pipe outside the working barrel. 6th. In an injector, the combination with the shell having partitions therein dividing the same into a steam chamber, a suction chamber and hot and cold



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tube secured to the partition between the suction and cold water overflow chambers, of a condensing or delivery tube having lateral perforations therein, a flange thereon secured to the partition between the cold and hot water overflow chambers, a disc thereon abutting against the rear end of said shell, closing the rear end of said hot water overflow chamber, and a deck valve in said condensing or delivery tube.

No. 66,794. Heating Drum. (Poêle sourd.)



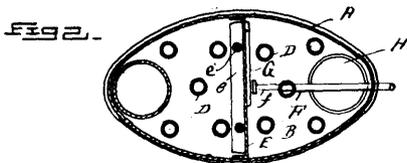
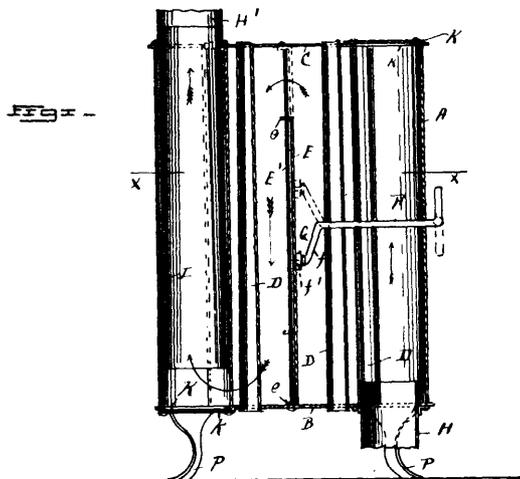
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Nicholas Mainz and George J. Zeller, both of Chicago, Illinois, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—In a heating drum, the combination, with a casing, an inlet pipe connected to its bottom plate, and an outlet pipe connected

to its top plate and depending within the casing over the inlet pipe, of a partition comprising front, side, back and inclined portions 2, 3, 4 and 6, said side portion being arranged on one side of the outlet pipe, and the said front and back portions being arranged at an obtuse angle to it and connected to the casing on the other side of the inlet pipe, and the said inclined portion having an opening g^1 , and extending from the bottom edges of the parts 2, 3 and 4, diagonally between the said inlet and outlet pipes and having its lower part connected to the bottom plate of the said casing a space g , being left between the top of the partition and the top plate of the said casing, and a damper for regulating the passage through the opening g^1 , substantially as set forth.

No. 66,795. Radiator. (Radiateur.)



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Nicholas Mainz and George J. Zeller, both of Chicago, Illinois, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. In a radiator, the combination, with a chamber provided with a top plate and a bottom plate, of a partition slidable between the said top and bottom plates and having the extent of its motion limited by them, guides for the said partition, means for sliding the partition, and inlet and outlet pipes connected to the said chamber on the opposite sides of the said partition, substantially as set forth. 2nd. In a radiator, the combination with a chamber provided with an inlet and an outlet, and guide rods secured in the said chamber, of a damper plate arranged between the said inlet and outlet and provided with flanges which slide on the said guide rods, and means for sliding the said damper plate, substantially as set forth. 3rd. In a radiator, the combination, with a chamber provided with a top plate and a bottom plate each of the said plates having two openings for flue pipes, of a partition slidable between the said plates and having the extent of its motion limited by them, guides for the said partition, means for sliding the said partition, an inlet and outlet flue pipe connected to two of the said openings on opposite sides of the said partition, and cover plates closing the remaining two openings, substantially as set forth.

No. 66,796. Graphophone. (Graphophone.)

George L. Hogan, Baltimore, Maryland, U.S.A., 28th March, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. A graphophone having in combination a rotating sound writing, a vibratory cone-shaped sounding trumpet pivoted to allow its point end free swinging movement, and also a slight vertical movement, a hard point engaging the surface of the sound writing in front of and in line with the point end of the trumpet but not contacting therewith and supported by a rod which extends along the outer wall of the trumpet and attached to the side thereof. 2nd.

A sounding trumpet for graphophones comprising a sheet of fiber folded to form a cone and the edges which come together bordered

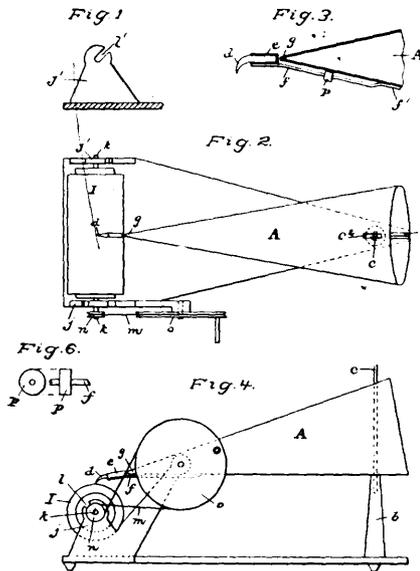
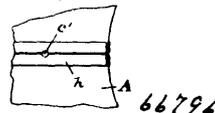


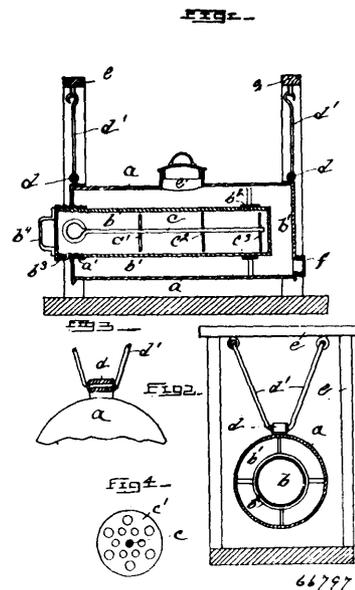
Fig. 5.



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by strips of metal folded over the edges and the said metal strips united, and a hard point at the point end of the trumpet. 3rd. A sounding trumpet for graphophones having a cone shape and made of fibre, a strip of thin metal extending longitudinally of said cone and secured to the trumpet, a hard point in front of the trumpet's point end but not attached thereto, and a rod supporting the said hard point and extending along the outside of the trumpet and attached to said metal strip. 4th. A graphophone having a base provided with two bearings each having a slot inclining in a different direction from the other, a rotary cylinder carrying the sound writing and having journals resting in said slotted bearings, a pulley on one journal, a drive pulley, and a belt from the drive pulley to the cylinder pulley, as and for the purpose set forth.

No. 66,797. Churn and Ice Cream Freezer. (Baratte et congelateur pour crème glacée.)



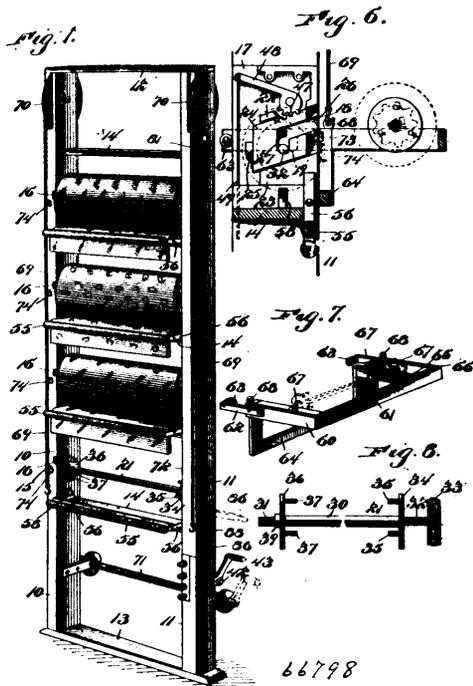
66797

Charles J. Eddy, Springfield, Ohio, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. The combination of an outer can open at one end, supports for said can and links securing said can to said supports, and formed to permit a longitudinal movement only of said can, an inner receptacle of less diameter and shorter in length than said outer can, open at one end and adapted to be supported at its closed end within said outer can, the open end of said inner receptacle extending slightly beyond the open end of said can and adapted to be closed with a cap, and a loose dasher in said inner receptacle having one or more pivoted discs, substantially as specified. 2nd. The combination of an outer suspended can or receptacle having a screw-threaded opening in the centre of one end, frames supporting said can, an inner receptacle of less diameter and shorter length than said outer can, closed at one end and screw-threaded at its open end and adapted to be supported within said outer receptacle at its closed end, and having its open end screw-threaded into the open end of said outer can, and projecting slightly beyond the same, and a screw-threaded cap fitting onto the screw-threaded end of said inner can, substantially as specified. 3rd. The combination of an outer can supported in a suitable frame, formed with an opening at one end, an opening in the top of said outer can and a small opening at or near the bottom thereof, closed by a cap, an inner receptacle supported in said outer can, said inner receptacle being open at one end, the open end of which projects slightly through and is supported in the opening in said outer can, a cap on one end of said inner receptacle and means for producing a longitudinal movement of said outer can in its supporting frame, substantially as specified.

No. 66,798. Carpet Display Rack.

(*Ratelier-montre pour tapis.*)



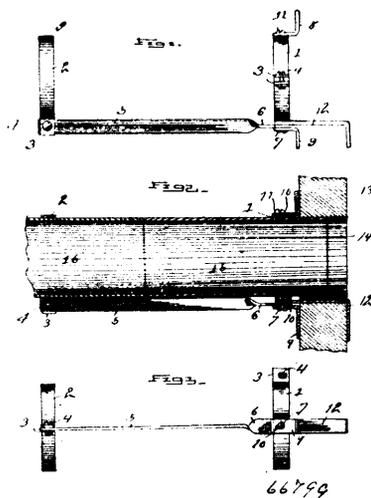
William Eley, Suffolk, Virginia, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. In a display rack, the combination with a plurality of reels and means for rotating them, of separate means for moving the reels successively and simultaneously into and out of operative relation to the rotating means, and means for moving the rotating means into and out of position for engagement by the reels. 2nd. In a display rack, the combination with a plurality of reels and a common means for rotating them, of separate means for moving the reels successively and simultaneously into and out of operative relation to the rotating means, and means for moving the rotating means into and out of position for engagement by the reels. 3rd. In a display rack, the combination with a plurality of reels, each having a sprocket, of a sprocket chain adapted to rotate the sprockets of the reels, means for moving the chain into and out of alignment with the sprockets and means for moving the reels with their sprockets into and out of engagement with the chain. 4th. In a display rack, the combination with a plurality of reels having rotating sprockets lying in a common plane, of a sprocket chain encircling the sprockets and movable in the plane of the latter, and means for individually engaging the sprockets with the chain. 5th. A display rack comprising uprights and cross pieces, bearings in the uprights, reels having shafts journaled in said bearings, one end of each shaft being adapted for lateral movement

in its bearing, a sprocket carried by the movable end of each shaft, a chain encircling the sprockets of the several shafts, and means for moving the shafts individually to engage their sprockets with the chain. 6th. In a display rack, the combination with uprights having rearwardly extending slots therein, of reels journaled in said slots, sprockets carried by the reels and lying in a common plane, a chain encircling the sprockets and adapted for engagement thereby for rotation, and means for moving the chain, laterally to permit the outward displacement of the reels. 7th. In a display rack, the combination with uprights having bearings therein, of reels adapted to lie in said bearings and adapted for movement into and out of the bearings, means for rotating the reels, said means lying in the path of outward movement of the reels, and means for moving the rotating means from the paths of the reels, to permit their introduction and removal with respect to the bearings. 8th. In a display rack, the combination with uprights having bearings therein, of reels journaled in said bearings and having each a sprocket wheel lying in a common vertical plane, shafts journaled in one of the uprights and adapted for rotatable and slidable movement therein, sprockets upon the shafts, a chain upon the last-named sprockets, means for moving the reel sprockets into and out of engagement with the chain, and means for moving the sprocket shafts to move the chain into and out of the plane of the reel sockets. 9th. In a display rack, the combination with uprights having bearings therein, of reels journaled in the bearings, sprockets carried by the reels and lying in a common plane, shafts mounted in one of the uprights and adapted for rotatable and longitudinal movement therein, sprockets carried by said shaft, a chain upon the sprockets encircling the reel sprockets, a crank carried by one of the shafts through the medium of which the sprocket may be rotated, and drawn longitudinally to remove the adjacent portions of the chain from the plane of the reel sprockets, a lever connected with the second shaft, and means for operating said lever to move its shaft longitudinally and draw the adjacent end of the chain from the plane of the reel sprocket. 10th. The combination with a display rack having bearings provided with communicating slots extending through the fronts of the uprights, of an elevator slidably connected with the uprights, and comprising sills adapted to receive a reel and to align with said slots to permit the passage of the reel thereto. 11th. In a display rack, the combination with uprights, having bearings therein and communicating slots adapted to receive reels, of an elevator slidably connected with the uprights and comprising sills adapted to receive a reel and to align with the slots to permit the passage of the reel through the slots and to the bearings, and means carried by the elevator for engagement with the uprights to hold the elevator at its different discharge points. 12th. The combination with uprights having bearings therein, and communicating slots adapted to receive reels, of plates adjacent the bearings of one upright and adapted to open and close the slots thereof and simultaneously move the adjacent ends of the reels.

No. 66,799. Stovepipe Fastener.

(*Attache de tuyau de poêle.*)

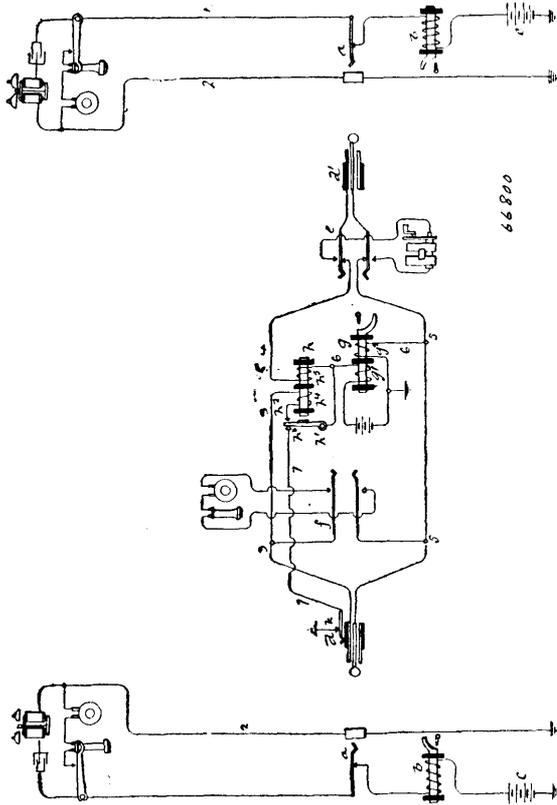


William H. Smith, Topeka, Kansas, U.S.A., 28th March, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—In a stovepipe fastener, the combination of front and rear clamping bands, each clamp formed from a single flat metal strap bent into circular form, and having opposite ends thereof formed into opposite ears, and fastenings connecting said ears, a flat connecting bar, having its rear end held between the ears of the rear clamp, and its front end twisted into a plane at substantially right angles to that of the bar, and fastened exteriorly to the front clamp, diametrically opposite and substantially I-shaped clamps secured to the front clamp, and another longer substantially

L-shaped clamp secured to the front clamp, and aligned longitudinally with one of the former L-shaped clamps, substantially as and for the purpose set forth.

No. 66,800. Supervisory Signal for Telephone Switchboards. (*Signal pour échange de téléphone.*)

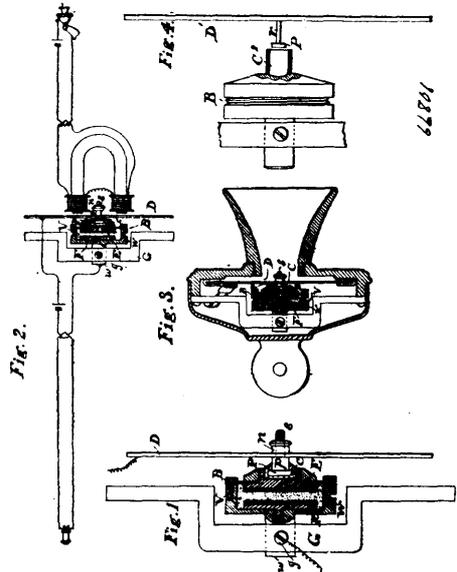


The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of Charles Ezra Scribner, Chicago, Illinois, U.S.A., 29th March, 1900; 6 years. (Filed 27th May, 1898.)

Claim.—1st. The combination with united telephone lines, each provided at its station with means for determining the flow of current in the line in the use of the telephone, a bridge of the united lines and a supervisory signal and a source of current included therein, of a relay with two windings, one included in the line to each station between said station and the bridge, the switch contacts of the said relay being adapted to break the circuit of the lines between the bridge and the calling station when the magnet is inert, whereby the supervisory signal is rendered responsive to current in both telephone lines, substantially as and for the purpose set forth. 2nd. The combination with telephone lines, each provided with means at its station for determining the flow of current in the line in the use of the telephone, and link conductors uniting the lines, of a bridge between said link conductors, and a supervisory signal and a source of current included therein, a calling key in said link conductors adapted to connect a source of calling current with one of said lines, a relay having two windings, one being placed in a link conductor toward each station between the station and said bridge, the switch contacts of said relay being open when the relay is inert, said switch contacts being interposed in the link conductor between the said bridge and the calling station, as described. 3rd. The combination with two telephone lines, each provided at its station with a switch for determining the flow of current in the line during the use of the telephone, of a bridge of the circuit, a supervisory signal and a source of current in the bridge, a magnet winding in a line conductor to each station between said station and the bridge, a normal break of the line circuit between the bridge and the calling station, and switch contacts actuated by said magnet windings adapted to close the break when the winding in circuit with the called station is excited, as described. 4th. In combination, a telephone line provided at its station with means for determining the flow of current in the line during the use of the telephone, a pair of plugs and the plug circuit thereof for making connection with the line, a bridge of the plug circuit, a supervisory signal and a source of current in the bridge, a magnet with two windings, one of said windings being in the conductor leading from said bridge to each station, switch contacts controlled by the said windings, one pair of said contacts adapted to be closed when the

magnet is excited, being interposed in a conductor of the plug circuit between said bridge and one of the stations, and other switch contacts adapted to be closed when the magnet is inert, controlling a local circuit including a winding of the supervisory signal, together with a source of current, as described. 5th. In combination with telephone lines, each provided with a switch at its station for determining the flow of current in the line during the use of the telephone, a pair of plugs and the plug circuit thereof for making connection between lines, a bridge of the plug circuit, and a supervisory signal and source of current therein, a relay magnet with two windings, one of said windings being included in the plug circuit at each side of the bridge, switch contacts of the relay adapted to be closed when the relay is excited interposed in the conductor of the plug circuit with one of said magnet windings, other switch contacts of the relay adapted to be closed when the magnet is inert, a local circuit of the supervisory signal, including a source of current controlled by said last mentioned switch contacts of the relay, and a plug seat switch for one of the plugs adapted to open the said local circuit when the plug is removed from its socket, substantially as described.

No. 66,801. Telephone. (*Téléphone.*)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of George Knox Thompson, Malden, Massachusetts, U.S.A., 29th March, 1900; 6 years. (Filed 20th February, 1900.)

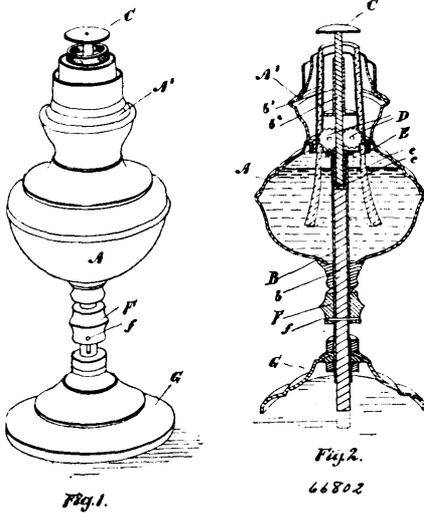
Claim.—1st. The combination in a telephone instrument having transmitting electrodes with the diaphragm, the said electrodes and the granular variable resistance material between said electrodes, of a mechanical connection interposed between the said diaphragm and the front electrode, the said connection being yielding to expansions and contractions of the adjacent parts such as may be produced by temperature variation, but rigid and unyielding under the rapid vibrations of the diaphragm in operation, substantially as and for the purposes set forth. 2nd. In a variable-resistance telephone instrument, the combination with the transmitting electrodes and diaphragm, of a cup or chamber of mercury mounted on the front plate of the said electrodes, and a plunger attached to the diaphragm working loosely in the said cup and embedded in the mercury contained therein, the said mercury acting as a solid and unyielding medium between the electrodes and diaphragm as respects the rapid speech vibration of the latter, and as a yielding connection for slow or gradual changes such as those arising from expansions or contractions of the electrodes and their supporting parts, substantially as described. 3rd. In a telephone repeater or transmitter, the combination of a vibratory diaphragm, transmitting electrodes adapted for operation thereby, a cup or cylinder in or upon the surface of the front electrode having its internal surface amalgamated, a piston or plunger also having an amalgamated surface carried by the diaphragm and projecting into the said cup, and a mass of mercury held within the cup surrounding the plunger, substantially as specified and for the purposes set forth.

No. 66,802. Lamp. (*Lampe.*)

Thomas F. Luya, Liverpool, England, 29th March, 1900; 6 years. (Filed 27th December, 1898.)

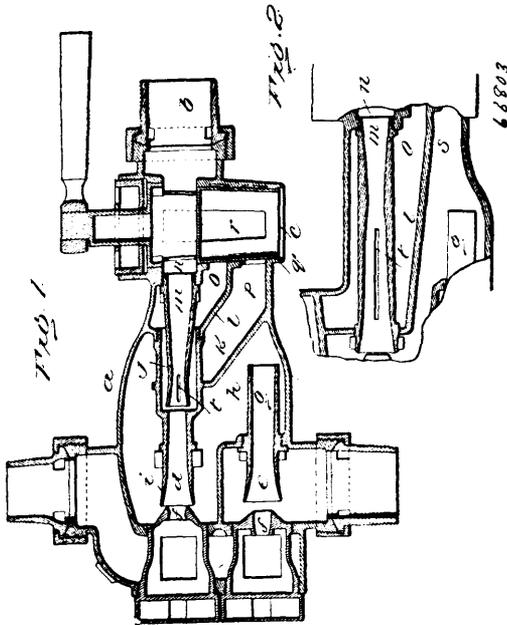
Claim.—In a lamp, the combination with the bowl, the base and the standard thereof, of a vertical lower rod with a weighted sleeve

fixed thereon, and a minor rod resting immediately on top of the lower rod and in the same perpendicular line having an extinguisher



on its upper end and an encircling spring towards its base, as and for the purpose specified.

No. 66,803. Steam Injector. (Injecteur à vapeur.)

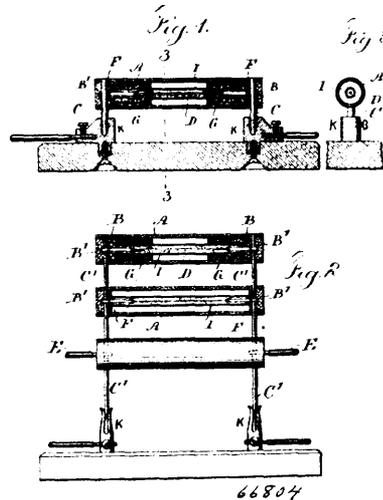


Francis Sticker, New York City, New York, U.S.A., 29th March, 1900; 6 years. (Filed 15th March, 1900.)

Claim.—1st. A steam injector having in one or more of its tubes or nozzles longitudinal lateral escape passages, as set forth. 2nd. A steam injector having in one or more of its tubes or nozzles a lateral escape passage or passages, extending longitudinally of the tube, on a straight line, as set forth. 3rd. A steam injector having in one or more of its tubes or nozzles a narrow longitudinal slot or slots forming a lateral escape passage or passages, as set forth. 4th. In a lifting and forcing injector, the forcer combining tube having a spill chamber, an overflow passageway leading from such chamber, and means for positively closing such passageway, substantially as set forth. 5th. In a lifting and forcing injector, the forcer combining tube formed in sections and having a chamber for receiving the spill of such tube, an overflow passageway leading from such chamber, and means for positively closing such passageway, substantially as set forth. 6th. In a lifting and forcing injector, the forcer combining tube formed with a spill chamber, an overflow passageway leading from such chamber, and a cock having a slot designed to coincide with such passageway, substantially as set forth. 7th. A lifting and forcing injector having a primary overflow for the forcer, an auxiliary overflow for the lifter, the forcer combining tube having

a spill chamber, a supplemental overflow leading from such chamber, and means for closing all of said overflows, substantially as set forth. 8th. A lifting and forcing injector having a primary overflow for the forcer, an auxiliary overflow for the lifter, the forcer combining tube having a spill chamber, a supplemental overflow leading from such chamber, and a single cock having a slot common to all of said overflows, substantially as set forth. 9th. A lifting and forcing injector having a primary overflow in communication with the delivery tube of the forcer, and an auxiliary overflow for the lifter, the forcer combining tube formed in sections, a chamber for receiving the spill from such combining tube, a supplemental overflow leading from such chamber, and a cock for positively closing all of said overflows, substantially as set forth. 10th. A lifting and forcing injector, comprising a casing having an overflow opening, a wall in the discharge chamber of the lifter extending above the tubes of the former, forming an auxiliary overflow passageway leading to said overflow passageway leading to said overflow opening, the forcer combining tube having a spill chamber opening at one end to a passageway leading to said overflow opening, and a cock fitted in said overflow opening and having a slot for coinciding with said passageways, substantially as set forth. 11th. A lifting and forcing injector, comprising a casing, a wall in the discharge chamber of the lifter extending above the tubes of the forcer, an auxiliary overflow for the lifter on the side of such wall from the lifter, the combining tube of the forcer having a spill chamber, a second wall forming a supplemental overflow leading from said chamber, and means for positively closing both of said overflows, substantially as set forth. 12th. A lifting and forcing injector, comprising a casing having an overflow opening extending therethrough, the forcer having a primary overflow in communication with the delivery tube leading into said overflow opening and also having its combining tube provided with a spill chamber, a supplemental overflow passageway leading from such chamber into said overflow opening, and a wall in the discharge chamber of the lifter extending upwardly therein above the tubes of the forcer and forming an auxiliary overflow passageway, for the lifter, leading to said overflow opening, and an operating cock fitted in said overflow opening and having a slot designed to coincide with each of said overflows, substantially as set forth. 13th. In a lifting and forcing injector, the forcer combining tube formed in sections, one of which has a cylindrical enlargement enclosing the other section, and an overflow passageway leading from such enlargement, substantially as set forth. 14th. The combination with the casing having a boiler outlet, an overflow opening, the forcer and lifter sets of tubes, and primary, supplemental and auxiliary overflow passageways leading to said overflow opening, of a cock fitted in said overflow opening having two vertical slots, either one of which is designed to coincide with all of said overflow passageways simultaneously, the other slot being in line with the boiler outlet, and a large transverse port leading through said cock in line between the former tubes and boiler outlet, substantially as set forth.

No. 66,804. Electric Cut Out. (Défente électrique.)

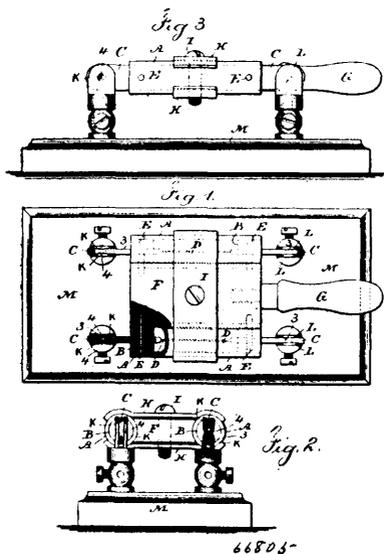


Joseph Sachs, Hartford, Connecticut, U.S.A., 29th March, 1900; 6 years. (Filed 24th October, 1899.)

Claim.—1st. The combination with the tubular case having heads within the end portions and a fusible strip of metallic terminals connected with the strip and passing across through the case and the end heads thereof so as to hold the said heads within the tubular case, substantially as set forth. 2nd. The combination with the safety fuses, each having a case and fusible strip, of metallic terminals that are parallel and pass across through the two or more cases and connect the fusible strips in multiple arc, and sockets or clips for receiving the projecting ends of the terminals, substantially as set forth. 3rd. In a safety fuse, having an enclosing case and a

smaller internal tube around the fusible strip and an air space between the tubes, borax or similar material around and in intimate contact with the fusible strip and within the smaller tube, substantially as specified. 4th. In a safety fuse having an inclosing case and a smaller internal tube around the fusible strip and an air space between the tubes, heads at the ends of the case and yielding material around the terminals and close to the inner sides of the head, substantially as set forth. 5th. The combination with the enclosing case and metallic terminals passing across through the same, of a fusible strip within the case, a small tube surrounding the fusible strip and material, such as borax, within the small tube and around the fusible strip and acting as a flux when the fusible strip melts, substantially as set forth. 6th. The combination with an enclosing case and metallic terminals crossing through the case near the ends thereof, of a fusible strip connected with the metallic terminals, a small tube surrounding the fusible strip and material such as borax, within the small tube to act as a flux when the fusible strip is heated, substantially as set forth. 7th. The combination with an enclosing case and heads within the case, and metallic terminals crossing through the case near the ends thereof, of a fusible strip connected with the metallic terminals, a small tube surrounding the fusible strip and material such as borax within the small tube, to act as a flux when the fusible strip is heated, substantially as set forth. 8th. The combination with a tubular case of insulating material, of terminals passing across through the case near the ends thereof, a fusible strip connected between the terminals and within the case, heads near the ends of the case and sealing material for closing the case air tight and a fluxing material such as borax, around the fusible strip and within the case, substantially as set forth. 9th. The combination with a tubular case of insulating material, of terminals passing across through the case near the ends thereof, a fusible strip connected between the terminals and within the case, heads near the ends of the case and sealing material for closing the case air tight, and a fluxing material such as borax around the fusible strip and within the case, the fluxing material being in a layer around the wire so that there is an air space between the same and the interior of the case, substantially as set forth. 10th. A cut out conductor and a surrounding mixture containing borax or similar material, a tube for surrounding and holding such material and the cut out conductor, a case for holding the conductor and tube, a heat insulator between the inner tube and the outer tube, and terminals projecting from the outer case near its end and a connection therefrom to the cut out conductor, substantially as set forth. 11. The combination with a tubular case of insulating material, of terminals connected thereto and a fusible strip attached between the terminals and within the case, heads near the ends of the case and a fluxing material, such as borax, around the fusible strip and forming a layer to such strip so that there is an air space between the same and the interior of the case, substantially as set forth.

No. 66,805. Electric Switch. (Commutateur électrique.)

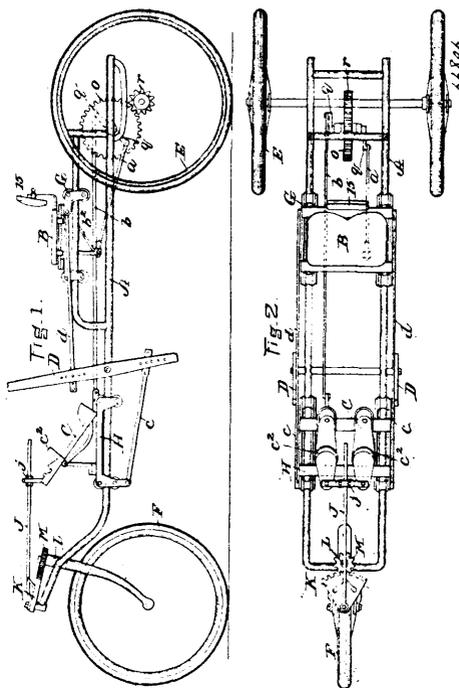


Joseph Sachs, Hartford, Connecticut, U.S.A., 29th March, 1900; 6 years. (Filed 24th October, 1899.)

Claim.—1st. In an electric switch, the combination with the stationary clips forming the circuit terminals, of a safety cut out having an enclosing case and projecting terminals adapted to pass into the stationary clips, and a switch body and means for removably clamping the safety cut out to the switch body, substantially as set forth. 2nd. In an electric switch, the combination with the stationary clips forming the circuit terminals, of two inde-

pendent fusible cut outs and their enclosing cases and rigid projecting conducting terminals passing into the stationary clips and a switch body and means for removably connecting the cut outs to the switch body, substantially as set forth. 3rd. In an electric switch, the combination with the stationary clips forming the circuit terminals, of a safety cut out having an enclosing case and projecting terminals adapted to pass into the stationary clips, and a switch body and means for removably clamping the safety cut out to the switch body, and means for determining the relative position of the terminals to the switch body before clamping the same, substantially as set forth. 4th. The combination with the handle and body, of a safety fuse having a case, terminals extending out at the ends of the case, a cross pin at each end for securing the terminals, such pin projecting at one side of the case and entering a recess or hole in the body, and clips with segmental ends for grasping and holding the case of the safety fuse at the side of the switch body, substantially as set forth. 5th. A handle and switch body segmentally grooved on the edges, in combination with two safety fuses, each having a case with projecting plate terminals in parallel planes, pins passing through the cases and through the terminals for holding them in position, the ends of the pins projecting and passing into holes or recesses in the switch body, and clamps with segmental ends, and a cross screw for holding the safety fuse cases permanently in position at the sides of the switch body, substantially as set forth. 6th. The combination with the safety fuse and the containing case, of plate terminals at opposite ends of the case, cross pins passing through the case and through the terminals for holding the parts in position, there being holes in the plate terminals and forked clips having inward projections or teats to pass into the hole of the terminal, substantially as set forth. 7th. The combination with the handle and body and the clamping devices, of a safety fuse and its surrounding case, terminals projecting at the ends of the case and cross pins passing through the case and securing the terminals and projecting at one side of said case and passing into holes in the switch body for aiding in retaining the case and safety fuse in position in the switch, substantially as set forth. 8th. The combination in an electric switch having stationary clips, of two safety fuses and their supporting cases and permanently attached metallic terminals, a clamp and switch body for removably holding the safety fuses together and allowing the metallic terminals to be connected to or disconnected from the clips, substantially as set forth.

No. 66,806. Mau Motor. (Moteur à bras.)

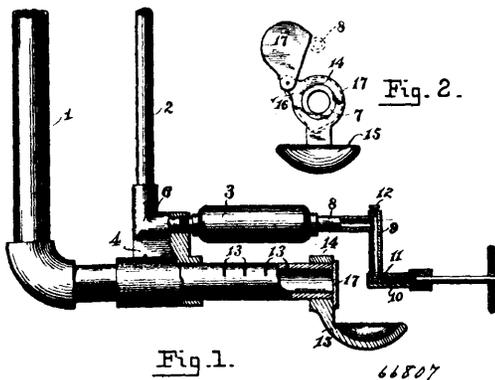


Dudley Allen Sargent, Cambridge, Massachusetts, U.S.A., 29th March, 1900; 6 years. (Filed 14th August, 1899.)

Claim.—1st. In an apparatus for applying the muscular force of the human body to exercise or locomotion, operating hand levers, power applying lever or levers, a travelling foot rest, and connections running therefrom to the operating hand levers, substantially as described. 2nd. In apparatus for applying the muscular force of the body to exercise or locomotion, the combination of a framework adapted to receive the operator and to sustain the connected mechanism, a travelling seat provided with a back, running upon and normally undetachable from said framework, a travelling foot

rest provided with a foot-holding strap running upon and normally undetachable from said framework, hand levers fulcrumed upon said framework and adapted to be grasped by the hands of the operator, a power applying lever or levers, and connections running from said travelling seat to the hand levers, and to the power applying levers, and connections running from the foot rest to the hand levers and to the power applying lever or levers, substantially as described and shown. 3rd. In apparatus for applying the muscular force of the body to exercise or locomotion, in combination with a supporting framework, a seat travelling upon and normally undetachable from said framework, operating hand levers fulcrumed upon said framework, a power applying lever or levers, and connections running from said seat to said operating hand levers and to said power applying lever or levers, substantially as described and shown. 4th. In apparatus for applying the muscular force of the body to exercise or locomotion, in combination with a supporting framework and a seat thereon, a foot rest travelling upon and normally undetachable from said framework, operating hand levers fulcrumed upon said framework, a power applying lever or levers, and connections running from said travelling foot rest to said operating hand levers and to said power applying lever or levers, substantially as described and shown. 5th. In an apparatus for applying the muscular force of the body to exercise or locomotion, the combination of the steering wheel F, two running wheels, on one of which, the power applying wheel E, is the pinion r, the gear O and cranks q q, the framework A, the travelling foot rest C, truck H whose double rollers normally hold the same upon the tracks and foot retaining strap c², the travelling seat B, double rollers G, and adjustable back 15, the hand levers D fulcrumed upon the framework A, the connecting rods loosely pivoted to said seat and to said hand levers, the connecting rod a loosely pivoted to said seat and to a crank q, the connecting rod b loosely pivoted to said travelling foot rest and to a crank q, connecting rods c loosely pivoted to said foot rest and to said hand levers, the standard L carrying the wheel F, the pinion M and quadrant K gearing with said pinion, and the steering bar J, J, adapted to be oscillated through the foot rest C, all substantially as described. 6th. In an apparatus for applying the muscular force of the body to exercise or locomotion, in combination with the framework A, the travelling seat B, normally undetachable rollers G, and adjustable back 15, the travelling foot rest C, normally undetachable rollers, and the foot holding strap c², the hand levers D fulcrumed upon the framework A, the power applying lever wheel E, the small gear r and the gear O, to which is attached the cranks q q, the rod a running from said travelling seat to one of said cranks q, the rods d running from said seat to the handle lever D, the rod b running from said travelling foot rest to one of said cranks q, and the rods c running from said foot rest to said handle levers D, all substantially as described and shown. 7th. In an apparatus for applying the muscular force of the body to exercise or locomotion, in combination with the framework A, the travelling seat B, normally undetachable rollers G, and adjustable back 15, the hand levers D fulcrumed upon the framework A, the power applying lever wheel E, gear r, gear O, and a crank q attached to gear O, a rod a running from said travelling seat to crank q and the rods d running from said seat to the operating hand levers D, substantially as described and shown. 8th. In an apparatus for applying the muscular force of the body to exercise or locomotion, in combination with a framework and a seat, the travelling foot rest C and rollers G therefor normally undetachable from the framework, the hand levers D, the lever wheel E, pinion r, gear O, and a crank q, the rod b connecting said foot rest with crank q, and rods c, c, connecting said travelling foot rest with said operating levers D, substantially as described.

No. 66,807. Gas Generator. (Générateur à gaz.)

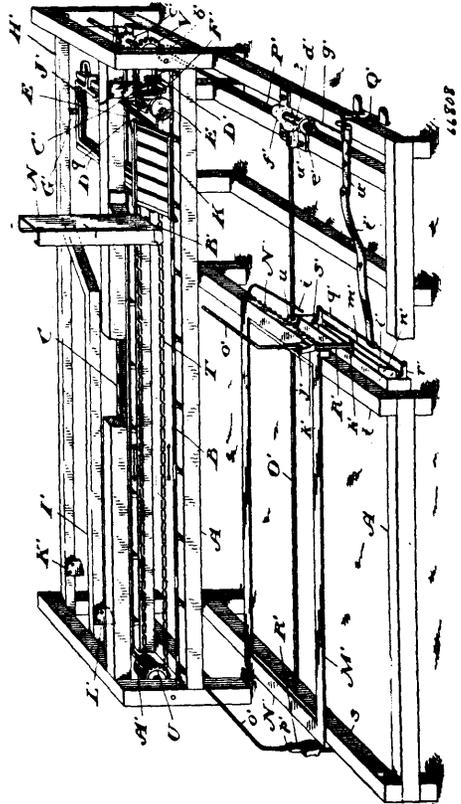


Morris L. Warner and Willard D. Warner, both of Hudson, Michigan, U.S.A., 29th March, 1900; 6 years. (Filed 28th August, 1899.)

Claim.—1st. In a device of the class described, the combination with the generating chamber, the needle valve casing having a pipe connection with said chamber, and the burner tube, of a collar fitted

on the end of the burner tube opposite the needle valve casing and provided with an oil cup pendant from its lower side and offset therefrom, and a deflector plate pivoted directly to the collar at one side of the latter and adapted to be sustained in the elevated inoperative position by said pipe connection between the needle valve casing and the generating chamber, substantially as set forth. 2nd. The combination with a generator, a pipe having a controlling valve in communication with the generator, and a burner having the end opposite the controlling valve open, of an oil cup located opposite the space formed between the controlling valve and burner, and a pivoted plate for closing the open end of the burner and serving to direct the oil into said cup, and supported when not in operative relation by the valved pipe, substantially in the manner specified.

No. 66,808. Machine for Laying Pallets and Loading Wheelbarrows. (Appareil pour déposer les palettes et charger les brouettes.)



Bertney Chapman Heater, Minto, Wellington, Ontario, Canada, 29th March, 1900; 6 years. (Filed 24th April, 1899.)

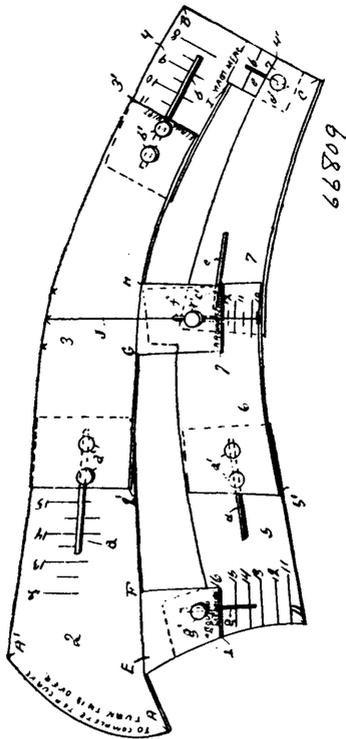
Claim.—1st. In a device of the class described, horizontal tracks, a car movable on the said tracks, a tiltable frame supported on the said car, a frame carried by one end of the tiltable frame and adapted to receive a load of brick, means tending to maintain the said end raised, in combination with an endless chain suitably carried parallel to the tracks, and means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted by carrying a load, and between the other side of the chain when the load is removed and the tiltable frame resumes its normal position, substantially as and for the purpose specified. 2nd. In a device of the class described, horizontal tracks, a car movable on the said tracks, transverse tracks carried by the said car, a frame movable on the said transverse tracks, a tiltable frame pivoted on the said movable frame, a frame carried by one end of the tiltable frame and adapted to receive a load of brick, and means tending to maintain the said end raised, in combination with an endless chain suitably carried parallel to the tracks, means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted by carrying a load, and between the other side of the chain when the load is removed and the tiltable frame resumes its normal position, a projection or roller extending up from the rear end of the tiltable frame, an inverted U-shaped track within the lower part of which the said projection normally lies, a track similar to and in front of the first, and connected therewith by a switch provided above the normal position of the roller with a switch point automatically movable by the aforesaid roller or projection when raised by the tilting frame, substantially as and for the purpose specified. 3rd. In a device of the class

described, horizontal tracks, a car movable on the said tracks, a tiltable frame supported on the said car, a frame for brick journalled at one end of the tiltable frame and confined to a limited rocking motion by suitable stops, means tending to maintain the said end of the tiltable frame in its raised position, and an inclined bar secured to the frame and placed in a position to engage a projection on the said rocking frame and rock it when the tilting frame is in its normal position and the car is moved towards or past the said bar, in combination with an endless chain suitably carried parallel to the tracks, and means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted by carrying a load, and between the other side of the chain and the car when the load is removed and the tiltable frame resumes its normal position, substantially as and for the purpose specified. 4th. In a device of the class described, horizontal tracks, a car movable on the said tracks, a tiltable frame supported on the said car, a frame carried by one end of the tiltable frame and adapted to receive a load of brick, and means tending to maintain the said end raised, in combination with an endless chain suitably carried parallel to the tracks, means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted by carrying a load, and between the other side of the chain and the car when the load is removed and the tiltable frame resumes its normal position, and a plate with bevelled lower edge secured to the main frame of the machine near one end and adapted to engage the front of the tilting frame to cause it to rock and withdraw connection between the car and both sides of the chain, substantially as and for the purpose specified. 5th. In a device of the class described, horizontal tracks, a car movable on the said tracks, a tiltable frame supported on the said car, a frame carried by one end of the tiltable frame and adapted to receive a load of brick, and means tending to maintain the said end raised, in combination with an endless chain suitably carried parallel to the tracks, means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted, by carrying a load, and between the other side of the chain and the car when the load is removed and the tiltable frame resumes its normal position, a plate with bevelled lower edge secured to the main frame of the machine near one end and adapted to engage the front of the tilting frame to cause it to rock and withdraw connection between the car and both sides of the chain, and a bracket located beneath the said plate on which the tilting frame may rest when forced down by the plate, substantially as and for the purpose specified. 6th. In a device of the class described, horizontal tracks, a car movable on said tracks, a tiltable frame supported on the said car, a frame carried by one end of the tiltable frame and adapted to receive a load of brick, and means tending to maintain said end raised, in combination with an endless chain suitably carried parallel to the tracks, means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted by carrying a load and between the other side of the chain and the car when the load is removed and the tiltable frame resumes its normal position, a plate with bevelled lower edge secured to the main frame of the machine near one end and adapted to engage the front of the tilting frame to cause it to rock and withdraw connection between the car and both sides of the chain, a bracket located beneath the said plate on which the tilting frame may rest when forced down by the plate, and a lever pivoted on the said bracket by means of which the tilting frame may be forced off the said bracket, substantially as and for the purpose specified. 7th. In a device of the class described, horizontal tracks, a car movable on the said tracks, a tiltable frame supported on the said car, a frame adapted to receive the pallets on which bricks are placed and carried by one end of the tilting frame, means tending to maintain the said end raised and means for reciprocating the said car in combination with a reservoir pallet holder constructed so that the pallets one at a time may be drawn from its lower end and pairs of projections on the pallet receiving frame adapted in succession to engage the lowermost pallet in the holder when the said frame passes under the pallet holder and the tiltable frame in its normal position, substantially as and for the purpose specified. 8th. In a device of the class described, a pallet receiving frame provided with side end pieces in combination with two leaves journalled at opposite sides of the frame and provided with oppositely arranged pairs of upward projections, means for locking the leaves in their normal position, means operated by contact with a stop for releasing the leaves, and allowing them to turn down to deposit a load of pallets and bricks, and means for returning the leaves to their normal position and relocking them, substantially as and for the purpose specified. 9th. In a device of the class described, horizontal tracks, a car movable on said tracks, a tiltable frame supported on the said car, a frame carried by one end of the tiltable frame and adapted to receive a load of brick, and means tending to maintain the said end raised, in combination with an endless chain suitably carried parallel to the tracks, means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted by carrying a load and between the other side of the chain and the car when the load is removed and the tiltable frame resumes its normal position, and a plate with bevelled lower edge suitably supported near one end of the main frame of the machine in position to engage the rear portion of the tilting frame when the latter is raised by a load of bricks, to cause it to rock and withdraw connection between the car and

both sides of the chain, substantially as and for the purpose specified. 10th. In a device of the class described, horizontal tracks, a car movable on said tracks, transverse tracks carried by the said car, a frame movable on the said transverse tracks, a tiltable frame pivoted on the said movable frame, a frame carried by one end of the tiltable frame and adapted to receive a load of brick, and means tending to maintain the said end raised, in combination with an endless chain suitably carried parallel to the tracks, means actuated by the tiltable frame whereby connection is made between one side of the chain and the car when the frame is tilted by carrying a load and between the other side of the chain and the car when the load is removed and the tiltable frame resumes its normal position, a projection or roller extending up from the rear end of the tiltable frame, an inverted U-shaped track within the lower part of which the said projection normally lies, a track similar to and in front of the first and connected therewith by a switch provided above the normal position of the roller, with a switch point automatically movable by the aforesaid roller or projection when raised by the tilting frame, and two plates with bevelled lower edges each secured to one of the tracks near one end of the machine but not in line with one another and in position to engage the rear portion of the tilting frame, when the latter is raised by a load of bricks, to cause it to rock and withdraw connection between the car and both sides of the chain, substantially as and for the purpose specified. 11th. In a device of the class described, the pallet holder N comprising a vertical rectangular box and the arms B' forming the bottom, the back of the holder descending sufficiently far to hold the pallet above the bottom pallet while permitting the bottom pallet to be withdrawn, in combination with a pallet receptacle movable beneath the pallet holder and provided with pairs of projections adapted to draw successive pallets from the holder, substantially as and for the purpose specified. 12th. In a device of the class described, the pallet holder N, comprising a vertical rectangular box and the arms B', forming the bottom, the back of the holder descending sufficiently far to hold the pallet above the bottom pallet while permitting the bottom pallet to be withdrawn, and the sides descending low enough to hold the bottom pallet from moving endwise, in combination with a pallet receptacle movable beneath the pallet holder and provided with pairs of projections adapted to draw successive pallets from the holder, substantially as and for the purpose specified. 13th. A pallet holder N, comprising a vertical rectangular box provided with a bottom supporting only the middle portion of the bottom pallet, the back of the holder descending sufficiently far to hold the pallet above the bottom pallet while permitting the bottom pallet to be withdrawn, in combination with a pallet receptacle movable between the pallet holder and provided with pairs of projections adapted to engage the end portions of the bottom pallets in the holder, substantially as and for the purpose specified. 14th. A pallet holder N, comprising a vertical rectangular box partly open down the front, the arms B', forming the bottom, the back of the holder descending within a short distance above the arms B', the sides descending sufficiently far to hold the bottom pallet in place, and a hinged portion in one side normally held closed by spring pressure, substantially as and for the purpose specified. 15th. In a device of the class described, a frame transversely movable on the main frame of the machine and provided with two racks in combination with a shaft suitably journalled and provided with gear pinions engaging the said racks, means controlled by the operator for causing the shaft to rotate in either direction so as to reciprocate the said frame to and from the body of the machine, bars vertically movable on the said frame and provided with horizontal bars formed on or secured thereto, and means whereby the reciprocating motion of the said frame causes the vertical bars to rise and maintain a raised position while the frame is travelling towards the body of the machine and to fall and maintain a lower position while the said frame is moving away from the body of the machine, substantially as and for the purpose specified. 16th. In a device of the class described, a frame transversely movable on the main frame of the machine and provided with two racks in combination with a shaft suitably journalled and provided with gear pinions engaging the said racks, means controlled by the operator for causing the shaft to rotate in either direction so as to reciprocate the said frame to and from the body of the machine, bars vertically movable on the said frame and provided with horizontal bars formed on or secured thereto, means whereby the reciprocating motion of the said frame causes the vertical bars to rise and maintain a raised position while the frame is travelling towards the body of the machine, and to fall and maintain a lower position while the said frame is moving away from the body of the machine, and means connected with the said frame for automatically throwing its operating shaft out of connection with the driving mechanism at the end of its desired motion in either direction, substantially as and for the purpose specified. 17th. In a device of the class described, a frame transversely movable on the main frame of the machine and provided with two racks in combination with a shaft suitably journalled and provided with gear pinions engaging the said racks, means controlled by the operator for causing the shaft to rotate in either direction so as to reciprocate the said frame to and from the body of the machine, bars vertically movable on the said frame and provided with horizontal bars, the horizontal bar on one vertical bar being fixed and the other journalled so that it may be swung to one side, a spring tending to maintain the said bar in its normal position, and means whereby the reciprocating motion of the said frame causes the vertical bars to rise and maintain a

raised position while the frame is travelling towards the body of the machine, and to fall and maintain a lower position while the frame is moving away from the body of the machine, substantially as and for the purpose specified. 18th. In a device of the class described, a frame transversely movable on the main frame of the machine and provided with two racks in combination with a shaft suitably journaled and provided with gear pinions engaging the said racks, means controlled by the operator for causing the shaft to rotate in either direction so as to reciprocate the said frame to and from the body of the machine, bars vertically movable on the said frame and provided with horizontal bars formed on or secured thereto, a horizontally extending roller journaled at the lower end of each vertical bar, a lower track for each roller to run on, a shorter upper track, and a switch point hinged at one end on the upper track and resting on the lower track at the end farthest from the body of the machine, substantially as and for the purposes specified.

No. 66,809. Sleeve Pattern. (Patron de manches.)



John R. Van Dame, Grand Rapids, Michigan, U.S.A., 29th March, 1900; 6 years. (Filed 17th January, 1900.)

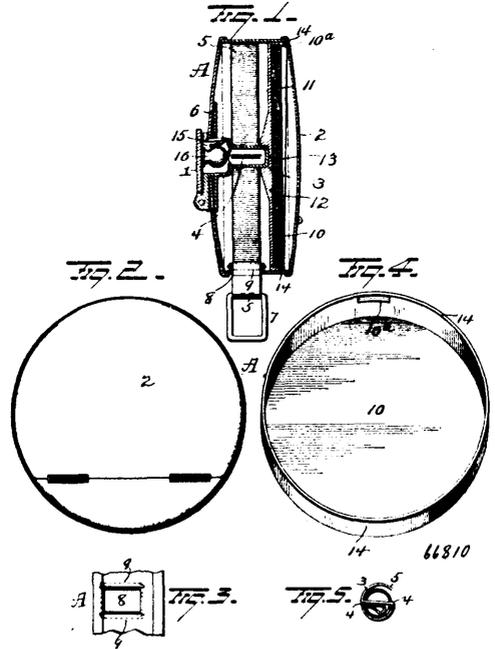
Claim.—1st. In a sleeve pattern, a shoulder section broad at the base and convex, the inner corner carried beyond the inner base line of the section, the outer edge slightly concave, an arm projecting from its inner edge and provided with a stud, an under arm section having an arm projecting from its inner edge and registering with the arm on the shoulder section and provided with a slot to receive the stud in the arm of the shoulder section, the end of this section and the edges of the arms forming a concave line which terminates at the inner edge of the shoulder section some distance from the end, a back elbow, and an under elbow section slidingly attached to the shoulder and under arm section for longitudinal adjustment, the back elbow section convex on its inner edge with an arm extending from its longitudinal centre to, and slightly attached to the end of the under elbow section for lateral adjustment, a long concavo convex section slidingly attached to the end of the under elbow for longitudinal adjustment and adapted by pivot joints, as at *c'*, to a swinging motion, a short wrist section slidingly attached to the end of the outer elbow section for longitudinal adjustment, and having an arm projecting from the inner edge at the end, and slightly attached to the inner wrist section for lateral adjustment at the wrist end of the pattern, all of said sections tapering from the shoulder to the wrist and one end of each of said sections made concave, and the other edge made convex to produce perfect form from the shoulder to the wrist, substantially as and for the purpose set forth.

No. 66,810. Tape Line Reel. (Dévidoir pour rubans d'arpenteurs.)

John Oscar Smith, Denver, Colorado, U.S.A., 29th March, 1900; 6 years. (Filed 22nd January, 1900.)

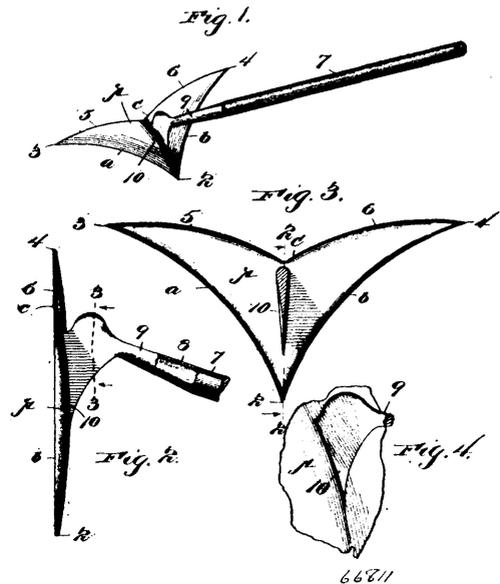
Claim.—1st. The combination with a casing closed at one end and having a hinged cover or door at the other end, a removable partition

disposed within said casing and dividing the same into two compartments, a shaft mounted at one end in the closed end of the



casing and at the other end in said removable position, and a tape line wound on said shaft and passing through the peripheral wall of the casing. 2nd. The combination with a casing closed at one end, and provided at the other end with a hinged cover, of a removable partition within said casing, said partition having a peripheral flange to lie against the inner wall of the casing, and constructed to receive a device to permit the ready removal of the partition, a shaft having its respective bearings in the closed end of the casing and said removable partition, and a tape wound on said shaft and passing through a slot in the casing.

No. 66,811. Hoe. (Houe.)

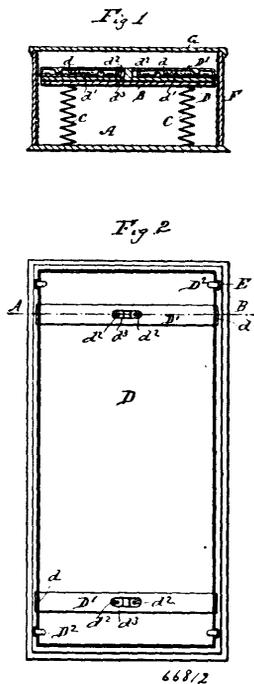


Charles Albert Long, Pomeroy, Washington, U.S.A., 29th March, 1900; 6 years. (Filed 6th March, 1900.)

Claim.—1st. An implement of the class specified, consisting of a blade having a series of three acute points separated by concaved edges, and a shank connected with the blade, the place of attachment of the shank to the blade being upon the centre of gravity of the latter, substantially as described. 2nd. An implement of the class specified, including a concavo convex blade having a series of acute points separated respectively by concaved edges. 3rd. An

implement of the class described, consisting of a blade having a series of three acute points separated by concaved edges, and concavo convex in cross section, and a shank connected with the blade, the place of attachment on the shank to the blade being upon the centre of gravity of the latter, substantially as described. 4th. An implement of the class specified, including a concavo convex blade having a series of acute points separated respectively by concaved edges, a shank connected with the blade, and a wedge-shaped separating device secured to the shank and also to the blade, the width of said wedge-shaped device at its widest point, being substantially the same as that of the shank.

No. 66,812. Garment Pressing Device.
(Appareil à presser les vêtements.)



Walter Jeffrey, 45 Harnsey Lane Gardens, Highgate, London, N. England, 29th March, 1900; 6 years. (Filed 24th February, 1900.)

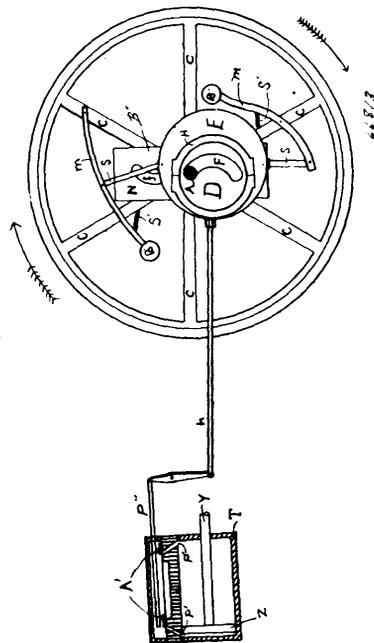
Claim.—1st. In a garment pressing device, a false bottom within a case pressed upwardly by springs and on which the garments to be pressed are placed, a plate adapted to be placed over the garments, spring tongues upon said plate, and toothed racks upon the casing with which the said spring tongues can engage, substantially as set forth and for the purposes specified. 2nd. In a garment pressing device, a case, a false bottom, springs between said false bottom and the bottom of the case, a top plate adapted to be placed upon said false bottom, spring tongues upon said top plate, finger pieces for operating said spring tongues, toothed racks upon the inner surface of the case and guides for the said plate all arranged and operating, substantially as set forth. 3rd. In a garment pressing device, case A, false bottom B, springs C, plate D, cross bars D', spring tongues d, finger pieces d'', projections D'', guides E, ratchet toothed racks F and cover G, all arranged and operating, substantially as set forth with reference to the drawings.

No. 66,813. Steam Engine. (Machine à vapeur.)

Oliver P. Holt, Colorado City, Colorado, U.S.A., 29th March, 1900; 6 years. (Filed 27th February, 1900.)

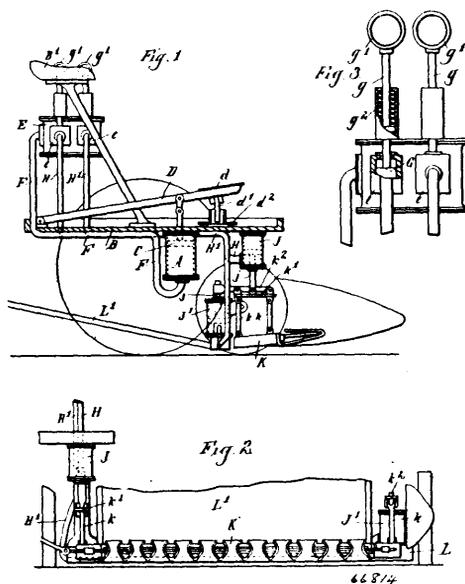
Claim.—1st. The combination in a steam engine eccentric, of an eccentric sheave having an elongated curved slot adapted to receive the principal shaft of an engine, by which the eccentric may be angularly advanced, substantially as described and for the purposes set forth. 2nd. The combination in a steam engine eccentric, of an eccentric sheave having an elongated curved slot and a plate permanently secured to such sheave, said plate having arms adapted to move in the elongated curved slots in a guide plate, and a guide plate having double elongated curved slots through it, and removable arms projecting laterally from each side of it, said arms being adapted to be attached to automatic lever bars, all substantially as described and for the purposes set forth. 3rd. The combination in a reversible steam engine and locomotive eccentric, of an eccentric sheave having an elongated curved slot adapted to receive the main shaft of the engine, said sheave secured to a circular plate having cogs extending across its inner surface, and a cog lever having teeth at one end adapted to engage the cogs on such plate whereby the

said plate is caused to move in the arc of a circle while raised or lowered by such lever, all substantially as described and for the pur-



poses set forth. 4th. The combination in a reversible steam engine and locomotive eccentric, of an eccentric sheave having an elongated curved slot, and cogged plate secured thereto, operated by means of a toothed lever, a guide plate having double, elongated curved slots and fastened to box secured to the main shaft of the engine, a box adapted to hold the guide plate and to receive the fulcrum on which said cog lever rotates, two lever bars connecting the end of the cog lever with a shipper sleeve which can be moved backward or forward or the main shaft of an engine by means of certain actuating machinery consisting of a band around said shipper sleeve and a forked rod bent at right angles and fulcrumed in the angle, and a rod pivoted at one end of such forked rod, all substantially as described and for the purpose set forth.

No. 66,814. Reaping and Binding Machine.
(Moissonneuse et lieuse.)

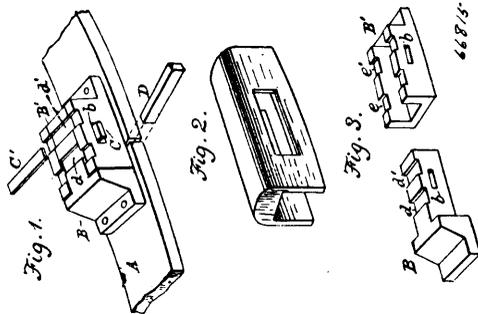


Thomas Percival Gascoigne, Marines Cottage, Thornhill Lees, Dewsbury, Yorkshire, England, 29th March, 1900; 6 years. (Filed 30th January, 1900.)

Claim.—1st. In a reaping machine, an adjustable pointer beam and means for operating the said beam, comprising hydraulic cylin-

ders adapted to raise and lower the beam at each end and apparatus by which pressure can be applied in said cylinders at the will of the driver, substantially as and for the purposes specified. 2nd. In a reaping machine, an adjustable pointer bar, cylinders at each end of the said bar having their pistons connected to it, pipes leading from the said cylinders to a water chamber or reservoir, a compressing cylinder connected to the chamber, foot lever adapted to supply and relieve the pressure, and valves regulating the supply of water to the operating cylinders, substantially as set forth. 3rd. The improved apparatus for operating adjustable pointer bars of reaping machines by hydraulic power at the will of the driver, constructed and operated substantially as set forth.

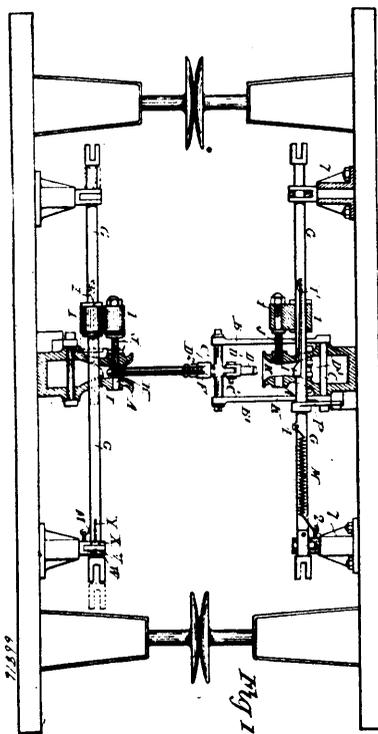
No. 66,815. Tire Tightener. (*Tendeur de bandage.*)



Peter Utah, assignee of John K. Adams, both of Tonkawa, Oklahoma, U.S.A., 30th March, 1900; 6 years. (Filed 15th December, 1899.)

Claim.—The combination with a sectionally hollow felly oppositely slotted as described, of a cut tire under whose opposite ends are respectively secured the joint pieces B, B', adapted to be keyed together in the manner set forth.

No. 66,816. Car Coupler. (*Atte'age de chars.*)



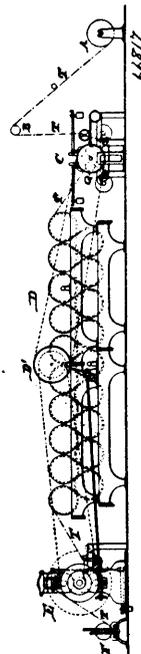
The Darling's Patent Automatic Coupling, Limited, 79 West Regent Street, Glasgow, assignee of John Darling, London, England, and John Darling, Gallowflats, Rutherglen, Lanark, all in Scotland, 30th, March, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. The general arrangement, combination and operation of the parts for automatically coupling railway carriages, wagons and other vehicles, substantially as hereinbefore described

and illustrated on the accompanying sheets of drawings. 2nd. The arrangement by which the shackles adjust themselves for coupling after the operation of uncoupling has taken place, substantially as described and illustrated more especially in hard lines in Fig. 3a of the accompanying drawings. 3rd. The arrangement by which the shackles are raised to the required level and put out of reach for coupling when desired, substantially as described and illustrated more especially in dotted lines in Fig. 3a of the accompanying drawings. 4th. The use of a spiral spring on the link D to give sufficient resistance to shackle F in operating the catch I on the spring I', substantially as described and illustrated more especially in Fig. 5 of the accompanying drawings. 5th. The crossbar G, carrying the pin J, which, when the catch I is pushed in by the link F of the other carriage, is automatically drawn along so that the pin J engages with the link F of the other carriage, substantially as described and illustrated on the accompanying sheets of drawings. 6th. The general arrangement, combination and operation of the parts for uncoupling railway carriages, wagons and other vehicles, substantially as described and illustrated on the accompanying sheets of drawings.

No. 66,817. Method of Coloring Textile Materials.

(*Méthode de colorer les tissus.*)



John William Fries, Salem, North Carolina, U.S.A., 30th March, 1900; 6 years. (Filed 15th February, 1899.)

Claim.—1st. The process of coloring textile fabrics, which consists in impregnating the fabric with a viscous dyeing size, and subjecting such impregnated fabric to pressure to thoroughly incorporate the viscous dyeing size therein, and immediately thereafter drying the fabric to produce a stiffened and colored finished material. 2nd. The viscous dyeing size for coloring and stiffening textile fabrics composed of starch and caustic soda in semi-fluid condition, acetic acid, a basic dye, and a substance, such as acetate of lime, capable of precipitating such basic dye. 3rd. The process of preparing a viscous dyeing size for coloring and stiffening textile fabrics, consisting in mixing separately dissolved starch, and caustic soda, boiling the mixture under pressure until it assumes a clear syrupy or viscous consistency, and adding the acid, dye and precipitant thereto. In apparatus for coloring and stiffening textile fabrics, the combination with a vat to contain dyeing size, of pressure rollers between which the impregnated fabric passes and is subjected to pressure, a guide roll for guiding the fabric through the dyeing seize before it passes to the pressure rolls, and means to adjust the position of said guide roll with reference to the vat. 5th. In apparatus of the character described the combination with the vat, pressure rolls and guide roll, of the means for raising or lowering the guide with reference to the vat and locking it in adjusted position.

No. 66,818. Corn Husking Machine.

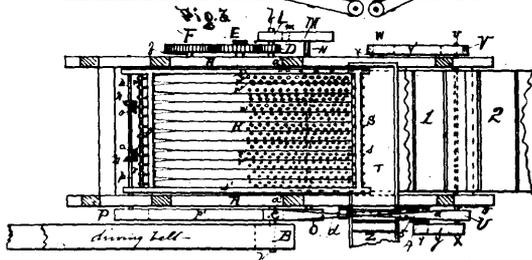
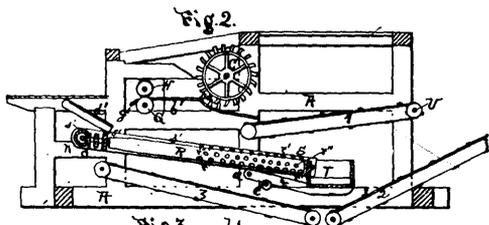
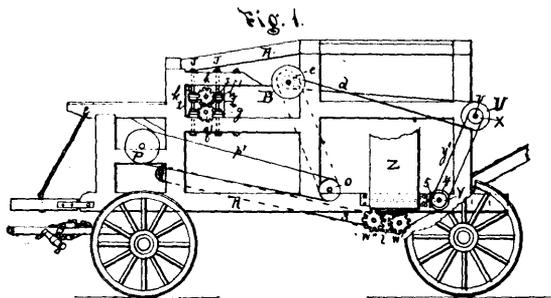
(*Appareil pour épucher le blé d'inde.*)

David William Grice, Chatham, Ontario, Canada, 30th March, 1900; 6 years. (Filed 17th March, 1900.)

Claim.—1st. The combination in a husking machine of the grooved rollers, G and H, having the adjustable bearings h k, with the

toothed threshing cylinder C, and concave C', all substantially as and for the purposes specified. 2nd. The combination in a husking

for the bowl, a slitted holder movable in the stem and provided with a spring plate having a projecting spur or point, said plate being



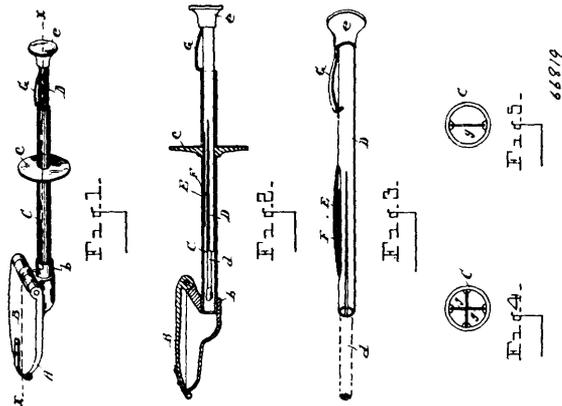
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machine of the grooved rollers G and H, the hinged frame S, containing the nest of husking rollers H, receiving their motion from the nest of pinion and bevel wheels u and o, on the shaft p, substantially as set forth. 3rd. The combination in a husking machine, the husking rollers R, having the forward and turned tapering, the upper portion being smooth, and the lower portion containing the rows of round headed husking pins, all substantially as shown and for purposes specified. 4th. In a husking machine, the grooved rollers, G and H, the cylinder S, and concave C', the husking rollers R, the rakers 1, 2 and 3, the trough T, and the elevator Z, substantially as described and for the purposes specified.

No. 66,819. Flash Lamp. (*Lampe à jet de flamme.*)

Charles H. Goodman, Bucyrus, Ohio, U.S.A., 30th March, 1900; 6 years. (Filed 17th August, 1899.)

Claim.—1st. In a flash lamp, a bowl to contain a charge of a flash powder, said bowl made shallow and flaring outwardly and having a movable lid or cover to confine the charge in place, in combination with a hollow stem rigid with said bowl, a movable holder therein and a match carried by the holder and adapted to ignite the powder from below. 2nd. In a flash lamp, a bowl to contain the charge of explosive powder, a hollow stem for said bowl, a match and a movable holder therefor, and means for limiting the initial insertion of the holder within the stem whereby the holder is held against accidental movement. 3rd. In a flash lamp, a bowl to contain the charge of flash powder, said bowl flaring outwardly, having a hinged lid or cover and an integral threaded nipple, a hollow stem to engage said nipple, a match holder slidable within said stem, and means carried by the stem and adapted to contact with and ignite a match carried by the holder. 4th. In a flash lamp, a bowl to contain a charge of flash powder, said bowl flaring outwardly and provided with a lid or cover, a hollow stem fitted to the bowl having its inner end provided with one or more blades within or contiguous to the base of the bowl, a holder slidable within the stem and adapted to carry the head of the match into contact with said blade or blades, a finger piece on the stem and a thumb piece on the holder whereby the latter is operated. 5th. A flash lamp, comprising a bowl to contain the flash powder, a hollow stem for the bowl, a match holder slidable within the stem, means for igniting the match contiguous to the bowl chamber, and a spring or plate on the holder having a spur or point to be forced through an opening in the holder so that it enters the match and thereby insures the burned match being withdrawn with the holder. 6th. A flash lamp, comprising a bowl to contain the flash powder, a hollow stem



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bowed or curved so that when the holder is inserted in the stem the plate is straightened out and the point or spur thereof is forced into the match, said plate frictionally holding the holder within the stem, and means for igniting the match contiguous to or within the bowl chamber. 7th. A flash lamp, comprising a bowl to contain a flash powder, a hollow stem for the bowl, a match holder and means for igniting a match carried thereby, and a safety spring plate on the holder adapted to contact with the stem to normally limit the insertion of the holder in the stem, said spring plate yielding under pressure, to permit the holder to be shot forward to ignite the flash powder. 8th. An improved flash lamp, consisting of a shallow bowl flaring outwardly and provided with a hinged lid or cover and laterally projecting nipple, a hollow stem to be fitted to said nipple and provided with a finger piece, a slitted holder movable in the stem and adapted to contain a match, a bowed or curved spring on the holder having a spur or point to be pressed into the match to positively secure the latter to the holder, a blade or blades at the inner end of the stem and in the path of movement of the match head, and a spring plate on the holder for limiting the initial position of the same within the stem, said plate yielding under pressure to enable the holder to be shot forward to ignite the match.

No. 66,820. Instantaneous Photographing Machine.

(*Machine instantanée de photographie.*)

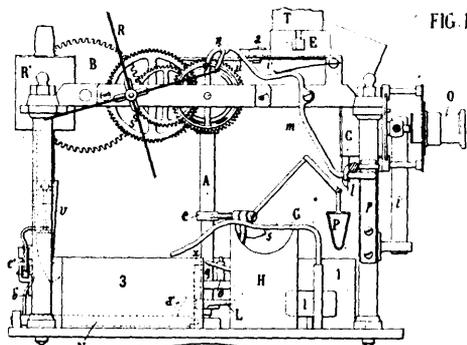


FIG. 1

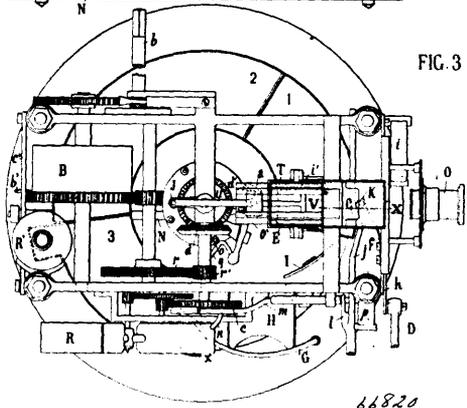


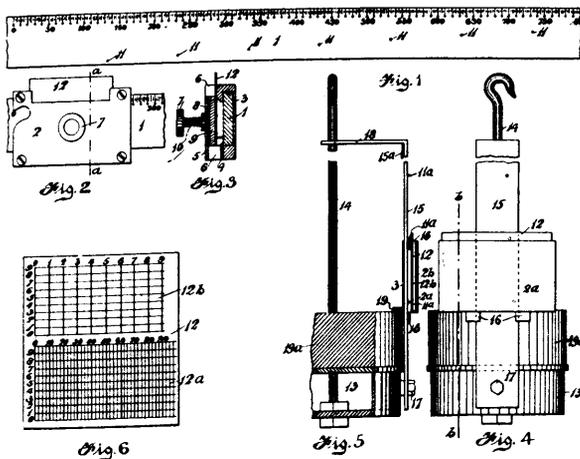
FIG. 3

66820

François de Paula Romani, Lyon, France, 30 mars, 1900; 6 ans. (Déposé le 30 décembre, 1899.)

Résumé.—1°. Un système d'appareil automatique et instantané pour production de photographies complètement achevées, renfermé dans une caisse à l'abri de la lumière, actionné par un mouvement d'horlogerie avec régulateur à ailette, comprenant entre autres une roue à jante à cran d'arrêt, sur laquelle reste fixe en marche retenue sur la jante par son poids, la pointe d'un levier coudée *m* portant doigt, et qui vient à la fin de chaque tour de la dite roue, tomber dans le cran, entraînant le doigt qui vient appuyer sur une ailette et arrête ainsi le mouvement, la remise en marche s'effectuant de l'extérieur de la caisse par une tringle *j* à plan incliné qui appuie sur le bras du levier coudée et le fait soulever pour laisser libre l'ailette du régulateur, un arbre vertical commandé par le mouvement d'horlogerie porte en haut une manivelle avec bielle, pour la poussée, d'une plaque sensibilisée, dans la chambre noire, et plus bas un panier articulé pour la réception de la plaque impressionnée. 2°. Dans le système d'appareil automatique caractérisé par la revendication 1; (a) Un tube rectangulaire T contenant en grand nombre des châssis en métal mince recourbés sur les bords pour retenir les plaques sensibilisées, ce tube posé dans un encaissement évidé muni d'un support dans lequel coulisse un pousseur à bec qui, actionné par une bielle reliée à une manivelle portée par l'arbre de commande, passe en dessous du tube et fait culbuter un châssis dans la chambre noir C vers l'objectif, un ressort étant placé entre la tube et le châssis à sa sortie pour éviter tout accrochage de ce dernier; (b) un panier P porteur de la plaque impressionnée tombée de la chambre C par l'effet de butée d'une tringle coudée *j* contre une plaque à coulisse qui la supportait, le dit panier muni d'un bras à came monté sur axe, pouvant être élevé pour son passage entre les cloisons de chaque bain, à l'aide d'un bras de levier dont la partie inférieure coudée bute contre des galets, l'autre extrémité appuyant sur la came porte panier sur laquelle est un téton pour l'arrêt du panier dans la position basse; (c) un chemin de glissement G sur lequel vient en tournant basculer le panier pour laisser tomber sur un couloir la plaque révélée, qui est reçue dans un tiroir.

No. 66,821. Computing Scale. (Balance à calculer.)



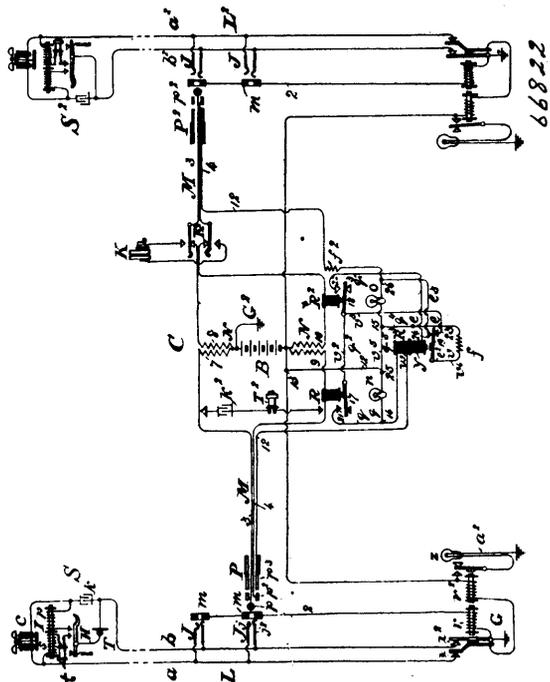
66821

Matthew H. Reed, Pittsburg, Pennsylvania, U.S.A., 30th March, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a recording scale, a beam having registering pins thereon spaced at graduated horizontal and vertical distances. 2nd. In a recording scale, a beam having registering pins thereon spaced horizontally according to the graduations on the beam and vertically by a predetermined unit. 3rd. In a recording scale, a beam, a counterpoise hung on said beam, a guide bar carried by said counterpoise and registering pins on said guide bar spaced at graduated horizontal and vertical distances. 4th. In a recording scale, a beam, a counterpoise hung on said beam, a guide bar fixed to said counterpoise and registering pins spaced thereon vertically corresponding to the weights used on said counterpoise and horizontally by some predetermined unit. 5th. In a recording scale, a beam, a counterpoise hung on said beam, a guide bar fixed to said counterpoise, registering pins on said guide bar, spaced at graduated horizontal and vertical distances, a card holder sliding on said guide bar, a card adapted to fit in said card case and receive the imprint of said registering pins, and means of advancing said card against said pins. 6th. In a recording scale, a beam, a counterpoise hung on said beam, a guide bar fixed to said counterpoise, registering pins spaced on said guide bar vertically corresponding to the weights used on said counterpoise and horizontally by some predetermined unit, a card holder sliding on said guide bar, a card adapted to fit in said card

case and receive the imprint of said registering pins, and means for advancing said card against said pins. 7th. In a recording scale, a primary beam fitted with registering pins, a primary poise mounted thereon, a secondary beam on said primary poise, a secondary poise mounted on said secondary beam, a punching pin actuated by said secondary poise, a card so divided by horizontal and vertical lines as to receive the imprint of the pins on the primary beam and the pins actuated by the secondary poise, and a card holder fitted to contain said card and advance it towards said beam.

No. 66,822. Telephone Switchboard Signal. (Signal d'échange de téléphone.)



The Bell Telephone Company of Canada, Montreal, Canada, assignee of Thomas Crane Wales, Newton, Massachusetts, U.S.A., 30th March, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—1st. In a telephone exchange system, the combination of two telephone substation circuits united by switch apparatus at a central station for through communication, a switch at the substations of said circuits controlling the electrical condition thereof, a supervisory signal at the central station associated with the said through circuit, and two relays, one for each component circuit, both controlling the said supervisory signal, and responsive each to the action of the switch at the substation of its respective component circuit. 2nd. The combination in a telephone exchange switch apparatus, with a switchcord connection having a switch plug at each terminal for uniting two substation circuits, a supervisory signal associated with one of the said plugs, a shunt circuit therefor governing the display thereof, all at a central station, and a suspension switch at the substations of the said two circuits, of two rays associated with the said switch plugs respectively, and connected in the main circuits of the said switchcord, both of the said relays being organized to control the said supervisory signal shunt circuit, and to respond to the operation of the substation suspension switches of the circuits with which their associated plugs are respectively connected. 3rd. In a telephone system and switching apparatus, two main circuits extending respectively between independent substations and the central station, and provided at the latter with switch sockets, a switchcord circuit connection uniting the said circuits for through communication, having its terminal switch plugs placed in the switch sockets of the calling, and called circuits respectively, two relays, one in each main circuit, a supervisory signal associated with the calling circuit switch plug, a shunt circuit governing the display of said signal and controlled by the substation apparatus of the calling main circuit through the relay thereof, a second shunt circuit for the said signal controlled by the substation apparatus of both main circuits through their respective relays, means for establishing the first shunt circuit when connection is made between one of the said plugs and the calling main circuit, and means for establishing the second shunt circuit and disestablishing the first, when switch connections having been made between the remaining plug and the called main circuit, a call signal is transmitted thereover and responded to, substantially as set forth. 4th. In a telephone switchboard apparatus, a sectional switch plug and cord connection circuit having a main and local circuit conduc-

tors, a supervisory signal connected with the local circuit thereof, two relays associated with the sectional main circuits of the two terminal plugs respectively, of said switch cord connection, a shunt circuit for the said signal controlled by one of the said relays, a second shunt circuit therefor, controlled by both of the said relays, and a switch relay operated by the closing of the second shunt, and adapted thereupon to open the first, substantially as and for the purposes specified. 5th. The combination in a telephone exchange system, with two main substation circuits, each having a switch controlling the electrical condition of the circuit at the substation, and switch sockets at the central station, and a plug and cord switch connection circuit therefor, of two determinate and absolute signals associated with the said switch connection, one being responsive to the initial operation of the substation switch of the called substation and adapted to indicate the said operation, and the other being responsive to every operation of the switch at the calling substation, and to every subsequent operation of the called station, and adapted to indicate a desired disconnection, substantially as specified. 6th. In a telephone exchange and switching system, the combination of a switch connection comprising a cord circuit having terminal switch plugs P², at its ends, and containing two main circuit conductors extending between the plugs and divided into two section loops by a battery bridge, and the conductors of two local circuits, one associated with each loop, a supervisory disconnecting signal in the local circuit of the plug P, an information signal in the local circuit of the plug P², and two relays in the main circuit sectional loops respectively, with a shunt circuit governing the disconnecting signal and controlled by one of the said relays, a second shunt circuit for the said signal controlled by both relays, an independent shunt circuit governing the display of the said information signal, and a switching relay operated by the closing of the second shunt circuit, and adapted thereupon to open the first shunt circuit around the disconnecting signal, to maintain the control of said signal by the relays associated with the main loops of both plugs, and to close and maintain closed, the independent shunt circuit of the information signal, substantially as set forth. 7th. The combination in a telephone switch apparatus, substantially as hereinbefore set forth, of a switch cord having terminal switch plugs P P², and containing two main circuit conductors divided centrally into two sectional loops by a battery bridge, and the conductors of two local circuits, one associated with each loop, a disconnecting signal in the local circuit of plug P, an information signal in the local circuit of plug P², two relays R, R², in the said main circuit sectional loops respectively, a shunt circuit governing the display of the disconnecting signal and controlled by the relay R, a second shunt circuit also governing the said signal, controlled by both relays, a third shunt circuit governing the display of the information signal, and a switching relay with two independent exciting coils contained respectively in the local signal circuit of plug P, and in the second shunt circuit, and adapted to attract its armature only when the said two coils reinforce one another, but to maintain the said attraction under the magnetizing influence of either winding alone, the said switching relay being thereby adapted to respond to the closing of the second shunt circuit, and thereupon to open the first shunt circuit and to close the third shunt circuit. 8th. The combination in a plug and cord switch board connection comprising main and local circuits, of a disconnecting signal in the local circuit of one plug, an information signal in the local circuit of the other plug, two relays in the main circuits of the two plugs respectively, a double wound stitching relay, a shunt circuit round the disconnecting signal leading through the back contacts of the said stitching relay, and the contacts of one of the said main circuit relays, a second shunt circuit round the said disconnecting signal extending through the contact points of both main circuit relays and one winding of the switching relay, and a shunt circuit for the information signal, extending through the front contacts of the said stitching relay, substantially as set forth.

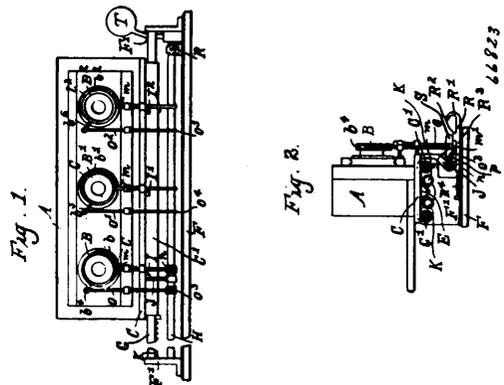
No. 66,823. Colour Photography.

(Photographie de couleurs.)

William Norman Lascelles Davidson, Rose Cottage, Southview Road, Southwick, Sussex, England, 30th March, 1900; 6 years. (Filed 14th September, 1899.)

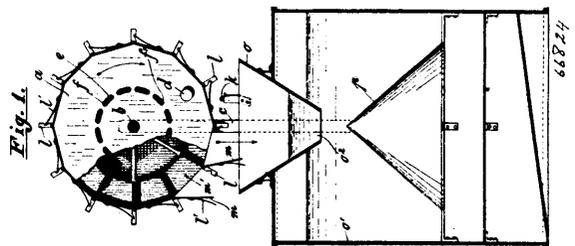
Claim.—1st. In means for taking photographs according to the three colour process, a camera having three divisions each provided with a lens having its proper colour screen and with shutter mechanism, a sliding carriage carrying said camera, springs tending to draw the camera towards one end of the stand, and mechanism whereby the lenses can be exposed in turn and between each exposure the camera moves so that all three exposures are made at the same position, substantially as set forth. 2nd. In means for taking photographs according to the three colour process, a camera having three divisions each provided with a lens having its proper colour screen and with shutter mechanism a sliding carriage carrying said camera a base board having guides for said carriage, springs whereby the camera is moved from one end of the base board to the other when its movement is permitted, a rod extending along said base board and provided with air ball or other mechanism whereby it can be vibrated through a small angle, and means whereby such vibration will cause the operation of each shutter as it is brought to the position from which the exposure is made and whereby the camera is moved to bring each of the lenses into position for exposure in turn,

substantially as set forth. 3rd. In means for taking photographs according to the three colour process a camera having three divisions



each provided with a lens having its proper colour screen and with shutter mechanism, a sliding carriage carrying said camera, a base board having guides for said carriage, springs whereby the camera is moved from one end of the base board to the other when its movement is permitted, a rod extending along said base board and provided with air ball or other mechanism whereby it can be vibrated through a small angle, a projection upon said rod which causes the shutter of the lens which is in position for exposure to move to the exposing position, a sliding piece whereby on a further operation of the air ball a further vibration of the rod is permitted, a projection which will then release the shutter thus allowing it to close again, and a projection which is disengaged from a catch on the camera so as to permit the camera to move under the influence of the springs to bring the next lens into position for exposure, said projection then stopping it at that position, substantially as set forth. 4th. In means for taking photographs according to the three colour process, a camera having three divisions each provided with a lens having its proper colour screen and with shutter mechanism, a sliding carriage carrying said camera, a base board having guides for said carriage, springs whereby the camera is moved from one end of the base board to the other when its movement is permitted, a rod extending along said base board and provided with air ball or other mechanism whereby it can be vibrated through a small angle, a projection upon said rod which causes the shutter of the lens which is in position for exposure to move the exposing position, a spring rod which stops each shutter at that position to allow for time exposure, a sliding portion by which a further vibration of the rod is permitted when the air ball is again operated, a projection which releases the spring rod on such further vibration to permit the shutter to close and a projection which is disengaged from a catch on the camera so as to permit the camera to move under the influence of its springs to bring the next lens into position for exposure, said projection stopping it at that position, substantially as set forth.

No. 66,824. Acetylene Generator. (Générateur à acétylène.)

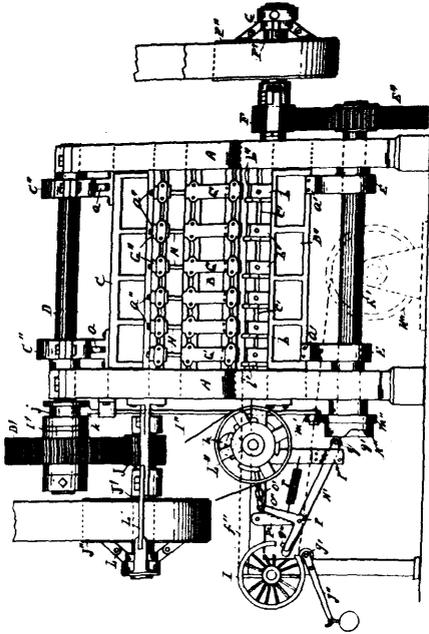


Carl Demuth, 37 Grottanerstrasse Zittau, Saxony, Germany, 30th March, 1900; 6 years. (Filed 16th May, 1899.)

Claim.—1st. An acetylene generator, characterized by a two-armed lever *i* which is fixed to a drum for the reception of carbide, and which has arranged on it stops or pins *f f'* which, by the rising movement of the gas holder bell *b*, are caused to move alternately into and out of the apertures *e* of the carbide drum, with the result that the drum *a*, which is loaded with the weight *d*, is moved step by step and is enabled to discharge the contents of its compartment *m'* singly into the generator *o*, constructed and arranged substantially as hereinbefore described. 2nd. An acetylene generator,

substantially as described, characterized by the fact that the carbide receiving hopper *o* is partly closed at its lower opening *o*² by means of a conical float *r*, so that the carbide that falls through the hopper is distributed with certainty towards the sides of the vessel and the opening *o*² can be uncovered by the yielding of the float *r* when large pieces fall down, constructed and arranged substantially as hereinbefore described.

No. 66,825. Machine for Forming Wire Fabric.
(*Machine pour la formation de tissus métalliques.*)

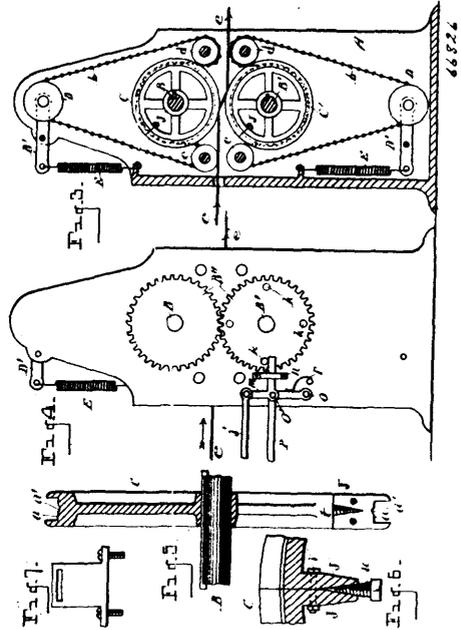


George L. Hoxie, Delos M. Baker, David Metcalf, William H. Shearson and Ira Waterman, all of Adrian, Michigan, U.S.A., 30th March, 1900; 6 years. (Filed 3rd May, 1899.)

Claim.—1st. In a machine for forming wire fabric, the combination with the main frame, the movable cross head carrying one member of the dies, the fixed cross beam carrying the other member of the dies, means for feeding the cross wire into the machine between said dies and across the longitudinal wires of the fabric, and the reciprocal plungers standing in line with said dies adapted to drive the tying staples around the intersecting stands of wire within said dies. 2nd. In a machine for forming wire fabric, the combination with the main frame, the vertically movable cross head carrying the lower dies, the fixed cross beam carrying the upper dies, a series of guides upon said cross beam in line with said dies, the upper cross head adapted to move vertically, the plungers carried by said upper cross head supported in the guide ways in the cross beam in line with said dies, and means for actuating said cross heads. 3rd. In a machine for forming wire fabric, the combination with the main frame, the vertically movable cross head carrying the lower dies, the fixed cross beam carrying the upper dies, a series of guides upon said cross beam in line with said dies, the upper cross head adapted to move vertically, the plungers carried by said upper cross head supported in the guide ways in the cross beam in line with said dies, means for feeding the cross wire intermittently into the machine between the faces of said dies and across the longitudinal wires, and means for actuating said cross heads. 4th. In a wire fabric machine, the combination with the main frame, the vertically movable cross head, the laterally adjustable dies mounted on said cross head, the cross beam, the laterally adjustable guides mounted on said cross beam, the upper cross head adapted to move vertically, laterally adjustable headblocks mounted on said upper cross head, vertical plungers carried by said head blocks and adapted to reciprocate in said guides. 5th. In a wire fabric machine, the combination with the main frame, the lower cross head adapted to move vertically, the dies carried by said cross head, the upper cross head adapted to move vertically, the plungers carried by said upper cross head, the upper dies mounted on the frame in line with the lower dies, guides to direct said plungers in line with said dies, the lower shaft having cams adapted to actuate the lower cross head, an upper shaft having eccentrics adapted to actuate the upper cross head, and means connecting the upper shaft with the lower shaft to impart an intermittent movement to said upper shaft. 6th. In a wire fabric machine, the combination with the main frame, the movable cross heads carrying the dies and plungers, said cross heads having an intermittent

movement, means for feeding the longitudinal wires through the machine over said dies, mechanism for feeding the cross wire into the machine adjacent to said dies and over the longitudinal wires, the lower shaft for actuating the lower cross head, and means connected with said shaft for imparting an intermittent movement to the mechanism for feeding the cross wire. 7th. In a machine for weaving wire fabric, the combination with the main frame of the machine, means for feeding the longitudinal wires through said machine, means for intermittently feeding the wool wires into the machine across said longitudinal wires, dies for embracing said wires at their junction, and means for forcing a tying staple around said wires at their point of crossing. 8th. In a machine for the purpose set forth, the combination with the main frame, movable dies adapted to receive the wires, means for feeding the longitudinal wires intermittently through the machine, a drive shaft for actuating said movable dies, vertically movable plungers in line with said dies, mechanism for feeding the cross wire into the machine in line with said dies and plungers, means connected with said drive shaft for imparting an intermittent movement to the mechanism for feeding the cross wires.

No. 66,826. Wire Fabric Making Machines.
(*Machine pour la fabrication de tissus métalliques.*)

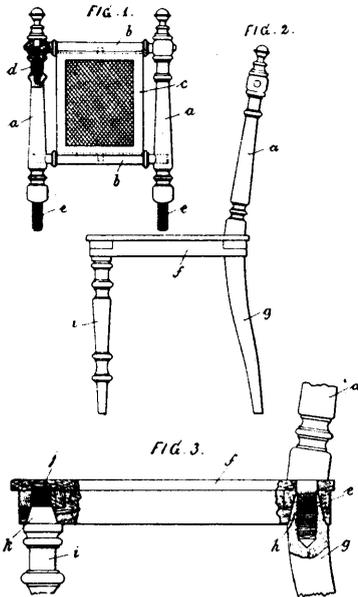


G. L. Hoxie, D. M. Baker, D. Metcalf, W. H. Shearson and Ira Waterman, all of Adrian, Michigan, U.S.A., 30th March, 1900; 6 years. (Filed 25th March, 1899.)

Claim.—1st. In a machine for forming wire fabric, the combination of the series of opposed feed wheels arranged in adjacent pairs and round which pairs the longitudinal wires are adapted to pass, means connecting the opposed series of feed wheels to cause them to travel in unison, a reel upon which the longitudinal wires are wound and which serves to draw said wires through the feed wheels, means for imparting an intermittent movement to said reel, and means for regulating the movement of the feed wheels to determine the length of wire fed therefrom at each operation of the reel. 2nd. In a machine for the purpose set forth, the combination of the series of feed wheels having channels in their peripheries, the sprocket chains passing around a portion of the arc of said feed wheels and held in contact therewith, said chains being adapted to confine within the channels of said wheels the wire strands which pass around the peripheries thereof, and means for drawing upon said strands so as to cause them to pay off of said feed wheels. 3rd. In a machine for the purpose set forth, the combination of the opposed series of feed wheels around which the wire strands are adapted to pass, the reel upon which said wires are adapted to be wound, means for driving the shafts of said series of wheels in unison, pins projecting from a disc on one of said shafts, a movable lever extending into the path of said pins, a clutch mechanism for driving said reel, means connecting said clutch mechanism with said lever, and means for withdrawing said lever from the path of said pins. 4th. In a machine for the purpose set forth, the combination of the grooved feed wheels around which the wire is adapted to pass, wheels upon opposite sides of said feed wheels adjacent thereto, chains passing around said oppositely disposed wheels and around a portion of the arc of said feed wheels, spring actuated idle wheels around which said chains also pass, whereby tension is applied to cause said chains to lie closely

to the peripheries of the feed wheels. 5th. In a machine for the purpose set forth, the combination of the grooved feed wheels around which the wire is adapted to pass, said wheels having a divided rim, projecting lugs on each side of the division of said rim, a tapering threaded socket between the contiguous faces of said lugs, and a conical screw adapted to screw into said socket.

No. 66,827. Chair. (Siège.)



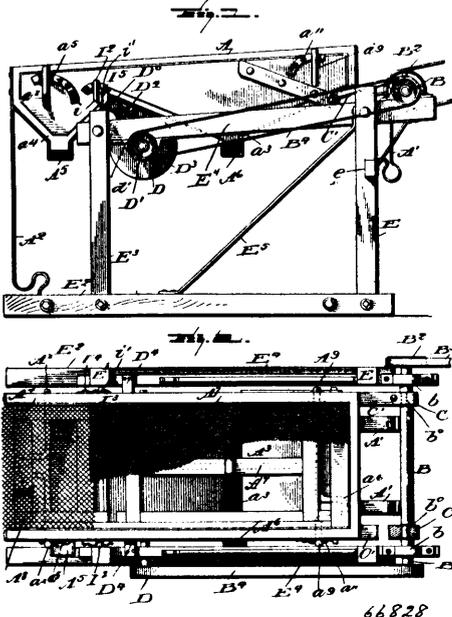
66827

The Commandit Gesellschaft zur Verwertung der Ferlinden schen Stuhlpatente Trefftz & Co., Germany, 30th March, 1900; 6 years. (Filed 13th March, 1900.)

Claim.—Improved detachable chair in which the chair legs to be screwed in receive conical pegs engaging in corresponding holes of the seat, so that in the event of changes in the dimensions of the seat frame a firmer clamping of the screw pegs is effected by these conical parts, substantially as described and shown in the drawing.

No. 66,828. Corneal Separator.

(Séparateur de farine de blé d'inde.)



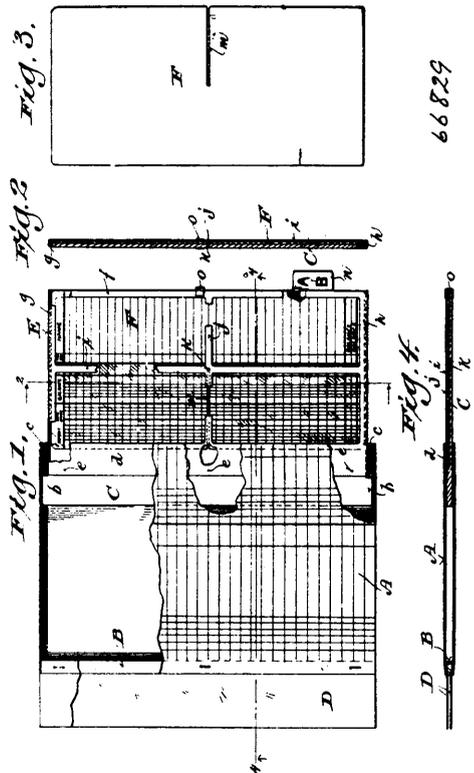
66828

Cornelius Theodore Cummings, Walterboro, South Carolina, U.S.A., 30th March, 1900; 6 years. (Filed 16th March, 1900.)

Claim.—1st. In a separator, a doubled headed beater provided with means of support, perforations and aperture, substantially as described. 2nd. In a separator, a double headed beater F provided with a central perforation, a bracket F^o provided at its upper end with a rectangular portion adapted to be fastened upon the frame of said separator, the lower portion of said bracket comprising legs provided with a series of corresponding perforations f^o and a pin f^x adapted to fit said apertures, substantially as described. 3rd. In a separator, the combination with a vibratory frame containing a plurality of horizontally, adjacent hoppers and means for vibrating said frame, of a plurality of screens of different mesh pivoted end to end within said frame over said hoppers, means for varying the inclination of said screens, a rotary fan mounted upon a rigid support arranged to direct a blast of air to the underside of one of said screens, a doubled headed beater within one of said hoppers provided with a central perforation, a bracket for supporting said beater adapted to be suspended from the frame of one of said screens, the legs of which are provided with a series of perforations, and a pin adapted to pass through said perforations, substantially as described.

No. 66,829. Ledger Balance Sheet.

(Bilan pour grand livre.)



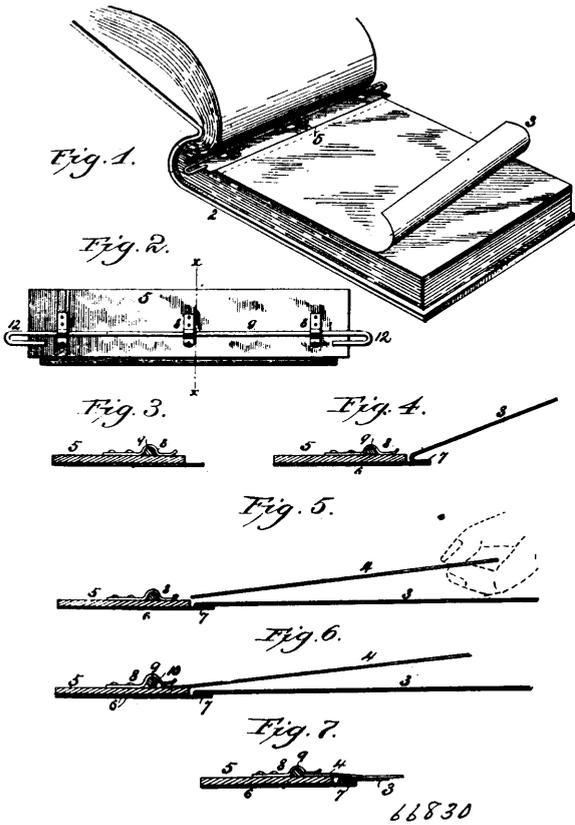
66829

Henry Swalley, Milwaukee, Wisconsin, U.S.A., 30th March, 1900; 6 years. (Filed 30th June, 1899.)

Claim.—1st. The combination with a casing or pocket adapted to be bound in or secured to a ledger, of a slide removable therein, means for preventing the complete withdrawal of said slide, a skeleton frame secured to said slide, and a removable entry sheet held in place upon the said slide beneath the said skeleton frame. 2nd. The combination with a casing or pocket adapted to be bound in or secured to a ledger, and having a transverse back stop and upper and lower front stops, within said casing or pocket, of an extension slide having upper and lower rear shouldered portions for engagement with said front stops, a skeleton frame secured to said slide and open at its front edge, and a removable entry sheet adapted to be held in place on said slide beneath the said skeleton frame, and formed with a silicious or analogous coating upon a portion of its upper surface. 3rd. The combination with a casing or pocket adapted to be bound in, or secured to a ledger, of an extension slide movable within said pocket, a skeleton frame secured to said slide at the rear of the frame, a guide pin connecting the said slide and frame at the centre of the latter, and a removable entry sheet adapted to be held in place between the said slide and frame, and formed with a central horizontal slit or opening extending from the rear edge of the said sheet for the reception of the shank of the said guide pin. 4th. The combination with a rigid casing or pocket of a flexible stub adapted to be bound in or secured to a ledger, a slide movable in said pocket, means for preventing the complete with-

drawal of said slide, a skeleton frame secured to said slide, and a removable entry sheet adapted to be held in place upon said slide beneath said skeleton frame.

No. 66,830. Carbon Sheet Holder. (Porte-feuille de carbone.)



Ira MacFarland, New York City, New York, U.S.A., 30th March, 1900; 6 years. (Filed 19th February, 1900.)

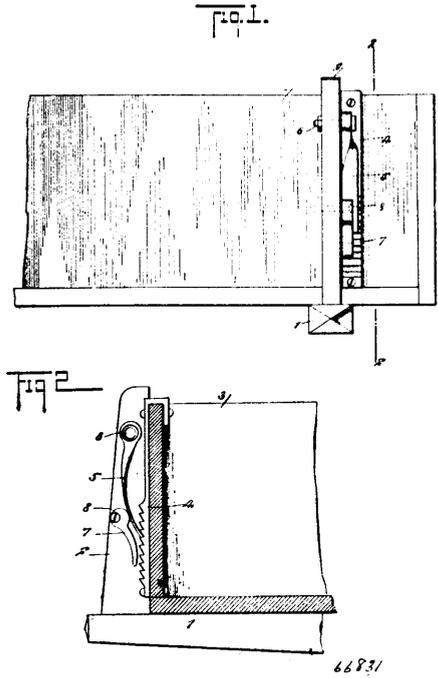
Claim.—1st. As a new article of manufacture, a book copying device consisting of a narrow, thin and straight strip of metal, a sheet of carbon paper fastened at one of its ends to said strip of metal and one or more clamps attached to said strip of metal for holding a letter sheet upon the non-carbonized surface of said sheet of carbon paper, substantially as described. 2nd. As a new article of manufacture, a book copying device consisting of a narrow, thin and straight strip of metal, a sheet of carbon paper fastened at one of its ends to said strip of metal, one or more clamps attached to said strip of metal for holding a letter sheet upon the non-carbonized surface of said sheet of carbon paper and means applied to said strip of metal and to said clamp or clamps for opening the latter, substantially as described. 3rd. A sheet of carbon paper, a strip of stiffening material applied to one edge of said sheet of carbon paper and adhesive material applied to the surface of said strip of stiffening material which corresponds to the non-carbonized surface of the said sheet of carbon paper, in combination with a narrow thin and straight strip of metal to which the said carbon sheet is connected by the said adhesive material applied to said stiffening strip, substantially as described. 4th. The plate 5, having clamps and the means for operating the same at its upper surface in combination with a strip 6 applied to said plate and a sheet of carbon paper 3 applied to said strip 6, substantially as described.

No. 66,831. Wagon Box Holder. (Porte boîte de voiture.)

William A. Crotts, Partridge, County of Reno, Kansas, U.S.A., 30th March, 1900; 6 years. (Filed 3rd February, 1900.)

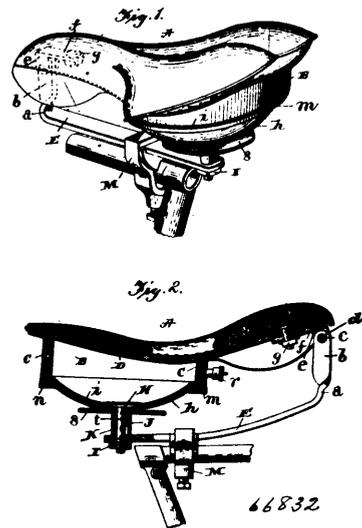
Claim.—1st. A wagon box holder, comprising a rack bar adapted to be secured to the side of the box, a dog mounted to swing on the wagon standard and adapted for engagement with the teeth of the rack bar, and a lever pivoted to the standard and having a cam held engaging with the dog, substantially as specified. 2nd. A wagon box holder, comprising a rack box secured to the wagon box, a spring yielding dog mounted to swing on a standard of the wagon and adapted for engagement with a tooth of the rack bar, and a cam lever for holding the dog in engagement with the rack bar, substan-

tially as specified. 3rd. A wagon box holder, comprising a rack bar attached to the wagon box, and a part supported on a standard



of the wagon and adapted for engagement with said rack bar, substantially as specified.

No. 66,832. Bicycle Saddle. (Selle de bicyclee.)

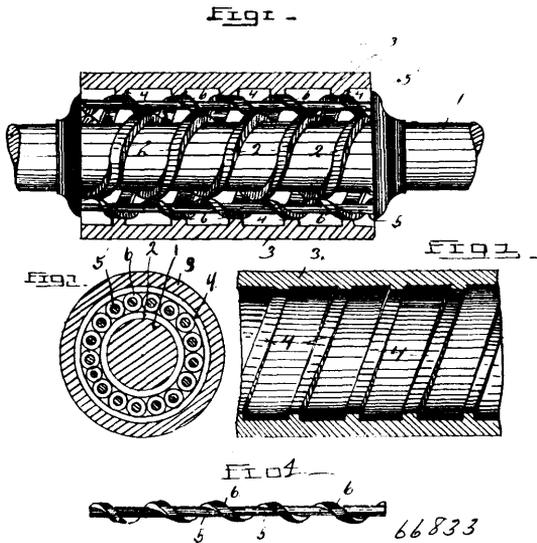


William H. F. Young, Muncie, Indiana, U.S.A., 30th March, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. A pneumatic seat comprising a seat portion, of a seat support having its front end connected to the front end of the seat portion, the rear end of the seat provided with a depending chamber having rigid walls and an open lower end, a flexible diaphragm closing the open lower end of the chamber, a diaphragm support situated between the diaphragm and the seat support and engaging the diaphragm, and a clamping member passing through the centre of the diaphragm and the support, whereby the diaphragm is permitted to engage and disengage the support except at the central point of attachment, substantially as described. 2nd. A pneumatic seat comprising a seat portion, a seat support, the front ends of the seat and support being connected, the rear end of the seat provided with a depending flange forming a chamber, a flexible diaphragm secured to the edges of the said flange and thereby forming a lower wall and forming a closed air chamber, and a support for the diaphragm, substantially as described. 3rd. A pneumatic

seat comprising a seat portion, a seat support, the front ends of the seat support and seat being connected, the rear end of the seat provided with a depending flange, a flexible diaphragm attached to the lower end of the flange and forming thereby a closed air chamber, a ring situated outside of the edge of the diaphragm and clamping the diaphragm to the lower edge of the flange, the diaphragm supported by the rear end of the seat support, substantially as described. 4th. A pneumatic seat comprising a seat portion, a seat support connected at one end to one end of the seat, the opposite end of the seat portion provided with a depending flange forming a chamber, a wearing flexible diaphragm closing the lower end of the chamber, a diaphragm support situated between the said diaphragm and the seat support, and an air tight diaphragm situated at the inner side of the said wearing diaphragm thus forming a closed air chamber, substantially as described.

No. 66,833. Anti-Friction Bearing. (Cousinet anti-frotant.)



Chester A. Latham, Wichita, Kansas, U.S.A., 30th March, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. The hereindescribed bearing consisting of a journal having spiral ridges surrounding the same from end to end, a boxing having a like series of ridges from end to end, and a series of rollers from end to end, the ridges of said rollers engaging the ridges on the journal and boxing, and said rollers adapted to rotate freely. 2nd. An anti-friction bearing consisting of a journal and boxing, each provided with spiral ridges surrounding them in the same direction from end to end, and a series of rollers adapted to rotate between said journal and boxing.

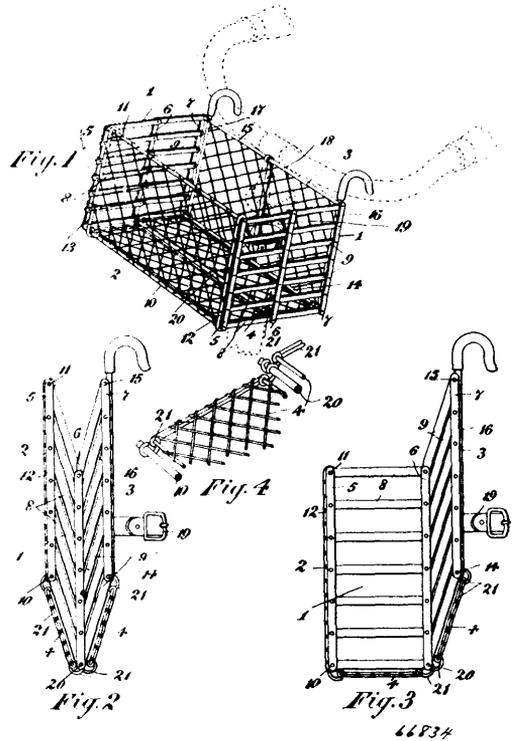
No. 66,834. Bicycle Parcel Carrier.

(Porte-paquet pour bicycles.)

John Emanuel Rothaermel, Toronto, Ontario, Canada, 30th March, 1900; 6 years. (Filed 9th November, 1899.)

Claim.—1st. A compressible parcel carrier for bicycles having downwardly folding ends and the bottom formed in two parts, constructed and adapted to fold downwards in conformity with the ends. 2nd. A folding parcel carrier for bicycles having two ends thereof, each end composed of three bars, two of such bars forming the outer sides of said ends and the remaining bar lying between the other two, and a number of cross bars running from each of the said outer bars and loosely riveted thereto, said cross bars passing each other at the middle bar to which they are loosely riveted, and constructed and adapted to remain fixed in a wholly or partially opened or folded position, the front and rear sides being formed of a suitable material, the bottom side of said carrier being formed in two parts, the inner side of each part being suitably hinged on a support common to both and carried by the said ends, the outer side of one part being hinged to the front side of the carrier, and the outer side of the second part being hinged to the rear side of the carrier, and means for adjustably attaching said carrier to the bicycle. 3rd. A parcel carrier for bicycles having two ends 1, 1, of same formed by a number of bars 8 and 9, and the bars 5, 6 and 7, all said bars being loosely riveted together, said carrier having its front and rear sides formed of a suitable material, the bottom side of said carrier being formed in two parts, the inner side of each part being suitably hinged on a support common to each part and carried by the said ends, the outer side of one part being hinged to the front

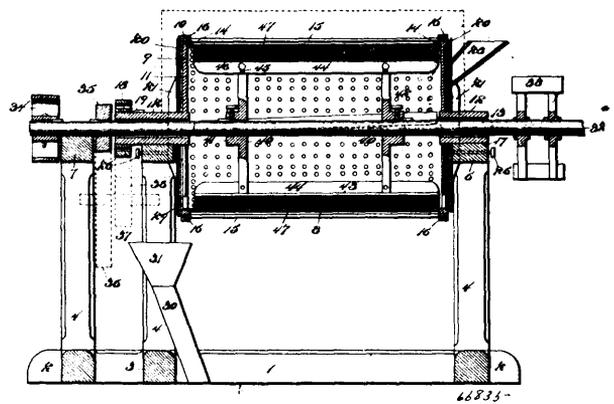
side 3 of the carrier and the outer side of the second part being hinged to the rear side 3 of the carrier, the rear side of said carrier



having extensions from same terminating in hooks, and an adjustable fastening device to encircle the head post of the bicycle, said adjustable fastening device being itself adjustable in its connection to the rear end of the carrier.

No. 66,835. Grain Cleaning Device.

(Séparateur pour le grain.)

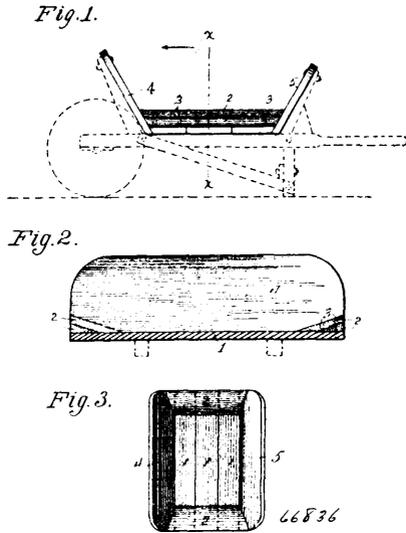


William E. Larmon and Hugh Larmon, both of Kentucky, U.S.A., 30th March, 1900; 6 years. (Filed 17th March, 1900.)

Claim.—1st. In a grain cleaner, the combination with the revoluble screen cylinder, of the removable closer heads provided with radial openings adapted to clear the cylinder heads bearings, the gate plates for said openings and the supports for said closer heads and gate plates, substantially as described. 2nd. In a grain cleaner the combination with the revoluble screen cylinder, of the removable closer heads having the parallel stay ribs on one side and supports having the grooves to receive said stay ribs and thereby secure said closer heads against rotation with the cylinder and permit the removing of said closer heads, substantially as described. 3rd. A brush for grain cleaning machines, comprising spiders, adapted to be received on a shaft, and having radial arms, brush heads on the ends of said radial arms, angular in cross section, to form side flanges which bear on the sides of the said radial arms, said side flanges having radial adjusting openings, and bolts in said openings and engaging the radial spider arms, for the purpose set forth, substantially as described. 4th. In a grain cleaning machine, the revoluble

screen cylinder, comprising the barrel, formed of perforate sheet metal, the open cylinder heads fitted on the ends of the barrel, and the bolt rods connecting said open cylinder heads, and securing the same to the ends of the barrel, substantially as described. 5th. In a grain cleaner, the combination with the revoluble cylinder having the open heads carried by or provided with the trunnions or journals, of the closer heads, one or more having the radial opening to clear the cylinder journal, the fixed support and the gate plate secured to said support and fitted to said opening, substantially as described. 6th. In a grain cleaning machine the combination of the perforate screen cylinder, having the open heads provided with hollow trunnions, one of which has a driving wheel, bearings for said trunnions, closer heads, in fixed supports, and disposed at the ends of the screen cylinder, the speed shaft in independent bearings, and extending through the screen cylinder trunnions, said speed shaft being geared to one of the said screen cylinder trunnions, for the purpose set forth, the spiders on said speed shaft and the brushes connecting the arms of said spiders, all constructed and adapted to operate, substantially as described.

No. 66,836. Wheelbarrow Tray. (Boite de brouette.)



Martin V. Garver, Bryan, Ohio, U.S.A., 30th March, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. A wheelbarrow tray, comprising a bottom composed of one or more flat rectangular pieces, sides consisting of blocks or pieces, triangular in cross section, disposed upon and transversely to the ends of the bottom piece, a front consisting of a flat piece and a back consisting of a flat piece and means for securing the bottom pieces, the triangular pieces and the front and back in fixed relation to each other. 2nd. In a wheelbarrow tray, a flat rectangular bottom having its front and rear margins bevelled, sides for the tray consisting of pieces triangular in cross section, and having their ends bevelled in the same planes as said first mentioned bevels, a flat front, a flat back, and means for securing said front and back to said bevelled portions of the bottom and sides.

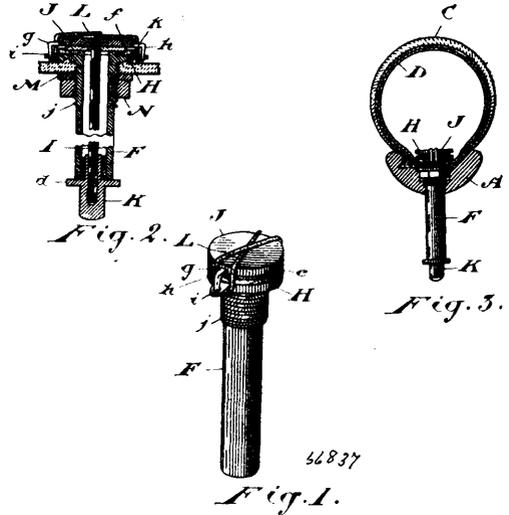
No. 66,837. Pneumatic Tire Valve.

(*Soupepe de bandage pneumatique*)

Edward Saunders Roney, Toronto, Ontario, Canada, 30th March, 1900; 6 years. (Filed 24th March, 1900.)

Claim.—1st. In a tire valve, comprising a hollow valve stem, and a flange formed on or connected to the head of the said stem, in combination with a rod extending through the said hollow stem, a disc connected to the said rod above the aforesaid flange, projections extending out from the flange and disc, one or more elastic bands engaging the said projections and tending to draw the disc and flange together and also to prevent them turning upon one another, and means engaging the outer ends of the stem and rod, whereby the disc and flange may be tightened together, substantially as and for the purpose specified. 2nd. In a tire, a valve comprising a hollow valve stem, a flange formed on or connected to the head of the said stem, and a ring of packing secured to the upper surface of the said flange, in combination with a rod extending through the said hollow stem, a disc connected to the said rod above the aforesaid flange, a disc of packing of less diameter than the aforesaid ring secured to the under side of the said disc on the rod, projections extending out from the flange and disc, one or more elastic bands engaging the said projections and tending to draw the disc and flange together, and also to prevent them turning upon one another, and means engaging the outer ends of the stem and rod whereby the disc and flange may be tightened together, substantially as and for the purpose specified.

3rd. In a tire, a valve comprising a hollow valve stem, and a flange formed on or connected to the head of the said stem, in



combination with a rod extending through the said hollow stem, a disc connected to the said rod above the aforesaid flange, a projection from each side of the disc and flange, one of the projections on the disc or flange being provided with a spike adapted to enter a suitable hole in the corresponding projection on the flange or disc, one or more elastic bands adapted to draw the flange and disc together, and means engaging the outer ends of the stem and rod whereby the disc and flange may be tightened together, substantially as and for the purpose specified. 4th. In a tire, a valve comprising a hollow valve stem, and a flange formed on or connected to the head of the said stem, in combination with a rod extending through the said hollow stem, a disc connected to the said rod above the aforesaid flange, one or more elastic bands tending to draw the disc and flange together and also to prevent them turning upon one another, and means engaging the outer ends of the stem and rod, whereby the disc and flange may be tightened together, substantially as and for the purpose specified. 5th. In a tire, a valve comprising a hollow valve stem, a flange formed on or connected to the head of the said stem, and a ring of packing secured to the upper surface of the said flange, in combination with a rod extending through the said hollow stem, a disc connected to the said rod above the aforesaid flange, a disc of packing of less diameter than the aforesaid ring secured to the underside of the said disc on the rod, one or more elastic bands engaging the disc and flange and tending to draw them together, and means engaging the outer ends of the stem and rod whereby the disc and flange may be tightened together, substantially as and for the purpose specified.

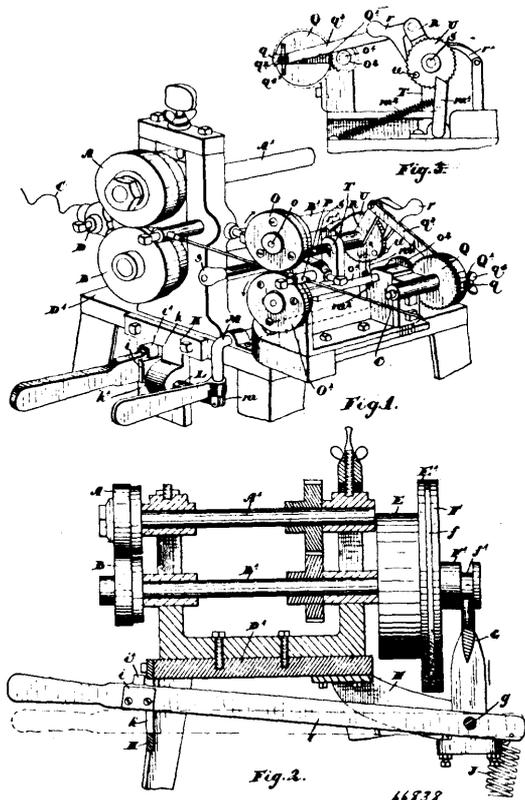
No. 66,838. Stop for Wire Colling Machines.

(*Arrêt pour machines à enrouler le fil de fer.*)

Sydney Turner, Toronto, Ontario, Canada, 30th March, 1900; 6 years. (Filed 22nd February, 1899.)

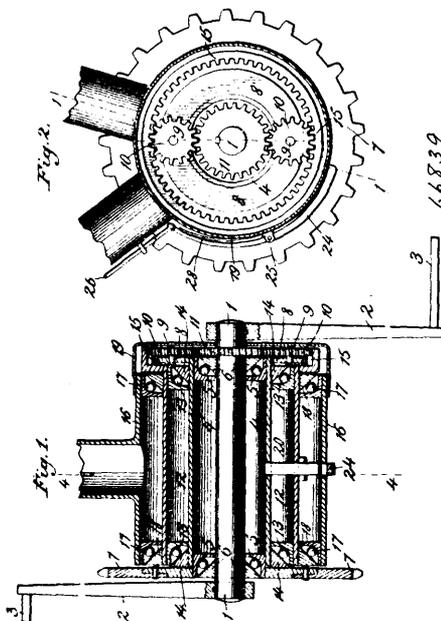
Claim.—1st. The combination with the feed rollers and means for driving the same, of the friction discs rotated by the wire passing into the machine, and means connecting such friction discs with the driving means of the rollers, whereby such driving means is thrown out of operation, as and for the purpose specified. 2nd. The combination with the feed rollers supported on suitable spindles and the loose pulley on one of the spindles provided with an end face friction disc, the friction disc secured on the main spindle and provided with a grooved hub, the forked arm extending into such groove and the spring held lever rigidly connected to the bottom of the same, of the peripheral friction discs designed to be rotated by the wire as it passes into the machine, a tripping means operated by such friction discs to release the spring held lever to throw the driving frictions apart, as and for the purpose specified. 3rd. The combination with the feed rollers supported on suitable spindles and the loose pulley on one of the spindles provided with an end face friction disc, the friction disc secured on the main spindle and provided with a grooved hub, the forked arm extending into such groove, and the spring held lever rigidly connected to the bottom of the same, of the peripheral friction discs designed to be rotated by the wire as it passes into the machine, the catch plate secured to the lever and the springs located above the same, the bolt designed to engage with the spring above the catch plate to hold the lever down, and tripping means to release the bolt and allow the lever to rise to throw the driving friction discs apart, as and for the purpose specified. 4th. The combination with the feed rollers supported on suitable spindles and the loose pulley on one of the

spindles provided with an end face friction disc, the friction disc secured on the main spindle and provided with a grooved hub, the



forked arm extending into such groove, and the spring held lever rigidly connected to the bottom of the same, of the peripheral friction discs designed to be rotated by the wire as it passes into the machine, the catch plate secured to the lever, and the spring located above the same, the bolt designed to engage with the spring above the catch plate to hold the lever down, the rod journalled on the bed plate and pivotally connected to the bolt and having an arm at the opposite end, and means operated through the rollers for tilting such arms to throw the bolt away from the lever, as and for the purpose specified. 5th. The combination with the feed rollers supported on suitable spindles and the loose pulley on one of the spindles provided with an end face friction disc, the friction disc secured on the main spindle and provided with a grooved hub, the forked arm extending into such groove and the spring held lever rigidly connected to the bottom of the same, of the peripheral friction discs designed to be rotated by the wire as it passes into the machine, the catch plates secured to the lever and the springs located above the same, the bolts designed to engage with the spring above the catch plate to hold the lever down, the rod journalled on the bed plate and pivotally connected to the bolt and having an arm at the opposite end, the ratchet wheel, means for suitably driving it from the wire to the driven friction rollers and a pin extending from the ratchet wheel designed to engage and tilt the arm on the end of the cross rod, as and for the purpose specified. 6th. The combination with the feed rollers supported on suitable spindles and the loose pulley on one of the spindles provided with an end face friction disc, the friction disc secured on the main spindle and provided with a grooved hub, the forked arm extending into such groove and the spring held lever rigidly connected to the bottom of the same, of the peripheral friction discs designed to be rotated by the wire as it passes into the machine, the catch plate secured to the lever and the spring located above the same, the bolt designed to engage with the spring above the catch plate to hold the lever down, the rod journalled on the bed plate and pivotally connected to the bolt and having an arm at the opposite end, the ratchet wheel, the gear at one end of the lower friction disc, the diametric slot on the face of one of the gears Q, the arm on the spindle of the ratchet wheel, the dog pivotally connected to the arm and engaging with the ratchet wheel, and the link connecting the arm to the stud on the gear wheel Q and the pin extending laterally from the face of the ratchet wheel and designed to tilt the arm on the end of the cross rod, as and for the purpose specified.

No. 66,839. Changeable Gear. (*Engrenage variable.*)



Frank M. Swayze, St. Davids, Lincoln, Ontario, Canada, 30th March, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. In a bicycle, the combination with the crank hanger and the crank shaft, of the central wheel secured to the crank shaft, the sleeve encircling the crank shaft and provided at one end with the sprocket wheel and carrying at the other end the planetary wheels meshing with the central wheel, the sleeve encircling said sprocket sleeve and provided with an internally toothed wheel with whose teeth the planetary wheels mesh, and means for locking the sleeve which carries the internally toothed wheel to either the sprocket sleeve or to the crank hanger in changing from one speed to the other, substantially as described. 2nd. In a bicycle, the combination with the crank hanger and the crank shaft, of the central wheel secured to the crank shaft, the sleeve encircling the crank shaft and provided at one end with the sprocket wheel and carrying planetary wheels at its opposite end, said planetary wheels meshing with the central wheel, the sleeve encircling the sprocket sleeve and provided with the internally toothed wheel with whose teeth the planetary wheels mesh, ball bearings between the crank shaft and crank hanger and the intermediate sleeve, the bolt movable through the sleeve carrying the internally toothed wheel towards and from the sprocket sleeve and the crank hanger and adapted to engage with one or the other of said parts in changing from one speed to the other, and means for actuating said bolt, substantially as described. 3rd. In a bicycle, the combination with the crank hanger, the crank shaft, the concentric sleeves and gears for changing from one speed to another, of the spring influenced bolt supported by one sleeve and adapted to engage one sleeve on the other as it may be desired to have one speed or another, the sliding spring influenced bolt for depressing the bolt carried by the inner sleeve, and the rod for actuating said bolt, substantially as described.

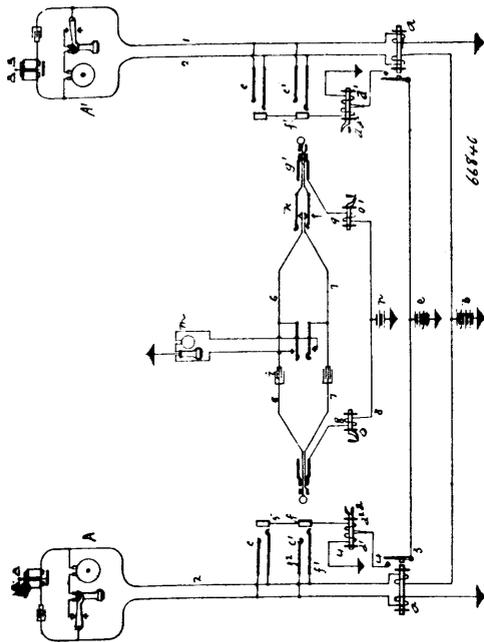
No. 66,840. Telephone Switch Board Signal.

(*Signal d'échange de téléphone.*)

The Bell Telephone Company of Canada, Montreal, assignee of C. E. Scribner, Chicago, Illinois, U.S.A., 31st March, 1900; 6 years. (Filed 27th May, 1898.)

Claim.—1st. The combination with a telephone line extending from a subscriber's station to a central office, of a signal associated with the line at the central office, said signal having two differential windings, a continuously active source of current and means at the subscriber's station, actuated during the use of the telephone, for effecting the connection of said source of current with one of the windings to operate the signal, a circuit including a second winding of the said signal differential with respect to the first mentioned winding, a source of current in the later circuit, and switch contacts closed in the act of making connection with the line to complete the last mentioned circuit, whereby the magnet of the signal is rendered inert when connection is made with the line, as described. 2nd. The combination with a telephone line extending from a subscriber's station to a central office, of an indicator associated with the line at the central office, a continuously active source of current and a circuit including the same with a winding of said indicator, means at the subscriber's station for effecting the completion of said circuit

during the use of the telephone, whereby current is supplied to said winding as long as the telephone remains in use, a spring jack for



the line, and plugs and a plug circuit for making connection therewith, a local circuit with a source of current therein including a second winding of the signal differential in its effect thereon with respect to the current controlled from the sub-station, said local circuit being controlled in registering contact pieces of the spring jack and plug during the connection, substantially as and for the purpose specified. 3rd. The combination with a telephone line, a source of current and a relay therein, and means at the substitution of the line for determining the flow of current in the line during the use of the telephone, of a local circuit controlled by the relay, a source of current therein, an electro-magnetic signal associated with the line having a winding included in the said local circuit, a second local circuit, including a winding differential with respect to said first mentioned winding, a spring jack and a plug for making connection with the line, and registering switch contacts in the spring jack and plug adapted to complete with said second mentioned local circuit, substantially as described. 4th. The combination with a telephone line having means at its station for determining the flow of current in the line automatically in the use of the telephone, of a relay responsive to such current connected with the line, a spring jack for the line and a plug and plug circuit for making connection therewith, a local circuit controlled by the relay including a source of current, and an electro-magnetic signal having a winding in the said local circuit, a second local circuit also controlled by the relay including a second winding of the said signal differential with respect to the first, registering contact pieces of the plug and spring jack adapted to complete said second mentioned local circuit, and a supervisory signal included in the second mentioned local circuit associated with the plug, substantially as described. 5th. The combination with a telephone line having at its sub-station means for determining the flow of current in the line, a spring jack for the line and a plug and plug circuit for making connection therewith, and a signal controlled by such current in the line through the agency of a winding thereon, of a local circuit completed in registering switch contacts of the spring jack and plug, a second winding on the signal controlling device differential with respect to the first, both said windings being included serially in the said local circuit, and a supervisory signal associated with the plug and interposed in the said local circuit, said supervisory signal being also controlled by current in the telephone line, whereby connection may be made with the line and the supervisory signal may be controlled without causing the display of the line signal, as described. 6th. The combination with a telephone line having means for determining the flow of current in the line in the use of the telephone, a spring jack for the line and a plug and plug circuit for making connection therewith, an electro-magnetic line signal associated with the line, said line signal having two windings, and a supervisory signal associated with the plug, a relay responsive to current in the line, a local circuit controlled by the relay divided into two parallel branches, a winding of said line signal in each of said branches, said windings being differential with respect to each other, said supervisory signal being included in one of said branches, and switch contacts of the spring jack and plug completing said last mentioned

branch, whereby the line signal is rendered inert and the supervisory signal is brought under the control of the relay when connection is made with the line, as described. 7th. The combination with a telephone line having means at its station for determining the flow of current in the line in the use of the telephone, a spring jack of the line and a plug and plug circuit for making connection therewith, a line signal associated with the spring jack, said line signal having two windings, a supervisory signal associated with the plug, a relay for the line responsive to current therein, a local circuit including a battery controlled by the said relay, said local circuit being divided into two parallel branches, a winding of the line signal being included in each of the branches, said windings being differential with respect to each other, switch contacts of the spring jack and plug completing one of said branches, the supervisory signal being included in said last mentioned branch, a source of test current insufficient to operate the said signals included in the same branch, and means for testing the spring jacks to determine the electrical conditions of the contact pieces in the local circuit, substantially as described. 8th. The combination with a telephone line extending from a subscriber's station to a central office, of an indicator associated with the line at the central office a continuously active source of current, a circuit connecting the same with a winding of said indicator, and means at the subscriber's station for effecting the completion of such circuit during the use of telephone, whereby said winding is continuously supplied with current while the telephone remains in use, a branch circuit connected in parallel with said first mentioned circuit and including a second winding of said indicator differential with respect to said first mentioned winding, a spring jack for the telephone line and a plug for making connection therewith, said branch circuit being closed in registering contacts of the plug and spring jack, and a supervisory signal connected with said branch circuit, substantially as set forth.

No. 66,841. Earth Closet. (*Latrinc sèche.*)

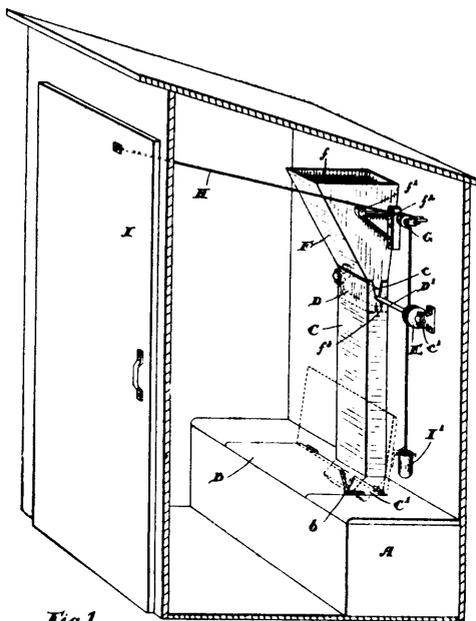


Fig. 1.

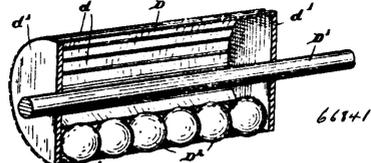


Fig. 2.

Thomas Taylor Paul, Orangeville, Ontario, Canada, 31st March, 1900; 6 years. (Filed 15th May, 1899.)

Claim.—1st. The combination with the rectangular chute leading into the excrement receptacle, of the rectangular hopper having the sides inclined and a screen at the top thereof, the peripherally slatted feeding cylinder located in the chute and provided with an outwardly extending spindle supported insuitable bearings, the pulley on the spindle, the cord wound round the pulley and provided with a suitable weight and the door to which the cord is connected at the opposite end, as and for the purpose specified. 2nd. The combination with the rectangular chute leading into the excrement recep-

tacle, of the rectangular hopper having the sides inclined and a screen at the top thereof, the slatted feeding cylinder located in the chute and provided with an outwardly extending spindle supported in suitable bearings, the balls in the cylinder, the pulley on the spindle, the cord wound around the pulley and provided with a suitable weight and the door to which the cord is connected at the opposite end, as and for the purpose specified. 3rd. The combination with the rectangular chute leading into the excrement receptacle, of the rectangular hopper having the sides inclined and a screen at the top thereof, the slatted feeding cylinder located in the chute and provided with an outwardly extending spindle supported in suitable bearings, the pulley on the spindle, the cord wound around the pulley and provided with a suitable weight, the door to which the cord is connected at the opposite end, the seat, the hinged flap and the bracket connected to the same and designed to extend over the weight when the flap is open, as and for the purpose specified.

No. 56,842. Account System and Appliance.

(Appareil et système de compts.)

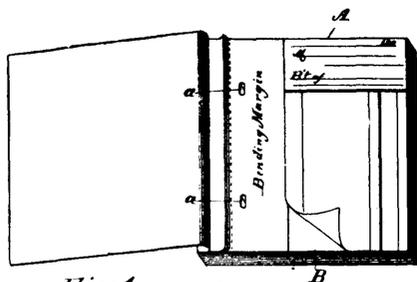


Fig. 1.

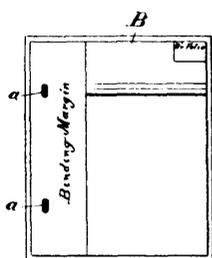


Fig. 2.

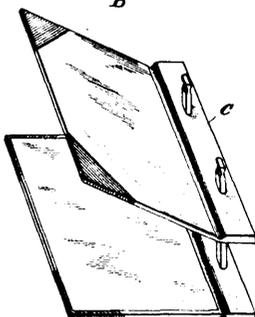


Fig. 3.

66842

Robert James Copeland and Albert Edwy Chatterton, both of Toronto, Ontario, Canada, 31st March, 1900; 6 years. (Filed 30th May, 1899.)

Claim.—1st. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book having detachable invoice sheets and detachable copy sheets in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices. 2nd. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book having detachable loose leaf invoice sheets and detachable loose leaf copy sheets in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices. 3rd. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book having detachable invoice sheets and detachable copy sheets in alphabetical arrangement in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices. 4th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book having detachable invoice sheets and detachable copy sheets in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, and a binder for filing the detached duplicate invoices. 5th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book having detachable loose leaf invoice sheets and detachable loose leaf copy sheets in which the entries of the sales sheets are copied or entered in duplicate for

the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, and a binder for filing the detached duplicate invoices. 6th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book having detachable invoice sheets and detachable copy sheets in alphabetical arrangement in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, and a binder for filing the detached duplicate invoices. 7th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book having detachable invoice sheets and detachable apertured copy sheets in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, and a binder for filing the detached duplicate invoices, said binder having posts to engage the apertures of said duplicate invoices. 8th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, said book comprising in its construction, a loose leaf binder having posts, and invoice sheets and copy sheets both of which are provided with score lines for detachment, the invoice and copy sheets having apertures outside their score lines to receive the posts of said binder, and the copy sheets having also apertures inside their score lines, and a loose leaf transfer binder for filling the duplicate invoice said binder having posts to engage the inner apertures of the detached duplicate invoices. 9th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, said book comprising in its construction a loose leaf binder having posts and invoice sheets and copy sheets and interpolated alphabetical index sheets said invoice and copy sheets both being provided with score lines for detachment, the invoice and copy sheets having apertures outside their score lines to receive the posts of said binder, and the copy sheets having also apertures inside their score lines, and a loose leaf transfer binder for filling the duplicate invoices, said binder having posts to engage the inner apertures of the detached duplicate invoices. 10th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customers' credit transactions, with an invoice book comprising in combination a loose leaf binder having posts, and apertured invoice sheets provided with a score line, and copy sheets whereby duplicates of the invoices may be made and preserved. 11th. In a credit account system, the combination of sales sheets on which are contemporaneously entered the customer's credit transactions, with an invoice book comprising in combination, a loose leaf binder having posts, apertured invoice sheets provided with a score line and interpolated alphabetical index sheets, and copy sheets whereby duplicates of the invoices may be made and preserved. 12th. In a credit account system, the combination of a counter sales book comprising detachable original sheets and detachable copy sheets, whereby the customer's transactions may be contemporaneously entered in said sales book in duplicate for the purpose of detaching the sheets and of giving one to the customer and preserving the other, with an invoice book having detachable invoice sheets on which the entries of the sales sheets may be copied or entered, and copy sheets whereby duplicates of the invoice sheets may be made and preserved. 13th. In a credit account system, the combination of a counter sales book comprising detachable original sheets and detachable copy sheets, whereby the customers' transactions may be contemporaneously entered in said sales book in duplicate for the purpose of detaching the sheets and of giving one to the customer and preserving the other, with an invoice book having detachable invoice sheets and detachable copy sheets in which the entries of the sales sheets are copied and entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices. 14th. In a credit account system, the combination of a counter sales book comprising detachable original sheets and detachable copy sheets, whereby the customers' transactions may be contemporaneously entered in said sales book in duplicate for the purpose of detaching the sheets and of giving one to the customer and preserving the other, with an invoice book having detachable invoice sheets and detachable apertured copy sheets in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, and a binder for filing the detached duplicate invoices, said binder having posts to engage the apertures of said duplicate invoices. 15th. In a credit account system, the combination of a counter sales book comprising detachable original sheets and detachable copy sheets whereby the customers' transactions may be contemporaneously entered in said sales book in duplicate for the purpose of detaching the sheets and of giving one to the customer and preserving the other, with an invoice book in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, said book comprising in its

construction a loose leaf binder having posts, and invoice sheets and copy sheets both of which are provided with score lines for detachment, the invoice and copy sheets having apertures outside their score lines to receive the posts of said binder, and the copy sheets having also apertures inside their score lines, and a loose leaf transfer binder having posts for filing the duplicate invoices, said binder having posts for filing the inner apertures of the detached duplicate invoices. 16th. In a credit account system, the combination of a counter sales book comprising detachable original sheets and detachable copy sheets, whereby the customers' transactions may be contemporaneously entered in said sales book in duplicate for the purpose of detaching the sheets and of giving one to the customer and preserving the other, with an invoice book comprising in combination a loose leaf binder having posts, and apertured invoice sheets provided with a score line, and copy sheets whereby duplicates of the invoices may be made and preserved. 17th. In a credit account system, the combination of a counter sales book comprising original sheets and apertured copy sheets connected together along a score line at one margin, the copy sheets being detachably connected in said book at the opposite margin, whereby the customers' transactions may be contemporaneously entered in the sales book in duplicate for the purpose of detaching said sheets and giving the original to the customer and preserving the duplicate, with a loose leaf binder having posts for filing the detached apertured duplicate sales sheets, an invoice book having detachable invoice sheets on which the entries of the sales sheets may be copied or entered, and copy sheets whereby duplicates of the invoice sheets may be made and preserved. 18th. In a credit account system, the combination of a counter sales book comprising original sheets and apertured copy sheets connected together along a score line at one margin, the copy sheets being detachably connected in said book at the opposite margin, whereby the customer's transactions may be contemporaneously entered in the sales book in duplicate for the purpose of detaching said sheets and giving the original to the customer and preserving the duplicate, with a loose leaf binder having posts for filing the detached apertured duplicate sales sheets, with an invoice book in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, said book comprising in its construction a loose leaf binder having posts, and invoice sheets and copy sheets both of which are provided with score lines for detachment, the invoice and copy sheets having apertures outside their score lines to receive the posts of said binder, and the copy sheets having also apertures inside their score lines, and a loose leaf transfer binder for filing the duplicate invoices, said binder having posts to engage the inner apertures of the detached duplicate invoices. 19th. In a credit account system, the combination of a counter sales book comprising original sheets and apertured copy sheets connected together along a score line at one margin, the copy sheets being detachably connected in said book at the opposite margin, whereby the customers' transactions may be contemporaneously entered in the sales book in duplicate for the purpose of detaching said sheets and giving the original to the customer and preserving the duplicate, with a loose leaf binder having posts for filing the detached apertured duplicate sales sheets, with an invoice book having detachable invoice sheets and detachable copy sheets in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices. 20th. In a credit account system, the combination of a counter sales book comprising original sheets and apertured copy sheets connected together along a score line at one margin, the copy sheets being detachably connected in said book at the opposite margin, whereby the customers' transactions may be contemporaneously entered in the sales book in duplicate for the purpose of detaching said sheets and giving the original to the customer and preserving the duplicate, with a loose leaf binder having posts for filing the detached apertured duplicate sales sheets, and comprising in combination a loose leaf binder having posts, and apertured invoice sheets provided with a score line, and copy sheets whereby duplicates of the invoices may be made and preserved. 21st. In a credit account system, the combination of a counter sales book comprising original sheets and apertured copy sheets connected together along a score line at one margin, the copy sheets being detachably connected in said book at the opposite margin, whereby the customers' transactions may be contemporaneously entered in the sales book in duplicate for the purpose of detaching said sheets and giving the original to the customer and preserving the duplicate, with a loose leaf binder having posts for filing the detached apertured duplicate sales sheets, an invoice book in which the entries of the sales sheets are copied or entered in duplicate for the purpose of rendering the invoices periodically to the customers and of preserving duplicate invoices, said book comprising in its construction a loose leaf binder having posts and invoice sheets and copy sheets and interpolated alphabetical index sheets, said invoice and copy sheets both being provided with score lines for detachment, the invoice and copy sheets having apertures outside their score lines to receive the posts of said binder, and the copy sheets having also apertures inside their score lines, and a loose leaf transfer binder for filing the duplicate invoices, said binder having posts to engage the inner apertures of the detached duplicate invoices. 22nd. In a credit account system, the combination of a counter sales book comprising original sheets and apertured copy

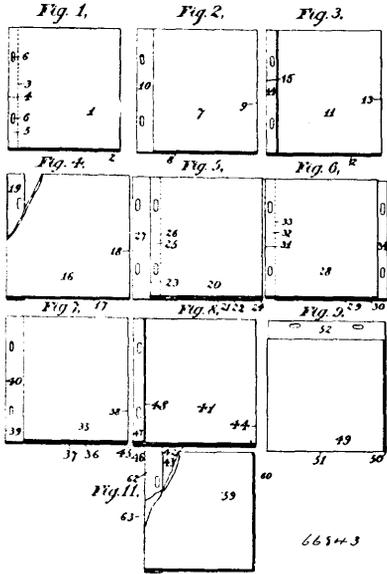
sheets connected together along a score line at one margin, the copy sheets being detachably connected in said book at the opposite margin, whereby the customers' transactions may be contemporaneously entered in the sales book in duplicate for the purpose of detaching said sheets and giving the original to the customer and preserving the duplicate, with a loose leaf binder having posts for filing the detached apertured duplicate sales sheets. 23rd. A sales book, comprising original sheets and copy sheets connected together along a score line at one margin, the copy sheets being detachably connected in said book at the opposite margin, whereby the customers' transactions may be contemporaneously entered in the sales book in duplicate for the purpose of detaching said sheets and giving the original to the customer and preserving the duplicate, said copy sheets having apertures whereby when detached they may be filed on a binder having posts. 24th. An account sheet, comprising a body portion and a stub separated by a score line, the body portion having a binding margin provided with apertures whereby when detached from its stub it may be filed on a binder. 25th. An account sheet, comprising a body portion and a stub separated by a score line, the body portion having a binding margin on the side next the score line provided with apertures whereby when detached from its stub it may be filed on a binder. 26th. A duplicating account sheet, comprising an original sheet and a copy sheet connected along one margin by a score line so that one may be folded over upon the other, the copy sheet having a wide margin on the side opposite the score line provided with apertures whereby the copy sheet may be filed on a binder. 27th. A duplicating account sheet, comprising an original sheet and a copy sheet connected along one margin by a score line and so that one may be folded over upon the other, one sheet having a margin provided with apertures whereby it may be filed on a binder. 28th. A duplicating account sheet, comprising an original sheet and a copy sheet connected along one margin by a score line and so that one may be folded over upon the other, one sheet having a stub separated by a score line from the body thereof and provided with apertures inside the score line. 29th. An invoice book, comprising a binder having posts, and invoice sheets, consisting of a body portion and a stub separated by a score line, the stub having apertures engaged by the posts of the binder. 30th. An invoice book, comprising a binder having posts, invoice sheets, consisting of a body portion and a stub separated by a score line, the stub having apertures engaged by the posts of the binder, and alternating detachable copy sheets secured in the binder. 31st. An invoice book, comprising a binder having posts, invoice sheets, consisting of a body portion and a stub separated by a score line, the stub having apertures engaged by the posts of the binder, and alternating copy sheets, each having a margin divided by a score line and apertures on both sides thereof. 32nd. An invoice book, comprising a binder having posts, invoice sheets, consisting of a body portion, and a stub separated by a score line, the stub having apertures engaged by the posts of the binder, and alternating copy sheets, each having a margin divided by a score line and apertures on both sides thereof. 33rd. An invoice book, comprising detachable invoice sheets and alternating detachable copy sheets, said copy sheets being provided with apertures whereby when detached they may be filed. 34th. An invoice book, comprising a loose leaf binder, loose leaf detachable invoice sheets, and loose leaf alternating detachable copy sheets. 35th. An invoice book, comprising a loose leaf binder, loose leaf detachable invoice sheets, loose leaf alternating detachable copy sheets, and an alphabetical index. 36th. An invoice book, comprising a loose leaf binder, loose leaf detachable invoice sheets, and loose leaf alternating detachable copy sheets, said copy sheets having apertures inside their lines of detachment, in combination with a loose leaf transfer binder adapted to engage the apertures of the detached duplicate invoices. 37th. An invoice book, comprising detachable invoice sheets and alternately detachable copy sheets, said copy sheets being provided with apertures whereby when detached they may be filed, in combination with a loose leaf transfer binder adapted to engage the apertures of the detached duplicate invoices. 38th. An invoice book, comprising a loose leaf binder having posts, alternating invoice sheets and copy sheets, both of which are provided with score lines for detachment, the invoice and copy sheets having apertures outside their score lines to receive the posts of said binder, and the copy sheets having also apertures inside their score line for filing on another binder when detached. 39th. An account sheet, comprising an apertured body portion and an apertured stub separated by a score line.

No. 66,843. Manifold Sheets. (*Feuille multiple.*)

Robert James Copeland, Toronto, Ontario, Canada, 31st March, 1900; 6 years. (Filed 4th July, 1899.)

Claim.—1st. A manifold sheet having an original leaf and a duplicate leaf connected at a score line and folded together, the duplicate leaf having an apertured binding margin which makes it of greater actual area than the original leaf, whereby when detached the duplicate leaf may be filed by means of its apertured margin. 2nd. A manifold sheet having an original leaf and a duplicate leaf connected at a score line and folded together, the duplicate leaf having an apertured binding margin which makes it of greater actual area than the original leaf, the duplicate leaf having its binding margin folded over whereby when the duplicate leaf is detached its margin may be unfolded for filing. 3rd. A manifold sheet having an original leaf

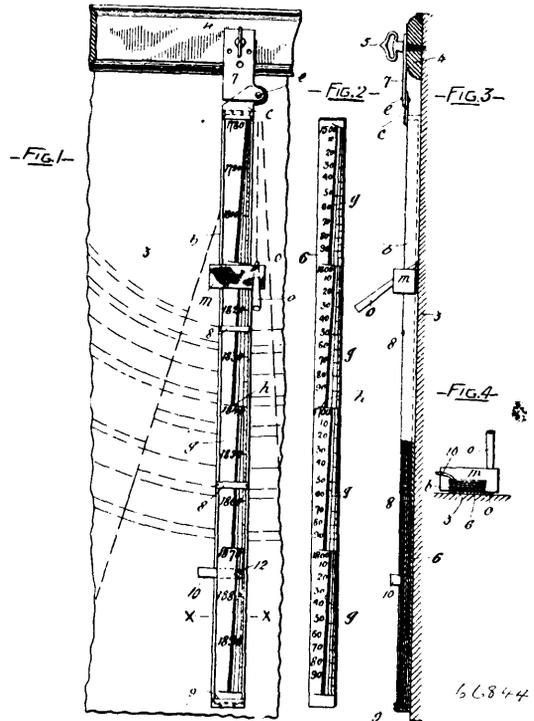
and a duplicate leaf connected at a score line and folded together, the duplicate leaf having an apertured binding margin which makes



it of greater actual area than the original leaf, the duplicate leaf having its binding margin folded over along its middle whereby when the duplicate leaf is detached its margin may be unfolded for filing. 4th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line, and folded together, the duplicate leaf having a binding margin on the side next the original leaf, which makes it of greater actual area than the original leaf, the line of fold for the sheet running medially across the margin of the duplicate leaf whereby when detached said margin of the duplicate leaf may be unfolded for filing. 5th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line, and folded together, the duplicate leaf having an apertured binding margin on the side next the original leaf, which makes it of greater actual area than the original leaf, the line of fold for the sheet running medially across the margin of the duplicate leaf, whereby when detached said margin of the duplicate leaf may be unfolded for filing. 6th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line, and folded together, the duplicate leaf having an apertured binding margin, which makes it of greater actual area than the original leaf, the line of fold for the sheet running medially across the margin of the duplicate leaf and so that part of said binding margin lies in the plane of the original leaf and part in the plane of the duplicate leaf, whereby when detached said margin of the duplicate leaf may be unfolded for filing. 7th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line, and folded together, the duplicate leaf having a binding margin on the side next the original leaf, which makes it of greater actual area than the original leaf, the line of fold for the sheet running medially across the margin of the duplicate leaf, and so that part of said binding margin lies in the plane of the original leaf and part in the plane of the duplicate leaf, whereby when detached said margin of the duplicate leaf may be unfolded for filing. 8th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line, and folded together, the duplicate leaf having an apertured binding margin on the side next the original leaf, which makes it of greater actual area than the original leaf, the line of fold for the sheet running medially across the margin of the duplicate leaf, and so that part of said binding margin lies in the plane of the original leaf and part in the plane of the duplicate leaf, whereby when detached said margin of the duplicate leaf may be unfolded for filing. 9th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line and folded together, the duplicate leaf having a binding margin on the side next the original leaf and having a portion on its opposite side folded back so that part of the matter written on the original leaf may not be duplicated on the duplicate leaf. 10th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line and folded together, the duplicate leaf having an apertured binding margin on the side next the original leaf and having a portion on its opposite side folded back so that part of the matter written on the original leaf may not be duplicated on the duplicate leaf. 11th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line and folded together, the duplicate leaf having an apertured binding margin on the side next the original leaf and having a portion on its opposite side folded back so that part of the matter written on the original leaf may not be duplicated on the duplicate leaf, the line of fold for the original and duplicate leaves

running medially across the binding margin of the duplicate leaf. 12th. A manifold sheet having an original leaf and a duplicate leaf connected at a score line and folded together, the duplicate leaf having an apertured binding margin which makes it of greater actual area than the original leaf, whereby when detached the duplicate leaf may be filed by means of its apertured margin, the manifold sheet having also a third leaf folded under the other two leaves and which may be used as a triplicate leaf, or as an original leaf whose matter may be duplicated on the under side of the duplicate leaf. 13th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line and folded together, the duplicate leaf having an apertured binding margin on the side next the original leaf and having a portion on its opposite side folded back so that part of the matter written on the original leaf may not be duplicated on the duplicate leaf, the line of fold for the original and duplicate leaves running medially across the binding margin of the duplicate leaf, the manifold sheet having also a third leaf provided with an apertured margin. 14th. A manifold sheet having an original leaf and a duplicate leaf connected at a score line and folded together, the duplicate leaf having an apertured binding margin which makes it of greater actual area than the original leaf, whereby when detached the duplicate leaf may be filed by means of its apertured margin, one of the leaves being divided by a transverse score line. 15th. A manifold sheet having an original leaf and a duplicate leaf connected together at a score line, and folded together, the duplicate leaf having a binding margin on the side next the original leaf, which makes it of greater actual area than the original leaf, the line of fold for the sheet running medially across the margin of the duplicate leaf, whereby when detached said margin of the duplicate leaf may be unfolded for filing, one of the leaves being divided by a transverse score line. 16th. A manifold sheet having an original leaf and a duplicate leaf connected at a score line and folded together, the duplicate leaf having an apertured binding margin which makes it of greater actual area than the original leaf, whereby when detached the duplicate leaf may be filed by means of its apertured margin, the manifold sheet having also a third leaf folded under the other two leaves and which may be used as a triplicate leaf, or as an original leaf whose matter may be duplicated on the under side of the duplicate leaf, one or more of the leaves being divided by a transverse score line.

No. 66,844. Chart Drawing Instrument.
(Instrument à dessiner les cartes.)

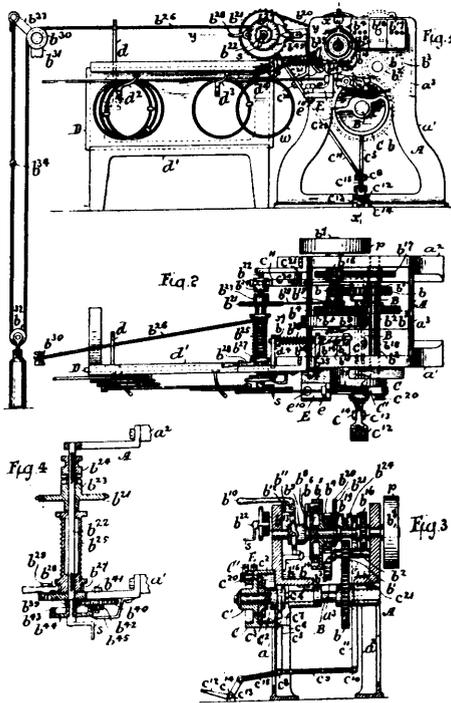


Eli Nash Moyer, Toronto, Ontario, Canada, 31st March, 1900; 6 years. (Filed 25th November, 1899.)

Claim.—1st. In combination with an arm for drawing instruments of the type described, a number of detachable strips carried by said arm and extending longitudinally thereof, each strip having a different scale marked thereon, and rigid stops upon the arm and extending across the ends and side edges of said strips for retaining said strips against longitudinal and lateral displacement upon said arm. 2nd. An arm for the purpose set forth, having a longitudinal

recess in the exposed face thereof and a series of strips bearing the time scales, carried in said recess, said strips being interchangeable with one another, and rigid stops upon the arm and extending across the end edges of said strips for retaining said strips against longitudinal displacement. 3rd. In combination with a blackboard, a drawing instrument of the class described, comprising an arm, a number of detachable strips carried by said arm and extending longitudinally thereof, each strip having a different scale marked thereon, rigid stops upon said arm and extending across the end and side edges of said strips for retaining said strips against longitudinal and lateral displacement, a marker carried by said arm and adjustable longitudinally thereof, and means for pivotally connecting said arm at one end to said blackboard, substantially as described and for the purpose set forth. 4th. In combination with a base, of an arm having a pivot point at one end in line with one side edge thereof, a series of strips carried by the exposed face of said arm, said strips being interchangeable with one another, each strip bearing a scale consisting of a series of equal divisions radiating from said pivot point and extending one beyond the other and off set from one another, and a series of equal divisions concentric of said pivot point and sub-dividing said radial divisions, the divisions and sub-divisions of the scale upon each strip differing from the other strips, a marker carried by said arm and movable longitudinally thereof and means for pivotally connecting said arm, at said pivot point to said base, substantially as described and for the purpose set forth. 5th. In combination with a black board 3, having a frame 4, of an arm having a longitudinal recess in the exposed face thereof, and a series of strips *b*, bearing time scales, carried in said recess, said strips being changeable with one another, a hinge plate 7, pivotally connected to one end of said arm, a thumb screw 5, for connecting said hinge plate to the frame 4, and a slidable block *m*, having a notch *n*, and a diagonal hole *p*, for a chalk marker *O*, substantially as described and for the purpose set forth.

No. 66,845. Machine for Stringing Drawing Dies upon Wires. (*Machine pour enfilet les dés à laminage sur du fil de fer.*)



66845

The Ansonia Brass and Copper Company, assignee of Charles A. Cowles, all of Ansonia, Connecticut, U.S.A., 23rd May 1899; 6 years.

Claim.—1st. In a machine for stringing dies upon wire, the combination with a drawing head capable of rotation in two directions, means for rotating said head in one direction to draw the wire through a die, a device for controlling said means to stop the further rotation of the head and permit the head to rotate freely in a reverse or opposite direction to relax the tension upon the wire, and automatic means for gripping and releasing the end of the wire, substantially as described. 2nd. In a machine for stringing dies upon wire, the combination of a drawing head capable of rotation in two directions, jaws carried by said head for gripping the end of the wire as the head is rotated in one direction, means for rotating said head in one direction to draw the wire through a die, a ratchet clutch in said means adapted when thrown into action to instantly start said

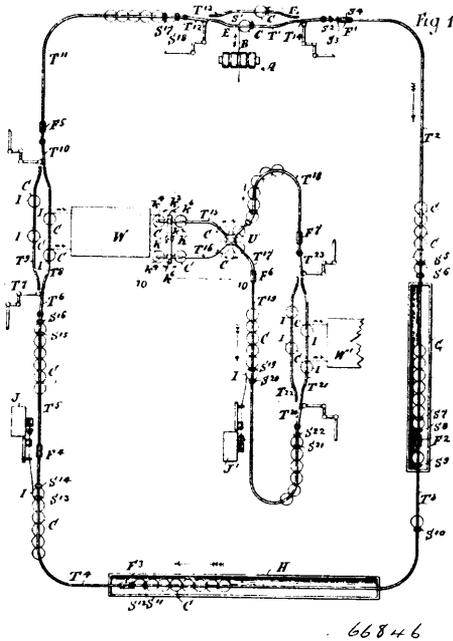
head in the drawing direction and when thrown out of action to instantly stop the rotation of the head to permit it to rotate freely in a reverse or opposite direction, and a lever mounted independently of said head for throwing said clutch into and out of action, substantially as described. 3rd. In a machine for stringing dies upon wire, the combination of a drawing head capable of rotation in two directions, means for rotating said head in one direction to draw the wire through a die, and a device for controlling said means to stop the further rotation of the head and permit the head to rotate freely in a reverse or opposite direction to relax the tension upon the wire, gripping jaws hinged together having cam surfaces, and a projection carried by the head and co-operating with said cam faces so that when the head rotates in the drawing direction the jaws are actuated to grip the wire and when the head rotates in the reverse direction they are permitted to release the wire, substantially as specified. 4th. In a machine for stringing dies upon wire, the combination with a rotating head provided with jaws, of a die holder, means for rotating the head, a ratchet clutch in said means for instantly stopping the rotation of said head, and a friction clutch also in said means for gradually starting the rotation of said head, substantially as specified. 5th. In a machine for stringing drawing dies upon wire, the combination of a rotating head carrying gripping jaws, means for rotating said head comprising a clutch, and a sliding piece for carrying the wire adapted to operate said clutch when drawn together, the head to prevent the further rotation of the head, substantially as described. 6th. In a machine for stringing drawing dies on the wire, the combination of a drawing head provided with gripping jaws, means for rotating said drawing head comprising a clutch, the die to be strung on the wire, and a piece adapted to slide toward the head at intervals and to operate the clutch to prevent further rotation of said head, substantially as described. 7th. The combination of a rotary head made heavier on one diametrical half than the other, a pair of jawl connected with the lighter diametrical half of said head, and means comprising a clutch for rotating said head, substantially as specified. 8th. The combination with a rotary head provided with jaws, means for rotating the said head in one direction and permitting it to move in another direction, of a piece carrying supports for wire threaded with drawing dies adapted to engage the means for rotating the head to stop the rotation of the head, and means independent of the wire for moving said piece towards the rotating head, substantially as described. 9th. The combination with a rotary head provided with jaws, and means for rotating the said head in one direction and permitting it to move in another direction, of a piece carrying supports for the wire threaded with drawn dies, means for moving said piece toward the head, and a clutch located in the said means for rotating the head adapted to be operated to prevent the further rotation of the head, substantially as specified. 10th. The combination with a rotary head provided with jaws, the means for rotating the said head in one direction and permitting it to move in another direction, of a piece carrying supports for wire threaded with drawing dies, said piece being movable toward and from the rotary head, and a stop mechanism for the rotary head operated by said movable piece, substantially as specified. 11th. The combination with a head provided with gripping jaws and capable of rotation in two directions, one to move a wire along and the other to relax the tension upon the wire, a sliding piece carrying a wire strung with drawing dies and adapted in its movement toward the head to prevent the movement of the head for drawing, and a scale for determining the forward movement of the piece, substantially as described. 12th. In a machine for stringing drawing dies upon wire, the combination of a rotary head provided with gripping jaws, means for operating said head, and a slide piece for supporting the wire threaded with dies, said piece being movable toward and away from the head and adapted when moved forward to stop the rotating of said head, substantially as described. 13th. In a machine for stringing drawing dies upon wire, the combination of a drawing head capable of rotation in two directions operating mechanism for said head comprising a clutch, a die holder and a device adapted to be moved toward the drawing head when the wire is being drawn for operating the clutch to stop the rotation of the head and allow it to rotate in a reverse direction, substantially as shown and described. 14th. In a machine for stringing drawing dies on wire, the combination of a drawing head capable of rotation in two directions, operating mechanism for said head comprising a clutch, a die holder, a device adapted to be moved toward the drawing head when the wire is being drawn through the die, and means in connection with said device for causing it to act on the clutch at a predetermined period to stop the rotation of the head in the drawing direction, substantially as described. 15th. In a machine for threading wire through dies, the combination of a die holder, means for drawing the wire through a die in said holder, means for pointing or swaging the wire preparatory to threading the wire through the die, said pointing or swaging means being driven by the wire drawing means, substantially as specified.

No. 66,846. Wire Manufacturing Machinery. (*Machine pour la fabrication de fil de fer.*)

The Ansonia Brass and Copper Company, assignee of Charles A. Cowles, all of Ansonia, Connecticut, U.S.A., 31st March 1900; 6 years. (Filed 22nd May, 1899.)

Claim.—1st. An apparatus for conveying material to different places where it is to be treated, consisting of a track, a support

arranged upon said track and extending below the same, means for operating upon said material, and a device arranged adjacent to said



track for moving the support vertically to the means which are to operate upon the material, substantially as specified. 2nd. In an apparatus for conveying material to different places where it is to be treated, consisting of a track, a support arranged on said track and extending below the same, and carrying the material to be treated, said track being inclined toward the place whither the support is desired to be moved, means for operating upon the material carried by the support, and a device arranged adjacent to said track for moving the support vertically to the means for operating upon said material, and also in order that it may be started onward in its course, substantially as specified. 3rd. An apparatus for moving material to places where it is to be treated, consisting of tracks, a support arranged to travel upon said tracks, upon which the material may be arranged, means for operating on said material, said tracks being inclined for lowering the support to the means, and an elevator located at the inclined end of said tracks for raising said support from the machine to tracks, or directly from some tracks to other tracks, substantially as specified. 4th. An apparatus for conveying material to different points to be treated consisting of tracks, a support for travelling on said tracks and carrying the material and a device adjacent to said tracks for raising said support from one track to another, said device comprising a section of track on which said supports might travel, substantially as described. 5th. In an apparatus for moving wire to places where it is to be treated, the combination of reels, trolleys with which said reels have a swivel connection, tracks along which said trolleys may be caused to travel, elevators for lowering and raising said trolleys and reels intermediate of different tracks, substantially as specified. 6th. In an apparatus for moving wire to places where it is to be treated, the combination of reels, trolleys with which said reels have a swivel connection, a track along which said trolleys may be caused to travel, and rotary supports with which said reels at their lower ends may be engaged, substantially as specified. 7th. In an apparatus for moving wire to places where it is to be treated, the combination of reels, trolleys with which said reels have a swivel connection, a track along which said trolleys may be caused to travel, rotate supports with which said reels at their lower ends may be engaged, and means combined with said rotary supports, so that at the will of an attendant the said supports and the reels may be rotated while the trolleys are still upon the tracks, substantially as specified. 8th. In an apparatus for moving wire to places where it is to be treated, the combination of reels, trolleys with which said reels have a swivel connection, a track along which said trolleys may be caused to travel, and rotary supports with which said reels at their lower ends may be engaged, said rotary supports having a number of pins for taking the strain of the wire first wound upon the reel, substantially as specified. 9th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a track along which said supports may travel, and a tank into which the wire will be carried when the said supports travel along the said track, substantially as specified. 10th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a main track along which said supports may travel, a switch at one end of said track, and duplicate or storage tracks, into line with

either of said switch may be set for the purpose of establishing communication between it and the main track, substantially as specified. 11th. In an apparatus for moving wire to places where it is to be treated, the combination of reels for the wire, trolleys with which said reels have a swivel connection, a track along which said trolleys may be caused to travel, and a wire drawing machine arranged adjacent to a part of said track so that it may take wire from the reels while the trolleys supporting such reels are upon said track, substantially as specified. 12th. In an apparatus for moving wire to places where it is to be treated, the combination of reels for the wire, trolleys with which said reels have a swivel connection, a track along which said trolleys may be caused to travel, a stop on said track for arresting one of the trolleys and its reel, and a machine arranged adjacent to said stop and track for taking the wire from a reel and threading it through dies, substantially as specified. 13th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a track along which said supports may be caused to travel, stops, and means whereby the stops are connected in such a manner that when one is raised another will be depressed, so that one of a number of trolleys may be allowed to pass at a time along the track, substantially as specified. 14th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a track along which said supports may be caused to travel, stops S^2 , S^3 , a lever s^2 , a spring s^{10} , and an elevator F^1 , substantially as specified. 15th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a track along which said supports may be caused to travel, stops s^2 , s^3 , and a lever s^2 having a yielding nose piece s^4 , s^5 , substantially as specified. 16th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, tracks along which said supports may be caused to travel, and a turntable, as U , to enable said supports to be transferred from one track to another, substantially as specified. 17th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, tracks along which said supports may be caused to travel, and a combined elevator and turntable, substantially as specified. 18th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, tracks along which said supports may be caused to travel, and two cross bars for sustaining the said supports, substantially as specified. 19th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a track along which said supports may be caused to travel, an elevator having a carriage or part normally in alignment with said track, and comprising hoisting mechanism consisting of a rotary shaft, a loosely mounted windlass and a clutch, and means whereby the windlass will be clutched to the shaft whenever the said carriage or part of the elevator receives one of the said supports for material to be treated, substantially as specified. 20th. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a track along which said supports may be caused to travel, an elevator having a carriage or part normally in alignment with said track, and comprising hoisting mechanism consisting of a rotary shaft, a loosely mounted windlass and a clutch, and means comprising a rod and tappets whereby the windlass will be clutched to the shaft whenever the said carriage or part of the elevator receives one of the said supports for material to be treated, substantially as specified. 21st. In an apparatus for moving wire to places where it is to be treated, the combination of supports for the wire, a track along which said supports may travel, an elevator having a carriage or part normally sustained in a yielding manner in alignment with said track, and comprising hoisting mechanism consisting of a rotary shaft, a loosely mounted windlass and a clutch, and means whereby the windlass will be clutched to the shaft whenever the said carriage or part of the elevator receives one of the said supports for material to be treated, substantially as specified.

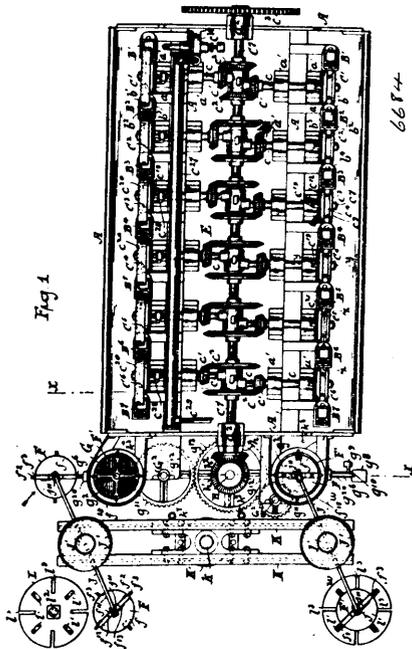
No. 66,847. Wire Drawing Machine.

(Machine pour le laminage du fil de fer.)

The Ansonia Brass and Copper company, assignee of Charles A. Cowles, all of Ansonia, Connecticut, U.S.A., 31st March, 1900; 6 years. (Filed 23rd May, 1899.)

Claim.—1st. In a wire drawing machine, the combination of a die, rotatable drawing block, a drawing roll, means for rotating the said drawing roll, a starting and stopping mechanism for starting the drawing block with a graduated movement, and means for throwing said starting and stopping mechanism into and out of action without stopping the drawing roll, substantially as described. 2nd. In a wire drawing machine, the combination of a die, a drawing block, a driving shaft, a continuously rotating drawing roll operated from said driving shaft, a starting and stopping mechanism between the driving shaft and drawing block for starting the block with a graduated movement, and means for throwing into and out of action said starting and stopping mechanism, without stopping the driving shaft, substantially as described. 3rd. In a wire drawing machine, the combination of a die, a rotatable drawing block, a drawing roll, means for rotating the drawing roll, a friction clutch for starting the block with a graduated movement and means for throwing said clutch into and out of action without stopping the drawing roll,

substantially as described. 4th. In a wire drawing machine, the combination of a series of dies, continuously rotating drawing rolls,

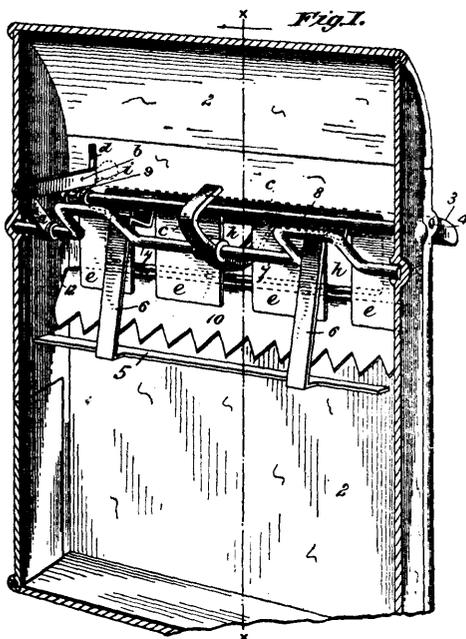


intermediate said dies, a drawing block, a driving shaft for operating said drawing rolls and drawing block, a starting and stopping mechanism between said block and driving shaft for starting the drawing block with a graduated movement, and means for throwing said starting and stopping mechanism into and out of action without stopping the driving shaft, substantially as described. 5th. In a wire drawing machine, the combination of a series of dies, a rotatable drawing block, drawing rolls, means for positively rotating said drawing rolls, a starting and stopping mechanism for starting the drawing block with a graduated movement, and means for throwing into and out of action said starting and stopping mechanism without stopping the drawing rolls, substantially as described. 6th. In a wire drawing machine, the combination of a series of dies, a rotatable drawing block, drawing rolls, means for positively and uniformly rotating said rolls, a starting and stopping mechanism for starting the drawing block with a graduated movement, and means for throwing into and out of action said starting and stopping mechanism without stopping the drawing rolls, substantially as described. 7th. In a wire drawing machine, the combination of a series of dies, a rotatable drawing block, drawing rolls, means for positively, uniformly and continuously rotating said rolls, a starting and stopping mechanism for starting the drawing block with a graduated movement, and means for throwing into and out of action said starting and stopping mechanism without stopping the rolls, substantially as described. 8th. In a wire drawing machine, the combination of a die, a drawing block, means for operating said block, a starting and stopping mechanism comprised in said operating means for starting the block with a graduated movement, means for throwing said starting and stopping mechanism into and out of action, and a brake for said block adapted to be operated when the said starting and stopping mechanism is thrown out of action, substantially as described. 9th. The method of stringing a wire drawing machine, which has in combination a series of die holders, continuously rotating drawing rolls intermediate the die holders, and a drawing block in advance of the forward die holder, said method consisting in stringing a wire with spaced dies that fit in said holders, coiling the wire about each roll in a loop longer than is sufficient to tightly embrace the roll and placing the intermediate dies in the holders, so that not until the block is started and the drawing operation begins through the forward die will the loops be successively tightened to enable the rolls to operate upon them to draw the wire through the successive dies, a gradual action of the rolls upon the wire being thus effected and wearing and heating of the wire being thus prevented. 10th. The method of stringing a wire drawing machine, having in combination a series of die holders, dies fitting in said holders and capable of movement forward and backward in the line of movement of a wire, continuously rotating drawing rolls intermediate the die holders and a block in advance of the forward die holder, said method consisting in stringing a wire with the dies and coiling the wire about each roll in a loop longer than is sufficient to tightly embrace the roll, so that as the block is started the drawing operation will begin through the forward die, and the loops will be successively tightened to enable the rolls to operate upon the wire to draw it through the successive die, a gradual action of the rolls

upon the wire being effected, and wearing and heating of the wire being thus prevented. 11th. The method of stringing a wire drawing machine, which has in combination a series of die holders, continuously rotating drawing rolls intermediate the die holders, a drawing block in advance of the forward die holder, and means for starting the block with a graduated movement, said method consisting in coiling a wire, carrying dies that fit in said holders, about each roll in a loop longer than is sufficient to tightly embrace the roll, so that as the block is started and the drawing operation begins, through the forward die, the loops will be successively tightened to enable the rolls to operate upon the wire, to draw it through the successive dies, a gradual action of the rollers upon the wire being thus effected and wearing and heating of the wire being thus prevented, substantially as described. 12th. In a wire drawing machine, the combination of a series of dies supported so as to be capable of movement forward and backward in the line of movement of the wire, continuously rotating drawing rolls intermediate the dies, a block in advance of the forward die, means for starting the block with a graduated movement, and the wire, on which the dies are strung coiled about each roll, said dies being adapted to have a rearward movement therein in the direction of length of the wire when the drawing block is stopped from operating, so that the coil of wire about each drawing roll will be loosened about the roll, substantially as described. 13th. In a wire drawing machine, the combination with sliding die holders, dies in such holders, a roller intermediate the die holders, and a block in advance of the forward die holder, whereby upon the stoppage of the block and the reverse movement thereof, the adjacent die may move to enlarge the loop around the roller, substantially as specified. 14th. The combination with a device for moving wire through a die, of a longitudinally sliding die holder with which the said die is loosely engaged in the direction of the length of the wire, so that when the drawing of the wire is stopped the die may move backward in the die holder, substantially as specified. 15th. The combination with a device for moving wire through a die, of a die holder, having an opening below the die and a die supported above said opening so that after the wire has been drawn through the die, the die may drop through the opening, substantially as specified. 16th. A drawing roller for a wire drawing machine, having a hollow flange formed with openings, said roller being provided with passages in communication with said hollow flange, through which the liquid circulates, substantially as described. 17th. A drawing roller for a wire drawing machine, having a flange provided with passages for the circulation of liquid, substantially as specified. 18th. In a wire drawing machine, the combination of a drawing roller having its body provided with passages for liquid, a stationary head having passages for liquid communicating with the body of the roller, and means for supplying liquid to the stationary head, substantially as specified. 19th. In a wire drawing machine, the combination of a drawing roller having its body provided with passages, a stationary head arranged in such relation with the body of the roller that a liquid passage will be left between them, and means for supplying liquid to the stationary head, substantially as specified. 20th. In a wire drawing machine, the combination of a drawing roller having its body provided with liquid passages, a hollow flange for receiving liquid having passages which lead to the inside and outside of the body of the roller, and a stationary head provided with passages leading to the inside and to the outside of the body of the roller, substantially as specified. 21st. In a wire drawing machine, the combination with a drawing roller around which liquid is circulated, of a sliding shield for limiting the throw of liquid from the roller, and means in connection with said shield for holding it in an elevated position above the roller, substantially as described. 22nd. In a wire drawing machine, the combination with a drawing roller around which liquid is circulated, of a shield for limiting the throw of liquid from the roller, and means whereby the said shield may be supported in different relations to the roller, substantially as specified. 23rd. In a wire drawing machine, the combination with a drawing roller upon the outside of which liquid is circulated and a die holder adjacent to said roller, of a shield against which liquid will be thrown from the outside of the roller, and an extension on said shield by which the liquid will be deflected into the die holder, substantially as described. 24th. In a wire drawing machine, the combination with a block, of a reel, the arms of which are adapted to be fitted to the same and to be removed therefrom without collapsing, and means in connection with said arms for collapsing them, substantially as described. 25th. In a reel, the combination of head, of a central stem adapted to slide in said head, arms pivoted at one end of the head, and links pivoted at one end to the arms intermediate, their length and at their other end to the central stem, substantially as described. 26th. In a reel, the combination of a head, arms pivotally connected to the head, links pivotally connected to the arms, a stem pivotally connected to the links, having a sliding bearing in the centre of the head, a swivel eye connected to the stem, and means for engaging the swivel eye so as to prevent the movement of the stem relatively to the head, substantially as specified. 27th. In a reel, the combination of a head, arms pivotally connected to the head, links pivotally connected to the arms, a tubular stem pivotally connected to the links, adapted to be fitted upon a support, and having a sliding bearing in the centre of the head, and means for locking the said stem and head together, substantially as specified. 28th. In a reel, the combination of a head, arms pivotally connected with the head, links pivotally connected to the arms, a stem pivotally

connected to the links and having a sliding connection with the head, a swivel eye connected with the stem, lugs upon the swivel eye and upon the head and a catch for holding the lugs of the swivel eye and of the head in engagement, substantially as specified. 29th. The combination of a drawing block carrying a reel which is rotated therewith, an elevator carrying a turn table, arms extending from said turn table, one of said arms adapted to be connected with the reel rotated by the block, while the other of said arms is adapted to be connected with the second reel, substantially as described. 30th. In a wire drawing machine, the combination of an elevator, a support for the two reels pivotally connected with a part of the elevator and reels supported so as to be able to rotate relatively to said support, substantially as specified. 31st. In a wire drawing machine, the combination of an elevator, a support for two reels pivotally connected with a part of the elevator, and reels supported so as to be able to swing relatively to said support, substantially as specified. 32nd. In a wire drawing machine, the combination of an elevator, a support for two reels pivotally connected with a part of the elevator, and reels supported so as to be able to travel along said support toward and from its pivotal connection. 33rd. In a wire drawing machine, the combination of a die, a drawing block, a driving shaft, means for rotating said shaft at high speed, a device for starting the block with a gradual movement to obtain the full speed of the driving shaft and means including a handle independent of the driving shaft, for throwing said device into and out of action without stopping the driving shaft, substantially as described.

No. 66,848. Street Letter Box. (Boite à lettre pour rues.)

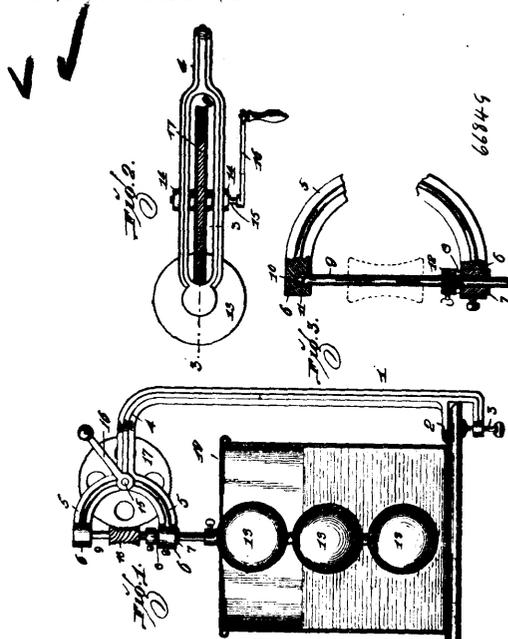


Alvin Matthews Cushing and Lillie Elizabeth Brown, both of Springfield, Massachusetts, U.S.A., 31st March, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. In a letter box, a lid swinging on the outer side thereof to open and close the aperture through which mail matter is introduced into the box, a metallic letter guard having a serrated down-hanging border fixed on the inner wall of said box below said aperture, a metallic guard plate supported on said lid and having a position under said serrated border when said lid is open and swinging away therefrom when said lid is closed, thus permitting mail matter to drop into the bottom of the box below said guard and plate, substantially as described. 2nd. In a letter box, a lid swinging on the outer side thereof to open and close the aperture through which mail matter is introduced, mechanism for opening said lid and for temporarily engaging and holding the same in that position for putting matter into the box, and means actuated by the impact of matter passed through said aperture for disengaging said lid retaining mechanism and permitting the lid to close, substantially as described. 3rd. In a letter box, a lid swinging on the outer side thereof to open and close the aperture through which mail matter is introduced into the box, a metallic plate having a serrated lower border fixed in an inclined position on the inner wall of said box below said aperture, a metallic guard plate connected by suitable arms with said lid and having vibratory motions under said serrated lower border concurrent with the opening and closing movements of said lid, substantially as described. 4th. In a letter box, a lid swinging on the outer side thereof to open and close the

aperture through which mail matter is introduced, mechanism for opening said lid and for temporarily holding the same in that position, comprising a shaft extending within the box opposite said lid having a lever fixed thereon for engaging the same and a finger lever projecting through the wall of the box and temporarily engaging the same, pivotally connected to an arm on said shaft whereby by the endwise movement of said finger lever said shaft is rocked and the lid is opened or allowed to close, substantially as described.

No. 66,849. Churn. (Barattc.)



Frean A. Mabee and Griff Grover, Bloomfield, Missouri, U.S.A. 31st March, 1900; 6 years. (Filed 16th March, 1900.)

Claim.—1st. In a churn, a standard 1, the upper end of which is provided with a lateral extension, a pair of vertically aligned bearings 6 formed in said extension, the sleeve 7 removably located in the lower one of said bearings, in the top of which sleeve is formed a continuous groove, a shaft rotatably arranged in the vertical bearings, a collar removably located upon said shaft immediately above the sleeve, ball bearings interposed between said collar and sleeve, a worm removably located upon the shaft, a worm wheel rotatably arranged in the lateral extension of the frame and in mesh with the worm, and a plurality of spherical bodies arranged one above the other upon the shaft, substantially as specified. 2nd. In a churn, a vertically arranged shaft 9, means for rotating said shaft, and a plurality of spherical bodies 13 arranged one above the other and being removably carried by the lower end of said shaft, substantially as specified.

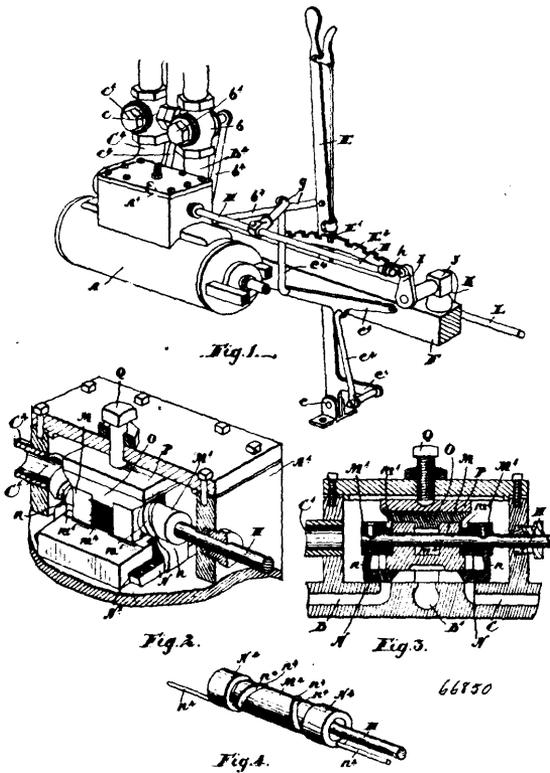
No. 66,850. Reversing Valve for Steam Engines.

(*Soupage de renversement pour machines à vapeur.*)

George Gilmore and John Hawthorne, both of Simcoe, Ontario Canada, 31st March, 1900; 6 years. (Filed 16th March, 1900.)

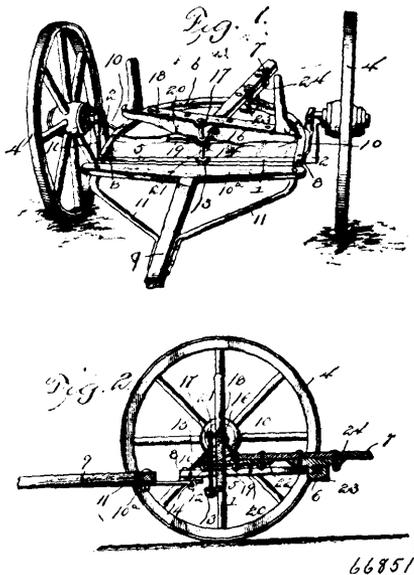
Claim.—1st. In a steam engine, the combination with the cylinder inlet ports and steam chest, of a valve having the closing ends thereof longitudinally adjustable to and from each other and means for accomplishing this end as and for the purpose specified. 2nd. In a steam chest, the combination with the cylinder inlet ports and steam chest of a valve having the closing ends thereof longitudinally adjustable to and from each other, the valve rod and means for connecting the valve rod to the adjustable end of the valves and means for turning the valve rod, as and for the purpose specified. 3rd. In a steam engine, the combination with the cylinder inlet ports and steam chest, of a valve having the closing ends thereof longitudinally adjustable to and from each other, the valve rod, the block on the valve rod holding the valves in position, the cylindrical sleeves secured to the valve rod and provided with serpentine grooves, and tongues extending from the adjustable portion of the valves into the grooves for turning the rod, as and for the purpose specified. 4th. In a steam engine, the combination with the cylinder inlet ports and steam chest, of a valve having the closing ends thereof longitudinally adjustable to and from each other, the valve rod, the block on the valve rod holding the valves in position, the cylindrical sleeves secured to the valve rod and provided with serpentine grooves and tongues extending from the adjustable portion of the valves into the grooves, the operating lever, the lateral projection thereof, the lever pivoted on the frame at one end, the rod connecting the lever

to the lateral projection of the operating lever, the arm on the valve rod and the rod connecting such arm to the lever pivoted on the



frame as and for the purpose specified. 5th The combination with the cylinder provided with inlet ports, the steam chest and the adjustable portion of the valves, of the block M provided with serpentine grooves *m*, the block O fitting in a recess in the block M, the block F fitting in the block O and the set screw extending through the valve chest into the recess in the block P, as and for the purpose specified.

No. 66,851. Running Gear. (Train.)

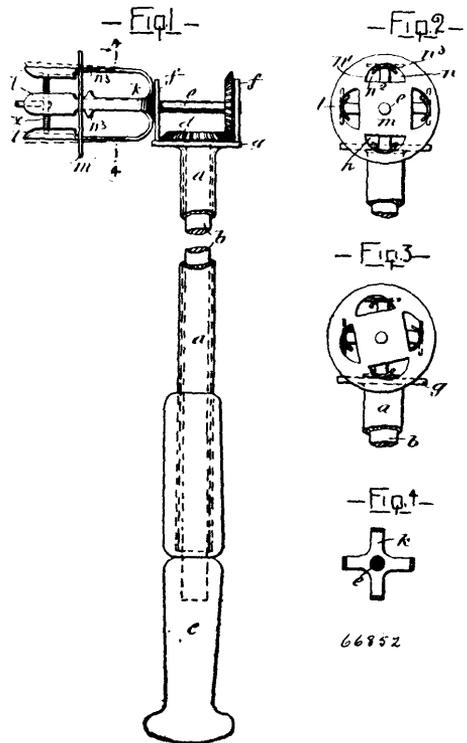


Charles A. McNaughton, Sprague's Mills, Maine, U.S.A., 31st March, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. A device of the class described, comprising an axle provided at its bottom with a forwardly projecting ear and having an axle bed, a bolster, bearing plates interposed between the bolster and the axle bed, and provided with ears arranged in alignment with the ear of the axle, an upper plate provided with an ear, a king

bolt passing through the said ears, a substantially semi-circular bar extending rearward from the axle and having its terminals projecting forwardly therefrom, a pole coupled to the ends of the curved bar, and a reach provided with a depending eye receiving the curved bar, substantially as described. 2nd. A device of the class described, comprising a drop axle having an axle bed, a substantially semi-circular bar extending rearward from the axle and having its terminals projecting forwardly therefrom, a pole coupled to the end of the curved bar, side braces extending from the arms of the axle to the bar, a bolster mounted upon the axle, and a reach provided with a depending eye receiving the curved bar, substantially as described. 3rd. A device of the class described, comprising a drop axle having upwardly extending I-shaped terminating in horizontal spindles, an axle bed *b*, secured to the axle and arranged between the vertical portions of the arms, the substantially semi-circular bar extending rearwardly from the axle and having its sides interposed between the ends of the axle bed and the said arms, the side braces extending from the tops of the arms to the said bar, a reach, and a pole, substantially as described.

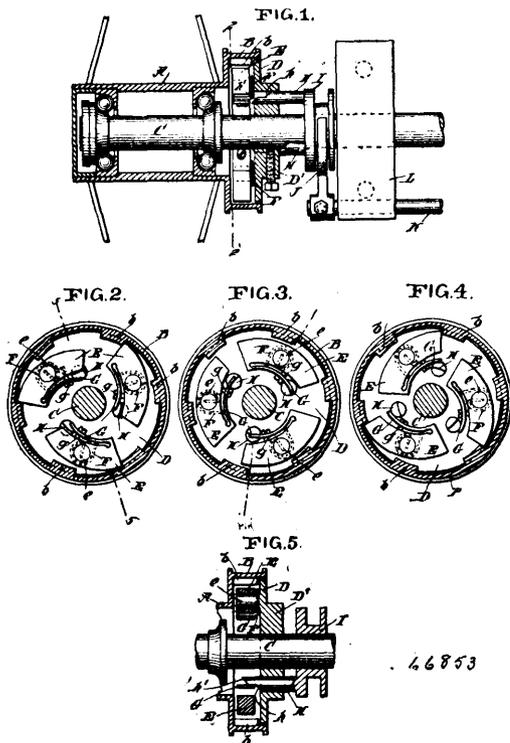
No. 66,852. Trainmen's Lamp Handling Appliance.
(Appareil à manier les lampes d'employés de chemin de fer.)



Reuben Henry Welden, Montreal, Quebec, Canada, 31st March, 1900; 6 years. (Filed 2nd May, 1899.)

Claim.—1st. An appliance for turning the device for controlling the supply of an illuminant, comprising a rotatory gripping device, means for causing said rotatory device to grip said controlling device, and means for rotating said gripping device. 2nd. An appliance for turning the device for controlling the supply of an illuminant comprising a rod or handle proper, fingers carried at one end of the rod or handle, and adapted to grip said controlling device and means with operating mechanism for causing said fingers to grip said device and rotate same, for the purpose set forth. 3rd. An appliance for turning a rotatory device for controlling the supply of an illuminant, comprising a rod or handle, flexible fingers carried at one end of said rod or handle and adapted to grip said controlling device, a rotatable cam disc engaging each of said fingers to cause them to grip said device, and means for rotating said cam disc, substantially as described and for the purpose set forth. 4th. An appliance for turning a rotatory device for controlling the supply of an illuminant comprising a main tubular rod or handle, an operating shaft extending throughout the tubular rod, a countershaft supported by the upper end of the tubular rod operating gear connected between said shafts, a cam disc carried rigidly by said countershaft, and a series of flexible fingers extending from a body portion, mounted loosely on the countershaft, and extending through cam slots in the cam disc, whereby upon the rotation of the latter said fingers will be pressed centrolineally to grip said controlling device and rotate same, as set forth.

No. 66,853. Reversible Clutch Mechanism.
(*Mécanisme d'embrayage.*)

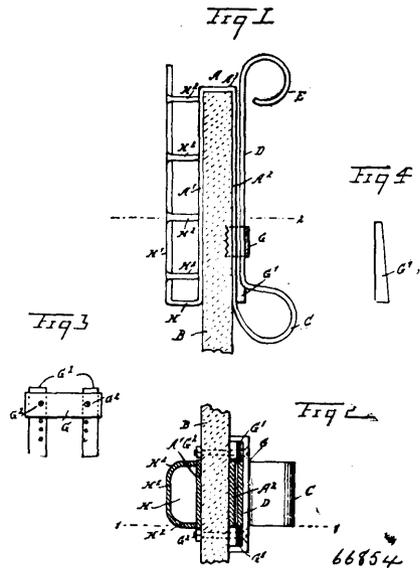


Franz Schneider, Lawrence, Essex County, Massachusetts, U.S.A.,
31st March, 1900; 6 years. (Filed 19th January, 1900.)

Claim.—1st. The combination with two relatively movable parts, of a pawl hung intermediate its ends on one of said parts, and movable to engage either end with the other of said parts, to transmit movement from one to the other, a spring serving normally to hold the pawl in one position, and means for throwing the pawl out of such position against the tension of the spring. 2nd. The combination of two relatively movable parts, a pawl hung at a point intermediate its ends, the pawl being mounted on one of said parts and capable of moving to engage either end with the other of said parts, a spring engaging the pawl to throw it to a certain position, a spring branch carried on the pawl, and a member movable to engage said spring branch of the pawl to throw the pawl against the tension of the first named spring. 3rd. A ratchet or clutch device, comprising two relatively rotatable members, one having projections or teeth thereon and the other having pawls pivoted thereon by their centres and adapted to engage either end with the teeth on the other member, springs tending to hold one end of said pawls engaged with said tooth, and independent means for positively engaging the pawl to overcome the action of said spring and to shift the opposite end of said pawl into engagement with said teeth, substantially as described. 4th. A ratchet device, comprising two relatively rotatable members, one having projections or teeth thereon and the other having pawls pivoted thereon by their centres and adapted to engage either end with the teeth on the other member, springs tending to hold one end of said pawls engaged with said teeth, and bars mounted to slide lengthwise of the axis of said clutch members and having inclines thereon adapted to engage said pawls to reverse their position and to engage their opposite ends with the teeth, substantially as described. 5th. A ratchet device, comprising a casing and a rotatable disc within the same, one being mounted on a driving member and the other upon a driven member, the casing having projections or teeth and the disc having pawls centrally pivoted thereon, and adapted to engage either end with the teeth on the casing, springs normally holding one end of said pawls in engagement with the teeth, independent means for shifting said pawls so as to clear both ends from the teeth or to engage the opposite ends with the teeth, and a spring of superior strength to the other spring interposed between said shifting means and the pawl, substantially as described. 6th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the casing having projections or teeth and the disc having segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth on the casing, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, and shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking position, substantially as described. 7th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the disc and casing having the one, projections or teeth, and the other segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, adjusting screws adapted to regulate the position of the bar springs relatively to the pawls, and shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking position, substantially as described. 8th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the disc and casing having the one, projections or teeth, and the other segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking positions, a grooved collar slidably mounted axially of the clutch members and supporting the pawl shifting bars, a yoke entering the grooves in said collar, and means for shifting said yoke and collar, substantially as described.

shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking positions, substantially as described. 7th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon the driven member, the casing having projections or teeth and the disc having segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth on the casing, and springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, adjusting screws adapted to regulate the position of the bar springs relatively to the pawls, and shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking position, substantially as described. 8th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the disc and casing having the one, projections or teeth, and the other segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking positions, a grooved collar slidably mounted axially of the clutch members and supporting the pawl shifting bars, a yoke entering the grooves in said collar, and means for shifting said yoke and collar, substantially as described.

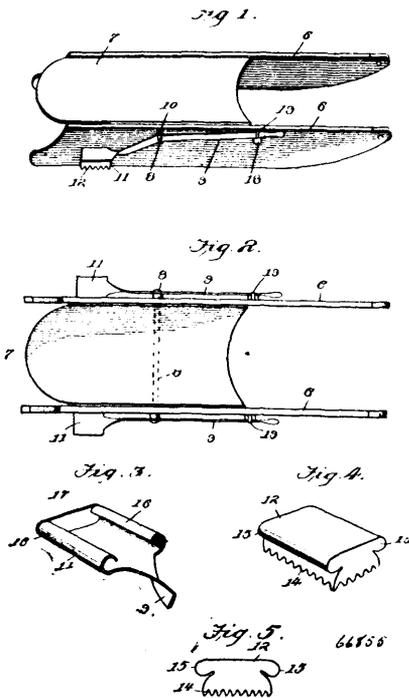
No. 66,854. Whip Socket and Rein Holder.
(*Double de fouet et porté-réens.*)



George W. Hyde, St. Paul, Nebraska, U.S.A., 31st March, 1900;
6 years. (Filed 26th January, 1900.)

Claim.—1st. A combination whip socket and rein holder, comprising a frame, a rein holder, comprising a frame, a rein holder having jaws, one of which is formed by one side of the saddle frame, and a whip socket having its inner side formed by the other side of the saddle frame, substantially as shown and described. 2nd. A combined whip socket and rein holder, comprising a saddle frame, a rein holder having jaws, one of which is formed by one side of the saddle frame, and a clamp and guideways for the jaws and adapted to be secured to the support of the device, substantially as shown and described. 3rd. A combined whip socket and rein holder, comprising a saddle frame, a rein holder having jaws, one of which is formed by one side of the saddle frame, and a clamp and wedge shaped guideways for the jaws and adapted to be secured to the support of the device, the said clamp being made U-shaped to extend over the front face of the outer jaw, and the guideways being held adjustably on the clamp to engage the side edges of the jaws, substantially as shown and described. 4th. A combined whip socket and rein holder, comprising a frame, a rein holder having jaws, one of which is formed by one side of the saddle frame, a whip socket having its inner side formed by the other side of the saddle frame, one side of the whip socket being provided with spaced integral bars bent over to meet the inner side of the socket, substantially as shown and described.

No. 66,855. Steering Apparatus for Sleds.
(Appareil à gouverneur pour traîneaux.)



Joshua Holdsworth, Woonsocket, Rhode Island, U.S.A., 31st March, 1900; 6 years. (Filed 25th January, 1900.)

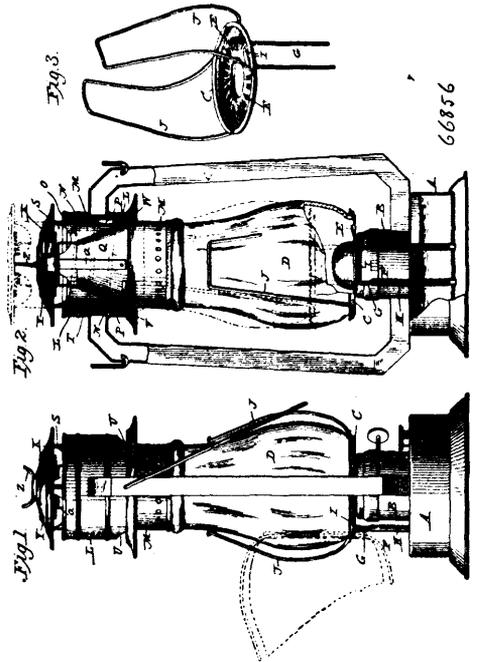
Claim.—1st. The herein described rubber consisting of a block of suitable material, provided with teeth on its under surface and hollowed out on its sides forming attaching ribs, substantially as described. 2nd. The herein described rubber consisting of a block of suitable material, provided with teeth on its under surface and hollowed out on its sides forming attaching ribs in combination with a holder or box provided with downwardly turned flange to prevent rearward displacement, substantially as described. 3rd. A lever for steering apparatus for sleds, provided with a horizontal socket to engage over a shaft and a rubber holding box having downwardly turned under sides and a downwardly turned rear end flange, substantially as described. 4th. The combination with a sled of a shaft extending horizontally through the runners with its ends projecting beyond them, of levers provided with rubbers, and journalled on the ends of the shaft, substantially as described. 5th. The combination with a sled, of a shaft extending horizontally through the runners with its ends projecting beyond them, of levers provided with sockets journalled on the shaft ends, boxes carried at the rear ends of the levers, and rubbers secured in said boxes, substantially as described. 6th. The combination with a sled and a shaft secured horizontally in the runners and having projecting ends, of levers carrying rubbers journalled on the projecting ends, stops to limit the downward movement of the forward ends of the levers, and springs to normally hold the forward ends in contact with the stops, substantially as described.

No. 66,856. Lantern. (Lanterne.)

James H. Hill, Belleville, Ontario, Canada, 31st March, 1900; 6 years. (Filed 15th April, 1899.)

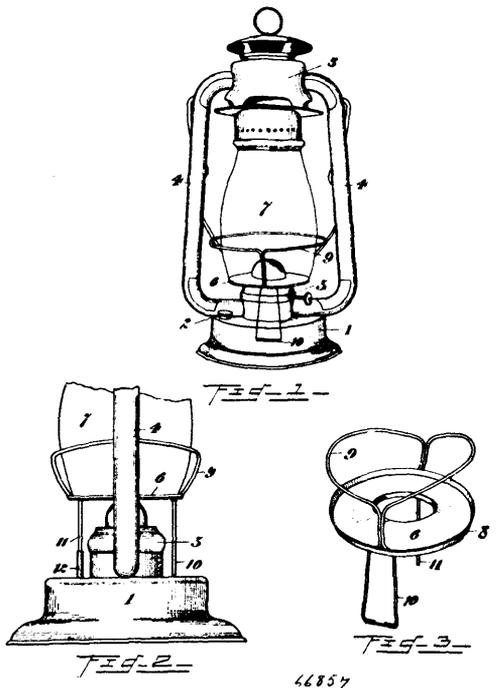
Claim.—1st. In a tubular lantern, a globe plate formed with laterally extending fluted openings for the passage of air from beneath to above the globe plate, substantially as described. 2nd. In a tubular lantern, the combination with the globe plate, of the vertically movable support for the globe plate, said support composed of telescopic sections, the movable members of the sections being connected together and having the globe plate secured thereto, substantially as described. 3rd. In a tubular lantern, the combination with the globe plate, of the vertically movable support for the globe plate, said support consisting of tubes arranged opposite to each other and attached to the oil cup, and two rods or arms moving in said tubes and connected together and to the globe plate, substantially as described. 4th. In a tubular lantern, the combination with the globe plate, of a vertically movable support for the globe plate, said support consisting of telescopic members, and a hinge connecting the globe plate to the movable support, whereby the globe plate and globe may be raised and also tilted, substantially as described. 5th. In a tubular lantern, the combination with the globe plate, of a vertically movable support for the globe plate

composed of telescoping sections, and a hinge for connecting the globe plate and movable support, said hinge consisting of a strip



passed around a portion of one member of the telescoping sections and through an opening in the globe plate, and having its ends bent down upon the globe plate to secure the parts together, substantially as described. 6th. In a tubular lantern, the combination with the globe plate, the globe, and air tubes passing down on opposite sides of the globe, of the shields or guards secured to the globe plate and extended lengthwise of the globe and located on opposite sides of the globe between the air tubes, substantially as described.

No. 66,857. Lantern. (Lanterne.)

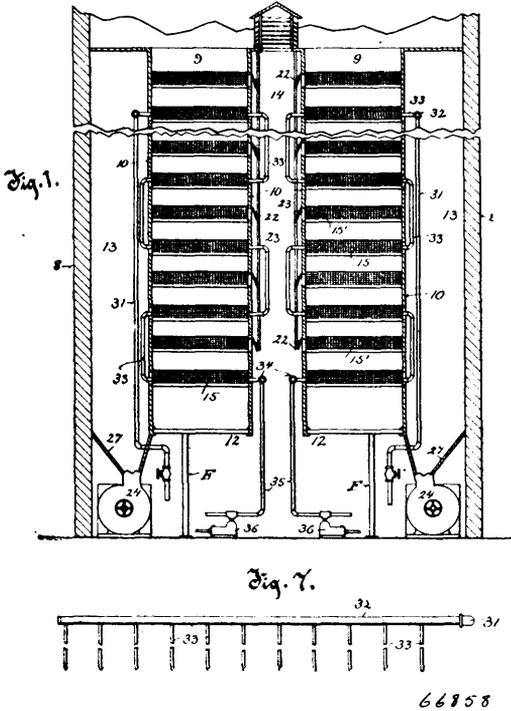


Thomas Rose, Georgetown, Ontario, Canada, 31st March, 1900; 6 years. (Filed 16th December, 1899.)

Claim.—1st. In a tubular lantern, means for retaining the lamp glass and air distributor in an elevated position as herein shown

and described, the same consisting of a support pendant from the air distributor and adapted to oscillate therein, substantially as shown and described. 2nd. In a tubular lantern, the combination of means for retaining the lamp glass and air distributor in an elevated position, the same consisting of a support hinged to the air distributor, with a vertical guide and tubular standard, substantially as shown and described.

No. 66,858. Drying Kiln. (Four à sécher.)



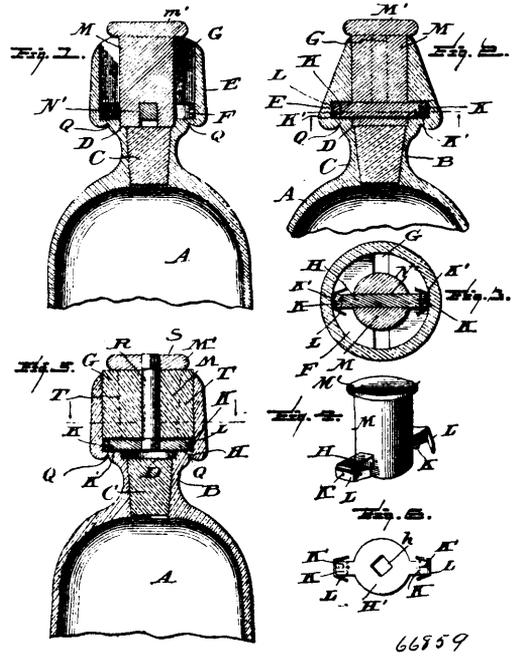
Fulton Robert Morris, Milwaukee, Wisconsin, U.S.A., 31st March, 1900; 6 years. (Filed 8th August, 1899.)

Claim.—1st. In a kiln for drying grain, the combination with a bin having opposite vertical walls with an air supplying chamber exteriorly at one side and an air exhaust chamber exteriorly at the other side, of a plurality of series screen covered air supplying conduits extending from the air supplying chamber through the bin substantially horizontally to and closed at the distant wall adjacent to the exhaust chamber, a plurality of series of air exhaust conduits extending from the air exhaust chamber through the bin substantially horizontally to and closed at the opposite wall adjacent to the air supplying chamber, the said air exhaust conduits of each series being disposed alternately above the series of air supplying conduits a main heat supplying pipe in the air supplying chamber, pipes leading from the main pipe through an upper series of air supplying conduits thence down to and through a series of air supplying conduits below and intermediate series of air exhaust conduits, thence down to and through another series of air supplying conduits below an intermediate series of air exhaust conduits and ultimately into a general discharge pipe. 2nd. In a kiln for drying grain, the combination, of a bin of considerable height having opposite vertical walls with an air supplying chamber at one side and an air exhaust chamber at the other side, a plurality of series of screen covered conduits extending from the air supplying chamber through the bin to and closed at the opposite wall, a plurality of series of air exhaust conduits extending from the air exhaust chamber through the bin to and closed at the opposite wall, the air exhaust conduits being arranged alternately above the several series of air supplying conduits, and doors at the discharging ends of the air exhaust conduits whereby the escape of the air into the exhaust chamber that had been taken into the bin through the air supplying conduits may be limited or prevented and held to escape directly upwardly through the grain in the bin partially or wholly. 3rd. An air conduit transversely of a grain bin, comprising a rigid frame secured at its ends to the walls of the bin and having longitudinally disposed sills and a ridge bar, a plurality of transverse bent ribs at distances apart secured to the sills and converging and secured to the ridge bar, and a screen like cover on the sides and top of the frame, the conduit being wholly unclosed at the bottom and the ribs and screen like cover being so arranged as to form a slanted roof to the conduit. 4th. In a drying kiln, the combination with a bin having imperforate walls of a screen or perforated lining at a little distance from and secured to the walls of the bin providing an air space between

the imperforate walls of the bin and said lining into which air can escape through the lining from within the bin. 5th. In a drying kiln, the combination with imperforate vertical and obliquely disposed walls of a bin, of a screen or perforated metal lining on the inside of said imperforate bin walls secured thereto at a little distance therefrom, and rails serving as partitions and supports for said lining in the space between said walls and said lining and forming upwardly extending exhaust air ducts in said space. 6th. In a drying kiln, a bin comprising imperforate side walls, screen linings at a little distance on the inside from but adjacent to said imperforate walls forming air spaces between said imperforate walls and said linings, and transversely disposed perforated intake air ducts across said bin and extending at one end or the other through the end walls of the bin.

No. 66,859. Non-Refillable Bottles.

(Bouteille non réemplissable.)

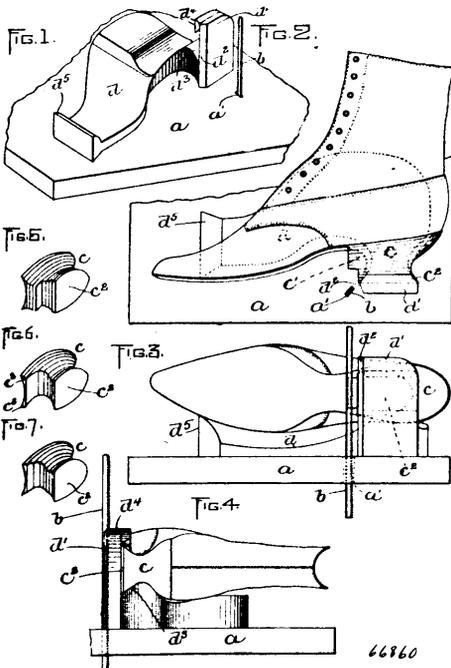


William H. Ferris and George Taylor Wade, both of Washington, District of Columbia, U.S.A., 31st March, 1900; 6 years. (Filed 16th March, 1900.)

Claim.—1st. A non-refillable bottle, comprising a neck having an annular groove in its outer wall, a locking bar mounted in an annular recess in the inner wall of the neck, and glass cutting wheels carried by said bar, and means for rotating said wheels, as set forth. 2nd. A non-refillable bottle having an annular groove in its outer wall and glass cutting wheels mounted inside the neck, and means for rotating said wheels against the inner wall of the neck opposite said groove, as set forth. 3rd. A non-refillable bottle having an annular groove in its outer wall, a locking bar seated in a recess in the inner wall of the neck, means for holding said bar in its locked relation, and glass cutting wheels carried by said bar, as set forth. 4th. A non-refillable bottle having an annular groove in its outer wall, a locking bar seated in an annular recess in the inner wall of the neck, glass cutting wheels journaled on said bar, spring flaps secured to the ends of the bar, and means for inserting the bar into the annular recess in the inner wall of the neck, and for rotating the wheels, as set forth. 5th. A non-refillable bottle having an annular groove in the outer wall of its neck, an annular recess in the inner wall of the neck opposite the groove in the outer wall of the neck, a locking bar seated in said inner recess, glass cutting wheels carried by said bar and held against the inner wall of the neck opposite the outer groove, spring flaps carried by the bar to hold the latter in a locked relation, and a key for rotating said bar, as set forth. 6th. A non-refillable bottle having an annular groove in its outer wall, the inner wall of the neck having an annular recess, the vertical grooves leading to said annular recess in the inner wall, a locking bar, the glass cutting wheels carried by the latter, spring flaps for locking the bar in place, and a key having a notched lower end to receive said bar, whereby the latter is forced down into a locked position, and rotated therein, as set forth. 7th. A non-refillable bottle having an annular groove in the under edge of said widened

portion, the locking bar held horizontally in an annular recess in the inner wall of the neck, glass cutting wheels journaled in recesses in said bar, and disposed directly over said annular groove in the outer wall of the neck, and means for turning said bar, as set forth. 9th. A non-refillable having a neck with an annular in its outer wall, a locking bar and glass cutting wheels carried thereby, the locking key having a notch at its lower end adapted to receive said bar, the lower ends of said key adapted to rest upon a shoulder on the inner wall of the neck, as set forth.

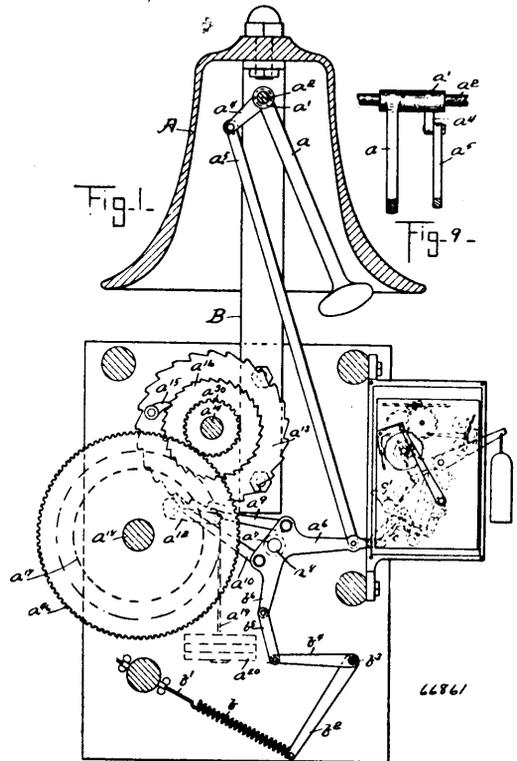
No. 66,860. Heel Breasting Machine.
(*Machine pour finir les talons de chaussures.*)



Placide Hébert and George Herbert Cushman, both of Lynn, Massachusetts, U.S.A., 31st March, 1900; 6 years. (Filed 19th March, 1900.)

Claim.—1st. A heel breasting machine, comprising a saw, a table or support substantially at right angles with the saw, and a carrier movable horizontally on the table and having an upper surface which affords a support on which a boot or shoe, placed sidewise, is movable or adjustable by the hands of the operator, whereby a shoe of any size and shape supported by the slide may be adjusted to make the front edge of the top lift of its heel parallel with the operative portion of the saw. 2nd. A heel breasting machine, comprising a saw, a table or support substantially at right angles with the saw, and a carrier movable horizontally on the table and having an upper surface which affords a support on which a boot or shoe, placed sidewise, is movable or adjustable by the hands of the operator, and a vertical gauge adapted to guide the operator in giving the front edge of the top lift a vertical position parallel with the operative portion of the saw. 3rd. A slide or carrier movable horizontally on a table and having an upper surface on which a boot or shoe, placed sidewise, is movable or adjustable by the hands of the operator, whereby a shoe of any size and shape supported by the slide may be adjusted to bring the front edge of the top lift to a predetermined position. 4th. A slide or carrier movable horizontally on a table and having an upper surface on which a boot or shoe, placed sidewise, is movable or adjustable by the hands of the operator, and a vertical gauge affixed to the slide and adapted to guide the operator in properly positioning the front edge of the top lift of a boot or shoe heel. 5th. A slide or carrier movable horizontally on a table and having a tread rest formed to bear on the tread surface of a French heel when the latter is turned on its side, and a side rest formed to bear on the under side of said heel. 6th. A slide or carrier movable horizontally on a table and having a tread rest formed to bear on the tread surface of a French heel when the latter is turned on its side, and top and bottom side rests formed to bear on the top and bottom sides of the heel.

No. 66,861. Bell Striker. (*Battant de cloche.*)



Gamewell Fire Alarm Telegraph Company, New York City, New York, assignee of Frederick William Cole, Newton, Massachusetts, U.S.A., 31st March, 1900; 6 years. (Filed 8th February, 1900.)

Claim.—1st. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, an actuating lever connected with and adapted to operate said detents to release the striking arm, a locking device for said actuating lever and a toothed wheel driven by a power propelled train for operating said locking device to release said actuating lever, substantially as described. 2nd. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, an actuating lever connected with and adapted to operate said detents to release the striking arm, a locking device for said actuating lever, a toothed wheel driven by a train for operating said locking device to release said actuating lever, and means operated by the striking arm when moving in both directions for returning said actuating lever into engagement with said locking device and returning said detents to locking position, substantially as described. 3rd. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, a train-controlled mechanism for operating said detents at predetermined times to release the striking arm, and means operated by the said striking arm for winding up the motive power of said train, substantially as described. 4th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, a train-controlled mechanism for operating said detents at predetermined times to release the striking arm, and means operated by the said striking arm when moving in both directions for winding up the motive power of said train, substantially as described. 5th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, an actuating lever connected with and adapted to operate said detents to release the striking arm, a locking device for said actuating lever, a toothed wheel driven by a train for operating said locking device to release said actuating lever, means operated by the striking arm when moving in both directions for returning said actuating lever into engagement with said locking device and returning said detents to locking position, and means also operated by said striking arm when moving in both directions for winding up the motive power of said train, substantially as described. 6th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, toggle levers connected with said detents for operating them to release the striking arm, an actuating lever for said toggle levers, a locking device for said actuating lever, and means for

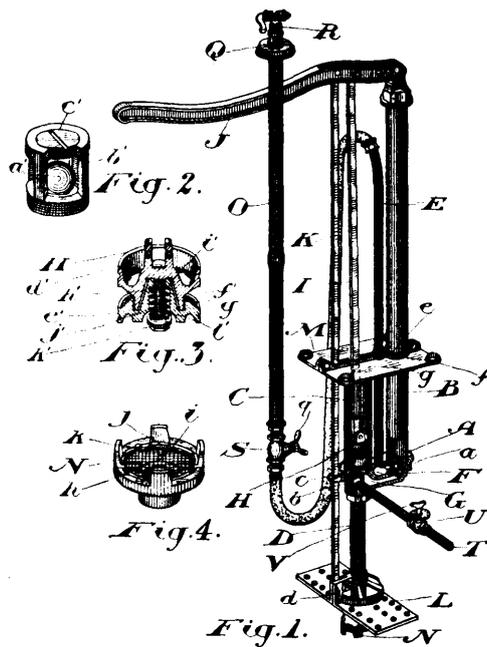
operating said locking device to release said actuating lever, substantially as described. 7th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, toggle levers connected with said detents for operating them to release the striking arm, an actuating lever for operating said toggle levers, a locking device for said actuating lever, a toothed wheel driven by a train for operating said locking device to release said actuating lever, a let off for said train and means for positively moving it in both directions to start and stop the train at will, substantially as described. 8th. In a bell striker, a striking arm, means for operating it, a train-controlled locking mechanism for said striking arm, a let-off for said train-controlled locking mechanism, a polarized electro-magnet for operating said let-off, a generator for the circuit of said polarized electro-magnet and a pole changing switch, substantially as described. 9th. In a bell striker, a striking arm, means for operating it, locking mechanism for said striking arm, a timing device controlling said locking mechanism, a let-off for said timing device, a polarized electro-magnet for operating said let-off, a generator for the circuit of said polarized electro-magnet and a pole-changing switch, substantially as described. 10th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, a detent for locking it after each movement, train-controlled mechanism for operating said detents at predetermined times to release the striking arm, a let-off for said train, a polarized electro-magnet for operating it, a generator for the circuit of said polarized electro magnet and a pole changing switch, substantially as described. 11th. In a bell striker, a striking arm, means for operating it, a detent for locking said striking arm, an actuating lever therefor, a locking device for said actuating lever, a train for operating said locking device to release said actuating lever, a let off for said train, a polarized electro magnet for operating it, a generator for the circuit of said polarized electro magnet and a pole changing switch, substantially as described. 12th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, detents *c, c'*, one or the other of which locks it after each movement, a spring actuated lever connected with and adapted to operate said detents to release the striking arm, a locking device for said spring actuated lever, substantially as described. 13th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, detents *c, c'*, one or the other of which locks it after each movement, an actuating lever connected with and adapted to operate said detents to release the striking arm, a locking device for said actuating lever, means for operating it to release said actuating lever, an arm *o* connected with and operated by the striking arm for engaging a co-operative part of the detent actuating mechanism when moving in both directions to return said actuating lever into engagement with its locking device, substantially as described. 14th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, detents *c, c'*, one or the other of which locks it after each movement, an actuating lever connected with and adapted to operate said detents to release the striking arm, a locking device for said actuating lever, means for operating it to release said actuating lever, the toggle joint *o², o³*, connected with and operated by said striking arm, the pivoted arm *o* operated by said toggle joint to engage a co-operative part of the detent actuating mechanism when moving in both directions to return said actuating lever into engagement with its locking device and return said detents to locking position, substantially as described. 15th. In a bell striker, a striking arm, means for moving it positively in each direction to strike a blow, detents *c, c'*, one or the other of which locks it after each movement, an actuating lever connected with and adapted to operate said detents to release the striking arm, a locking device for said actuating lever, a train for operating it, the arm *o* connected with and operated by the striking arm for winding up the motive power of said train, substantially as described. 16th. In a bell striker, a bell having its oscillating hammer contained within it and pivoted adjacent the crown of the bell, the short arm *a⁴* and the longitudinally reciprocating rod *a⁵* connected at one end to said short arm *a⁴* the vibrating arm *a⁶* to which the opposite end to said rod *a⁵* is connected, the rocking cradle *a⁷* bearing said arm *a⁶*, pawls carried by said cradle, and a power propelled ratchet wheel for operating said pawls to rock said cradle, substantially as described. 17th. In a bell striker, a bell having its oscillating hammer contained within it and pivoted adjacent the crown of the bell, the short arm *a⁴* and the longitudinally reciprocating rod *a⁵* connected at one end to said short arm *a⁴*, the vibrating arm *a⁶* to which the opposite end of said rod *a⁵* is connected, the rocking cradle *a⁷* bearing said arm *a⁶*, pawls carried by said cradle, and a power propelled ratchet wheel for operating said pawls to rock the cradle, the balancing spring *b* for the bell hammer, a bell crank lever, one arm of which is connected to said spring and the other arm *b⁴* of which is connected by a toggle joint with said cradle, substantially as described.

No. 66,862. Spray Pump. (Pompe à jet d'eau.)

William Henry Heard, London, Ontario, Canada, 31st March, 1900; 6 years. (Filed 21st October, 1899.) NOTE.—Patent No. 66,862 is a re-issue of Patent No. 60,601, dated 15th July 1898.

Claim.—1st. In a pump, a base casting having two passages formed therein, in combination with a plunger tube and suction

tube connecting with one passage, an air chamber and a discharge pipe connecting with the other passage, a valve between the two



passages, a valve between the first-mentioned passage and the opening of the suction pipe, and a small pipe communicating with the said passage, substantially as and for the purpose specified. 2nd. In a pump, a base casting having two passages formed therein, in combination with a plunger tube and suction tube connecting with one passage, an air chamber and a discharge pipe connecting with the other passage, a valve between the two passages, a valve between the first-mentioned passage and the opening of the suction pipe, a small pipe communicating with the said passage, and a regulating valve in the said pipe, substantially as and for the purpose specified. 3rd. The combination with a valve adapted to close the inlet pipe and a valve closing the outlet through which liquid is forced to the discharge, of a pipe communicating with the interior of the pump between said valves and a regulating valve adapted to control the admission of liquid through the said pipe, substantially as and for the purpose specified. 4th. A pump provided with a suction tube and a valve closing the said tube thereof, in combination with a small tube opening into the pump above the said valve, and a regulating valve in the said tube, substantially as and for the purpose specified. 5th. In a pump, a base casting, two lugs formed thereon, a suction tube and an air chamber connected thereto, in combination with a pump handle pivoted upon the air chamber, an agitator sleeved upon the said suction pipe, and a rod connected with the said agitator, pivoted to the said handle and passing between the aforesaid lugs, substantially as and for the purpose specified. 6th. In a pump, a valve cage externally screw-threaded and having a seat in its lower portion closed by a ball, in combination with a plug closing an opening in the top of the cage, and provided with a seat similar to the aforesaid seat, substantially as and for the purpose specified. 7th. In a pump, a base casting having two passages formed therein, in combination with a plunger tube connecting with one passage, an air chamber and a discharge pipe connecting with the other passage, a valve between the two passages, and a valve between the first-mentioned passage and the opening of the suction pipe, each valve comprising a cage screwed into a suitable opening and having an opening in its lower portion closed by a ball valve, and a screw plug closing an opening in the top of the cage, substantially as and for the purpose specified. 8th. In a pump, the suction tube D, in combination with the strainer N, provided with the ribs *i*, wire gauze *h*, lugs *j* and bent wire *k*, substantially as and for the purpose specified. 9th. In a pump, the suction tube D, in combination with the strainer N, provided with the wire gauze *h*, lugs *j*, and bent wire *k*, substantially as and for the purpose specified. 10th. In a pump, an agitator sleeved upon the suction tube and partly split, in combination with an agitator rod having its end inserted between the parts, and a clamping bolt adapted to clasp the parts together, substantially as and for the purpose specified. 11th. In a pump, and in combination with the discharge pipe thereof, a valve normally held closed by spring pressure, in combination with a cam pivoted to the end of the spindle and bearing against the end of the valve mounting, and two lever handles connected to the said cam, substantially as and for the purpose specified. 12th.

In a pump, a drip cap having a sleeve thereon, in combination with a metal tube secured within the sleeve and a bamboo tube surrounding the metal tube and having its end inserted in a recess in the drip cap, substantially as and for the purpose specified. 13th. In a pump, a metal tube and a nozzle, in combination with a drip cap secured in position at or about the junction of the two, substantially as and for the purpose specified. 14th. In a pump, a nozzle and a tube to which the said nozzle is secured, in combination with a drip cap having a sleeve thereon within which the said tube is secured, substantially as and for the purpose specified. 15th. In a pump, a spray nozzle comprising a casing internally threaded and provided with a water inlet in one side thereof and a water outlet in one end in combination with a spindle passing through a suitable packing in the other end of the casing, and provided with a square portion and a needle on its end, a nut threaded to screw loosely within the casing and having a recess formed therein to fit the squared part on the plunger, and a coil spring bearing against the head of the spindles and the casing, substantially as and for the purpose specified. 16th. In a pump, a spray nozzle comprising a casing internally threaded and provided with a water inlet in one side thereof and a water outlet in one end, in combination with a spindle provided with a square portion and a needle on its end, a nut threaded to screw loosely within the casing and having a recess formed therein to fit the squared part on the plunger, a washer on the spindle with a bevelled recess, a coil spring between the washer and the nut, and the casing, substantially as and for the purpose specified. 17th. In a pump, a plunger comprising two parts longitudinally movable upon one

another and so shaped as to form between them an external recess in combination with a spring mechanism tending to draw the part of the plunger together, substantially as and for the purpose specified. 18th. In a pump, a plunger comprising two parts longitudinally movable upon one another and so shaped as to form between them and external recess with bevelled sides in combination with spring mechanism tending to draw the parts of the plunger together, substantially as and for the purpose specified. 19th. In a pump, a plunger comprising two parts made longitudinally movable upon one another and so shaped as to form between them an external recess with bevelled sides, in combination with a spindle rigidly connected to one part of the plunger and extending through a shouldered hole formed in the other part, a nut upon the end of the spindle, and a spring upon the spindle between the nut and the shoulder within the said hole, substantially as and for the purpose specified. 20th. In a pump, the combination of the following elements comprising a plunger, the part e^1 , having the sleeve g^1 , formed thereon and provided with shoulders i^1 and j^1 , the part d^1 , centrally recessed to receive the sleeve g^1 , the nut shaped to engage the shoulder and the spring engaging the nut and the shoulder, each part of the plunger being so shaped as to form between them an external recess for packing, substantially as and for the purpose specified. 21st. In a pump, and in combination with the air chamber and discharge pipe thereof, a plate centrally divided and provided with a flange z , adapted to embrace the said parts and means for clamping the two portions of the plate together, substantially as and for the purpose described.

TRADE-MARKS

Registered during the month of March, 1900, at the Department of Agriculture—
Copyright and Trade-Mark Branch.

7252. THE KENT MILLS COMPANY, LIMITED, Chatham, Ont. Flour, 2nd March, 1900.
7253. THE BISHOP & BABCOCK COMPANY, Cleveland, Ohio, U. S. A. Hydraulic Air Compressors, 2nd March, 1900.
7254. FRANK McQUEEN NELSON, Bridgetown, N.S. Liniments, 2nd March, 1900.
7255. LUDGER ALFRED MOISAN, Quebec, Que. Certains articles de lingerie pour femmes, 2 mars, 1900.
7256. AMELIA LANDRY, Montreal, Que. Un Insecticide, 3 mars, 1900.
7257. THE EMPIRE TOBACCO COMPANY, LIMITED, Granby, Que. Cut and Plug Tobacco and Cigarettes, 3rd March, 1900.
7258. THE EMPIRE TOBACCO COMPANY, LIMITED, Granby, Que. Tobacco in all its forms excepting Cigars, 3rd March, 1900.
7259. RICHARD KLINGER, Gumpoldskirchen, near Vienna, Austria-Hungary. Packing Materials, 6th March, 1900.
7260. CHARLES KENT & COMPANY, Boston, Massachusetts, U.S.A. Proprietary Remedies for external and internal use, including Cod-Liver Oil, 6th March, 1900.
7261. THE AMERICAN COMPRESSED FOOD COMPANY, Passaic, New Jersey, U.S.A. Compressed Food such as Rations, 6th March, 1900.
7262. WM. JESSOP & SONS, LIMITED, Sheffield, England, and Toronto, Canada. Cast Steel, 8th March, 1900.
7263. CHAPPELL, ALLEN & COMPANY, LIMITED, Redfield, Bristol, England. Corsets, 9th March, 1900.
7264. JOHN MACDONALD & COMPANY, Toronto, Ont. Black Dress Goods, 10th March, 1900.
7265. THE DISTILLERS COMPANY, LIMITED, Edinburgh, Scotland. Whisky, 10th March, 1900.
7266. E. N. CUSSON & COMPANY, Montreal, Que. Cigars, 12th March, 1900.
7267. JAMES SUTHERLAND, Montreal, Que., trading as VERRET, STEWART & COMPANY. Salt, 13th March, 1900.
7268. THE ALBERT DICKINSON COMPANY, Chicago, Illinois, U.S.A.
7269. } Grass, Clover and Field Seeds and Seed Grains, 16th March,
7270. } 1900.
7271. }
7272. CHARLES GURD & COMPANY, Montreal, Que. Soda Water, 16th March, 1900.
7273. THE CLEVELAND FAUCET COMPANY, Cleveland, Ohio, U.S.A. Hydraulic Pumps and Apparatus for the drawing or forcing of liquids under pressure, 16th March, 1900.
7274. JOHN L. WHITING & SON COMPANY, Boston, Massachusetts, U.S.A. Brushes, 17th March, 1900.
7275. JAMES A. PITTS, Montreal, Que. Photographic Supplies, 19th March, 1900.
7276. FERDINAND STRAUSS, New York, N.Y., U.S.A. Mouth Harmonicas, 20th March, 1900.
7277. THE ALBIONITE COMPANY, LIMITED, Montreal, Que. Washing and Scouring Soaps and Compositions, 21st March, 1900.
7278. J. ELLWOOD LEE COMPANY, Conshohocken, Pennsylvania, U.S.A. Medicinal and Surgical Supplies, 21st March, 1900.
7279. VAN DULKEN WEILAND & COMPANY, Rotterdam, Holland. Geneva, 21st March, 1900.
7280. THE PATENT BORAX COMPANY, LIMITED, Birmingham, England. General Trade Mark, 24th March, 1900.
7281. FRANK D. L. SMITH, Toronto, Ont. Medicinal Tablets, 24th March, 1900.
7282. HANS MORITZ MEYER, Montreal, Que. Underwear and other Knitted Goods, 27th March, 1900.

7283. B. HOUDE & COMPAGNIE, Quebec, Que. Marque de Commerce Generale, 23 mars, 1900.
7284. M. L. GILMOND, Montreal, Que. Starch, 28th March, 1900.
7285. FRANK CROSSLEY HOWE, Halifax, N.S., trading as the FAIRY BAKING POWDER COMPANY. Baking Powder, 29th March, 1900.
7286. THOMAS HALL ROBINSON, Montreal, Que. Preparations for the Teeth, 29th March, 1900.
7287. THE RUBBER TIRE COMPANY OF AMERICA, New York, N. Y., U.S.A. India Rubber Tires, 30th March, 1900.

INDUSTRIAL DESIGNS.

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1622. P. W. ELLIS & COMPANY, Toronto, Ont. Advertising device *re* British Lion and Cubs, "Out for Business," 1st March, 1900.
1623. OCTAVE BÉLANGER, Montreal, Que. Door Frame especially adapted for use in connection with Bakers' Ovens, (marked A.) 2nd March, 1900.
1624. OCTAVE BÉLANGER, Montreal, Que. Door Frame especially adapted for use in connection with Bakers' Ovens, (marked B.) 2nd March, 1900.
1625. CHARLES H. RICHES, Toronto, Ont. Knife for Slicing Machines, 2nd March, 1900.
1626. CHARLES H. RICHES, Toronto, Ont. Cash Fare Slip or Ticket, 2nd March, 1900.
1627. KILGOUR BROTHERS, Toronto, Ont. Egg Box, 5th March, 1900.
1628. JEAN CHALMERS STOCKS, Toronto, Ont. Kindergarten Octometers for Piano Technique, 5th March, 1900.
1629. DANIEL BENJAMIN STEVENS, Toronto, Ont. A Neurotone, 6th March, 1900.
1630. FRANCIS G. GALE, Waterville, Ont. Bedstead (No. 130), 7th March, 1900.
1631. FRANCIS G. GALE, Waterville, Ont. Bedstead, (No. 675) 7th March, 1900.
1632. JAMES LANGTON, Hamilton, Ont. Metallic Arm for Tailors Pressing Machines, 7th March, 1900.
1633. GEORGE H. HEES, Toronto, Ont. Window Shade Pull, 9th March, 1900.
1634. JAMES W. MOWBRAY, Walton, Ont. Carbon Protecting Globe, 13th March, 1900.
1635. ADAM HARVEY, Ottawa, Ont. Golf-Tee, 13th March, 1900.
1636. RICHARD HEMSLEY, Montreal, Que. A Decorative Metal Ornament, "For Queen and Empire," 15th March, 1900.
1637. JOHN G. BOWES AND JAMES JAMIESON, Hamilton, Ont. Cook Stove Range, 19th March, 1900.
1638. HANNAH DAVIS, Montreal, Que. Two Union Jacks with their Flag Staffs crossed, a Bow of Ribbon at the point of crossing, and a semi-circle of Maple Leaves below, 29th March, 1900.
1639. RICHARD HEMSLEY, Montreal, Que. Metal Badge or Insignia, "Daughters of the Empire," 29th March, 1900.

COPYRIGHTS

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Copyright and Trade-Mark Branch.

11196. LONDON TIMES' NEWS AND VIEWS *re* TRANSVAAL WAR. No. 3. The Globe Printing Company, Toronto, Ont., 1st March, 1900.
11197. HOKEY POKEY. Cake Walk and Two-Step. By Frederick V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 1st March, 1900.
11198. QUO VADIS WALTZES. By Frederick V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 1st March, 1900.
11199. OXYDONOR: WHY ARE YOU SO BEHIND THE AGE? (Book). Dr. H. Sanche & Co., Montreal, Que., 1st March, 1900.
11200. OOM PAUL. (Song). Words and music by Kenneth Ferguson, Glace Bay, Cape Breton, N.S., 1st March, 1900.
11201. HÆC DIES. Chœur Pascal pour trois voix égales. Par Achille Fortier, Montréal, Qué., 1er mars, 1900.
11202. SPRING AND SUMMER CATALOGUE, 1900. No. 44. The T. Eaton Co. (Ltd.), Toronto, Ont., 1st March, 1900.
11203. MY ESCAPE FROM THE BOERS. The exciting experiences of a Canadian Medical Missionary. By F. J. Livingston, B.A., M.D. William Briggs, Toronto, Ont., 2nd March, 1900.
11204. THE FILLIPINO SHUFFLE. Cake Walk and Two-Step. By H. F. Odell. H. F. Odell & Co., Boston, Mass., U.S.A., 3rd March, 1900.
11205. STRATHCONA'S HORSE; or, THE MOUNT ROYAL. Words by John Blair. Music by J. H. Hyde. John Blair, Grimsby, Ont., 5th March, 1900.
11206. CANADIAN CRIMINAL CASES. Annotated. Edited by W. J. Tremear. Volume II. Robert Reid Cromarty, Toronto, Ont., 5th March, 1900.
11207. THE DOMINION MERCANTILE AGENCY. (Livret de lettres commerciales.) Omer Beaudet, Québec, Qué., 5 mars, 1900.
11208. LA REVUE DE JURISPRUDENCE. Par Charles Chamilly de Lorimier. Volume V., 1899. C. Theoret, Montréal, Qué., 5 mars, 1900.
11209. ELECTION POSTER *re* SIR WILFRED LAURIER. John A. Harkins, Toronto, Ont., 7th March, 1900.
11210. SUCCESSFUL FARMING; HOW TO FARM FOR PROFIT. The latest methods. By William Rennie, sr. William Rennie's Sons, Toronto, Ont., 8th March, 1900.
11211. SOLDIERS OF THE QUEEN. (Photo.) Joseph C. Clarke, Toronto, Ont., 9th March, 1900.
11212. THE EMPIRE SERIES: THE INFANT READER. A. & W. MacKinlay, Halifax, N.S., 9th March, 1900.
11213. PINKERTON VOWEL INDEX. (Second edition.) (Book.) Robert D. Richardson, Winnipeg, Man., 9th March, 1900.
11214. THE CANADIAN MAGAZINE. Military number. March, 1900. The Ontario Publishing Company (Ltd.), Toronto, Ont., 9th March, 1900.
11215. THE CANADIAN CONTINGENT MARCH. By Harry N. Crandall, Salisbury, N.B., 10th March, 1900.
11216. ALLELUIA! CHRIST IS RISEN. Easter anthem. By Albert Han, Mus. Doc., F.R.C.O., Toronto, Ont., 12th March, 1900.
11217. CANADA'S IDEAL. Portraits of twelve notable short-horn cattle. The William Weld Company, (Ltd.), London, Ont., 12th March, 1900.
11218. THE OXFORD RIFLES. March and two-step. By George W. Hulme, Ingersoll, Ont., 12th March, 1900.
11219. WHEN JOHNNY CANUCK COMES HOME. Words and music by H. H. Godfrey, Toronto, Ont., 12th March, 1900.
11220. SONS OF THE EMPIRE. Words and music by Chas. R. Palmer. Whaley, Royce & Co., Toronto, Ont., 12th March, 1900.
11221. THE LEADER MARCH. By Harry J. Weiler, Baden, Ont., 12th March 1900.

11222. ONLY A MOTHER. Words and music by Verner J. Cavers. Amey & Hodgins, Toronto, Ont., 12th March, 1900.
11223. LES ALIÉNÉS DEVANT LA LOI. Etude Médico-Légale. Par le Dr. Geo. Villeneuve. Joseph Antoine Georges Villeneuve, Montréal, Qué., 12 mars, 1900.
11224. EXTRACT FROM THE PHOENIX ASSURANCE COMPANY'S RULES. (Pamphlet.) The Phoenix Assurance Company, London, England, 12th March, 1900.
11225. VALSE ESPAGNOLE. Par Emiliano Renaud. Edmond Archaubeault, Montréal, Qué., 12 mars, 1900.
11226. THE QUEBEC LEGAL CHART, 1900. Henry Cartwright, Toronto, Ont., 14th March, 1900.
11227. FROM CAPE TOWN TO LADYSMITH. An unfinished record of the South African War. By G. W. Stephens. The Copp, Clark Co. (Ltd.), Toronto, Ont., 15th March, 1900.
11228. THE REALIST. A modern romance. By Herbert Flowerdew. The Copp, Clark Co. (Ltd.), Toronto, Ont., 15th March, 1900.
11229. ARTIST'S BRUSH. (Music.) By Gerrit Smith, Op. 21. No. 1. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11230. AT MOONLIGHT. (Music.) By Gerrit Smith, Op. 21. No. 2. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11231. IN THE CANON. (Music.) By Gerrit Smith, Op. 21. No. 3. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11232. ALPINE ROSE. (Music.) By Gerrit Smith, Op. 21. No. 4. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11233. ON THE HEIGHTS. (Music.) By Gerrit Smith, Op. 21. No. 5. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11234. MARIPOSA LILY. (Music.) By Gerrit Smith, Op. 21. No. 6. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11235. BY THE STREAMS. (Music.) By Gerrit Smith, Op. 21. No. 7. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11236. COLUMBINE. A carnival scene. (Music.) By Gerrit Smith, Op. 21. No. 8. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11237. ARBUTUS. (Music.) By Gerrit Smith, Op. 21. No. 9. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11238. CLOUD SHADOWS. (Music.) By Gerrit Smith, Op. 21. No. 10. The John Church Co., Cincinnati, Ohio, U.S.A., 16th March, 1900.
11239. LOVELL'S LOOSE LEAF ORDER FORM. Robert James Lovell, Toronto, Ont., 16th March, 1900.
11240. CHANGE FRONT ON PRE-TORIA; OR, MAPLE CANDY FOR OOM PAUL. Words and music by John Edgar March, St. John, N.B., 16th March, 1900.
11241. ANOTHER LITTLE PATCH OF RED. Words by W. T. Lytton. Music by Denham Harrison. The Anglo Canadian Music Publishers' Association (Ltd.), London, England, 17th March, 1900.
11242. THE CREOLE QUEEN. Characteristic March, (Two-Step.) By R. B. Hall. The John Church Company, Cincinnati, Ohio, U.S.A., 19th March, 1900.
11243. THE TRANSVAAL FROM WITHIN. A private record of public affairs. By J. P. Fitzpatrick. William Briggs, Toronto, Ont., 21st March, 1900.
11244. VIORIS. Waltz. By H. H. Shepherd. Amey & Hodgins, Toronto, Ont., 21st March, 1900.
11245. MINIATURE POLONAISE. By George Liebling, Op. 47. No. 1. The John Church Co., Cincinnati, Ohio, U.S.A., 22nd March, 1900.
11246. MINIATURE RUSSE. By George Liebling, Op. 47. No. 2. The John Church Co., Cincinnati, Ohio, U.S.A., 22nd March, 1900.
11247. THE CORRESPONDENT'S GUIDE. Charles Lewis Benedict, Brockville, Ont., 22nd March, 1900.
11248. TRAVAUX MANUELS, MÉTHODE DE COUPE. (Livre.) Les Sœurs de la Congrégation de Notre-Dame, Montréal, Qué., 22 mars, 1900.
11249. VAMPING CHART. Horace William Harpur, Vancouver, B.C., 22nd March, 1900.
11250. WALKING WITH GOD: THOUGHTS ON THE ASSURANCE OF SALVATION. By John Haldane, Toronto, Ont., 23rd March, 1900.
11251. CAN RUPTURE BE CURED. (Pamphlet.) Dr. W. S. Rice, Toronto, 23rd March, 1900.

11252. TO THE MAN WHO WONDERED WHY. (Pamphlet.) Dr. W. S. Rice, Toronto, Ont., 23rd March, 1900.
11252. MEASUREMENT BLANK. (Circular.) Dr. W. S. Rice, Toronto, Ont., 23rd March, 1900.
11254. LIKENESS ON MAPLE LEAF WITH UNION JACK AS BACKGROUND. (Photo.) Joseph C. Clarke, Toronto, Ont., 23rd March, 1900.
11255. THE MUNICIPAL AND ASSESSMENT GUIDE. (Book.) By John James Kehoe, Sault Ste. Marie, Ont., 23rd March, 1900.
11256. THOUGHT LIKE A LOVELY FLOWER. (Song with music.) By Gerrit Smith. The John Church Co., Cincinnati, Ohio, U.S.A., 23rd March, 1900.
11257. A CRIMSON ROSE-BUD. (Song with music.) By Gerrit Smith. The John Church Co., Cincinnati, Ohio, U.S.A., 23rd March, 1900.
11258. BOBS: THE NATIONAL GAME. (Game of cards.) Clara Speight Humberstone, Newton Brook, Ont., 23rd March, 1900.
11259. OFFICIAL TELEPHONE DIRECTORY, DISTRICT OF EASTERN ONTARIO, MARCH, 1900. The Bell Telephone Company of Canada, Limited, Montreal, Que., 24th March, 1900.
11260. STRATHCONA MARCH. By Ludwig Waizmann, J. L. Orme & Son, Ottawa, Ont., 24th March, 1900.
11261. RULES AND REGULATIONS GOVERNING THE WAR GAME. (Book.) Arthur E. Brock, London, Ont., 27th March, 1900.
11262. MEMORIAL LIFE AND WORKS OF DWIGHT L. MOODY. Illustrated, By Rev. J. W. Hanson, A.M., D.D. J. L. Nichols & Co., Toronto, Ont., 27th March, 1900.
11263. OFFICERS AND MEN OF H. M. S. LEANDER. (Photo.) John Wallace Jones, 27th March, 1900.
11264. PRÉLUDE À LA MENUET. By Homer N. Bartlett, Op. 157. The John Church Co., Cincinnati, Ohio, U.S.A., 28th March, 1900.
11265. SCHERZO IN D. By Homer N. Bartlett, Op. 171. The John Church Co., Cincinnati, Ohio, U.S.A., 28th March, 1900.
11266. LONDON TIMES' NEWS AND VIEWS. (No. 5.) The Globe Printing Co., Toronto, Ont., 28th March, 1900.
11267. DRINK AND DRUDGERY. Two Social Sins. By Frederick L. H. Sims, Western, Ont., 29th March, 1900.
11268. COUPON DE PRIME. Alphonse Gélinas, Ste. Anne de la Pérade, Qué., 29 mars, 1900.
11269. SONS ACROSS THE SEA. Patriotic Song. Words by Lewis B. Butler and Charles D. Bingham. Music by Gustave Chandoir. Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 29th March, 1900.
11270. THE CAUSE OF IT ALL; OOM PAUL KRUGER. (Illustrated Envelope.) George Alfred Lowe, Toronto, Ont., 29th March, 1900.
11271. FIRST MOUNTED REVIEW OF STRATHCONA HORSE AT OTTAWA, ONT., 7TH MARCH, 1900. (Photo; No. 59113.) Steele & Co., Winnipeg, Man., 29th March, 1900.
11272. THE "MONTEREY" LEAVING HALIFAX WITH STRATHCONA HORSE FOR SOUTH AFRICA, 17TH MARCH, 1900. (Photo; No. 59180 E.) Steele & Co., Winnipeg, Man., 29th March, 1900.
11273. SPECIAL CONTRACT WITH TRAVELLERS. (Form.) J. L. Nichols, & Co., Toronto, Ont., 31st March, 1900.