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# The Canadian Patent Office

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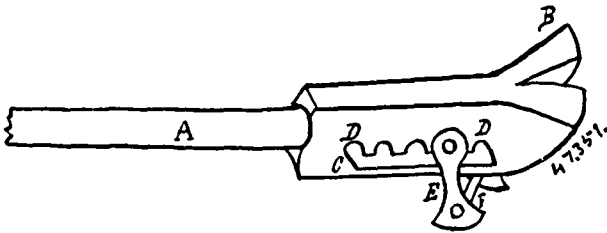
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### INVENTIONS PATENTED.

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

#### No. 47,351. Spike Extractor.

(Machine pour extraire les chevillettes.)

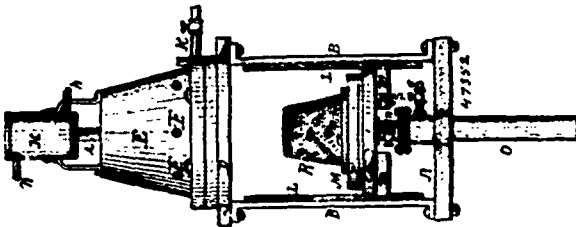


L. Arthur Dion and Adjuteur Carmel, both of Montreal, Quebec, Canada, 2nd November, 1894; 6 years.

Claim.—1st. The combination of an extractor A or crow-bar having at its lower part a slide C, with the upper part of said slide toothed, forming notches or crans DD, substantially as and for the purpose hereinbefore set forth. 2nd. The combination, with the extractor A, of a link E acting as fulcrum and sliding loosely in slide C of the bar, said link E working in crans DD, substantially as and for the purpose hereinbefore set forth.

#### No. 47,352. Machine for Making Paper Buckets.

(Machine à fabriquer les seaux en papier)

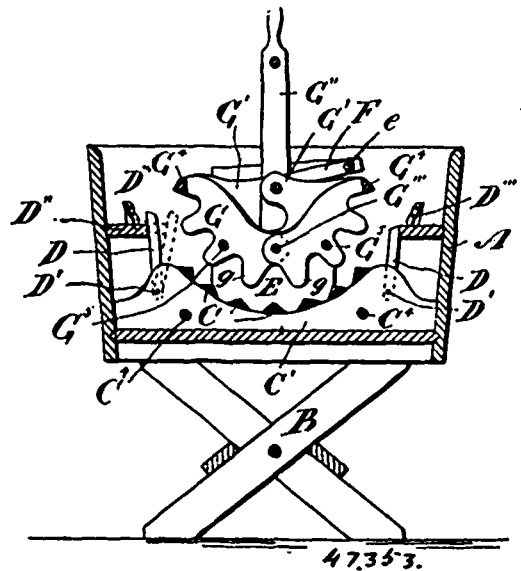


Henry P. Lane, Franklin, Ohio, U.S.A., 2nd November, 1894; 6 years.

Claim.—1st. In a press for hollow vessels, the combination with the frame, of an inverted stationary female die supported on the frame and having drain openings, the movable chime or bottom plate in the female die, a correspondingly shaped hollow male die adapted

to move vertically within the frame and into the female die, said male die having combined filling and drainage openings in its top and sides, an imperforate inflatable bag sustained on the male die exteriorly and over its perforations, a valved water cylinder arranged below the male die, a hollow plunger moving in said cylinder and open at both ends, one end of said hollow plunger being fitted to the bottom of the male die and communicating with the interior thereof, and a valve arranged in the hollow plunger near its upper end, substantially as set forth. 2nd. The combination with a female die and a vertically movable hollow inflatable male die, of a valved water cylinder arranged below the latter die, a hollow plunger moving in the cylinder and open at both ends, one end of said hollow plunger being fitted to and communicating with the interior of said male die, and a valve arranged in the hollow plunger near its upper end, substantially as set forth.

#### No. 47,353. Washing-Machine. (Machine à laver.)

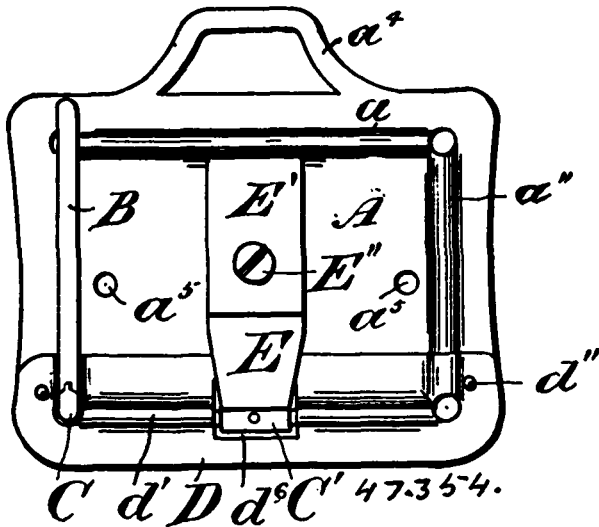


Edward Byron Near, Humberston, Ontario, Canada, 2nd November, 1894; 6 years.

Claim.—1st. In a washing-machine, the combination of a tub A, having cleats D<sup>2</sup>, a folding horse or stand B, having projecting ears at top and removal mechanism, consisting of a slatted segmental bottom, slatted inclined sides hinged to the bottom and having segmental pieces adapted to be engaged by the said cleats and a beater or rubber consisting of toothed segments with handles journaled upon a shaft with arms pivoted upon studs held on sides secured to the frame pieces of the bottom, substantially as set forth. 2nd. In a washing-machine, the combination of concave ribs C<sup>1</sup>, C<sup>2</sup> C<sup>3</sup>, triangular slats C, secured to said ribs, inclined side grids consisting of slats D, hinged to rods passing through the ribs of the bottom and having at the top segments D<sup>2</sup>, sides E, secured to the end ribs C<sup>2</sup>, and provided with arms E<sup>1</sup>, adapted to hold a swinging beater or rubber, substantially as set forth. 3rd. In a beater or rubber, of a washing-machine, the combination of

segments G, having rounded projections *g*, segments G<sup>1</sup>, at the ends, a rod G<sup>2</sup>, connecting said segments at the bottom, slats G<sup>3</sup>, secured to the ends of the segments, handles G<sup>4</sup>, placed between the end pairs of segments, a shaft F<sup>1</sup>, upon which the handles and the upper parts of the end segments are journaled and provided with fast arms or links, the ends of which are pivotally supported at their ends, substantially as set forth. 4th. In a washing-machine, the combination of a series of triangular slats C, secured upon the concavely curved edges of ribs C<sup>1</sup>, C<sup>2</sup>, C<sup>3</sup>, rods C<sup>4</sup>, passing through said ribs, rods D, passing through said ribs, slats D, provided upon said rods, a segment D<sup>1</sup>, secured to the upper end of each set of slats D, sides E, secured to the ribs C<sup>2</sup>, arms E<sup>1</sup>, secured to said sides, a stud *e*, on each side of said arms, a shaft F<sup>1</sup>, having an arm or link F, secured to each end, having its free end journaled upon said stud, a beater or rubber consisting of segments G and G<sup>1</sup>, having rounded projections *g*, a rod G<sup>2</sup>, upon which the lower parts of said segments are secured, handles G<sup>4</sup>, between the end segments G<sup>1</sup>, end slats G<sup>3</sup>, connecting the ends of said segments and said end segments and handles journaled upon the shaft F<sup>1</sup>, substantially as set forth.

**No. 47,354. Letter and Bill File. (Serre-papier.)**

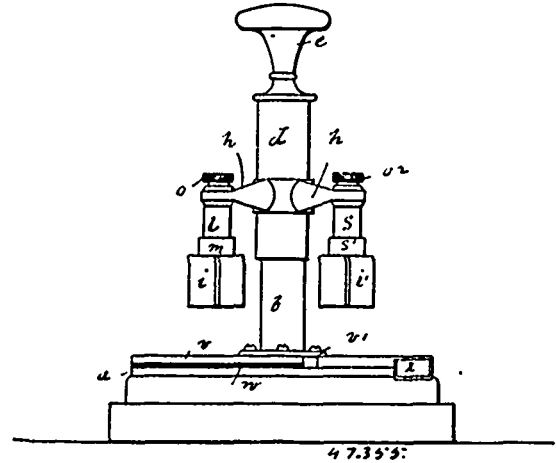


The Eclipse Office Furniture Company, assignee of William O. Gottwals, both of Ottawa, Ontario, Canada, 2nd November, 1894; 6 years.

*Claim.*—1st. In a letter and bill file, the combination of a stamped base A, having raised ridges *a*, *a*<sup>2</sup>, *a*<sup>3</sup>, and groove *a*<sup>1</sup>, a cap plate D, secured to the upper face of said base, having a groove in the lower surface corresponding with the groove *a*<sup>1</sup>, and being perforated at the ends and in the centre, two arches B, having their cross-shanks secured to the upper groove formed by the ridge *a*, so that the upright shanks lean rearwardly or upwardly, according as the base plate is horizontal or vertical, and having their points bevelled at the front and grooved, receiving wires C, formed in one piece with a cross-shank *c*, journaled in the bearing formed by the grooves *a*<sup>1</sup>, and *d*<sup>1</sup>, between the base A and cap D, and having its points bevelled and tongued to fit the points of the arches, a cam C<sup>1</sup>, on said cross-shank adapted to bear on a spring and engage a notch therein, and a double spring E, E<sup>1</sup>, bolted to said base and adapted to bear with its point on the said cam and to engage and lock the same by a notch *e*, substantially as set forth. 2nd. The combination of a rectangular piece of stamped sheet metal A, a groove *a* in the lower surface forming a raised ridge at the upper surface, and having a perforation at each end, said groove forming a bed for the cross-shank of the arches, a groove *a*<sup>1</sup>, parallel to the groove *a*, and forming part of a journal bearing for the cross-shank of the receiving wires, raised ridges *a*<sup>2</sup>, extending from the perforated ends of the ridges *a*<sup>2</sup>, extending from the ridge *a*, to the groove *a*<sup>1</sup>, and a cap D, secured to the front edge of the base, and having a groove *d*<sup>1</sup> in its lower surface corresponding to the groove *a*<sup>1</sup>, and forming therewith a journal bearing for the cross-shank of the receiving wire, and said groove being perforated in the centre, substantially as set forth. 3rd. The combination of a base A, having a groove *a*<sup>1</sup>, in the front or lower edge, a cap plate D, having a groove *d*<sup>1</sup>, in its lower surface corresponding to said groove *a*<sup>1</sup>, and perforated at the ends, and in the centre which said cap is secured to said base, so that the two grooves form a journal bearing, and the receiving wire C, having a cross-shank *c*, journaled in said bearing *a*<sup>1</sup>, *d*<sup>1</sup>, and its upright shanks projecting through the perforations at the ends of the groove *d*<sup>1</sup>, substantially as set forth. 4th. The combination of a base plate A, holding two arches rigidly and two receiving wires movably, two arch wires B, rigidly secured to said base so that the upright shanks have an upward or rearward inclination, according as the base plate is vertical or horizontal, two receiving wires C, formed in one piece

on a cross-shank *c*, journaled in a groove on said base and held in place by a cap plate, and adapted to have a rocking motion in said journal, a cam C<sup>1</sup>, on a cross-shank of said receiving wires projecting upwards through a perforation in the cap plate, and adapted to be engaged by a spring E, secured to the upper surface of the base, and having its points provided with a notch *e*, adapted to engage said cam when the receiving wire is open and to press upon it when the cam is disengaged from the notch, and force it rearwardly or upwardly against the arches, substantially as set forth.

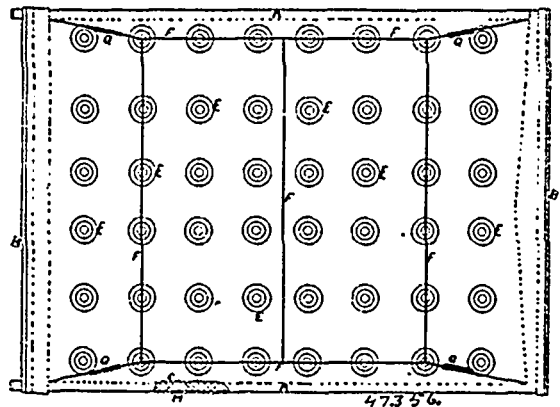
**No. 47,355. Apparatus for Affixing Adhesive Stamps. (Appareil à coller des timbres adhésifs.)**



The Stamp and Label Affixing Machine Company, assignee of Bass Kennedy, both of Glasgow, Scotland, 2nd November, 1894; 6 years.

*Claim.*—1st. In an apparatus of the class set forth, the combination of a pedestal or pillar, a tube or equivalent sliding thereon and damping and stamping devices secured to said sliding tube, substantially as set forth. 2nd. The sliding tube *d* made with a V-shaped slot *g* in it, substantially as and for the purpose set forth. 3rd. The combination of the box *i*, damping pad *j*, and spring *k* acted on by a piston *l* or its equivalent, substantially as described and shown.

**No. 47,356. Bed Spring. (Sommier élastique.)**



The St. Thomas Manufacturing Company, assignee of Renfrew W. Gates and Richard C. Williams, all of St. Thomas, Ontario, Canada, 2nd November, 1894; 6 years.

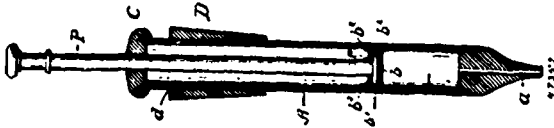
*Claim.*—1st. The combination in a bed spring, of two woven wire webs under tension, with spiral springs placed between the said webs, substantially as and for the purpose set forth. 2nd. The combination with the woven wire webs, of a skeleton frame of wire or flat flexible metal provided with coiled springs and suspended from the angles of the main frame, substantially as and for the purpose set forth. 3rd. The combination with a woven wire web, of a strand or strands of heavy wire, spirally woven and interlocked in the edges of the web, substantially as and for the purpose set forth. 4th. In a bed spring the combination with the woven wire webs, of a frame, having elevated bearing bars B, B, and adjusting screws A and B, with clips C, substantially as and for the purpose set forth.

**No. 47,357. Syringe. (Seringue.)**

Walter Freeman Ware, Camden, New Jersey, U.S.A., 2nd November, 1894; 6 years.

*Claim.*—1st. In a syringe, the combination of a barrel, the piston

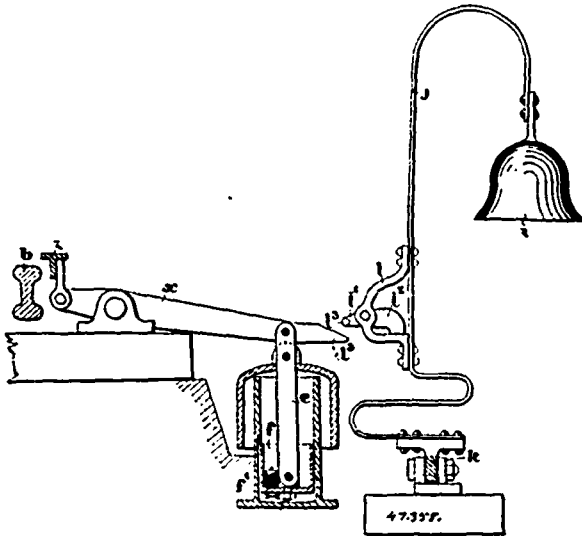
provided with a disc at its lower end, a rubber cup encasing said disc and having an inwardly projecting flange engaging on the inner side of said disc around said piston rod, substantially as described. 2nd. The combination in a syringe, of a barrel, a cap, a nozzle, a



piston rod, a disc on the lower end thereof, and a cup-like body of yielding material having a lower bottom portion extending entirely over the lower surface of the disc, the ring portion surrounding the piston, and the inwardly projecting annular flange portion extending partly over the upper surface of the disc, substantially as specified. 3rd. The combination of a barrel, a cap, a nozzle, a piston in the barrel, and inherently elastic conical stopper D, surrounding the barrel and adjustable longitudinally thereon whereby the syringe may be adapted to bottles of different size, substantially as described.

**No. 47,358. Switch and Signal for Railways.**

(Aiguille et signal de chemin de fer.)



John George Dixon, 98 Norman Road, Birkly, County York England, 2nd November, 1894; 6 years.

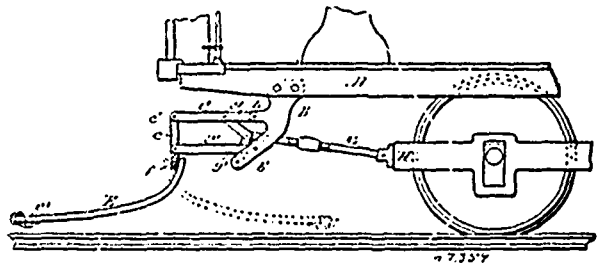
*Claim.*—1st. In connection with self-acting switches, an air cylinder *g*, tappet *c*<sup>1</sup>, terminating in the guiding end *c*<sup>2</sup>, the slide *c*<sup>3</sup>, with adjusting nuts *c*<sup>4</sup> and *c*<sup>5</sup>, operatively connected to the piston rod *e*, and piston *f*, together with the side tube *g*<sup>1</sup>, spring valve *g*<sup>2</sup>, its spring *g*<sup>3</sup>, and the ball valve *h*<sup>1</sup>, the whole operating as described and for the purpose set forth, and as illustrated in the drawing. 2nd. In audible railway signalling apparatus, the combination of a treadle *z*, air cylinder and piston, such as *g* and *f*, and a transverse lever *x*, the whole operating to sound a bell on the passage of a vehicle over the treadle in a running direction, substantially as described and as illustrated in the drawings. 3rd. A treadle *z*, for use in audible railway signalling apparatus, together with a transverse lever *x*, cylinder and piston, such as *g* and *f*, and valve *f*<sup>1</sup>, operating to restrain the return of the treadle to the normal position until the piston *f*, itself returns normal, substantially as described and illustrated. 4th. In audible railway signalling apparatus, an air cylinder such as *g*, and piston such as *f*, operating to prevent the end *d*<sup>2</sup>, of the transverse lever *x*, from performing more than one upward movement for sounding a gong or bell, substantially as described and illustrated. 5th. In audible railway signalling apparatus, the combination with a cylinder and piston, of a treadle *z*, transverse lever *x*, pawl *o*, with projection *o*<sup>2</sup>, and lever *n*, the whole operating to strike a gong (such as *m*) on the passage of a train or vehicle, substantially as described and illustrated in the drawing.

**No. 47,359. Car Fender. (Défense pour chars.)**

Richnell Hall and Edward P. Coleman, both of Lambton, Massachusetts, U.S.A., 2nd November, 1894; 6 years.

*Claim.*—1st. In a fending device, in combination with a car body and its truck, a fender hung below the car and adapted to have a vertical movement, toggle arms, one of which is connected to said fender and the other with the car bottom, and a connecting rod connecting the joint of said toggle arms with the car truck, all as set forth. 2nd. In a fender-lifting mechanism, means whereby a

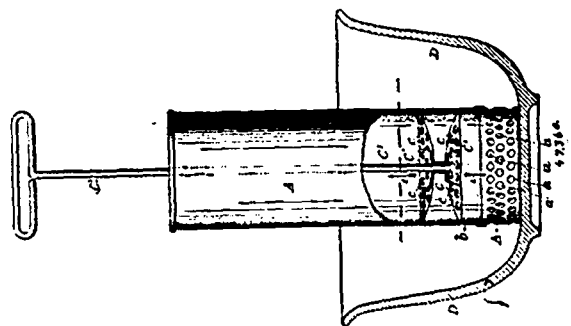
vertical movement is given to said fender, said means consisting of a hanger, two horizontal connecting rods pivoted thereto and a link connecting the ends of said connecting rods, all in combination with a fender hung from said link and means whereby said fender is lifted, as and for the purposes set forth. 3rd. In a fending device,



in combination with a car body and its truck, one or more frames *C*, *C*<sup>1</sup>, *c*, hung below the car platform and adapted to support the fender, a fender hung therefrom and means whereby said frame is oscillated to compensate for the oscillating of the car platform, whereby said fender is caused to move vertically, all as set forth. 4th. In a fending device, in combination, a supporting frame, a fender, a vertical pivot and one or more latches, said pivot connecting said fender and said frame and said latches adapted to prevent said fender from turning about said pivot, all as and for the purpose set forth. 5th. In a car fender mechanism, a fender hung below the platform of the car and connecting rod connecting said fender with the car truck, and adapted to change the position of the fender as the car oscillates on said truck, whereby the position of the fender with relation to the road bed may be changed, as set forth. 6th. In a car fender mechanism, a fender hung upon a horizontal axis, a portion of said fender extending above said axis and adapted to form one member of a stop mechanism, in combination with one or more stops, also located above said axis, and adapted to engage with the upper ends of said fender whereby said fender will be allowed to swing freely forward, but will be prevented from swinging backward, as set forth. 7th. In combination with the forward end of a fender, the spring *c*<sup>2</sup>, shaped and attached thereto as described, a portion of said spring lying in front of the end of said fender to form a cushion, and another portion of said spring lying under the end of said fender and adapted to prevent its contact with the road bed, as set forth. 8th. In a car fender mechanism, a series of independent fingers hung below the car, and provided with mechanism substantially as described, whereby they will be oscillated to compensate for the oscillating of the car upon its truck, as set forth. 9th. In a car fender mechanism, the fender provided with yielding fingers hung below the car in substantially the manner described, whereby it may yield slightly but will be prevented from swinging back on striking an object in front, and will swing freely forward to over ride any obstruction striking it in the rear, as set forth. 10th. In a car fender mechanism, a fender hung below the platform of the car, and a connecting rod connecting said fender with the car truck, and adapted to change the position of said fender as the car oscillates, said connecting rod being adjustable in length, whereby the location of the fender with relation to the road bed may be adjusted, as set forth.

**No. 47,360. Device for Beating Eggs, &c.**

(Vergette de cuisine.)



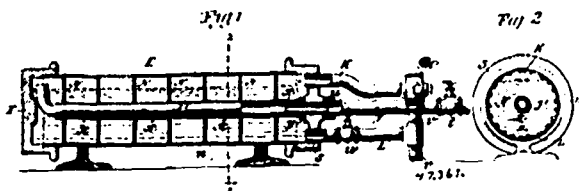
Aaron Jason Saltsman, and Robert Bryce, both of Albany, New York, U.S.A., 2nd November, 1894; 6 years.

*Claim.*—1st. In a device for beating or whipping eggs, cream, &c., the combination of a dasher, comprised by two concavo-convex dash-discs provided each with perforations *c*, *c*, and arranged with their convex sides towards each other, a reciprocating shaft having its lower end position rigidly fixed to the said perforated concavo-convex dash-discs, and its upper end provided with a suitable handle, and the tube *A*, having its lower end open to its full diameter and provided in its lower end portion, neighbouring its lower end edge,



with perforations *a a*, which are relatively between the edges of the said two perforated concavo-convex dash-discs when said dasher is at the bottom of the said tube, substantially as and for the purposes set forth. 2nd. In a device for beating or whipping eggs, cream, &c., the combination with the tube *A*, having its lower open, as described, and provided in the lower end portion of its wall with two or more annular rows of perforations *a a*, of a dasher composed of the two concavo-convex dash-discs *C<sup>1</sup>*, *C<sup>2</sup>*, provided each with perforations *c c*, and arranged and secured with their convex sides towards each other on the lower end of the reciprocating shaft *C<sup>3</sup>*, and at such a distance apart that when the edge of the lower disc is at the bottom edge of the tube *A*, the edge of the upper disc will be slightly above the plane of the upper annular row of perforations *a*, provided in said tube, the whole capable of use with vessel *D*, as described, and removable therefrom at will, substantially as and for the purposes set forth.

**No. 47,361. Steam Radiator. (Radiateur à vapeur.)**



Edward Ethel Gold, New York, State of New York, U.S.A., 2nd November, 1894; 6 years.

*Claim.*—1st. A radiator consisting of a casing, a steam inlet to said casing, an overflow outlet for water of condensation from said casing near the top, a thermostatic trap controlling said outlet, whereby normally there is retained in the casing a body of water to act as a heat-storage medium, and a valved drainage outlet at the bottom, by opening which the casing may be emptied of water. 2nd. A radiator consisting of an approximately horizontal casing, a steam inlet at one end, an overflow outlet for water of condensation near the top, adapted normally to retain in the casing a body of water to act as a heat-storage medium, a steam pipe within the casing leading from said steam inlet beneath said body of water to the opposite end of the casing, and opening to the steam space above the confined body of water, and a valved drainage outlet at the bottom of the casing. 3rd. A radiator consisting of an approximately horizontal casing, a steam inlet at one end, an overflow outlet for water of condensation at the same end near the top, adapted normally to retain in the casing a body of water to act as a heat-storage medium, a steam pipe within the casing leading from said steam inlet beneath the level of said overflow outlet to the opposite end of the casing, whereby when the casing is filled with water to the normal level said steam pipe is immersed in the water and serves to heat it by conduction, and a valved drainage outlet at the bottom of the casing. 4th. A radiator consisting of a casing, a steam inlet, an overflow outlet for water of condensation near the top, adapted normally to retain in the casing a body of water to the level of said outlet, a valved drainage outlet at the bottom, and a series of partitions within said casing sub-dividing the space beneath said level into chambers of reduced size for preventing sudden movements of the contained mass of water, and formed with openings to permit a restricted flow of water past them. 5th. In a radiator, the combination with its casing, of a series of partitions fixed upon a longitudinal rod or tube in alternation with sleeves *x, x*, whereby the partitions *N N* are maintained properly spaced apart. 6th. In a radiator consisting of a casing having a steam pipe *J<sup>1</sup>* passing centrally within it, the combination therewith of a series of partitions *N N*, and sleeves *x x*, arranged in alternation upon said steam pipe. 7th. In a radiator, the combination with a casing, a thimble *u* screwed through a threaded opening in the head of the casing and projecting within the interior of the casing, a steam pipe *J* having a threaded attachment to said thimble, and a steam pipe *J<sup>1</sup>* within the casing having its end slipped over the inwardly projecting portion of said thimble. 8th. In a radiator, the combination with its casing of a series of transverse partitions *N N* having notched edges for affording communication between the several compartments of the radiator closely adjacent to the casing, whereby sediment may be washed through the casing and expelled.

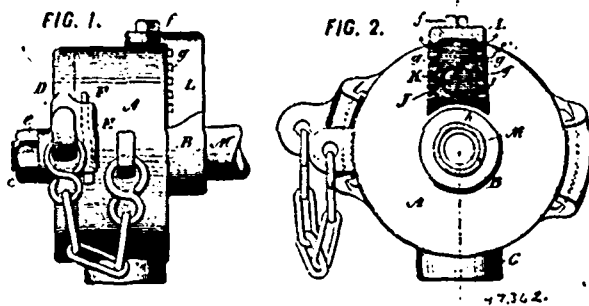
**No. 47,362. Thermostatic Steam Traps.**

(*Trappe de vapeur thermostatique.*)

Edward Ethel Gold, New York, State of New York, U.S.A., 2nd November, 1894; 6 years.

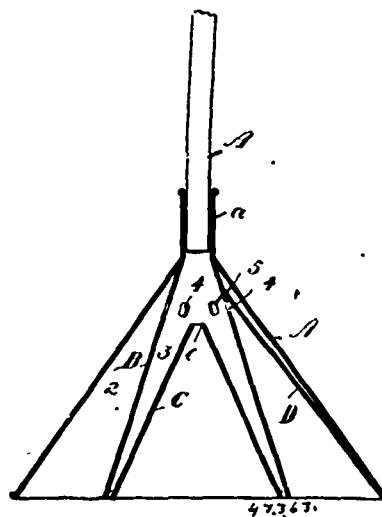
*Claim.*—1st. A steam trap comprising an inclosing casing having inlet and outlet openings for the condensed water, and a thermo-expansion vessel inclosed in said casing, containing a volatile liquid, the said casing constructed with opposite openings at top and bottom for admitting of an upward circulation of air through it around said vessel, so that the air heated by radiation within said casing may escape upwardly and its place be taken by cold air to hasten the cooling of said vessel and thereby accelerate the opening of the trap.

2nd. A steam trap comprising an inclosing casing having inlet and outlet openings for the condensed water, and a thermo-expansion vessel inclosed in said casing, containing a volatile liquid, the said casing constructed with opposite openings for promoting a circula-



tion of air through it around said vessel to hasten the cooling thereof, combined with a shield over such air opening adapted to intercept any hot water or steam that may issue therefrom, and direct it downward or laterally and break its force, that it may do no damage. 3rd. A steam trap comprising a casing *A*, having inlet *B*, outlet *C*, and air-opening *J*, and a thermo-expansion vessel *G* inclosed in said casing, combined with a shield *L* over said air-opening, having lateral and bottom openings. 4th. A steam trap comprising a casing *A*, having inlet *B*, outlet *C*, and air opening *J*, and a thermo-expansion vessel *G* inclosed in said casing, combined with a strainer *K* over said air-opening, and a shield *L* fastened to the casing over the strainer to hold the latter in place, and having lateral notches *g, g*, to form openings for escape of air or hot water.

**No. 47,363. Clothes Washer. (Machine à laver.)**



William Henry Patterson, Hooper, Nebraska, U.S.A., 2nd November, 1894; 6 years.

*Claim.*—In an improved clothes washer, the combination of a funnel-shaped shell *A*, with neck or socket *a*, a cone or funnel *B* within the said shell of the same height, but smaller diameter at the base but of the same diameter at the top and connected to the shell *A* at the top, an inner cone or funnel *C* of nearly the same diameter at the base as the cone *B* and intermittently connected to it at the base, but of less height and having a small opening at the top and a series of semi-cones or pockets *D*, having their edges secured upon the intermediate cone *B* and communicating with the interior of the cone *B* by perforations *4* in said cone at the top of the pocket and perforations *5* in said cone *B* between said pockets and near the top thereof, substantially as set forth.

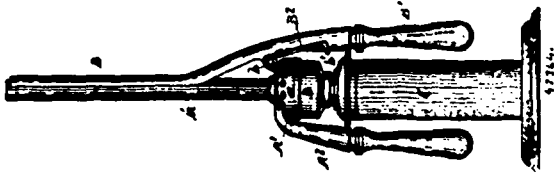
**No. 47,364. Curling Iron and Heater.**

(*Fer à friser et chauffeur.*)

Robert H. Brown, assignee of Josephus C. Chambers, both of Detroit, Michigan, U.S.A., 2nd November, 1894; 6 years.

*Claim.*—1st. The curling iron and heater herein described having in combination a heater, a tubular barrel removably engaged upon said heater, and a spring clamp connected with said barrel, said barrel and clamp each provided with an independent handle separable from the heater whereby the barrel and clamp and their operating handles may be removed from the heater for use when the barrel is heated, substantially as set forth. 2nd. The curling iron and

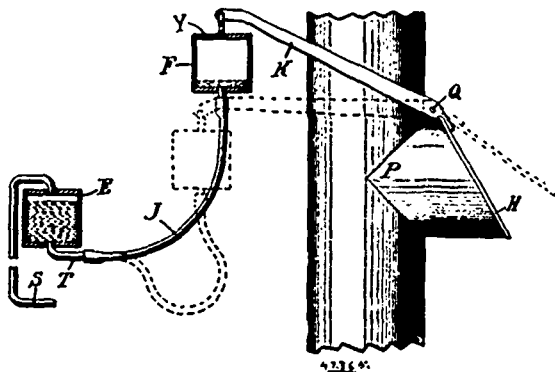
heater herein described, having in combination a heater, a tubular barrel provided with an open housing at its lower end removably engaged with the top of the heater, and a spring clamp connected with the barrel, said barrel and clamp each provided with an inde-



pendent operating handle separable from the heater whereby the barrel and clamp and their operating handles may be removed from the heater for use when the barrel is heated, substantially as set forth. 3rd. The curling iron and heater herein described, having in combination a tubular barrel provided with an open housing at its base, an operating handle permanently attached to said housing, a spring clamp connected with said housing provided with an operating handle, a heater provided with a removable supporting collar D to engage said housing at the base of the barrel, said housing having a removable engagement with said collar whereby the barrel and clamp and their operating handles may be removed from the heater for use when the barrel is heated, substantially as set forth. 4th. The curling iron and heater herein described, consisting of a heater, a supporting collar D removably engaged therewith, a tubular barrel provided with a housing removably engaged with said collar, and a spring clamp connected with said barrel, the interior of said collar and housing forming a combustion chamber, said barrel and said clamp each formed with an independent handle whereby the barrel and clamp and their operating handles may be removed from the heater for use when the barrel is heated, substantially as set forth. 5th. In combination a tubular barrel provided with an open housing at its base and with an operating handle, a spring clamp engaged therewith also provided with an operating handle, and a supporting collar D having a removable engagement with said housing, substantially as set forth. 6th. In combination a tubular barrel provided with an open housing at its base, a spring clamp connected therewith, a lamp having a burner provided with a burner tip and surrounding neck, and a supporting collar removably engaged with said neck and housing, said barrel and clamp each provided with a handle independent of the lamp whereby the barrel and clamp and their operating handles may be removed from the heater for use when the barrel is heated, substantially as set forth.

**No. 47,365. Temperature Regulator.**

(Régulateur de température.)



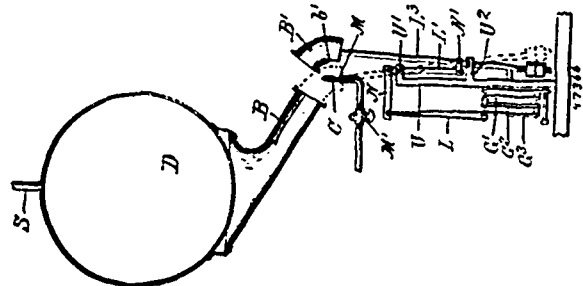
Thomas O. Perry, Chicago, Illinois, U.S.A., 2nd November, 1894; 6 years.

**Claim.**—1st. In a temperature regulator, in combination with a regulating valve or damper, an element adapted to be expanded and contracted by changes of temperature and connections therefrom which operate the valve or damper, a continuously operating heating device, and means for directing its heat toward or away from the expanding and contracting element, a thermostat, and mechanism by which it controls the relative position of the heating device and the heat-directing device, substantially as set forth. 2nd. In a temperature regulator, the regulating valve or damper, the chamber D, and a device to heat it and mechanism by which the expansion and contraction of the fluid contents of the chamber operates the damper, in combination with a device to direct the heat from the heating device toward or away from that chamber, mechanism which controls the relative position of the heating and heat directing devices, and a thermostat connected to and operating such mechanism, substantially as set forth. 3rd. In combination, substantially as set forth, the chamber D, containing air or other fluid, a continuously operating heating device to which such chamber is exposed, a shield adapted to be interposed between the heating devices and the chamber, a thermostat and connections there-

from adapted to control the relative positions of the heating devices and the shield, the valve or damper whose opening and closing affects the temperature of the room which contains the thermostat, and mechanism by which the expansion and contraction of the contents of the chamber operate the damper. 4th. In a temperature regulator, in combination with a chamber D, containing air or other fluid, a valve or damper whose opening or closing affects the temperature of the room to be regulated, connections by which the expansion and contraction of the fluid in the chamber operates the damper, a heating device to which the chamber may be exposed, a movable shield adapted to be interposed between the chamber and the heating device, a thermostat located in the room whose temperature is to be regulated, and connections therefrom to actuate the shield as the thermostat responds to changes in the temperature, substantially as set forth. 5th. In a temperature regulator of the general character described, the shield A, for the air chamber consisting of a plurality of discs located one above the other with intervals between them, substantially as set forth. 6th. In a temperature regulator of the character described, in combination with the chamber D, a fixed shield and a movable shield located below the fixed shield, and adapted to be shifted to and from a position vertically below the line of said apertures, substantially as set forth. 7th. In combination with the chamber D, the plurality of discs or plates B B B, constituting a shield below the chamber, a tubular hub B', which connects said shield and constitutes a flue leading through them, a heating device located in line vertically below said hub, and the movable shield A, adapted to be interposed vertically above the flue, and mechanism for moving it from that position, the thermostat, and connections by which it operates the shield A, substantially as set forth. 8th. In a temperature regulator of the general character described, the movable shield, the vertical stem upon whose upper end it is carried, having a counterpoise at the lower end whereby it tends to remain vertical, the bracket upon which said vertical arm is fulcrumed, the lever being provided with a rolling pivotal support upon said bracket, substantially as set forth. 9th. In a temperature regulator, a thermostat consisting of a plurality of bars composed each of two elements having different coefficients of contraction and expansion, the first of said bars being rigidly secured at one end and succeeding bars being secured each at the otherwise free end of the preceding bar and extending thence back toward the fixed end, consecutive bars being placed with their respective elements in opposite order, substantially as set forth. 10th. In a temperature regulator of the general character described, in combination with the chamber D, the fixed shield B, and the movable shield A, the heating device located lower than the movable shield, the lever arm, which carries said movable shield, and the thermostat which actuates it, consisting of a plurality of compound bars G<sup>1</sup>, G<sup>2</sup> and G<sup>3</sup>, consecutive bars having their elements in opposite order, each bar having one end made rigid with the otherwise free end of the preceding bar, multiplying lever connections from the last bar to the lever which carries the movable shield, substantially as set forth. 11th. In a thermostat, in combination with the two elements, having different coefficients of expansion and contraction secured face to face and to a fixed support at one end, an arm or finger extending rigidly from the free end in the direction of the length, substantially as set forth. 12th. In a thermostat, in combination with a compound plate comprising the two elements, having different coefficients of expansion and contraction, secured together and to a fixed support at one end, a rigid bar attached across the free end, and a lever arm or finger extending rigidly from said free end in the direction of the length, substantially as set forth. 13th. In a temperature regulator, in combination with the valve or damper, the air chamber and the mechanism by which the expansion and contraction of its contents operates the valve or damper, a tube whose upper end stands underneath the air chamber, a heating device located at the lower end of said tube, and a shield adapted to be interposed between the same and the tube, the thermostat, and connections therefrom to operate the shield, substantially as set forth.

**No. 47,366. Temperature Regulator.**

(Régulateur de température.)



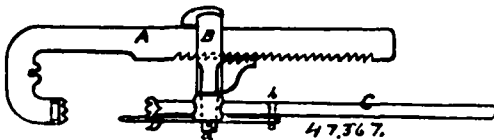
Thomas O. Perry, Chicago, Illinois, U.S.A., 2nd November, 1894; 6 years.

**Claim.**—1st. In a temperature regulator, in combination with the regulating valve or damper, a contracting and expanding element

and mechanism by which its expansion and contraction operates the damper, a continuously operating heating device, and a guide which conducts the heat current thereof to the expanding and contracting device, mechanism by which the relative positions of the heating device and the heat receiving mouth of the guide are controlled, and a thermostat connected to and operating such mechanism, substantially as set forth. 2nd. In a temperature regulator, the chamber D, the valve or damper, and connections by which the expansion and contraction of the contents of the chamber operates the damper, a heating device and a guide to direct its heat against the chamber, mechanism by which the relative positions of the heating device and the guide are controlled, and a thermostat connected to and operating said mechanism, substantially as set forth. 3rd. In a temperature regulator of the general character described, the expanding and contracting element, the heating device, the guide to direct its heat against the expanding and contracting element, the receiving mouth of the guide being movable, in combination with mechanism adapted to move it toward and from the heating device, a thermostat, and connections by which it actuates said mechanism, substantially as set forth. 4th. In a temperature regulator of the general character described, a chamber D, a heating device, in combination with a duct to direct its heat against the chamber, having its receiving mouth notched at one side, and mechanism which controls the relative position of the heating device and the duct, substantially as set forth.

**No. 47,367. Wire Fence Stretcher.**

(Tendeur de fil métallique.)

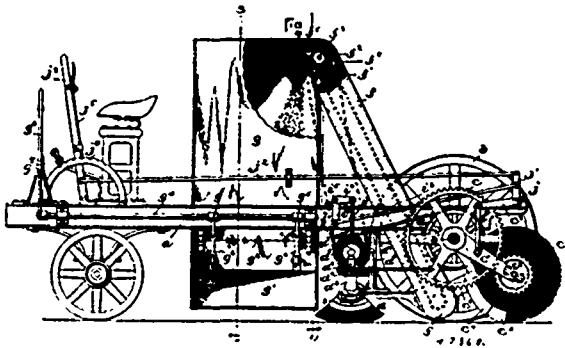


Télesphore Laverdière, Village de Beaupré, Comté de Montmorency, Province de Québec, Canada, 2 novembre 1894; 6 ans

*Résumé.*—Un appareil pour tendre les fils métalliques composé d'un tige principale A, dentée telle que montrée recourbée à l'une de ses extrémités, et ayant une tête mobile B, munie d'un cliquet et d'un levier C, portant une patte pointée D, le tout tel que décrit et pour les fins indiquées.

**No. 47,368. Street Sweeping Machine.**

(Balayeur mécanique pour rues.)



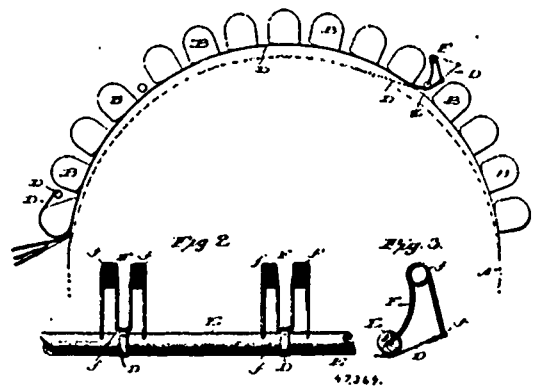
Charles Milton Kimball, Toledo, Ohio, U.S.A., 3rd November, 1894; 6 years.

*Claim.*—1st. In a street-sweeping machine, the combination of ground-wheels, a brush in gear with said wheels and vertically movable, a clutch controlling connection between the ground-wheels and the brush, and a handle for simultaneously slipping the clutch and raising or lowering the brush. 2nd. In a street-sweeping machine, the combination of ground-wheels, a main brush of cylindrical form in gear with said ground-wheels and in bearings on vertically movable supports, side-brushes of disc form also in gear with the said ground-wheels and vertically movable, a brush-controlling handle, and connections between the same and both the main brush and the side-brushes, whereby they may be raised or lowered. 3rd. In a street-sweeping machine, the combination of ground-wheels, a main brush of cylindrical form in gear with said ground-wheels and in bearings on vertically movable supports, side-brushes of disc form also in gear with the said ground-wheels and vertically movable, a clutch-controlling connection between the ground-wheels and the brushes, and a handle operatively connected with the clutch and with the brushes, whereby it operates to slip the clutch and simultaneously raise or lower the brushes. 4th. In a street-sweeping machine, side-brushes of disc form on sliding spindles, levers engaging said spindles and operating to slide them in their bearings, means for working the said levers, and operative connections between the spindles and ground-wheels for revolving

the brushes. 5th. In a street-sweeping machine, the combination of a cross-beam having oblique bearings at its ends, sliding spindles extending through said bearings and carrying brushes at their lower ends, bevel-gears splined on their spindles, a cross-shaft carrying bevel-gears in mesh with those on the spindles, suitable driving connections between said shaft and ground-wheels, and means for sliding the spindles to raise or lower the brushes. 6th. In a street-sweeping machine, the combination of a supporting frame, ground-wheels on an axle in bearings on said frame, a gear-wheel and a sprocket-wheel fixed together and both loose on the said axle, a clutch splined to the axle and adapted to rotatively connect the same with the gear and sprocket-wheels, a pair of arms pivoted on the axle, a cylindrical brush in bearings on said arms and carrying a gear-wheel in mesh with that on the axle, a cross-shaft carrying a sprocket-wheel connected by a chain with that on the axle, said shaft also carrying bevel-gears, side-brushes of disc-like form, having sliding spindles with bevel-gears splined to them and in mesh with those on the said cross-shaft, a rock-shaft, suitable connections between the same and the clutch for slipping the latter, suitable connections between the said rock-shaft and the arms supporting the cylindrical brush, whereby the latter may be raised and lowered, suitable connections between said rock-shaft and the sliding spindles of the side-brushes for raising and lowering the latter, and a hand-lever operatively connected with the rock-shaft.

**No. 47,369. Tape for Laundry Machines.**

(Ruban pour machines de buanderie.)



Allen Conkling, Chicago, Illinois, and Thomas S. Wiles, Albany, New York, both in the U.S.A., 3rd November, 1894; 6 years.

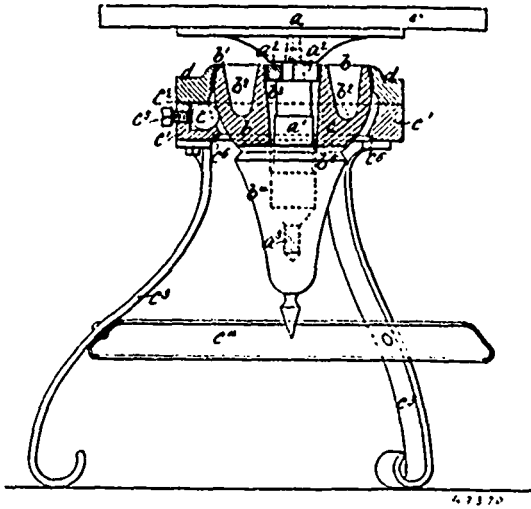
*Claim.*—1st. A metallic guide and feed tape for laundry machinery, as set forth. 2nd. A guide and feed tape of a non-corrosive metal, as set forth. 3rd. A metallic feed and guide tape, combined with a take-up connected therewith, as set forth. 4th. A guide and feed tape for the purpose described formed of phosphor bronze, as set forth. 5th. The combination with a tape, of a yielding take-up connected therewith, as set forth. 6th. The combination with a tape, of a yielding take-up having a loop connected with one end of said tape, as set forth. 7th. The combination with a tape, of a rod at right angles to the length thereof, and beneath which the tape passes and a yielding take-up mounted on said rod and connected with the tape, as set forth.

**No. 47,370. Method of Mounting Chair Bottoms, Table Tops, &c. (Méthode de former des supports de chaises, tables, etc.)**

Wilhelm Droser, London, England, 3rd November, 1894; 6 years.

*Claim.*—1st. The method of mounting chair bottoms, table tops and the like so as to cause them to maintain a horizontal or approximately horizontal position irrespective, within the required limits, of the inclination of the floor on which their leg supporting frame rests, consisting in supporting the chair bottom or other part a, in the line of its centre of gravity by a spherical bearing b, which is supported in a plane adjacent to its horizontal plane of greatest area by ball bearings c, contained in a rigid annular frame c', supported by a leg-framing c'', and in causing the stable equilibrium of the part a, so supported to be maintained by the application of its own weight to the bearing b, or a depending extension thereof at a point below the plane of support of such bearing, as set forth. 2nd. In combination, a chair bottom, table top or other sitting or supporting part a, of an article of furniture or the like, a spherical bearing b, truncated as at b', hollowed as at b'', provided with a depending extension or gravity device b'', and recessed as at b'', in the line of its centre of gravity to a point below its plane of support, a standard c', connecting the part a, with the bearing b, in the line of its centre of gravity and below its plane of support, ball bearings c, supporting the bearing b, in a plane adjacent to its horizontal plane of greatest area, a rigid annular frame c', supporting the ball bearings, a

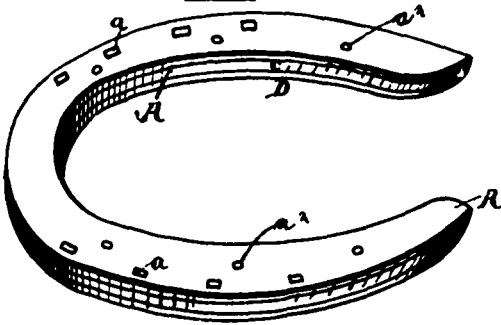
depending leg-framing  $c^2$ , supporting the frame  $c^1$ , and covering  $d$ , locating the ball bearings in the frame  $c^1$ , and connecting the



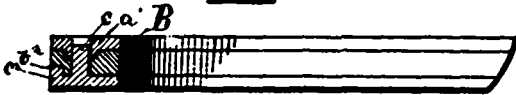
bearing  $b$ , to the framing  $c^1$ ,  $c^2$ , so as to permit of the lifting and removal of the whole upon lifting the top supported part  $a$ , as set forth.

**No. 47,371. Horse-shoe. (Fer à cheval.)**

**Fig. 1.**



**Fig. 2.**



47371

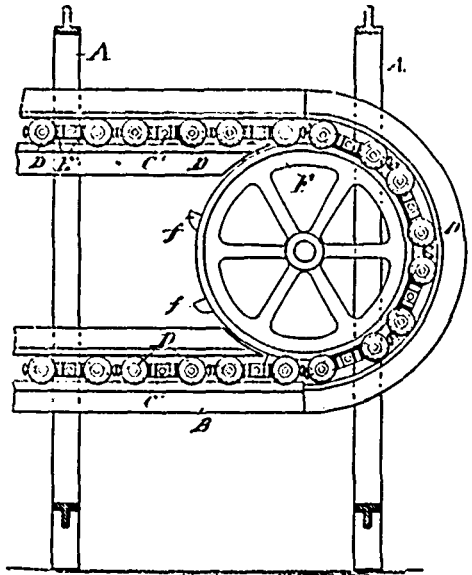
Theodore N. Jones, Greeley, Colorado, U.S.A., 3rd November, 1894; 6 years.

**Claim.**—1st. A horse-shoe made of three sections B, C, and D, the two outer sections being of metal, or other hard substance, and the inner or middle one of elastic material, the first section B being secured to the hoof by nails, and the other two sections C and D, being held to sections B by screws passing through and heads countersunk in section D, through lugs or bosses  $c^1$ , on through holes  $b^1$ , in C, and terminating in corresponding holes threaded in B, as shown and described. 2nd. The thread section D, having the pins  $c$ , at toe and heels, in combination with the section C, having holes  $b$ , and section B, having lugs or bosses  $a^1$ , with holes at centre through which said pins pass through and into said holes in section B to prevent any forward, backward or sidewise displacement of the thread D, as described. 3rd. The section B, having the lugs  $a^1$ , with holes at their centres, in combination with the section C, having holes  $b$  large enough to receive said lugs, and the section D, having the pins  $c$ , passing through the holes  $b$ , and into the holes at centre of lugs  $a^1$ , as shown and described. 4th. The thread section D, having the lugs  $C^1$ , the hoof action B, having holes  $a^2$ , whose interior walls are threaded and which register with the lug, the rubber section C, having holes  $b^1$ , and the connecting screws  $c^2$ , whose heads are countersunk in the section D, as shown and described. 5th. The thread section D, having the reinforcement toe  $c^2$ , in combination with the section C, having a corresponding cavity  $b^2$ , as above described. 6th. The section B, having threaded holes  $a^2$ , in combination with sections C and D, having corresponding holes for

screws  $c^2$  to pass through, countersunk in D, for heads and terminating B, thereby connecting the complete show as set forth and described.

**No. 47,372. Conveying Apparatus.**

(Appareil de transport.)



47372

James L. Board, Chicago, Illinois, U.S.A., 3rd November, 1894; 6 years.

**Claim.**—1st. The combination of an endless track of a series of carriers travelling on said track and substantially filling the space on said track whereby one carrier is closely adjacent to, or in contact with the carrier next adjacent, but entirely disconnected from the latter, and means for engaging one or more of the carriers to move it through a pre-scribed space, thereby moving all the carriers in advance by pushing them, substantially as described. 2nd. The combination, with an endless track of a series of carriers travelling on said track and substantially filling the space thereon, said carriers entirely disconnected from each other, and a sprocket-wheel located at one point on said track to engage one or more of the carriers and move it, thereby pushing the rest of the train, substantially as described. 3rd. The combination, with an endless track formed of two sections one above the other, of a series of carriers travelling upon said track and capable only of longitudinal motion, each of said carriers being adjacent to but entirely disconnected from the carriers next adjacent, and means for pushing the line of carriers around the track, substantially as described.

**No. 47,373. Cutter Bar for Mowing Machines.**

(Souche de lames pour faucheuses.)

**Fig. 1.**

**Fig. 2.**



Emmett I. Peaslee, Orange, Vermont, U.S.A., 3rd November, 1894; 6 years.

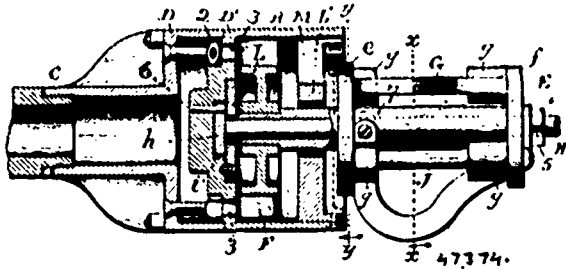
**Claim.**—1st. In a cutter bar of a mowing machine, knives C attached to bar D by posts  $d$  passing through them on which they swing when in operation, substantially as and for the purpose hereinbefore set forth. 2nd. In mowing machines, the combination of the portable knives C operated by the bar B and pivotally attached thereto with the bar D attached to hold said knives in position by the use of a thumb-screw, and adjusted to allow the proper lay of the knives by set screws  $c$ ,  $c$ , substantially as and for the purpose hereinbefore set forth.

**No. 47,374. Boiler Flue Cleaner. (Nettoyeur de tubes.)**

Cyrus S. Dean and John W. Dean, both of Fort Erie, Ontario, Canada, 3rd November, 1894; 6 years.

**Claim.**—1st. A flue cleaner comprising a casing, a propeller located within the casing and protected thereby, and a scraper exterior to

the casing and driven by the propeller, substantially as specified. 2nd. A flue cleaner comprising a cylindrical casing open at the front and closed at the inner or rear end by a hollow head, a propeller located within the casing and adapted to be driven by jets escaping



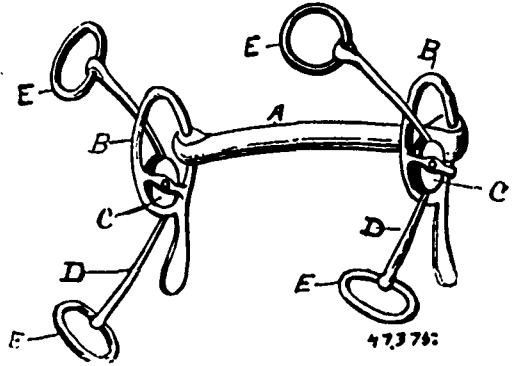
from the said chamber, and a scraper exterior to the casing and having connection with and operated by the said propeller, substantially as described. 3rd. A flue cleaner comprising a casing open at the front and closed at the rear end by a hollow head having oblique outlets in the inner wall, a propeller located within the casing, and a scraper exterior to the casing and operated by the propeller, substantially as set forth. 4th. A flue cleaner comprising a casing open at the front and closed at the rear end by a hollow head having oblique outlets in the inner wall, a propeller located within the casing, and having its buckets standing at opposite angle to the oblique outlets, and a scraper exterior to the casing and operated by the propeller, substantially as set forth. 5th. A flue cleaner comprising a casing open at the front and closed at the rear end by a hollow head having oblique and straight outlets in its inner wall, a propeller located within the casing and driven by the jets issuing from the oblique outlets, and a scraper exterior to the casing and operated by the propeller, the jets issuing from the straight outlets being designed to create a blast in the tube to remove loose particles, substantially as specified. 6th. A flue cleaner comprising a casing open at the front and closed at the rear end by a hollow head having outlets in its inner wall, a spindle connected with the said head by a universal joint, a hollow shaft mounted on the spindle, a propeller attached to the hollow shaft, and a series of scraping blades tangentially disposed with respect to the said shaft and pivotally supported at their inner edges, substantially as set forth. 7th. A flue cleaner comprising a casing open at the front and closed at the rear end by a hollow head having outlets in its inner wall, a spindle connected with the said head by a universal joint, a hollow shaft mounted on the spindle, a propeller and a scraper carried by said hollow shaft, substantially as set forth. 8th. A flue cleaner comprising a casing open at the front and closed at the rear end by a hollow head having outlets in its inner wall, a spindle connected with the said head by a universal joint, a hollow shaft mounted on the spindle, a propeller attached to the hollow shaft, and a series of scraping blades disposed about the said shaft and adapted to have an outward movement, substantially as and for the purpose described. 9th. In a flue cleaner, the combination with a rotary shaft having supports located a short distance apart thereon, of scraper blades tangentially disposed with respect to the said shaft and pivotally connected at their inner edges with the said supports, substantially as specified. 10th. In a flue cleaner, the combination with a rotary shaft, of blades tangentially disposed with respect to the said shaft, and having a hinged or pivotal connection therewith, and stops to limit the swinging movement of the said blades, substantially as described. 11th. In a flue cleaner, the combination with a rotary shaft, of blades tangentially disposed with respect to the said shaft, and having a hinge or pivotal connection therewith, a stop integral with the blade to limit its movement in one direction, and an adjustable stop supported on a lug projecting from the said blade, substantially as specified.

**No. 47,375. Bridle Bit. (Mors de bride.)**

Iran Z. Merriam, Whitewater, Wisconsin, U.S.A., 3rd November, 1894; 6 years.

*Claim.*—1st. A driving bit comprising a mouth bar, cheek rings secured thereto, a loop or pulley attached to the cheek rings and an independent link having a stop at either end, said link adapted to pass through the loop or pulley, and adapted to be attached at one end to the check-rein and at the other end to the driving reins, substantially as set forth. 2nd. A driving bit comprising a mouth bar, cheek rings secured thereto, a loop or pulley attached to the cheek rings, and an independent flexible link having a stop at either end, said link adapted to pass through the loop or pulley, and adapted to be attached at one end to the check-rein and at the other end to the driving reins, substantially as and for the purposes set forth. 3rd. A driving bit comprising a mouth bar, cheek rings secured thereto, a loop or pulley attached to the cheek rings, and an independent metallic link, having a stop at either end, said link adapted to pass through the loop or pulley, and adapted to be attached at one end to the check-rein and at the other end to the driving reins, substantially as and for the purposes set forth. 4th. A driving bit comprising a mouth bar, cheek rings secured thereto, a loop or pulley attached to the cheek rings, and an independent

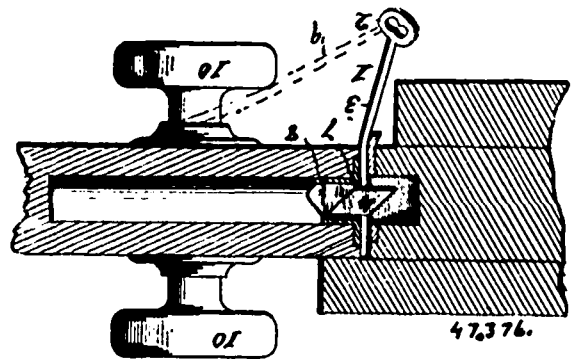
flexible curved metallic link having a stop at either end, said link adapted to pass through the loop or pulley and adapted to be attached at one end to the check-rein and at the other to the driving reins,



substantially as and for the purposes set forth. 5th. A driving bit comprising a mouth bar and cheek ring, having loops extending at an angle to the cheek rings, the passage through said links being vertical and independent links having a stop at either end, said links adapted to pass through the loops and to be attached at one end to the check-rein and at the other ends to the driving reins, substantially as described.

**No. 47,376. Lock and Key Combined.**

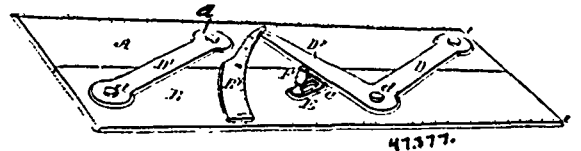
(Serrure et clef combinées.)



Amos Bassette Buckland, Rochester, New York, U.S.A., 3rd November, 1894; 6 years.

*Claim.*—The combination with a door provided with a latch bolt opening, and a latch bolt adapted to operate therein, and having an inclined face 8, and a door jamb provided with a triangular shaped recess at a point to adapt said recess to lie opposite the opening in the door when the latter is closed, of a lock or key 1, comprising the shank 3 bent laterally at a point beyond the face of the door as described, and a diamond or lozenge shaped head or bit 4, the face 5 whereof is adapted to lie against the face 6 or notch in the door jamb, and the face 7 against the inclined face 8 of the latch bolt, said head or bit of the device 1 being arranged to one side of the line of the shank, for the purpose specified.

**No. 47,377. Parallel Rule. (Règle parallèle.)**



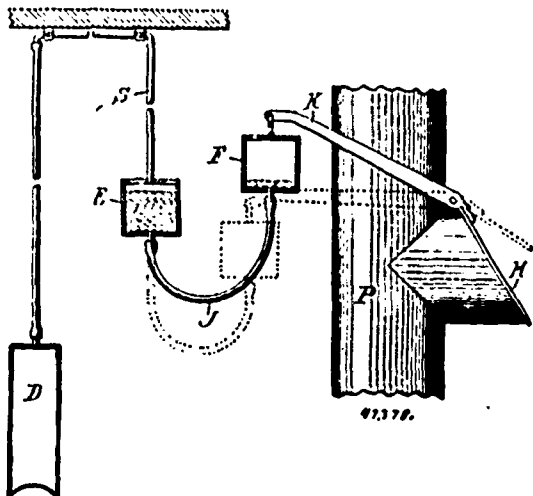
Charles Henry Beeler, jr., Philadelphia, Pennsylvania U.S.A., 3rd November, 1894; 6 years.

*Claim.*—1st. The combination in a parallel rule, of the two members, links connecting the two members, one link having an arm, a segment on one of said members projecting over the other member and graduated, substantially as described. 2nd. The combination in a parallel rule, of the two members A and B, links connecting the two members together, an arm on one of said links, a segment fixed on one member and overhanging the other, with an adjustable stop for limiting the movement of the arms, substantially as described. 3rd. The combination in a parallel rule, of the two members A and B, links D, D', pivots d for said links, an arm D<sup>2</sup> extending from the base of the link D at an angle to said link and having a bevelled end, a graduated segment secured to or forming

part of the portion B, said segment overlapping the portion A and having an undercut edge adapted to receive the bevelled end of the arm D, substantially as described.

No. 47,378. Temperature Regulator.

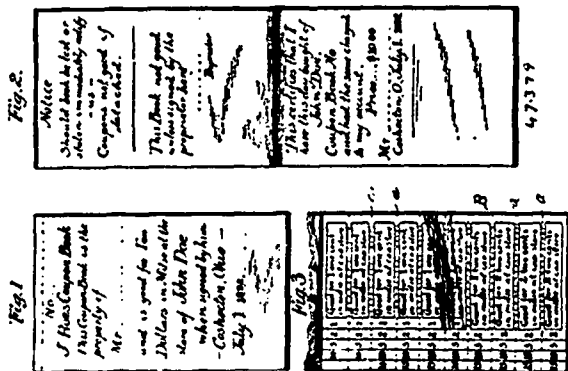
(Régulateur de température.)



Thomas O. Perry, Chicago, Illinois, U.S.A., 3rd November, 1894; 6 years.

Claim.—1st. In a temperature regulator, in combination with a regulating valve or damper, an expanding and contracting element and connections therefrom by which its expansion and contraction may operate the damper, a constant heating device, a thermostatic device exposed to the temperature to be regulated, and mechanism by which it controls the relative position of the expanding and contracting element and the constant heating device, substantially as set forth. 2nd. In a temperature regulator, in combination with the regulating valve or damper, an expanding and contracting element, and connections therefrom by which its expansion and contraction may operate the damper, a constant heating device, a thermostatic device exposed to the temperature to be regulated, and connections therefrom to the constant heating device adapted to move the latter to and from a position in which a heat is directed against the expanding and contracting element, substantially as set forth. 3rd. In a temperature regulator, in combination with the regulating valve or damper, an expanding and contracting element and connections therefrom by which its expansion and contraction may operate the damper, a constant heating device, a thermostatic device exposed to the temperature to be regulated, and mechanism by which it controls the relative position of the expanding and contracting element and the constant heating device, the expanding and contracting element being concave downward toward the heating device, substantially as set forth.

No. 47,379. Coupon Book. (Livre de coupon.)



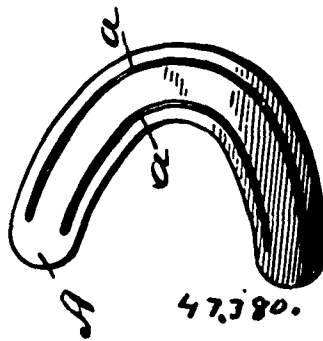
Jesse P. Forbes, Coshocton, Ohio, U.S.A., 3rd November, 1894; 6 years.

Claim.—1st. A coupon book in which the coupons are receivable at a given place for an equivalent value in merchandise, composed of a series of strips of different denominate value bound in book form and arranged to expose a margin of a strip corresponding to a denominate value, each strip being composed of a series of coupons separated by lines of perforations and having a character or numeral on the exposed margin corresponding with and indicating the face

value of the said coupon, substantially as shown and described. 2nd. A coupon book in which the coupons are receivable at a given place for an equivalent value in merchandise, composed of a series of strips of different denominate values bound in book form, the said strips being of different widths and arranged to expose a margin at one edge and composed of a number of coupons separated by lines of perforations, and having a character or numeral on the exposed margin opposite and corresponding with the face value of the coupon to indicate the value of the same, and having the total value of the coupons, on each strip placed at the end thereof, substantially as described.

No. 47,380. Method of Making Dental Suction Plates.

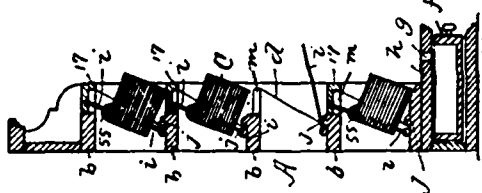
(Méthode de faire des plaques dentaires d'aspiration.)



Joseph Spyer, Mexico, Republic of Mexico, 3rd November, 1894; 6 years.

Claim. 1st. The method herein described which consists in making a groove or grooves in the plaster model, filling said grooves or groove with rubber, and then vulcanizing the plate upon said model to join the said filling in the grooves, substantially as shown and described. 2nd. The method herein described which consists in placing a slotted form plate upon the plaster model, making grooves in said model by passing an instrument around in the slots in the form or plate filling the grooves so made with rubber, packing the case and uniting the plate and rubber filling, substantially as described. 3rd. The form herein described consisting of a thin metallic sheet of the desired shape and having slots or openings extending from end to end near its edges, substantially as described.

No. 47,381. Method of and Apparatus for Sales Checking. (Méthode et appareil pour vérifier les ventes.)



Albert Nelson Southwick, Boston, and James Levin Hall, Kingston, both in Massachusetts, U.S.A., 3rd November, 1894; 6 years.

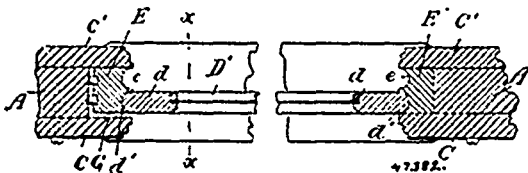
Claim.—1st. The herein described method of checking sales which comprises the employment of a check having a stub and one or more detachable coupons thereon, said stub and coupons being numbered alike and bearing a value imprint of the same denomination, detachably locking the stub in a support, imprinting a number indicating the salesman on said stub or one of the said coupons, and detaching a coupon for delivery by the salesman to the customer, substantially as described. 2nd. The herein described system of sales checking consisting of the employment of a check comprising a stub and two detachable coupons, said stub and coupons respectively bearing the same number and value imprint, locking the stub in a holder with the coupons exposed, separating the coupons from the stub and from each other, imprinting one of the said coupons with a mark indicating the salesman and depositing the same in a receptacle and delivering the companion coupon to the salesman for delivering to the customer, substantially as described. 3rd. In a sales checking apparatus a case or support provided with a series of pins or wires in combination with a series of checks comprising a stub provided with a detachable coupon, said stub and coupons being numbered alike, and said checks being numbered consecutively, openings in the stubs of said checks for receiving said wires and mechanism for locking the wires in said case whereby the stub may be secured therein, substantially as described. 4th. The combination, with the case A, provided with the wires 1, arranged substantially as specified, of the checks C mounted on the said wires and mechanism for locking the wires in said case. 5th. The sales checks C, comprising the stub 50, provided with the opening 54, and the



coupons 51 and 52, detachably connected with said stub, the stubs and coupons being numbered alike and bearing like value imprints, and one of the said coupons being provided with a space for receiving a salesman mark or number. 6th. The sales check C, comprising the stub 50, and detachable coupons 51 and 52; said stub being provided with an opening 54, whereby it may be locked in a receptacle, the stub and coupons being provided with like numbers and value imprint and one of said coupons being provided with a space denominated waiter N<sup>o</sup>. substantially as and for the purpose set forth. 7th. The case A, provided with the drawer f, shelves b, and partitions d, in combination with the wires i hinged to said shelves between said partition and mechanism for locking the free ends of said wires, substantially as described. 8th. The case A, provided with the shelves b, in combination with the wires i, hinged by an end to said shelves, the lock bars B, for receiving the free ends of said wires, and mechanism for locking said bars in the case, substantially as described. 9th. The case A, provided with the drawer or receptacle f, in its base, and a slot opening into said receptacle, a series of wires secured in said case and adapted to receive sale checks and mechanism for covering or locking the open ends of said wires to prevent the removal of the checks therefrom, substantially as described. 10th. The case A, provided with the shelves b, in combination with the pivoted wires i, on said shelves, the checks C, detachably mounted on said wires and lock bars, as B for securing the free ends of the wires, substantially as described. 11th. The case A, provided with the slotted shelves b, a receptacle in its base and a slot opening in said receptacle in combination with the wires i, pivoted to said shelves, the curved lock bars B for receiving the free ends of said wires, the hinged side-piece t and lock for securing said bars, substantially as described. 12th. A separable sale check and stub in combination with a locking rack or similar device for holding said stub, substantially as described. 13th. A sale check having a separable stub, in combination with mechanism for locking said stub, substantially as set forth. 14th. In a device of the character described, a rack provided with a rod, a series of sale checks having their stubs fitted to slide on said rod, and a body detachable from said stub, substantially as set forth.

#### No. 47,382. Frame for Window Sashes, &c.

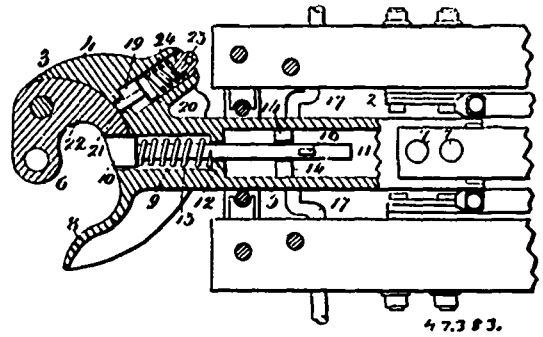
(Cadre pour croisées de fenêtre, etc.)



Peter McKenzie, Ottawa, Ontario, Canada, 3rd November, 1894; 6 years.

*Claim.*—1st. In frames and casing for sashes and blinds, the combination of two posts or casing pieces forming two parallel sides of the opening of architraves or stops forming a groove channel or recess with each, casing pieces E and E', fitting in said recesses or grooves, and having their opposing faces provided with grooves rounded in cross-section and adapted to receive the edges of the stiles slidingly, elastic cushions secured to the rear face of one of said pieces and bearing on the contiguous post or piece, and elastic cushions inserted in the joint between said cushioned piece and the architrave or stop forming one side of the channel groove or recess in which said piece is placed, and the sashes or parts having stiles with rounded edges sliding in the rounded grooves of said pieces, substantially as set forth. 2nd. The combination of the posts A, each with stops C C', forming a channel or recess, pieces E and E', having their opposing faces provided with grooves c, rounded in cross-section and adapted to receive the stiles of the sash slidingly, elastic cushions F, secured to the rear face of one of said pieces and bearing against the contiguous post, cushions C in the face joint between said piece, and one of the stops and secured to one of them, and the sashes D and D', having the edges of their stiles rounded to fit and slide in the curved grooves of said pieces, substantially as set forth. 3rd. The combination of a piece A, and two stops C and C', forming a channel or recess, a piece E fitting loose in said groove or channel, and elastic cushions F, secured to the rear face of said piece, substantially as set forth. 4th. The combination of a piece A, forming one side of an opening, stops C and C', forming a groove or channel, therewith, a piece E fitting loose, in said groove or channel, elastic cushions F, in the rear face of said piece and bearing against the piece A, and elastic cushions G, in the face joint between said piece and one of the stops, substantially as set forth. 5th. The combination of a piece A, forming one side of an opening, stops C C', forming a groove or channel therewith, and a piece E' fitting in said channel, and having two grooves of curved cross-section adapted to receive the stiles of the sash slidingly, substantially as set forth. 6th. The combination of a piece E, having one face occupied by two grooves c of curved cross-section, and elastic cushions F, inserted in the opposite face, substantially as set forth.

#### No. 47,383. Car Coupler. (Attelage de chars.)

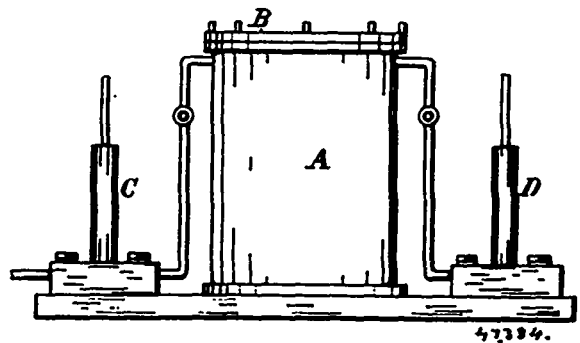


Edward Byers, Jacob Byers, Thomas Huser, all of Cameron, and William C. Hannum, Brookfield, all in Missouri, U.S.A., 6th November, 1894; 6 years.

*Claim.*—A car coupler, comprising a draw-head and knuckle, a locking device for the same, a cavity formed in the draw-head, a cap secured to said draw-bar and covering said cavity, a pin movably located within said cavity, the end of which is in contact with the tail end of the knuckle when the same is closed, and a spring interposed between said cap and pin for operating the pin in one direction and opening the knuckle when released, substantially as set forth.

#### No. 47,384. Piston-rod Packing.

(Garniture de tige de piston.)



William James Hennessy, assignee of Charles Henry North, both of Palmyra, New York, U.S.A., 6th November, 1894; 6 years.

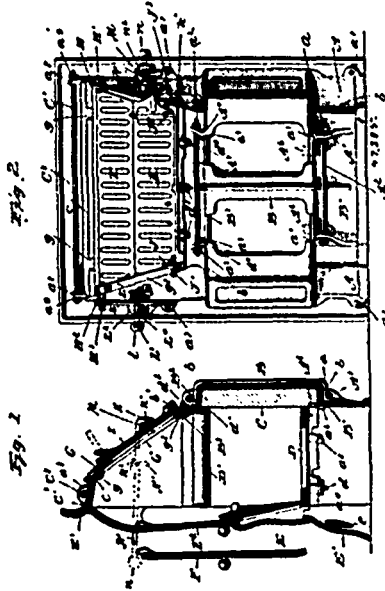
*Claim.*—1st. The herein described process of manufacturing piston-rod packing, consisting in exhausting the air from a closed vessel containing the packing immersed in oil having powdered lubricating material in suspension therein, and in subsequently increasing the pressure within the vessel above the normal atmospheric pressure, whereby the liquid is caused to permeate the packing, and carry into its interstices the solid lubricating material, substantially as and for the purposes set forth. 2nd. The herein described process of manufacturing piston-rod packing, consisting in exhausting the air from a closed vessel containing the packing, in admitting to the said vessel oil having powdered lubricating material in suspension therein, and in subsequently increasing the pressure within the vessel above the normal atmospheric pressure, whereby the liquid lubricant is caused to permeate the packing, and carry into its interstices the solid lubricant, substantially as and for the purposes set forth.

#### No. 47,385. Grate. (Grille.)

Edward Scanlan, Frederick Keifel, jr., both of Louisville, Kentucky, and John Zipp, New Albany, Indiana, all in the U.S.A., 6th November, 1894; 6 years.

*Claim.*—1st. The combination with the frame having apertured lugs, of the lining in interlocking sections, having apertures to receive said lugs, removable means inserted in the apertures of the lugs, and the border clamps for holding the upper edge of the lining and covering the joints thereof, substantially as specified. 2nd. A fire-place frame comprising end piece, an independent back-piece, offset at the top and bottom, a cross-piece connecting the upper ends of the end pieces and connecting bolts, substantially as specified. 3rd. In a fire-place frame, a trough-shaped upper connecting piece, substantially as specified. 4th. The combination with the end and back-pieces, of a trough-shaped upper cross-piece, and a rod connecting the upper ends of the end-piece and located in the trough of the upper cross-piece, substantially as specified. 5th. The combination with the end-pieces, having oppositely-disposed offsets with flanges, of a separable back-piece offset at the top and bot-

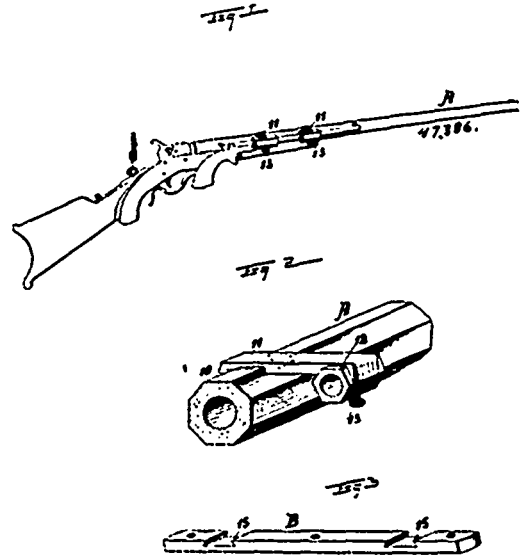
tom and having lateral portions engaging said flanges, substantially as specified. 6th. The combination with the end-pieces having lugs as flanges, of an independent back-piece offset at the top and bottom and having lateral portions engaging said flanges and bolts passed



through said lugs and having nuts to bind the back and end-pieces together, substantially as specified. 7th. In a fire-place frame, the combination with a trough-shaped cross-piece at the top having inclined portion, of a roof-piece to removably engage said inclined portion, substantially as specified. 8th. The combination with the end and back-pieces and the upper trough-shaped connecting piece with inclined rear portion, of a removable roof piece having under-turned lugs to engage said inclined portion, substantially as specified. 9th. The combination with the frame and its upper cross-piece, of an upper inclined damper mounted to open upward and having one pintle extended to engage the operating means, whereby it serves to direct the smoke from the front to the rear, substantially as specified. 10th. The combination with the frame and the roof piece of a damper, having one pintle extended to engage the operating means and pivotally mounted at the upper end of the roof piece to open upwardly, whereby it serves to direct the smoke from the front to the rear and prevent its escape into the room, substantially as specified. 11th. The combination with the frame and roof piece, of an upper damper mounted to open outward, and the lower damper mounted to open rearward and provided with a stop lug, said damper having oppositely extended pintles to be engaged by. 12th. The combination with the frame and the dampers in its inclined portion and having extended pintles, of the slidable push-rods mounted at opposite ends for operating the dampers, substantially as specified. 13th. The combination with a pivoted damper, and having one of its pintles extended for engagement of its operating means, of a push-rod slidingly and rotatably mounted to operate said damper, substantially as specified. 14th. The combination with a damper, mounted to open upward and having one of its pintles extended for engagement of its operating means, of a push-rod mounted for sliding and rotatable movement and disconnected from the damper but constructed to operate it, as set forth. 15th. The combination with a pivoted damper having one of its pintles extended for engagement of its operating means, of a push-rod mounted for sliding and rotary movement and having a lateral portion to engage means connected with the damper, substantially as specified. 16th. The combination with a pivoted damper having one of its pintles extended for engagement of its operating means, of a push-rod mounted for sliding and rotary movement and having a lateral arm, a curved lever on the pintle of the damper, and a rack bar for engaging said lateral arm, substantially as specified. 17th. The combination with a pivoted damper, of a push-rod mounted for sliding and rotary movement and having a lateral arm, a curved lever on the pintle of the damper, and a rack bar for engaging said lateral arm, substantially as specified. 18th. The combination with a pivoted damper, of a push-rod mounted for sliding and rotary movement and provided with a lateral arm having rounded under face, a curved lever connected with the pintle of the damper, and a rack-bar engaging said lateral arm, substantially as specified. 19th. The combination with a damper mounted to move upward to open, of a push-rod mounted for sliding and rotary movements and provided with a lateral arm having rounded under face, a curved lever connected with the pintle of the damper, and a rack-bar engaging said lateral arm, substantially as specified. 20th. The combination with a pivoted damper having one of its pintles extended for engagement of its operating means, of a push-rod mounted for sliding and rotary movement and provided at its inner end with means for engaging a part moving with the damper, substantially as specified.

No. 47,386. Pistol Attachment for Gun Barrels.

(Attache de pistolet pour canon de fusil.)

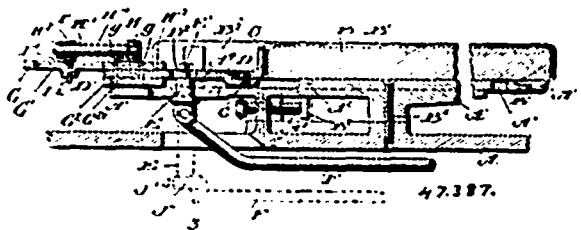


Mandal Whipple Fairbanks, Fairbanks, California, U.S.A., 6th November, 1894; 6 years.

Claim.—The combination with a gun having its barrel provided with transverse grooves, of arms secured in the grooves and provided with pistol receiving sockets at their ends, and screws carried by the sockets for binding a pistol therein, substantially as herein shown and described.

No. 47,387. Neck Band Clamp.

(Agrafe de bande de collet.)



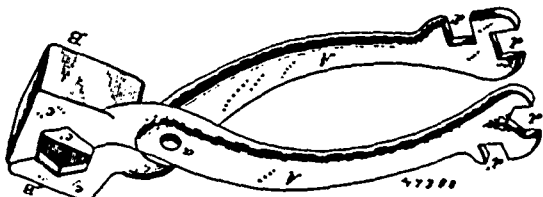
Allen Conkling and Edward W. Buell, both of Chicago, Illinois, U.S.A., 6th November, 1894; 6 years.

Claim.—1st. Neck-band clamps radially-disposed and adjustable to neck-bands of varied dimensions, substantially as specified. 2nd. A series of radially disposed neck-band clamps and means for adjusting them simultaneously to operate upon neck-bands of varied dimensions, substantially as specified. 3rd. A series of radially-disposed neck-band clamps in combination with a cam-plate and connections between the clamps and plate. 4th. Radially-disposed neck-band clamps, a slotted cam-plate and devices for connecting the clamps with the slots of the plate. 5th. Radially-disposed neck-band clamps, a slotted plate, means for connecting the clamps and plate and means for giving motion to the plate. 6th. Clamps mounted for radial movement simultaneously, a cam-plate, a clamp and plate-connecting devices and means for determining the extent of the movement of the plate. 7th. The combination with a cam-plate, of a series of radially-disposed clamps mounted for actuation by said plate, and a yoke-clamp operated by said plate. 8th. A series of radially-disposed neck-band clamps and a yoke clamp and means for simultaneously operating said clamps. 9th. A series of radially-disposed neck-band clamps, means for adjusting the operative position of the same, and means for operating them in an adjusted position. 10th. The combination with a yoke-clamp, a slotted clamp-plate, neck-band clamps and means for connecting the same for positively moving the yoke-clamp in one direction and yieldingly moving said yoke clamp in the opposite direction. 11th. A neck-band clamping mechanism, comprising radially-disposed clamps and a yoke-clamping mechanism, combined with means for adjusting the operative position thereof and for operating the same in said positions. 12th. The combination with an ironing-board having a neck-band recess, of a neck-band clamping mechanism comprising radially-disposed clamps and yoke-clamping mechanism and means for operating the neck-band clamping mechanism adjustably connected with the yoke clamp. 13th. The combination with radially-disposed neck-band clamps and cam-plate



operatively connected therewith, of a presser yoke-clamp mounted for movement with said plate positively in one direction and yieldingly in the opposite direction. 14th. A neck-band clamp and a yoke-clamp mounted for simultaneous movement, means for permitting independent movement of the yoke clamp and means for adjusting the said yoke-clamp. 15th. The combination with neck-band clamps, and a cam-plate having slots and operative connections between said plate and clamps, of a yoke-clamp mounted for movement with said plate, and also yieldingly mounted for movement with relation to the said plate.

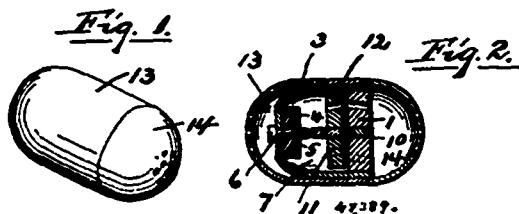
**No. 47,388. Wrench. (Clé à écrou.)**



Giles Arnel Hosmer, Buffalo, New York, U.S.A., 6th November, 1894; 6 years.

*Claim.*—1st. A wrench consisting of a pair of pivoted arms provided in front of their connecting pivot with V-shaped jaws, each having a bottom flange extending inwardly from the rear edge of the jaw and provided in its face with a three-sided recess, the recesses of the two jaw flanges facing each other, whereby said recesses form together a hexagonal opening, when the jaws are closed, while the jaws form together a rectangular socket, substantially as set forth. 2nd. A wrench consisting of a pair of pivoted arms provided in their outer or rear portions with one or more notches or recesses adapted to fit a nut and in front of their connecting pivot with V-shaped jaws arranged on one side of the plane of the arms, substantially as set forth. 3rd. A wrench consisting of a pair of pivoted arms provided in their outer or rear portions with one or more notches or recesses adapted to fit a nut and in front of their connecting pivot with V-shaped jaws, each having an inwardly extending bottom flange provided with a three-sided notch or recess, substantially as set forth.

**No. 47,389. Whistle. (Siflet.)**



William Ely, Providence, Rhode Island, U.S.A., 6th November, 1894; 6 years.

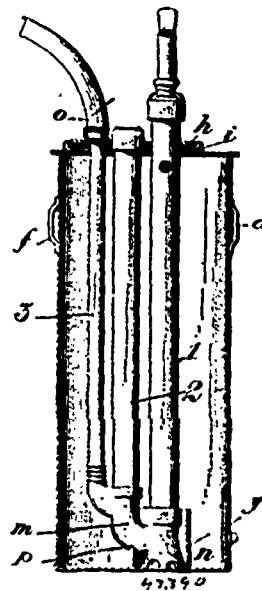
*Claim.*—1st. In a whistle, the combination with a casing, consisting of a main body and a minutely perforated cover of a stationary disc below the cover and having an annular series of inclined perforations, bearings located at one side of the disc and a rotatable disc mounted in bearings and having a series of annular perforations inclined in opposition to those of the fixed disc, and formed upon a circle agreeing with those of the fixed disc, substantially as specified. 2nd. In a whistle, the combination with a casing, of a disc having an annular series of perforations, and a central bearing-stud, terminating at its lower end in a conical bearing-cavity, a U-shaped bridge secured to the opposite side of the stationary disc and provided at its centre with a bearing-block having a vertical and transverse perforation, a bearing-pin or screw adjustably mounted in the vertical perforation, and provided at its upper end with a conical bearing-cavity, a binding-screw located in the transverse perforation and adapted to bear against the bearing-screw, a rotatable disc having an annular series of perforations adapted to register with those of the stationary disc, and a conical-ended stud located in the rotatable disc and bearing in the cavities, substantially as specified. 3rd. The combination, with the elliptical casing, comprising the main and cover sections, each perforated at its ends, of the disc 1 located in the upper end of the main section, the U-shaped bridge, the inclined perforations in the disc, and the rotatable disc supported below the disc 1 and provided with perforations disposed at an angle to those of the disc 1, substantially as specified.

**No. 47,390. Spraying Apparatus. (Pulvérisateur.)**

Philip Andrew Myers, Ashland, Ohio, U.S.A., 6th November, 1894; 6 years.

*Claim.*—1st. A spray pump consisting of a lower casting having an opening for the ingress of the water, a discharge pipe, a pump

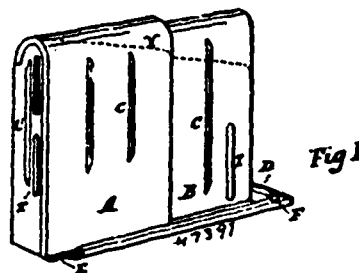
barrel secured to said casting containing a lifting piston, and an air pipe extending from said casting parallel to the pump barrel, substantially as described. 2nd. A spray pump consisting of a pump barrel, an air pipe and a discharge pipe, a casting receiving the



lower ends of said pipes, an ingress opening in the casting for the water, and a perforation in said casting below the air pipe for the discharge of a small stream to agitate, substantially as described. 3rd. A spray pump consisting of a pump barrel, an air pipe and a discharge pipe, a casting fitted to the ends of said pipes and having an ingress opening, a piston in the pump barrel, a receptacle adapted to contain the pump, and openings in the pump barrel near the upper end thereof, for the discharge of the water back into the receptacle which may pass the lifting bucket, substantially as described. 4th. A spraying device consisting of a tank, a spray pump detachably connected thereto, a disc connecting the tubes of the pump, and closing the opening through which the pump is inserted into the tank, a handle for the pump projecting above the disc, and a flexible discharge tube connected to the discharge pipe of the pump above the disc, substantially as described. 5th. In combination with the tank, a spray pump, means for holding the tank upon the back, a piston rod, a pivoted lever connected to said piston and supported at one end from the tank, and a depending handle connected to the opposite end, substantially as described. 6th. A spraying tip having a channelled plug fitting within the same, substantially as described.

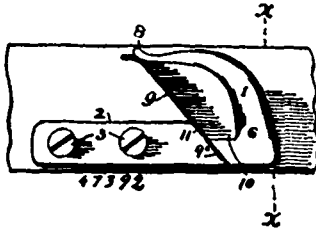
**No. 47,391. Magazine for Firearms.**

(Magasin d'armes à feu.)



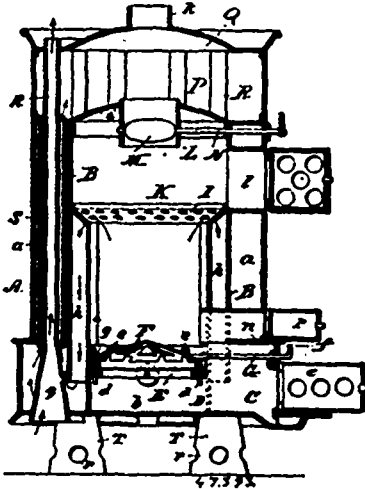
Thomas Robert Rancey Ashton, Deniliquin, New South Wales, and Edward John Kelly, Terany, Victoria, both in Australia, 6th November, 1894; 6 years.

*Claim.*—1st. A magazine for firearms consisting of the body A, B, and lips or flanges E F, at the base thereof, substantially as described. 2nd. A magazine for firearms, consisting of the body A, B, strengthening ribs in the sides thereof, and in the rear side, substantially as described. 3rd. In combination in a magazine for firearms, a body, open at the bottom, and a hinged door at the rear said door, being adapted when closed to resist strong rearward pressure, substantially as described. 4th. A magazine for firearms, comprising a body portion A, B, having flanges E F, and a rear door, said body having a bent over part Q, forming a recess to receive the edge of the door, and said door having a like bent over part on its outer edge to fit a flange on the body end.

**No. 47,392. Holdback for Shafts or Thills.***(Ragot de limonière.)*

John F. Haines, Bingtown, Pennsylvania, U.S.A., 6th November, 1894; 6 years.

*Claim.*—1st. In combination, the hook comprising the base plate and hook portion extending back over the same and the inclined spring retainer having its outer free end bearing on the end of the hook and inclining forward toward the base of the hook and secured to the base plate, substantially as described. 2nd. In combination, the hook comprising the base plate and hook portion, having a thickened end with the hook thereon and a cutaway part forming a shoulder, and the spring retainer bearing on said shoulder and having its lower end bifurcated and extending through slits in the plate, the ends of the prongs being clinched to the plate, substantially as described. 3rd. In combination, the hook comprising the base plate having the hook at one end and the spring retainer having a bifurcated end passing through the base plate and clinched thereto, substantially as described.

**No. 47,393. Stove. (Pöle.)**

Martin L. Larson, Warren, Minnesota, U.S.A., 6th November, 1894; 6 years.

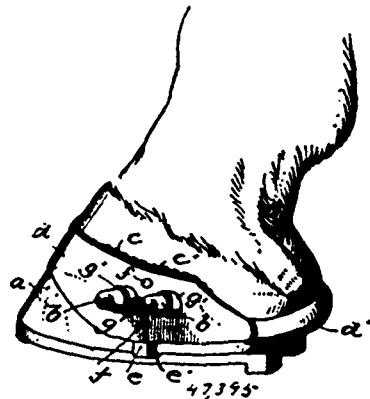
*Claim.*—1st. The body or casing, formed with double walls so as to provide a chamber between them in combination with the base chamber, the fire-pot, arranged with an external circular chamber, in communication with the base chamber, an upper chamber above the double walled casing, pipes connecting said upper chamber with the base chamber, and also in communication with the fire-pot or chamber, and pipes passing from below the stove to the top thereof, and through the pipes which connect the top chamber with the base chamber, substantially as specified. 2nd. A stove having the base chamber, a fire-box therein, a chamber above the fire-box with a damper for cutting off communication between the fire-box and smoke-pipe, pipes connecting the base chamber with the passages leading to the smoke pipe, and pipes passing through the latter pipes and open above and below the stove respectively, substantially as specified. 3rd. A heating stove, having the long cylindrical fire-pot, with perforated plate at its mouth, and surrounded by a chamber, a base chamber communicating with the lower end of the chamber around the fire-pot, and also having a chamber above the fire-pot, in communication with the smoke pipe, the circular chamber or interspace exterior to the chamber surrounding the fire-pot, a circular series of pipes passing vertically through the latter chamber, and connecting the base chamber with said upper chamber, and a circular series of pipes having flared lower ends passing through the first-named series of pipes and opening above and below the stove respectively, as set forth. 4th. The improved stove, comprising the base chamber, having an ash chamber, the fire-pot H, having the grate therein, and the perforated plate I, at the upper end of said pot, and also having the chamber K, surrounding the pot and leading into the base chamber, the chamber N, above the fire chamber, and the upper chamber P, having the tube

L, and the damper therein, the circular series of pipes passing through the chamber or interspace a, and connecting the base chamber with the chamber P, and indirectly connecting the latter chamber with the fire-pot, and the pipes R, passing through the pipes S, and extending from above the stove to beneath the base chamber, and terminating in flaring portions, substantially as specified.

**No. 47,394. Process of Preparing Food.***(Procédé pour préparer la nourriture des animaux.)*

Samuel Cleveland, Coaticook, Quebec, Canada, 6th November, 1894; 6 years.

*Claim.*—1st. The art or process of preparing hay, straw, or grain in the straw or other similar coarse food for domestic animals, by first cutting the same, second, grinding it into meal, substantially as described. 2nd. The art or process of preparing hay, straw or other similar coarse feed, by cutting, so that it may be readily discharged from the hopper into the grinding machine, then grinding it into meal in combination with a given quantity of grain of any kind fed into the mill at the same time and ground with the cut feed, substantially as described. 3rd. The product of grinding dried grasses or grains in the straw usually used for food for domestic animals, into meal, substantially as set forth.

**No. 47,395. Non-interfering Device for Horses.***(Appareil pour empêcher les chevaux de se tailler.)*

William Temple, Windsor, New York, U.S.A., 6th November, 1894; 6 years.

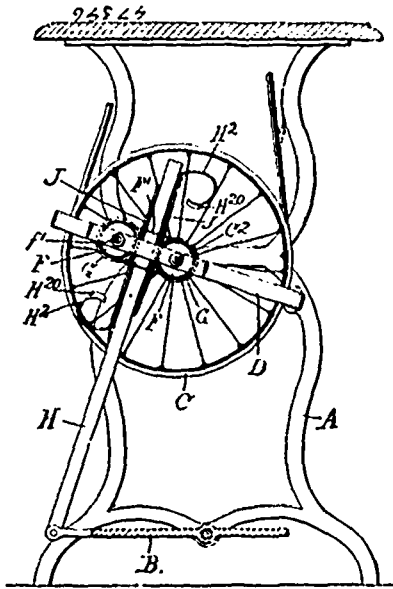
*Claim.*—1st. A non-interfering device consisting of a thong or strap adapted to embrace the hoof, in combination with a cushioning device consisting of a rubber base secured to the inside of the strap, and having formed thereon an integral finger which projects through the strap and outwardly therefrom so as to receive the blow of the striking hoof, and a securing device countersunk in the inner side of the base so as to lie flush with said side, and provided with a stud adapted to pass under the hoof and thereby assist in securing the cushioning device in place, substantially as described. 2nd. In a non-interfering device, a thong or strap provided with flexible fingers connected at the base by a web or reinforcing device, substantially as described.

**No. 47,396. Mechanism for Converting Pedal Motion.***(Mécanisme pour convertir le mouvement des pédales.)*

Osborne Baker, Osborne, Ontario, Canada, assignee of Thaddeus Baker, Chicago, Illinois, U.S.A., 6th November, 1894; 6 years.

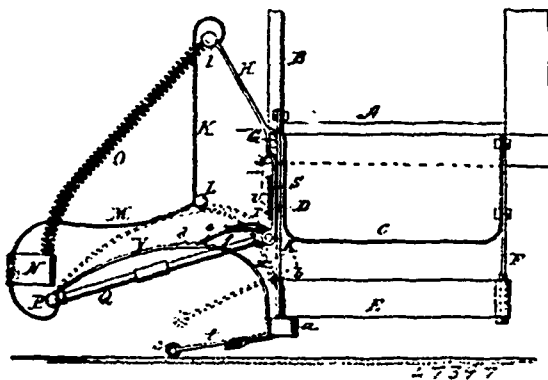
*Claim.*—1st. In combination, with the drive-wheel, two clutch-drums and a single pitman operating adjacent to them both, cables encircling the drums respectively and having both ends attached to the pitman, the clutches of said drums being adapted to operate the one upon one stroke of the pitman and the other upon the reverse stroke of the same, and connections from the driven member of both clutches to the drive-wheel axle adapted to communicate motion to it in the same direction from both, substantially as and for the purpose set forth. 2nd. In combination, with the drive-wheel, the clutch-drum thereon, a similar clutch drum and its shaft parallel to the drive-wheel shaft, pulleys on said shaft, and a belt encompassing them for communicating motion from one to the other, the pitman operating between the two clutch-drums, and cables encircling the drums respectively and having both ends secured to the pitman, the clutch mechanism of said drums being adapted to communicate to the shafts respectively, rotary motion in the same direction, substantially as and for the purpose set forth. 3rd. In combination, with the drive-wheel and the mechanism which drives it comprising drums or sheaves clutched to their shafts, the pitman and the cables which connect it to the drums, and stops to arrest the reciprocating motion of the pitman at the proper opposite limits of its stroke,

substantially as set forth. 4th. In combination, with the drive-wheel and the mechanism which drives it comprising drums or sheaves clutched to their shafts respectively, the pitman and the cables which connect it to the drums, and elastically yielding stops



for the pitman to yieldingly check its movement before the limits of its stroke in each direction, substantially as set forth. 5th. In combination, with the drive-wheel, the mechanism which drives it comprising drums or sheaves clutched to their driving shafts respectively, the pitman and the cable which connect it to the drums, elastically yielding stops on the pitman adapted to collide with the drums to check the stroke of the pitman before its proper limits in each direction, substantially as set forth. 6th. In combination, with the drive-wheel and the mechanism which drives it comprising drums or sheaves clutched to their driving shafts respectively, the pitman and the cables which connect it to the drums, the spirally coiled spring stops H<sup>2</sup> attached to the pitman at the opposite ends and adapted to collide with the drums respectively before the limits of the strokes respectively, whereby both the rotation of the drums after the collision and the longitudinal movement of the pitman after the collision tend to put the colliding spring under tension, whose reaction will initiate the return stroke, substantially as set forth. 7th. In combination, substantially as set forth, the drive-wheel and its shaft and the clutch-drum thereon, the shaft f and the clutch-drum thereon, the pulleys on said shafts respectively and the belt which encompasses them, the frame which encompasses both said shafts and affords bearings for them at their ends outside of all the wheels on them respectively, and the pitman reciprocating between the plane of the fly-wheel and the plane of the pulleys, and also between the drums.

**No. 47,397. Car-fender. (Défense de chars.)**

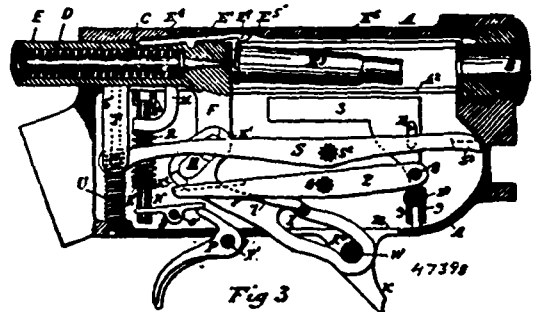


The Darrach Car Fender Company, assignee of Samuel Adger Darrach, both of Newark, New Jersey, U.S.A., 6th November, 1894; 6 years.

*Claim.*—1st. A car-fender composed of two sections as K, M, jointed together and provided with a scoop jointed to one of the sections and adapted to be depressed or dipped by the swinging of said last named section, substantially as described. 2nd. The combination with a car-fender composed of two sets of springs jointed together, of a swinging-brace for keeping one set of the

springs distended, and a scoop hinged to said fender, substantially as described. 3rd. The combination with a car-fender composed of two sets of springs jointed together, of a swinging-brace for keeping one set of the springs distended, and a scoop jointed at one portion to said fender, and a ledge or rest secured to the car for the free portion of the scoop, substantially as described. 4th. The combination with a car-fender composed of two sets of springs jointed together, of a swinging-brace for keeping one set of the springs distended, yielding or spring guards as O, and a scoop hinged to said fender, substantially as described. 5th. A car-fender provided with a scoop jointed to the fender and adapted to be depressed or dipped by the swinging of the fender, and a detent or lock as e for holding the scoop depressed, substantially as described. 6th. A car-fender provided with a scoop jointed to the fender and adapted to be depressed or dipped by the swinging of the fender, said scoop being provided with spring fingers as Z having their free ends jointed by a flexible connection as c, substantially as described. 7th. A car-fender provided with a scoop, said scoop being provided with spring fingers as Z having their free ends jointed by a flexible connection as c, and flexible or spring rollers as g mounted on the connection c between the spring fingers, substantially as described. 8th. The combination with a vertically movable car-fender, of a pivoted take-up scoop which is depressed by the upward movement of the fender and operates to bodily take up or pick up a person or object on the track, said fender having its forward portion provided with rollers, substantially as described. 9th. The combination with a vertically movable car-fender, composed of springs made to extend forward and downward, of a pivoted take-up scoop which is depressed by the upward movement of the fender and operates to bodily take up or pick up a person or object on the track, substantially as described. 10th. The combination with a vertically movable car-fender, of a pivoted take-up scoop which is depressed by the upward movement of the fender and operates to bodily take up or pick up a person or object on the track, said fender having its forward portion provided with a strip of canvas or soft material, substantially as described. 11th. The combination with a vertically movable car-fender, of a pivoted take-up scoop which is depressed by the upward movement of the fender, and operates to bodily take up or pick up a person or object on the track, and a shoulder and elastic catch for engaging the fender, substantially as described. 12th. The combination with a vertically movable car-fender, of a pivoted take-up scoop which is depressed by the upward movement of the fender and operates to bodily take-up or pick-up a person or object on the track, and a shoulder and elastic catch formed from a suitably bent spring rod for engaging the fender, substantially as described. 13th. The combination with a vertically movable car-fender of a pivoted take-up scoop which is depressed by the upward movement of the fender, and operates to bodily take-up or pick-up a person or object on the track, and a releasing treadle for depressing said scoop independently of the movement of the fender, substantially as described. 14th. The combination with a vertically movable car-fender, of a pivoted take-up scoop which is depressed by the upward movement of the fender, and operates to bodily take up or pick up a person or object on the track, and a lock for locking the fender against vertical movement, substantially as described. 15th. The combination with a vertically movable car-fender, of a pivoted take-up-scoop which is depressed by the upward movement of the fender, and operates to bodily take up or pick up a person or object on the track, and a detent or lock for holding the scoop depressed, substantially as described.

**No. 47,398. Firearm. (Arme à feu.)**

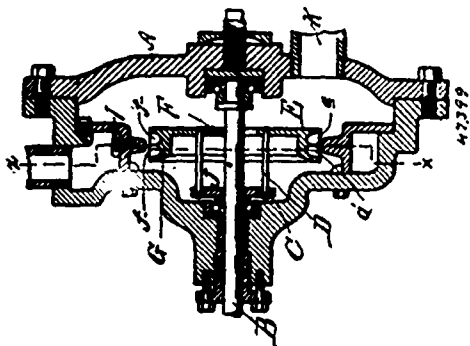


Thomas Robert Rancey Ashton, Deniliquin, New South Wales, and Edward John Kelly, Terany, Victoria, both in Austria, 7th November, 1894; 6 years.

*Claim.*—1st. The combination in a firearm of a breech bolt having at its fore-end a downwardly projecting lug, a pin projecting transversely therefrom, and an operating lever having an angled slotted end engaging said pin and having a slotted connection with its pivot pin, substantially as described. 2nd. In a firearm, a breech-block, a locking-block therefor, a pivoted lever S, connected at one end to the bolt locking-block, an operating lever K, and means for operating lever S, through said lever K, substantially as described. 3rd. In a firearm, a breech-block, a locking-block therefor, a pivoted

lever S, hinged rearwardly to the breech bolt locking-block, a projecting lug at the fore-end of said lever, and an operating lever K for actuating said lug, substantially as described. 4th. In a firearm, an operating lever K, the lug K<sup>1</sup> at the base thereof, a breech-block, a locking-block therefor, a lever S, operating said locking-block, and a lug on said lever, substantially as described. 5th. In combination with the breech-block, a locking-block S<sup>1</sup> adapted to slide vertically, and having an aperture T, a pin V situated partly within and partly beneath said aperture, substantially as described. 6th. The combination, with a breech-block, a locking-block therefor adapted to slide vertically in grooves and having an aperture T, of a fixed pin V, and a spring U whereby the depression of the said block compresses said spring and whereby the spring is adapted to raise and support the block in position behind the breech-bolt, substantially as described. 7th. The combination, with a casing of a firearm, a breech-block, an extractor pivoted to said breech-block and inclined planes E<sup>2</sup> and E<sup>3</sup> formed in said casing, whereby the said extractor is tilted on its pivot, substantially as described. 8th. The combination, with a breech-block, of an extractor E<sup>1</sup>, a depression E<sup>2</sup> in the block, a slot E<sup>3</sup>, and a rearward extension of the latter provided with inclined planes as E<sup>2</sup> and E<sup>3</sup>, substantially as described. 9th. In a firearm, a body having side entry and exit openings, the former higher than the other, said openings being connected at their base by a laterally inclined table, substantially as described. 10th. In a firearm, a body having side entry and exit openings, an inclined table between the openings and dogs controlling the entry and exit of the cartridge, substantially as described. 11th. In a firearm, a pivoted lever 2, a cut-off dog 4 and operating connections between the lever and dog, and between the lever 2, and the operating lever K, substantially as described. 12th. The combination, with a transverse rocking lever, of dogs 4 and 3, said dogs being pivoted to said lever, an operating lever K and connections thereto from said rocking lever whereby the dogs are operated alternately to raise and lower the same, substantially as described. 13th. The combination, with cut-off dogs as 4 and 3, a pivoted lever 2 connected thereto, and a pivoted lever K having a transverse projection K<sup>2</sup> on its upper inner end, said projection being adapted to bear down upon and depress the rear of lever 2, when the lever handle is operated, substantially as described. 14th. In combination, an operating lever K, slotted at I, pivoted at W, lugs K<sup>1</sup> and K<sup>2</sup>, a pin G, a slotted connection therewith, a lever S, a breech-block lock operated thereby, a lever 2, and cut-off dogs operated thereby, the lug K operating the lever S, and the lug K<sup>2</sup>, the lever 2, substantially as described. 15th. In combination, with a laterally inclined table A<sup>1</sup>, a dog 3 adapted to be lowered when an empty shell or cartridge has been retracted so as to allow same to leave the arm, and a dog 4 adapted to be raised whilst 3 is lowered, said dog 4 being adapted to be again lowered, and dog 3 raised so as to allow a new cartridge to enter the arm in front of the retracted breech-bolt, substantially as described. 16th. In combination, with the body of a firearm A, a magazine receiver as B<sup>2</sup> at the upper right side of said body, said receiver having three vertical sides and an open front and a sloping base, substantially as described. 17th. In a firearm, in combination with a magazine receiver, a magazine having a shoulder 18, and a spring 16 adapted to automatically hold in place said magazine when the latter has been inserted, whilst allowing easy insertion and withdrawal of the same, substantially as described. 18th. In a firearm, in combination with a magazine receiver, a magazine having shoulders and a bolt 17 having fore and rear ends 20 and 19 respectively, substantially as described. 19th. In a firearm having a magazine receiver, a magazine having shoulders 18, a spring 16 at one side thereof, and a bolt 17 at the other side, substantially as described. 20th. The combination, with a firearm body having apertures 13 and 14, of a sloping table, and a magazine or cartridge receiver having a sloping base of which the said table A<sup>1</sup> is a downward lateral continuation, substantially as described.

**No. 47,399. Rotary Engine. (Machine rotative.)**

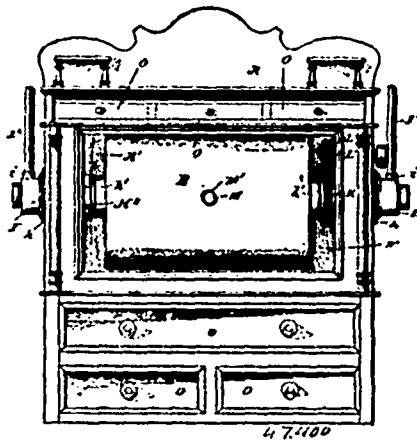


The Consolidated Car Heating Company, assignee of James Finney McElroy, both of Albany, New York, U.S.A., 7th November, 1894; 6 years.

*Claim.*—1st. In a rotary motor, a wheel having peripheral pockets, a central dividing flange therein, and a jet adapted to

direct the impelling fluid or gas upon the flange, whereby the discharge or exhaust is deflected towards the edge, substantially as described. 2nd. In a rotary motor, a wheel having peripheral pockets inclined, and enlarging from the bottom out, said pockets being arranged in pairs, a ridge or flange dividing the members of each pair, and a jet adapted to direct the impelling fluid or gas upon the ridge, substantially as described. 3rd. In a rotary motor, a wheel comprising a solid metal body and rim, inclined pockets, flaring towards the mouth sunk into the periphery, and nozzles adapted to discharge centrally therein and having free discharge at the sides, substantially as described.

**No. 47,400. Advertising Cabinet for Producing and Regulating Gas. (Régulateur à gaz et cabinet d'annonce.)**



John Ruthven, Topeka, Kansas, U.S.A., 7th November, 1894; 6 years.

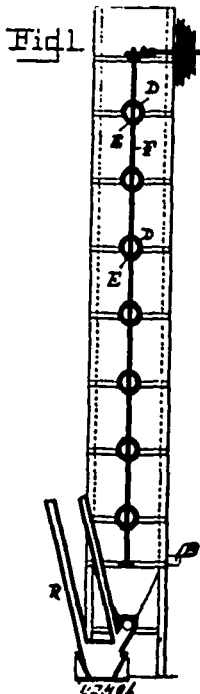
*Claim.*—1st. The combination with the case or cabinet, and the chamber therein, of the suction cylinder and regulator within said chamber, the L-pipes one at each end forming respectively the vapour inlet and outlet, and having their vertical arms within said cylinder, said pipes forming bearings for said cylinder, and the perforated central tube or pipe forming a centre bearing for said cylinder, substantially as specified. 2nd. The combination with the case or cabinet having the interior chamber, of the suction cylinder and regulator within said chamber, the L-shaped pipes projecting one through each end wall of the cabinet and forming the gas inlet and outlet, their vertical arms extending into the opposite end portions of said cylinder, the central perforated tube having bearings at its ends, the central rod or shaft, and the caps to which the inlet and outlet pipes are respectively connected, substantially as specified. 3rd. The combination of the L-pipes, their bearing pipes or tubes, the cylinder into the end portions of which the vertical arms of said L-pipes project, the bearing sleeves or bushings in said cylinder, the stuffing-boxes, the central perforated pipe or tube engaging said bearing pipes at its ends, the caps on the outer projecting ends of said L-pipes, the inlet and outlet pipes connected to said caps, the central rod or shaft and the driving gear, substantially as specified. 4th. The herein described suction cylinder and vapour regulator, comprising a rotary cylinder designed to be partially filled with a liquid, the spirally arranged passages or chambers therein, the closed end chambers, an inlet pipe communicating with one of said end chambers, and an outlet pipe communicating with the other of said chambers, and a central perforated pipe, substantially as specified. 5th. The herein described suction cylinder and vapour regulator, comprising a rotary cylinder designed to be partially filled with a liquid, its bearings and driving gear, the central portion of said cylinder being divided into a series of spiral chambers or passages, the end chambers into which said chambers or passages open, a vapour inlet communicating with one of said end chambers, and a vapour outlet communicating with the other of said chambers, and a central perforated tube or pipe, substantially as specified. 6th. The combination, with the suction cylinder having the closed end chambers, and the series of spiral chambers or passages connecting said end chambers and communicating therewith by oppositely directed openings, of the L-pipes forming bearings for said cylinder and having their vertical arms projecting into the upper portions of said end chambers, said pipes forming respectively the vapour inlet and outlet, and the central perforated pipe or tube, substantially as specified. 7th. A suction cylinder and vapour regulator, comprising a closed rotary cylinder provided with a vapour inlet and outlet and designed to be partially filled with a liquid, a series of compartments or passages therein, and a central perforated tube or pipe through which the liquid seeks its level as the cylinder rotates, substantially as specified.

**No. 47,401. Drier. (Séchoir)**

Thomas Craney, Bay City, Michigan, U.S.A., 7th November, 1894; 6 years.

*Claim.*—1st. In a drier, a tower, a vertical series of hollow rotat-

ing screens and chutes under the discharge side of the screens to deflect the material upon the next lower one, substantially as described. 2nd. In a drier, a tower, a vertical series of hollow screens and means for rotating the alternate screens in opposite directions,



and chutes under the discharge side of the rotating screens to deflect the material from the upper screen upon the next lower one, substantially as described. 3rd. In a drier, a tower, a vertical series of hollow rotating screens, and vibrating screens, forming chutes under the discharge side of the rotating screens to feed the material discharged from an upper upon a lower screen, substantially as described. 4th. In a drier, the combination of a tower, a series of transverse driven shafts therein, cylindrical screens secured to the shafts, and each consisting of heads, connecting strips H and J between the heads, a wire screen secured to the heads between the strips, the teeth L on the heads, and the screen chutes M hinged to the side of the tower upon the discharge side of the drums and resting with their free ends upon the notched heads, substantially as and for the purpose described.

#### No. 47,402. Manufacture of Conserves.

(Fabrication de conserves.)

Alphonse Remillard, Montreal, Quebec, Canada, 7th November, 1894; 6 years.

Claim.—1st. As a stiffening body for use in the manufacture of conserves, a composition of seaweed, sugar and glucose, for the purpose set forth. 2nd. In the manufacture of conserves, the combination of a stiffening body or composition of seaweed, sugar and glucose, with the specific flavouring fruit element. 3rd. In the manufacture of conserves such as apple jelly, the combination of a stiffening body or composition of seaweed, sugar and glucose with a specific flavouring or character imparting element in the form of apple cider. 4th. In the manufacture of apply jelly, the combination of a stiffening preservative with apple cider, for the purpose set forth. 5th. In the manufacture of conserves, such as marmalade the combination of a stiffening body or composition of seaweed, sugar and glucose with specific flavouring or character imparting elements consisting of orange and lemon peel and an extra quantity of sugar substantially in the proportions specified.

#### No. 47,403. Tread for Floors, Stairs, &c.

(Surface métallique pour planchers, escaliers, etc.)

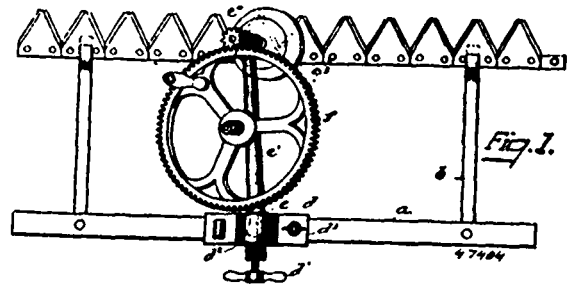


William Henry Lindsay, Ashton Gate, Bristol, England, 7th November, 1894; 6 years.

Claim.—1st. The herein described process for forming a wearing surface, staircase treads and the like, which consists in squeezing together with heavy pressure a sheet of lead, and a perforated or reticulated sheet of hard metal, and causing the lead to fill the

perforations or interstices in the hard metal sheet. 2nd. A wearing surface for floors, staircase treads and the like, composed of a sheet of lead having in it a sheet of hard metal with projections, recesses or interstices, the lead filling the interstices and the metal in one perforation being connected with the metal in other perforations, substantially as described. 3rd. A wearing surface for floors, staircase treads, and the like, composed of a sheet of wire network embedded in a sheet of lead, substantially as described.

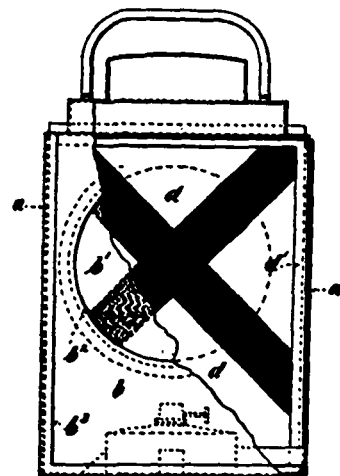
#### No. 47,404. Sickle Grinder. (Aiguiseur de faucilles.)



Henry B. Beairsto, Horatio S. Beckwith, Frank W. Burns and Henry S. Kinney, all of Fort Fairfield, Maine, U.S.A., 7th November, 1894; 6 years.

Claim.—1st. In a grinding machine for mowing machine blades and guards, the combination of a grinding-wheel, a yielding endwise moving shaft therefor, a stand at the upper end which said shaft has its bearing, means for rotating said shaft, a clamp-like base plate for holding said stand, a universal joint connecting the lower end of said stand with the base plate, substantially as described. 2nd. In a grinding machine the combination of a grinding-wheel, a yielding endwise moving shaft therefor, a stand at the upper end of which said shaft has its bearing, a pinion on said shaft, a gear-wheel for rotating it the diameter of which is less than the height of the stand, a clamp-like base plate for said stand comprising two parts each having a hemispherical socket to receive the spherical end piece at the lower end of the stand, and a clamping screw for drawing said parts together thereby securely holding the stand in any different position that it may be set, substantially as described. 3rd. The combination of the grinding mechanism, of a blade-holder having a slotway as shown, to receive and permit endwise and also a tilting movement of the blade, substantially as described.

#### No. 47,405. Night Signal and Sign. (Signal.)

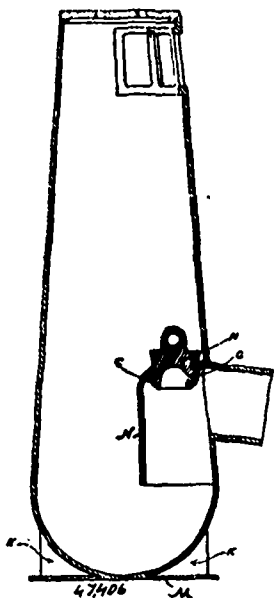


John Reilly, New South Wales, Australia, 7th November, 1894; 6 years.

Claim.—1st. Improved method and means for exhibiting by night or in darkness white coloured and parti-coloured signals, signs and devices consisting in reflecting from prepared backgrounds the colours, &c., of said backgrounds through transparent openings, substantially as herein described and explained. 2nd. Improved method and means for exhibiting by night or in darkness white coloured and parti-coloured signals, signs and devices consisting in reflecting light from a prepared surface through transparent openings of varied configuration or pattern, substantially as herein described and explained. 3rd. In means for exhibiting signals, signs and devices of the class set forth, the combination and arrangement with lights such as c', in an appropriate casing and prepared front such as B, having variously shaped openings and a transparent

backing such as B<sup>1</sup>, of a background such as D, preferably removable and reversible and fitting in grooves such as D<sup>1</sup>, substantially as herein described and explained, and as illustrated in the drawing. 4th. In means for exhibiting signals, signs and devices of the class set forth, the combination and arrangement with a lamp or lantern such as a, b, c, having an opening such as b<sup>2</sup>, and glass such as b<sup>1</sup>, and a lamp such as c, with or without reflector such as c<sup>2</sup>, of prepared backgrounds such as d, preferably removable and reversible and fitting in grooves d<sup>1</sup>, substantially as herein described and explained and as illustrated in the drawing. 5th. In a lamp or lantern, the combination and arrangement with parts substantially as set out in the preceding claim of grooves such as b<sup>3</sup>, on the face of said lamp or lantern for the reception of backgrounds such as d, as day or light signals, substantially as herein described and explained and illustrated in the drawing. 6th. The combinations and arrangements of the various mechanical parts altogether going to make up improved means for exhibiting signals, sign and devices substantially as herein described and explained and as illustrated respectively in Fig. 1 to 3, and in Fig. 4 and 5 of the drawings.

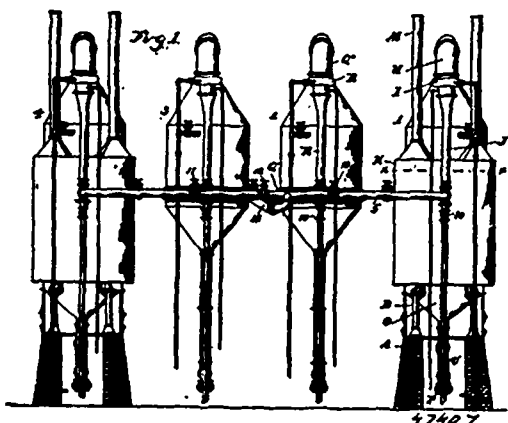
**No. 47,406. Sewer Well. (Puits d'égout.)**



Brian D. McConnell, Cote St. Antoine, Quebec, Canada, 7th November, 1894; 6 years.

*Claim.*—A sewer well, in form a frustrum of a cone with one stopped end hemispherical in the inside, but flat at the bottom M outside, with strengthening webs K, the same sewer well being provided with the trap N, in the upper side of which is the inverted conical aperture G, that can be closed with the plug H, substantially as and for the purpose hereinbefore set forth.

**No. 47,407. Evaporator. (Appareil d'évaporation.)**



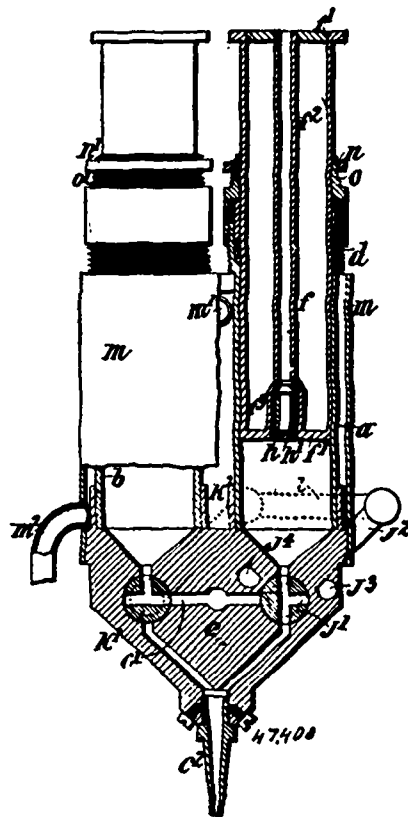
Thomas Craney, Bay City, Michigan, U.S.A., 7th November, 1894; 6 years.

*Claim.*—1st. In an evaporating apparatus, the combination of a furnace pan, complete and capable of independent operation, of a series of steam pans, and connections between the vapour discharge

pipe of the furnace pan, and between the steam pans, whereby the pans may be operated for double or triple expansion evaporation with the furnace pan, substantially as described. 2nd. In an evaporating apparatus, the combination of a furnace pan complete and capable of independent operation, of a steam pan, a valved connection from the vapour pipe of the furnace pan to the steam chamber of the steam pan, and a condenser for the discharge pipe of the steam pan, substantially as described. 3rd. In an evaporating apparatus, the combination of the outer casing having a vapour outlet at the top, an inner casing concentrically arranged and forming an annular flue between a smoke chamber outside the outer casing, tubes extending from the inner to the outer casing through the annular flue, separated tapering settling chambers at the lower end of the annular flue connecting into a common settling leg O<sup>1</sup>, and the elevator from the bottom of said leg, substantially as described.

**No. 47,408. Stoppering and Sealing Jars, Etc.**

(Méthode de boucher et sceller les jarres, etc.)



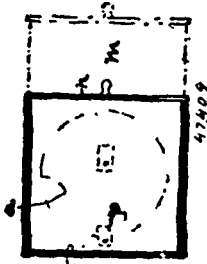
Jarvis W. Horner, Sheffield, England, 7th November, 1894; 6 years.

*Claim.*—1st. The method of stoppering jars and the like by placing them in a closed chamber, utilizing a vacuum chamber therein, and suckers to lift the stoppers therefrom, then heating the jars by hot liquid and vapour so as to form a partial vacuum therein and in the closed chamber, next lowering the vacuum chamber to replace and force down the stoppers on the jars, then, when the jars are cool, raising the vacuum chamber and suckers to lift the whole series of jars or the like, substantially as described. 2nd. The combination of a closed chamber in which jars or the like to be stoppered are placed, a vacuum chamber, suckers carried by the wall of said chamber and adapted to engage with the stoppers of the jars or the like, and means for raising said vacuum chamber with its suckers, substantially as and for the purposes specified. 3rd. The combination of a closed chamber in which jars or the like to be stoppered are placed, a vacuum chamber, suckers carried by the wall of said chamber and adapted to engage with the stoppers of the jars or the like, means for raising said vacuum chamber with its suckers, and means for heating the jars in the vat, substantially as described. 4th. In apparatus for stoppering jars or the like, the combination of a vat, an internal flange therein, a perforated plate supported thereon on which the jars or the like rest, a cover to the vat and a vacuum chamber within the vat, and suckers with flexible lips secured to the said vacuum chamber, substantially as described. 5th. In apparatus for stoppering jars and the like, the combination of a vat, a cover therefor, a vacuum chamber movable in guides in the cover, flexible-mouthed suckers carried by said chamber, and means for supporting the jars or the like in the vat, substantially as described. 6th. The combination of a vat, a cover therefor, a

vacuum chamber suspended in the cover, guides for the vacuum chamber, means for adjusting the chamber, which means consist of a screw-threaded spindle attached at its lower end to the closed chamber and extending to the exterior of the cover through a stuffing-box thereon, a nut through which one spindle passes provided with a hand-wheel, and bearings in standards attached to the cover in which bearings the spindle turns, substantially as described. 7th. In apparatus for stoppering jars or the like, the combination of a vat furnished with means for supporting the jars, a cover therefor, a vacuum chamber movable in guides in the cover, suckers carried by said chamber, each sucker consisting of a hollow spindle provided with a flange, a centrally perforated cup of india-rubber placed below the said flange and having a tapered circumferential lip with blocks extending radially inward from the circumference towards the centre, a perforated washer placed below the cup which is recessed in places, and a perforated flanged screw adapted to screw into the lower part of the aforesaid hollow spindle, substantially as shown and described, for the purpose specified. 8th. In apparatus for sealing jars and the like with wax or other filling, the combination of a jacketed receiver provided at the upper end with a stuffing-box, a piston sliding in said receiver, an air outlet in said piston and a float valve for closing said air outlet, substantially as shown and described for the purposes specified. 9th. In apparatus for sealing jars and the like with wax or other filling, the combination of a jacketed receiver, a hollow piston or ram working therein, an air outlet opening in the piston or ram, a float valve to close said air-outlet, a stuffing-box, and a three way cock to place the interior of the receiver alternately in communication with the outlet and inlet for the wax, substantially as described.

#### No. 47,409. Stovepipe Damper.

(Clé de tuyau de poêle.)



Hermann Sigel and Felix Flanger, both of Montreal, Quebec, Canada, 7th November, 1894; 6 years.

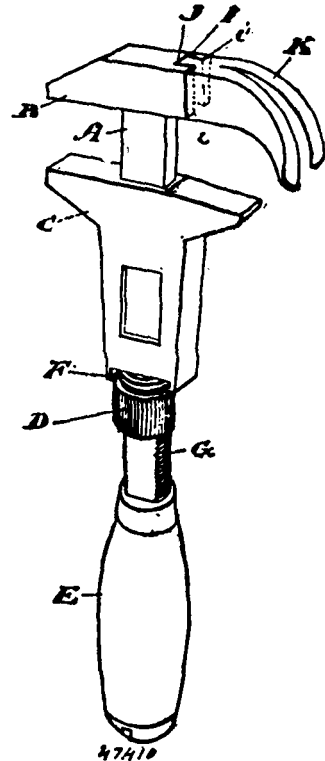
*Claim.*—1st. In combination with a stovepipe, a sliding damper for the purpose set forth. 2nd. In combination with a stove pipe, a transverse guideway and a sliding damper movable in such guideway for the purpose set forth. 3rd. In combination with the lengths *a* of stovepipe, flat plates with central openings connected to such lengths, and together to form a transverse chamber or guideway, and a damper movable in such guideway for the purposes set forth. 4th. In combination with the lengths *a* stovepipe, flat rectangular plates with central openings connected at their inner edges to such lengths, and to each other by the overlapping of the outer edges of one over the outer edges of the other on all sides except one, so as to form a transverse chamber or guideway with an opening thereto, and a rectangular damper movable in such guideway for the purpose set forth. 5th. In combination with the lengths *a* of stovepipe, flat rectangular plates with central openings connected at their inner edges by off-set and flattened overlapping flanges to such lengths, and to each other by the overlapping of the outer edges of one over the outer edges of the other on all sides except one, so as to form a transverse chamber or guideway with an opening thereto, and a rectangular damper movable in such guideway for the purpose set forth.

#### No. 47,410. Wrench. (Clé à écrou.)

Silas John Vaudette, Port Hope, Ontario, Canada, 7th November, 1894; 6 years.

*Claim.*—1st. A wrench consisting of a screw threaded shank, a fixed jaw at the head of the shank, a movable jaw sliding upon said shank, a set nut mounted on said shank having its inner face screw threaded to correspond with the screw threads on the said shank, enlargements in the inner face of the set nut arranged diametrically opposite each other, and adapted to admit of the entry of the screw threaded shank to permit of the nut sliding upon the said shank, a dove-tailed channel in the back of the fixed jaw an interchangeable part having a dove-tailed tenon to enter the said channel, substantially as specified. 2nd. In a wrench, the combination of the screw threaded shank, a fixed jaw at the head of the shank, a movable jaw sliding upon said shank, a set nut mounted upon said shank having its inner face screw threaded to correspond with the screw threads on the said shank, enlargements in the inner

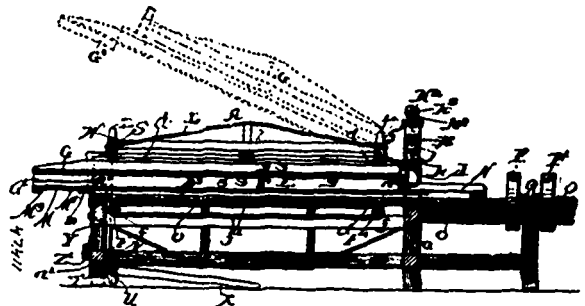
face of the set nut arranged diametrically opposite each other, and adapted to admit of the entering of the screw threaded shank



therein to allow of the nut sliding upon the said shank, said set-nut connected to the sliding jaw by means of a swivel joint, substantially as specified.

#### No. 47,411. Machine for Stuffing Mattresses.

(Machine pour rembourrer les matelas.)



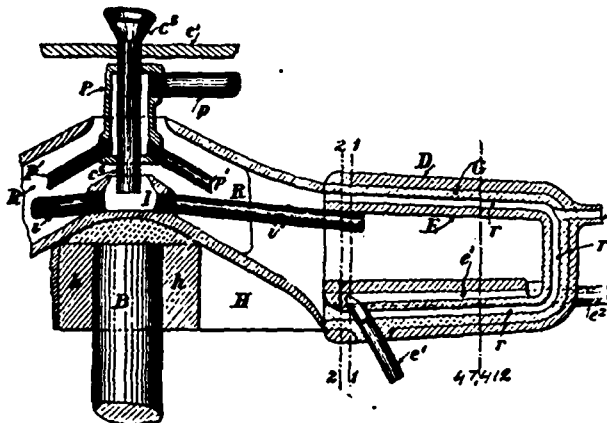
Robert R. Thompson, Bloomington, Illinois, U.S.A., 7th November, 1894; 6 years.

*Claim.*—1st. A mattress stuffing machine, constructed with a floor and vertically adjustable top, said floor and top being constructed with a number of laterally adjustable beams provided with laterally adjustable overlapping plates, in combination with mechanism for adjusting said beams and plates in the top and floor of said machine synchronously. 2nd. A mattress stuffing machine constructed with a bottom, having laterally adjustable overlapping plates, a hinged top having laterally adjustable overlapping plates and a vertically adjustable hinge, in combination with mechanism for synchronously adjusting the plates of the top and floor of the machine, as herein set forth. 3rd. A mattress stuffing machine, constructed with laterally adjustable side-rails, a floor composed of laterally adjustable overlapping plates, a top provided with laterally adjustable overlapping plates, and mechanism for synchronously adjusting said plates in the top and floor of the machine. 4th. In a mattress stuffing machine, the combination with a laterally adjustable floor, a laterally adjustable top, and mechanism for synchronously adjusting said top and floor, of a reciprocating plunger, as herein set forth. 5th. A mattress stuffing machine, constructed with a floor, composed of a series of laterally adjustable plates, a top composed of a series of laterally adjustable plates, laterally adjustable sides, a spout composed of laterally adjustable plates, and mechanism for synchronously operating the said several plates of the top and floor and spout. 6th. A mattress stuffing machine constructed with a floor and top, each



provided with overlapping laterally adjustable plates, means for synchronously adjusting said plates, and mechanism for equalizing the adjusted distance of the plate relative to one another. 7th. A mattress stuffing machine constructed with a floor and top, each provided with laterally adjustable overlapping plates, means for synchronously adjusting said plates, and a lazy-tongs mechanism connecting said plates, whereby the relative movement of the plates to each other is equalized. 8th. In a mattress stuffing machine, a spout composed of a fixed lower horizontal central plate, and lower side laterally adjustable plates, in combination with a hinged cover extended forwardly to constitute the upper section of the spout, and having laterally adjustable plates, the outer side plates thereof having depending flanges. 9th. In a mattress stuffing machine, the combination with a bottom and a hinged cover, each formed with overlapping plates and adjustable sides, of mechanism for synchronously operating said plates, an adjustable spout, an adjustable gate, substantially as described. 10th. A mattress stuffing machine constructed with a bottom, sides, gate, spout and cover, each of said parts being laterally adjustable and connected together so as to be adjusted, in combination with a mechanism for effecting said adjustment. 11th. The combination, with the frame and the swinging cover mounted thereon, of slotted wear-plates secured to the sides of the cover, a rock-shaft mounted on the frame near the base thereof and provided with levers, rods pivoted to said levers and adapted to engage slots in the wear-plates, and nuts mounted on the upper ends of the said rods. 12th. In a mattress stuffing machine, the combination with the gate, consisting of a fixed central plate, a U-shaped bar secured thereto, and side plates moving laterally in said bar over the central plate, of a hand-lever connected to the gate, an angle lever connected to the hand-lever, and a spring bearing on the hand-lever to hold the gate normally closed. 13th. In a mattress stuffing machine, the combination, with a suitable laterally adjustable bed, of side boards attached to the margins thereof and both laterally adjustable, a longitudinal plunger shaft approximately central with reference to the bed, a variable plunger attached to said shaft and adapted to be moved longitudinally in the stuffing-box and a suitable cover for the stuffing-box. 14th. In a mattress stuffing machine, the combination with a suitable laterally adjustable bed, side boards attached to the margins of the bed and laterally adjustable with reference to the centre thereof and an approximately central longitudinal plunger shaft lying within the stuffing-box, of a laterally adjustable plunger mounted upon the shaft and adapted to moved thereby and a suitable cover for the stuffing-box.

**No. 47,412. Centrifugal Separator for Molten Metals.**  
(Séparateur centrifuge pour le métal fondu.)

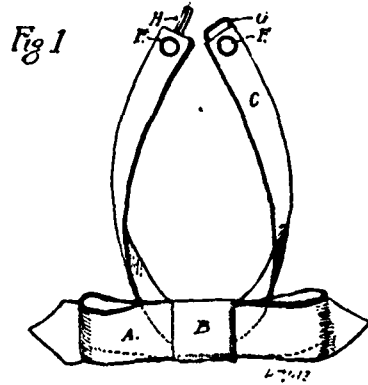


Jonathan Aldous Mays, Hamstead, County London, England, 7th November, 1894; 6 years.

*Claim.*—1st. In an apparatus for separating molten metals and similar substances from each other by the action of centrifugal force alone, the combination of a revoluble receiving vessel, means for rotating the same, a gas air supply for producing an oxidising or reducing flame, an eduction tube or tubes, and one or more collectors for receiving the separated substances, substantially as described. 2nd. In an apparatus for separating molten metals and similar substances from each other by the action of centrifugal force alone, the combination of a revoluble receiving vessel, means for rotating the same, a heated air supply for producing an oxidising effect, an eduction tube or tubes, and one or more collectors for receiving the separated substances, substantially as described. 3rd. In an apparatus for separating molten metals and similar substances from each other by the action of centrifugal force alone, the combination of a revoluble receiving vessel, means for rotating the same, a chamber for melting or smelting the solid substances, a gas and air supply for producing either an oxidising or a reducing flame, an eduction tube or tubes, and one or more collectors for receiving the separated substances,

substantially as described. 4th. In an apparatus for separating molten metals and similar substances from each other by the action of centrifugal force alone, the trap or siphon apparatus for governing the radial levels of the different molten substances, substantially as described. 5th. In the apparatus for centrifugally separating molten metals, and similar substances from each other, the device for cooling the deflectors or collectors, substantially as shown and described. 6th. In the apparatus for centrifugally separating molten metals and similar substances from each other, the devices for heating the collectors, or their contents, substantially as shown and described.

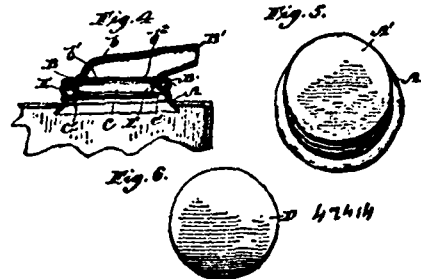
**No. 47,413. Celluloid Ties.** (Faux-col en cellulôide.)



François-Xavier Bessette, Montréal, Québec, Canada, 8th November, 1894; 6 ans.

10.—Dans un faux-col en feuille de cellulôide, la combinaison d'une boucle A en feuille de cellulôide réunie à une bande en élastique ou autre étoffe quelconque C avec un crampon en métal E, tel que ci-dessus décrit et pour les fins indiquées. 20. Dans un faux-col en cellulôide, la combinaison de la bande B en feuille de cellulôide réunie à la boucle A avec une agrafe en métal D et recouvrant, sur le devant de la boucle A, le crampon E et l'agrafe D, tel que ci-dessus décrit et pour les fins indiquées. 30. Dans un faux-col en cellulôide, la combinaison des crampons F avec la bande élastique ou d'autre étoffe quelconque C pour relier l'aillet G et l'agrafe H aux extrémités de la bande C, tel que ci-dessus décrit et pour les fins indiquées.

**No. 47,414. Cap for Cans.** (Couvercle de boîte métallique.)



George J. Record, Comeaut, Ohio, U.S.A., 8th November, 1894; 6 years.

*Claim.*—1st. A receptacle having a filling opening and a screw-neck for said opening provided with an internal flange, in combination with a sealing disc or seal of thin material having projecting parts which snap under the said flange and hold the sealing disc or seal against withdrawal, substantially as set forth. 2nd. A receptacle having an opening surrounded by an inwardly extending flange in combination with a sealing disc or seal of thin material having projecting parts which snap under the said flange and hold the sealing disc or seal against withdrawal, substantially as set forth. 3rd. A receptacle having an opening surrounded by an inwardly extending flange, in combination with a sealing disc or seal of thin material adapted to snap under the said flange by elasticity and be held against withdrawal, substantially as set forth.

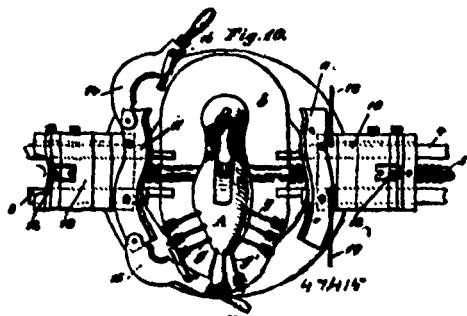
**No. 47,415. Upper for Boots and Shoes, and Apparatus for Manufacturing Same.** (Empègne de chaussure et appareil de fabrication.)

Christian Chaskel Eisenberg, Berlin, Prussian, 8th November, 1894; 6 years.

*Claim.*—1st. An upper for boots and shoes having an outer edge or welt formed in one piece with it, and adapted to serve as the means of attaching it to the sole, as set forth. 2nd. An apparatus

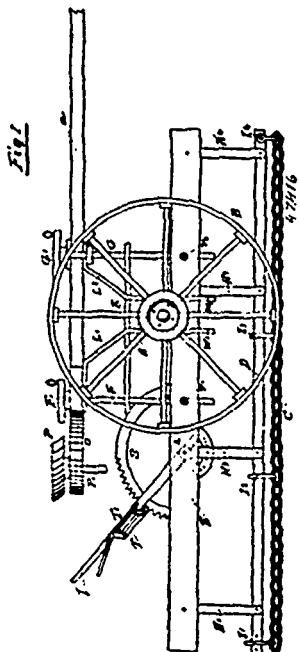


for manufacturing improved uppers consisting of clamps adapted to stretch the upper cover the last, and of pressing bars, and means for operating them, the said pressing-bars serving to press the upper in between the last and sole-plate, and so effect the formation of



the outer edge or welt, as set forth. 3rd. In an apparatus for manufacturing improved uppers, the combination with the clamps *g*, *g*, adapted to stretch the upper over the last *e*, of side pressing-bars 11, pressing-levers 14 and 15, for the heel and toe portion, said pressing-bars and levers serving to press the upper in between the last *e*, and sole plate *d*, and so effect the formation of the outer edge or welt, as set forth. 4th. In an apparatus such as described, a sole-plate *d*, conforming to the shape of the last *e*, the said plate *d*, being capable of being connected to the last and having a stepped edge or border *d'*, for preventing the upper from shifting during the pressing operation, as hereinbefore described and shown. 5th. In an apparatus for manufacturing improved uppers, the combination with the sole plate *d*, and last *e*, of the pressing-bars 11, carried by the plate 10, the nuts *i*, screw spindles 5, and hand-wheels *h*, all arranged as and for the purpose specified. 6th. In an apparatus for manufacturing improved uppers, the combination with the sole-plate *d*, and last *e*, of the pressing-levers 14 and 15, arranged as and for the purpose specified. 7th. In an apparatus for manufacturing improved uppers, the combination with the sole-plate *d*, and last *e*, of the pressing-levers 14 and 15, and screw devices 18 and 19, all arranged as and for the purpose specified.

**No. 47,416. Machine for Distributing or Collecting Metal on Roads, &c. (Machine pour distribuer et ramasser la pierre sur les chemins, etc.)**

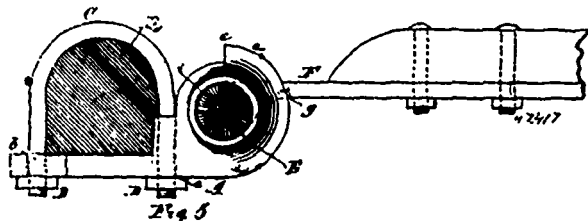


John Pascoe Oliver, Brunswick, Colony of Victoria, Australia, 8th November, 1894; 6 years.

*Claim.*—1st. In a machine of the nature specified, the use of chain or chains, substantially as and for the purpose hereinbefore set forth. 2nd. In a machine of the nature specified, the combination of a frame with an adjustable guide or guides and chain or chains capable of being set at an angle as described and illustrated, substantially as and for the purpose hereinbefore set forth. 3rd. In a machine of the nature specified, the combination of guide or guides with a chain or chains, substantially as and for the purpose herein-

before set forth. 4th. In a machine of the nature specified, the combination of frame *E*, and shafts *F* and *G*, with guide *D*, and chain *C*, and lever *J*, and pivot nuts *V*<sup>1</sup> and *V*<sup>2</sup>, as described and illustrated, substantially as and for the purpose hereinbefore set forth. 5th. In a machine of the nature specified, the hanging of guide *D*, with chain *C*, by *H*<sup>1</sup>, *H*<sup>2</sup>, *H*<sup>3</sup>, *H*<sup>4</sup> and *I*<sup>1</sup>, *I*<sup>2</sup>, *I*<sup>3</sup>, *I*<sup>4</sup>, substantially as and for the purpose hereinbefore set forth. 6th. In a machine of the nature specified, the combination of a lever *J*, with shafts *F* and *G*, and nuts *V*<sup>1</sup> and *V*<sup>2</sup> to adjust the position of guide or guides and chain or chains as required, and ratchets *S*, with catch *T*, and spring *T*<sup>1</sup> to hold guide or guides and chains or chains in their adjusted positions and the attachments specified, substantially as and for the purpose hereinbefore set forth.

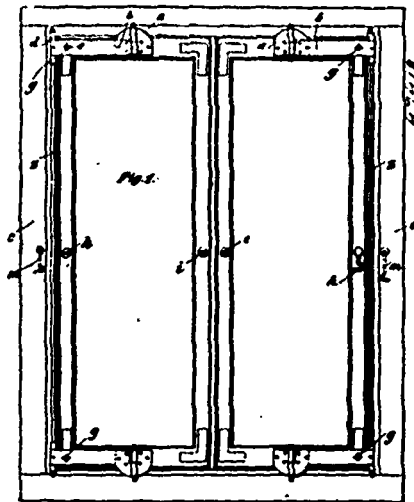
**No. 47,417. Thill Coupler. (Armon de limonière.)**



James Houghton, Brantford, Ontario, Canada, 8th November, 1894; 6 years.

*Claim.*—1st. In a thill coupling for vehicles, a box formed with two circular-shaped lugs at its outer end, one open at the top, a circular-shaped opening and a corresponding T shaped bevel-ended head operating in said opening attached to a thill to form a complete coupling, substantially as and for the purpose specified. 2nd. In a thill coupling, for vehicles, the box *A*, constructed with lugs *c*, *c'*, socket opening *d*, across the box, a cylindrical head *E*, to operate in the socket opening *d*, and the plate *F*, attached to said head, all constructed substantially as and for the purpose specified. 3rd. In a thill coupling for vehicles, the box *A*, constructed with lugs *c*, *c'*, projection *e*, to hold up thills, socket opening *d*, to receive the head *E*, dust opening *h*, opening *a*, and slot *b*, in the rear portion to adjust to different sizes of shafts and held by clip *C*, substantially as and for the purpose specified. 4th. In a thill coupling, the combination of the box *A*, lugs *c*, *c'*, circular-shaped opening *d*, thill supporting projection *e*, dust opening *h*, adjusting slot *b*, the cylindrical-shaped head *E*, with level ends *i*, *i*, having the iron *F*, attached thereto, all constructed substantially as and for the purposes specified.

**No. 47,418. Window. (Fenêtre.)**



Robert Heinrich Wilhelm Rump, Hamburg, Germany, 8th November, 1894; 6 years.

*Claim.*—In French windows having sashes opening outwardly, hinges such as *a*, *d*, with leaves *b*, common to both and which can be locked to the sashes by means of fasteners *f*, constructed and arranged substantially as hereinbefore described.

**No. 47,419. Coil Wire Duster. (Epousette en fil de fer.)**

Caleb Swayze, Toronto, Ontario, Canada, 8th November, 1894; 6 years.

*Claim.*—1st. As a new article of manufacture, a coiled wire

duster comprising a coiled wire bent circular at the outer end oblong in shape with the two ends bent together and formed in one double coil and forced over the small end of the handle, substantially as



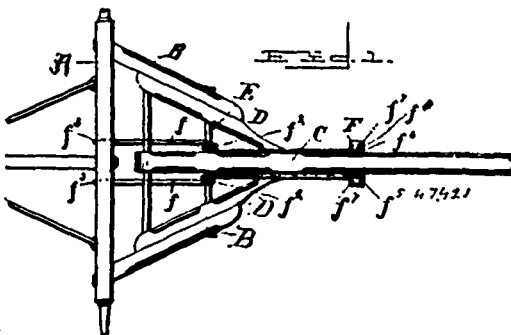
and for the purpose specified. 2nd. The coiled wire duster herein described, comprising the coiled wire A, having the double coil C, and having the handle B firmly fastened into it all, substantially as described and shown.

**No. 47,420. Process of Softening Vegetable Fibre.**  
(*Procédé pour amollir les fibres végétales.*)

William H. L. James and George Clark Warr, both of Paterson, New Jersey, U.S.A., 8th November, 1894; 6 years.

*Claim.*—The herein described method of softening vegetable fibre which consists in first subjecting the fibre to the action of a solution of alkali, soap, oil and glycerine, until the fibre is saturated and softened, and in then drying the saturated fibre, substantially as described.

**No. 47,421. Wagon Tongue Support.**  
(*Support d'arçon de wagon.*)

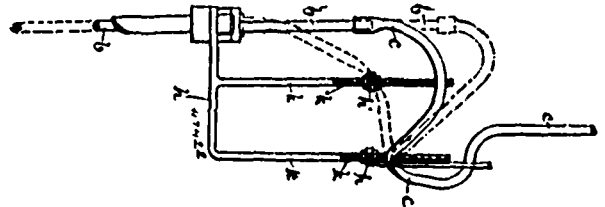


George H. Mills, Oshkosh, Wisconsin, U.S.A., 8th November, 1894; 6 years.

*Claim.*—A tongue-support, comprising duplicate spring-arms bent substantially centrally of their length into coils and having the inner ends suitably formed to engage the axle of a vehicle, an approximately U-shaped clip adapted for supporting the tongue and horizontally disposed coils formed by the bent up extremities of said arms encircling the legs of said U-shaped clip, as specified.

**No. 47,422. Bottle Filling Machine.**

(*Machine à embouteiller.*)



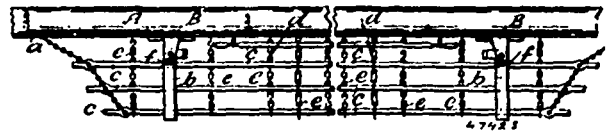
Robert Allan, Montreal, Quebec, Canada, 8th November, 1894; 6 years.

*Claim.*—1st. In a bottle filling machine, the combination with the water supply tube, of means for automatically controlling the flow of water through same, for the purpose set forth. 2nd. In a bottle filling machine, the combination with the movable water supply tube, and the moving plunger to which it is attached, of stationary bearings or supports upon which the supply tube is bent, for the purpose set forth. 3rd. In a bottle filling machine, the combination with the movable flexible water supply tube, and the moving plunger to which it is attached, of plate *f* suitably supported and having openings *d, e*, through which the tube passes, for the purpose set forth. 4th. In a bottle filling machine, the combination with the movable flexible water supply tube, and the moving plunger to which it is attached, of plate *f* suitably supported and having openings *d, e* and bar *g* suitably supported, through which openings and over which bar the tube passes, for the purpose set forth.

**No. 47,423. Shuttle Guard and Catcher.**

(*Garde-navette et arrêtoir.*)

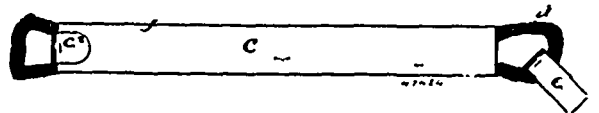
FIG. 2



Charles Henry Wilkinson, Milnsbridge, Yorkshire, England, 8th November, 1894; 6 years.

*Claim.*—In looms the combination therewith of a shuttle-guard and shuttle-catcher comprising a series of horizontal rods and chains and collapsible brackets such as *b*, all constructed, arranged and operating substantially in the manner described and shown in the drawing.

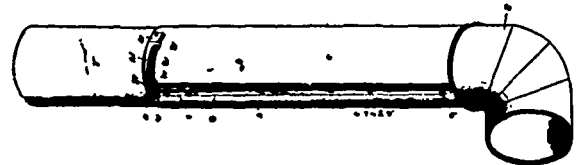
**No. 47,424. Thread Package.** (*Emballage de fil.*)



Benjamin L. Armstrong, New London, Connecticut, U.S.A., 8th November, 1894; 6 years.

*Claim.*—A thread package consisting of a casing or envelope, enclosing a skein as set forth, said casing being closed at one end within the doubled portion of the skein to prevent the withdrawal of the latter, all substantially as set forth.

**No. 47,425. Stove Pipe Joint.** (*Joint de tuyau de poêle.*)

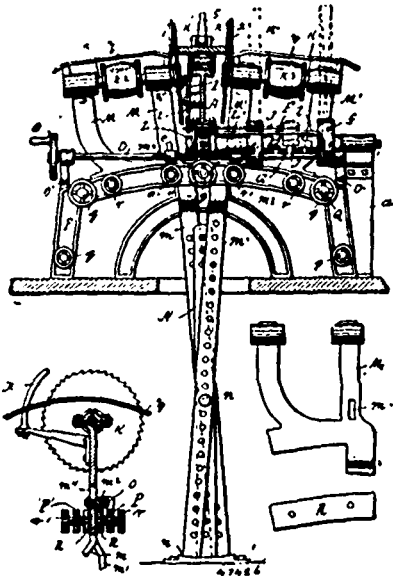


Martin Stehle, Perry, Missouri, U.S.A., 8th November, 1894; 6 years.

*Claim.*—1st. A pipe joint consisting of a section of sheet metal bent into a cylindrical form and having its contiguous edges overlapping, whereby it may be adjusted to suit the size of the pipe with which it is used, a perforated plate on one edge, a ring pivoted to the remaining edge, and a lever fulcrumed to the ring and provided at one end with a reduced or pointed portion and at the remaining end with a hook, the first end being adapted to pass into engage-

ment with the perforations of said plate while the hook of the remaining end is adapted to take under the plate and to hold the lever in place, substantially as described. 2nd. A pipe joint consisting of a sheet of metal bent into a cylindrical form, and having its contiguous edges overlapping, a rivet at one end of said edges whereby the edges at said end are held in a fixed position, a strengthening strip riveted to the outer edge of the sheet of metal, a U-shaped strip rigidly secured to the lower end of said strengthening strip and projecting inwardly, so as to embrace the two edges of the sheet of metal and to hold them in position, and a clasp for securing the said edges together, substantially as described.

**No. 47,426. Stave Machine. (Machine à douelles.)**



Nelson Burr, Batavia, Illinois, U.S.A., 8th November, 1894, 6 years.

*Claim.*—1st. In a stave machine, the combination with a table or bed, whose upper surface inclines upwardly from front to rear, of a carriage adapted to reciprocate upon the table, and a pair of circular saws located upon opposite sides of the table and mounted obliquely so as to flare apart upwardly, substantially as described and for the purpose set forth. 2nd. In a stave machine, the combination with a table or bed whose upper surface inclines upwardly from front to rear, of a carriage adapted to reciprocate upon the table, a pair of circular saws located upon opposite sides of the table and mounted obliquely so as to flare upwardly, and upwardly projecting fingers at the rear of the saws for deflecting the strips cut from the sides of the staves, substantially as described and for the purpose set forth. 3rd. In a stave machine, the combination with a table or bed, and with a carriage tapering upwardly toward its rearward end, and adapted to reciprocate upon the table, of a pair of circular saws located upon opposite sides of the table, laterally swinging frames for carrying the saws, and a pair of clamping frames transverse to the table and upon opposite sides of the saw frames, and means for drawing said clamping frames tightly against the saw frames whereby the latter are firmly locked, substantially as described and for the purpose set forth. 4th. In a stave machine, the combination with a table or bed with a carriage tapering upwardly toward its rearward end and adapted to reciprocate upon the table, of a pair of circular saws located upon opposite sides of the table, laterally swinging frames for carrying the saws, clamping frames for locking the saw frames, contact or adjusting plates interposed between the clamping frames and the saw frames and adjustable with reference to the former, whereby the alignment of the saws with reference to the carriage movement can be adjusted, and set screws  $r$ ,  $r'$ , for controlling the adjusting plates, substantially as described and for the purpose set forth. 5th. In a stave machine, the combination with a table or carriage way, of a pair of circular saws located upon opposite sides of the table and in divergent planes, the lines of the table top and of the intersection of the planes of the saws diverging, substantially as described and for the purpose set forth.

**No. 47,427. Over Shoe. (Claques.)**

Charles Leander Higgins, Montreal, Quebec, Canada, 8th November, 1894; 6 years.

*Claim.*—1st. An overshoe having an unwaterproofed textile upper separately secured to the lining of the rubber covering and the latter secured to the lining and covering up the seam between the upper and lining, for the purpose set forth. 2nd. An overshoe having an upper secured to the lining of the rubber covering by means of a line of stitching running parallel with the edges of the upper and

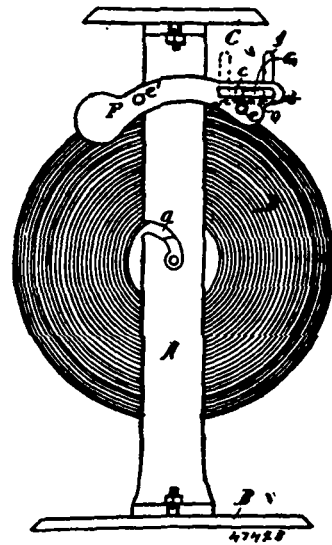
lining and a line of stitching overlapping the edge of said upper, for the purpose set forth. 3rd. In the manufacture of rubber overshoes, first securing the upper *a* to the lining *b*, and then the rubber covering *g* over same, for the purpose set forth. 4th. An overshoe



having an upper secured to the lining of the rubber covering, and the edge of such upper finished by a line of stitching overlapping same, for the purpose set forth. 5th. An overshoe having an upper secured to the lining of the rubber covering, and the edge of such upper finished by a zig-zag line of stitching overlapping same, for the purpose set forth. 6th. In an overshoe, the combination of the upper *a*, lining *b*, lines of stitching *c* and *d*, and rubber covering *g*, all united and acting in the manner, and for the purposes set forth,

**No. 47,428. Roll Paper Holder and Cutter. (Porte et coupe-rouleaux de papier.)**

(Porte et coupe-rouleaux de papier.)



Clarence H. Haggood and James F. Leake, both of Dayton, Ohio, U.S.A., 9th November, 1894; 6 years.

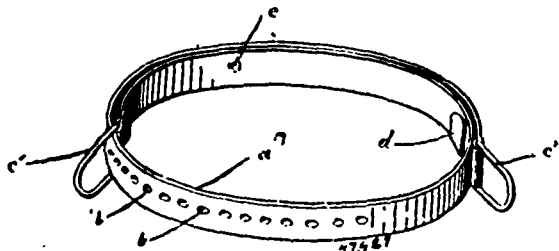
*Claim.*—1st. The combination of the standards upon which the roll is mounted, the end brackets provided with slots and lugs, parallel rods mounted in said brackets, guide and supporting plates for the free end of the paper secured to one of said rods, a cutting blade mounted in said slots, and means for keeping said blade in an outward position, normally, as is herein described. 2nd. The combination, with the supporting standards, of a carriage consisting of end plates provided with slots in their front ends, a transverse cutting blade slidingly maintained in said slots, parallel rods mounted in said plates, one of said rods occupying a position in the rear of the cutting blade and forming a fixed support as to horizontal movement, for the free end of the paper, substantially as herein described.

**No. 47,429. Band Clasp. (Agrafe de courroie.)**

Samuel Knighton and Charles E. Kavanagh, both of Winnipeg, Manitoba, Canada, 9th November, 1894; 6 years.

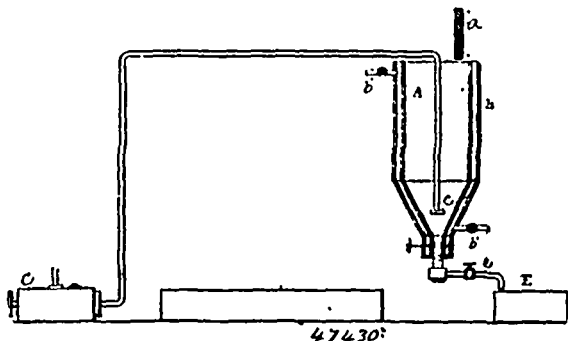
*Claim.*—In a flexible band clasp, the combination of the band or

strap A with perforations *b, b, b*, the loops *C<sup>1</sup>, C<sup>2</sup>*, secured to ends of band *a*, the clip *d* and hook *e* secured to the said band *a*,



substantially as and for the purpose above set forth.

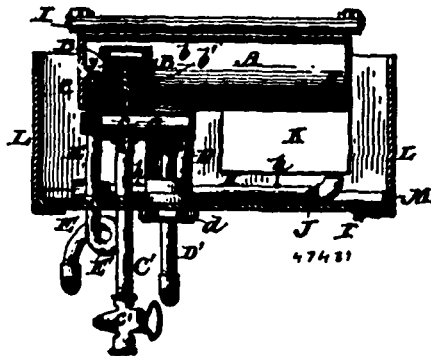
**No. 47,430. Process of Refining Butter, Etc.**  
(Procédé pour raffiner le beurre etc.)



Joseph H. Campbell and Charles H. Campbell, both of New York, State of New York, U.S.A., 9th November, 1894; 6 years.

**Claim.**—1st. The process of refining butter which consists in melting the same, allowing the solid impurities to settle, removing the same, and then treating the residue to an air blast. 2nd. The process of refining butter which consists in partially removing the solid impurities therefrom by melting the butter, removing said solid impurities by precipitation, then treating to an air blast whereby moisture is driven off, again removing the remaining impurities, and subsequently treating to an air blast, substantially as set forth. 3rd. The process of refining butter which consists in partially removing the solid impurities therefrom by melting the butter, allowing said solid impurities to precipitate, drawing them off, and then treating to an air blast and thereafter washing with water, substantially as set forth. 4th. The process of refining butter which consists in partially removing the solid impurities therefrom while the butter is in a melted state, and alternately treating with an air blast and water, substantially as set forth. 5th. The process of refining butter which consists in treating the same while in a melted state with an air blast and water alternately, substantially as set forth. 6th. The process of refining butter which consists in treating the same in a melted state, first removing by precipitation a portion of the impurities thereof, then adding water on top of the material undergoing treatment and allowing the same to settle therethrough, removing the said water with its collected impurities, and subsequently treating to an air-blast, substantially as set forth. 7th. The process of refining butter which consists in treating the purified butter-oil in the presence of milk, etc., previously acrated, substantially as set forth. 8th. The process of refining butter which consists in treating a purified butter-oil in the presence of sweet milk to an air-blast and subsequently adding to the mixture, a quantity of sour milk without interrupting the air blast, substantially as set forth. 9th. The process of refining butter which consists in alternately treating the same to water and an air blast, then adding sweet milk to the purified butter-oil in the presence of an air-blast, until the mixture is of about the consistency of cream, then adding butter or sour milk without interrupting the air-blast, substantially as set forth. 10th. The process of refining butter which consists in alternately treating the same to water and an air-blast, then adding sweet milk to the purified butter-oil in the presence of an air-blast, until the mixture is of about the consistency of cream, then adding butter or sour milk without interrupting the air-blast, drawing off the contents into an ice tank, removing the flocculent particles thereby formed, and subsequently churning the same in the presence of sweet milk or cream, substantially as set forth. 11th. The process of refining butter which consists in alternately treating the same to water and an air-blast, then adding sweet milk to the purified butter-oil in the presence of an air-blast until the mixture is of about the consistency of cream, then adding butter or sour milk without interrupting the air-blast, drawing off the contents into an ice tank, then removing the flocculent particles thereby formed, and churning the same in the presence of milk or cream which has been already partially churned, substantially as set forth.

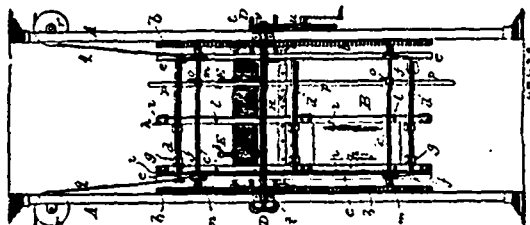
**No. 47,431. Vaporizer. (Evaporateur.)**



Joseph O. Beazley, Baltimore, Maryland, U.S.A., 9th November, 1894; 6 years.

**Claim.**—1st. In a retort vaporizer, the combination with a mixing chamber, of a steam chest, a chamber having a perforated cap upon its top, communicating with the said chest and projecting into the mixing chamber, an oil supply pipe leading into the said mixing-chamber, a water supply pipe leading into the said chest, burners connected with the said mixing chamber and contiguous thereto and to the steam chest, and a blow-out pipe connected with the said steam chest, substantially as described. 2nd. In a retort vaporizer, the combination with a mixing chamber, of a steam chest, a chamber having a perforated cap upon its top, communicating with the said chest and projecting into the mixing chamber, an oil supply pipe leading into the said mixing chamber, a water supply pipe leading into the said chest, burners connected with the said mixing chamber and contiguous thereto and to the steam chest, a sleeve *D<sup>1</sup>*, secured to the bottom of the said steam chest, a drip pan engaged by the said sleeve, and a blow-out pipe connected with the said steam chest, substantially as described. 3rd. In a retort vaporizer, the combination with a substantially horizontal mixing chamber, a substantially horizontal steam chest upon the bottom thereof, an interior chamber within the said mixing chamber, provided with a perforated cap and communicating with the interior of the steam chest, a burner communicating with the mixing chamber and being adjacent to and below the said mixing chamber and steam chest, an oil induction pipe communicating with the said mixing chamber, a water induction pipe entering the steam chest, and a blow-off pipe communicating with the steam chest, substantially as described. 4th. In a hydrocarbon burner, wherein water is converted into steam to unite with the vapour of oil, a separate steam chest located between the water supply pipe and the mixing chamber, said chest being provided with an outlet pipe and valve for the discharge of any sediment from the water, substantially as described. 5th. The combination of the mixing chamber *A*, the asbestos chamber *B*, the intermediate steam chest *C*, the oil pipe *B*, the water supply pipe *D*, the outlet pipe *C<sup>1</sup>*, and gas pipes *F, F<sup>1</sup>*, and *H, H<sup>1</sup>*, having burners *h, h<sup>1</sup>*, all substantially as and for the purpose described.

**No. 47,432. Manufacture of Mirrors.**  
(Fabrication de miroir.)

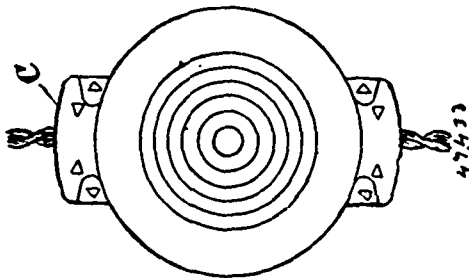


Adam I. Klock, St. Johnsville, New York, U.S.A., 9th November, 1894; 6 years.

**Claim.**—1st. The method of manufacturing mirrors, which consists in fusing an amalgam of lead, tin and mercury, and applying the amalgam while heated, to a plate of glass. 2nd. In combination, with the main frame and spreading devices carried thereby, the sliding glass holding frame mounted in the main frame. 3rd. In combination, with the main frame and spreading devices carried thereby, a sliding frame provided with a glass-holding sash and means for moving the sash toward and from the spreading devices. 4th. In combination, with the main frame and spreading devices carried thereby, a sliding glass-holding frame comprising a rigid frame and the laterally movable glass clamping bars. 5th. In combination, with the main frame and spreading devices carried thereby, a sliding glass-holding frame comprising rack bars *b, b*, uprights *c, c*, cross bars *d, d*, upright bars *h, i*, with their spring pins

k, clips g, and means for raising and lowering the frame. 6th. In combination, with the main frame and spreading devices carried thereby, the sliding frame having bars c, yokes m, shaft e, provided with eccentrics n, and arm o, and rod p connected with the arms. 7th. In a machine of the class described, the combination, with a frame having the upright bars h, of the flanged bars i hinged to the bars h, and the spring pressed pins k, for holding the glass against the flange of bar i. 8th. In combination, with a main frame and a sliding glass-holding frame, a melting pot C, a box F below the pot, and means for heating the pot and box. 9th. In combination, with a main frame and a sliding glass-holding frame, a spreader box F, and a pivoted valve acting in conjunction therewith to force the molten metal upon the glass. 10th. In combination, with a main frame and a sliding glass frame, a melting pot, a box F, and an interposed valve. 11th. In combination, with a main frame and a sliding glass frame, a box F, and a valve acting in conjunction therewith, and means whereby the valve is operated by the reciprocation of the sliding frame. 12th. In combination, with box F, having raised rim G, the pivoted valve or plate I. 13th. In combination, with box F, having raised rim G, the pivoted valve or plate I, and the spreader plate H applied to the front face of the box. 14th. In combination, with a main frame, a box F, having raised rim G, and spreader plate H, the pivoted valve I, provided with arm L, and sliding frame B, provided with cam M.

**No. 47,433. Suspension Device. (Appareil de suspension.)**



Stephen Porter and John Robert White, both of Boston, Massachusetts, U.S.A., 9th November, 1894; 6 years.

**Claim.**—1st. In a suspension device of the character described, casing-sections having flanges around their openings through which the cord passes, and lining pieces of insulation affixed to said flanges. 2nd. In a suspension device of the character described, casing-sections having abutting ears, those on one section formed with slots and those on the other section with prongs to enter the slots and turn down over the ears of the slotted section. 3rd. In a suspension device of the character described, casing-sections having flanges around their openings through which the cord passes, and lining pieces of insulation affixed to said flanges and secured by prongs struck up from the material of the flanges, passed through the insulation and bent down over the same.

**No. 47,434. Building Blocks and Process of Making the Same. (Blocs de construction et procédé de fabrication.)**

Theodore Sanford Pierce, Grand Rapids, and Frederick C. Norris, Lansing, Michigan, U.S.A., 9th November, 1894; 6 years.

**Claim.**—1st. The herein described composition for building blocks or brick, consisting of hydraulic cement, sand, sugar or equivalent saccharine matter, potassium nitrate, silicate of soda, alum, sulphuric acid and water, combined substantially in the manner and proportions specified. 2nd. The herein described process of making artificial building block or brick, which consists, first, in thoroughly mixing sand and hydraulic cement in substantially the proportions specified, then reducing such mixture to a plastic condition by a solution composed of water, sugar or equivalent saccharine matter, potassium nitrate, silicate of soda, alum and sulphuric acid, combined substantially in the manner and proportions specified, and finally in moulding the plastic mass into the desired form, substantially as described.

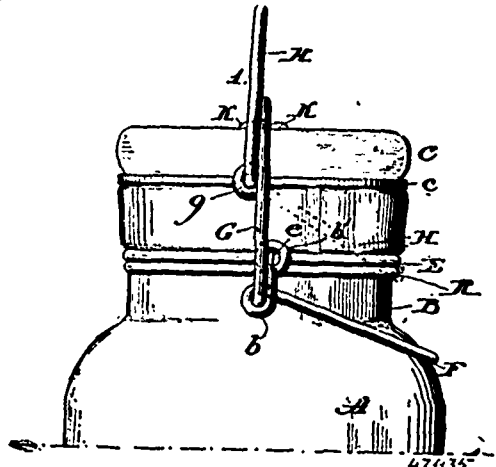
**No. 47,453. Fastener for Glass and other Vessels.**

(Attache pour vaisseaux en verre et autres.)

Salmon B. Rowley, assignee of Cleophas Fisher, both of Philadelphia, Pennsylvania, U.S.A., 9th November, 1894; 6 years.

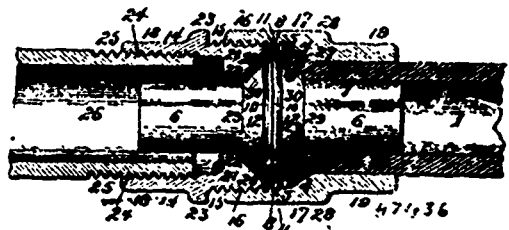
**Claim.**—1st. In a fastener for glass and other vessels, the combination of a neck-wire consisting of two parts adapted to surround the vessel, and the adjacent ends of which are adapted to be bent outwardly, a compressing lever having two pairs of loops, one pair of which is adapted to receive the neck-wire ends, and a bail or yoke, the ends of which are adapted to rest in the other pair of said compressing lever loops, substantially as described. 2nd. In a fastener for glass and other vessels, the combination of a bail or yoke having loops, a handle the ends of which are adapted to set in

said loops; a neck-wire consisting of two disjointed semi-circular wires adapted to surround the vessel, and the corresponding ends of which are adapted to be bent outwardly and adjacent to each other,



and a compressing lever having two pairs of loops, one pair of which are adapted to receive the neck-wire ends, and the other pair of which are adapted to receive the ends of the bail or yoke, substantially as described. 3rd. The combination with a top or cover for glass and other vessels having two pairs of beads K, a bail or yoke having loops for the reception of the ends of a handle and adapted to extend over the top of said cover, and make contact therewith at two points near the circumference thereof, and being bent between said contact points above the plane thereof, a net-wire consisting of two disjointed semi-circular wires adapted to surround the vessel, and the adjacent ends of which are adapted to be bent outwardly, and a compressing lever having two pairs of loops, one pair of which are adapted to receive the neck-wire ends, and the other pair of which are adapted to receive the ends of the bail or yoke, substantially as described. 4th. The combination with a top or cover for glass and other vessels, of a fastener consisting of a bail, a neck-wire and a compressing lever, said bail being adapted to extend over the top of the cover and make contact therewith at two points near the periphery thereof, and being provided with an upwardly bent spring portion beyond said contact points and periphery, substantially as described. 5th. The combination with a top or cover for glass and other vessels, of a fastener consisting of a bail, a neck-wire and a compressing lever, said bail being adapted to extend over the top of the cover and make contact therewith at two points near the periphery thereof, and being provided with an upwardly bent spring portion between said contact points and an outwardly bent spring portion beyond said contact points and periphery, the said top or cover being provided with pairs of beads at the points of contact of said bail, the space between said beads being less than the width of the bail, substantially as described.

**No. 47,436. Pipe Coupler. (Joint de tuyau.)**



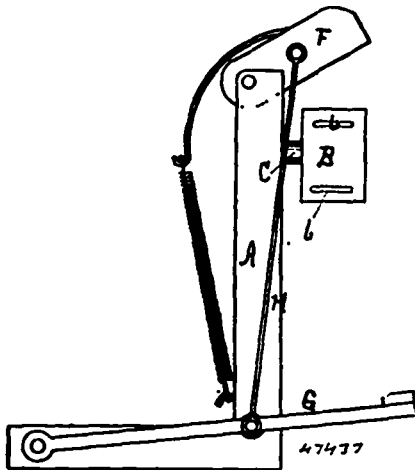
Samuel Meyer Friede, St. Louis, Missouri, U.S.A., 9th November, 1894; 6 years.

**Claim.**—1st. In a pipe coupler, the combination of the soft metal pipe 1 having the bevel joint lip 2, the splice pipe 6, the close joint gasket 8, mounted on said splice pipe, the said gasket 8 having duplex bevel jointer sides 10, meeting at their peripheral edge 11, the combined intermediate, hard metal pipe and screw coupling collar 14, having the bevel inwardly projecting joint seat 20, the head 21, and the contact embracing shoulder 22, and the major screw coupling collar 17, having the bevel joint seat 27, substantially as described. 2nd. In a pipe coupler, the combination of the soft metal pipe 1 having the joint lip 2, the close jointer gasket 8, having the duplex bevel joint sides 10, and their meeting peripheral edge 11, the combined intermediate screw pipe, and minor coupling collar 14, having the bevel joint face 20, and the major screw coupling collar 17, having the bevel face 27, substantially as described. 3rd. In a pipe coupler, the combination of the soft metal pipe 1, having the flaring bevel joint lip 2, the close jointer gasket 8, having the duplex bevel joint sides 10, and their meeting peripheral edge 11 pointing

to the intervening space between the joint ends of pipes, the elastic seal washers 12, the combined intermediate screw pipe and minor coupling collar 14 of hard metal having the bevel joint face 20, and the major screw coupling collar 17, of hard metal having the bevel joint seat 27, substantially as described. 4th. In a pipe coupler, the combination of the soft metal pipe 1, having the flaring bevel joint lip 2, the splice pipe 6, the close joint gasket mounted on said splice pipe, the said gasket having the duplex bevel joint sides 10, that meet at their peripheral joint pointer edge 11, the elastic seal washers 12, having the inner seal faces 13, the outer seal faces 30, and the seal edge 29, the combined intermediate screw pipe, and minor coupling collar 14 of hard metal, having the bevel joint face 20, the major screw coupling collar 17 of hard metal, having the bevel joint seat 27, and the hard metal screw jointed extension pipe 26, substantially as described. 5th. In a pipe coupler, the combination of the soft metal pipe 1, having the bevel joint lip 2, the close jointer double faced gasket 8, having the peripheral edge 11, the hard metal pipe 14, having the bevel joint face 20, and the elastic seal 11, substantially as described.

**No. 47,437. Box Ending Machine.**

(Machine à faire les bouts des boîtes.)

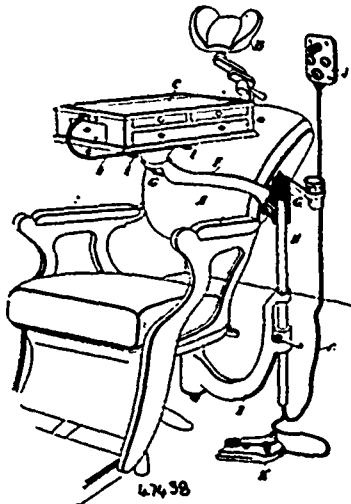


John Fee, Montreal, Quebec, Canada, 9th November, 1894; 6 years.

*Claim.*—The block B arranged to revolve on the center C, so that each end of the box may be brought under the heading block F, with one application of the box blank without removing the box from the said block B, substantially as set forth.

**No. 47,438. Electric Dental Motor.**

(Moteur dentaire électrique.)



Francis Napier Denison, Toronto, Ontario, Canada, 9th November, 1894; 6 years.

*Claim.*—1st. In a dental outfit, the combination with the dental table pivoted and swung in proximity to the chair, as specified, of an electric motor in a chamber under the central portion of the table between the drawers and having the rigid spindle of the dental engine deriving motion from the motor, journaled in suitable

bearings in the inner partition and side of the table and having the flexible shaft of the dental engine extending outwardly from the end of the rigid spindle, as and for the purpose specified. 2nd. In a dental outfit, the combination with the dental table pivoted and swung in proximity to the chair as specified, of an electric motor supported in a chamber under the central portion of the table between the drawers by a casting D<sup>1</sup>, which is secured to the bottom of the table and has a downwardly extending portion to which the bottom of the motor is secured, the downwardly projecting portion rests on the end of the supporting bracket, being secured and pivoted thereon by the tubular bolt c, as and for the purpose specified. 3rd. In a dental outfit, the combination with the dental table pivoted and swung in proximity to the chair, as specified, of an electric motor suitably supported in a chamber under the central portion of the table between the drawers and having a pulley situated on the main shaft which is connected by a belt to a pulley secured to the rigid spindle which is journaled in self-aligning bearings and the flexible shaft of the dental engine extending from the outside of the table, as and for the purpose specified. 4th. In a dental outfit, the combination, with the dental table pivoted and swung in proximity to the chair, as specified, and an electric motor supported in a chamber under the central portion of the table between the drawers, of a rigid spindle suitably journaled beneath the table, extending outwardly beyond the side, deriving motion from the motor and having the flexible shaft attached to the outer end of the spindle and the cleaning brush secured to the outer end of the spindle, as and for the purpose specified. 5th. In a dental outfit, the combination with the dental table pivoted and swung in proximity to the chair, as specified, of the electric motor D, rigid counter spindle P, flexible shaft S, pulley N<sup>1</sup>, on the motor shaft L, connected by a belt N<sup>2</sup>, to the pulley O, on the counter spindle P, the brake consisting of an adjustable disc N, forming part of the pulley N<sup>1</sup>, and magnets M, all arranged as and for the purpose specified. 6th. The combination, with the dental table C, motor D situated in a chamber between the central portion of table between the drawers and having the shaft of the motor connected to the rigid counter spindle P, as specified, of the self-aligning bearings P<sup>1</sup>, P<sup>2</sup>, with arc-shaped peripheries and pivoted at the bottom as specified upon the bracket Q, and ring P<sup>3</sup>, respectively, as and for the purpose specified. 7th. The combination, with the dental table, the motor and counter spindle driven from the motor as specified, of the pulleys O, and brush R, secured on the sleeves P<sup>4</sup>, P<sup>5</sup>, journaled in the self-aligning bearings P<sup>1</sup>, P<sup>2</sup>, held in position by the collars P<sup>3</sup>, P<sup>7</sup>, respectively, which collars are secured from rotation by the screws P<sup>4</sup>, P<sup>5</sup>, extending into the longitudinal groove or keyed slot p, in the counter spindle P, as and for the purpose specified. 8th. The combination, with the dental table and motor suitably supported within a chamber below the centre of the table and between the drawers by a casting located on the bracket arm F, the motor communicating motion to the rigid counter spindle P, and flexible shaft S, of the dental engine as specified, of the tubular bolt c, bracket F, swivelled on the tubular standard R, which is held on the bracket I, attached to the bottom of the chair the tubular bolt bracket and tubular standard forming a conduit for the circuit wires, as and for the purpose specified. 9th. The combination, with the dental table C, motor D, communicating motion to the flexible shaft S, as specified and supported underneath the central portion of the table between the drawers and pivoted upon the end of the arm F, standard H, arranged as specified, of the foot switch K, having a pedal V, arranged as specified, connected to the circuit wires to the motor and brake and the switchboard J, connected by the wires G, to the main circuit wires as shown and for the purpose specified. 10th. In a dental outfit, the combination, with the dental table and motor as specified, of the foot switch K, consisting of the pedal V, stiffly pivoted on the trunnion and means whereby upon pressure being applied to the forward end of the pedal contact is made so as to throw the circuit through the rheostat and motor and when pressure is exerted upon the heel portion of the pedal contact is made and the circuit thrown into the brake, as and for the purpose specified. 11th. In a dental outfit, the combination, with the dental table and motor as specified, of the table V, stiffly pivoted on the trunnion V<sup>1</sup>, which is swivelled upon the tubular bolt V<sup>2</sup>, and means whereby upon the toe of the pedal being depressed contact is made with one or other of the plates of the rheostat so that the resistance is decreased as the pedal is depressed and swung to the left so as to increase the speed of the motor, as and for the purpose specified. 12th. The combination with the foot pedal pivoted, swivelled and making contact as specified, of the stops U<sup>1</sup>, U<sup>2</sup>, arranged as and for the purpose specified. 13th. The combination with the foot pedal pivoted, swivelled and making contact as specified, of the insulating plug V<sup>3</sup>, provided with an insulating ring V<sup>4</sup>, arranged as and for the purpose specified. 14th. The combination with the foot pedal pivoted, swivelled and making contact as specified, of the boss V<sup>5</sup>, extending downwardly from the bottom of the heel portion and provided with a rubber cushion V<sup>10</sup>, arranged as and for the purpose specified. 15th. The combination with the pedal stiffly pivoted and swivelled upon the tubular bolt V<sup>2</sup>, as specified, of the insulating plug V<sup>4</sup>, having connected to its lower end the spring contact plate V<sup>5</sup>, which is designed to be brought against the plate Y, and means whereby the circuit is completed from the plate Y, to the brake, as and for the purpose specified. 16th. The combination with the foot pedal pivoted, swivelled and making contact as



specified, of the plug V<sup>1</sup>, having connected to its lower end the spring plate V<sup>6</sup>, which is designed to be brought against one of the plates Z<sup>1</sup>, of the rheostat, and means whereby the main circuit is completed from the plate through the rheostat to and through the motor, as and for the purpose specified. 17th. The combination with the pedal stiffly pivoted and swivelled upon the tubular bolt V<sup>2</sup>, as specified, of the insulating bar W, provided with metal contact bars W<sup>2</sup>, W<sup>3</sup>, W<sup>4</sup>, and contact blocks W<sup>1</sup>, and the pivoted insulating bar X, provided with spring contact plates X<sup>2</sup>, X<sup>4</sup>, the right hand ends x<sup>2</sup>, x<sup>4</sup>, of which are designed to be held in continuous contact with the blocks w, w<sup>1</sup>, while the left hand ends are designed to be brought either in contact with the bars w<sup>2</sup>, w<sup>3</sup>, or w<sup>4</sup>, w<sup>3</sup>, according to whether the plunger X<sup>1</sup>, connected to the bar x, by the pin x<sup>1</sup>, or plunger X<sup>2</sup>, connected to the bar x, by the pin x<sup>2</sup>, is depressed and means whereby the toe of the pedal being depressed, the circuit is thrown through either of the two courses, so as to change the direction of the rotation of the motor by the depression of either the plungers X<sup>1</sup> or X<sup>2</sup>, as and for the purpose specified. 18th. The combination with the pedal stiffly pivoted and swivelled upon the tubular bolt V<sup>2</sup>, as specified, of the insulating bar W, provided with the metal contact bars w<sup>2</sup>, w<sup>3</sup>, w<sup>4</sup>, and contact blocks w, w<sup>1</sup>, and the pivoted insulating bar X, provided with spring contact plates X<sup>2</sup>, X<sup>4</sup>, the right hand ends x<sup>2</sup>, x<sup>4</sup>, of which are designed to be held in continuous contact with the blocks w, w<sup>1</sup>, while the left hand ends are designed to be brought either in contact with the bars w<sup>2</sup>, w<sup>3</sup>, or w<sup>4</sup>, w<sup>3</sup>, the plungers X<sup>1</sup>, connected to the bar X, the rheostat arranged with the separate plates the contact plate V<sup>6</sup>, secured in the end of the insulating block V<sup>4</sup>, circuit wire 7, binding post w<sup>1</sup>, wire 6, contact plate V<sup>6</sup>, rheostat with contact plate Z<sup>1</sup>, wire 2, binding post z<sup>1</sup>, wire 2<sup>1</sup>, spring contact plate x<sup>2</sup>, contact block W, wire 4, binding post W<sup>4</sup>, wire 13, motor D, wire 14, binding post W<sup>2</sup>, wire 5, contact block w<sup>1</sup>, spring contact plate X<sup>4</sup>, contact bar w<sup>4</sup>, wire 3, binding post w<sup>2</sup>, wire 12, all arranged as and for the purpose specified. 19th. The combination with the pedal stiffly pivoted and swivelled upon the tubular bolt V<sup>2</sup>, as specified, of the wire 7, binding post W<sup>2</sup>, wire 6, extending through the insulating plug V<sup>4</sup>, contact plate V<sup>6</sup>, plate Y, insulated from the base plate U, wire 2, binding post W<sup>1</sup>, wire 15, and bracket H, all arranged as and for the purpose specified.

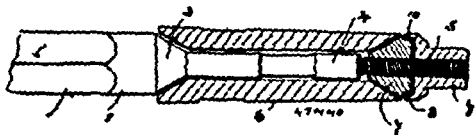
**No. 47,439. Bottle. (Bouteille.)**



Clement Clark, Sandusky, Ohio, and John Sherman Clark, Detroit, Michigan, both in the U.S.A., 9th November, 1894; 6 years.

*Claim.*—1st. The combination, with a bottle and its neck having the inwardly extending flange C, with the upper inclined bearing E, contracted section G, shoulder H, and upper inclined entering section I of the ball valve closing the aperture through the flange C, a bushing having the lower tapering section apertured on the sides, the central tubular section, the split ring arranged in a groove at the lower end of the body section, a flange L at the top, and a packing ring adapted to be compressed between the flange L and the top of the bottle. 2nd. In a device of the kind described, the combination, with the neck of the bottle and a ball valve therein closing the passage at the lower end of the neck, of the shoulder H formed therein, the flange bushing having the lower tapering section Q, and the elliptical ring adapted to be forced over such outer section and to enter the groove at the lower end of the body portion, the parts to be arranged and combined, substantially as and for the purpose described.

**No. 47,440. Carriage Axle. (Essieu de voiture.)**



Quar Stevenson Bedford, Upper Bedford, and The Firm of F. N. Hency and Company, Montreal, both in Quebec, Canada, 9th November, 1894; 6 years.

*Claim.*—1st. In a carriage axle, the combination, with the axle-box having a recessed outer end, the journal having a screw threaded outer end and the retaining nut or cap, of a conical nut or sleeve interposed between said axle-box and retaining nut, for the purpose set forth. 2nd. In a carriage axle, the combination, with the axle-box having a conically-shaped recess at its outer end, the journal having a screw threaded end and the retaining nut or cap of a conical nut or sleeve bored and screw threaded interiorly to take

onto said screw threaded end of the journal and be held within the recessed end of said axle-box by said retaining nut, for the purpose set forth. 3rd. In a carriage axle, the combination, with the axle-box having a conically-shaped recess at each end, the collar of the axle having a conically-shaped shoulder fitting the recess at the inner end of the axle-box, and the retaining nut or cap, of a conical nut or sleeve bored and screw threaded interiorly to take on to the screw threaded end of the journal and be held within the recessed outer end of said axle-box by said retaining nut, for the purpose set forth.

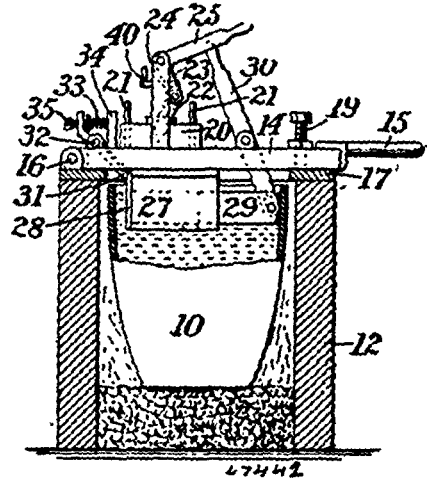
**No. 47,441. Waterproof Fabric. (Tissu imperméable.)**

Wax Berlowitz, assignee of Sahnann Solomon, both of Memel, Prussia, Germany, 9th November, 1894; 6 years.

*Claim.*—1st. A process to produce buoyant and waterproof fabrics, thereby marked that these fabrics after impregnating with a solution of hydrocarbons and resins, insoluble in water but dissolved in bi-sulphide of carbon and ether, and hardened in cold water, as described. 2nd. A mixture of the solution mentioned in claim 1, consisting of ingredients in about the proportions set forth: spermaceti, 40 parts; paraffin wax, 30 parts; gum copal, 50 parts; colodony, 50 parts; India-rubber, 30 parts; gutta percha, 20 parts; oil of rosemary, 10 parts; bi-sulphide of carbon, 1,000 parts; ether, 1,500 parts, as described. 3rd. Garments from a fabric treated according to this process thereby marked, that by hardening in cold water, these garments are swelled up, become buoyant and impervious, as described for the purpose set forth.

**No. 47,442. Method of and Apparatus for Casting.**

(Méthode et appareil de coulage.)



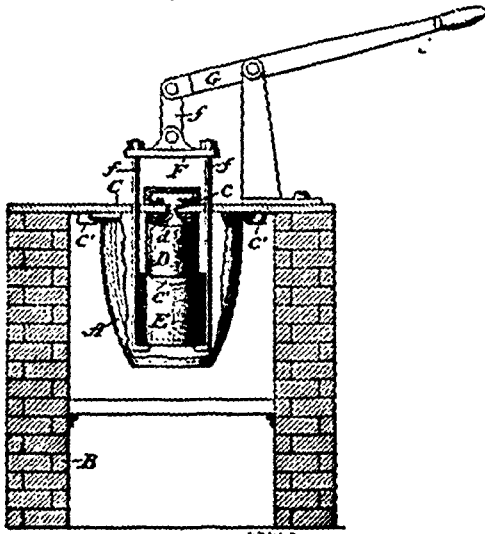
Robert George Underwood, Yonkers, New York, U.S.A., 10th November, 1894; 6 years.

*Claim.*—1st. The herein described method of casting which consists in introducing a limited quantity of the molten material into a chamber, forcing the molten material from said chamber into the mould through an open side of the same under uniform pressure, maintaining the pressure on the molten material, separating the molten material while still under pressure in the plane of the open side of the mould, thereby cutting off the superfluous material and leaving the corresponding side of the moulded article in a finished condition, and finally expelling all the superfluous material from the chamber, substantially as and for the purpose described. 2nd. The herein described method of casting which consists in submerging a chamber in a mass of molten material, introducing a quantity of the molten material into the chamber, forcing the molten material from said chamber through the side of a communicating mould under uniform pressure, maintaining the pressure on the molten material, separating the molten material while still under pressure in the plane of the open side of the mould, thereby cutting off the superfluous material and leaving the corresponding side of the moulded article in a finished condition, and finally expelling all the superfluous material from the chamber, substantially as and for the purpose described. 3rd. In an apparatus for casting, the combination of a support for a mould, a chamber communicating with said mould through a lateral opening corresponding to one side of the moulded article, a plunger having a sliding fit in said chamber and movable transversely across said opening whereby the molten material is forced into the mould, the superfluous material is removed by said plunger and the side of the article corresponding to said opening is left in a finished condition, and means to permit the escape of the molten material from the chamber beyond said opening, substantially as shown and described. 4th. In an apparatus for casting, the combination of a support for a mould, a chamber communicating with the mould through a lateral opening corresponding to one side of the moulded article, said chamber also having

an independent orifice beyond said opening, a plunger having a sliding fit in said chamber to force the molten material into the mould and movable across said opening and a yielding valve covering said orifice and opening outwardly to permit the molten material to be forced out by the movement of the plunger beyond the mould, substantially as shown and described. 5th. In an apparatus for casting, the combination of a support for a mould, a chamber communicating with said mould through a lateral opening corresponding to one side of the moulded article, said chamber also having an independent orifice beyond said opening, a plunger having a sliding fit in said chamber to force the molten material into the mould and movable across said opening, an outwardly opening valve closing said orifice, and means to regulate the pressure upon said valve, whereby the pressure at which the molten material is forced into the mould may be controlled, substantially as shown and described. 6th. In an apparatus for casting, the combination of a support for a mould, a chamber attached to said support and communicating with the mould, a plunger movable in said chamber and adapted to force the molten material into the mould, a pot for the molten material, and means to adjust the position of said support with respect to said pot, whereby said chamber and plunger may be submerged always beneath the surface of the molten material as the quantity of such material is diminished, substantially as shown and described. 7th. In an apparatus for casting, the combination of a movable support carrying a mould, chamber suspended beneath said support and communicating with the mould, a plunger movable in said chamber independent of the mould but adapted to force the molten material into the same, and means for operating said plunger, whereby the casting apparatus may be moved into a pot of molten material to receive its charge and may be moved away from the same to permit the mould to be opened, substantially as shown and described. 8th. In an apparatus for casting, the combination of a removable support carrying a mould, a chamber suspended beneath said support and communicating with the mould, a plunger movable in said chamber independent of the mould but adapted to force the molten material into the same and forming when retracted an end of the chamber, and means carried by said movable support for operating the plunger, substantially as described. 9th. In an apparatus for casting, the combination of a pivoted support, a chamber suspended beneath said support and communicating with the mould, a plunger movable in said chamber and adapted to force the molten material into said mould, and a lever for operating said plunger secured at one end thereto, and pivotally secured to the said support, substantially as shown and described. 10th. In an apparatus for casting, a support for the mould, a chamber attached to said support opening at the top into the mould and having an opening in its under side for the admission of the molten material, a plunger sliding in said chamber and forming when retracted an end of said chamber, and yielding gate at the opposite end through which, in the forward movement of the plunger, the superfluous material is expelled, substantially as described.

#### No. 47,443. Apparatus for Casting.

(Appareil de coulage.)



Herbert George Underwood, Yonkers, New York, U.S.A., 10th November, 1894; 6 years.

**Claim.**—1st. In an apparatus for casting, a pot or crucible for the molten metal, a support to which the same is attached, a chamber within the pot or crucible, also attached to said support submerged in the molten metal, and having a port in its upper wall, a mould also resting on said support, and having its ingate just above the port of the chamber with means for forcing the molten metal from the chamber into the mould, substantially as described. 2nd. The com-

ination of a pot for molten metal, a cylinder supported within said pot to be submerged in the molten metal therein, and having a port through its upper wall, a plunger and means to operate the same to force molten metal out through said port, and a stationary support upon which a mould may be held with its ingate adjacent thereto, and forming a close joint with said port, whereby the molten metal has the shortest possible distance to move, and is therefore not likely to be chilled in its passage into the mould, and whereby the metal not carried away as the mould is removed may fall back from the port into the cylinder and within the body of molten metal in the pot. 3rd. The combination of a pot for molten metal, a stationary bridge plate across the top of said pot and having an aperture, a cylinder suspended below said plate to be submerged in the molten metal in said pot, and having an aperture registering with the aperture in said plate to form a discharge port, a plunger and means to operate the same to force molten metal out through said port, said bridge plate forming a support upon which a mould may be held with its ingate forming a close joint with said port. 4th. The combination of a pot for molten metal, a bridge plate across the top of said pot, and having an aperture, a cylinder suspended below said plate to be submerged in the molten metal in said pot, and having an aperture registering with the aperture in said plate to form a discharge port, a plunger and means whereby relative movement of said cylinder, and plunger may be produced to force molten metal out through said port, said bridge plate being depressed below the level of the top of the pot to form a support upon which a mould may be held with its ingate forming a close joint with said port. 5th. The combination of a pot for molten metal, a cylinder supported within said pot to be submerged in the molten metal therein, and having a port through its upper wall, a bucket plunger fitting freely over the outside of said cylinder, means to cause a relative movement of the cylinder and plunger to force molten metal out through said port, and a support upon which a mould may be held with its ingate in communication with said port. 6th. The combination of a pot for molten metal having an outlet port, means to force the molten metal out through said port, a mould having an aperture, a support upon which said mould may be held with its aperture in communication with said port, and a cut-off plate interposed between said mould, and supported and adapted to be moved across the aperture in said mould while the latter is in position upon said support. 7th. The combination of a pot for molten metal having an outlet port, means to force the molten metal out through said port, a mould having an aperture, a support upon which said mould may be held with its aperture in communication with said port, and a cut-off plate interposed between said mould and said support and having an aperture to register with the aperture in said mould, said plate being movable across the aperture in said mould. 8th. The combination of a pot for molten metal having an outlet port, means to force the molten metal out through said port, a mould having an aperture, a support upon which said mould may be held with its aperture in communication with said port, and a cut-off plate movable attached to the bottom of said mould and forming close contact therewith and with said support, said plate having an aperture to register with the aperture in said mould. 9th. The combination, with a pot or crucible, of a stationary support above the same, a chamber attached to said support extending below the same such a distance as to be submerged in the pot of molten metal, a mould above said chamber and resting on said support, with suitable ports in the chamber and mould registering with one another, and means for forcing the material from the submerged chamber into the mould, substantially as described. 10th. In an apparatus for casting, the combination, with the pot or crucible for the molten metal, a cylinder supported within the pot to be submerged in the molten metal therein and having a port through its upper wall, and a hollow plunger with means for moving the same in relation to the cylinder to force molten metal out through said port and a mould with its ingate adjacent to and in close communication with said port, substantially as described. 11th. In an apparatus for casting, a pot or crucible for the molten metal with means for supporting it within the furnace, a chamber within the pot or crucible with a stationary support to which it is attached, said chamber being submerged in the molten metal and having a port in its upper wall, and a mould placed above the chamber, and having an ingate registering with the port of the chamber and in close communication therewith, with means for forcing the material from the submerged chamber into the mould.

#### No. 47,444. Apron for Textile Machines.

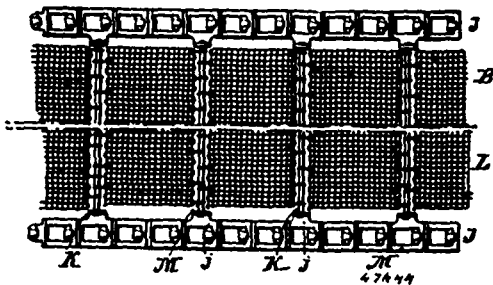
(Tablier pour machines à tissu.)

John Hewetson Lorimer, Germantown, Pennsylvania, U.S.A., 12th November, 1894; 6 years.

**Claim.** 1st. In a conveying apron for textile machines, the combination of two flexible parallel chains or bands connected at intervals by transverse rods, and a series of interposed independent frames composed of inter-laced or woven wire. 2nd. In a conveying apron for textile machines, the combination of two flexible parallel chains or bands connected at intervals by transverse rods, a series of interposed independent frames composed of inter-laced or woven wire, and loose connections between the interposed frames and the transverse rods. 3rd. A conveying device for textile material consisting in the combination of two parallel sprocket chains, transverse



bars or rods connected to links of the two chains and arranged at a distance apart, and interposed independent frames formed of woven wire arranged intermediate of the sprocket chains and rods or parts and flexibly connected to said rods. 4th. A conveying device for



textile material consisting of the combination of two parallel sprocket chains, transverse bars or rods connected to links of the two chains arranged at a distance apart, interposed independent frames formed of woven wire arranged intermediate of the sprocket chains and rods or parts and flexible connected to said rods, an enclosing chamber or vessel, and guide wheels or pulleys for guiding the sprocket chains arranged within the said chamber.

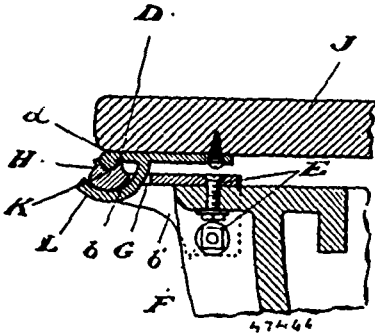
No. 47,445. Calculating Machine. (Machine à calculer.)



Emil Scholler, Krimmitschau, Saxony, Germany, 12th November, 1894; 6 years.

Claim.—1st. A calculating apparatus comprising a frame carrying a series of movable blocks arranged in two parallel longitudinal rows and an intermediate scale of divisions and numbers opposite said blocks, substantially as described. 2nd. A calculating apparatus comprising a frame carrying two series of movable blocks, each series representing a decimal number, one series being greater than the other, and a scale of numbers representing the sum of the numbers of both series of blocks, substantially as described. 3rd. A calculating machine comprising a board having two parallel grooves, two sets of blocks fitted to move therein opposite a scale of numbers marked upon the block, substantially as described. 4th. A calculating machine comprising a board having two parallel grooves, two sets of blocks fitted to move therein, and an intermediate scale corresponding with said blocks, substantially as described.

No. 47,446. Closet. (Latrine.)



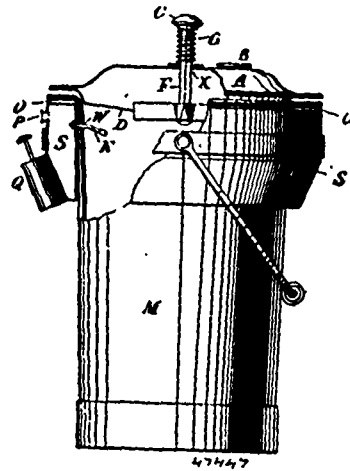
William B. Malcolm, Toronto, Ontario, Canada, 12th November, 1894; 6 years.

Claim.—1st. In a closet, the combination of the basin A, two brackets connected to the basin, arranged one on either side of the flushing horn, the closet seat, and means for hinging the closet seat to the brackets, substantially as and for the purpose specified. 2nd. In a closet, the combination of the basin A, two brackets B, B', connected to the basin, arranged one on either side of the flushing horn C, a female hinge D, bolted to each of the brackets B, B', a male hinge I, and a closet seat J, secured to the male hinge I, substantially as and for the purpose specified. 3rd. In a closet, the combination of the basin A, brackets B, B', connected to the basin A, arranged one on either side of the flushing horn, the closet seat, a female hinge D, consisting of a plate d bolted to the bracket, having an opening G, and an elevated seat H, a male hinge I, connected to the closet seat, consisting of a plate i, having a bearing K, to enter the seat H, and a guide lug L, to pass through the opening G, substantially as and for the purpose specified. 4th. In a closet, the combination of the basin, the closet seat, and means for hinging the closet seat to the basin, consisting of a male hinge I, composed of a plate i, a bearing K, at the rear end of the plate i, and a curved

guide lug L, formed integrally with the plate i, a female hinge consisting of a plate, an opening in the plate to receive a guide lug L, and an elevated seat H, for the bearing K, substantially as and for the purpose specified. 5th. In a closet, the combination of the basin, the closet seat and means for hinging the closet seat direct to the basin, substantially as specified.

No. 47,447. Sanitary Pail and Lid.

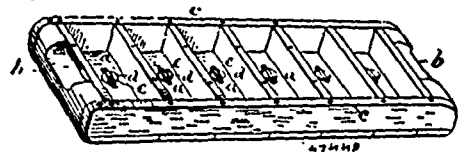
(Seau et couvercle sanitaire.)



Valborg Emmilie Poppens, North Melbourne, Victoria, Australia, 12th November, 1894; 6 years.

Claim.—1st. A sanitary pail as M having a hollow vessel or enclosed space as S under the rim of said pail, and parts P, K, W and Q all in combination as shown in figure 1, substantially as and for the purposes set forth. 2nd. A sanitary vessel as Z having about its rim a hollow enclosed space, and parts as P, K and Q all in combination as shown in figure 2, substantially as and for the purposes set forth. 3rd. A sanitary vessel as Z, having about its rim a hollow enclosed space, and an opening for access to such space, all in combination as shown in figure 6, substantially as and for the purposes set forth. 4th. In combination with the upper edge of a pail, a removable hollow vessel as R, having parts as U, K, Q, the upper surface of R being adapted to form a seat as shown in figure 3, substantially as and for the purposes set forth. 5th. In combination with a sanitary vessel, a hollow enclosed space within or about the sides or rim of said vessel, means for filling said space with liquid, and means for discharging said liquid into the vessel or otherwise as a spray or as a stream, substantially as and for the purposes set forth. 6th. A sanitary vessel having an enclosed hollow space about its rim, and means for filling and emptying said space as P, V, in figure 7, substantially as and for the purposes set forth. 7th. In combination with a lid for sanitary vessels, a hollow space within said lid, an opening as B for filling, and slots as E for discharging material from the same, substantially as and for the purposes set forth. 8th. In combination with a lid for sanitary vessels having discharge slots on the under side, a spindle having a head as C, a spring as G, and arms on said spindle adapted to close or open said discharge slots, substantially as and for the purposes set forth. 9th. In combination with a spindle as F, radial arms at the base thereof, said arms being wedge shaped with their apices uppermost as shown in figure 4, substantially as and for the purposes set forth. 10th. The combination with a sanitary pail of my improved lid as herein described, substantially as and for the purposes set forth.

No. 47,448. Brick Mould. (Moule à brique.)



Carl F. Kaul, Madison, Nebraska, U.S.A., 12th November, 1894; 6 years.

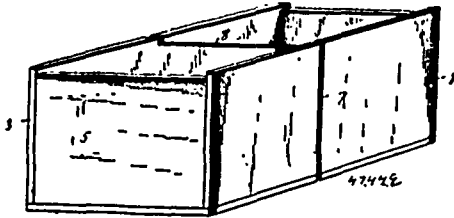
Claim.—1st. In a brick mould, a valve placed in the bottom of the mould for the admission of air, substantially as set forth. 2nd. The combination with the casing of a brick mould, provided with an aperture in the bottom, of a valve provided with a disc d, of flexible material, and a strip of metal c, to which said disc is secured, substantially as set forth and described.

No. 47,449. Spring Box-seal. (Seau de boîte à ressort.)

Daniel Emanuel John Wellhoener, St. Louis, Missouri, U.S.A., 12th November, 1894; 6 years.

Claim.—1st. An improved spring box-seal, comprising spring

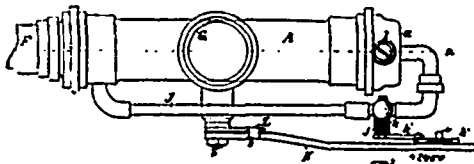
clips secured to the under side of the box lid, and a binder passing under said lid and adapted to be engaged by said clips to prevent the removal of the same, except by the destruction of the box or lid, as set forth. 2nd. An improved spring box-seal, having a binder en-



compassing the bottom and sides of the box, said binder secured in a shallow groove cut transversely through the bottom and sides of the box, a strip secured to the under side of the lid, spring clips secured to said strip and adapted to prevent the removal of the lid, except by its destruction, substantially as set forth. 3rd. An improved spring box-seal, comprising a strip fixed to the under side of the lid, a plurality of spring clips secured to said strip, and a binder encompassing the box and adapted for engagement by said spring clips, as set forth. 4th. An improved spring box-seal, having a binder encompassing the bottom and sides of the box, said binder inlaid flush with the outer surface of the box, except at the corners, where it has a deeper seat, said binder passing under the lid and adapted to be held against longitudinal movement by a pin inserted through the lid and a strip upon the under side of said lid, said pin entering a shoulder upon said strip, substantially as set forth.

#### No. 47,450. Water Closet Flushing Device.

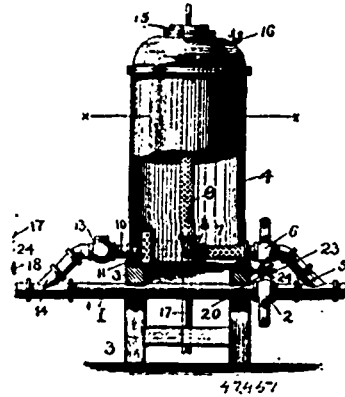
(Appareil à lavage des latrines.)



Wilham Richard Baker, Watertown, New York, U.S.A., 12th November, 1894; 6 years.

*Claim.*—1st. The combination with a flushing device of the class herein specified and comprising a cylindrical chamber with an inlet and an outlet, a dash-pot in one end of the chamber, a piston in said dash-pot, a rod connecting the piston with a valve in the opposite end of the chamber, and means for moving the rod provided with a lever, of a passage extending along one side of said chamber and connecting the dash-pot with the opposite end of said chamber, a cut-off in said passage and means for operating the cut-off engaging the said lever, as set forth. 2nd. The combination with a flushing device of the class herein specified and comprising a chamber with an inlet and outlet, a dash-pot in one end of the chamber provided with holes in its sides throughout its length, a piston in said dash-pot, a rod connecting the piston with a valve in the opposite end of the chamber, a rock-arm and spindle for moving the rod, a lever secured rigidly to the spindle and provided with projections, and a lever pivoted on the end of the spindle and lying between the projections, of a pipe extending along one side of said chamber and connecting the dash-pot with the side of said chamber near the end thereof, remote from the dash-pot, a cut-off in said passage, and means for operating the cut-off engaging the said pivoted lever, as and for the purpose described. 3rd. The combination with a flushing device of the class herein specified and comprising a chamber with an inlet and outlet, a dash-pot in one end of the chamber provided with holes in its sides throughout its length, a piston in said dash-pot, a rod connecting the piston with a valve in the opposite end of the chamber, a rock-arm and spindle for moving the rod, a lever secured rigidly to the spindle and provided with projections, and a lever pivoted on the end of the spindle and lying between the projections, of a pipe extending along one side of said chamber and connecting the dash-pot with the side of said chamber near the end thereof remote from the dash-pot, a cut-off in said passage, a spindle connected to the cut-off provided with an arm, a segment of a disc pivoted to the arm, a pin on the said pivoted lever engaging the segment, and a spring on the spindle to return the cut-off to its normal position, as set forth. 4th. The combination with a main pipe closed at one end and connected at the other end, with a supply pipe, an outlet communicating with one side of said main pipe, a dash-pot within the latter pipe at the closed end thereof, a rod carrying a piston to operate in said dash-pot, a valve on the opposite end of the rod to open and close the supply pipe, and the lever to move the rod, of a small pipe or passage connecting the base of the dash-pot with the supply pipe, a cut-off in the small pipe or passage and means through which the latter cut-off is operated by the said lever, substantially as described and shown.

#### No. 47,451. Fire Extinguisher. (Ezincieur d'incendie.)



Clarence Richmond Macomber, Worcester, Massachusetts, U.S.A., 12th November, 1894; 6 years.

*Claim.*—1st. The method of introducing chemical into a stream of water to be used for extinguishing fires, which consists in continuously diverting a portion of said stream, leading the same into a chamber containing chemical, causing the diverted portion to unite with the chemical in said chamber, and then leading the solution from the chamber, and returning the same into the main stream at a point beyond where the same was originally diverted, so that a circulation is kept up through the chemical chamber, substantially as described. 2nd. The combination of a pipe line and closed chamber containing the chemical, induction and eduction pipes leading from said main pipe and connected with said chamber, said induction and eduction pipes being of the same size as the main pipe line, and a suitable valve or valves arranged so that any portion or the whole of the main stream may be diverted through the chemical chamber, substantially as described. 3rd. The combination of a pipe line, a closed chamber containing chemical, branch induction and eduction pipes leading from said main pipe line and connected to said chamber and valves in the branch induction pipe and in the main line, and connections between said valves arranged so that the valves will be oppositely operated so that any portion of the main stream may be diverted through the tank, substantially as described. 4th. The combination of a pipe line, a closed chamber containing chemical, branch induction and eduction pipes leading from said main pipe and connected to said chamber, a forwardly opening check valve located in the branch induction pipe and in the main pipe line and connections between said valves arranged so that the valves will be oppositely operated and so that the added area of the openings of both valves will remain constant whereby any portion of the main stream may be diverted through the tank, substantially as described. 5th. The combination of pipe 1, the chamber 4, the induction and eduction pipes leading from the main pipe to said chamber, the valves located in the branch induction pipe and in the main pipe, a connection as a link or rod between said valves connected so that one valve will be opened as the other is closed and means for holding the said valves in their adjusted positions, substantially as described. 6th. In a fire extinguisher, a chemical tank having an induction and an eduction pipe, a strainer over the mouth of said eduction pipe and an outlet arranged in the induction pipe so as to direct a stream or jet against the face of said strainer whereby the same will be kept clear, substantially as described. 7th. In a fire extinguisher, a chemical tank having induction and eduction pipes connected to the bottom thereof, said induction pipe being carried to the inside of said tank, and a vertical perforated pipe connected to said induction pipe, and extending to near the top of the tank, substantially as described. 8th. In a fire extinguisher, a chemical tank having an induction and an eduction pipe connected to the bottom thereof, said induction pipe being carried to substantially the centre of the tank as by pipe 7, and the vertical pipe 9, to which the pipe 7, is connected, said pipes 7 and 9, being perforated for the purpose set forth, substantially as described.

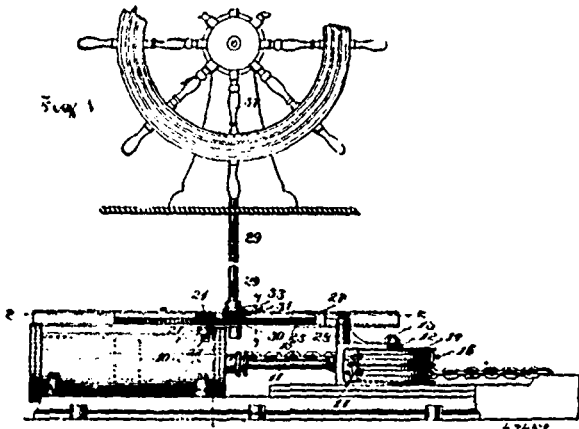
#### No. 47,452. Steam Steering Apparatus.

(Appareil à vapeur pour gouverner.)

Edward Heyde, East Saginaw, Michigan, U.S.A., 12th November, 1894; 6 years.

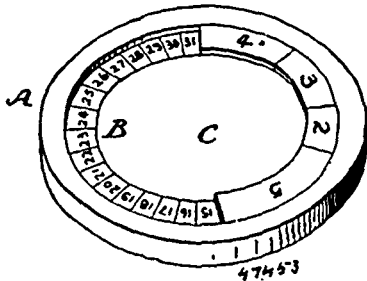
*Claim.*—1st. In a steam steering apparatus, the combination, with a steam cylinder and its piston rod, of a cross-head carried by said piston rod, two sheaves carried by the cross-head, chams each having one end made fast and carried over said sheaves respectively in opposite directions and connected to the tiller, a steam valve, a valve gear actuated by the piston rod, and means for manually controlling the valve independently of the movements of the piston rod, substantially as described. 2nd. In a steam steering apparatus, the combination, with a steam cylinder and its piston and piston rod, of a valve for controlling the cylinder ports, a swinging lever pivoted to the valve rod, a pinion carried by said lever and two sliding racks

immeshed with the pinion, one of said racks connected to the piston rod and means for moving the other rack independently, substantially as described. 3rd. In a steam steering apparatus, the combination, with a steam cylinder and its piston and piston rod, of a



slide valve for controlling the cylinder ports, a swinging lever pivoted to the valve rod, a pinion carried by said lever, two sliding racks immeshed with the pinion, one of said racks connected with the piston rod and moving therewith, a steering wheel, an operating rod turned thereby, a loose pinion carried by said rod and immeshed with the rack connected to the piston rod, a pinion secured to the turn with the operating rod and immeshed with the other of said racks and a clutch, one member of which is carried by the loose pinion and the other by the rod, substantially as described.

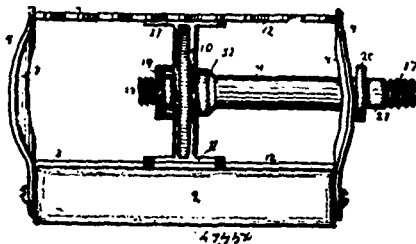
No. 47,452. Puzzle. (Jeu de patience.)



Herbert Howland Sargent, Fort Bowie, Territory of Arizona, U.S.A., 12th November, 1894; 6 years.

Claim.—1st. A game or puzzle comprising a base-piece having a series of segmental spaces marked thereon in continuous order to form a circle, and a series of segmental blocks or checkers, substantially as shown and described. 2nd. A game or puzzle, comprising a base-piece having an upraised circular body or portion thereon, and a series of segmental blocks or checkers, substantially as shown and described. 3rd. In a game apparatus, the combination, with a series of numbered blocks or checkers of varying dimensions of a board having a series of spaces thereon bearing consecutive numbers, and adapted to be covered individually and in series by the said blocks, substantially as shown and described.

No. 47,454. Treadle. (Pédale.)



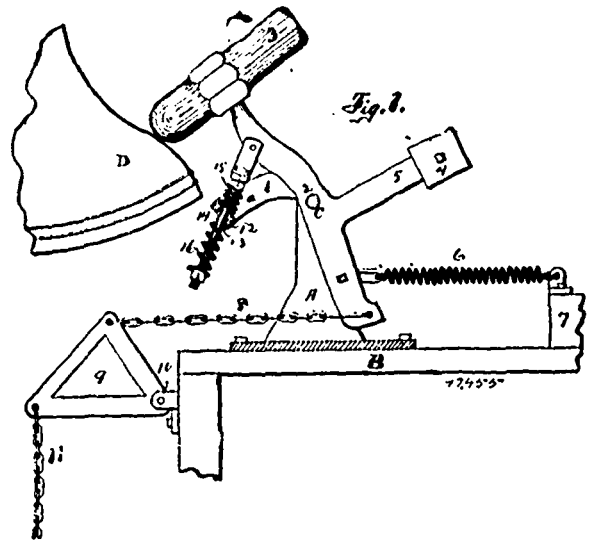
Daniel Peglow, Buffalo, New York, U.S.A., 12th November, 1894; 6 years.

Claim.—1st. A treadle, consisting of a shell or frame consisting of a horizontal top and bottom plates, transversely-bored vertical end pieces connecting said top and bottom plates, and a central vertical shell or plate connecting and bracing said top and bottom plates, and having a circumferentially-grooved ball-receiving bore, a treadle-supporting shaft connected at one end with the customary crank, and at its other end having bearing in the central shell, a cone con-

sisting of a bevel-ended stop collar secured to said shaft, and a bevel-ended nut adjustable on said shaft, and friction balls, contained within said grooved bore, substantially as and for the purpose set forth. 2nd. A treadle consisting of a shell or frame composed of vertical end pieces having transverse openings therein, and longitudinal top and bottom plates, a central bearing connected with said top and bottom plates, and having a central bore having a circumferential ball-receiving recess of U-shape in cross-section, balls contained within said recess, a treadle-supporting shaft extending from one end of said frame to the central bearing therein, and having a bevel-ended stop collar and a cone and cone-clamping nut mounted on shaft, substantially as and for the purpose set forth.

No. 47,455. Bell Ringing Device.

(Appareil à sonner les cloches.)



William Joseph Going, Amsterdam, New York, U.S.A., 12th November, 1894; 6 years.

Claim.—1st. The herein described device for striking bells, comprising a lever pivotally mounted, and having a hammer at one end, means for raising it at its opposite end and means for easing the blow of the hammer. 2nd. The herein described device for striking bells, comprising a lever pivotally mounted, and having a hammer at one end, means for raising it at its opposite end and a spring, for easing the blow, as set forth. 3rd. The herein described device for striking bells, comprising a lever swingingly mounted and having a hammer at one end, and means for raising it at its opposite end, a downwardly extending arm secured to the upper part of said lever, passing through an opening in the arm 1, coil springs surrounding the arm 14, and means for limiting their travel on said arm. 4th. The herein described device for striking bells, comprising a lever swingingly mounted and having a hammer at one end, means for raising it at its opposite end, a downwardly extending arm secured to the upper part and adapted to pass through an opening in the arm 1, an adjustable nut a, and a coil spring surrounding the arm 14, as set forth. 5th. The herein described device for striking bells, comprising a lever swingingly mounted, having a hammer at one end, means for raising it at its opposite end and an adjustable weight for balancing said hammer, as set forth.

No. 47,456. Knife Handle. (Manche de couteau.)

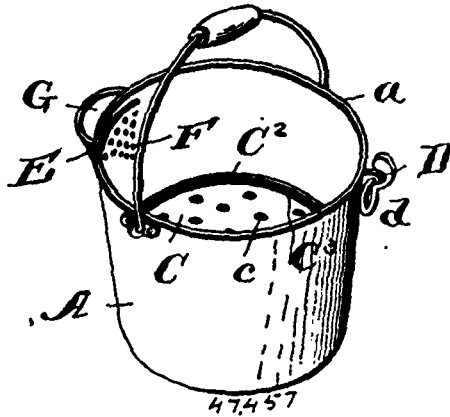


Jacob Oefinger, Meriden, Connecticut, U.S.A., 12th November, 1894; 6 years.

Claim.—1st. A handle for knives, forks and kindred articles, consisting of a tube, a solid plug located in one end thereof, adapted in its exterior conformation to form the outer end of the handle, and constructed with a shoulder against which the tube abuts, and an imperforate plug located in the opposite end of the tube, adapted in its exterior conformation to form the bolster of the handle, having a shoulder against which the tube abuts, and constructed to have an independently formed knife-blade or other part fastened to its outer end, substantially as described. 2nd. A handle for knives, forks and kindred articles, consisting of a tube, a solid plug located in one end thereof, adapted in its exterior conformation to form the end of the handle, having a shoulder against which the tube abuts, and

constructed with a threaded socket, a solid plug located in the opposite end of the tube, adapted in its exterior conformation to form the bolster of the handle, having a shoulder against which the tube abuts, and constructed with a screw-threaded bore to receive an independently formed knife-blade or other part, and a coupling rod permanently attached to the plug last mentioned, and having its opposite end threaded to enter the threaded socket in the plug, forming the end of the handle, substantially as described.

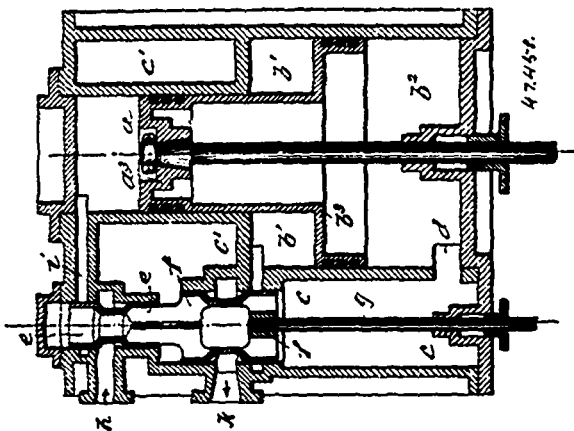
**No. 47,457. Cooking Utensil. (Ustensile de cuisine.)**



August W. Obermann, New York, State of New York, U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. The combination of a vessel having a spout in its upper edge, a cover for said vessel provided with an extension which serves as a cover for the spout and having a peripheral flange bent upward and outward and extending over the upper edge of the vessel, and an operating handle pivotally secured on the side of the vessel and provided with a hook-like portion which is adapted for engaging the flange of the cover, all parts operating substantially as described. 2nd. The combination of a vessel having an open top spout and an aperture E, a cover for the vessel having at one edge a projection which serves as a cover for the spout and provided with a peripheral flange bent upward and outward and extending over the upper edge of the vessel and an operating handle pivoted to the outer upper side of the vessel opposite the spout and provided with a hooked portion which is adapted for engaging the flange of the cover, substantially as described. 3rd. The combination of a vessel having an open top spout at its upper edge, a closely fitting cover for said vessel having at one edge an extension which serves as a cover for the spout, and provided with a peripheral flange bent upward and outward and extending over the upper edge of the vessel, and the locking handle pivoted to the outer side of the vessel opposite the spout, and provided with a hooked portion which is adapted to pass over the flange of the cover, the distance from the tip of the spout cover to the edge of the vessel cover, which is opposite thereto, being less than the distance from the tip of the spout to the upper edge of the vessel, which is opposite.

**No. 47,458. Steam Engine. (Machine à vapeur.)**

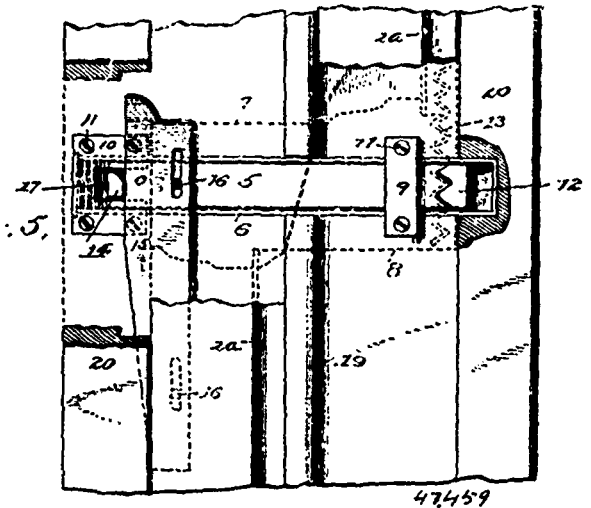


Wilhelm Schmidt Wilhelmshole, Hesse Nassau, Germany, 13th November, 1894; 6 years.

*Claim.*—1st. In a steam-engine having a high-pressure and a low-pressure piston, the combination, with the cylinder of the latter, of a receiver constantly communicating with one and the same side of said cylinder, substantially as and for the purpose hereinbefore set forth. 2nd. In a tandem steam-engine having a plunger-like

high-pressure piston and a low-pressure piston forming the continuation of the latter, the combination, with the low-pressure cylinder, of a receiver constantly communicating with one and the same side of said cylinder, substantially as and for the purpose hereinbefore set forth. 3rd. In a tandem steam-engine having a plunger-like high-pressure piston and a low-pressure piston forming the continuation of the latter, the combination, with the low-pressure cylinder, of a receiver constantly communicating with one and the same side of said cylinder, a valve adapted to connect the upper side of said cylinder alternately either with the outlet or with said receiver being arranged within the latter, substantially as and for the purpose hereinbefore set forth. 4th. Compound steam-engine with differential piston, in which the larger side of the latter constantly communicates with a receiver, and the annular side of said piston is alternately communicating also with said receiver, and with the exhaust port of the engine, or with a condenser respectively, for the purposes of, first, obtaining a double acting engine by effecting the return stroke of the differential piston by the over-pressure acting on the larger side of the same, and, second, heating by means of the receiver-steam the cylinder and piston-walls forming the annular space from which the steam is escaping, substantially as and for the purpose hereinbefore set forth.

**No. 47,459. Sash Fastener. (Arrête-croisée.)**

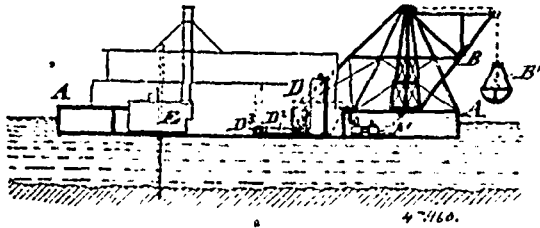


Lewis Cass Miller, St. Louis, Missouri, U.S.A., 13th November, 1894; 6 years.

*Claim.* 1st. In a sash lock or fastener, a sliding bolt placed transversely across the meeting rails of the bottom and top sashes and adapted to engage a locking plate secured to one of the sashes, and means operated by movement of one of the sashes to actuate said bolt, and to hold said bolt in engagement with the locking plate, substantially as and for the purposes described. 2nd. In a sash lock or fastener, a sliding bolt placed transversely across the meeting rails of the bottom and the top sash and set into the window frame, a locking plate secured to one sash in a position to be engaged by that bolt, and means carried by the other sash and actuating the bolt in the movement of that sash, said bolt, locking plate, and bolt actuating means being enclosed by the window frame and two sashes to conceal the same from view, substantially as and for the purposes described. 3rd. In a sash lock or fastener, a sliding bolt placed transversely across the meeting rails of the bottom and the top sash and adapted to engage a locking plate secured to one of the sashes, and cam secured to the other sash, and adapted to actuate said bolt in the movement of the sash, said cam having an actuating face so formed that during a partial movement of the cam it will actuate the bolt and during the further movement of the cam it will not actuate the bolt whereby the sash carrying the cam may be held at various adjustments without actuating the bolt to unlock the other sash, substantially as and for the purposes described. 4th. In a sash lock or fastener, a sliding bolt placed transversely across the bottom and the top sash and adapted to engage a locking plate secured to one of the sashes, and means carried by the other sash to prevent the bolt actuating means from being moved except when released by said means, substantially as and for the purposes described. 5th. In a sash lock or fastener, a sliding bolt placed transversely across the bottom and the top sash and adapted to engage a locking plate secured to one of the sashes, a cam carried by the other sash for actuating said bolt and having a portion of its face formed to permit movement of the cam without actuating the bolt, and means carried by the same sash for locking it at various adjustments, when by the top sash can be lowered and the bottom sash raised and both sashes be locked in their adjusted positions, substantially as and for the purposes described. 6th. In a sash lock or fastener, the combination with automatically operating

mechanism for locking the top sash by the downward movement of the bottom sash, of means for locking the bottom sash in its lowered position to prevent the opening of the top sash until the locking means of the lower sash is released, substantially as and for the purposes described.

**No. 47,460. Dredge. (Dragueur.)**

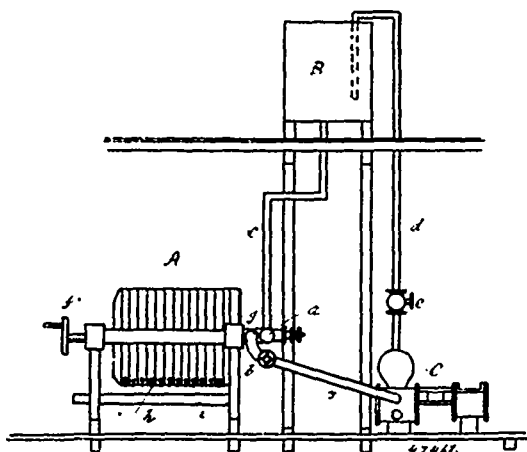


The Mining and Dredging Power Company, assignee of Levi Hussey, both of New York, State of New York, U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. The combination, of a dredge, an excavating mechanism arranged on the same, an open receiving-tank for the dredged material or spoil, means for mixing the material in the receiving-tank with water, a steam vacuum-pump having valved suction and discharge-pipes, the suction-pipe being connected with the receiving-tank, and a conveyer-pipe connected with the discharge-pipe of said pump, substantially as set forth. 2nd. The combination of a barge, an excavating mechanism on the same, a receiving-tank for the dredged material or spoil, means for mixing the material in said tank with water, agitating jets at the bottom of the receiving tank, a steam vacuum-pump, the suction pipe of which is connected with said tank, and a conveyer pipe connected with the discharge-pipe of said pump, substantially as set forth. 3rd. A dredging apparatus, consisting of a barge, an excavating mechanism for the dredged material or spoil on said barge, an open comminuting-tank, an open receiving tank in communication with said comminuting-tank, a comminuting mechanism in said comminuting-tank, means for supplying water to the comminuting and receiving-tanks, a steam vacuum-pump, a suction-pipe leading from the receiving-tank to the vacuum-pump, and a conveyer-pipe connected with the discharge-pipe of said pump, substantially as set forth. 4th. A dredging apparatus, composed of a barge, an excavating mechanism for the dredged material on said barge, a comminuting-tank on said barge into which the dredged material is discharged, a comminuting mechanism in said tank, a receiving-tank, an inclined chute connecting the comminuting-tank with the receiving-tank, pipes for supplying water to both tanks, a steam vacuum-pump, a suction-pipe connecting the pump with the receiving-tank, and a conveyer-pipe connected with the discharge-pipe of the pump for conveying the excavated material to the point of discharge, substantially as set forth.

**No. 47,461. Process of Purifying Water.**

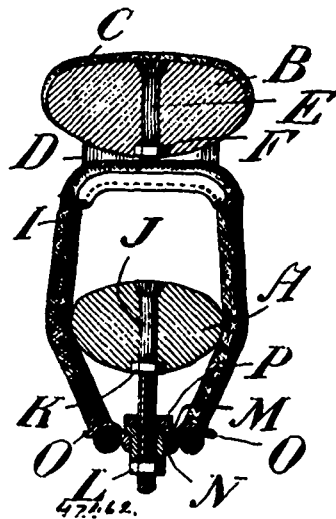
(*Procédé pour purifier l'eau.*)



Bernhard Remmers, and Alex. P. Meude, both of New York, State of New York U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. The process herein described for separating organic matter from waste liquids and purifying, decolorizing and deodorizing liquids, consisting in adding thereto vegetable charcoal or prussiate waste and subjecting the liquid to air pressure for agitating before said liquids are passed into a filtering press and also while said liquids are in the filtering press, substantially as described.

**No. 47,462. Bicycle. (Bicycle.)**

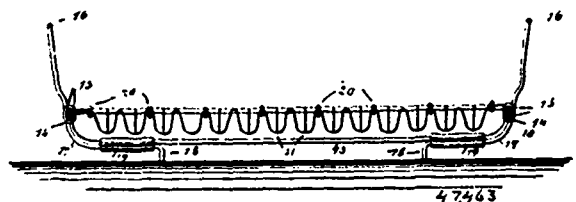


Stanley Cooper Peuchen, Toronto, Ontario, Canada, 13th November, 1894; 6 years.

*Claim.*—1st. In a tire, an outer rim and an inner rim or felloe, in combination, with a series of tension springs connecting the said rims, substantially as and for the purpose specified. 2nd. In a tire, an outer rim and an inner rim or felloe, in combination, with a series of tension springs connecting the said rims, and means for adjusting the tension of the same, substantially as and for the purpose specified. 3rd. In a tire, an outer rim and an inner rim or felloe, in combination, with a series of endless tension springs connecting the said rims, substantially as and for the purpose specified. 4th. In a tire, an outer rim and an inner rim or felloe, in combination, with a series of endless tension springs connecting the said rims, and means for adjusting the tension of the same, substantially as and for the purpose specified. 5th. In a tire, an outer rim and an inner rim or felloe, in combination, with a series of springs connected to the inner side of the outer rim, passing round the inner rim and connected to the inner side of the same, substantially as and for the purpose specified. 6th. In a tire, an outer rim and an inner rim or felloe, in combination, with a series of springs connected to the inner side of the outer rim passing round the inner rim and adjustably connected to the inner side of the same, substantially as and for the purpose specified. 7th. In a tire, an outer rim having a series of plates D connected thereto, each provided with two grooves H, an inner rim or felloe having a corresponding number of double hooks O, connected to the inner side thereof, in combination, with endless tension springs I, looped to lie in the grooves G, and hooks O, substantially as and for the purpose specified. 8th. In a tire, an outer rim having a series of plates D connected thereto, each provided with two grooves H, an inner rim or felloe having a corresponding number of adjustable double hooks O, connected to the inner side thereof, in combination, with endless tension springs I, looped to lie in the grooves G, and hooks O, substantially as and for the purpose specified. 9th. In a tire, the combination of the outer rim B, plate D connected thereto, and provided with grooves H, inner rim A, pin J connected thereto, flanged nut L, ring N, double hook O, and endless spring I, substantially as and for the purpose specified. 10th. In a tire, the combination of the outer rim B, plate D connected thereto, and provided with grooves H, inner rim A, pin J connected thereto, flanged nut L, jump nut P, ring N, double hook O, and endless spring I, substantially as and for the purpose specified.

**No. 47,463. Chocolate Dipper.**

(*Râtelier de trempage de chocolat.*)

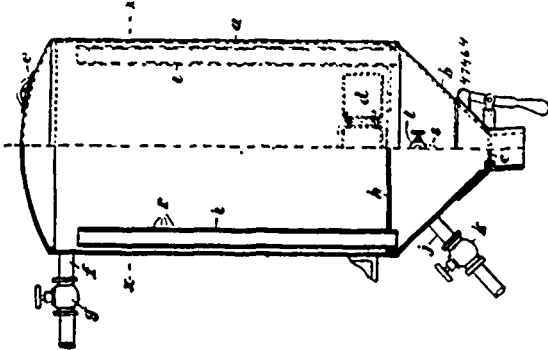


Cyprien Gousset, New York, State of New York, U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. A chocolate dipper, comprising a basket having a series of open sided cream cups therein, and a cover for the basket, substantially as described. 2nd. A chocolate dipper, comprising a basket having end balls and a series of cream cups thereon, and a cover for the basket cover, also having end balls, substantially as

described. 3rd. A chocolate dipper, comprising an open frame, a series of parallel wires crossing the frame, and secured at their ends thereto, and a series of cups formed of a series of serpentine or zig-zag wires crossing the frame and resting at their upward bends upon said cross wires, and a second series of serpentine or zig-zag wires at right angles to the first series, and having their downward bends crossing the downward bends of the said first series, substantially as described. 4th. A chocolate dipper, comprising the open wire frame 12, the strengthening rails 13, beneath the ends of the frame, bent upwardly at the top and connected by the transverse wires 14, said wires lying parallel with the ends of the frame 12, and united thereto by the integral coils 15, handles 16, formed by extension of the said wires beyond the coils, the said wires extending thence along the rails 13, as shown at 17, and terminating in feet 18, clips 19, uniting the parts 13, 17, and a series of cups formed of crossed serpentine or zig-zag wires secured at their ends to the sides and ends of the frame respectively, substantially as described.

**No. 47,464. Rendering Tank. (Réservoir pour la graisse.)**



Emil Holthaus, Canarsie, New York, U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. In a rendering tank, the combination with the upright shell *a*, having funnel-shaped bottom *b*, with screen *h*, at the top of the funnel, and outlet door *d*, just above the screen *h*, of the perforated pipes *i*, projected upward from the screen at opposite sides adjacent to the wall of the tank, and opening into the funnel-shaped bottom beneath the screen, as and for the purpose set forth. 2nd. In a rendering tank, having a screen near the bottom, the combination with the screen, of one or more perforated pipes projected upward from the same, and opening into the space beneath the screen, and steam and water pipes connected with the tank below the screen, as herein set forth. 3rd. In a rendering tank, the combination with the upright shell *a*, having the manhole *c*, and outlet door *d*, of the funnel-shaped bottom *b*, and the gate *e*, the screen *h*, at the top of the funnel, the perforated pipes *i*, inserted in the screen and extended upward from the same, the outlet pipe from the top of the tank, and steam and water pipes connected with the bottom of the tank, substantially as herein set forth.

**No. 47,465. Process of Obtaining Iron Derivatives of Albumen. (Procédé pour obtenir des dérivatifs de fer de l'albumine)**

Frederich Engelhorn, Waldhof, assignee of Oswald Schmiedeberg, Strassburg, Alsace, both in Germany, 13th November, 1894; 6 years.

*Claim.*—1st. The process of obtaining an iron derivative of albumen, which consists in first obtaining the same in the form of a heated solution, and then, before precipitating the iron derivative, maintaining the solution at a high temperature, and, at the same time, acidulating the same, whereby all impurities are separated from the iron derivative of albumen, in solution, substantially as set forth. 2nd. The process of obtaining an iron derivative of albumen, which consists in keeping an albuminous substance in solution in the presence of an iron salt and an alkali and acidulating the heated solution before the iron derivative of albumen is precipitated out of the solution, whereby all ingredients not bound in the iron derivative, such as free albumen and intermediate compounds, are separated from the solution, substantially as set forth. 3rd. The process of obtaining an iron derivative of albumen, which consists in keeping an albuminous substance in solution in the presence of an iron salt and an alkali, for about five hours, and at a temperature of about 90 degrees, Centigrade, then introducing a current of steam into the mixture, so as to maintain the same at about 96 degrees, Centigrade, and, at the same time, adding small quantities of acid until the solution reacts first neutral and then slightly acid, substantially as described and for the purposes set forth. 4th. As a new compound adapted for use as a food and a medicine, an iron derivative of albumen containing from seven to ten per cent of iron, and having a brown colour, which is insoluble in weak alkaline water, a neutral solution of which will not coagulate on boiling, and twenty cubic centimeters of an ammoniacal solution of which, containing 0.06 grams of the iron derivative, will remain unchanged for three

minutes upon the addition of a drop of a fifty per cent. aqueous solution of sulphide of ammonium, substantially as set forth.

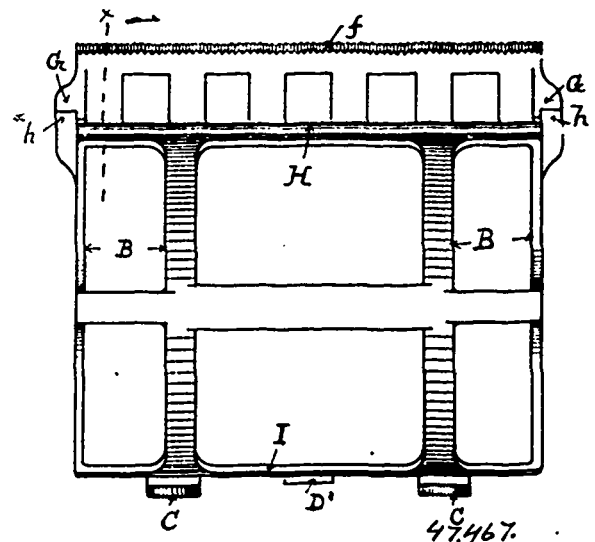
**No. 47,466. Process of Obtaining Iron Derivatives of Albumen. (Procédé pour obtenir des dérivatifs de fer de l'albumine.)**

Friedrich Engelhorn, Waldhof, assignee of Oswald Schmiedeberg, Strassburg, Alsace, both in Germany, 13th November, 1894; 6 years.

*Claim.*—1st. The process of obtaining an iron derivative of albumen, which consists in adding water to internal animal organs and gradually heating the same to the boiling point, then separating the coagulum, and then treating the extract so obtained with dilute acid, substantially as set forth. 2nd. The process of obtaining an iron derivative of albumen, which consists in adding water, to internal animal organs such as liver, gradually heating the mixture to near the boiling point until the albuminous substances begin to coagulate, then raising the temperature to, and maintaining it at the boiling point, until coagulation is completed, and finally separating the resulting iron-albumen derivative, substantially as set forth. 3rd. The process of obtaining an iron derivative of albumen, which consists in making an extract from liver or other animal organ, by slowly heating the same with water to the boiling point, removing the coagulum produced and cooling and finally treating the extract with acid, to precipitate the iron-albumen derivative. 4th. The process of obtaining an iron derivative of albumen, which consists in making an extract from liver and other organs, by slowly heating the same with water nearly up to the boiling point, then raising the temperature to the boiling point and maintaining the extract at the boiling point for a short time, then filtering, then cooling off completely, and finally treating the filtrate with an acid solution in order to precipitate the iron-albumen derivative. 5th. The process of obtaining an iron derivative of albumen, which consists in adding water to finely comminuted internal animal organs, such as liver, gradually heating mixture, while stirring to near the boiling point until the albuminous substances begin to coagulate, then raising the temperature to and maintaining it at the boiling point until the coagulation is completed, then filtering and finally treating the filtrate with an acid solution to precipitate the iron-albumen derivative, substantially as set forth. 6th. The process of obtaining an iron derivative of albumen, which consists in aiding to finely comminuted liver, five times its bulk of water, then gradually heating the mixture to near the boiling point until coagulation of the albuminous substance begins, then raising the temperature to the boiling point and maintaining it there until coagulation is completed, then filtering and allowing the filtrate to cool and finally treating the filtrate with dilute tartaric acid, to precipitate the iron derivative, substantially as set forth.

**No. 47,467. Paper Roll Holder.**

(Porte-rouleaux de papier.)



Walter Henry Clarke, Columbus, Ohio, and Frederick Wurtzbach, jr., Minneapolis, Minnesota, both in the U.S.A., 13th November, 1894; 6 years.

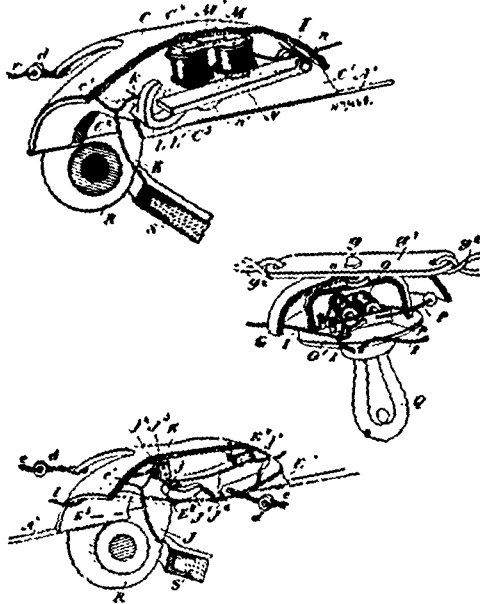
*Claim.*—1st. A paper roll-holder, consisting of two skeleton sections, each cast in one piece and one section having a knife integral therewith, each section having an integral bevelled locking-lug projecting from two of its outer corners, and one of the sections having an integral locking projection or lug for engaging the other sections, substantially as set forth. 2nd. The combination in a paper roll-holder, of a semi-cylindrical section A, a shelf F, having a serrated



edge *f*, on the front edge of said section *A*, and laterally projecting locking-lugs *G*, *G*, at the ends of said shell on said section *A*, with a semi-cylindrical section *B*, lugs *h*, *h*, at the ends of the front edge of said section *B*, adapted to engage the locking-lugs *G*, *G*, on the section *A*, and a lug or catch on the rear edge of one of said sections adapted to be sprung into frictional engagement with the rear edge of the other of said sections by means of the spring of the parts, substantially as and for the purpose set forth.

**No. 47,468. Danger Signalling Device.**

(Signal de danger pour chemins de fer à trolley.)

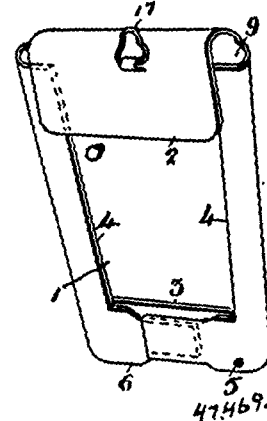


John Barnabas Hall, Toronto, Ontario, Canada, 13th November, 1894; 6 years.

*Claim.*—1st. In a trolley electric railway, the combination with a danger signalling device located in the centre of the cross roads, of a trolley wire support having a magnet and armature secured to the same, the armature being arranged to be thrown against the magnet so as to close the shunt circuit to the signal bell, and a trolley wire support containing a switch located in the path of the shunt circuit wire, and arranged to be operated by the trolley-wheel as it passes it, so as to cause the armature of the magnet in the preceding support to drop to throw the current out of the signal bell, as and for the purpose specified. 2nd. The combination with the danger signalling bell and lamp supported by cross wires and vertical posts above the level of the trolley wires in the centre of the cross roads and a danger signalling bell and lamp similarly supported and located in the centre of the cross roads one at each side of the trolley railway at a suitable distance from the corners of the cross streets, the three sets of bells and lamps being arranged in series, of a trolley wire support having a magnet and armature secured to the same, the armature being arranged to be thrown against the magnet so as to close the shunt circuit to the signal bell, and a trolley wire support containing a switch located in the path of the shunt circuit wire and arranged to be operated by the trolley-wheel as it passes it, so as to cause the armature of the magnet in the preceding support to drop to throw the current out of the signal bell, as and for the purpose specified. 3rd. The combination, with the danger signalling bell and lamp on the shunt circuit wire provided with suitable resistance, of a trolley wire support provided with a magnet insulated from it, an armature pivoted on the blade of the support, a hanger journaled in the recess of the blade in the line of passage of the centre of the trolley-wheel and having a double arm on the outer end of its spindle, a trolley-wheel designed as it passes along from the hanger forwardly to throw up the armature into contact with the magnet through the lower arm on the end of the spindle of the hanger, a succeeding trolley support provided with a hanger journaled in a recess in the line of the passage of the trolley-wheel and extending below the trolley wire and an outer arm on the end of the spindle of the hanger, which is designed to be brought upwardly as the hanger is swung forwardly by the passing of the trolley-wheel, so as to remove the insulating contact strip from contact with an insulated bracket secured to the blade, so as to break the shunt circuit which is completed through the wire leading from the preceding trolley wire support to the contact bracket and succeeding support contact strip and wire leading from such strip to the signal bell, as and for the purpose specified. 4th. The combination, with the danger signalling bell and lamp on the shunt circuit wire provided with suitable resistance, of a trolley support *C*, provided with a magnet *M*, insu-

lated by the plate *M*<sup>1</sup>, shunt wire *I* leading from the same, the armature *N*, pivoted on the blade and provided with a supporting lug *n*<sup>1</sup>, the hanger *K*, pivoted in the recess *C*<sup>1</sup>, and having the double arm *L*, *L*<sup>1</sup>, on the outer end of its spindle and the trolley support *E*, provided with a hanger *J*, journaled in the recess *E*<sup>1</sup>, and having at the outer end of its spindle the arm *J*<sup>1</sup>, the contact bracket *J*<sup>2</sup>, secured to the blade insulated from it and having connected to it the wire *I*, the contact strip *J*<sup>3</sup>, insulated by the block *J*<sup>4</sup>, from the hood *E*<sup>2</sup>, and having one end normally resting on the contact bracket *J*<sup>2</sup>, and the wire *I* extending from the opposite end to the bell and ground, as shown and for the purpose specified. 5th. The combination, with the trolley wire support *C*, provided with a suitable hood *C*<sup>2</sup>, designed to cover the magnetic closing device, which is operated as specified, and the trolley wire support *E*, having a hood *E*<sup>2</sup>, designed to cover the circuit breaking device, which is operated as specified, of the signal bell hung by the central button *u*, from the cross-bar *g*<sup>1</sup>, which is supported as specified, and arranged so as to cover the bell hanger magnet and casing and the lamp, which latter are centrally supported, as shown and for the purpose specified.

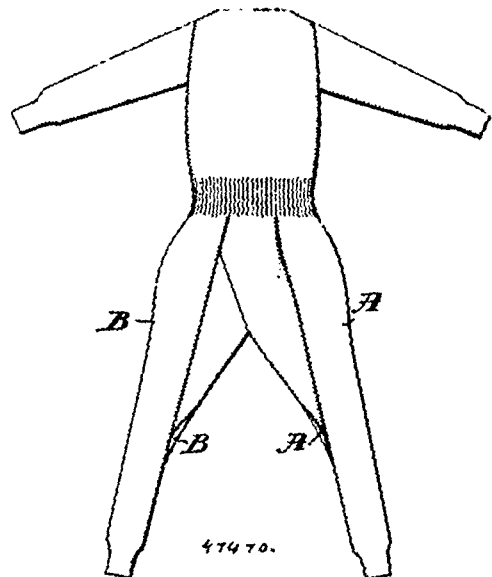
**No. 47,469. Sectional Neck Tie. (Cravate.)**



David Sanguinette, St. Louis, Missouri, U.S.A., 13th November, 1894; 6 years.

*Claim.*—In a sectional tie, a form having a body or face portion, upper and lower flaps for the same, lateral folded portions, the upper flap folded parallel to the face and exterior to the lateral portions, the lower flap folded parallel to the face, but interior to the lateral portions, wings on said lateral portions folded parallel to one another, but exterior to the lower flap, the whole adapted to hold a suitable covering of corresponding shape, substantially as set forth.

**No. 47,470. Union Garment, and Method of Making the same. (Vêtement et méthode de confection.)**



Walter Augustine O'Brien, Boston, Massachusetts, U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. A union garment, comprising a piece *A*, containing one leg and part of the front of the garment, the back, and a back

flap folded upon itself, and united to the waist portion at its line of fold, and also united to the leg portions along opposite edges and having its adjacent sides overlapped, substantially as described. 2nd. A union garment comprising a piece A, containing one leg and part of the front of the garment, a piece B, containing the other leg, and the other part of the front of the garment, the back, and a back flap terminating in oppositely tapered ends and folded upon itself, and united to the waist portion at its line of fold, and also united to the leg portions along opposite edges and having its adjacent sides overlapped, substantially as described. 3rd. A union garment composed essentially of two halves or fronts, each presenting fabric to surround and cover a leg, and substantially one-half of the front of the waist and bust above, and each half having a waist start, presenting a series of loops consolidated in the line of the bottom of the waist, a two ply back flap having its upper end in the line of the bottom of the waist, and a piece of fabric knitted to the waist starts, and to the upper end of the back flap to constitute the back of the waist, and the back and shoulder covering portion above it, said piece of fabric having selvage edges of each part of the front under the arm seye, all substantially as shown and described. 4th. The method of knitting union garments, which consists in knitting separately the two halves A, B, of the garment of the proper width and shape substantially to the bottom of the waist line at the back, running the loops off from some of the needles to make waist starts having loops, continuing the knitting at one side of the waist starts, toward the top of the garment to form a bust covering portion, running the loops of the bust covering portion off the needles knitting a back flap, picking the loops thereof, and of the waist starts of the two halves of the fabric on to needles in the same row, knitting the fabric to cover the back from the waist starts to the neck, and uniting the back doubled on itself to the leg covering portions of the two halves, and thereafter uniting portions of each leg thereof from the ankle up to the lower ends of the back flap, substantially as described. 5th. The method of knitting union garments which comprehends knitting separately the two halves A, B, of the garment, each of the proper width and shape up substantially to the bottom of the waist line at the back, running the loops off from some needles to leave loops to constitute waist starts, continuing the knitting at one side the waist starts towards the top of the garment to form a bust covering portion, running the loops of the bust covering portion off the needles, knitting a two-ply back flap, picking the loops of the back flap onto needles, picking the loops of the waist starts on to other needles in the same row, said needles being less in number than the needles the said loops were made upon, knitting the back of the garment to the said waist starts, and to the said back flap, and thereafter uniting the edges of the back flap to each leg covering portion, uniting the selvages of the leg covering parts of the two halves each to the other from the ankle to the lower end of the back flap, and uniting the main part of the back end of the bust covering portion to the arm seye, substantially as described. 6th. The method of knitting union garments, which consists in knitting separately the two halves A, B, of the garment of the proper width and shape up substantially to the bottom of the waist line at the back, consolidating some of the loops on to a less number of needles then were required to knit the loops and thus form waist starts to leave loops, continuing the knitting at one side, the waist starts toward the top of the garment to form a bust covering portion, knitting a two-ply back flap picking the loops of the back flap on to needles, picking the loops of the waist starts on to other needles in the same row, and upon a less number of needles than said loops were made upon, knitting the back of the waist to the said waist starts, and to the said back flap, and knitting the back of the garment to the back of the waist, and thereafter uniting the two front halves each to itself for a part of its length to form suitable legs, uniting the edges of the back flap to each leg, and uniting the main part of the back, and of the back of the waist to the fronts above the bottom of the waist, substantially as described. 7th. The method of knitting union garments, which consists in knitting the web or fabric for a leg and front, which comprehends the leg, widening said web as described to substantially the widest course for the top or the hip, then transferring part of the loops to change the character of the knitting for the waist, and consolidating the loops for part of the width of the web running the loops off for part of the width of the web to leave a waist start, and then continuing the knitting for the front of the waist and the bust covering part of a id front, substantially as described.

**No. 47,471. Garment Supporter. (Support de vêtement.)**



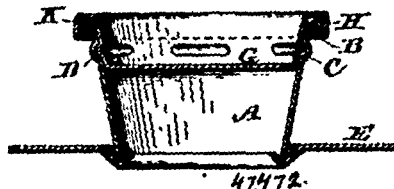
Ella N. Gaillard, Brooklyn, New York, U.S.A., 13th November, 1894; 6 years.

*Claim.*—The combination in a garment supporter, of a loop of stiff material and a button, the two being freely held and connected by supporting straps, the loop being shaped near one end to receive the button freely, and at the other end reduced in size to receive the neck

and hold the head of the button, the said button and loop being adapted to co-set as a garment holder, at least one of them being faced in its contact region with a cushion of homogeneous flexible material, substantially as specified.

**No. 47,472. Can Cap Fastener.**

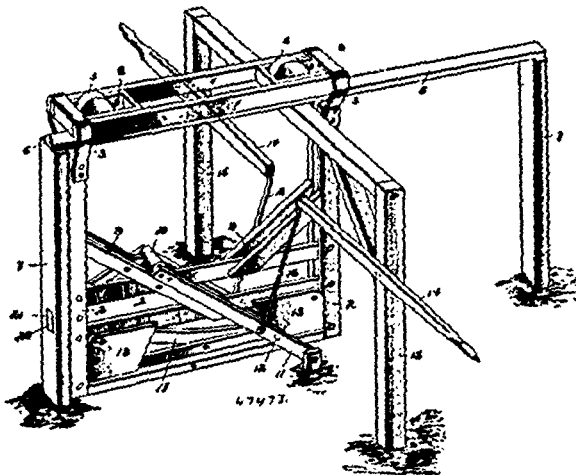
(Attache de couvercle de vase etc.)



George J. Record, Conneaut, Ohio, U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. A seal for closing vessels or receptacles consisting of thin metal provided with laterally projecting parts, and a part adapted to extend across the opening of a vessel or nozzle, the latter part being easily cut through and the said seal locking permanently by resiliency, substantially as set forth. 2nd. In combination with a receptacle having an opening and a groove surrounding the same, a seal provided with projections for interlocking by resiliency with the said groove that part of the seal which closes the said opening being easily cut through, substantially as set forth. 3rd. A receptacle having an internally grooved nozzle, in combination with a thin metallic seal or cap having lateral projections for snapping into the said groove and thereby permanently locking the said seal, substantially as set forth. 4th. In combination with a receptacle, a seal for closing the opening thereof, the said receptacle having a grooved or unequal inner face for the material surrounding the said opening and the seal being provided with projections for snapping into engagement therewith, one of the two interlocking parts being resilient and the said seal being of thin material easily cut through, substantially as and for the purpose set forth. 5th. A seal for closing vessels and receptacles, consisting of thin material easily cut through and having a raised side wall with projecting parts J formed thereon, which are adapted to interlock permanently by resiliency with the grooved inner face of the neck or inlet of the receptacle, substantially as set forth. 6th. A seal for closing vessels or receptacles constructed with a side wall having lateral projections J a flange H bent to fit over the neck of the receptacle and a thin part or diaphragm G adapted to be easily cut through and the said projections being adapted to engage permanently by resiliency with the grooved inner face of the neck nozzle or inlet of the receptacle, substantially as set forth.

**No. 47,473. Gate. (Barrière.)**



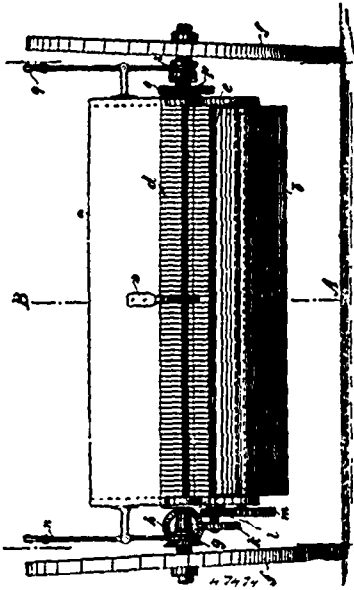
Stansbury Jacob Smith, Paris, Texas, U.S.A., 13th November, 1894; 6 years.

*Claim.*—1st. The combination of a supporting frame having a track, a sliding gate suspended from the track and provided with rollers arranged on the track, the opposite inclined tracks arranged on the gate, the oscillating levers fulcrumed at their lower ends located at opposite sides of the gate and adapted to engage the inclined tracks, the opposite pivoted blocks mounted on the gate and arranged in advance, and in rear of the oscillating levers, a transverse pin mounted on the oscillating levers and arranged to engage the pivoted blocks, substantially as described. 2nd. The combination of a supporting frame having a track, a gate provided with oppositely inclined track bars, and suspended from the supporting



frame and provided with rollers arranged on the track bar thereof, the oscillating levers located on opposite sides of the grate fulcrumed at their lower ends and provided at their upper ends with a roller arranged to engage the inclined tracks, the opposite pivoted blocks mounted on the gate and having their inner ends inclined, a transverse-pin mounted on the oscillating levers and arranged to engage the blocks, and means for operating the oscillating levers, substantially as described. 3rd. The combination of a supporting frame having a track, a sliding gate suspended therefrom, and having rollers arranged thereon, and provided with oppositely inclined tracks, oscillating levers arranged at opposite sides of the gate and adapted to engage the tracks thereof, the opposite pivoted blocks mounted on the gate, the bar pivotally mounted on the gate at the bottom thereof, and having an upward extending portion arranged at the rear portion of the gate, and a transverse-pin carried by the oscillating levers and adapted to engage the blocks in opening and closing the gate, and to engage the rear portion of the pivoted bar when the gate is closed, substantially as described. 4th. The combination of a sliding gate provided with oppositely inclined tracks arranged at the front and back of the gate, pivoted blocks mounted on the gate at the bottom thereof, oscillating levers arranged at opposite sides of the gate and provided at their upper ends with a roller and carrying a pin for engaging said blocks, and a pivoted latch mounted on the inclined track at the front of the gate and adapted to engage the roller when the gate is closed, substantially as described. 5th. In a sliding gate, the combination with the superimposed track bar, the supporting posts, the hangers, and rollers mounted on the track bar, of the depending standards, a series of panel rails connecting the same and forming a gate, the opposite stops mounted on the gate, the inclined oppositely disposed track bars extending upward from the centre of the gate to the standards, a stud below the gate, a pair of swinging levers pivoted to the stud and embracing the gate and arranged to engage said stops, a roller arranged between the upper ends of the levers and adapted to operate upon the inclined track bars, and operating levers at opposite sides of the gate connected with the swinging levers and fulcrumed at opposite sides of the gate, substantially as described. 6th. In a sliding gate, the combination with opposite posts, the superimposed track, the rollers arranged thereon, and the depending hangers of the gate provided with oppositely inclined track bars, the opposite stops mounted on the gate, the swinging levers embracing the gate and pivoted below the same, a roller arranged near the upper ends of the swinging levers and adapted to operate against either of the inclined track bars, the operating levers fulcrumed between their ends, and connecting rods between the operating levers, and swinging levers, substantially as described.

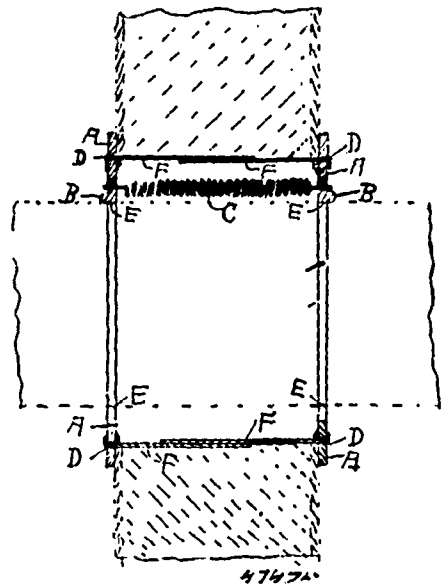
**No. 47,474. Machine for Scattering Manure.**  
(Machine pour distribuer le fumier)



Eward Scheiblich, Kibitzberg, Prussia, Germany, 13th November, 1894; 6 years.

*Claim.*—A machine for scattering manure, provided with a drum *b*, which takes the manure from a chest *a*, and further provided with a screw-plate *c*, which fits closely to the drum *b* and which is curved according to the radius of a screw-roller *d*, said screw plate *c* leading the manure to the screw-roller *d*, whereby the latter serves as a disperser, and whereby the drum *b* and the screw-roller *d* will get their motions, independent one from another by the wheels *f* of the machine for scattering manure, and whereby the very same can be disengaged by means of the levers *n* and *g*.

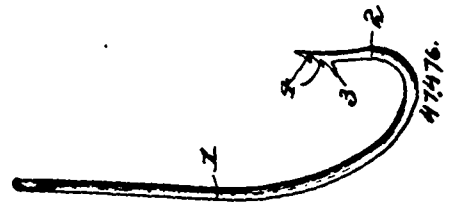
**No. 47,475. Stove Pipe Thimble.** (Dé de tuyau de poêle.)



Archibald Fairgreive, Toronto, Ontario, Canada, 14th November, 1894; 6 years.

*Claim.*—The combination of a cap *A*, with the corrugated edge *E*, forks *B*, and perforations *D*, substantially as and for the purpose described and set forth.

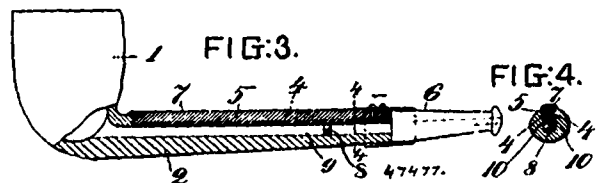
**No. 47,476. Fish-hook.** (Hameçon.)



Burrell S. Martin, Angola, New York, U.S.A., 14th November, 1894; 6 years.

*Claim.*—The herein described improved fish-hook, the same having one or more beards located on the tapered inner side of the hook portion intermediately between its point and the regular barb, and disposed outwardly and away from the point, and inclined in the same direction as the said barb, but smaller in size than the latter, substantially as specified.

**No. 47,477. Tobacco Pipe.** (Pipe à fumer.)

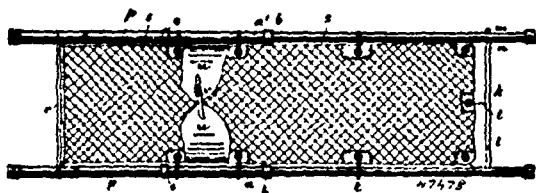


Warren Edward Trott, Brooklyn, New York, U.S.A., 14th November, 1894; 6 years.

*Claim.*—1st. A tobacco pipe having a stem provided with a slot extending along substantially its entire length and communicating with the smoke-passage and a tenon or closing strip, fitting into said slot in an air-tight manner, and means for holding said tenon in place in the slot, substantially as set forth. 2nd. A tobacco pipe having a straight slot extending the entire length of its stem and open to the smoke-passage in the latter, said slot being of substantially the same width as the smoke-passage, and a tenon or closing strip fitting into the slot between the side-walls thereof in an air-tight manner, said tenon having projecting parts which take under overhanging parts on the pipe when the tenon is in place, substantially as set forth. 3rd. A tobacco pipe having a straight slot extending the entire length of its stem and open to the smoke-passage in the latter, said slot being of substantially the same width as the smoke-passage, and a sliding tenon or closing strip with rabbeted edges fitted into the side-walls of the slot and closing the same in an air-tight manner, substantially as set forth. 4th. The combina-

tion, with a tobacco pipe having its stem provided with a slot which opens into the smoke-passage in the stem and extends substantially the entire length of the stem, of a sliding covering strip, with rabbetted edges, fitted into and closing said open slot, and a removable mouth-piece secured to said strip and provided with a band which fits over the end of the stem and forms a smoke tight joint when the parts are in place, substantially as set forth. 5th. A tobacco pipe having a slot in its stem open to the smoke-passage therethrough, a tenon or closing-strip to close said slot, and a dam carried by said tenon and fitting into the smoke-passage, said dam being adapted to hold back the liquids but permit the passage of smoke, as set forth.

**No. 47,478. Folding Litter. (Litère pliante.)**

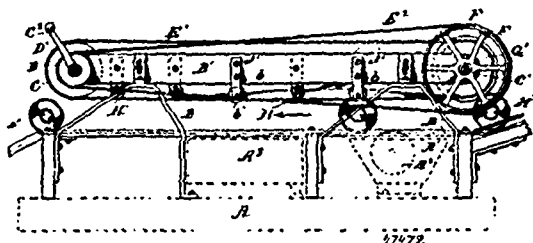


Max Nehemais, Hamburg, Germany, 14th November, 1894; 6 years.

*Claim.*—A folding-up litter, the long carrying poles *a, a'*, of which consist of telescope-like tubes to be shoved into each other, with folding carrying feet *d, d'*, in a parallel respectively rectangular position, with cross-connectors *k*, and head supports *g*, with truss-bars *p*, and a sail-cloth *s* held between these parts by means of hooks and eyes, a support being secured against the bending down of the middle of each long carrying pole *a, a'*, of the unfolded and charged litter by the two draw-poles *f* and *h*, wing their constructive connection to the coupling-box *f* and causing and holding fast the rectangular position of the carrying feet *d, d'*, and which by their actual connection with the other carrying parts form a lattice-work.

**No. 47,479. Can-labelling Machine.**

*Machine à étiqueter les boîtes en métal.)*



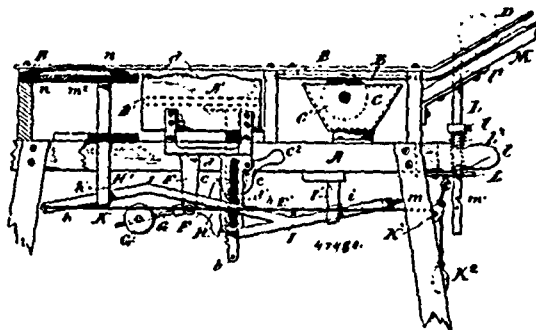
Evan William Cornell and Frederick Henry Knapp, both of Adrian, Michigan, U.S.A., 14th November, 1894; 6 years.

*Claim.*—1st. In a can-labelling machine, the combination with the feed mechanism for delivering the cans to the machine, the endless conveyor mechanism for conveying the cans through the machine, and of mechanism for imparting greater speed to the conveyor mechanism than to the feed mechanism, whereby the conveyor mechanism automatically spaces the cans while conveying same through the machine. 2nd. The combination with a labelling machine, of a conveyor frame supported thereabove, the feed mechanism and endless conveyor mechanism arranged therein and of mechanism for imparting greater speed to the conveyor mechanism than to the feed mechanism, whereby the conveyor mechanism automatically spaces the cans while being conveyed through the machine. 3rd. The combination with a labelling machine, of a conveyor frame supported thereabove, the drive shaft secured at each end thereof, the feed discs and drive-wheel rigidly secured to the forward shaft, the belt wheels loosely mounted upon said shaft, the belt wheels and small drive wheels rigidly secured to the rear shaft, drive belt for transmitting the motion of the small drive wheel to the large drive wheel, the endless conveyor belts for imparting the speed of the fixed belt wheels, and of mechanism for imparting motion to the rear shaft of the conveyor frame. 4th. The combination with a labelling machine, of the conveyor belts, mechanism, for imparting motion thereto, and of the keeper rolls so arranged as to throw the conveyor belts at an angle to the travelling cans, whereby the belts engage the cans at the ends thereof. 5th. The combination with a labelling machine, of the conveyor frame supported thereabove, the endless conveyor working therein, and devices for causing the endless conveyor to engage the cans at an angle to the ends. 6th. The combination with a labelling machine, the conveyor frame supported thereabove, the keeper rolls suspended there below at an angle, the endless conveyor belts working within the frame, said belts being thrown at an angle by means of the keeper rolls so as to engage the cans at an angle, and the cone-shaped grooves cut therein within which the conveyor belts work.

7th. In a labelling machine, the combination with the feed discs, of the conveyor mechanism and of mechanism for imparting greater speed to the conveyor mechanism than to the feed discs, whereby the cans fed into the machine are automatically spaced while being carried through the machine.

**No. 47,480. Can-labelling Machine.**

*(Machine à étiqueter les boîtes en métal.)*

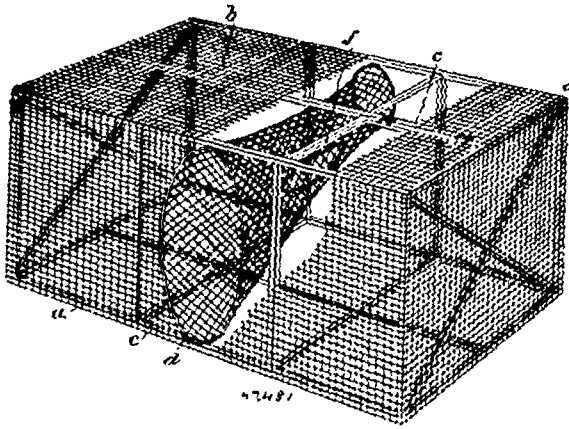


Evan William Cornell and Frederick Henry Knapp, both of Adrian, Michigan, U.S.A., 14th November, 1894; 6 years.

*Claim.*—1st. In a can-labelling machine, the combination with the follower for raising the labels, of mechanism for automatically raising or elevating the same as the labels are removed from the holding receptacle, and of an automatic moving device for holding the follower locked in its raised position, whereby the same is prevented from moving downward by the pressure of the can passing over the labels. 2nd. In a labelling machine, the combination with the label-holding receptacle, of the movable follower located therein for raising the labels, mechanism for automatically raising the follower as the labels are removed from the receptacle and a device for automatically holding the follower in its raised position, whereby the same is prevented from moving downward by the pressure of the can passing over the label. 3rd. In a can-labelling machine, the combination with the feed runway for the cans, an actuated stop device for stopping the feed of the cans to the machine when the label-holding receptacle is empty or nearly so, and of mechanism for automatically operating the stop device for the cans when the label receptacle is empty or nearly so. 4th. In a can-labelling machine, the combination with the feed runway for the cans, of mechanism for automatically stopping the feed of the cans to the machine upon the label-holding receptacle becoming empty or nearly so. 5th. In a can-labelling machine, the combination with the feed runway, of a spring actuated stop device, of the mechanism for operating the followers for the labels and of a device automatically operated by the follower mechanism for releasing the spring-actuated stop device for the cans as the label receptacle is emptied, whereby the feed of the cans to the machine is stopped. 6th. In a labelling machine, the combination with the mechanism for raising the follower of the label receptacle, of the stop, device for the cans, inclined longitudinally movable rod for releasing the stop device and mechanism for imparting movement to the incline rod as the follower is raised, said rod serving as a brake to prevent downward movement of the follower. 7th. In a can-labelling machine, the combination with the can feed runway, of the spring-actuated stop device working therein, and of mechanism for automatically releasing the stop device when the last, or near the last label has been removed from the holding receptacle. 8th. In a labelling machine, the combination with the label-holding receptacle, the follower working therein, mechanism for automatically operating the same and a device for locking the follower mechanism when the follower has been lowered its full distance. 9th. In a can-labelling machine, the combination, with the label receptacle, the follower, the rack-bar depending therefrom, the segmental rack cam for raising the rack-bar of the follower automatically, the longitudinally inclined movable rod engaged by the rack-bar and by means of which the said rack-bar is held in its raised position and of mechanism for forcing the inclined rod forward with the upward travel of the rack-bar. 10th. In a can-labelling machine, the combination, with the feed runway for the cans, a stop device working therein, a longitudinally moving rod for operating the device upon the labels held within the receptacle becoming exhausted. 11th. In a can-labelling machine, the combination, with the label-holding receptacle, of the follower, said follower having its ends inclined or raised whereby the ends of the labels are raised. 12th. In a labelling machine for cans, the combination, with the feed runway, of a device interposed therein for causing such cans as may be indented to slide thereover whereby the can is fed into the machine in a position to present the undamaged portion of the can to the paste-applying wheel. 13th. In a can-labelling machine, the combination, with the label-holding receptacle, the paste-applying wheel and of an incline cam or throwing device interposed within the path of the can between the holding receptacle for the labels and the paste-applying wheel for throwing the can in true line with the label. 14th. The combination, with a can-labelling machine, of an elastic pad for pressing the lap end of the label firmly down, said

pad consisting of a series of parallel elastic metal strips. 15th. The combination, with a can-labelling machine, of an elastic metallic pad for pressing the lap end of the label firmly down.

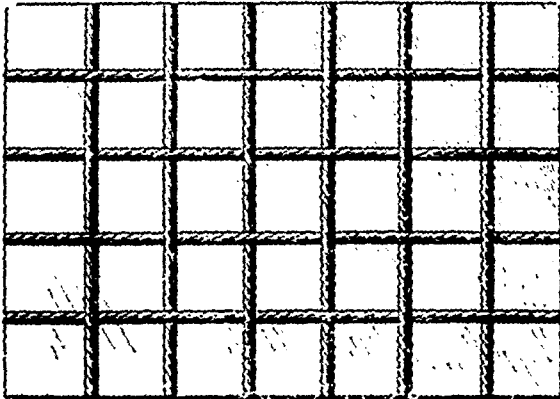
**No. 47,481. Fish-Trap. (Parc de mer.)**



Robert Janian Hodge, Medford, Massachusetts, U.S.A., 14th November, 1894; 6 years.

*Claim.*—A fish-trap comprising in its construction an outside enclosure having a vertically-extending inlet opening and a horizontal passage-way extending across the interior of said outside enclosure from the inlet-opening therein to the opposite side of the enclosure which closes that end of the passage-way, the said passage-way having an opening in its under side providing communication between the passage-way and the outside enclosure.

**No. 47,482. Plate Glass. (Verre.)**



John H. Crosbie and Joseph Locke, both of Pittsburgh, Pennsylvania, U.S.A., 14th November, 1894; 6 years.

*Claim.*—1st. As a new manufacture, glass having imbedded in it strings or cords of incombustible material with metallic cores, substantially as described. 2nd. As a new article of manufacture, a plate or piece of glass having imbedded in it metallic wires covered with asbestos.

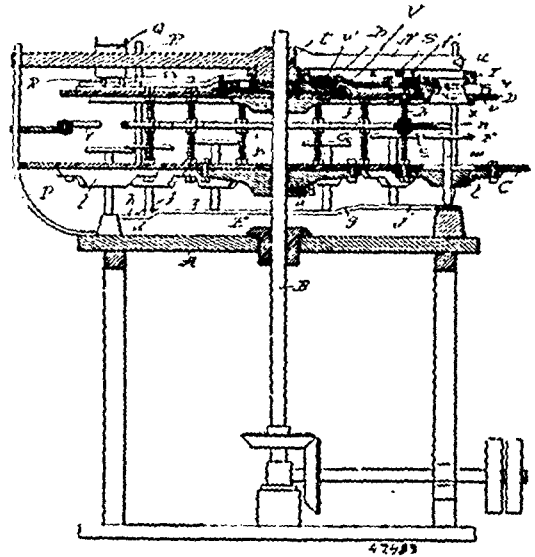
**No. 47,483. Machine for Closing Cans.**

(Machine pour fermer les boîtes métalliques.)

Charles R. Austin, New Westminster, British Columbia, Canada, 14th November, 1894; 6 years.

*Claim.*—1st. The combination of an upper rotary table adapted to receive and hold a can, a lower table movable with the upper table, a vertically movable can supporting platform carried by the lower table and a suitable means for raising said platform, substantially as and for the purpose set forth. 2nd. The combination of an upper rotary table adapted to receive and hold a can, a lower table movable with the upper table, a vertically-movable can supporting platform carried by the lower table and having a portion depending below said table, and a stationary track arranged below the lower table and adapted to engage the depending portion of the vertically-movable platform and raise the same, substantially as and for the purpose set forth. 3rd. The combination of an upper rotary table adapted to receive and hold a can, a suitable means for delivering caps upon the table, a plate S, arranged above said table, a lower table movable with the upper table, a vertically movable can-sup-

porting platform carried by the lower table and a suitable means for raising said platforms, substantially as specified. 4th. The combination with a rotary table, and a vertically movable platform carried by the table and having a portion depending below the same, of a

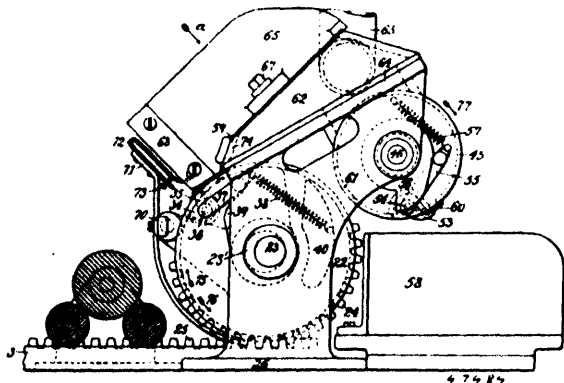


track arranged beneath the table and adapted to engage the depending portion of the platform and raise the same, substantially as specified. 5th. The combination with a rotary table and a vertically movable platform carried by the table and having a portion depending below the same, of a stationary track arranged beneath the table and having inclines at intervals, said track being adapted to engage the depending portions of the platform and raise said platform in a step-by-step manner, substantially as specified. 6th. The combination of an upper rotary table adapted to receive and hold a can, a lower table movable with the upper table, a carrier arranged between and movable with tables and adapted to engage and carry a can, and a suitable means for raising the can into engagement with the upper table, substantially as specified. 7th. The combination of an upper rotary table having a circular series of can holders, a lower rotary table movable with the upper table, a series of vertically movable platforms carried by the lower tables and arranged below the holders of the upper table and having depending portions, a track arranged below the lower table and adapted to engage the depending portion of the platforms and raise the same, a carrier arranged between the upper and lower table and having seats to receive the cans, a plate S, arranged above the upper table, and a suitable means for delivering caps upon said table, all substantially as and for the purpose set forth. 8th. The combination of a lower rotary table, an upper table movable with the lower table and an adjustable connection between said tables whereby one may be adjusted and adjustably fixed at various distances from the other, substantially as and for the purpose set forth. 9th. In a can-capping machine, the combination with a rotary carrier adapted to engage and carry a can, of a stationary arm J, intersecting the path of the carrier and adapted to remove a can therefrom, substantially as and for the purpose set forth. 10th. The combination of an upper rotary table adapted to receive and hold a can, a lower table movable with the upper table, a carrier arranged between and movable with the tables and adapted to engage and carry a can, and an arm J, connected to a stationary support and intersecting the path of the carrier so as to remove a can therefrom, substantially as and for the purpose set forth. 11th. The combination, with a rotary table and a can-carrier arranged above and movable with the table, of an arm K extending above the table to a point adjacent to the carrier, an arm L extending above the table to a point adjacent to the carrier and having a seat p, and means for removing the cans from the seat p, of the arm L, substantially as specified. 12th. The combination of a rotary table, a can-carrier arranged above and movable with the table, an arm K extending above the table to a point adjacent to the carrier, an arm L extending above the table to a point adjacent to the carrier and having a seat p, a lever M fulcrumed on a stationary support and means for returning said lever M to its normal position, substantially as and for the purpose set forth. 13th. The combination of a rotary table, a can-carrier arranged above and movable with the table and having a plurality of seats to receive the cans, and arm J, extending above the table and intersecting the path of the carrier, an arm K extending above the table to a point adjacent to the carrier, an arm L extending above the table to a point adjacent to the carrier, and having a seat p, a lever M fulcrumed on a stationary support and means for returning said lever M to its normal position, substantially as specified. 14th. In a machine for capping cans, the combination of a rotary table having an opening to receive a can a holder arranged upon the table around the opening therein, and comprising a fixed section and movable sections, and a suitable means for opening and closing the movable sections of the holder,

substantially as specified. 15th. In a machine for capping cans, the combination of a rotary table having an opening to receive cans, an annular ring arranged in the opening in the table and having its inner side bevelled upwardly and inwardly, a holder arranged upon the table around the opening therein, and comprising a fixed section and movable sections, and a suitable means for opening and closing the movable sections of the holder, substantially as and for the purpose set forth. 16th. In a machine for capping cans, the combination, with a rotary table having an opening to receive a can, and a holder surrounding the opening of the table and comprising movable sections of a central cam, and mechanism intermediate of the cam and the movable sections of the holder adapted to move said sections and open and close the holder, substantially as and for the purpose set forth. 17th. In a machine for capping cans, the combination, with a rotary table having an opening to receive a can and a holder surrounding the opening of the can and comprising movable sections and levers fulcrumed on the table and connected to the movable sections, a central stationary cam and a slide actuated by said cam and engaging the levers, substantially as and for the purpose specified. 18th. In a machine for capping and crimping cans, the combination of a rotary table having an opening to receive a can, a holder arranged upon the table, around the opening and comprising movable sections, a suitable means for moving the sections of the holder to open and close the same, a slidable crimper arranged upon the holder and having a gudgeon or projection, a fixed or stationary crimper-bar adapted to engage one side of a can, a cam-bar  $S^1$ , adapted to engage the gudgeon or projection of the crimper and force it into engagement with the opposite side of the bar, and a cam-bar  $S^2$ , adapted to engage the gudgeon or projection of the crimper, and move the same away from the can, substantially as and for the purpose set forth. 19th. The combination of a rotary table adapted to receive and hold a can, a slidable crimper arranged upon the table and having a gudgeon or projection, a stationary crimper adapted to engage one side of a can, a stationary cam-bar  $S^1$ , adapted to engage the gudgeon or projection of the crimper and force the same into engagement with the opposite side of the cam, and a cam-bar  $S^2$ , adapted to engage the gudgeon or projection of the crimper and move the same away from the can, substantially as specified. 20th. The combination of a rotary table adapted to receive and hold a can, means for delivering caps upon said rotary table, and a device carried by the table and adapted to engage the caps as they are fed so as to move them with the table, substantially as specified. 21st. A rotary table adapted to receive and hold a can, a device carried by the table and adapted to engage caps, in combination with a cap chute having tracks as R, at its lower end, substantially as specified. 22nd. A rotary table adapted to receive and hold a can a device carried by the table and adapted to engage caps, in combination with a suitable device for delivering caps, tracks as R, and guides as R', substantially as and for the purpose set forth. 23rd. A rotary table adapted to receive and hold a can, and a device carried by the table and adapted to engage caps, in combination with a suitable device for delivering caps, tracks R, and guides R', having a cross-bar R'', substantially as specified. 24th. The combination of a rotary table having a holder to receive a can, a suitable means for raising a can into the holder, and a finger pivoted in the holder and adapted to be engaged and raised by the can when the same is pushed upwardly, substantially as specified.

#### No. 47,484. Sheet Separating and Printing Machine.

(Machine à séparer les feuilles et imprimer.)



Casper Reising, Southington, Connecticut, U.S.A., 14th November, 1894; 6 years.

**Claim.**—1st. A sheet separating table, provided with an interior chamber in which a partial vacuum is maintained, having a wall adapted to support a portion of the surface of a pile of sheets, with a wall adjacent to the unsupported portion of the pile, and inclined at a substantial angle to the sheet supporting wall, the inclined wall being provided with an opening leading to the interior chamber, all arranged and operating to draw toward that opening the unsupported portion of the adjacent sheet, substantially as described.

2nd. A sheet separating device, consisting of a table adapted to support a portion of the surface of a pile of sheets, and a stop finger adapted to support an edge of the over-hanging portion of the pile, the table being provided with an air-passage adjacent to that over-hanging portion, which communicates with a vacuum or exhaust chamber, whereby the unsupported portion of the lower sheet is drawn away from the other sheets and from the stop finger, substantially as described. 3rd. A sheet separating and feeding device, consisting of a table provided with an interior chamber in which a partial vacuum is maintained, having a wall adapted to support a portion of the surface of a pile of sheets, a wall adjacent to, and inclined at a substantial angle with the sheet supporting wall, provided with an opening leading to the interior chamber, and a reciprocating carrier provided with a gripper and located adjacent to the inclined wall, all arranged and operating to automatically separate the lowest sheet from the others by drawing it down upon the inclined wall, and pulling it away by the carriers, substantially as described. 4th. A sheet separating and feeding device, consisting of a table adapted to support a portion of the surface of a pile of sheets, provided with a vacuum chamber having an opening adjacent to the unsupported portion of the pile, a travelling carrier or bed provided with a gripper, and a stop finger adapted to support the edge of the remaining sheets as the lower sheet is drawn away, all substantially as described. 5th. A table or rack adapted to hold a pile of sheets to be separated and fed, consisting of an inclined base adapted to support a portion of the pile, adjustable sides adapted to gauge the sidewise position of the pile, adjustable L-shaped pieces adapted to engage the lower leading corners of the pile of sheets and keep their front ends in even register, and an adjustable stop finger located substantially central with the opening between the L-shaped pieces and adapted to allow the lower sheet to be drawn away while constantly supporting those above it, substantially as described. 6th. A table or rack adapted to separate and feed sheets from a pile, consisting of a vacuum box 62, having a surface adapted to support a portion of the under side of the pile, and having another surface adjacent to the unsupported portion provided with a port leading to the interior of the vacuum box, the adjustable sides 65, 66, the L-shaped pieces 68 and 69 adapted to constantly engage the leading corners of the pile of sheets and keep them in even register, and the adjustable stop finger 72 adapted to constantly support the edge of that side of the pile which is unsupported by the base, all substantially as described. 7th. The herein described combination of a sheet separating and take-off device, consisting of a vacuum box provided with a surface adapted to support a portion of a pile of sheets, and having another surface adjacent to the unsupported portion of the pile, provided with an opening therein leading to the interior of the vacuum box, an impression cylinder mounted adjacent thereto, provided with a gripper, and adapted to draw the separated sheet from the vacuum box, a take-off roll mounted adjacent to the cylinder, provided with a gripper and provided with a port adapted to communicate with the vacuum chamber when the roll is in a relation to the cylinder suitable for receiving the sheet therefrom, all arranged and operating to feed a separated sheet to the cylinder, and from thence to the take-off roll, substantially as described. 8th. A sheet separating and take-off device, consisting of a vacuum box having a surface adapted to support a portion of the under side of a pile of sheets, and having a surface adjacent to the unsupported portion of the pile, provided with an opening leading to the interior of the vacuum box, a stop finger adapted to support an edge of the otherwise unsupported portion of the pile, an oscillating cylinder journaled adjacent to the vacuum box and provided with a gripper adapted to seize the separated sheets and draw them from beneath the pile, an oscillating suction take-off roll journaled adjacent to the cylinder, provided with a gripper, and provided with a port adapted to communicate at suitable intervals with the vacuum box by means of ports on their adjacent surfaces, substantially as described. 9th. The combination of the vacuum box 62 provided with the port 64, the stop-finger 72, the cylinder 22, its gripper 35, and the hollow take-off roll 45, provided with the port 61, adapted to register with the port 64 in the vacuum box, substantially as described.

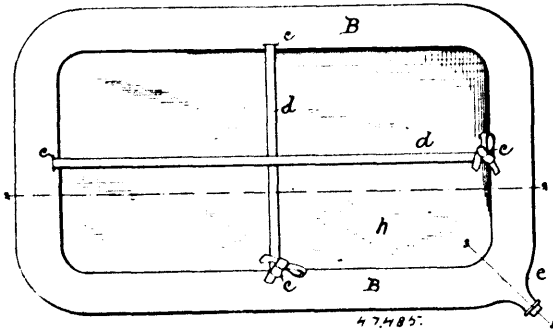
#### No. 47,485. Compress and Poultrice Protector.

(Protecteur pour cataplasmes.)

Ida Marilla Hemsteyer, Chicago, Illinois, U.S.A., 14th November, 1894; 6 years.

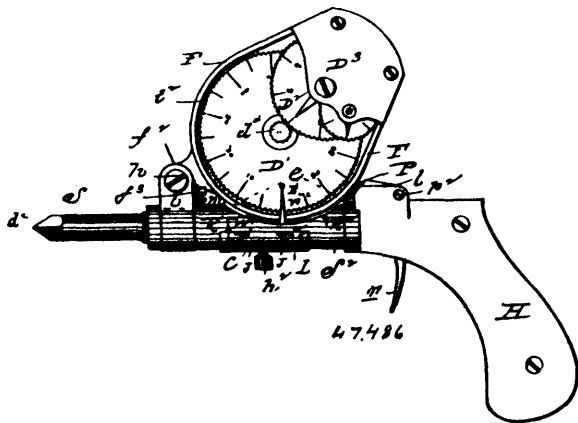
**Claim.**—1st. The poultrice, blister or compress protector, consisting of a bag made of waterproof material and having one of its faces or sides cut away to form a marginal face, substantially as specified. 2nd. The poultrice, blister or compress protector, consisting of a bag made of waterproof material and having one of its faces or sides cut away to form a marginal face, and provided further with means as for example, the aperture c, for attaching a holding tape or tapes to cross the open face of the protector, substantially as specified. 3rd. The poultrice, blister or compress protector, consisting of a bag made of waterproof material and having one of its faces or sides cut away to form a marginal face, and provided with means, as for example the loops g, for attaching tapes or strings by which the apparatus may be fastened to the body of the patient, substantially as specified. 4th. The poultrice blister or

compress protector made of waterproof material and consisting of the backing part and the marginal face whereby the poultice, blister or compress is protected at the back and edges and exposed at the face, provided with the grooves or gutter *f*, substantially as speci-



fied. 5th. The poultice, blister or compress protector made of waterproof material and consisting of the backing part and the marginal face, whereby the poultice, blister or compress is protected at the back and edges and exposed at the face, and provided with the nozzle *e*, substantially as specified. 6th. The poultice, blister or compress protector, made of waterproof material and consisting of the back part and the marginal face whereby the poultice, blister or compress is protected at the back and edges and exposed at the face, provided with the groove *f*, and provided with the nozzle *e*, substantially as specified.

**No. 47,486. Speed Indicator. (Indicateur de vitesse.)**

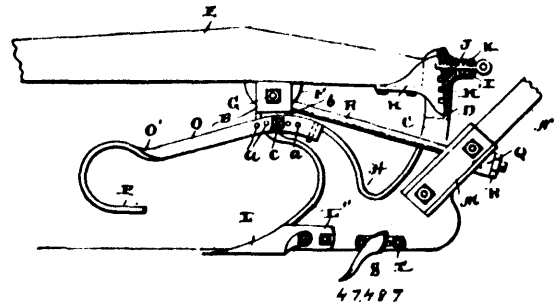


William Thomas Lintner, Gloversville, New York, U.S.A., 15th November, 1894; 6 years.

*Claim.*—1st. In a speed indicator, the combination, with a spindle adapted to make a contact engagement with a revolving shaft and to be turned with and by the latter, of a right-hand and left-hand threaded worm-gear, each mounted upon, adapted to slide together upon and to turn with said spindle, and a dial-wheel having perimetral teeth adapted to engage with and be operated by either of said worm-gears, substantially in the manner as and for the purposes set forth. 2nd. In a speed indicator, the combination, with a spindle adapted to engage with a revolving shaft, and to be turned by the latter, of a sleeve mounted on said spindle, to turn with the latter, and to slide thereon longitudinally, a left-hand threaded worm-gear upon one end of said sleeve, a right-hand threaded worm-gear upon the other end of said sleeve, and a dial-wheel having perimetral teeth adapted to engage with and be operated by either of said worm-gears, substantially in the manner as and for the purposes set forth. 3rd. In a speed indicator, the combination, with a spindle constructed to make a contact engagement with a revolving shaft, and actuated to be turned thereby within a stock, of a sleeve arranged on said spindle and constructed to slide longitudinally thereon and to turn therewith, of a right-hand threaded worm-gear upon one end of said sleeve, a left-hand threaded worm-gear upon its other end, a semi-tube-form plate on said spindle between said worm-gears, and a pin connected to said plate by which the latter and the sleeve may be moved laterally on said spindle, substantially in the manner as and for the purposes set forth. 4th. In a speed indicator, the combination, with a dial-wheel having perimetral teeth, and mounted in a frame that is pivoted to a stock, of a spindle arranged in bearings in the latter, and adapted to be turned when in contact with a revolving shaft, of a right hand and left-hand threaded worm-gear mounted upon said spindle, and each of said worm-gears adapted to separately engage with the teeth upon said dial-wheel, substantially in the manner as and for the purposes set forth.

5th. In a speed indicator the combination with a spindle constructed with bearings in a stock and adapted to engage with and be turned by contact with a revolving shaft, and provided with a right-hand and left-hand threaded worm-gear, laterally adjustable on said spindle, substantially as described, of arrows on the stock indicating by direction the rotation of the shaft to which the spindle is to be applied, a dial-wheel mounted in a frame and having perimetral teeth adapted to engage with either of said worm-gears when positioned in the spindle with reference to said direction arrows, substantially in the manner as and for the purposes set forth. 6th. In a speed indicator the combination with a spindle constructed with bearings in a stock and adapted to engage with and actuated to turn by a revolving shaft and provided with a right-hand and left-hand threaded worm-gear laterally adjustable on said spindle, of arrows on the stock indicating by direction the rotation of the shaft to which the spindle is applied, a dial-wheel mounted in a frame and having perimetral teeth adapted to engage with either of said worm-gears, a cover-plate adapted to move laterally with said worm-gears, said cover-plate having an arrow at each end pointing in co-incident direction with those upon the stock, substantially in the manner as and for the purposes set forth. 7th. The combination with the spindle of a speed indicator that is actuated by a contact pressure with a revolving shaft, and by means of a worm-gear on said spindle transmits motion to a registering dial-wheel, substantially as described, of a socket bearing for said spindle, and a ball bearing B<sup>2</sup>, arranged at the inner end of said socket bearing, said ball bearing having balls *a*<sup>4</sup>, arranged around a pin *a*<sup>6</sup>, projected from the inner end of the washer *a*<sup>6</sup>, substantially as and for the purposes set forth. 8th. In a speed indicator the combination with a stock having a pistol-form handle, and made with a spindle bearing, and having a frame pivoted to said stock, and provided with an indicating dial-wheel having perimetral teeth, of a spindle adapted to turn on said spindle bearing provided with a sleeve having thereon a right-hand and left-hand thread, and a trigger-form lever adapted to bring said dial-wheel in meshing engagement with either of said worm-gears as moved into position on said spindle, substantially in the manner as and for the purposes set forth.

**No. 47,487. Ditching Plough. (Charrue à fossoyer.)**



John J. Larimer, Crab Tree, Pennsylvania, U.S.A., 15th November, 1894; 6 years.

*Claim.*—1st. An improved plough comprising a stock and a channelling tongue detachably secured to the vertical side of the stock and depending beneath the same, substantially as shown and described. 2nd. An improved plough comprising a stock, grooved vertical extension C thereon, a beam fulcrumed between its ends to the stock, a rack secured to the rear end of the beam which is adapted to move in the said grooved extension, and a means for holding the said rack therein in different vertical positions, substantially as shown and described. 3rd. An improved plough comprising a stock, a beam fulcrumed thereto between its ends, frame I extending laterally from the stock, a locking-pin extending longitudinally therethrough, and adapted to engage the inner end of the beam, and a spring in the said frame for the holding the said pin normally pushed inward, substantially as shown and described. 4th. The combination with a plough, of a guage extended therefrom, a series of securing points arranged in the segment of a circle on the end of the guage adjacent the plough, and means of securing the same thereto, substantially as shown and described.

**No. 47,488. Differential Pattern Machine.**

(Machine à patron différentiel.)

Robert Cairns, Watertown, Wisconsin, U.S.A., 15th November, 1894; 6 years.

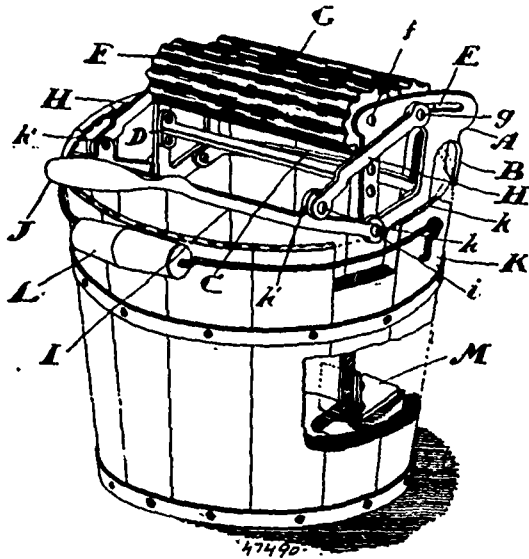
*Claim.*—1st. The combination of a suitable table for the temporary support of a drag or cope, a series of concentric guideways within the confines of the table, removable fillers for the guideways, patterns interchangeable with the guideway fillers, and suitable means for vertically adjusting a pattern in its guideway, substantially as set forth. 2nd. The combination of a base, a suitable table supported above the base, a series of concentric guideways within the confines of the table, removable fillers for the guideways, a rotative screw-spindle interposed between said base and table, a support having a nut-connection with the spindle, slides normally loose







**No. 47,490. Mop Wringer. (Essoreuse de torchon.)**

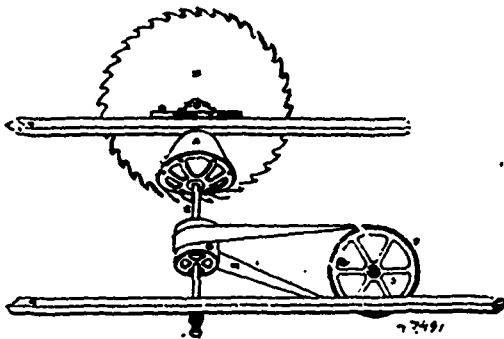


James Bowes Cleghorn, Toronto, Ontario, Canada, 15th November, 1894; 6 years.

*Claim.*—1st. In a mop-wringer, a bracket attached to the rim of a pail, in combination with rollers, one of which is journaled on the bracket, while the spindle of the other roller is pivoted on the ends of links pivotally attached at their other ends to the free ends of a bail or handle piece, which is pivotally attached to the lower portion of the bracket, the spindle of the movable roller being adapted to move in a horizontal slot formed in the upper portion of the bracket so as to engage the mop between the rollers when the handle of the mop-wringer is depressed and release it when the handle is raised, substantially as described and specified. 2nd. In a mop-wringer, the bracket A, provided with jaws B, and slot E, in combination with the roller A, journaled on the bracket, movable roller G, spindle g, and links H, pivotally attached to the spindle g, and bail or handle piece I, substantially as described and for the purpose specified. 3rd. In a mop-wringer, the bracket A, adapted to engage with the rim of the pail K, by means of jaws B, and curved brace C, in combination with the roller F, and movable roller G, adapted to move in the slot E, by means of the spindle g, links H, and bail or handle piece I, substantially as described and specified. 4th. In a mop-wringer, the bracket A, provided with jaws B, curved brace C, and cross brace D, in combination with the roller A, movable roller G, adapted to move in the slot E, by means of the spindle g, links H, and bail or handle piece I, and the pail K, and step M, substantially as described and for the purpose specified. 5th. In a mop-wringer, the bracket A, in combination with a pail K, step M, roller F, movable roller G, spindle g, links I, bail I, and handle J, substantially as described and specified. 6th. A mop-wringer comprising the following elements, bracket A, jaws B, curved brace C, cross brace D, slot E, formed in the bracket, corrugated roller F, movable corrugated roller G, spindle g, links H, bail I and handle J, substantially as described and specified.

**No. 47,491. Method of Driving Saws.**

(Méthode de mouvoir les scies.)

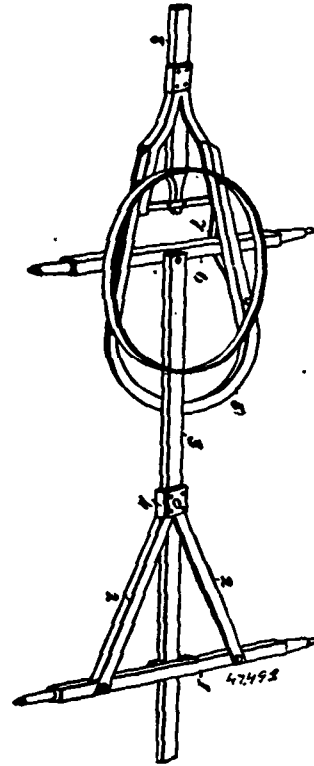


Robert Hunter, James W. Hackett and David Robertson, all of Vancouver, British Columbia, Canada, 15th November, 1894; 6 years.

*Claim.*—1st. A driving mechanism for circular saws comprising driven friction wheels engaging opposite faces of the saw, substantially as shown and described. 2nd. A driving mechanism for

circular saws, comprising driven conical friction wheels engaging opposite faces of the saw, substantially as shown and described. 3rd. A driving mechanism for circular saws comprising driven shafts arranged at angles to each other and having the apex of their axes in the center of the saw to be driven, and friction wheels made conical and secured on the said shafts, the peripheries of the saw wheels engaging the opposite faces of the saw to be driven, substantially as shown and described.

**No. 47,492. Wagon. (Wagon.)**



James H. Jackson, Keady, Ontario, Canada, 15th November, 1894; 6 years.

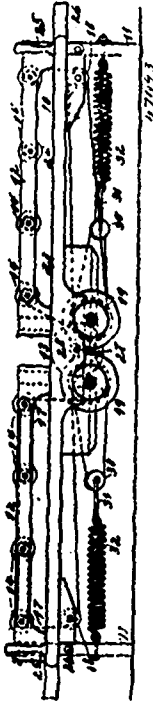
*Claim.*—1st. In a vehicle the combination with the front and rear axles of the rear hounds formed of angle metal connected to the reach in front of the rear axle, the front hounds of angle metal connected to the front axle and rounded at the rear of the front axle, a bracket connected to the sides of the front hounds and passing below the reach, the front hounds continued beyond the front axle and bolted to the tongue, substantially as specified. 2nd. In combination with a bolster, a bolster stake having an enlarged base provided with holes horizontally opposite each other, a clip arranged to pass around the bolster and through the said holes, and nuts screwed on the said clip to fasten the bolster stake to the bolster, substantially as specified. 3rd. In combination with a bolster, a bolster stake having an enlarged base provided with holes horizontally opposite each other, a clip arranged to pass around the bolster and through the said holes, and nuts screwed on the said clip to fasten the bolster stake to the bolster, a longitudinal slot in the bolster and bolt passing through the base of the bolster stake and slot, substantially as specified.

**No. 47,493. Carrier. (Transport.)**

Charles P. Hogue, Portland, Oregon, U.S.A., 15th November, 1894; 6 years.

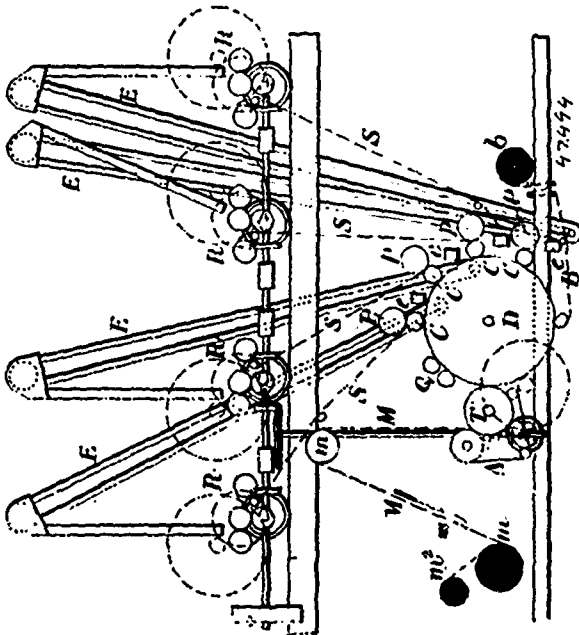
*Claim.*—1st. A carrier comprising a series of rolls, a pair of oppositely arranged drums provided with circumferential grooves and located below the plane of said rolls, a shifting gear adapted to turn either drum, and a continuous belt passing over the two drums and engaging directly with every roll, substantially as shown and described. 2nd. In a carrier, the combination with the two series of circumferential-grooved rolls arranged horizontally, of the two circumferentially-grooved drums arranged side by side below the rolls, a tension pulley adjacent to each of the said drums, an endless rope arranged on the said pulleys, drums and several rolls, as shown and described, friction wheels mounted on the drum shafts, the shifting bar and a friction roller carried by the latter as specified. 3rd. The herein described carrier, comprising a bed, frames arranged on the bed and separated to form transverse passages, rolls jour-

nalled transversely in the frames, driving drums, means for changing the direction of rotation of the drums, and a continuous belt



connecting the drums and the several rolls to turn them all in one direction, substantially as described

**No. 47,494. Manufacture of Mosaic Floor Cloth.**  
(Fabrication de toile cirée en mosaïque.)

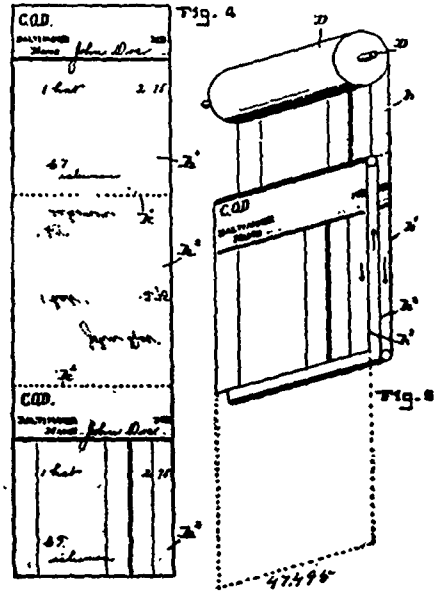


Frederick Walton, London, England, 15th November, 1894; 6 years.

*Claim.*—1st. A machine for the manufacture of mosaic floor cloth, comprising several sets of rollers arranged to deliver sheets of coloured floor cloth material to as many sets of pressing rollers and cutting cylinders arranged partly around a drum provided with an apron having projecting pins, comprising also a reel to deliver backing fabric, a pair of pressure rollers, a heated roller and set of pressing rollers with a travelling apron and its guide rollers, a reel to receive the floor cloth along with suitable fabric interposed between its layers, substantially as herein described. 2nd. In a machine for the manufacture of mosaic floor cloth, a set of rollers

for delivering a sheet of floor cloth material, consisting of three rollers  $r$ ,  $r^1$ ,  $r^2$ , a stationary table  $r^3$ , a scraping roller  $r^4$ , a reciprocating knife  $r^5$ , a measuring roller  $r^6$ , and a guide roller  $r^7$ , in combination with the gearing for driving and adjusting them, substantially as described. 3rd. In a machine for the manufacture of mosaic floor cloth, the combination of a pressing roller and cutting cylinder, the latter provided with knives, intermediate plates with their spring studs and plungers, and an internal cam, a picking roller and scraping roller, substantially as described.

**No. 47,495. Manifolding Autographic Register.**  
(Registre autographique multiple.)



William Assheton, David Stewart and Charles Gerome Carroll, all of Baltimore, Maryland, U.S.A., 15th November, 1894; 6 years.

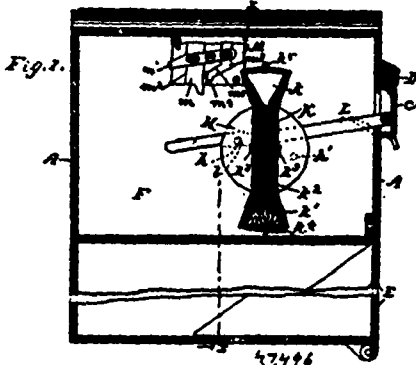
*Claim.*—1st. In an autographic manifolding register, the combination of a bed or platen provided with standards carrying a shaft for a single roll of paper, two reversing rollers  $g$ , one at each end of the platen over which one strip of paper from the same roll is passed to form three stretches above the platen, and a carbon paper between the first and second, and second and third stretches, respectively, substantially as described. 2nd. In an autographic manifolding register, the combination of a bed or platen, a single shaft  $D^1$  mounted loose to carry one roll of paper, a reversing roller at each end of the platen, suitable guide rollers, and a cutter bar, whereby a continuous strip of paper may be drawn from the one roll and stretched forward, back and then forward again to form three stretches of paper above the platen with the extremity of the paper strip resting under the cutter-bar. 3rd. In an autographic manifolding register, the combination of platen having at two opposite sides a longitudinal groove, a shaft for a single roll of paper, two reversing rollers  $g$ , one at each end of the platen over which one strip of paper from the same roll may be passed to form three stretches above the platen, and two bars each pivoted at an opposite side of the platen, to turn down into the said groove said bars serving to confine carbon paper.

**No. 47,496. Letter-Box.** (Boîte à lettres.)

Granville L. Savage, assignee of William H. Harrison, both of New York, State of New York, U.S.A., 15th November, 1894; 6 years.

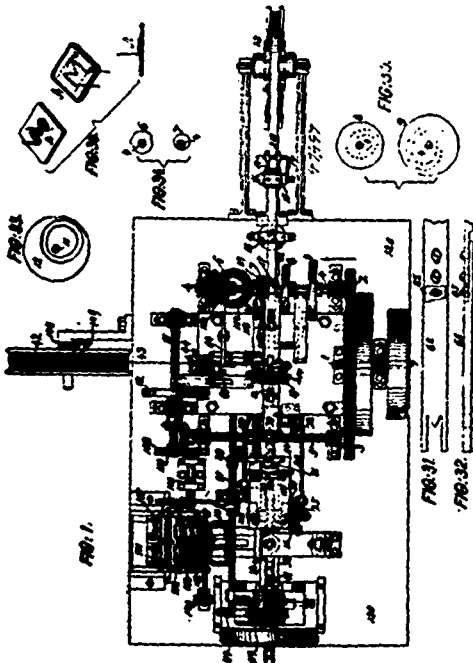
*Claim.*—1st. The combination of a carrier mounted on an axis, a tube fixed to said carrier, a ponderous substance to run from one end to the other of said tube, a device adapted to be moved from its normal position and to be held temporarily in its new position, and a connector intermediate said device and said carrier and adapted to engage the latter, whereby said device is held until the carrier moves, substantially as shown and described. 2nd. The combination of a carrier mounted on an axis, a tube fixed to said carrier, a ponderous substance to run from one end to the other of said tube, a latch to prevent backward movement of said tube and carrier, a device adapted to be moved from its normal position and to be held temporarily in its new position, and a connector intermediate said device and said carrier and adapted to engage the latter whereby said device is held until the carrier moves, substantially as shown and described. 3rd. The combination of a door, a detent, means to shift said detent at a predetermined time after it has been set, and a connector intermediate said door and detent, whereby the detent is set by the movement of the door in one

direction and whereby the door is held from movement in the opposite direction until the detent is shifted, substantially as shown and described. 4th. The combination of a tube mounted to swing on a transverse axis and containing a ponderous substance adapted



to run from one end to the other, a door, and a connector between said door and tube adapted to engage a detent and hold said door in one position and to be disengaged from said detent by the movement of said tube, substantially as shown and described. 5th. The combination of a carrier mounted on an axis, pins supported by said carrier, a tube fixed to said carrier, a ponderous substance to run from one end to the other of said tube, a notched rod adapted to engage one of said pins to be held thereby and adapted to be disengaged therefrom by another pin as the carrier is moved by the shifting weight, and a door connected to said rod, substantially as shown and described. 6th. The combination of a carrier mounted on an axis, pins supported by said carrier, a tube fixed to said carrier, a ponderous substance to run from one end to the other of said tube, a latch to engage said tube and hold it from backward movement a notched rod adapted to engage one of said pins to be held by said carrier and adapted to be disengaged therefrom by another pin as the carrier is moved by the shifting weight, and a door connected to said rod, substantially as shown and described. 7th. The combination with a letter-box having a receiving slot and a lid to close the same, of a carrier mounted to rotate on an axis, pins supported by said carrier, a tube fixed to said carrier, a ponderous substance to run from one end to the other of said tube, and a notched rod connected to said lid and adapted to engage and be held by one of said pins and to be disengaged therefrom by the other of said pins as the carrier is moved by the shifting weight, substantially as shown and described.

**No. 47,497. Machine for Making Pin Tickets.**  
(Machine à faire les étiquettes.)

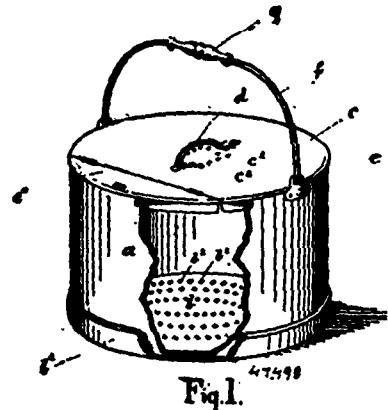


The Thomas Manufacturing Company, Wilmington, Delaware, assignee of Thomas Moore, Brooklyn, New York, all in the U.S.A., 15th November, 1894; 6 years.

Claim.—1st. In a machine for making pin tickets, the combination

of a paper feed with a wire feed, a wire cutter, a wire bending slide, a former, and a push-bar reciprocating parallel to the direction of the paper feed, for pushing the bent wire into the paper, substantially as specified. 2nd. The combination of a paper feed with needles reciprocating parallel to the line of feed, a wire feed, a wire cutter, a wire bending slide, a former, and a push-bar, for pushing the bent wire into the paper, substantially as specified. 3rd. The combination of a paper feed with needles reciprocating parallel to the line of feed, a wire feed, a wire cutter, a wire bending slide, a former, a push-bar and an upsetting finger, substantially as specified. 4th. The combination of a paper feed with needles reciprocating parallel to the line of feed, an intermittent wire feed, a wire cutter, a wire bending slide, a former, a push-bar and an upsetting finger, substantially as specified. 5th. The combination of a paper feed with needles reciprocating in the line of feed, an intermittent wire feed, a wire cutter, a wire bending slide, a former, a stripper, a push-bar and an upsetting finger, substantially as specified. 6th. The combination of a paper feed with needles reciprocating in the line of feed, a lower flattened block around which the paper is bent, an upper movable clamping block, a wire feed, a wire cutter, a wire bending slide, a former, a push-bar and an upsetting finger, substantially as specified. 7th. The combination of a paper feed with a wire feed, a pair of needles, a wire cutter, a wire bending slide, a former, a push-bar, an upsetting finger and a punch for serving the tickets, substantially as specified. 8th. The combination of a paper reel with a feed roller, needles reciprocating in the line of feed, a wire reel, a wire feed operating in a direction at right angles to the paper feed, a wire cutter, a wire bending slide, a former, and a push-bar, substantially as specified. 9th. The combination of paper reel with a feed roller, needles reciprocating in the line of feed, a wire reel, a wire feed operating at right angles to the paper feed, a wire cutter, a wire bending slide, a former, a push-bar, an upsetting finger and a punch, substantially as specified. 10th. The combination of pair of clamping jaws with a jointed upsetting finger for turning up the shanks of the staple, a slide to which the finger is connected, and a spreader adapted to enter between and distend the shanks of the staple, substantially as specified. 11th. The combination of a shuttle composed of pivotally connected jaws 48, 49 with lever 64, adapted to engage and lock the movable jaw of the shuttle, and with a cam 12, slide 60, and arm 61 for feeding the shuttle, substantially as specified. 12th. The combination of a shuttle composed of pivotally connected jaws 48, 49, and box 62, with set screws 63, an operating arm 61, engaged thereby, and a clamping lever 64, substantially as specified. 13th. The combination of male former 89, with a female slide 68, composed of two adjustable sections, substantially as specified. 14th. The combination of a paper feed with a wire feed shuttle, a wire cutter, a wire bending slide, a former, a push-bar and a pair of needles reciprocating in the line of paper feed, an upsetting finger, a hollow impression block 40, and a printing block 39, substantially as specified. 15th. The combination in a machine for making pin tickets, of a revolving indented disc, with a series of radially arranged boxes, a power pulley 127, spring stop 131, having pin 134, forked lever 135 engaged thereby, rock-shaft 136, having arm 137, and with wheel 139, having pin 138, and which is connected to the driving mechanism of the machine, substantially as specified.

**No. 47,498. Drainer for Cooking.** (Egouttoir de cuisine.)



John Valie, Winnipeg, Manitoba, Canada, 15th November, 1894; 6 years.

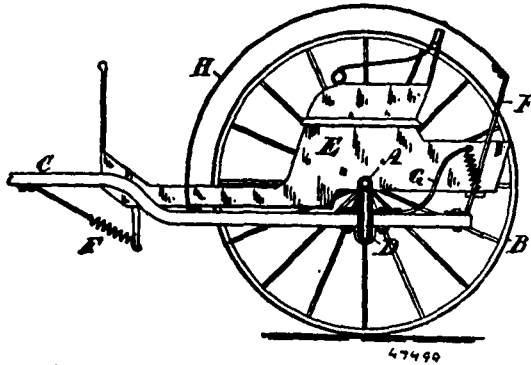
Claim.—A drainer in which meat or vegetables to be cooked remain during the operation of cooking, having the bottom *b*, with perforations *b*<sup>1</sup>, *b*<sup>2</sup>, cover *c*, with portion *c*<sup>1</sup> hinged lugs *e*, *e* as shown, handle *f*, holder *g*, with detached bottom *b*<sup>2</sup>, substantially as and for the purpose above set forth.

**No. 47,499. Two Wheeled and other Vehicles.** (Voiture.)

Henry C. Hogarth, Tilsonburg, Ontario, Canada, 15th November, 1894; 6 years.

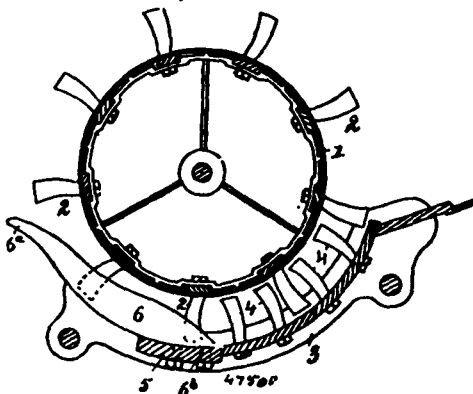
Claim.—1st. In a carriage, the combination of the crank axle A,

and wheels B, the shafts C, loosely attached to said axle to swing and the carriage body supported by or mounted on said shafts in dependently of the axle, whereby the body of the carriage gravitates



in a curved path forwardly and rearwardly of the axle, as set forth for the purpose described. 2nd. In a carriage or vehicle, the combination of the crank axle, the wheels thereon, the shafts loosely connected to said axle to swing, the mud or wheel fenders rigidly attached to said shafts, and the carriage body connected to said shafts and moving independently of the said fenders, as set forth.

**No. 47,500. Thrashing Machine. (Machine à battre.)**



Lorey T. Austin and Byron E. Crankhite, both of Rossville, Illinois, U.S.A., 17th November, 1894; 6 years.

**Claim.**—1st. The combination, with the cylinder and the toothed sections of the concave of a thrashing machine, of a set of fingers beginning under the centre of the cylinder and extending upward and backward adjacent to the teeth of the cylinder, substantially as set forth. 2nd. The combination, with the cylinder and the toothed sections of the concave of a thrashing machine, of a set of fingers extending rearwardly from the toothed sections and each occupying a space between circumferential sets of cylinder teeth, substantially as set forth. 3rd. The combination, with the cylinder and the toothed sections of the concave of a thrashing machine, of a set of fingers extending rearwardly from the toothed sections of the concave in a generally tangential direction with relation to the cylinder, and each occupying a space between circumferential sets of cylinder teeth, substantially as set forth.

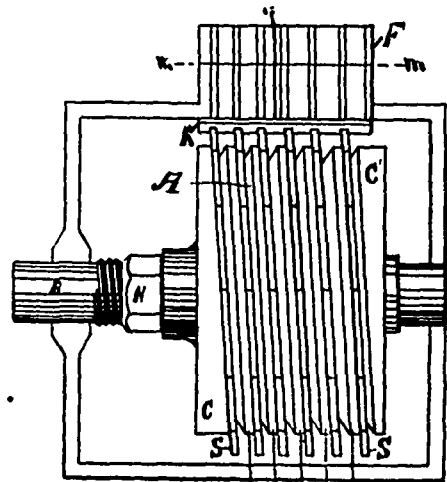
**No. 47,501. Wood Cutting Machine.**

(Machine pour couper le bois.)

William Merrell, assignee of Daniel R. Edwards, both of Saginaw, Michigan, U.S.A., 17th November, 1894; 6 years.

**Claim.**—1st. In a machine for cutting wood, a frame supporting a revolving cylinder composed of two collars clamping between them saws and discs, one or both of the corners of the discs adjacent to the saws being cut away for the clearance of the chips, substantially as described. 2nd. In a machine for cutting wood, the combination with a frame, and an inclined feed spout supported upon the frame of a revolving cylinder journaled upon the frame and consisting of a series of saws with discs between the saws, the saws and discs clamped together between collars whose inner faces are parallel planes not at right angles with the axis of revolution of the cylinder, substantially as and for the purpose set forth. 3rd. In a machine for cutting wood, the combination with a frame, and an inclined feed spout having upon its upper surface ribs or corrugations, of a revolving cylinder journaled in the frame consisting of collars and discs, and saws between the discs clamped together by collars, substantially as and for the purpose set forth. 4th. In a machine for cutting wood, the combination with a frame having an inclined

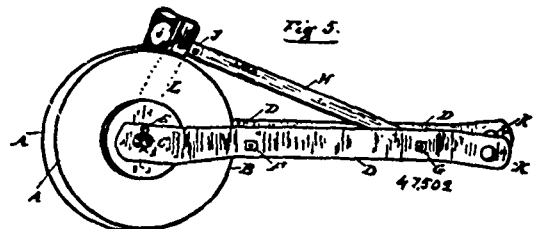
feed spout upon the upper surface of which are ribs or corrugations in the line of the feed, of a revolving cylinder composed of a series of saws and discs between the saws, the saws discs clamped between collars whose inner surfaces are parallel planes not at right angles with the axis of revolution of the cylinder, substantially as and for



**Fig. 2.** 47501

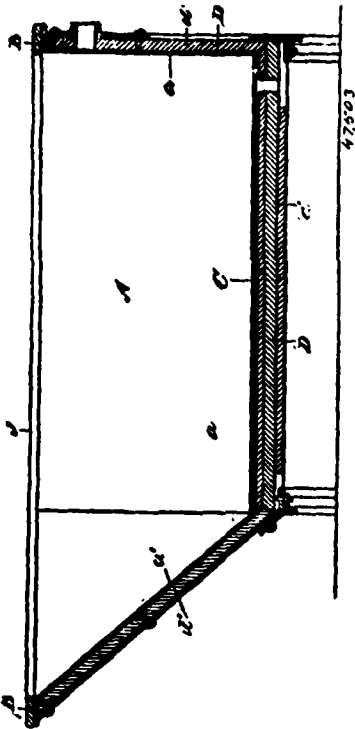
the purpose set forth. 5th. In a machine for cutting wood, the combination of a frame supporting a revolving cylinder composed of two collars clamping between them saws and discs, the discs having cavities in their outer edges corresponding and adjacent to the cavities between the teeth of the saws, for the clearance of chips, substantially as described. 6th. In a machine for cutting wood, the combination of a frame supporting a revolving cylinder, composed of two collars clamping between the saws and discs, the discs having cavities in their outer edges corresponding and adjacent to the cavities between the teeth of the saws for the clearance of chips, in combination with an inclined feed spout, and one or more bed knives, substantially as described. 7th. In a machine for cutting wood, the combination of a frame supporting a revolving cylinder composed of two collars with inner surfaces consisting of planes parallel, but not at right angles with the axis of revolution, and clamping between them saws and discs, the discs having cavities in their outer edges corresponding and adjacent to the cavities between the teeth of the saws, for the clearance of chips, substantially as described. 8th. In a machine for cutting wood, the combination of a frame supporting a revolving cylinder composed of two collars with their inner surfaces consisting of planes parallel, but not at right angles with the axis of revolution and clamping between them saws and discs, the discs having cavities in their outer edges corresponding and adjacent to the cavities between the teeth of the saws, for the clearance of chips, with an inclined feed spout and one or more bed knives, substantially as described. 9th. In a machine for cutting wood, a frame having an inclined feed spout, and carrying a revolving cylinder composed of two collars clamping between them saws and discs, the discs extending to partly enclose the teeth of the saws, substantially as described. 10th. In a machine for cutting wood, a frame having an inclined feed spout, and carrying a revolving cylinder composed of two collars clamping between them saws and discs, the teeth of the saws being bent so as to entirely cover the discs, substantially as described.

**No. 47,502. Seed Drill. (Semoir en lignes.)**



William McKone and Samuel McKone, both of Neepawa, Manitoba, Canada, 17th November, 1894; 6 years.

**Claim.**—1st. The combination of the spout shaft and axles, substantially as and for the purposes hereinbefore set forth and described. (Fig. 1). 2nd. The combination of the steel discs with bevelled edges and the collar affixed thereto, (Figures 1, 2 and 3), with the spout shaft and axles, substantially as and for the purposes hereinbefore set forth.

No. 47,503. Bath. (*Bain.*)

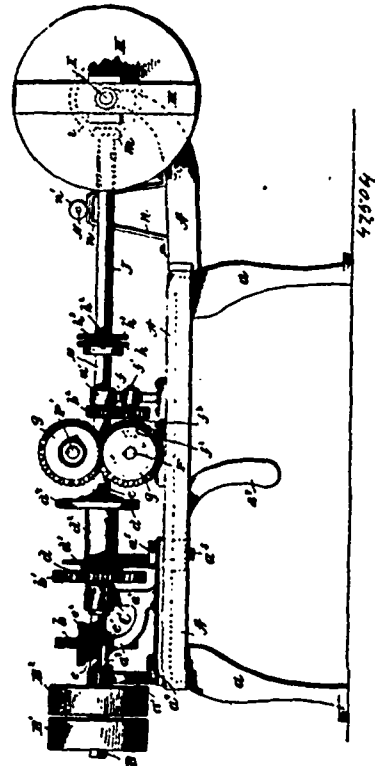
Robert Drury and John O. Thorn, both of Toronto, Ontario, Canada, 17th November, 1894; 6 years.

*Claim.*—1st. A bath consisting of an inner shell, a covering of wood, pulp or papier maché conforming to the shape of the inner shell, and means for binding the inner shell to the covering, substantially as specified. 2nd. A bath consisting of an inner shell comprised of a body portion, head and foot portions connected to the body portion, a flattened bottom for the body portion, an outer covering of wood consisting of a body portion and head and foot portions of the inner shell, and means for binding the wooden covering to the inner shell, substantially as specified. 3rd. A bath consisting of an inner shell comprised of a body portion, head and foot portions connected to the body portion, a covering comprised of a body portion and head and foot portions, conforming to the shape respectively of the body portion and head and foot portions of the inner shell, brackets, and a metallic frame arranged to hold together the several parts of the outer covering, substantially as specified. 4th. In a bath, the combination of the inner shell, comprised of a body portion and head and foot portions, the outer covering comprised of a body portion and head and foot portions arranged to conform respectively to the shape of the body portion and head and foot portions of the inner shell, a metallic frame comprised of two U-shaped brackets arranged at the foot of the body portion and the other at the head of the body portion, tie-rods connected to the top of the U-shaped brackets arranged to bind them together, and arms connected to the tie-rods extending around the head of the bath, substantially as specified. 5th. In a bath, the combination of the inner shell comprised of a body portion and head and foot portions, the outer covering comprised of a body portion and head and foot portions arranged to conform respectively to the shape of the body portion and head and foot portions of the inner shell, a metallic frame comprised of two U-shaped brackets arranged at the foot of the body portion and the other at the head of the body portion, tie-rods connected to the top of the U-shaped brackets arranged to bind them together, arms connected to the tie-rods extending around the head of the bath, and a brace connecting together the U-shaped brackets beneath the bath, substantially as specified. 6th. In a bath, the combination of the inner shell comprised of a body portion and head and foot portions, the outer covering comprised of a body portion and head and foot portions arranged to conform respectively to the shape of the body portion and head and foot portions of the inner shell, a metallic frame comprised of two U-shaped brackets arranged at the foot of the body portion and the other at the head of the body portion, tie-rods connected to the top of the U-shaped brackets arranged to bind them together, arms connected to the tie-rods extending around the head of the bath, and a brace connecting together the U-shaped brackets beneath the bath, substantially as specified. 7th. In a bath, the combination of the inner shell comprised of a body portion and head and foot portions, the outer covering comprised of a body portion and head and foot portions arranged to conform respectively to the shape of the body portion and head and foot portions of the inner shell, a metallic frame comprised of two U-shaped brackets arranged at the foot of the body portion and the other at the head of the body portion, tie-rods connected to the top of the U-shaped brackets arranged to bind them together, arms connected

to the tie-rods extending around the head of the bath, a brace connecting together the U-shaped brackets beneath the bath, and a top frame connected to the tie-rods and arms, substantially as specified. 8th. In a bath, the combination of the inner shell comprised of a body portion and head and foot portions, the outer covering comprised of a body portion and head and foot portions arranged to conform respectively to the shape of the body portion and head and foot portions of the inner shell, a metallic frame comprised of two U-shaped brackets arranged at the foot of the body portion and the other at the head of the body portion, tie-rods connected to the top of the U-shaped brackets arranged to bind them together, arms connected to the tie-rods extending around the head of the bath, a brace connecting together the U-shaped brackets beneath the bath, a top frame connected to the tie-rods and arms, and a brace connected to the head of the frame and to the U-shaped bracket at the head of the bath and beneath the same, substantially as specified.

## No. 47,504. Machine for Making Wire Fencing.

(*Machine à fabriquer les clôtures en fil de fer.*)

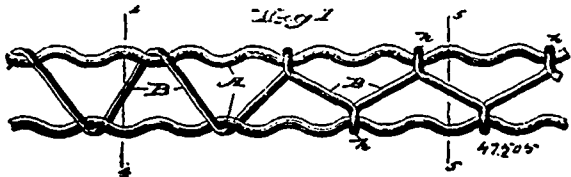


De Laski Thomas Clemons, Julius Peytrenet, John Mathew Deutsch, John Farmer Richardson and Emeline Wolf Vantine, all of Hornellsville, assignees of Alonzo B. Woodhard, Wellsville, all of New York, State of New York, U.S.A., 17th November, 1894; 6 years.

*Claim.*—1st. The combination with crimping-wheels and a non-rotary wire guide having two separated passages for the longitudinal wires, of a support at the forward end of said passages to hold said wires separated and to serve as a support to or former for the binding wire, a rotating spool carrier and spool to wind said binding wire around said longitudinal wires, and two sets of overlapping toothed bending and feeding wheels. 2nd. The combination with the non-rotary guide or holder for the passage of the longitudinal wires, the rotating spool carrier, wire carrier and spool surrounding said guide or holder, bending and feeding wheels and a driving shaft from which wheels, spool carrier, wire carrier and spool are operated, of a reeling mechanism, a driving shaft to operate said reeling mechanism and having a frictional connection with said first-named driving shaft. 3rd. In a fencing strand forming machine, the combination with a non-rotary wire guide, having two separated passages for longitudinal wires, of a separating support or former at the forward end of said passages, a rotating spool carrier and spool, two sets of overlapping, toothed wire-bending and work-feeding wheels, a driving shaft for said spool carrier and bending and feeding wheels, a reeling mechanism for the fencing strand or strands and a driving shaft for said reeling mechanism, having a frictional connection with the said first-named driving shaft. 4th. The combination with the non-rotary wire guide, its tongue or separating support, and the rotating spool-carrier and spool, of a laterally movable standard by which said parts are supported and which may be moved out sidewise when it is necessary to place a spool of

wire in position or remove an empty spool. 5th. The combination with the non-rotary wire guide or holder, its tongue or former, the rotating spool-carrier, the removable disc or carrier and the spool, of the standard  $a^2$ , by which the said parts are carried, the table A, to which one end of the base of said standard is pivoted, and a clamping device for removably securing the other end of said base to said table. 6th. The combination with the shaft B, provided with worm-wheel  $b$ , of the bevelled worm gear-wheel meshing with said worm-wheel, two sets of crimping-wheels and intermeshing gear-wheels operated from said worm gear-wheel and serving to drive said crimping-wheels, a non-rotary wire guide or holder, through which the crimped longitudinal wires pass, and a rotating spool carrier, wire carrier and spool for winding a binding or filling wire around the crimped longitudinal wires. 7th. The combination with the standard  $a^2$ , having arm  $a^3$ , of the non-rotary wire guiding shaft C, mounted on said standard and having support or tongue  $c^1$ , the rotary spool-carrying sleeve D, provided with a pinion, the driving shaft B, having gear-wheel  $b^1$ , and worm-wheel  $b$ , the former meshing with said pinion, and the crimping-wheels mounted on said arm  $a^3$ , and driven from said worm-wheel  $b$ . 8th. The combination with the driving-shaft B, having the gear-wheel  $b^1$ , and the pinion  $b^2$ , of the twin sets of strand forming and wire bending and feeding mechanisms driven from said gear-wheel and pinion, each set of strand-forming mechanism consisting of a stationary wire guide, with separated longitudinal passages for the wire, a separating wire support or tongue at the forward end of said passages, and a rotary spool-carrier, and spool for carrying the binding wire. 9th. The combination with the driving-shaft B, having the worm-wheel  $b$ , the gear-wheel  $b^1$ , and the pinion  $b^2$ , of the twin sets of wire-crimping, strand-forming and wire bending and feeding mechanisms driven from said gear-wheel and pinion, each set of strand-forming mechanism consisting of a non-rotary wire guide, with separated longitudinal passages for the wire, a separating wire support or tongue at the forward end of said passages, and a rotary spool-carrier and spool for carrying the binding wire around said separating wire support or tongue. 10th. The combination with the reel carrying-shaft I, provided with a right and left-hand screw, of the traverse-shaft provided with one or more strand-guides, the lever for moving said shaft laterally of the reel or reels, the sleeve surrounding said shaft I, and to which said lever is connected, a pivoted yoke having arms to engage the grooves of said screw, and a spring to assist in throwing said yoke past a central position, and to hold said arms in engagement with said screw. 11th. The combination with the non-rotary wire guide having two separated passages for longitudinal wires, of a separating support and former at the forward end of said passages, a rotating spool-carrier and spool, two sets of overlapping toothed wire bending and feeding-wheels, two shafts F and F', by which said wheels are carried, and adjustable bearings  $g^1$ , for one of said shafts. 12th. The combination with the non-rotary wire guiding-shaft or holder C, having the wire passages  $c$ , and provided at its forward end with the tongue or former  $c^1$ , of the rotary sleeve D, the disc or wire carrier  $d^1$ , removably attached to said sleeve and the spool retained in place on said sleeve by said disc or wire carrier, all substantially as and for the purposes hereinbefore set forth.

**No. 47,505. Method of Making Wire Fencing Strands.** (*Méthode de fabriquer les cordons de fil de fer pour clôtures.*)

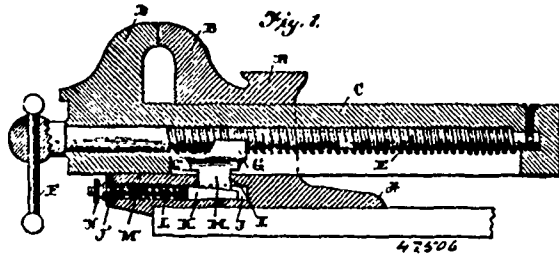


De Laski Thomas Clemons, Julius Peytrenet, John Mathew Deutsch, John Farmer Richardson and Emeline Wolf Vantine all of Hornellsville, assignees of Alonzo B. Woodhard, Wellsville, all of New York, State of New York, U.S.A., 17th November, 1894; 6 years.

**Claim.**—1st. A fencing strand or strip consisting of longitudinal wires and a binding wire passing round and round said longitudinal wires and running diagonally from one to the other thereof, the bights or loops of said binding wire being compressed together between the longitudinal wires to form closed eyes embracing the latter. 2nd. A fencing strand or strip consisting of crimped or corrugated longitudinal wires and a binding wire passing round and round said longitudinal wires and running diagonally from one to the other thereof, the bights or loops of said binding wire being compressed together between the corrugated longitudinal wires to form closed eyes embracing the latter. 3rd. The herein described method of forming a fencing strand, the same consisting in winding a binding wire spirally around separated longitudinal wires and then compressing the loops or bights of said binding wire together, between said longitudinal wires, the form closed eyes embracing them at intervals. 4th. The herein described method of forming a fencing strand, the same consisting in first crimping or corrugating

longitudinal wires, next winding a binding wire spirally round said longitudinal wires and then compressing the loops or bights of said binding wire together, between said longitudinal wires, to form closed eyes embracing them at intervals.

**No. 47,506. Vice.** (*Etiau.*)

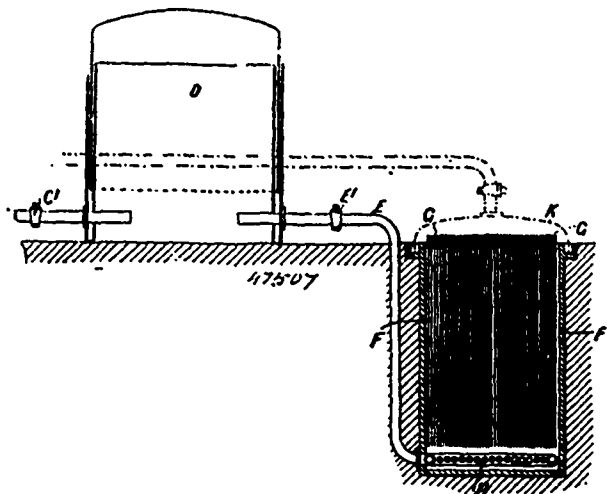


John L. Carpenter, and Walter M. Harris, both of Auburn, New York, U.S.A., 17th November, 1894; 6 years.

**Claim.**—1st. An improved vice, comprising a fixed jaw, a movable jaw, a screw for adjusting the latter, a nut which the screw engages, a wedge beneath the nut for holding it in said engagement, and a spring for holding the wedge normally in said position, substantially as described. 2nd. An improved vice comprising a fixed jaw, a movable jaw, a screw for adjusting the latter, a nut which the screw engages, a device for holding the nut in said engagement, a stem extending outward from said device, and provided with a pivoted break between its ends for the purpose stated, and a spring coiled about the stem, substantially as shown and described. 3rd. An improved vice comprising a fixed jaw, a movable jaw, a screw for adjusting the latter, a nut which the screw engages, a wedge for holding the nut in said engagement, a stem projecting from the wedge, a spring coiled about the stem for the purpose stated, and a means for holding the wedge withdrawn, as described. 4th. In an improved vice, a base constructed with recesses I and J, step J', a fixed jaw, a movable jaw, a screw for adjusting the latter, a nut which the screw engages, a wedge for holding the nut in said engagement, a stem projecting from the wedge, a spring coiled about the stem which engages the wedge at one end, and the stop J' at its opposite end, and a means for holding the stem and wedge withdrawn, substantially as shown and described. 5th. In an improved vice, a base constructed with recesses I and J, a fixed jaw, a movable jaw, a screw for adjusting the latter, a nut for engaging the screw, a wedge for holding the nut in said engagement, a stem extending from said wedge which is screw threaded at its outer end, a nut adjustable thereon for the purpose stated, and a spring encircling the stem for holding the wedge normally beneath the nut, substantially as shown and described.

**No. 47,507. Method of Tanning Skins, &c.**

(*Méthode de tanner les peaux.*)



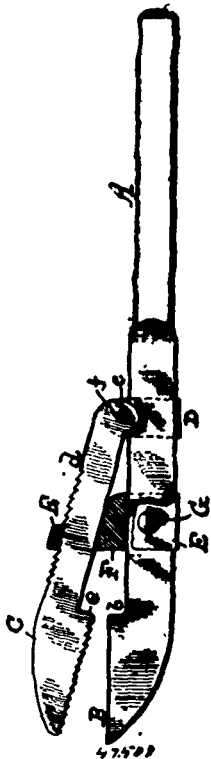
Henry Alfred Leverett and Thomas Henry Lee Bake, both of London, Middlesex, England, 17th November, 1894; 6 years.

**Claim.**—1st. The improvement in the process of tanning hides and skins, consisting in passing hydrogen, arsenic being present in small quantity, at intervals through the tanning liquor in the pit or vessel containing the hides and skins to be tanned, substantially as set forth. 2nd. The improvement in the process of tanning hides and skins, consisting in passing hydrogen, arsenic being present in small quantity, at automatically regulated intervals through the tanning liquor in the pit or vessel containing the hides and skins to



be tanned, substantially as set forth. 3rd. A tanning apparatus consisting of the following combination of parts, viz. : a gas-holder with suitably weighted bell for storing hydrogen gas, a smaller gas holder with suitably weighted bell for receiving a charge of gas from the first-named gas-holder and discharging it at a suitable pressure into the tanning liquor in a pit or pits containing skins or hides to be tanned, said tanning pit or pits, a nest of pipes in each pit having fire holes for the issue of the hydrogen into the liquor in said pits, removable covers for the pits, and suitable pipes and taps for connecting the first gas-holder with the second gas-holder and the latter with the nests of pipes, substantially as set forth.

**No. 47,508. Wrench. (Clé à écrou.)**



William Edward Pugsley and David Fitzgerald, both of Lincoln, Nebraska, U.S.A., 17th November, 1894; 6 years.

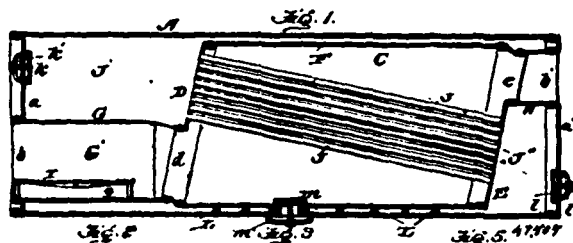
*Claim.*—1st. A wrench comprising a handle-bar, having one end in the form of a jaw, another jaw having a shank pivotally connected to the handle-bar, a collar loose on the handle-bar, a jaw-shank and a wedge block fast in the collar between said handle-bar and jaw-shank, substantially as set forth. 2nd. A wrench comprising a handle-bar, having one end in the form of a jaw and provided intermediate of its extremities with a concave socket, another jaw provided with a shank having a half-round terminal engaging the handle-bar socket, a clip fast on said handle-bar, a pivot connecting said jaw-shank terminal with the clip and a sliding device that regulates the spread of the jaws, substantially as set forth. 3rd. A wrench comprising a handle-bar, having one end in the form of a jaw, another jaw having a shank pivotally connected to the handle-bar, a collar loose on the handle-bar, a jaw-shank and wedge-block fast in the collar between said handle-bar and jaw-shank, and a set screw for locking the collar in adjusted position, substantially as set forth. 4th. A wrench comprising a handle-bar having one end in the form of a jaw, another jaw having a serrated shank pivotally connected to the handle-bar, a jaw-shank and a wedge-block fast in the collar between said handle-bar and jaw-shank, substantially as set forth. 5th. A wrench comprising a handle bar having one end in the form of a jaw provided upon its working face with longitudinal flutes, another jaw having a shank pivotally connected to the handle-bar, a collar loose on the handle-bar and jaw-shank, and a wedge-block fast in the collar between said handle-bar and jaw-shank, substantially as set forth. 6th. A wrench comprising a handle-bar, having one end in the form of a jaw, provided upon its working face with longitudinal flutes, another jaw having a transversely serrated working face, and a shank pivotally connected to the handle-bar, a collar loose on the handle-bar and jaw-shank, and a wedge-block fast in the collar between said handle-bar and jaw-shank, substantially as set forth.

**No. 47,509. Steam Boiler. (Chaudière à vapeur.)**

John Vanes, Brazil, Indiana, U.S.A., 17th November, 1894; 6 years.

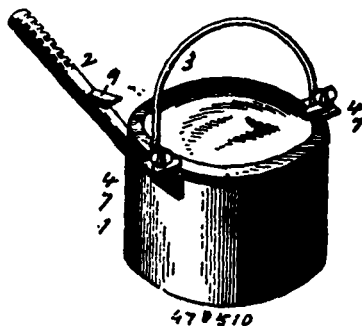
*Claim.*—1st. The combination with an external boiler shell, of the

internal shell and flue sheets connected together and forming a combustion chamber within the boiler shell, a furnace chamber situated between the front flue sheet and boiler head and having the respective ends of its shell G, united to said flue sheet and the boiler-



head, a smoke exit pipe connected to the other flue sheet and boiler-head, and the straight water tubes extending through the combustion chamber and united to the flue sheets, substantially as and for the purpose described. 2nd. The combination with an external boiler shell, of the flue sheets and internal shell connected together and forming the combustion chamber within said boiler shell, said flue sheets being set in inclined or slanting positions and substantially parallel to each other, the furnace shell fastened to one flue sheet and boiler-head and opening directly through the flue sheet into the combustion chamber, the exit pipe coupled to the other flue sheet and boiler head above the plane of the opening between the furnace shell and the front flue sheet, and the inclined straight water tubes fastened to said flue sheets, substantially as and for the purposes described. 3rd. The combination with an external boiler shell, of the inclined flue sheets therein, the internal shell united to the flue sheets, the furnace shell united to one flue sheet and boiler head and communicating, at its rear end, directly with the combustion chamber, the exit pipe connected to the other flue sheet and boiler head on a line above the furnace shell, and the water tubes united to the two flue sheets and inclined downwardly from the front flue sheet to the rear flue sheet and arranged directly in the path of products of combustion as they emerge from the furnace chamber, substantially as and for the purposes described. 4th. The combination with an external boiler shell having man holes at or near the ends thereof, of the inclined flue sheets, the internal shell united to said flue sheets, the furnace shell united to the lower part of one flue sheet and boiler head and communicating directly with the combustion chamber, the exit pipe coupled to the other flue sheet and boiler shell on a line above the furnace shell, and the straight inclined water tubes fastened to the front flue sheet above the furnace shell and having their rear ends united to the rear flue sheet substantially in line with the furnace shell and below the exit pipe, substantially as and for the purposes described. 5th. The combination with an external boiler shell, of the flue sheets and internal shell connected together and forming the combustion chamber, the furnace shell united to one flue sheet and boiler head and opening directly into the combustion chamber, the exit pipe coupled to the other flue sheet and boiler-head on a line above the furnace shell, the hollow stay bolts between the external and internal shells, at the lower part of the boiler, and forming air inlet passages to the combustion chamber in rear of the furnace chamber, and the water tubes united to the front flue sheet above the furnace shell and coupled to the rear flue sheet below the exit pipe, substantially as and for the purposes described.

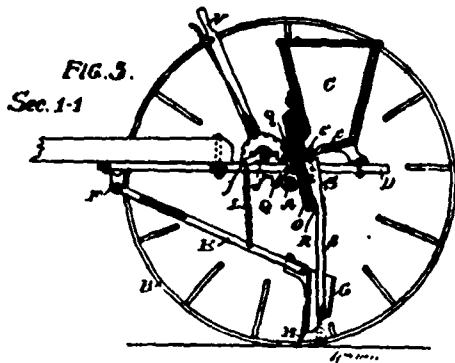
**No. 47,510. Cooking Utensil. (Ustensile de cuisine.)**



Susan M. Hoagland, Murray, New York, U.S.A., 17th November, 1894; 6 years.

*Claim.*—In a sauce-pan, the combination with a body having a handle provided with a forwardly extending projection, of a lid having a flange adapted to be slid under the said projection to hold the cover forward from the body, oppositely positioned guides or holders 7, on the upper portion of the body in the same plane as the said forwardly extending projection, and a ball substantially as and for the purposes specified.

**No. 47,511. Seeding Machine. (Semoir.)**

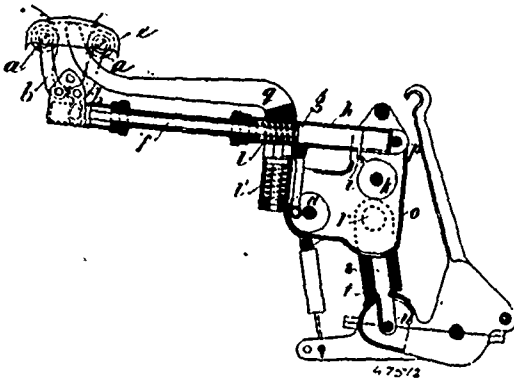


Fred H. Ferris, Ketchum's Corners, New York, U.S.A., 17th November, 1894; 6 years.

*Claim.*—In a seeding machine, the combination of a seed hopper having a continuous delivery slot, an adjustable scattering-board pivoted beneath said slot, and a series of discharge spouts secured to a board hinged to said scattering-board, and movable therewith, substantially as shown and described.

**No. 47,512. Milking Apparatus.**

(Appareil pour traire les vaches.)

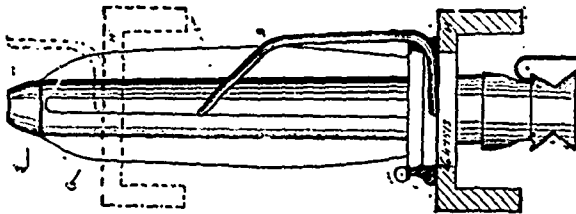


Carl Gustaf Patrick de Laval, Handverkaregatan, Stockholm, Sweden, 19th November, 1894; 6 years.

*Claim.*—In a mechanical apparatus suspended from the cow, the combination with milking rollers, attached to one of two arms, movable in relation to each other as the legs of a pair of scissors, of a plate or ring attached to the other of said arms, and resting during the milking operation against the base of the teat, offering a resistance or kicking to the pull, received on the teat, said arms arranged so easily movable relatively to the teat, that they may be moved by the force, resulting from the milking operation, substantially as and for the purpose set forth.

**No. 47,513. Ring Spinning Machine.**

(Broche à anneau pour machines à filer.)



Mathias Larner, Milltown, New Brunswick, Canada, 19th November, 1894; 6 years.

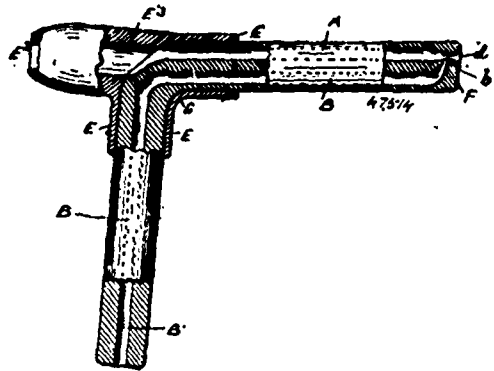
*Claim.*—The long wire A, attached in any manner to the thread board of any ring spinning machine and supported by loop B, kept in position by the wire slot C, and regulated by the stationary bracket D, attached to the ring rail H, substantially as and for the purpose hereinbefore set forth.

**No. 47,514. Atomizer. (Pulvérisateur.)**

Patrick Joseph McElroy, Cambridge, Massachusetts, U.S.A., 19th November, 1894; 6 years.

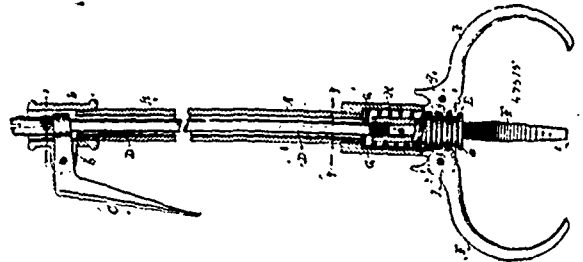
*Claim.*—1st. An atomizer-tube, having air and liquid passages A

and B, a solid head F, over and beyond said passages, an opening b, within said head and adjoining said passages and a discharge opening d, in line with said air-passage and through said head, substantially as described, for the purpose specified. 2nd. The



combination with an atomizer-tube having in one portion an air-passage A, and a liquid passage B, and in another and angular extending portion a continuation of said liquid passage, of a T-thimble or sleeve E, entered upon said tube portions at their junction C, and having a side tubular extension E', in communication with said air-passages, substantially as described, for the purpose specified.

**No. 47,515. Grapple. (Grappin.)**

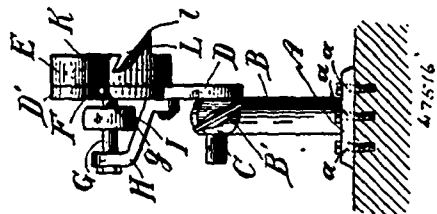


William Thomas, Washington, Columbia, U.S.A., 19th November, 1894; 6 years.

*Claim.*—1st. An apparatus for extracting articles from sewers, closets, etc., consisting of a tube, having the upper and lower heads, in combination with a rod, provided with a handle, and operating the pivoted arms as shown and specified. 2nd. The combination of a tube provided with the upper and lower heads, the latter recessed for the reception of the serrated piece and spring, and with said piece the teeth of the pivoted arms engaging and operated by a rod and handle, with said spring operating, as set forth. 3rd. The combination, with the tube A, of the upper head B upon one end of the tube, the bell-crank lever C pivoted to said head, and engaging the upper end of the rod D which extends the length of the tube, the serrated piece E upon the lower end of the rod adapted to engage the teeth upon the arms, the lower head G upon the tube, the arm F pivoted to the lower head, and the spring H to hold the arms open, as shown and described.

**No. 47,516. Knife or Scissors Sharpening Device.**

(Appareil pour affûter les couteaux et ciseaux.)

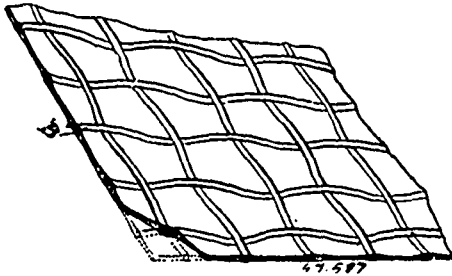


Thomas Tunnicliff Hosack and Maurice Alfred Lalonde, both of Oil City, Pennsylvania, U.S.A., 19th November, 1894; 6 years.

*Claim.*—1st. An attachment for sewing machines comprising a standard having a casing adjustably mounted thereon, and a shaft journaled in the walls of the casing carrying a grinding disc and adapted to be operated by the wheel of the sewing machine, said casing having inclined slots adapted to embrace the blade to be sharpened, substantially as described. 2nd. In combination, the standard, the casing adjustably pivoted in said standard, a grinding disc located within the casing, a shaft supporting said disc and

having one end extended through the wall of the casing, a pulley mounted upon said extended end, said casing having slots in its side and edge arranged at different angles, substantially as described. 3rd. In combination, with the standard, the casing mounted thereon carrying a grinding disc within it adapted to be operatively connected with sewing machine wheel, said casing having an inclined slot in its edge and a second inclined slot in its side wall, and a ledge forming a continuation of the lower wall of said second inclined slot, substantially as described. 4th. In combination, with the standard, the casing mounted thereon carrying a grinding disc within it adapted to be operated by the sewing machine, the casing having an inclined slot in its side, and a ledge forming a continuation of the lower wall of said side slot, said casing being divided approximately on the line of its edge slot and having a suitable hinge whereby the upper portion may be swung back to expose the upper portion of the disc, substantially as described.

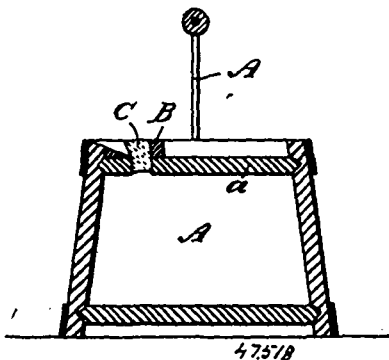
**No. 47,517. Wire Cloth Screen.**  
(*Ecran en toile métallique.*)



George Byran Meadows, Toronto, Ontario, Canada, 19th November, 1894; 6 years.

*Claim.*—1st. As a new article of manufacture a screen comprised of a wire cloth, the woof and warp wires of which form an open mesh and are covered on each side with a transparent film so that a transparent sheet is formed in each of the spaces to completely fill all of them up and produce an imperforate transparent wire screen, as shown and for the purpose specified. 2nd. As a new article of manufacture a screen comprised of a wire cloth, the woof and warp wires of which form an open mesh and are covered on each side with a transparent film, the plurality of connected transparent film and sheets being comprised of manilla gum, kari, linseed oil and turpentine mixed in the proportions and for the purpose specified. 3rd. The process hereinbefore described of producing a transparent imperforate screen of open mesh wire cloth, consisting in passing the sheet of cloth in a concave form through a receptacle containing a suitable transparent solution, and then raising such sheet to the perpendicular and supporting it in such position, for the purpose hereinbefore set forth. 4th. The process hereinbefore described of producing a transparent imperforate screen of open mesh wire cloth, consisting in passing the sheet of cloth in a concave form through a receptacle containing a suitable transparent solution, and then raising such sheet to the perpendicular and supporting it in such position, and finally by a suitable means disturbing the mesh of the wire cloth when the gummy solution is half dry, for the purpose hereinbefore set forth.

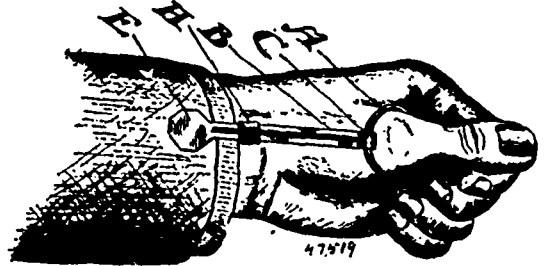
**No. 47,518. Pail for Viscous Fluids.**  
(*Seau pour fluides visqueux.*)



George Henry Millen, Hull, Quebec, Canada, 19th November, 1894 6 years.

*Claim.*—In a pail for viscous fluids, the combination of a pail A, a head a in the same, a bung hole rim B secured to the head and fitting against the chime and flush therewith at the top and provided with a bung hole penetrating through the head and elongated slantingly from near the bottom of said rim to the outer and upper edge of the chime, and a bail A<sup>1</sup>, substantially as set forth.

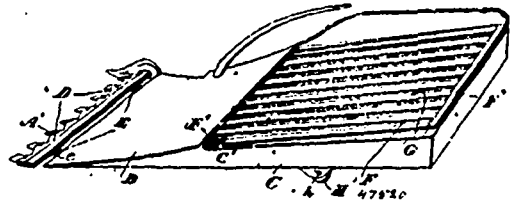
**No. 47,519. Sleeve Holder.** (*Arrête-manche de vêtement.*)



John Campbell, Toronto, Ontario, Canada, 19th November, 1894; 6 years.

*Claim.*—1st. A sleeve holder comprising a ring adapted to fit over the thumb of the user, and loosely connected to the shank of a clip provided with jaws to grasp the cuff of the sleeve, and means whereby the jaws are made to grip or release the said cuff, substantially as and for the purpose specified. 2nd. In a sleeve holder, the combination of the ring A, loosely connected to the shank B, of the clip C, the plate E, substantially flush with the upper half of the shank B, the plate F, having upwardly projecting teeth G, and the band H, provided with the projection I, substantially as and for the purpose specified. 3rd. In a sleeve holder, the combination of the ring A, loosely connected to the ribbed shank B, of the clip C, the plate E, substantially flush with the ribbed upper half of the shank B, the plate F, connected to the ribbed lower half of the shank B, and having upwardly projecting teeth G, and the band H, provided with the projection I, substantially as and for the purpose specified.

**No. 47,520. Clover Seed Catching Apparatus for Mowers.** (*Appareil à recevoir le trèfle pour fauchuses.*)



Daniel Crough, Ennismore, Ontario, Canada, 19th November, 1894; 6 years.

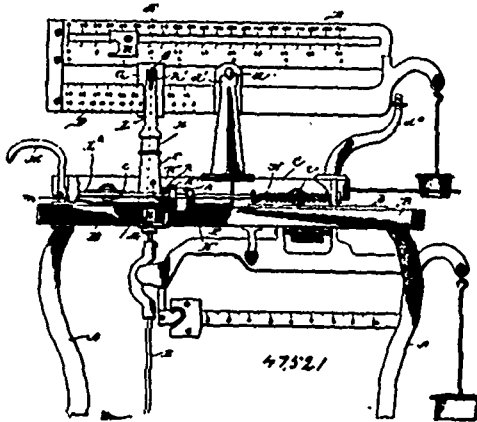
*Claim.*—1st. The combination with a cutter bar of a mower, of a rearwardly extending upwardly inclined table, a box or receptacle secured to the rear of the table, and an inclined slatted top extending rearwardly from the table and supported upon the front and rear ends of the box, and means for connecting the attachment to the mower bar, and supporting it clear of the ground, as and for the purpose specified. 2nd. The combination with a cutter-bar of a mower, of a rearwardly extending upwardly inclined table, a box or receptacle secured to the rear of the table, and an inclined slatted top extending rearwardly from the table and supported upon the front and rear ends of the box and the wheels H, journalled in bearings beneath the box, as and for the purpose specified. 3rd. The combination with the cutter-bar A, inclined table B, attached thereto, box or receptacle secured to and extending behind the rear of the table and the slatted top provided with end bars, the rear bar of which is hinged beneath the rear end of the table, and the rear bar of which has attached to it a folding support G, as and for the purpose specified. 4th. The combination with a mower bar having screw eyes to the rear of the bar, of a rearwardly extending upwardly inclined table having hooks on the front thereof designed to fit into the eyes in the mower bar, a box or receptacle extending rearwardly from the table, and an open slatted top for the box extending rearwardly from the table, as and for the purpose specified.

**No. 47,521. Price Scales.**  
(*Bascule à peser et à indiquer les prix.*)

Orange Oscar Ozias, Dayton, Ohio, U.S.A., 24th November, 1894; 6 years.

*Claim.*—1st. In a price scales, the combination with the laterally movable computing beam and connecting rod loosely connected therewith, of the stop rest for positioning the end of the connecting rod and the handle for operating said stop-rest moving laterally with the computing beams, substantially as described. 2nd. In a price scales, the combination with the laterally movable bearings having the fulcrum bearings thereon, the computing beam mounted in the said bearings and the connecting rod loosely connected with said computing beam, of the handle journalled in the carriage and connections between said handle and stop-rest whereby the connecting rod may be disengaged and the carriage moved with one hand, substantially as described. 3rd. In a price scales, the com-

combination with the supplemental base, laterally movable carriage mounted thereon, the pivoted computing beam fulcrumed on said carriage and the connecting rod loosely connected with said beam, of the vertically movable stop rest for holding the end of the rod



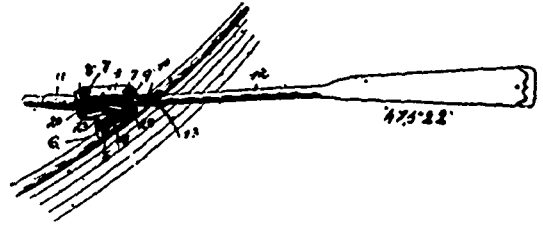
against lateral movement, the stationary bearing on the base in which the stop-rest works, a handle moving with the carriage and connections between the handle and stop-rest whereby the stop-rest may be moved into operative position and the carriage shifted with one hand, substantially as described. 4th. In a price scales, the combination with the laterally movable carriage computing beam mounted thereon, connecting rod loosely connected with the beam, and the stop-rest, of the shaft journalled in the carriage, handle on said shaft and a sliding connection between the shaft and stop-rest, whereby the stop-rest may be operated with the carriage in any position of adjustment, substantially as described. 5th. In a price scales, the combination with the laterally movable carriage, computing beam mounted thereon, connecting rod loosely connected with the beam and the stop-rest, of the shaft journalled in the carriage, handle on said shaft and cam through which the shaft slides for moving the stop-rest when turned by the shaft, substantially as described. 6th. In a price scales, the combination with the laterally movable carriage, computing beam mounted thereon, connecting rod loosely connected with the computing beam and stop-rest, having the arm at the bottom, of the shaft journalled in the carriage, the cam through which the shaft passes journalled in stationary bearings and engaging the arm on the top-rest, substantially as described. 7th. In a price scales, in combination with the laterally movable carriage, computing beam mounted thereon, connecting rod loosely connected with the computing beam and the stop-rest, of the shaft journalled in the carriage for moving the stop-rest, and a spring for retaring said shaft and stop-rest to normal position, substantially as described. 8th. In a price scales, the combination with the laterally movable price beam, connecting rod loosely connected therewith, the stop-rest and a lock for preventing the lateral movement of the beam, of a handle moving laterally in unison with the beam and connecting both the lock and stop-rest, substantially as described. 9th. In a price scales, the combination with the laterally movable carriage and beam mounted thereon, connecting rod loosely connected with the beam, stop-rest, and the lock for preventing the lateral movement of the carriage of the handled shaft journalled in the carriage and connections between said shaft and the lock and stop-rest, substantially as described. 10th. In a price scales, the combination, with the laterally movable computing beam, of a locking cam having a friction surface for holding said beam in adjusted position, whereby it may be adjusted with absolute accuracy and locked, substantially as described. 11th. In a price scales, the combination, with the laterally movable carriage and computing beam pivoted thereon of the locking cam mounted in stationary bearings and the shaft on the carriage for releasing said cam, substantially as described. 12th. In a price scales, the combination, with the laterally movable carriage and computing beam pivoted thereon, of the locking cam mounted in stationary bearings, the rod movable with the carriage with which said cam co-operates to lock the carriage and a handle for releasing the cam, substantially as described. 13th. In a price scales, the combination, with the laterally movable carriage, computing beam mounted thereon, connecting rod loosely connected with the computing beam and vertically movable stop-rest, of the cam mounted in stationary bearings and having a cam surface engaging a member movable with the carriage, an arm engaged by said cam for moving the stop rest, and a handled shaft journalled in the carriage and passing through the cam to turn the same with the carriage at any position of adjustment, substantially as described.

**No. 47,522. Bow Facing Oar. (Rame articulée.)**

Isaac David Wright, Sedalia, Missouri, U.S.A., 24th November, 1894; 6 years.

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

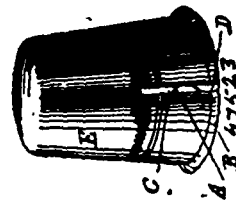
with oscillating heads provided with means for the attachment of an oar handle and blade respectively, and flexible connections between such heads, of clips 21 for adjustably securing said flexible



connections to the heads, said clips consisting each of the body portion 22, and the notched upturned ends 24, substantially as set forth. 2nd. In a device of the class described, the combination of independent oscillating cylindrical heads, detachable flanged caps provided with inwardly extending pins to engage notches in the cages of said heads, means for connecting the oar-handle and blade to the said heads, and operating connections between the heads, substantially as set forth. 3rd. In a device of the class described, the combination, with the connecting plates 1 and 2, the heads 8 and 9 swivelled thereto, and the plate 2 having the perforated ears 3 depending therefrom, of the gunwale strap 5 having upturned perforated terminals 6, and the spindle 4 carried thereby and upon which the connecting plates 1 and 2 are mounted by means of the ears, substantially as set forth.

**No. 47,523. Thread Cutter and Thimble Combined.**

(Coupe-fil et de combinés.)

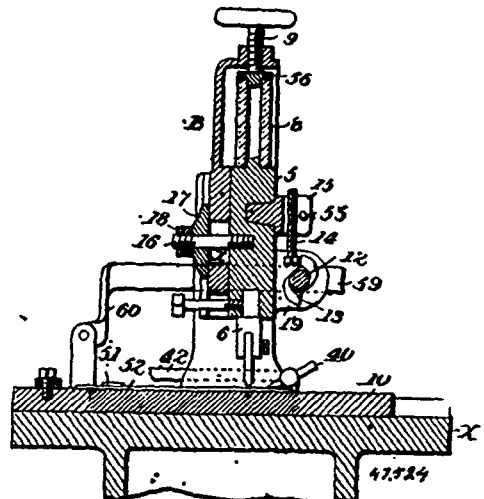


Margaret Russell Gray, Auckland, New Zealand, 24th November, 1894; 6 years.

Claim.—1st. In a combination thimble and thread cutter two metal blades facing outwardly from the thimble set at an angle to one another and meeting together at their inner ends, in combination with blunt guiding and protecting surfaces, substantially as set forth. 2nd. In combination with a thimble a spring ring as set forth, having a thread cutter thereon said cutter consisting of two metal blades forcing outwardly from the said ring and set at an angle to one another, and meeting together at their inner end, in combination with blunt guiding and protecting surfaces, substantially as set forth.

**No. 47,524. File Cutting Machine.**

(Machine à tailler les limes.)

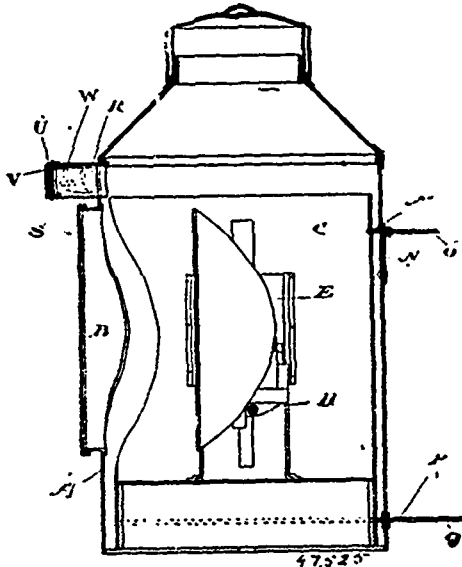


Alfred Weed, Anderson, Indiana, U.S.A., 24th November, 1894; 6 years.

Claim.—1st. The combination with the frames B, having a recess

provided with inclined sides and an elongated slot *x*, extending from said recesses to the rear of the frame, a reciprocating plunger 5, provided with a tool carrier and having inclined sides fitting said recess, a bolt extending from the plunger through the slot in the frame, and a washer and nuts attached to said bolt, and means for reciprocating the plunger, substantially as described. 2nd. The combination with the reciprocating plunger, of an operating cam increasing or diminishing towards one end, devices for shifting the same and connections between said devices and a movable part of the machine, substantially as described. 3rd. The combination with the blank carrier of a file cutting machine, of a movable cam, and connections between the blank carrier and cam arranged to shift the cam upon the movement of the carrier, substantially as set forth. 4th. The combination with the blank carrier of a file cutting machine, of a sliding cam D having an inclined edge a lever connected with the carrier and carrying a bearing in contact with said edge and means for sliding the cam, substantially as set forth. 5th. The combination with the sliding blank carrier, lever and cam D, of a rack on the cam, a worm engaging said rack, and means for rotating said worm, substantially as set forth. 6th. The combination of the movable blank carrier, of a cam controlling the movement of the carrier, means for moving the cam at a uniform speed, the cam being provided with a gradually increasing curve towards its end, whereby an increment of movement of the blank carrier is produced, substantially as described. 7th. The combination with the blank carrier and its actuating cam, of devices for varying the movement of said cam, substantially as set forth. 8th. The combination with the blank carrier, of a presser bar 40, supported by a rock shaft and a treadle connected to rock the said rock shaft in one direction and weight for turning it in the other, substantially as set forth.

**No. 47,525. Head Light. (Fanal de locomotive.)**

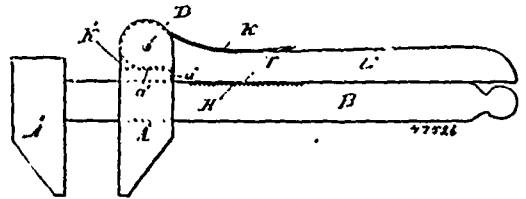


Edward Spencer Piper, Toronto, Ontario, Canada, 24th November, 1894; 6 years.

*Claim.*—1st. A head light for an engine consisting of a housing provided with a face, a lamp provided with a reflector within the housing, a revoluble drum within the housing having an opening to permit the radiation of the light from the reflector through the said face, and means for turning the said drum, substantially as specified. 2nd. A head light for an engine consisting of a housing having a face, a lamp provided with a reflector within the housings a revoluble drum within the housing having an opening to permit the radiation of the light from the reflector through the said face, means for turning the said drum and openings in the sides of the drum provided with coloured glasses, substantially as specified. 3rd. A head light consisting of a housing, a face for the said housing, a lamp provided with a reflector within the said housing, a revoluble drum within the housing provided with an opening to permit the radiation of the light through the said face openings in the sides of the said drum fitted with coloured glasses, cords attached to the said drum to turn it to bring either of the said side openings opposite the said face, substantially as specified. 4th. A head light consisting of a housing, a face for the said housing, a lamp provided with a reflector within the said housing, a revoluble drum within the housing provided with an opening to permit the radiation of the light through the said face openings in the sides of the said drum fitted with coloured glasses, a spring-operated latch to so hold the revoluble drum that the said opening in its normal front will be opposite the said face, a cord attached to the said latch by means of which it is operated from the cab, cords attached to the said drum to turn it to bring either of the side openings opposite the said face, substantially as specified. 5th. A head light consisting of a housing,

a lamp provided with a reflector within the said housing arranged to show and illumine the engine number, substantially as specified.

**No. 47,526. Wrench. (Clé à écrou.)**

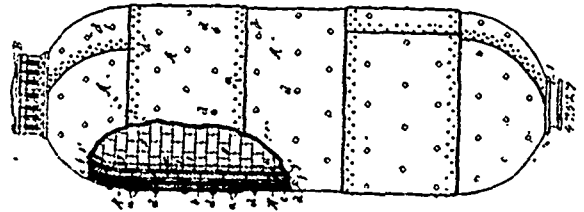


William Harding, Orangeville, Ontario, Canada, 24th November 1894; 6 years.

*Claim.*—1st. The combination of jaw A<sup>1</sup>, colapsably connected with handle C, and kept in place by spring K, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of tooth or teeth I, on handle C, fitting in grooves H on B, substantially as and for the purpose hereinbefore set forth.

**No. 47,527. Paper Pulp Digester.**

(Pourrissoir de pâte à papier.)

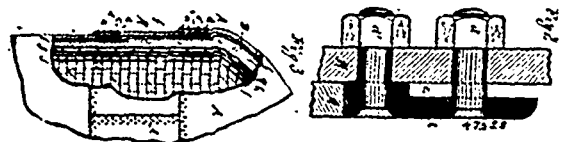


Henry W. Stibbins, West Carrolton, Ohio, U.S.A., 24th November, 1894; 6 years.

*Claim.*—The combination, with the metallic shell, of a lining adjacent thereto composed of a layer of cement, a lining of lead adjacent to said cement and secured thereto and to the metallic shell by lead rivets, a lining of non-heat conducting and acid-resisting material, as described, adjacent to said lead lining, a lining of porous blocks adjacent thereto, a further lining or porous filling adjacent to said blocks, and the glazed tile set in cement adjacent thereto, all combined and placed, substantially as herein specified.

**No. 47,528. Paper Pulp Digester.**

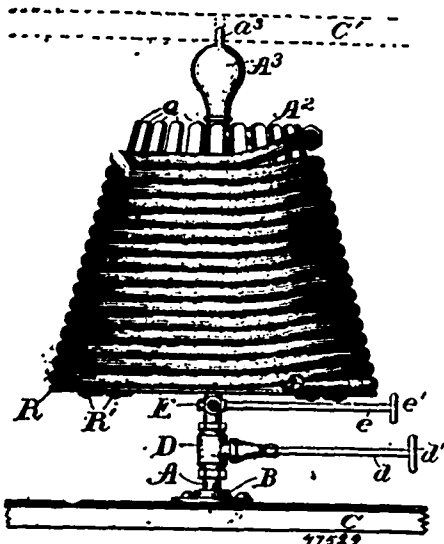
(Pourrissoir de pâte à papier.)



Henry W. Stibbins, Carrolton, Ohio, U.S.A., 24th November, 1894; 6 years.

*Claim.*—1st. The sections A of hard metal placed to over-lap each other and form a continuous shell or boiler upon the inner side of which there is a series of annular shoulders b, a series of bands having different degrees of thickness abutting with the shoulders b, and forming a series of annular pockets on the interior of the shell, in combination with a lining of pliable metal arranged to extend in and over said pockets whereby a continuous lining thereof is formed, and maintained in position by said pockets, and by the bolts d, as herein described. 2nd. The combination of the shell, a series of internally arranged bands or rings forming annular pockets, a lining of lead placed adjacent to said shell and secured thereto by extending into said pockets, a heat-absorbing and acid-resisting lining composed of Portland cement, asbestos, lampblack, sulphate of barium, litharge and silicate of soda in suitable proportions, by means of which a minimum and uniform degree of pressure and temperature is maintained and the metals thereby preserved, as herein described. 3rd. The combination, substantially as set forth, of a digester shell, bands forming annular pockets on the interior, thereof, a lining of soft metal placed against said shell, the heat-absorbing and acid-resisting lining f adjacent to the soft metal, the lining g composed of porous blocks to further prevent the transmission of heat and to reinforce the lining f, the lining h having a heat-absorbing and acid-resisting nature, and the glazed tile j all combined and arranged, substantially as herein specified.

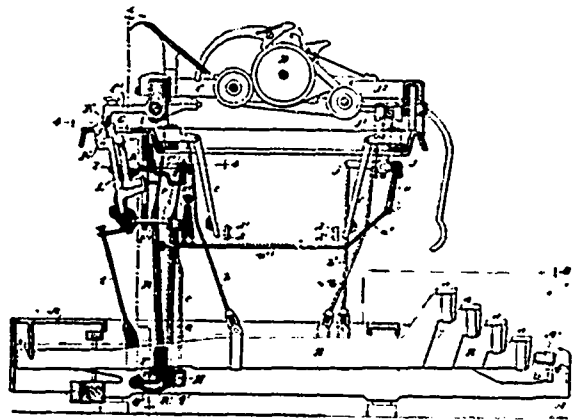
**No. 47,529. Hose Reel. (Dévidoir de boyau.)**



William Neil Casson, Marenette, Wisconsin, U.S.A., 24th November, 1894; 6 years.

*Claim.*—1st. In an apparatus of the character described, the combination with a stand pipe, of a revoluble pipe and a union connecting the two pipes, a gooseneck fast to said revoluble pipe, and a hose connected thereto, and a conical reel revolubly mounted on said stand pipe and with its axis vertical, substantially as and for the purposes described. 2nd. In an apparatus of the character described, the combination with a stand pipe, of a revoluble pipe and a union connecting the two pipes, a gooseneck fast to said revoluble pipe and a hose connected thereto, an air chamber surmounting said revoluble pipe, and a conical reel revolubly mounted on said stand pipe, and with its axis vertical, substantially as and for the purposes described. 3rd. In an apparatus of the character described, the combination with a stand pipe, of a revoluble pipe and a union connecting the two pipes, an air chamber surmounting said revoluble pipe and provided with a journal for the upper end of the reel, a gooseneck fast to said revoluble pipe, and a hose connected thereto, and a conical reel suspended with its axis vertical on hubs fast to said revoluble pipe and revolubly mounted on said stand pipe, respectively, substantially as and for the purposes described. 4th. In an apparatus of the character described, the combination with the stand pipe A, and plate B, of the revoluble pipe A² and a union connecting the two pipes, the gooseneck A² and the hose connected thereto, the conical reel having one hub rigidly attached to said stand pipe, and the other revolubly supported on said stand pipe, the valves D and the drain cock E, substantially as and for the purposes described.

**No. 47,530. Type-Writer. (Clavigraphie.)**



John Andrews Hamilton, New York, State of New York, U.S.A., 24th November, 1894; 6 years.

*Claim.*—1st. In a type-writer, the combination with the feed-mechanism comprising a relatively movable feed-rack and dog, and a spacer, said rack having teeth of a fineness equal to a fraction of the feed for types of average width, of a variable stop for determining the movement of the spacer, mounted to reciprocate with the feed mechanism, and means for operating said stop consisting of a movable abutment standing normally in the path of said stop, to intercept it in position to give a normal feed, and a connection

between said abutment and the requisite keys for throwing said abutment out of the path of the stop to vary the movement of the keys so connected is depressed. 2nd. In a type-writer, the combination with the feed-mechanism comprising a relatively movable feed-rack and dog, and a spacer, said rack having teeth of a fineness equal to half the feed for types of average width, of a variable stop for determining the movement of the spacer, mounted to reciprocate with the feed mechanism, and means for operating said stop consisting of a movable abutment standing normally in the path of said stop, to intercept it in position to give a two-space feed, and a connection between said abutment and the keys for one-space types for throwing said abutment out of the path of the stop to permit the latter to move farther and thereby limit the movement of the spacer to give a one-space feed. 3rd. In a type-writer, the combination with the feed-mechanism comprising a relatively-movable feed-rack and dog, and a spacer, said rack having teeth of a fineness equal to half the feed for types of average width, of a variable stop for determining the movement of the spacer, mounted to reciprocate with the feed mechanism, and means for operating said stop consisting of a movable abutment standing normally in the path of said stop, to intercept it in position to give a two-space feed, and a connection between said abutment, and the keys for types requiring a different feed, consisting of a treadle, projections on such keys arranged to encounter and displace the treadle, and means for communicating motion from the treadle to said abutment to throw the latter out of the path of the stop on the depression of the treadle. 4th. In a type-writer, the combination with feed-rack E, dog F, and spacer G, of variable stop L, movable abutment K, treadle Q¹, arranged to be depressed by certain keys, and rod Q, connecting it to said abutment, to the effect set forth. 5th. In a type-writer wherein the same type-keys print two different types under the control of a shifting mechanism the combination therewith of a variable letter-feed, comprising a feed-rack, dog and spacer, a variable stop for determining the movement of the spacer over one or more teeth of the rack, a stop actuating mechanism connected to the keys for printing each two types which requires different feeds, so that the depression of any of said keys operates said stop-actuating mechanism, said mechanism normally connected to the stop to actuate the latter to give a narrow feed, and a connection between said stop-actuating mechanism and the shifting mechanism for disconnecting the former from the stop upon the operation of the shifting mechanism, so that the depression of any of said keys fails to act upon the stop, and the latter gives the wider feed, whereby the same key will cause a wide or narrow feed according to the type it is printing as determined by the shifting mechanism. 6th. In a type-writer wherein the same type-keys print two different types under the control of a shifting mechanism, the combination therewith of a variable letter feed, comprising a feed-rack, dog and spacer, a variable stop for determining the movement of the spacer over one or more teeth of the rack, a movable abutment normally in the path of said stop and acting to hold it to the position for giving a two-space feed, a stop-controlling mechanism for displacing said abutment to enable the stop to give a one-space feed, connected to and normally operated by the keys for printing each two types which require different feeds, so that normally the depression of any of said keys displaces said abutment and gives a one-space feed and a connection between said stop-controlling mechanism and the shifting mechanism for throwing the former out of action upon the operation of the latter, so that while the shifting mechanism is in use the depression of any of said keys fails to displace said abutment and gives a two-space feed. 7th. In a type-writer wherein the same type-keys print two different types under the control of a shifting mechanism, the combination therewith of a variable letter-feed, comprising a feed-rack, dog and spacer, a variable stop for determining the movement of the spacer over one or more teeth of the rack, and mechanism for controlling the stop consisting of a movable abutment K, having an arm with active portion r¹, a treadle R¹ arranged to be depressed by the keys for printing each two types which require different feeds, a rod R connecting the treadle to said arm, normally engaging the portion r¹ thereof, so that the depression of the treadle displaces the abutment, and a rod u for connecting said rod R with the shifting mechanism so that when the latter is operated said rod R is moved out of engagement with the active part of said arm, and the depression of said keys, treadle and rod fails to displace the abutment. 8th. In a type-writer, the combination, with a feed-rack E, dog F, and spacer G, of variable stop L, movable abutment K, having arm p, treadle R¹ arranged to be depressed by certain keys, rod R connecting it to said arm, arm u attached to the shifting mechanism of the type-writer and rod u¹ connecting said arm u to said rod for throwing the latter out of action. 9th. In a type-writer, the combination with the feed-rack E, dog F, and spacer G, of variable stop L, movable abutment K, treadle Q¹, and R¹ arranged to be depressed by certain different keys, rods Q and R connecting the respective treadles to said arms q and p, both of said rods having free or slotted engagement with said



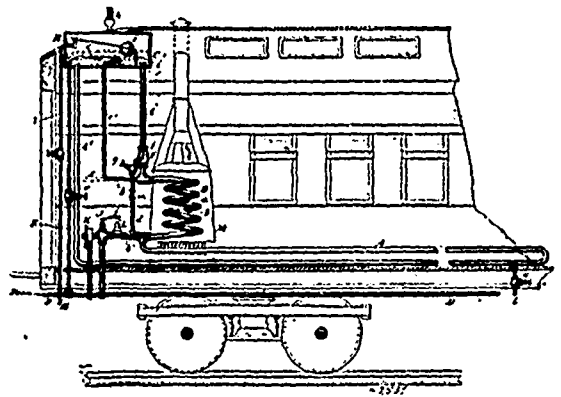
arms to enable either arm to move down independently of its rod under the pull of the other rod, and rod *u*<sup>1</sup>, connecting rods *R* with the shifting mechanism for throwing it out of action. 11th. In a type-writer, the combination with the feed-rack *E*, dog *F* and spacer *G*, of variable stop *L*, movable abutment *K* constructed as a pivoted arm pressed normally to place by a spring *s*<sup>1</sup>, and mechanism in connection with certain keys for displacing said abutment when said keys are depressed. 12th. In a type-writer, the combination with the feed-rack *E*, dog *F*, and spacer *G*, of variable stop *L*, movable abutment *K* having an arm *g*, a treadle *Q*<sup>1</sup> arranged to be depressed by certain keys, a rod *Q* connecting it with said arm, and a spring *s*<sup>2</sup> for upholding the said treadle and rod. 13th. In a type-writer, the combination with the feed-rack *E*, dog *F* and spacer *G*, of variable stop *L*, movable abutment *K* having an arm *p*, a treadle *R*<sup>1</sup> arranged to be depressed by certain keys, a rod *R* connecting it with said arm, a rod *u*<sup>1</sup> connecting said rod *R* with the shifting mechanism, and a spring *s*<sup>2</sup> for upholding said treadle and rods. 14th. In a type-writer, the combination with feed-rack *E* having teeth of a fineness equal to a fraction of the feed for types of average width, dog *F* and spacer *G*, of a variable stop *L*, mounted to move with the dog, and movable relatively to the dog in the direction of the dog's movement, having a shoulder abutting against the dog, and a spring *s* for tending to keep it in place with said shoulder pressed against the dog, whereby the stop normally moves with the dog to cause a feed of a certain width, and connections between said stop and the requisite type-keys for displacing the stop relatively to the dog, and against the tension of said spring, for causing a feed of a different width. 15th. In a type-writer, the combination of feed-rack *E*, pivoted dog *F* and spacer *G*, with a variable stop *L* pivoted on the same axis as the dog, and spring *s* acting against it and reacting on the dog. 16th. In a type-writer, the combination of feed-rack *E*, pivoted dog *F* and spacer *G*, with a variable stop *L* mounted to move relatively to the dog in the direction of the movement of the dog, having shoulder *l* abutting against the dog for limiting its movement relatively thereto, and spring *s* tending to press it forward and bring said shoulder against the dog whereby the stop is normally carried with the dog. 17th. In a type-writer, the combination of feed-rack *E*, pivoted dog *F*, and spacer *G*, with a variable stop *L*, mounted to move with the dog, and movable independently in the direction of the dog's movement, and an adjusting device for determining its position longitudinally of the rack to adjust it to stop the spacer in positions coinciding with the spaces between the rack teeth. 18th. In a type-writer, the combination of feed-rack *E*, pivoted dog *F*, and spacer *G*, with a variable stop *L*, mounted to move with the dog, and an adjusting device for determining its position relatively to the spacer consisting of a screw collar *k*, engaging the stop to move it toward or from the spacer. 19th. In a type-writer, the combination of feed-rack *E*, pivoted dog *F*, formed with an axial shaft *i*, and spacer *G*, with a variable stop *L* pivoted on said shaft, and a collar *k* adjustable thereon and engaging the stop. 20th. In a type-writer, the combination to form a variable letter feed, of a feed-rack, a dog and spacer working therein, a variable stop for determining the movement of the spacer over a greater or less number of teeth, mounted to move with the dog, and movable relatively to the dog in the direction of the dog's movement, a spring pressing against said stop and tending to cause it to move normally with the dog, and a connection between the keys for types of extra width, and said variable stop adapted upon the depression of either of said keys to draw back the stop during the forward movement of the dog to a position where it permits an increased movement of the spacer, thereby causing a wider feed. 21st. In a type-writer, the combination to form a variable letter feed, of a feed-rack, a dog and spacer working therein, a variable stop *L*, mounted to move with the dog, having a spring *s*, acting against it and reacting on the dog, and a shoulder abutting against the dog for limiting its movement relatively thereto, whereby normally the stop moves with the dog, and having a rearwardly projecting arm, and a connection between said arm, and a key lever for impressing a type of extra width, adapted on the depression of such key-lever to draw back the variable stop against the tension of its spring during the forward movement of the dog. 22nd. In a type-writer, the combination of feed-rack *E*, dog *F*, spacer *G*, variable stop *L*, mounted to move with the dog, having a spring tending to press it forward with the dog, and formed with a rearward arm *L*<sup>2</sup> and a rod *t* connecting this arm with the key-lever of a type of extra width, whereby on the depression of said lever it draws back the stop. 23rd. In a type-writer, the combination of feed-rack *E*, dog *F*, spacer *G*, variable stop *L*, mounted to move with the dog, having a spring tending to press it forward with the dog, and formed with a rearward arm *L*<sup>2</sup>, having a cross-bar *L*<sup>2</sup>, and two rods *t*, connecting the opposite ends of this cross-bar with two key-levers for types of extra width, whereby on the depression of either of said levers the stop is drawn back.

**No. 47,531. Steam Heating System for Railway Cars.**  
(Appareil de chauffage à la vapeur pour chars de chemin de fer.)

Edward Ethel Gold, New York, State of New York, U.S.A., 24th November, 1894; 6 years.

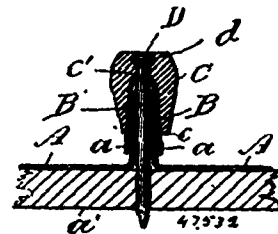
Claim.—1st. The combination of a radiating liquid circuit, a steam heater comprising a steam heated liquid passage forming part of said circuit, and adapted to both heat and circulate the liquid,

and an injector connected to receive the spent or condensed steam from said heater and inject the same into the liquid circuit. 2nd. The combination of a radiating liquid circuit, a steam-heater in connection therewith adapted to both heat and circulate the liquid and



an injector arranged in the hottest part of the liquid circuit in contact with the liquid which has just traversed, the heater and connected to receive the spent or condensed steam that has traversed the heater. 3rd. The combination of radiating liquid circuit, a heating stove in connection therewith to impart heat thereto, a steam-heater in connection therewith, whereby the liquid may be heated and circulated through said circuit by either steam or fire or both, and an injector connected to the hottest part of said circuit and adapted to inject steam therein. 4th. The combination of a radiating liquid circuit, a steam-heater in operative contact therewith, a steam-pipe for supplying said heater, an injector in said liquid circuit, a pipe for conducting spent or condensed steam from the heater to said injector, a valve in said pipe, and a valve or trap through which the condensed steam may be discharged from said heater, whereby the heating apparatus may be operated with or without the injection of spent or condensed steam into the liquid circuit.

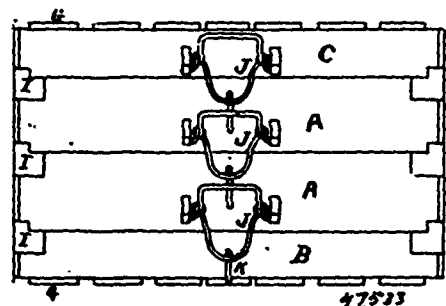
**No. 47,532. Fastening for Metallic Roofs.**  
(Attache pour toitures métalliques.)



John Osborn Pew, North Bloomfield, Ohio, U.S.A., 24th November, 1894; 6 years.

Claim.—1st. A washer clip of soft metal provided with a forked lower end adapted to straddle the cap plate, a central hole, and a projecting portion adapted to be hammered down over the head of the nail or screw when driven in, substantially as set forth. 2nd. A washer clip of soft metal provided with a forked lower end adapted to straddle the cap plate, a central hole, and a projecting flap upon one side of it, adapted to be hammered down over the head of the nail or screw when driven in, substantially as set forth.

**No. 47,533. Egg Crate.** (Boîte à œufs.)

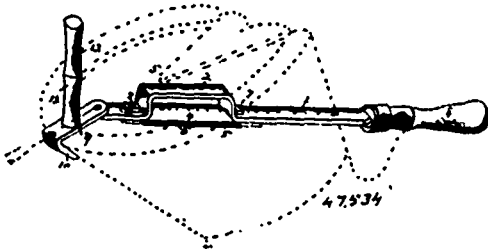


Alexander E. Wallace, assignee of James H. Robison, both of St. Thomas, Ontario, Canada, 24th November, 1894; 6 years.

Claim.—1st. The combination in a crate for transporting eggs, of sheets of perforated cardboard and supporting ribs for the same,

with grooves in the sides and ends of the crate, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of a crate made in sections with one sheet of perforated cardboard in the upper section and two sheets of perforated cardboard in the lower section, as hereinbefore set forth. 3rd. The combination of any number of sections of a crate having perforated sheets of cardboard held in position by grooves in the sides and ends of the crate, and supporting ribs with spring wire fastening and angle plates, substantially as and for the purpose hereinbefore set forth.

**No. 47,534. Hoof Trimmer. (Paroir de maréchal.)**



Mrs. Job Matheson and George W. Beattie, assignees of Job Matheson, all of South Hartford, New York, U.S.A., 24th November, 1894; 6 years.

*Claim.*—1st. In a hoof trimmer or parer, the combination of a knife-bar having an off-set loop or bend therein to form an opening, a knife-secured to said knife-bar and spanning the said opening thereof, and having an open space at its inner face to prevent clogging, and a grip-bar pivoted to the outer end of said knife-bar, substantially as described. 2nd. In a hoof trimmer or parer, the combination of a knife-bar having a handle connected thereto, a double-edged knife secured to the said knife-bar, a grip-bar pivotally connected to the outer end of said knife-bar and having an outer-bent end with an inner corrugated or roughened surface, and a handle secured to the said grip-bar, substantially as described. 3rd. In a hoof trimmer or parer, the combination of a knife-bar having a handle connected thereto, a double-edged knife removably secured to the said knife-bar, and a grip-bar having an outer angularly bent end with an inner corrugated or roughened surface and a handle, said grip-bar being also provided with a stop or projection to limit the movement of the knife-bar, substantially as described. 4th. In a hoof trimmer or parer, the combination of a grip-bar having an outer angularly bent end to engage a hoof, and provided with a projection or stop, a knife-bar pivotally attached to the grip-bar and provided with a blade having cutting edges at opposite sides of the knife-bar, the latter being arranged to engage the projection or stop to prevent the blade coming in contact with the grip-bar, and a handle secured to the grip bar and arranged perpendicular to the knife-bar, substantially as described.

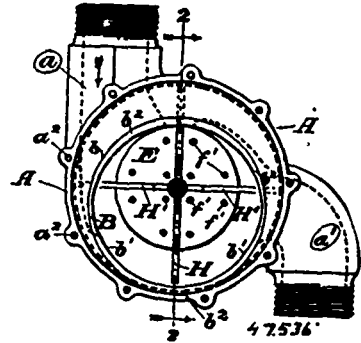
**No. 47,535. Wheel. (Roue.)**



The Indiana Novelty Manufacturing Company, Plymouth, Indiana assignee of Charles Francis Harrington, Lyndhurst, New Jersey, all in the U.S.A., 24th November, 1894; 6 years.

*Claim.*—1st. The herein described method of making a rim for rubber tired bicycle wheels, that is to say, by bending a single flat piece of wood in a circle, splicing the meeting ends and then turning the rim to the requisite shape, substantially as set forth and described. 2nd. A wood rim for a rubber tired bicycle wheel, bent from a single piece, with a lapped joint, as set forth, said joint being covered with cloth, or equivalent flexible material, glued or cemented to the wood, substantially as shown and described. 3rd. A wood wheel rim adapted and arranged to receive a rubber tire, said rim being formed and bent from a single piece of wood, the ends being tapered or fitted to form a lap joint, glued or cemented together, and then covered with cloth or other flexible material, glued or cemented to the wood, substantially as shown and described. 4th. A wood wheel rim adapted and arranged to receive a rubber tire, said rim being bent from a single piece of wood, and provided with holes to receive the spokes, metallic washers being seated in the wood surrounding the spoke holes, protecting the wood and preventing the drawing of the spokes therefrom, substantially as shown and described. 5th. A wheel of the character herein specified, in which is comprised a wood rim arranged to receive a rubber tire, said rim being bent from a single piece of wood, having a lap joint covered with cloth or other strengthening material, and having a metal support in the bottom of the groove to prevent the spokes drawing from the wood.

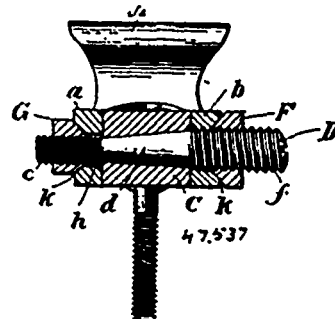
**No. 47,536. Water Wheel. (Roue hydraulique.)**



Henry John Rohlfs and George Irving, both of Chicago, Illinois, U.S.A., 24th November, 1894; 6 years.

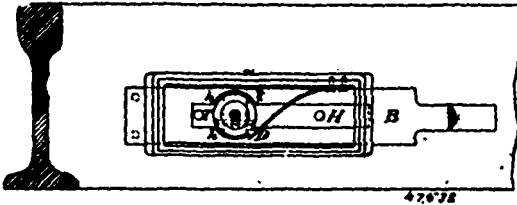
*Claim.*—1st. A casing having an inlet and an outlet and a bushing therein, such bushing not extending to the ends of the casing and having an oval-walled hole therethrough, in combination with a roller having grooves therein rotatably mounted on the bushing so that the periphery thereof is near to contact with the oval wall of the bushing and with the shaft of the roller extending through one of the ends of the casing, discs concentrically mounted on the roller shaft, secured to the ends of the roller, such discs having radial grooves coincident with the grooves in the roller on the faces adjacent to the ends of the roller, and such faces near to contact with the ends of the bushing, and paddles mounted in the grooves thereof, such paddles having a portion thereof, respectively, taken away, and adapted to slide in grooves thereof as the roller and discs rotate, so that the ends of the paddles will alternately project beyond the periphery of the roller, and be flush therewith, substantially as described. 2nd. The combination of a roller having grooves therein extending in from the periphery thereof and connecting grooves, with discs concentrically mounted on the ends of the rollers, such discs having radial grooves corresponding with the grooves in the roller and on the faces adjacent to the roller, and paddles having a portion thereof taken away, respectively, mounted in the grooves, respectively, so as to be slid therein as the roller and discs turn, and such paddles adapted to have the ends thereof alternately projected beyond the periphery of the roller and retracted flush therewith, substantially as described. 3rd. The combination of a roller mounted on a rotatable shaft, and having radial grooves extending from the periphery thereof in toward but not to the axial centre thereof, and having grooves connecting the first-named grooves, respectively, on opposite sides of the roller, with discs concentrically mounted on the roller shaft and secured to the ends of the roller, such discs having on the faces thereof adjacent to the ends of the roller, radial grooves corresponding respectively with the grooves in the roller, and paddles having a portion thereof cut away respectively mounted in the grooves, so that as the roller and discs turn, such paddles may be slid in the respective grooves thereof and the ends of the paddles may alternately project beyond the periphery of the roller and be flush therewith, substantially as described.

**No. 47,537. Thill Coupler. (Arçon de limonière.)**



Shepard Wheeler Cately and Alice Maria Ettling, both of Cortland, New York, U.S.A., 24th November, 1894; 6 years.

*Claim.*—In a thill coupling, the combination, with an axle clip having two ears, one provided with a threaded hole and the other with a smaller unthreaded hole, both of said holes being countersunk on their outer sides, of an eye fitting between said ears and provided with a conical opening, a bolt having a plain conical central portion fitting in the conical opening in the eye, a threaded end fitting in the threaded hole in the ear, and a smaller threaded end passing through the unthreaded hole in the other ear, and conical nuts for centering the bolt fitting on the threaded ends of said bolt resting in the countersinks in the ears, as set forth.

**No. 47,538. Switch Lock for Railways.***(Serrure d'aiguille de chemin de fer.)*

The Canada Switch Manufacturing Company, Montreal, Quebec, Canada, assignee of Charles Hodgson, Kilburn, London, England, 24th November, 1894; 6 years.

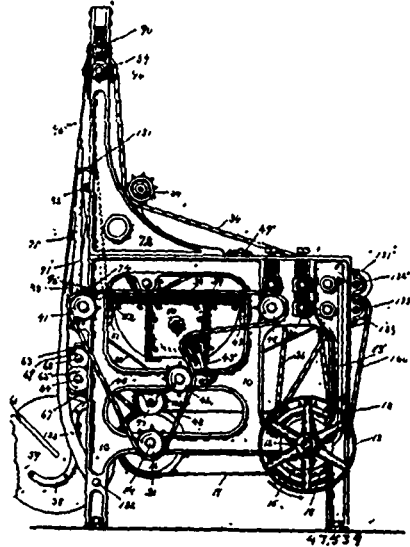
*Claim.*—1st. A point lock, consisting of a lock fixed to the stock rail close to the end of the switch rail and provided with a sliding bolt that can be moved by hand so that its end overlaps the end of the switch rail when the rail is closed and can be locked in that position by a key, substantially as and for the purpose set forth. 2nd. In a point lock, the combination, with a sliding bolt adapted to be moved by hand and having a wide end which normally overlaps the end of the switch rail when the rail is closed and clears the end of said rail when the bolt is pushed in, of a lock whereby the bolt can be locked in its normal position, substantially as and for the purpose set forth. 3rd. In a point lock, the combination, with a sliding bolt adapted to be moved by hand, of a wide end on the bolt which is of sufficient width to overlap the end of the switch rail when the rail is closed and opened and the bolt is in its normal position, and a lock fixed to the stock rail, whereby the bolt can be locked in its normal position, substantially as and for the purpose set forth. 4th. In a point lock, the combination, with a sliding bolt adapted to be moved by hand and having a wide end which normally overlaps the end of the switch rail when the rail is closed and clears the end of said rail when the bolt is pushed in, of a pivoted tumbler having a key slot and adapted to engage with the bolt when the latter is in its normal position, substantially as and for the purpose set forth. 5th. In a point lock, the combination of a sliding bolt adapted to be moved by hand, whose end normally overlaps the end of the switch rail when the rail is closed and clears the said rail when the bolt is pushed in, of a pivoted tumbler having a key slot, and which is normally engaged with the bolt, and a cover C, having an opening c for the key, which opening coincides with the key slot when the tumbler is in its normal position, substantially as and for the purpose set forth. 6th. In a point lock, the combination of a sliding bolt adapted to be moved by hand, whose end normally overlaps the end of the switch rail when the rail is closed and clears the said rail when the bolt is pushed in, the bolt having the slot H with the hollows h, a cylindrical pivoted tumbler T, having the flat sides U, and a key slot, the tumbler extending through the slot H, and when the bolt is in its normal position, being between the hollows h, a stop i, in the path of rotation of the flat sides of the tumbler, and stops for limiting the distance which the bolt can be pushed in and out, substantially as and for the purpose set forth. 7th. In a point lock, the combination of a sliding bolt adapted to be moved by hand, whose end normally overlaps the end of the switch rail when the rail is closed and clears the said rail when the bolt is pushed in, a pivoted tumbler having a key slot and the notches V, the said tumbler engaging with the sliding bolt when rotated a predetermined distance, and a spring catch D, which engages with the notches when the tumbler is engaged with and disengaged from the sliding bolt, substantially as and for the purpose set forth.

**No. 47,539. Machine for Folding or Plaiting Paper.***(Machine pour plier le papier.)*

Walter L. Allen and The Norwich Folded Paper Carpet Lining Company, both of Norwich, Connecticut, U.S.A., 24th November, 1894; 6 years.

*Claim.*—1st. In a plaiting-machine, in combination, longitudinally fluted crimping dies, and conveyer belts leading from the delivery side thereof, said belts being so guided that they gradually approach each other, and pressure rolls adapted to compress the crimped paper as it leaves said dies, all being substantially as described. 2nd. In combination with a pair of meshing crimping dies, edge trimming cutters operating in advance of said dies, and conveyer belts as set forth extending from a point between said edge trimmers and dies to a point beyond said dies, and rolls for forcing together the said belts, as and for the purpose specified. 3rd. In combination with a pair of meshing crimping dies, edge trimming cutters operating in advance of said dies, conveyer belts as set forth rolls 141-142 located respectively above and below said belts, means for adjusting said rolls and, pressure rolls in the rear of said dies, substantially as and for the purpose specified. 4th. In combination with a pair of meshing crimping dies, and pressure rolls operating in the rear thereof, a conveyer consisting of upper and lower endless belt as set forth, the said dies and pressure rolls being formed with circumferential grooves for the passage of said belts, whereby the upper dies and rolls may be forced into close engagement

with the companion, or lower, dies and rolls for the object stated. 5th. In combination with a pair of meshing crimping dies, conveyer belts operating immediately in the rear of said dies, to partially flatten the crimped paper, as set forth, pressure rolls operating in succession to receive and compress the partially flattened paper and pasting mechanism, consisting of a paste-pan,



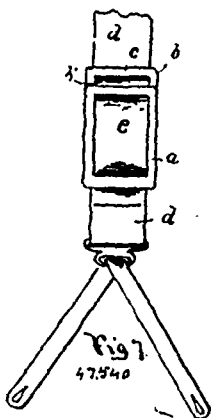
having revolvably mounted therein rolls whose circumferential faces lie in the path of the plaited product of the machine, substantially as and for the purpose specified. 6th. In combination with a pair of meshing crimping dies, conveyer belts operating in the rear of said dies to gradually flatten the crimped paper, as set forth, pasting mechanism consisting of a pan having journaled therein rolls whose circumferential faces are in the path of the plaited product of the machine, and axial supports for reels, of binding strips corresponding in number and position with said paste rolls, all substantially as and for the purpose specified. 7th. In combination with mechanisms for crimping, pasting and binding a web of paper, a roll upon which the finished product is wound, vertical ways between which said roll is supported, one of said ways being of lever form, adapted to be lowered to release the roll and its load, and a roll 36 located immediately beneath the said roll and adapted to revolve the latter and the finished product wound thereon, substantially as and for the purpose specified. 8th. In combination with mechanisms for crimping, pasting and binding, a web of paper, and mechanism as set forth for rolling up the finished product, frictionally acting belts 95, engaging portions of the circumference of said roll, said belts being supported and guided by fixed rolls at the top of the machine and by pulleys 88, journaled in the free ends of arms mounted to slide vertically, as described. 9th. In combination with mechanism for rolling up a web of plaited paper, frictionally acting belts engaging portions of said roll of paper, said belts being supported and guided by fixed rolls at the top of the machine and by pulleys 88, journaled in the free ends of arms mounted to slide vertically and spread laterally, mechanism for controlling the lateral movements of said arms, consisting of cords having one end attached to said arms and the other ends coiled upon drums, as set forth, and mechanism substantially as described for releasing said cord from the drums at stated times, for the purpose specified. 10th. In combination with a pair of meshing crimping dies, pressure rolls, conveyer belts, pasting and binding mechanisms and mechanism for forming the finished product into a marketable roll as described, a grooved rod 109, devices for securing said bar to the roll of paper, a knife coincident with the groove of said bar, and mechanism for moving said knife, all being substantially as described. 11th. In a plaiting machine, in combination with a spindle 74, on which the finished product may be rolled, vertical ways for said roll, one of said ways 71, being of lever form, adapted to be dropped to a horizontal position, a rod 109, and means for suspending the same from the spindle 74 and arms 117, connected and movable with said lever and adapted to engage the rod 109, and force it underneath the roll of finished paper when lever 71 is raised to a vertical position, all being substantially as specified. 12th. In combination with a spindle 74, on which a web of plaited paper may be rolled, clamping rod 109, having secured to each end a spring terminating with a hook adapted to embrace the said roll 74, in the manner and for the purpose specified.

**No. 47,540. Suspender Buckle. (Boucle de bretelles.)**

William W. Riley, Cromwell, Connecticut, U.S.A., 26th November, 1894; 6 years.

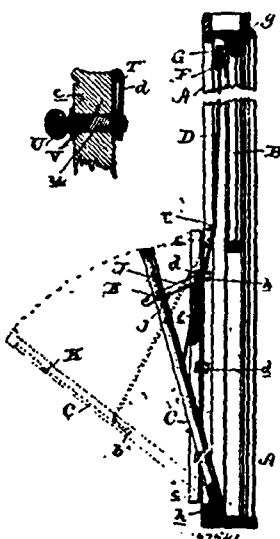
*Claim.*—In combination in a buckle, a substantially rectangular frame having a central opening and cross-bar extending across said opening, a sliding loop having its outer end located on one side of

the rectangular frame and provided with a slot, and its inner end forming a clamping offset part and located upon the opposite side of



the frame from the outer end, and the back turned integral lugs located on the sliding loop and on the opposite side of the frame from the offset portion, all substantially as described.

**No. 47,541. Window. (Fenêtre.)**

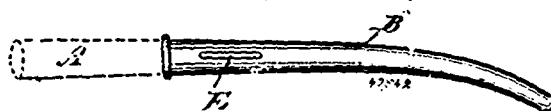


Oscar Frostscher, Philadelphia, Pennsylvania, U.S.A., 26th November, 1894; 6 years.

*Claim.*—1st. The combination, with a window frame, of two sashes of different widths, the upper sash being the narrower and each sash having its edge cut away for a portion of its length, a projection between the narrow sash and the frame, and a movable stop bead in front of the bottom sash to provide a space below the upper sash for the withdrawal of the sash, substantially as specified. 2nd. The combination, with a window frame, of two sashes of different widths, the upper sash being the narrower, and each sash having its edge cut away for a portion of its length, the sustaining cords attached to said sash near the end of the cut away portion, a projection between the narrow sash and the frame, a parting strip set in front of the upper sash only and a movable stop bead opposite the lower sash, substantially as and for the purpose specified. 3rd. The combination, with a window frame having two sashes hung therein, the sashes and guides for the same being constructed to allow the top of the sashes to swing inward and downward, of a plate on the sill of the frame in line with the lower sash and a plate in the head of said frame in line with the upper sash, said upper sash being narrower than the lower sash and hung on two cords, one on each side, whereby the top of said sash may swing inward and downward on said cords, under the bottom of the lower sash when the latter is raised, substantially as described. 4th. The combination of a hinge with a screw passing through one leaf of said hinge and screwing into a tapped hole in the other leaf, substantially as described. 5th. The combination, with a window stile and movable stop bead hinged thereto, of a screw passing through one leaf of the hinge and screwing into a tapped hole on the other leaf, substantially as described. 6th. In combination, with the stile of a window frame, a stop bead provided with a lip overlapping the joint between it and the stile, substantially as described. 7th. The combination, with an inwardly moving sash and a movable stop bead, of a swinging notched plate pivoted in a recess in said stop bead, substantially

as and for the purpose specified. 8th. The combination, with a window frame and the sash thereof, of a plate O provided with an elongated hole therein, and a bar M having at one end a pivoted lug N adapted to enter said elongated hole, substantially as described. 9th. The combination, in a window frame and with the inwardly moving sash thereof, of a bead having a metallic protector at its lower end, substantially as described and shown.

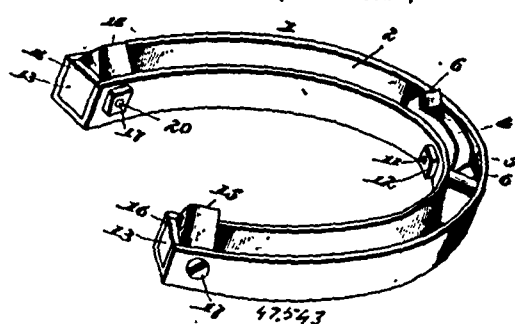
**No. 47,542. Shaft Tip. (Bout de timon.)**



William Layng, Athens, Ontario, Canada, 26th November, 1894; 6 years.

*Claim.*—1st. A carriage shaft tip B, of cast malleable iron or steel, having a socket to receive the end of a shaft A, and provided with a loop or hook B, to connect with the harness straps of the gig saddle, girth, etc. 2nd. The combination with a carriage shaft A, of the tip B, fitting thereon, having a loop or hook B, as set forth.

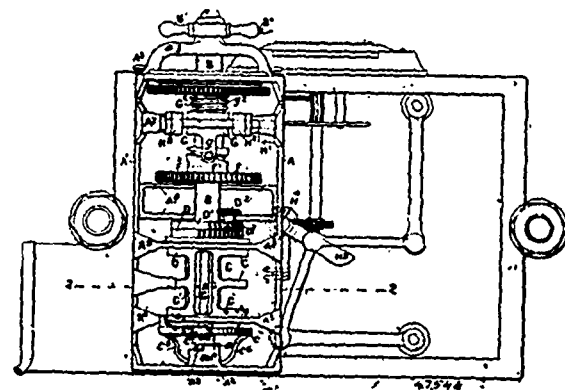
**No. 47,543. Horse-shoe. (Fer à cheval.)**



Crutcher Duty Shepherd, Orlando, Florida, U.S.A., 26th November, 1894; 6 years.

*Claim.*—1st. The herein described shoe having a U-shaped channel upon its under side, cubical toe and heel-calks removably fitting the channel and having perforations aligning with perforations in the wall of the shoe, and bolts passed through the perforations of the calk and shoe and provided with nuts, substantially as specified. 2nd. The herein described shoe, channelled upon its under side and having reversible heel and toe calks, one side of each calk being provided with a spike and the opposite side plain, said calk exceeding in width the depth of the channel, and bolts having nuts passed removably through the wall of the shoe and the calks, substantially as specified. 3rd. The toe-calk for shoes having the longitudinally bevelled central ridge terminating in the transverse end ridges, substantially as specified.

**No. 47,544. Gas Meter. (Compteur à gaz.)**

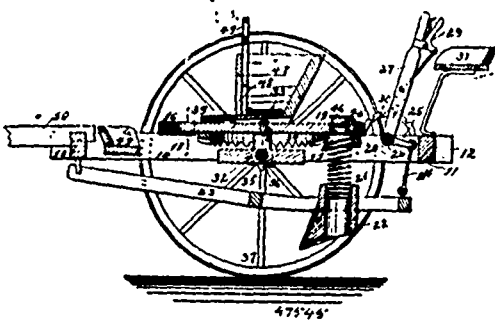


John Sharp, Glasgow, Scotland, 26th November, 1894; 6 years.

*Claim.*—1st. In coin-freed gas meters the arrangement and combination of the operating mechanism  $b$  to  $b^4$ ,  $B^1$   $B^2$ ,  $C$  to  $C^3$ ,  $F$  to  $F^3$ ,  $G$  to  $G^3$ ,  $g$ ,  $H$  to  $H^3$ , on a single horizontal spindle  $B$  and portable framing  $A$  to  $A^3$ ,  $a$  to  $a^3$ , substantially as herein described. 2nd. In coin-freed gas meters the construction and arrangement of coin-receiving organ  $b$  to  $b^4$  on horizontal spindle  $B$  and an outer sleeve organ  $C$  to  $C^3$ , turned by the coin to operate the gas freeing mechanism, substantially as herein described. 3rd. In coin-freed gas meters the fitting of a segmental toothed-wheel  $D$  on the sleeve turning or coin-freed organ  $C$  in combination with a loose segmental toothed-wheel  $D^1$  made adjustable to suit the varying price of gas,

substantially as and for the purposes herein described. 4th. In coin-freed gas meters, the fitting of a rotative sleeve F<sup>1</sup>, formed with a differential coiled slot or cam groove F<sup>2</sup>, in combination with a pin *g* and sleeve G capable of combined rotative and longitudinal movement, and having connecting gearing and fittings G<sup>2</sup> G<sup>3</sup>, H to H<sup>4</sup> to set on and stop the movements of meter, substantially as herein described.

**No. 47,545. Potato Planter. (Semoir à patates.)**

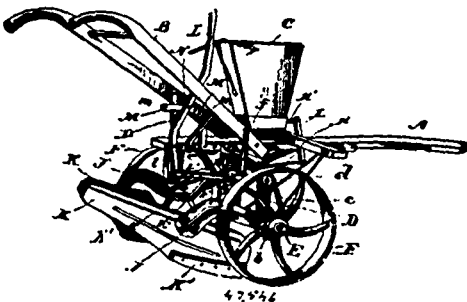


Millard F. Myers, Greenville, Ohio, U.S.A., 26th November, 1894; 6 years.

*Claim.*—1st. The seed dropping disc having a series of seed apertures, and a vertically divided sleeve 40 in each opening and provided with slotted flanges 41, and screws passed through the flange slots into the upper side of the disc, the said sleeves being separate and independent of one another, substantially as described. 2nd. In a potato planter, the combination, with a frame, the axle and ground wheels, a circular guide carried by the frame, having an exit opening, and a planting disc held by horizontally rotate upon said guide and provided with a series of adjustable pockets, of a driving connection between the axle and the planting disc, a spring throat located beneath the exit opening in the guide, a frame pivoted to the main frame of the machine, a shoe carried by the said frame and connected with the said spring throat, a rock shaft provided with locking devices, connected with the supporting frame of the shoe, an exposed spring controlled expelling-head located over the exit opening in the guide and adapted to travel upon the upper face of the planting disc and enter the pockets as they register with the throat, and a hopper adapted to contain the seed and located over the planting disc, having a closed bottom provided with a forward extension to deliver on the upper exposed side of the disc, and having a discharge opening in its front wall and a gate controlling the same, whereby the seed may be delivered upon the disc or removed from the hopper and placed in the pockets of the disc, substantially as shown and described.

**No. 47,546. Horse Hoe and Fertilizer Distributor.**

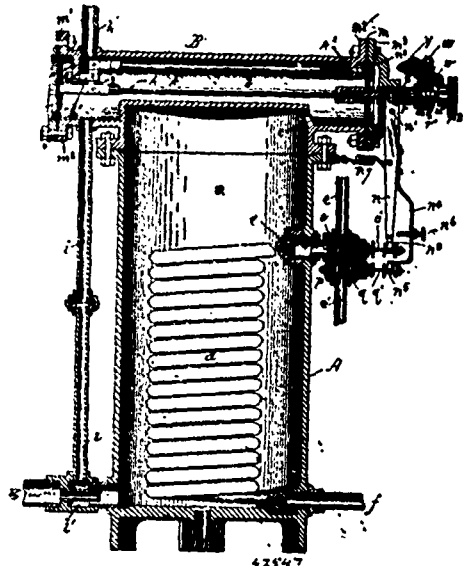
(Houe à cheval et distributeur d'engrais.)



Fred M. Haines, Fort Fairfield, Maine, U.S.A., 26th November, 1894; 6 years.

*Claim.*—1st. The combination with the dropper slide, of the end-wise-movable shaft, pivotal connections between said shaft and the said slide, and a sprocket-wheel with which said shaft is adapted to detachably engage, and the adjustable arms on the crank axle as set forth. 2nd. The combination with the crank axle and the arms adjustable thereon, of the wings mounted on the said arms, and detachable acting portions on said wings, as set forth. 3rd. The combination with the crank axle and the arms adjustable thereon, of the wings mounted on said arms, and the lever pivoted as described and connected with the said axle, substantially as and for the purpose specified. 4th. The combination with the frame, the pole, the hopper, the hopper slide and the wheels, of the end-wise-movable shaft, the two sprocket-wheels, the sprocket-chain, the crank axle, the arms on the axle and the wings thereon and the means for adjusting the arm, substantially as specified.

**No. 47,547. Water-heater. (Réchauffeur d'eau.)**



Henry Archibald Tobey, Toledo, Ohio, U.S.A., 26th November, 1894; 6 years.

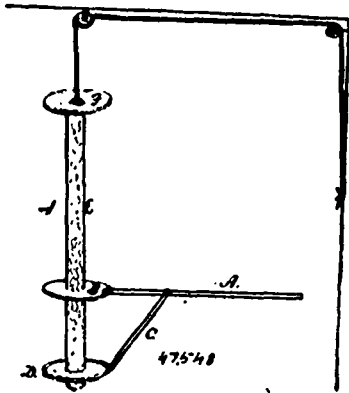
*Claim.*—1st. In a water-heater, the shell thereof in combination with a return-pipe leading from the upper to the lower part of the interior of said shell, and the water supply-pipe of said heater, said two pipes discharging into the lower part of said shell through a chamber common to both said pipes, whereby the advancing current in the supply-pipe may accelerate the current in the return-pipe, and whereby the streams from both pipes may mingle at or near their point of discharge into the lower part of said shell, substantially as shown and described, for the purpose specified. 2nd. In a water-heater, a source of heat connected therewith, a valve or valves, controlling said source of heat, two expansible rods or pipes within said heater progressively connected together by suitable intermediate mechanism, one end of the first rod or pipe in said series being fixed, and one end of the last rod or pipe in said series extending outside of said heater, and being operatively connected with said valve or valves, substantially as shown and described, for the purpose specified. 3rd. In a water-heater, the expansion-rod-chamber thereof, having its opposite ends closed by diaphragms rigidly connected by an intermediate rod or pipe attached at both ends to said diaphragms, substantially as shown and described, for the purpose specified. 4th. In a water-heater, a valve controlling the supply of exhaust-steam to said heater, a valve controlling the supply of live-steam to said heater, and an expansion-rod within said heater common to and operatively connected with both said valves, substantially as shown and described, for the purpose specified. 5th. In a water-heater, a steam-coil within said heater, an exhaust-steam pipe having a valve therein, connected with said steam-coil, a live-steam pipe having a valve therein, connected with said steam-coil, and a single valve-casing common to both said steam-pipes and valves, substantially as shown and described, for the purpose specified. 6th. In a water-heater, a temperature indicator consisting of a hand or pointer and a graduated dial, operatively connected with the adjusting screw *r*, governing the point of contact between the expansion-rod extension *r* and the steam-valve controlling lever *n*, substantially as shown and described, for the purpose specified. 7th. A water-heater, having an expansible rod in said heater, an extension of said rod outside of said heater having an internally threaded axial bore, a contact-piece movable longitudinally in said bore, a regulating screw in said bore adapted to move said contact-piece, a post secured to said expansion-rod extension, a hand or pointer fixed to said post, a circumferentially toothed, graduated dial, journaled upon said post, and a pinion on said regulating screw engaging the teeth of said dial-plate, in combination with a lever engaged by said contact-piece and controlling the source of heat for said heater, all substantially as and for the purpose specified. 8th. A water-heater, comprising and combining the following elements, 1 a shell having its upper and lower parts connected by a return water-pipe, a thermostat in said shell, 3 a thermostat chamber having its opposite ends closed by diaphragms connected to said thermostat, 4 a live steam-pipe and an exhaust steam pipe connected to said heating coil of said water-heater, each of said pipes having a valve connected with and controlled by said thermostat, and 5 an adjustable temperature indicator connected with said thermostat and governing the point of contact between the thermostat and the steam valve mechanism, substantially as and for the purpose specified.

**No. 47,548. Clothes Horse. (Séchoir à linge.)**

George Henry Garrow, jr., Aurora, Ontario, Canada, 26th November, 1894; 6 years.

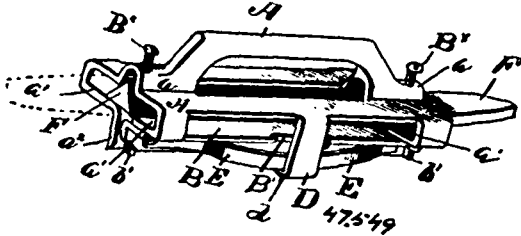
*Claim.*—1st. A number of arms A, surrounding and hinged to a

disc B, each arm supported by a brace C, resting on a support D, attached to a shaft E, substantially as and for the purpose specified. 2nd. A rest F, to which the arms A, may be attached or against



which they may rest when not in use and folded substantially as and for the purpose specified. 3rd. A device, circular in structure, and folding, suspended by a rope or strap to elevate and lower, or to be detached and removed if desired, substantially as and for the purpose specified.

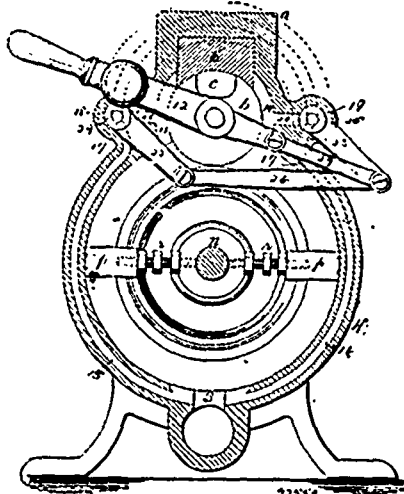
**No. 47,549. Saw Jointer and Skate Sharpener Combined.** (*Appareil pour affûter les scies et patins*)



Edwin Bertram Pike, Pike Station, New Hampshire, U.S.A., 26th November, 1894; 6 years.

*Claim.*—1st. The combination with the body portion with file-holding means and a skate or saw-holding jaw, of a spring-pressed and adjustable skate or saw-holding jaw, and a spring held at its centre by a depending portion of the fixed jaw, and arranged parallel with the movable jaw against which its ends bear, as set forth. 2nd. The combination with the body portion with horizontal portions and depending jaw, and depending portion with horizontal lug, of the adjustable jaw and the spring bearing thereon and held by said lug, as set forth. 3rd. The combination with the body portion with horizontal portions, jaw and depending portion with horizontal lug, of the adjustable jaw having lugs at its ends, and the spring held by said depending portion and lugs and bearing against the movable jaw, as set forth.

**No. 47,550. Rotary Engine.** (*Machine rotative.*)



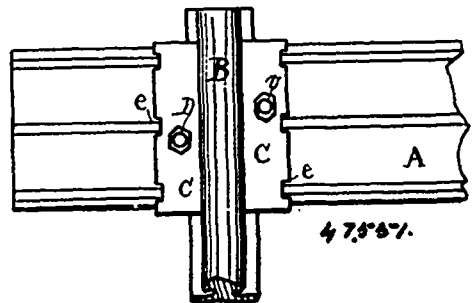
Williard Glenn Adams, Weedsport, New York, U.S.A., 26th November, 1894; 6 years.

*Claim.*—1st. In a rotary engine the combination with a case, a

piston-head therein and a rotating cut-off valve, of recesses 13, 14, within and on opposite sides of the valve chamber, adapted to take steam to drive the piston-head in opposite directions. 2nd. In a rotary engine, the combination with a case, a piston-head therein and a rotating cut-off valve, and provided with a steam port, and a tubular shaft provided with a port adapted to register with the port in said valve, of recesses 13, 14, within and on opposite sides of the valve chamber, adapted to take steam to drive the piston-head in oppositedirections. 3rd. In a rotary engine, a cut-off valve provided with a steam port and mounted upon a tubular shaft provided with a port registering with that of said valve, a steam pipe within said shaft provided with ports adapted to register with said shaft and valve ports, and means to rotate said steam pipe independently, to change the engagement of said ports, in combination. 4th. In a rotary engine, a cut-off valve provided with a steam port and mounted upon a tubular shaft provided with a port registering with that of said valve, a steam pipe within said shaft provided with ports adapted to register with said shaft port, and means to rotate said steam pipe, independently to change the engagement of said ports, in combination with recesses in the walls of said valve chamber and on opposite sides thereof. 5th. In a rotary engine, the combination with a case, a rotating piston-head and its piston mounted therein, and an exhaust port, of passages in said case and opposite sides thereof, connected to the exhaust port, and means to close one passage and open the other, according to the direction of the rotation of said head. 6th. In a rotary engine, the combination with a case, a rotating piston-head and its pistons mounted therein, a cut-off valve mounted in a chamber upon said case, recesses in the walls of said valve-chamber and upon opposite sides thereof and an exhaust port, of passages in the opposite walls of said case connected at one end to said exhaust port, of passages in the opposite walls of said case connected at one end to said exhaust port and at their other ends to the respective recesses aforesaid and means to close one passage and open the other when the rotation of the piston-head is reversed. 7th. In a rotary engine, the combination with a steam inlet pipe, of a rotatable steam pipe provided at one end with inlet ports, always registering therewith and at the other end with discharge ports, one of which normally registers with the cut-off valve, a cut-off valve and means to rotate said steam pipe to throw one of said discharge ports into register and the other out of register with the said cut-off valve. 8th. In a rotary engine, the combination with a case, a piston-head therein, a cut-off valve in said case, a steam inlet pipe, a rotatable steam pipe provided at one end with inlet ports always registering with said inlet pipe, and at the other end with discharge ports, one of which normally registers with the cut-off valve, and means to rotate said steam pipe, to throw one of said discharge ports into register, and the other out of register with said cut-off valve, of an exhaust port in the case, recesses in and upon opposite sides of the cut-off valve-chamber, passages in the case connected at one end to the exhaust port and at their other end to said recesses, and means to close one passage and rotate the other when said steam pipe is rotated to reverse the engine. 9th. A rotary engine, comprising a case, a head therein concentric therewith, pistons radially mounted in the head and fixedly adjustable in their projection beyond it, a cut-off valve mounted in a chamber connected to the steam chamber between the pistons, a rotary tubular shaft carrying said valve and provided with a port adapted to register with the steam inlet pipe, and a recess in the inner wall of the case beyond and extending from the exhaust port, substantially to the steam inlet, in combination. 10th. In a rotary engine, the combination with the case, the head therein and the pistons in the head, of an exhaust port and a recess in the inner wall of the case beyond the exhaust and extending substantially to the steam inlet.

**No. 47,551. Metal Tie and Nut Lock.**

(*Traverse métallique et arrête-écrou.*)



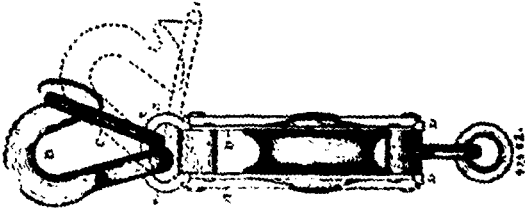
Jasper Pemberton Warner, Decatur, Michigan, U.S.A., 27th November, 1894; 6 years.

*Claim.*—1st. The combination of suitable ties, rails mounted thereon, spring metal binding-plates, bowed upward when viewed in cross-section, prior to being bound, and adapted to straighten after being bound, and binding bolts and nuts, whereby the tendency of the plates to assume their normal shape locks the nuts, substantially as set forth. 2nd. The combination of channelled metal ties,



rails mounted upon said ties, elastic metal binding plates, provided with notches in their outer edges fitting over the upper free edges of the channelled ties, and binding bolts and nuts, substantially as set forth. 3rd. The combination of channelled metal ties, rails mounted thereon, elastic metal binding plates, having a spring resistance against the binding pressure of the binding nuts, and headed binding bolts right-angled through one of the walls of the channelled tie, and from thence extending upward on opposite sides of said wall, passing through the binding plates, and binding nuts on said bolts, substantially as set forth.

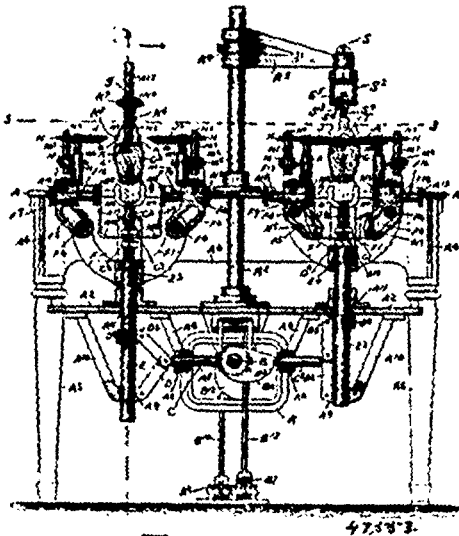
**No. 47,552. Tackle Block. (Moufle.)**



Henry Von Hartz, Cleveland, Ohio, U.S.A., 27th November, 1894; 6 years.

*Claim.*—1st. A tackle-block and a hook therein, constructed with a reverse-hook at its point, and a link to engage over said reverse-hook, substantially as set forth. 2nd. A tackle block and a hook and a link secured side by side in the block, the said hook having its point constructed to engage and hold the said link, substantially as set forth. 3rd. The block and the shank or clevis thereon widened at its sides, and a hook having a reverse hook on its point secured on said shank, and a link on said shank in front of the hook thereon and arranged to engage over said reverse hook, substantially as set forth.

**No. 47,553. Lasting Machine. (Machine à enformer.)**

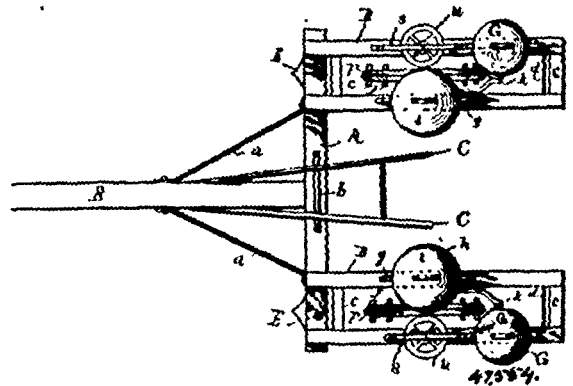


Julia Rogers Wood, Foxborough, Massachusetts, U.S.A., 27th November, 1894; 6 years.

*Claim.*—1st. In a lasting machine, the combination of horizontally sliding side, heel and toe plates, as J, J<sup>2</sup>, J<sup>4</sup>, J<sup>5</sup>, adjustable gripper-rods N, having substantially round inner ends, and mounted on sliding-blocks, whereby said gripper-rods slide horizontally above the plates, and adjustable spring gripper-fingers as N<sup>2</sup>, formed at their lower ends into eyes N<sup>3</sup>, set opposite and on a horizontal line with the inner ends of the gripper-rods with their vertical planes parallel with the periphery of the last, whereby the gripper-rods grip the leather and hold it in the eyes at numerous points but not in a continuous line, substantially as set forth. 2nd. In a lasting machine, a series of pairs of spring-gripper fingers N<sup>2</sup>, secured to and depending from the arm N<sup>4</sup>, each gripper-finger of a pair being bent as shown and crossing the other twice i, c, crossing and re-crossing the other of the pair, above the last, whereby the lower ends are prevented from swinging in the arc of a circle but are caused to move in a substantially horizontal line, and hence prevented from striking the inner sole, substantially as set forth. 3rd. In a lasting machine, the combination of the centrally located cam B<sup>2</sup>, on the driving-shaft B, the horizontally sliding-pins C, C<sup>1</sup>, actuated by the cam and on opposite sides thereof, the toggle joints D, D<sup>2</sup>, engaged by the pins, the vertical shafts E, E<sup>2</sup>, actuated by the toggles, frame or arms F, F<sup>1</sup>, F<sup>2</sup>, F<sup>3</sup>, the sliding-blocks F<sup>4</sup>, F<sup>5</sup>, F<sup>6</sup>, F<sup>7</sup>, F<sup>8</sup>, F<sup>9</sup>, F<sup>10</sup>, F<sup>11</sup>, F<sup>12</sup>, slotted at F<sup>3</sup>, F<sup>5</sup>, F<sup>7</sup>, F<sup>9</sup>, and suitable lasting mechanism, substantially as described. 4th. In a lasting machine, the mechanism for laying the outsole, comprising the endwise moving shaft R<sup>2</sup>, extending vertically from the table at the rear and between the two lasting mechanisms, the arm R<sup>3</sup>, extending horizontally from said shaft, the longitudinally slotted frame S<sup>2</sup>, supported by a swivel connection with the free end of the arm, the screw-rods S<sup>4</sup>, adjustably secured in the slot in said frame, the presser feet T, and suitable lasting mechanism, substantially as described. 5th. In a lasting machine, the combination of the semi-circular plate O<sup>2</sup>, provided with the radial guide-slots O<sup>3</sup>, the semi-circular plate O<sup>1</sup>, provided with the diagonal cam-slots O<sup>4</sup>, the radial toe-lasting rods P, engaging with the said diagonal and radial slots by means of studs and moving longitudinally on radial lines, the inner ends of said toe-lasting-rods being provided with blades curved in horizontal section, and a toe-block provided with uprights corresponding in shape with and serving as seats for said curved blades, substantially as set forth.

*Claim.*—1st. In a corn planter, the combination of a supporting frame, a corn-hopper h, mounted above and to one side of the supporting frame, and an opening j, in the hopper h, a disc i, within the hopper and mounted on a shaft m, opening p, in said disc, a stationary cut-off brush q, above the opening j, a wheel n, carried by the shaft m, and depending fingers o, on said wheel n, adapted to engage with the pins f, substantially as described. 2nd. In a corn planter, the combination of a supporting wheel, pins f, on the periphery thereof, a corn-hopper h, supported above and to one side of the wheel F, an opening j, in the bottom of said hopper, cut-off mechanism within said hopper and above said opening j, a shaft m, for operating the said mechanism, a wheel n, on the shaft m, depending fingers o, engaging with the pins f, hopper G, carried by the machine, and opening X, in the bottom of the hopper G, a lever H, pivoted beneath the said hopper and carrying a shutter for normally closing said opening, a shaft and connections between said shaft and the lever H, and between said shaft and the supporting wheel F, substantially as described. 3rd. In a corn planter, the combination of a frame, the plows E, carried by said frame at or near each end thereof, a supporting wheel F, on each side of the frame in line with the plows E, pins f, on the periphery thereof, a corn-hopper h, supported above and to one side of the wheel F, and opening j, in the bottom of said hopper, cut-off mechanism within said hopper and above said opening j, a shaft m, for operating the said mechanism, a wheel n, on the shaft m, depending fingers o, engaging with the pins f, a hopper G, a lever H, pivoted beneath the said hopper and carrying a shutter for normally closing said opening, a shaft i, and connections between said shaft and the lever H, and between said shaft and the supporting wheel F, and plows J, on each side of the machine for closing the furrows made by the plows E, substantially as described.

**No. 47,554. Corn Planter. (Semoir à blé & Indes.)**



Peter M. Weisel, Williamsport, Pennsylvania, U.S.A., 27th November, 1894; 6 years.

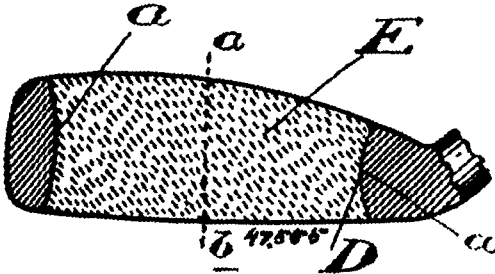
*Claim.*—1st. In a corn planter, the combination of the supporting wheels F, pins f, on the periphery thereof, a corn-hopper h, mounted above and to one side of the supporting frame, and an opening j, in the hopper h, a disc i, within the hopper and mounted on a shaft m, opening p, in said disc, a stationary cut-off brush q, above the opening j, a wheel n, carried by the shaft m, and depending fingers o, on said wheel n, adapted to engage with the pins f, substantially as described. 2nd. In a corn planter, the combination of a supporting wheel, pins f, on the periphery thereof, a corn-hopper h, supported above and to one side of the wheel F, an opening j, in the bottom of said hopper, cut-off mechanism within said hopper and above said opening j, a shaft m, for operating the said mechanism, a wheel n, on the shaft m, depending fingers o, engaging with the pins f, hopper G, carried by the machine, and opening X, in the bottom of the hopper G, a lever H, pivoted beneath the said hopper and carrying a shutter for normally closing said opening, a shaft and connections between said shaft and the lever H, and between said shaft and the supporting wheel F, substantially as described. 3rd. In a corn planter, the combination of a frame, the plows E, carried by said frame at or near each end thereof, a supporting wheel F, on each side of the frame in line with the plows E, pins f, on the periphery thereof, a corn-hopper h, supported above and to one side of the wheel F, and opening j, in the bottom of said hopper, cut-off mechanism within said hopper and above said opening j, a shaft m, for operating the said mechanism, a wheel n, on the shaft m, depending fingers o, engaging with the pins f, a hopper G, a lever H, pivoted beneath the said hopper and carrying a shutter for normally closing said opening, a shaft i, and connections between said shaft and the lever H, and between said shaft and the supporting wheel F, and plows J, on each side of the machine for closing the furrows made by the plows E, substantially as described.

**No. 47,555. Golf Club. (Bâton pour jeu de golf.)**

William Tyndale Jennings, Toronto, Ontario, Canada, 27th November, 1894; 6 years.

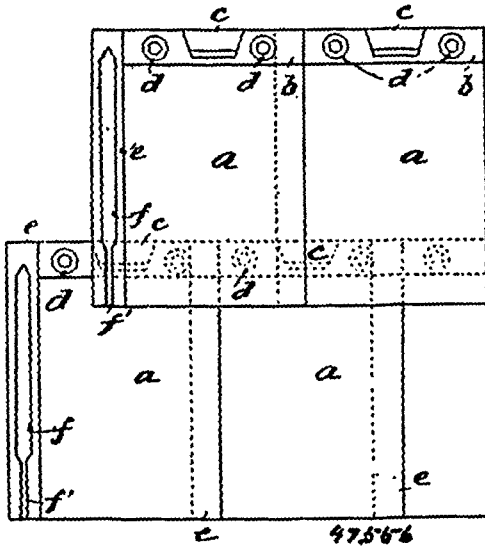
*Claim.*—1st. A golf club, in which the portion of the head which comes in contact with the ball is made resilient, substantially as and for the purpose specified. 2nd. A golf club, in which the material composing the head is so shaped so as to leave walls on each side of a central space, the wall designed to come in contact with the ball being sufficiently thin to be resilient, substantially as and for the purpose specified. 3rd. A golf club, in which the material composing the head is so shaped as to leave resilient walls on each side of a central space, substantially as and for the purpose specified. 4th. A golf club, in which the metal composing the head is so shaped as to leave resilient walls on each side of a central space, substantially as and for the purpose specified. 5th. A golf club, in

which the material composing the head is so shaped as to leave resilient walls on each side of a central space, in combination with means by which pressure on the front wall is elastically conveyed



to the rear wall, substantially as and for the purpose specified. 6th. A golf club, the head of which is formed of spring steel so shaped as to leave a central space with resilient walls on each side, in combination with a filling of vulcanized rubber or other elastic material in said space, substantially as and for the purpose specified. 7th. A golf club, the head of which is formed of spring steel so shaped as to leave a central space with resilient walls on each side, in combination with a filling of vulcanized rubber or other elastic material in said space, which is shaped as shown to retain the filling, substantially as and for the purpose specified.

**No. 47,556. Roofing Tile. (Tuile pour toiture.)**



Thomas Arundel Aldridge, Bridgewater, Somerset, England, 27th November, 1894; 6 years.

*Claim.*—An improved tile consisting of the foundation or body *a*, in combination with the ridges *b*, *c*, *g* on the front, and the ridges or projections *h*, *k* on the back, the recesses *e*, channels *f*, *n*, and nail holes *d*, as herein described and set forth.

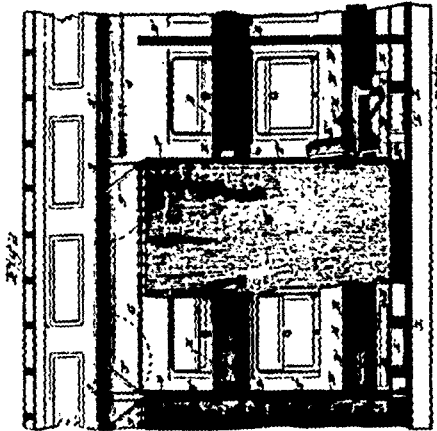
**No. 47,557. Sleeping and Parlor Car Combined.**

(*Char-lit et salon combinés.*)

Lanford Fitch Ruth, Connellsville, Pennsylvania, U.S.A., 27th November, 1894; 6 years.

*Claim.*—1st. A passenger car having pneumatic cushions combined with and permanently connected to the compressed air pipes of the car, and valves for directing the air to any one of said cushions, or cutting it off from the same, substantially as shown and described. 2nd. In a passenger car, the combination of pneumatic berth cushions made with accordion folds extensible in the plane of the cushion, and permanently connected compressed air pipes and valves to both inflate and extend the berth cushion by the power of the compressed air, substantially as and for the purpose described. 3rd. In a passenger car, the combination of pneumatic berth cushions constructed as described to fold, permanently connected compressed air pipes with valves, flexible strips attached to the ends of the berth cushions, transverse guides for holding the berth cushion strips, and coil springs for drawing back the berth cushion into a collapsed and folded condition, substantially as and for the purpose described. 4th. In a passenger car, the combination of pneumatic berth cushions constructed to fold as described, permanently connected compressed air pipes with valves, flexible strips attached to the ends of the berth cushions, coil springs for winding up the same and folding transverse berth supports having guides for the flexible strips, substantially as and for the purpose described. 5th. A combined parlor and sleep-

ing car, having swivelling chairs with air cushions and pipes entering said cushions through the swivelling connection and extensible pneumatic berths above the chairs, air pipes and valves connecting with the same, the said chair cushions and berth cushions being



arranged to be the one extended and inflated and the other collapsed and folded, and vice versa, as set forth. 6th. In a sleeping car the combination of an air mattress and an outer panel rail connected thereto at the bottom only, substantially as and for the purpose described.

**No. 47,558. Process of Manufacturing Lubricants.**

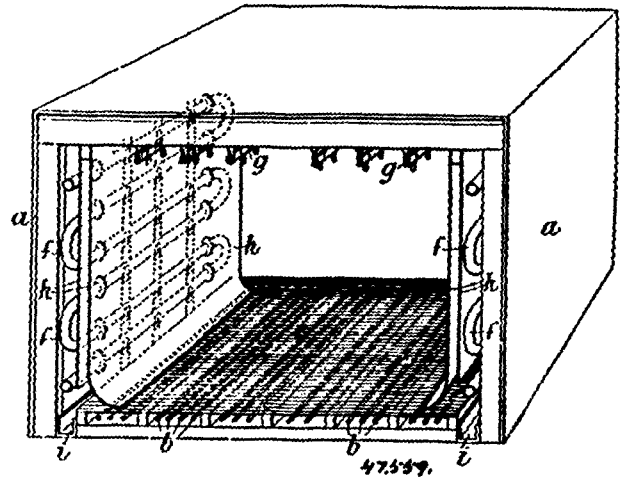
(*Procédé de fabrication de graisseur.*)

Ross Jones Hoffman, Binghamton, New York, U.S.A., 27th November, 1894; 6 years.

*Claim.*—The hereinbefore described process of manufacturing lubricating oil, the same consisting in first filtering and then reducing the oil, substantially as described.

**No. 47,559. Thawing Frozen Food.**

(*Appareil pour dégeler les aliments.*)



Edward Montague Nelson, London, England, 27th November, 1894; 6 years.

*Claim.*—1st. The improvements in thawing frozen food consisting in subjecting such food to a temperature above freezing point in the presence of cold surfaces upon which the moisture contained by the air is condensed, substantially as described. 2nd. In apparatus for thawing frozen food, the arrangement in a closed chamber of pipes through which a heating medium is circulated and of other pipes through which a cooling medium is circulated, substantially as described.

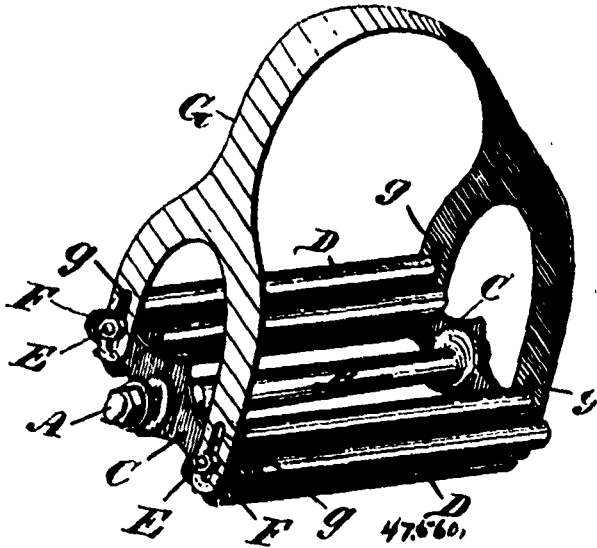
**No. 47,560. Bicycle Pedal Attachment.**

(*Attache de pédale de bicyclette.*)

Alexander Porteous and David James Moore, both of Toronto, Ontario, Canada, 28th November, 1894; 6 years.

*Claim.*—1st. A bicycle pedal attachment consisting of a receptacle to receive the toe of the shoe of the rider, whereby the pedal will be

lifted by the foot on the up-stroke, as set forth. 2nd. A bicycle pedal attachment, consisting of a bent or curved bar or strap (C



bifurcated at one or both ends, said end or ends slotted and adjustably secured to one or both ends of the pedal, as set forth.

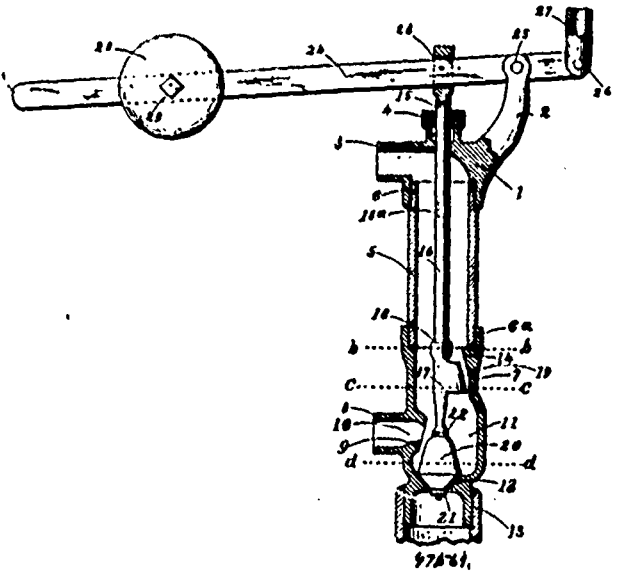
**No. 47,561. Anti-freezing Valve.**

(*Soupape anti-congélateur.*)

John Henry Casler and Charles Richmond Hastings, both of Buffalo, New York, U.S.A., 28th November, 1894; 6 years.

*Claim.*—1st. In an anti-freezing valve, the combination, with an upper and lower valve case, of a valve stem extending up through the top valve case and provided with a weighted bar extending through its top end and having one end pivoted to an arm on the upper case and its opposite end provided with a weight, a valve seat below the valve and an inclined side valve seat in the lower case, a substantially conical valve attached to the lower end of the valve stem located in the valve chamber, an inclined faced lug on the valve stem, and a correspondingly inclined faced projection on the

valve case, substantially as and for the purposes described. 2nd. In an anti-freezing valve, a valve stem, an inclined faced lug located on the valve stem, a valve at its lower end, and means at its upper end for operating it, in combination with a valve case having



a correspondingly inclined faced projection against which the inclined face of the lug on the valve stem operates, and an enlarged chamber for the valve to operate in, a lower valve seat adapted to receive the bottom of the valve and an inclined side valve seat adapted to receive the side of the valve, both in the lower valve case, substantially as described. 3rd. In an anti-freezing valve, the combination, with a valve holding case having an outlet opening near the top, of a valve stem extending up through the top of said case and provided at its lower end with a valve, a side valve seat in the lower end of the holding case connected with the waste nozzle adapted to be closed by the side of said valve while in its upward position, a valve seat below the valve connected with the inlet and adapted to be closed by the bottom of said valve, and means substantially as above described for forcing the side of said valve against the side valve-seat during its upward position as above set forth.

**CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO  
THE FOLLOWING PATENTS.**

3701. DAVID MURDOCH MACPHERSON, 3rd five years of Patent No. 20,463, from the 3rd day of November, 1894. Card Mill, 2nd November, 1894.
3702. WILLARD WALTER KING, 2nd five years of No. 32,720, from the 2nd day of November, 1894. Medicinal Compound, 2nd November, 1894.
3703. CHARLES FREDERICK HINE, 2nd five years of Patent No. 32,739, from the 4th day of November, 1894. Process of Waterproofing and Preserving Materials, 2nd November, 1894.
3704. NETTLEFOLDS LIMITED, 2nd five years of Patent No. 33,377, from the 9th day of January, 1895. Machinery for the manufacture of Metallic Articles having Screw Threads, 2nd November, 1894.
3705. THE CONSOLIDATED CAR HEATING COMPANY, 2nd five years of Patent No. 32,832, from the 4th day of November, 1894. Drain Valve, 2nd November, 1894.
3706. THEODORE FRIEDRICH, 3rd five years of Patent No. 20,570, from the 13th day of November, 1894. Combined Lock and Latch, 2nd November, 1894.
3707. KING HIRAM ELLIOTT AND WILLIAM FAREWELL MOULTON, 3rd five years of Patent No. 20,465, from the 3rd day of November, 1894. Vehicle Hub, 2nd November, 1894.
3708. GUSTAF DE LAVAL, 3rd five years of Patent No. 20,702, from the 9th day of December, 1894. Centrifugal Creamer, 6th November, 1894.
3709. MALCOLM NICHOLSON, 2nd five years of Patent No. 32,751, from the 8th day of November, 1894. Hot Water Furnace, 6th November, 1894.
3710. GEORGES HENRI BERAUD, 2nd five years of No. 32,867, from the 19th day of November, 1894. Method of and Apparatus for Utilizing Peat Fibre, 6th November, 1894.
3711. PETER HAMILTON, 2nd five years of Patent No. 32,771, from the 8th day of November, 1894. Knotting Mechanism for Harvester Binders, 7th November, 1894.
3712. WILLIAM C. WILLIAMS, 2nd five years of Patent No. 32,777, from the 9th day of November, 1894. Poultry Fattening Machine, 7th November, 1894.
3713. RODERICK HENRY LEWIS AND GEORGE ALEXANDER GREY, 2nd five years of Patent No. 32,822, from the 14th day of November, 1894. Slop Fall, 8th November, 1894.
3714. JAMES MATTHEWS JOHNSON, (administrator), 2nd five years of Patent No. 32,787, from the 9th day of November, 1894. Rail Joint, 8th November, 1894.
3715. JAMES SYDENHAM BAKER, 2nd five years of Patent No. 32,754, from the 8th day of November, 1894. Hane Fastener, 8th November, 1894.
3716. THE CANADA GENERAL ELECTRIC COMPANY, assignee of Charles Joseph Van Depole, 2nd five years of Patent No. 32,999. Adjustable Crossing and Switch for Overhead Conductors, 9th November, 1894.
3717. DUNCAN DOUGALL, 2nd five years of Patent No. 32,807, from the 13th day of November, 1894. Washing Machine, 9th November, 1894.
3718. JAMES BALLANTYNE HANNAY, 2nd five years of Patent No. 32,891, from the 21st day of November, 1894. Improved Process and Apparatus for Manufacture of Sulphate of Lead Pigment, November 10th, 1894.
3719. LUDWIG MOND, and DR. CARL LANGER, 2nd five years of Patent No. 22,870, from the 10th day of November, 1894. Gas Batteries, November 10th, 1894.
3720. JOHN HOWARD ROSS and EDWARD ELIJAH ATKINS, 2nd five years of No. 32,872, from the 19th November, 1894. Overhead Oil Lamp, November 10th, 1894.
3721. THE CASSEL GOLD EXTRACTING COMPANY (assignee), 2nd five years of Patent No. 33,976, from the 20th day of March, 1894. Improvements in Extracting Gold and Silver from Ores and other Compounds, November 10th, 1894.
3722. GEORGE EDWARD HASSON, 2nd five years of Patent No. 32,810, from the 13th day of November, 1894. Clothes Dryer, November 10th, 1894.
3723. JOHN THOMAS WILLIAMS, 2nd five years of Patent No. 32,839, from the 15th day of November, 1894. Electro-magnetic Despatch Apparatus or Portelectrics, November 13th, 1894.
3724. THE FOLDING SAWING MACHINE CO. (assignee) 3rd five years of Patent No. 20,618, from the 28th day of November, 1894. Drag Saw, November 14th, 1894.
3725. DOCITÉ LAMOTHE and ZACHARIE THÉRIEN, 2nd five years of Patent No. 32,821, from the 14th day of November, 1894. Hay Press, November 14th, 1894.
3726. JAMES HARRIS and CHARLES B. BROWN, 2nd five years of Patent No. 32,857, from the 16th day of November, 1894. Nut-Lock, November 16th, 1894.
3727. SAMUEL L. ALLEN, 2nd five years of Patent No. 32,845, from the 16th day of November, 1894. Sled. November 16th, 1894.
3728. EDWARD LESLIE, 2nd five years of No. 32,859, from the 18th November, 1894. Bearing for Car Axles, November 17th, 1894.
3729. JOHN CARRUTHERS, 3rd five years of Patent No. 20,643, from the 28th day of November, 1894. Device for Suspending Machinery and for Obtaining Rotating Centres, November 17th, 1894.
3730. OTIS BROTHERS and COMPANY (assignees), 3rd five years of Patent No. 21,001, from the 29th day of January, 1894. Safety Device for Elevators, November 17th, 1894.
3731. HENRY ROBERTS, 2nd five years of Patent No. 32,912 from the 21st day of November, 1894. Rod Mill, November 19th, 1894.
3732. HENRY ROBERTS, 2nd five years of No. 32,913, from the 21st day of November, 1894. Wire Rod Mill, November 19th, 1894.
3733. WILLIAM R. RONEY, 2nd five years of Patent No. 32,897, from the 21st day of November, 1894. Steam Boiler Furnace, November 19th, 1894.
3734. ALEXANDER MUIRHEAD, 2nd five years of Patent No. 33,029, from the 4th day of December, 1894. Electric Telegraph. November 20th, 1894.
3735. THE GOODYEAR SHOE MACHINERY COMPANY OF CANADA, 2nd five years of Patent No. 33,080, from the 7th day of December, 1894. Sewing Machine, November 21st, 1894.
3736. THE GOODYEAR SHOE MACHINERY COMPANY, OF CANADA, 2nd five years of Patent No. 33,081, from the 7th day of December, 1894. Sewing Machine, 21st November, 1894.

3737. EUPHEMIA AGNES McLENNAN, 2nd five years of Patent No. 33,009, from the 3rd day of December, 1894. Medicinal Compound, 23rd November, 1894.
3738. GEORGE ERTEL, 2nd five years of Patent No. 33,213, from the 21st day of December, 1894. Power Mechanism for Baling Presses, 24th November, 1894.
3739. THE HOLMES ELECTRIC PROTECTION COMPANY FOR CANADA, 3rd five years of Patent No. 20,663, from the 29th day of November, 1894. Electric Burglar Alarm, 29th November, 1894.
3740. GUILFORD M. STUART, 2nd five years of Patent No. 33,025, from the 4th day of December, 1894. Mitering Machine, 29th November, 1894.
3741. THE NORTH AMERICAN PYROGRANITE COMPANY, 2nd five years of Patent No. 33,207, from the 20th day of December, 1894. Artificial Granite, 29th November, 1894.
3742. CHARLES E. PATRIC and FRANK R. PACKHAM, 2nd five years of Patent No. 33,121, from the 12th day of December, 1894. Grain Drill, 29th November, 1894.
3743. CHARLES E. PATRIC, 2nd five years of Patent No. 33,154, from the 16th day of December, 1894. Grain Drill, 29th November, 1894.
3744. THE REVOLVING PURIFIER COMPANY OF AMERICA, 2nd five years of Patent No. 33,074, from the 7th day of December, 1894. Improvements in the Purification of Water, and Apparatus therefor, 20th November, 1894.
3745. EDWIN DUNBAR BANGS, 3rd five years of Patent No. 33,017, from the 4th day of December, 1894. Oil Cup for Lubricating, 20th November, 1894.
3746. THE CANADIAN GENERAL ELECTRIC COMPANY, 2nd five years of Patent No. 33,000, from the 3rd day of December, 1899. Overhead Contact and Switch, 20th November, 1894.
3747. THE CANADIAN GENERAL ELECTRIC COMPANY, 2nd five years of Patent No. 33,001, from the 3rd day of December, 1899. Switch for Suspended Electric Conductor, 30th November, 1894.
3748. THE CANADIAN GENERAL ELECTRIC COMPANY, 2nd five years of Patent No. 33,002, from the 3rd day of December, 1899. Double Suspended Conductor Systems for Electric Railways, 30th November, 1894.
3749. THE CANADIAN GENERAL ELECTRIC COMPANY, 2nd five years of Patent No. 33,003, from the 3rd day of December, 1899. Electric Motor, 30th November, 1894.
3750. THE CANADIAN GENERAL ELECTRIC COMPANY, 2nd five years of Patent No. 33,004, from the 3rd day of December, 1899. Electric Locomotive, 30th November, 1894.
3751. THE CANADIAN GENERAL ELECTRIC COMPANY, 2nd five years of Patent No. 33,005, from the 3rd day of December, 1899. Electric Dynamic Motors, 30th November, 1894.
3752. THE CANADIAN GENERAL ELECTRIC COMPANY, 2nd five years of Patent No. 33,006, from the 3rd day of December, 1899. Multiple Motor Electric Locomotive, 30th November, 1894.

## TRADE - MARKS

Registered during the month of November, 1894, at the Department of Agriculture—  
Copyright and Trade-Mark Branch.

5084. JOSEPH MIZAEI FORTIER, Montreal, Que. Cigars, 2nd November, 1894.
5085. LOUIS OVIDE GROTHÉ, Montreal, Que. Cigars, Cigarettes and Tobacco, 6th November, 1894.
5086. J. STEEDMAN & Co., 272 Walworth Road, Surrey, England. Soothing Powders for Children cutting their teeth, 7th November, 1894.
5087. A. G. BOOTH, W. J. RITCHIE and ALFRED ROGERS, Toronto, Ont., trading as the TORONTO MUTUAL EXCHANGE. A Business Device, 7th November, 1894.
5088. JOSIAH BRUCE PAYNE, Granby, Que. Cigars, 7th November, 1894.
5089. GEORGE A. LEWIS, Petrolia, Ont. A Method for the Cure of Stammering, 7th November, 1894.
5090. THOMAS ALEXANDER LYTLE and SAMUEL CRANE, Toronto, Ont., trading as T. A. LYTLE & CO. Vinegar, catsup pickles, sauces, jams, jellies, and analogous articles of merchandise, 8th November, 1894.
5091. CHARLES BEAUPRÉ, Montréal, Qué. Remèdes ou Médicaments, 10 novembre, 1894.
5092. WILLIAM JOHN CROTHERS, Kingston, Ont. Biscuits, 10th November, 1894.
5093. MRS. P. J. BEDARD (née Phoebe M. Frew), of Montreal, Que. A sign to distinguish a place of business in the City of Montreal, 12th November, 1894.
5094. D. RITCHIE & CO., Montreal, Que. General Trade-Mark, 12th November, 1894.
5095. WM. GIFFORD & CO., Chicago, Illinois, U.S.A. Proprietary Medicines, 13th November, 1894.
5096. LYMAN, SONS & CO., Montreal, Que. Improved Food for Infants, 14th November, 1894.
5097. LYMAN, SONS & CO., Montreal, Que. Digestive Malt Extract, 14th November, 1894.
5098. LYMAN, SONS & CO., Montreal, Que. Jelly of Cucumber and Roses, 14th November, 1894.
5099. VILLENEUVE & CO., Montreal, Que. Cigars, 14th November, 1894.
5100. HENRY MILES, Montreal, Que. Pills or Granules for Medical Purposes, 15th November, 1894.
5101. THE NORWEGIAN MILK CONDENSING COMPANY, LIMITED, Tøten, Christiania, Norway, Condensed Milk, 19th November, 1894.
5102. A. E. MALLETTE, Montreal, Que. Claret and other Wines, 19th November, 1894.
5103. GEORGE WOSTENHOLM & SON, LD., Washington Works, Sheffield England. Table and Pocket Cutlery, Razors, Scissors, &c., 21st November, 1894.
5104. GEORGE FARNWORTH, London, Ont. Yeast, 21st November, 1894.
5105. S. DAVIS & SONS, Montreal, Que. Cigars, Cigarettes and Tobaccos, 23rd November, 1894.
5106. WILLIAM A. MARSH, Quebec, Que. Boots & Shoes, 26th November, 1894.
5107. THE BOW PARK COMPANY LIMITED, Bow Park, Tp. Brant, Co. Brant, Ont. General Trade-Mark, 26th November, 1894.
5108. ISIDOR FRANKENBURG, of Greengate Rubber and Leather Works, Salford, Co. Lancaster, England. Articles of clothing, 27th November, 1894.
5109. WILLIAM HENRY ROGER, Ottawa, Ont. A. Tonic for nervous weakness, 28th November, 1894.



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5110. THE DIAMOND GLASS COMPANY, LIMITED, Montreal, Que. Lamp Chimneys, 28th November, 1894.
5111. WILLIAM PRYM, Stolberg, Rhenish Prussia. Small wares such as pins, hooks, eyes, of all kinds, coat hangers, thimbles and chains, 28th November, 1894.
5112. SAREPTO D. MORSE, Niagara Falls, Ont. An Ointment for colds, catarrh, sprains, burns, piles, kidneys, &c., 29th November, 1894.
113. DOMINION GLASS COMPANY, Montréal, Qué. Verreries, 30 novembre, 1894.
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# COPYRIGHTS

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7621. SWEET AND LOW. Words by Lord Tennyson. Music by T. Harold Mason. Whaley, Royce & Co., Toronto, Ont., 2nd November, 1894.
7622. THE CHINEE DOLLY. Song from "GO BANG." Words by Adrian Ross. Music by F. Osmund Carr. The Anglo-Canadian Music Publishers' Association, Ltd., London, England, 3rd November, 1894.
7623. DI, DI, DI. Song from "GO BANG." Words by Adrian Ross. Music by F. Osmund Carr. The Anglo-Canadian Music Publishers' Association, Ltd., London, England, 3rd November, 1894.
7624. COUNTRY DANCE. (in D.) Piano Solo, by Michael Watson. The Anglo-Canadian Music Publishers' Association, Ltd., London, England, 6th November, 1894.
7625. ONTARIO GAZETTEER AND DIRECTORY INCLUDING MONTREAL, 1895. The Might Directory Company of Toronto, Ltd., Toronto, Ont., 6th November, 1894.
7626. LONDON CITY AND MIDDLESEX COUNTY DIRECTORY, 1894. The Might Directory Company of Toronto, Ltd., Toronto, Ont., 6th November, 1894.
7627. TABLE SHOWING THE NUMBER OF DAYS FROM ANY DAY IN ANY MONTH TO THE SAME DAY IN ANY OTHER MONTH. William Wedd, Jr., Toronto, Ont., 6th November, 1894.
7628. SEARCH LIGHTS ON HEALTH or LIGHT ON DARK CORNERS. By Prof. B. G. Jefferis, M.D., Ph. D. and J. L. Nichols, A.M., John Adam Hertel, Toronto, Ont., 7th November, 1894.
7629. CANADA. A Portfolio of Original Photographic Views of Our Country. Volume I, No. 11. Art Publishing Co., Toronto, Ont., 8th November, 1894.
7630. BROUN'S CHART OF THE MUSIC OF SPEECH. A Complete and Original System of Voice Culture. Francis Josef Broun, Toronto, Ont., 9th November, 1894.
7631. THY WILL BE DONE. Sacred Solo. Music by Lawrence Sumerville. A. & S. Nordheimer, Toronto, Ont., 9th November, 1894.
7632. REPORTS OF CASES DECIDED IN THE VICE-ADMIRALTY COURT OF NEW BRUNSWICK FROM 1879 TO 1891, WITH A DIGEST OF ALL CANADIAN VICE-ADMIRALTY CASES. By Alfred A. Stockton, D. C. L., &c., St. John, N. B., 12th November, 1894.
7633. SKETCHES. For Piano, by J. Lewis Browne, Op. 12. Whaley, Royce & Co., Toronto, Ont., 12th November, 1894.
7634. THE OSGOODE. New Dance. By Prof. S. M. Early. Music by Chas. Bohner. Whaley, Royce & Co., Toronto, Ont., 16th November, 1894.
7635. MANUEL DU CONGRÉGANISTE DE LA SAINTE VIERGE. J. H. Perrault, Ptre., Montréal, Qué., 16 novembre, 1894.
7636. CANADA. A Portfolio of Original Photographic Views of Our Country, Volume I, Number 12. Art Publishing Co., Toronto, Ont., 17th November, 1894.
7637. SOME ELEMENTS OF THEISM AS RELATED TO OLD TESTAMENT CRITICISM AND TO THE THEODICY OF LUX MUNDI. Book being preliminarily published in separate articles in the "Church Guardian," Montreal. (Temporary Copyright) Edward Softley, R.D., London, Ont., 17th November, 1894.
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7639. LOVE AND ROSES. Song. Words and Music by Lillian Forrest. Whaley, Royce & Co., Toronto, Ont., 20th November, 1894.

7640. HUGHES' DECIMAL TABLES. Simple and Compound Interest, Exchange, Valuation of Stocks, Shares, Debentures, &c., William Romer Hughes, Toronto, Ont., 20th November, 1894.
7641. ALPHABET DU SYLLABAIRE GRADUÉ, par F. E. Juneau et N. Lacasse. J. A. Langlais & fils, Québec, Qué., 21 novembre, 1894.
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7644. THE HISTORY OF CANADA. Volume VII., (1779-1807) with Maps by Wm. Kingsford, LL.D., &c., Ottawa, Ont., 21st November, 1894.
7645. NOUVEAU COURS DE CALLIGRAPHIE CANADIENNE. Série comprenant neuf cahiers. J. A. Langlais & fils, Québec, Qué., 23 novembre, 1894.
7646. THE COMMON USE OF TOBACCO CONDEMNED BY PHYSICIANS, EXPERIENCE, COMMON SENSE AND THE BIBLE, by Rev. Albert Sims, Uxbridge, Ont., 23rd November, 1894.
7647. METHODIST HYMN AND TUNE BOOK. Compiled and Published by authority of the General Conference of the Methodist Church. Wm. Briggs (Book Steward of the Methodist Book and Publishing House) Toronto, Ont., 23rd November, 1894.
7648. THE CANADIAN ALMANAC AND MISCELLANEOUS DIRECTORY FOR THE YEAR 1895. The Copp, Clark Co., Ltd., Toronto, Ont., 23rd November, 1894.
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7650. TORONTO ENGINE WORKS, CATALOGUE NUMBER 2, *re* Fire Hydrants, Valves, Water Towers, Tanks, &c. John Perkins, Toronto, Ont., 27th November, 1894.
7651. MCGILL. College Song, by C. W. Colby, Montreal, Que., 27th November, 1894.
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7654. HISTORY OF THE NORTH-WEST. Volume I., by Alexander Begg, Winnipeg, Man., 30th November, 1894.
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Indiana Novelty Manufacturing Company. Wheel	47,535	Robertson, David, et al. Mode of driving saws			47,491
Irving, George, et al. Water-wheel	47,536	Robinson, James H. Crate for eggs			47,533
Jackson, James H. Wagon	47,492	Rohlf, Henry John, et al. Water-wheel			47,536
Jennings, William Tyndale. Golf club	47,557	Rowley, Salmon B. Fastener for vessels			47,435
Jones, N. Theodore. Horse-shoe	47,371	Rump, Robert H. W. Window or casement			47,418
Jones, William H. L., et al. Process of softening vegetable fibres	47,420	Ruth, Linford Fitch. Railway car			47,557
Kaul, Carl F. Mould for bricks	47,448	Ruthven, John. Gas producing, regulating and advertising cabinet			47,400
Kavanagh, Charles E., et al. Band-clasp	47,429	Saltsman, Aaron Jason, et al. Egg beater			47,360
Kelly, Edward John, et al. Magazine firearm	47,398	Sanguinette, David. Neck-tie			47,469
Kennedy, Bass. Apparatus for affixing stamps	47,355	Sargent, Herbert Howland. Game			47,453
Kiefel, Frederick Wendell, et al. Grate	47,385	Savage, G. L. Letter box			47,496
Kimball, Charles Milton. Street sweeping machine	47,368	Scanlan, Edward, et al. Grate			47,385
Kinney, Henry S., et al. Grinding machine	47,494	Scheiblich, Edward. Machine for scattering manure			47,474
Klock, Adam I. Method of manufacturing mirrors	47,433	Schmidt, Wilhelm. Valve motion for steam engines			47,489
Knapp, Frederick Henry, et al. Attachment for can-labeling machines	47,479	Schmidt, Wilhelm. Steam engine			47,458
Knighton, Samuel, et al. Band-clasp	47,429	Schmiedeburg, Oswald. Art of obtaining iron derivatives of albumen		47,465	47,466
Lalonde, Maurice Alfred, et al. Knife or scissors sharpening device	47,516	Scholler, Emil. Calculating machine			47,445
Lane, Henry P. Machine for making paper buckets	47,352	Sharp, John. Gas meter			47,544
Larimer, John J. Plough for ditching	47,487	Shepherd, Crutcher Duty. Horse-shoe			47,543
Larner, Mathias. Tension equalizer for spinning machines	47,513	Sigel, Hermann, et al. Damper for stove pipes			47,409
Larson, Martin L. Heating stove	47,393	Smith, Stansbury J. Gate			47,473
Laverdière, Téléphore. Wine tightener	47,367	Southwick, Albert Nelson, et al. Method of and apparatus for checking sales			47,381
Laying, William. Shaft-tip for carriages	47,542	Spyer, Joseph. Method of and means for making dental suction plates			47,380
Leake, Jas. F., et al. Holder and cutter for roll-paper	47,428	Stebbins, Henry W. Digestion for paper pulp		47,527	47,528
Leverett, Henry A., et al. Tanning process	47,507	Stehle, Martin. Joint for stove pipes			47,425
Lindsay, William Henry. Wearing surface for floors, stair-cases and the like	47,403	Stamp and Label Affixing Machine Company. Apparatus for sticking stamps			47,355
Linter, William Thomas. Speed indicator	47,486	Stewart, David, et al. Autographic register			47,495
Locke, Joseph, et al. Plate-glass	47,482	St. Thomas Manufacturing Company. Bed Spring			47,356
Lomier, John Hewetson. Apron for textile machinery	47,444	Swayze, Caleb. Coil wire duster			47,419
Macomber, Clarence R. Fire extinguisher	47,451	Temple, William. Foot gear for horses			47,395
Malcolm, William B. Closet	47,446	Thomas Manufacturing Company. Machine for making pin tickets			47,497
Martin, Burrell S. Fish-hook	47,476	Thomas, William. Grapnel			47,515
Matteson, Job. Hoof-trimmer	47,534	Thompson, Robert R. Machine for stuffing mattresses			47,411
Mateson, Mrs. Job., et al. Hoof-trimmer	47,534	Thorn, John O., et al. Bath			47,503
Mays, Jonathan Aldous. Separator for molten metals, etc.	47,412	Tobey, Henry Archibald. Heater			47,547
McCormell, Brian D. Sewer well	47,406	Trott, Warren E. Tobacco pipe			47,477
McElroy, James Finney. Rotary engine	47,399	Underwood, Herbert George. Method of and apparatus for casting		47,442	47,443
McElroy, Patrick Joseph. Atomizer	47,514	Vandette, Silas John. Wrench			47,410
McKenzie, Peter. Frame for window sashes and blinds	47,382	Vanes, John. Steam boiler			47,509
McKone, William and Samuel. Seeder	47,502	Vantine, Emeline W., et al. Machine for making wire fencing		47,504	47,505
Meadows, George Bryan. Screen	47,517	Velic, John. Drainer for cooking purposes			47,498
Merriam, Iram Z. Bridle bit	47,375	Van Harty, Henry. Tackle block			47,552
Merrill, William. Wood-cutting machine	47,501	Wallace, Alexander E. Crate for eggs			47,533
Meude, Alex. P., et al. Process of purifying water	47,461	Walton, Frederick. Floor cloth			47,494
Millen, George Henry. Pail for viscous fluid	47,518	Ware, Walter Freeman. Syringe			47,357
Miller, Lewis Cass. Sash fastener	47,459	Warner, Jasper Pemberton. Metal tie and nut-lock			47,551
Mills, George H. Support for wagon tongues	47,421	Warr, George Clark, et al. Process of softening vegetable fibre			47,420
Mining and Dredging Power Company. Dredge	47,460	Weed, Alfred. File cutting machine			47,524
Moore, David James, et al. Pedal for bicycles	47,560	Weisel, Peter M. Corn planter			47,554
Moore, Thomas. Machine for making pin tickets	47,497	Wellhoener, Daniel E. Seal lock			47,449
Myers, Millard Filmon. Potato planter	47,545	White, John Robert, et al. Suspension device			47,433
Myers, Philip Andrew. Spraying apparatus	47,390	Wiles, Thomas S., et al. Tape for laundry machinery			47,369
Neal, Edward Byron. Washing machine	47,353	Wilkinson, Charles H. Shuttle guard and catch for looms			47,423
Nehomas, Max. Litter	47,478	Wood, Julia Rogers. Lasting and sole laying machine			47,553
Nelson, Edward M. Method of thawing frozen food	47,559	Woodward, Alouzo B. Machine for making wire fencing			47,504
Norris, Frederick C., et al. Block and brick for building purposes	47,434	Wright, Isaac David. Oar			47,522
North, Charles Henry. Packing for piston rods	47,384	Wurtzbach, Frederick, et al. Holder for paper rolls			47,467
Norwick Folded Paper Carpet Lining Co., et al. Machine for folding paper	47,539	Zipp, John, et al. Grate			47,385
Obermann, August W. Cooking utensil	47,457				
O'Brien, Walter Augustine. Garment	47,470				
Oefinger, Jacob. Knife handle	47,456				
Oliver, John Pascoe. Machine for making roads	47,416				
Ozias, Orange Oscar. Scale	47,521				
Patterson, William Henry. Washing machine	47,363				
Peaslee, Emmett J. Cutter-bar for mowing machines	47,373				
Poglaw, Daniel. Treadle	47,454				