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# The Canadian Patent Office

## RECORD





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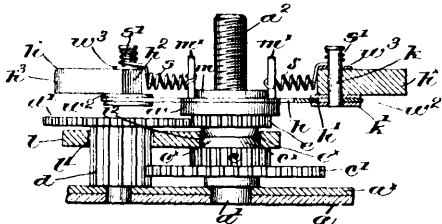
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### INVENTIONS PATENTED.

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

#### No. 56,850. Bicycle Bell. (*Cloche de bicycles.*)



56850

Norman Taylor Mills, East Hampton, Connecticut, U.S.A., 3rd August, 1897; 6 years. (Filed 22nd June, 1896.)

*Claim.*—1st. In a bell of the class described, a central post, a hammer-carrier rotatable thereon and having an attached pinion, a locking plate to at times directly engage and hold the pinion, a vibratable actuator having a segmental gear, and gearing intermediate it and the pinion, the actuator on returning to normal position engaging and moving the locking plate into operative position, substantially as described. 2nd. In a bell of the class described, a central post, a hammer-carrier rotatable thereon and having an attached pinion provided with a bevelled hub, a locking device to at times engage and hold the bevelled hub, a vibratable actuator, and gearing between it and the pinion to rotate latter, the actuator on its return to normal position engaging and moving the locking device into operative position, substantially as described. 3rd. The base, an upright post erected thereon, a hammer-carrier rotatable thereon and having an attached pinion, a vibratable actuator having a segmental gear, a pinion in engagement therewith and loose on the post, a locking device to engage and lock said pinions when the actuator is at rest, and connecting gearing between said pinions, substantially as described. 4th. The base, an upright post thereon, a hammer-carrier rotatable thereon and having an attached pinion provided with a downwardly-extended hub, a vibratable actuator having a segmental gear, a pinion in mesh therewith loose on the post and having an upwardly-extended hub, a movable locking plate to at times engage the hubs of and restrain the pinions from rotation, and gearing intermediate the pinions, said locking plate being moved into operative position by the actuator when in normal position, substantially as described. 5th. In a bell of the class

described, a rotatable hammer-carrier, actuating mechanism to rotate it, a locking plate to normally engage and prevent rattling of said mechanism, and means to release the plate when the bell is rung, substantially as described. 6th. A rotatable hammer-carrier having an upturned lug, and a hole at one end, a headed stud extended loosely through said hole and the hammer, a substantially triangular hammer having a convex base, and a spring secured to the lug and interposed between it and the hammer to bear upon the convex base of and normally press the hammer and stud outwardly and maintain the hammer apex extended radially, substantially as described. 7th. A rotatable hammer-carrier, a pinion having its hub extended therethrough, a retaining ring on the hub above the carrier and provided with an upturned lug, a hammer pivotally mounted near the end of the hammer-carrier, and a hammer spring connected at one end to said lug and interposed between it and the hammer, substantially as described. 8th. A rotatable hammer-carrier, a hammer having a convex base and outwardly converging sides mounted on said carrier and having a radial and a partially rotative movement thereon, and a controlling spring held at its inner end on the hammer-carrier, and bearing upon but unconnected with the convex inner side of the hammer to retain it yielding in normal position, substantially as described. 9th. A rotatable hammer-carrier, a triangular hammer having a convex base mounted to move radially and rotatively thereon, a headed stud extended loosely through the hammer-carrier and through the hammer near its convex base, and a controlling spring for the hammer adapted to bear upon the convex base substantially at its centre to return it to normal position after rotative movement upon the stud, substantially as described. 10th. In a bell of the class described, a base having an integral loop struck on its inner side, a rotatable hammer-carrier and its hammer, an actuator manually moved in one direction, a spring, one end of which is attached thereto to move it in the opposite direction, the other end of said spring being attached to the loop of the base, and gearing intermediate the hammer-carrier and actuator, substantially as described. 11th. A rotatable triangular hammer, a headed stud extended through said hole and the hammer, and a spring to normally hold the hammer upon the hammer-carrier and also to maintain the hammer pressed outwardly, substantially as described. 12th. In a bicycle bell, a base, an adjusting screw rotatably mounted therein, an attaching clip inturned at its inner ends and perforated, and an internally threaded block secured to the clip within one of its inturned ends to engage the screw, whereby when the clip is bent to cause its ends to overlap, engagement and rotation of the adjusting screw will draw the loop of the clip into the base, substantially as described.

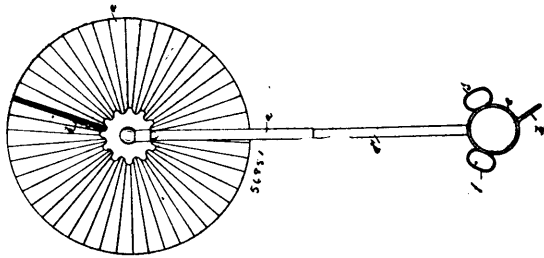
#### No. 56,851. Sun Shade for Bicycles.

(*Garde-soleil pour bicycles.*)

Paula von Meyern, Halberstadt, Prussia, Germany, 3rd August, 1897; 6 years. (Filed 22nd March, 1897.)

*Claim.*—1st. A sunshade for cyclists in which a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of a rod *d*, *d*<sup>1</sup>, advantageously adjustable in a longitudinal direction, constructed and arranged substantially as hereinbefore described. 2nd. In a sunshade for cyclists in which a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of a rod *d*, *d*<sup>1</sup>, advantageously adjustable in a longitudinal direction, the binding together of the two stiff rods *a*<sup>1</sup>, *a*<sup>2</sup>, of the fan by means of cords *n* connected with the ring or sleeve *p* near the lower end of the rod parts *d* or *d*<sup>1</sup>, or to a lever *u* or cord *n*<sup>1</sup> by the lowering of either of which the fan can be completely or partly closed, constructed and arranged substantially as hereinbefore described. 3rd. In a sunshade for cyclists in which

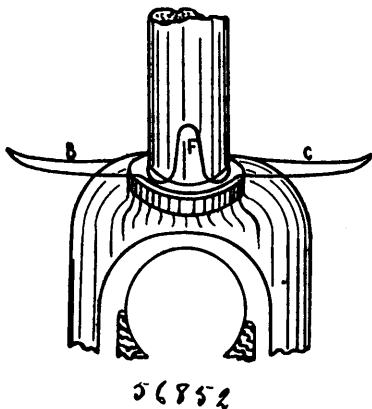
a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of the rod *d*, *d*<sup>1</sup>, advantageously



adjustable in a longitudinal direction, the arrangement of a device known as a lazytongs connected with the rods *a*<sup>1</sup>, *a*<sup>1</sup>, for opening and closing the fan, constructed and arranged substantially as hereinbefore described. 4th. In a sunshade for cyclists in which a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of a rod *d*, *d*<sup>1</sup>, advantageously adjustable in a longitudinal direction, the insertion of a joint *v* between the fan *a* and holding device *e* to enable the adjusting of the fan in any position, constructed and arranged substantially as hereinbefore described. 5th. In a sunshade for cyclists in which a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of a rod *d*, *d*<sup>1</sup>, advantageously adjustable in a longitudinal direction, a supporting rod *d*, *d*<sup>1</sup>, which by the help of one or more rings *e* or of a sleeve or shell is carried by one of the handles or the handle-bar and by means of further rings *f*, *g*, *h*, held fast in the desired position by the thumb or one or more fingers, constructed and arranged substantially as hereinbefore described. 6th. A sunshade for cyclists in which a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of a rod *d*, *d*<sup>1</sup>, advantageously adjustable in a longitudinal direction, characterized by the fact that the fan *a* is removably connected with the supporting rod *d*, *d*<sup>1</sup>, constructed and arranged substantially as hereinbefore described. 7th. In a sunshade for cyclists in which a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of a rod *d*, *d*<sup>1</sup>, advantageously adjustable in a longitudinal direction, the arrangement of two supporting rosette discs between which the fan is removably fastened, constructed and arranged substantially as hereinbefore described. 8th. In a sunshade for cyclists in which a closable fan *a* is carried by the handle or handle-bar of the bicycle or other velocipede by means of a rod *d*, *d*<sup>1</sup>, advantageously adjustable in a longitudinal direction, the arrangement of the two parts *d*, *d*<sup>1</sup>, capable of relative rotary movement for the purpose of enabling the adjustment of the fan in the same vertical plane, constructed and arranged substantially as hereinbefore described.

**No. 56,852. Feet Rest for Bicycles.**

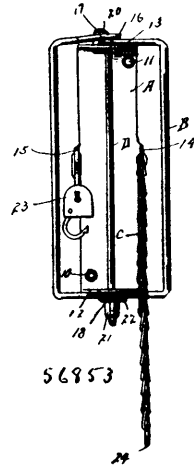
(*Appni-pieds pour bicycles.*)



Charles Noe Daly, Guelph, Ontario, Canada, 3rd August, 1897; 6 years. (Filed 5th May, 1897.)

*Claim.*—The feet rest for bicycles, consisting of two oppositely projecting arms of wire, or cast, or sheet metal, to be secured to the front or guide post of bicycles for the purpose of resting the feet thereon when the machine is in motion, as described and illustrated in the drawings.

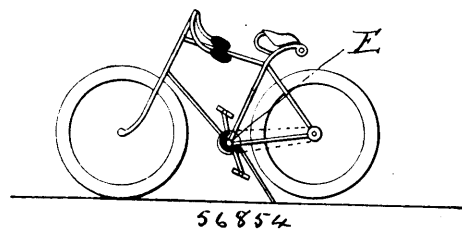
**No. 56,853. Bicycle Support. (*Support de bicycles.*)**



Charles Holmann Thurston, Worcester, Mass., U.S.A., 3rd August, 1897; 6 years. (Filed 3rd June, 1897.)

*Claim.*—1st. The combination of a base-piece or bracket, a socket-piece, a rod or bolt for pivotally connecting said parts, and a clamping-nut threaded onto the rod for securing the parts in their adjusted position. 2nd. The combination of a sheet-metal base-piece or bracket, having lugs or projections at opposite ends, a wire socket-piece, having loops or eyes, a clamping rod or bolt engaging said loops or eyes and pivotally connecting the socket-piece with the base-plate, and a clamping nut for securing the parts in their adjusted position, substantially as described. 3rd. The combination of a sheet-metal base-plate, having lugs or projections at its opposite ends, a wire socket-piece having loops or eyes, a clamping bolt or rod engaging said loops or eyes and pivotally connecting the socket-piece with the base-plate, said clamping rod having a hooked or bent portion at its end to prevent the same from turning, and a butterfly clamping nut threaded onto the clamping rod for holding the parts in their adjusted position, substantially as described. 4th. The combination of a bicycle-support, comprising a base-plate, A, a wire socket-piece or frame, B, a clamping bolt for pivotally connecting said parts and securing them in their adjusted position, and a locking-chain and padlock for securing the bicycle wheel in the socket-piece, substantially as described.

**No. 56,854. Bicycle Support. (*Support de bicycles.*)**



Henry Daniel Herdt, Montréal, Québec, Canada, 3 août 1897; 6 ans. (Déposé le 9 juin 1897.)

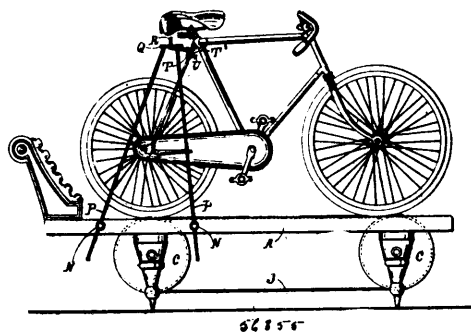
*Résumé.*—Un support de bicyclette constitué par une tige métallique ployée de manière à présenter la forme d'un Y renversé, le dit support ayant sa partie supérieure courbée en B, et recouverte de caoutchouc ou autre substance analogue; le tout tel que décrit et pour les fins indiquées.

**No. 56,855. Apparatus for the Teaching and Practice of Velocipede Riding. (*Appareil pour apprendre à pédaler.*)**

George Waters Tarver, Streatham, Surrey, England, 3rd August, 1897; 6 years. (Filed 10th July, 1897.)

*Claim.*—1st. In an apparatus for teaching or practicing the riding of a velocipede, the combination, with an endless band passing over rollers rotatably mounted in a frame-work and forming a moving artificial course or road operated by the driving wheel of a captive velocipede, of means for firmly but freely holding the said velocipede at or near its saddle, substantially as set forth. 2nd. In an apparatus for teaching or practicing the riding of a velocipede, means, located between a clamping or securing device for holding the

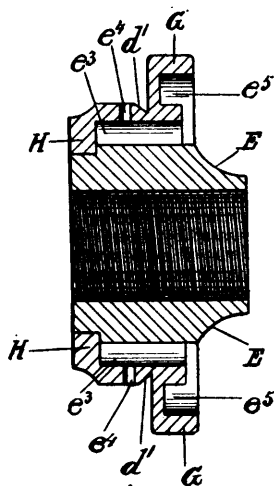
velocipede at or near its saddle and supports rising from the frame-work, for forming a universal joint or pivotal connection substan-



56855

tially as and for the purpose set forth. 3rd. The construction, arrangement and combination of parts constituting my improved apparatus for teaching or practicing the riding of a velocipede, substantially as set forth and as illustrated in the accompanying drawings.

**No. 56,856. Bicycle Hub. (Moyeu de bicycles.)**

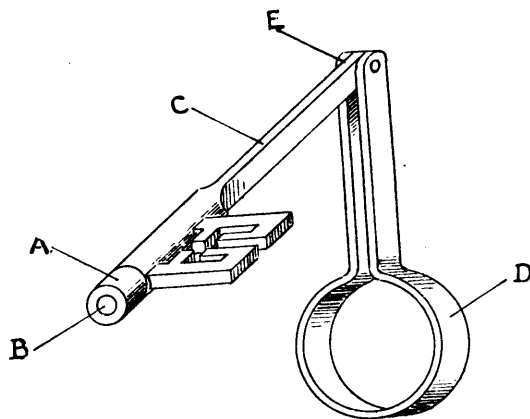


56856

Jas. Anderson Coulter and John Morrow, both of Ingersoll, Ontario, Canada, 3rd August, 1897; 6 years. (Filed 14th July, 1897.)

*Claim.*—1st. A band or collar, J, in combination with a dust cap, dust cap flange or cone, the former being so fitted to the periphery of the latter, that its accidental adjustment thereon is avoided and completely prevented, while its adjustment by an operator is freely permitted, and means for preventing the lateral disengagement of said band therefrom, substantially as and for the purpose set forth. 2nd. A dust cap flange, a dust cap or cone, as the case may be, in which a groove or recess, d<sup>1</sup>, is formed, in combination with a band or collar, J, formed with an inclined or flanged edge, c<sup>1</sup>, substantially as and for the purpose set forth. 3rd. A band or collar, J, in which the holes, b<sup>1</sup>, are formed, and which is provided with the flanged or inclined edges, c<sup>1</sup>, and, n, in combination with a dust cap, dust cap flange or cone as the case may be, in which the groove, d<sup>1</sup>, oil holes, e<sup>4</sup>, and oil passage, e<sup>3</sup>, are formed, substantially as and for the purpose set forth. 4th. A dust cap or cone formed with a recess or socket, e<sup>5</sup>, in combination with the body or shell, A, the end of the latter being fitted to said recess, e<sup>5</sup>, substantially as and for the purpose set forth. 5th. A cone, E, and a dust cap, G, formed of separate and independent pieces, and of a hardened and toughened material respectively, and means for securing them together, substantially as and for the purpose set forth. 6th. A cone, E, and a dust cap, G, formed of separate and independent pieces, and of a hardened and toughened material respectively, and sweated together, substantially as and for the purpose set forth.

**No. 56,857. Door Key. (Clef de portes.)**

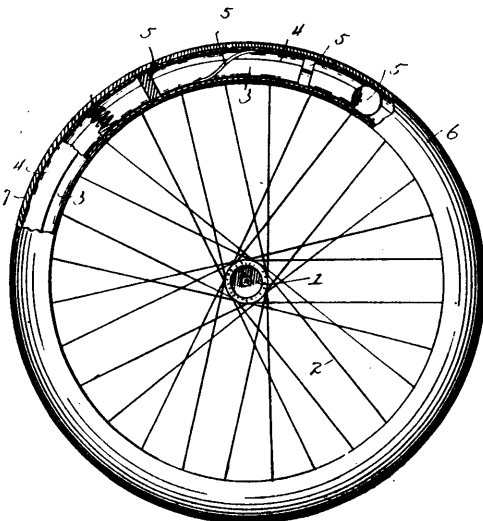


56857

William George Glenn, Owen Sound, Ontario, Canada, 3rd August, 1897; 6 years. (Filed 20th July, 1897.)

*Claim.*—1st. The combination of the swivel A with the pin B, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the swivel A, the pin B and the joint E, substantially as and for the purpose hereinbefore set forth.

**No. 56,858. Vehicle Wheel. (Roue de voitures.)**



56858

Er. Gabriel Corbett, Columbus, Ohio, U.S.A., 3rd August, 1897; 6 years. (Filed 14th July, 1897.)

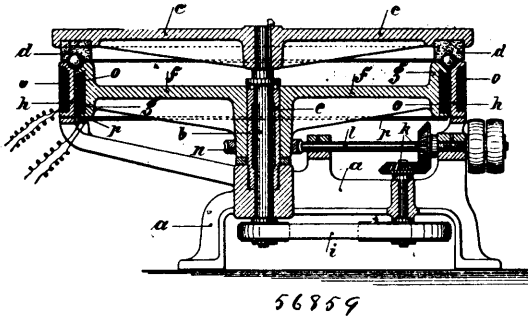
*Claim.*—In a vehicle wheel, a hollow tire composed of similarly formed rims inversely disposed and having their side portions parallel and telescopically related, the side flanges of the outer rim embracing the side flanges of the inner rim, and the inner and outer portions being convex on their outer surface, the inner rim having direct connection with the outer ends of the spokes, elastic or spring cushions interposed between the rims, and a casing or jacket of india-rubber enveloping the rims and having its tread surface thickened and gradually diminishing in thickness toward the sides of the tire, and separable on a line corresponding with the medial line of the inner rim, substantially as and for the purpose set forth.

**No. 56,859. Machine for Cutting or Grinding Metal Balls. (Machine pour couper et polir les boules métalliques.)**

Friedrich Fischer, Schweinfurt-on-Main, Germany, 3rd August, 1897; 6 years. (Filed 24th March, 1897.)

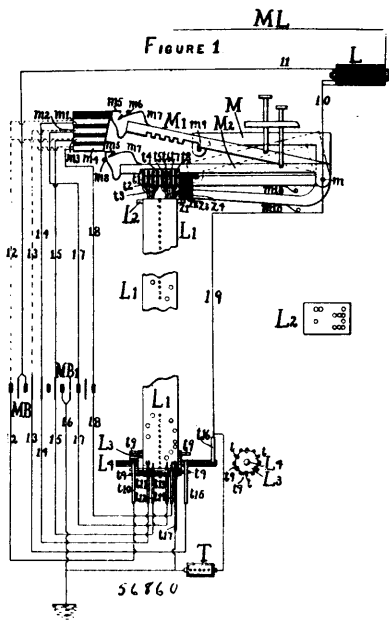
*Claim.*—In a machine for cutting or grinding metal balls of the kind wherein a divided or undivided guiding disc and a cutting or

grinding ring or disc are employed, forming the guiding groove of a metal capable of being magnetized and magnetizing it in a suitable



manner permanently or intermittently to such a degree that it ensures the balls in the guiding groove revolving at a constant or nearly constant velocity during their passage round the guiding groove, substantially as and for the purpose hereinbefore described.

**No. 56,860. Electric Telegraph. (Télégraphe électrique.)**



William Henry Cooley, Brockport, New York, U.S.A., 3rd August, 1897; 6 years. (Filed 23rd December, 1895.)

*Claim.*—1st. In combination, in a telegraphic circuit, the following elements, namely, at any one station in such circuit a distributor and means for sending to line, alternating at the successive contacts made by such distributor, direct and inverse induced impulses and means for balancing upon the home relay at such station the effect of such outgoing induced impulses. 2nd. In combination, in a telegraphic circuit, the following elements, namely, at any one station in such circuit, a home relay, a distributor, and means for sending to line, alternating at the successive contacts made thereby, direct and inverse induced impulses or currents, and means for maintaining such home relay neutral to such outgoing impulses or currents. 3rd. In combination with a system of simultaneous dual transmission between any two stations, and means for sending to line alternating direct and inverse impulses at points of time synchronous with the contacts made by a distributor at one of such stations, a synchronizing distributor at the other one of such stations having its contacts each in a separate electric circuit or branch circuit, together with a receiving instrument, each of such circuits or branch circuits also containing therein the contacts of a main line relay common to two or more of such circuits or branch circuits and contained in such above mentioned system of simultaneous dual transmission. 4th. A transmitting distributor and source of direct and inverse induced impulses or currents, and a home relay having a balancing coil thereon in circuit with a source of electric energy. 5th. A receiving relay in a main line and a receiving instrument at the same station, and a distributor between such relay and such receiving instrument. 6th. In combination with means for charging a main line at regular intervals of time, a

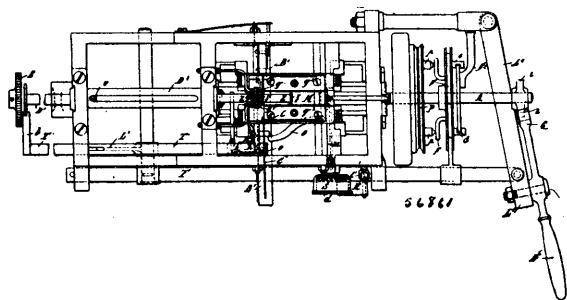
distributor at a receiving station on such line, making contacts synchronously with the charges on such main line, such distributor located between a relay in the main line and any suitable receiving instrument or instruments. 7th. In combination with means for charging a main line at regular intervals of time and a distributor capable of imparting or supplying impulses to any suitable receiving instrument or instruments at points of time synchronous with the charges on the main line, a relay in such main line at any station and a receiving instrument or instruments at the same station, such distributor located between such relay and such receiving instrument or instruments. 8th. In combination with means for charging a main line at regular intervals of time, a receiving relay located in such main line, the contacts of such relay placed in circuit with a source of electric energy, together with a distributor making contacts synchronously with the charges on the main line, and a special local relay or receiving magnet for each contact made by such distributor, each of such local relays or receiving magnets and corresponding contact in such distributor located in a separate branch of such above named source of electric energy. 9th. Two stations connected by a main line, at one station a distributor and means for charging the main line at intervals of time synchronously with the contacts made by the distributor at that station, at the other station a relay permanently located in the main line and having its contacts, by the operation of a distributor also at such other station, placed successively in each of several local circuits or branch circuits, each of such local circuits or branch circuits also containing a receiving instrument. 10th. A series of receiving or relay magnets and means for energizing the same in different combinations thereof taken a certain fixed number, less than the whole thereof, at a time, all of such receiving or relay magnets in each combination being energized together in common during some portion of the period of time set off for the energizing of each combination, in combination with a source of electric energy having a series of branch circuits, and in each branch circuit a registering or printing magnet and such a certain fixed number of relay contacts as shall correspond to and be actuated by the energizing of some one of such above named combinations of such receiving or relay magnets. 11th. A series of receiving or relay magnets and means for energizing the same in different combinations thereof taken a certain fixed number less than the whole thereof, at a time, all of such receiving or relay magnets in each combination being energized together in common during some portion of the period of time set off for the energizing of each combination, in combination with a series of printing or registering magnets, each one located in circuit with a source of electric energy together with such a certain fixed number of relay contacts as shall correspond to and be actuated by the energizing of some one of such above named combinations of such receiving or relay magnets. 12th. A series of receiving or relay magnets and means for energizing the same in different combinations thereof taken a certain fixed number, less than the whole thereof, at a time, in combination with a series of printing or registering magnets, each one located in circuit with a source of electric energy together with such a certain fixed number of relay contacts as shall correspond to and be actuated by the energizing of some one of such above named combinations of such receiving or relay magnets. 13th. In combination with means for sending to line alternating induced impulses, means for sending to line or not, as desired, at each such induced impulse, a battery impulse synchronizing and harmonizing therewith. 14th. In combination with means for sending to line alternating induced impulses, means for sending to line or not as desired battery impulses of different strength at each such induced impulse and synchronizing and harmonizing therewith. 15th. A series of electric circuits or branch circuits, each containing a pair of relay contacts, means for causing a first impulse, traversing such first circuit, to open the contacts in such first circuit and close the contact in such second circuit, and means for causing the second impulse thus transversing such second circuit to open the contacts in such second circuit and close the contacts in such third circuit, and so on, the impulse thus traversing the last circuit in the series, causing the contacts in such last circuit to open and the contacts in such first circuit to close, whereby in each succession of impulses, corresponding impulses are caused to traverse the same circuit or branch circuit. 16th. A series of electric circuits or branch circuits, each containing a pair of relay contacts, means for causing a first impulse, traversing such first circuit, at its cessation, to open the contacts in such first circuit and close the contacts in such second circuit, and means for causing the second impulse thus transversing such second circuit, at its cessation, to open the contacts in such second circuit and close the contacts in such third circuit, and so on, the impulse thus traversing the last circuit in the series, causing, at its cessation, the contacts in such last circuit to open and the contacts in such first circuits to close, whereby in each succession of impulses, corresponding impulses are caused to traverse the same circuit or branch circuit. 17th. Three relay armatures having their actuating coils arranged to be synchronously traversed by energizing impulses, the first armature having working contacts on each side thereof and responding to impulses of one kind or character, the second armature also having working contacts on each side thereof and responding to those same impulses and also to impulses of a different kind or character not affecting such first named armature, the third armature responding to impulses actuating either of the other armatures and also to impulses affecting neither of the other armatures, such second named armature con-

nected through one of its working contacts in series with such first named armature and through its other working contact in series with such third named armature. 18th. As a means for selecting and energizing any desired one of a number of coils, two or more branch relays, each having its armature connected to a source of electric energy and arranged to engage two or more contacts, each contact connected to one terminal of a different one of such coils, all the similarly connected coils to such branch relays having their other ends connected to a common return wire, there being a return wire for each different coil and contact to a branch relay, and means for energizing any desired one of such branch relays and for connecting to such source of electric energy any desired one of such return wires. 19th. As a means for selecting and energizing any desired one of a number of coils, two or more branch relays each having its armature connected to a source of electric energy and arranged to engage or make contact with two or more contacts, each contact connected to one terminal of a different one of such coils, all the similarly connected coils to such branch relays having their outer ends connected to a common return wire, there being a return wire for each different coil and contact to a branch relay, and means for energizing any desired one of such branch relays requiring at least one-half or more of the transmitted impulses necessary to select any desired one of such coils, and means for connecting to such source of electric energy any desired one of such return wires. 20th. As a means for selecting and operating any desired one of a series of levers, a series of bars supporting and carrying such levers, a series of selecting washers or plates opposed to such bars, and having notches and projections so formed thereon that the movements of such washers or plates in each different combination thereof shall allow one and only one of such lever-carrying bars to assume an operative position, causing its lever to assume an operative position such as to be engaged by a moving body arranged to communicate motion to such levers, in combination with means for actuating such selecting washers or plates in such different combinations thereof. 21st. In combination with any suitable rod or equivalent device, as  $Q^3$ , and means for reciprocating the same, a series of lever-carrying bars, as  $N^4$ , carrying levers, as  $N^7$ , a series of selecting washers or plates, as  $N^3$ , opposed to such bars, means for operating such washers or plates  $N^3$  in such different combinations thereof by the movement of such rod, as  $Q^3$ , as shall allow one of such bars and the lever carried thereby to assume an operative position, and means for actuating such lever by such rod  $Q^3$ . 22nd. In combination with any suitable rod or equivalent device, as  $Q^3$ , and means for reciprocating the same, a series of lever-carrying bars, as  $N^3$ , carrying levers, as  $N^7$ , a series of selecting washers or plates, as  $N^3$ , opposed to such bars, means for operating such washers or plates  $N^3$  in such different combinations thereof by the movement of such rod  $Q^3$  in one direction as shall allow one of such bars and the lever carried thereby to assume an operative position, and means for actuating such lever by the return of such rod  $Q^3$  to its normal position, and also for returning to their normal positions, after such lever has been so engaged, such lever-carrying bars and such selecting washers or plates. 23rd. At a central station a series of switch levers, each connected to main line and arranged to engage a single contact, each contact connected with a different series of wires from different local subscribers' circuits, each one of such local subscribers' circuits having its other end connected to a different contact opposed to a different switch lever, in a second series thereof, located also at each central station, and through which a ground or return connection may be made, as shown and described, common to all such local subscribers' circuits. 24th. As means for selecting any desired one of a series of circuits, a series of contacts each opposed to a different lever connected to one terminal of a different group of such circuits, each of the other terminals of such circuits in each of such different groups connected to a different contact opposed to a different lever in a second series thereof, and means for actuating such levers in the different combinations thereof forming terminals to the different circuits to be selected. 25th. A series of type or printing bar actuating coils each located in a separate electric circuit or branch circuit, each closed through a spring contact normally operating, when once closed, to retain such circuit closed until the completion of the operative stroke of that type bar whose actuating coil is located in the circuit closed thereby, means for opening each of said spring contacts at the completion of the operative stroke of that type bar, having its actuating coil located in the circuit closed there-through, individual devices for holding each of such spring contacts open, when once opened at the completion of the operative stroke of a type bar, each of such devices controlled by a separate coil, operating, when energized, to release such spring contacts, and means for selecting and energizing any desired one of such last named coils actuating the devices controlling such spring contacts. 26th. A type bar having a revoluble type wheel in the printing end thereof, a lever swinging on or concentric with the axis of such type bar, a connecting rod between such lever and such type wheel. 27th. A type bar having a revoluble type wheel in the printing end thereof, a lever swinging on or concentric with the axis of such type bar, a connecting rod between such lever and such type wheel, and means for swinging such lever so as to bring into printing position any desired one of such type on such type wheel. 28th. In combination with a series of type bars, having two or more type thereon, a shifting mechanism for each type bar, controlling the angular position of the type on such bar, means for communi-

cating motion from a common shifting device to each of such shifting mechanisms, a catch engaging such common shifting device and means for releasing such catch at the completion of the printing stroke of any one of such type bars. 29th. In a telegraphic system, at a transmitting station, a transmitting distributor and means for sending to the line induced impulses alternating at the successive contacts thereof, and for superimposing thereon or not, as desired, transmitting battery impulses synchronizing and harmonizing therewith, at a receiving station, receiving instruments responding only to such battery impulses and a relay responding to such induced impulses and controlling a local circuit containing an alternating current electric motor, such motor containing an armature section and pole piece opposed thereto for each section or contact of such transmitting distributor, at such receiving station, also a receiving distributor similar to the transmitting distributor and actuated from the shaft to such motor, and through the different sections, of which successively such main line impulses are all caused to pass and thereby through the different ones as desired of such receiving instruments connected to different sections of such receiving distributor. 30th. In a telegraphic system, an alternating current dynamo, having its armature coils in the main line and having an armature section and pole piece opposed thereto for each section of a transmitting distributor located directly on, or actuated from the shaft of such dynamo, and means for sending to line or not, as desired, through the successive contacts of such distributor, battery impulses harmonizing and synchronizing with such induced impulses from such alternating current dynamo. 31st. In a telegraphic system, as a means for maintaining synchronism, at a transmitting station, a distributor and means for sending to line impulses alternating at the successive contacts thereof, and at a receiving station an alternating current electric motor, having an armature section and coil for such contact of such distributor, and having its energizing circuit controlled by a relay on the main line responding to such alternating impulses, such motor imparting its motion to a receiving distributor or other apparatus to be synchronized. 32nd. As a means for selecting any desired one of a number of coils a series of branch relays, each controlling two or more branch circuits containing a different one of such coils, all the similarly connected coils to such branch relays connected to a common return wire, there being a different return wire for each coil to such branch relays, such branch relays connected to a source of electric energy, means for selecting and energizing such branch relays and for connecting to such source of electric energy any desired one of such return wires. 33rd. As a means for selecting and energizing any desired one of a number of coils or instruments, a series of circuits or branch circuits, each containing a different one of such coils, means for connecting such circuits or branch circuits, at each end thereof, to a source of electric energy in different groups of two or more such that at each one of such different groupings one of such branch circuits only shall complete the circuit of such source of electric energy. 34th. At a central station, a series of subscribers' circuits, each terminal of each of such circuits entering such station, means for connecting such subscribers' circuits in different groups, at one end, to a common ground or return connection, and at the other end to a wire leading to a station outside of such central station, such that between such wire and such common ground or return connection an unbroken path shall lie through one only of such subscribers' circuits. 35th. In combination with means for sending to line alternating impulses, means for causing any one of such impulses to be an induced impulse or a weak or strong battery impulse as desired. 36th. A series of electric circuits or branch circuits, each containing one or more pair of relay contacts actuated by devices under the control of the successive impulses traversing such circuits or branch circuits, such that any impulse traversing any one of such circuits or branch circuits shall cause at its cessation the opening of that circuit or branch circuit just traversed and the closing of the next circuit in the series. 37th. A series of electric circuits or branch circuits, each containing one or more pair of relay contacts actuated by devices under the control of the successive main line impulses, causing correspondingly successive relayed impulses to traverse such circuits or branch circuits, such that any one of such main line impulses shall cause at its cessation the opening of that circuit or branch circuit just traversed by a relay impulse and the closing of the next circuit or branch circuit in the series. 38th. In a telegraphic system, at any one station therein, two receiving instruments or magnets, each located in a separate electric circuit or branch circuit, and in series with a separate pair of main line relay contacts, one pair of such relay contacts controlled by mechanism actuated by weak currents, the other pair of such relay contacts controlled by mechanism actuated only by stronger impulses, but not actuated by impulse sufficient to actuate the mechanism controlling such one pair of relay contacts, and a current distributor located between such main line relays and such receiving instruments or magnets, such distributor making connection with corresponding ones of a series of receiving instruments synchronously with corresponding main line impulses. 39th. In a telegraphic system, at any station therein, two receiving instruments or magnets, each located in a separate electric circuit or branch circuit and in series with a separate pair of main line relay contacts, one pair of such relay contacts controlled by mechanism actuated only by positive impulses or currents, the other pair of relay contacts controlled by mechanism actuated only by negative impulses or currents, a distributor located between such relay contacts and such receiving

instruments or magnets such distributor making connection with corresponding ones of a series of receiving instruments synchronously with corresponding main line impulses. 40th. In a telegraphic system, at any station therein, four receiving instruments or magnets, each located in a separate electric circuit or branch circuit and in series with a separate pair of main line relay contacts, two of such pair of relay contacts controlled by mechanism actuated only by positive impulses or currents and the other two of such pair of relay contacts controlled by mechanism actuated only by negative impulses or currents, two pair of such relay contacts controlled by mechanism actuated by feeble or weak impulses or currents insufficient to actuate the mechanism controlling another two pair of such relay contacts, such last named two pair of such relay contacts controlled by mechanism actuated only by stronger impulses and currents, and a distributor located between such relay contacts and such receiving instruments or magnets, such distributor making connection with corresponding ones of a series of receiving instruments synchronously with corresponding main line impulses.

**No. 56,861. Cigar Making Machine.**  
(*Machine à faire les cigares.*)



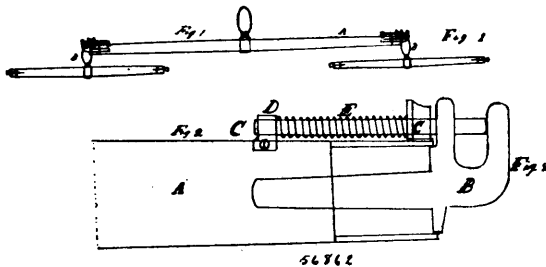
Denis Cousinne, Horres, Belgium, 3rd August, 1897; 6 years.  
(Filed 9th March, 1896.)

**Claim.**—1st. In a cigar making machine, a rotatable holder adapted to support a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, and mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, substantially as and for the purpose specified. 2nd. In a cigar making machine, a rotatable holder consisting of a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, and mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, substantially as and for the purpose specified. 3rd. In a cigar making machine, a rotatable, longitudinally-movable holder provided with a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, and mechanism to move the holder while the mould is closed to cause the needle to enter the filler, substantially as and for the purpose specified. 4th. In a cigar making machine, a rotatable, longitudinally-movable holder provided with a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, mechanism to move the holder while the mould is closed to cause the needle to enter the filler, a series of rollers journaled on the frame so as to be in contact with the filler and in position to give an initial impulse in the winding of the wrapper, substantially as and for the purpose specified. 5th. In a cigar making machine, a rotatable longitudinally-movable holder provided with a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, mechanism to move the holder while the mould is closed to cause the needle to enter the filler, a series of rollers journaled on the frame so as to be in contact with the filler and in position to give an initial impulse in the winding of the wrapper, and a paste feeding device adapted to supply paste to the point of the mould at the proper time, substantially as and for the purpose specified. 6th. In a cigar making machine, a rotatable longitudinally movable holder provided with a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, mechanism for com-

pressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, mechanism to move the holder while the mould is closed to cause the needle to enter the filler, a series of rollers journaled on the frame so as to be in contact with the filler and in position to give an initial impulse in the winding of the wrapper, a suitably supported reciprocating knife, and mechanism for moving the said knife into position to turn the point of the cigar when the mould is closed, substantially as and for the purpose specified. 7th. In a cigar making machine, a rotatable longitudinally-movable holder provided with a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, mechanism to move the holder while the mould is closed to cause the needle to enter the filler, a series of rollers journaled on the frame so as to be in contact with the filler and in position to give an initial impulse in the winding of the wrapper, a paste feeding device adapted to supply paste to the point of the mould at the proper time, and a suitably supported reciprocating knife, and mechanism for moving the said knife to cut off the end of the cigar as soon as the needle is withdrawn, substantially as and for the purpose specified. 8th. In a cigar making machine, a rotatable longitudinally movable holder provided with a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, mechanism to move the holder while the mould is closed to cause the needle to enter the filler, a series of rollers journaled on the frame so as to be in contact with the filler and in position to give an initial impulse in the winding of the wrapper, a suitably supported reciprocating knife, and mechanism for moving the said knife into position to turn the point of the cigar when the mould is closed, and mechanism for opening the mould and holding it open after the cigar is completed, substantially as and for the purpose specified. 9th. In a cigar making machine, a rotatable longitudinally-movable holder provided with a needle adapted to pass axially into a filler, in combination with a divided compressible mould surrounding the cigar in course of formation, mechanism adapted to periodically rotate the said holder, mechanism for compressing the mould during a period of non-rotation and opening it during a period of rotation of the holder, mechanism to move the holder while the mould is closed to cause the needle to enter the filler, a series of rollers journaled on the frame so as to be in contact with the filler and in position to give an initial impulse in the winding of the wrapper, a paste feeding device adapted to supply paste to the point of the mould at the proper time, a suitably supported reciprocating knife, and mechanism for moving the said knife to cut off the end of the cigar as soon as the needle is withdrawn, and an ejector located below the mould, and mechanism for throwing up the ejector after the cigar is finished and the mould finally opened, substantially as and for the purpose specified. 10th. A mould and mould operating mechanism for cigar making machines, comprising the following elements, the levers *L* pivoted on the frame of the machine, the lower cheeks or shells *q* supported thereby, the upper cheeks or shells *q'*, the springs *r* so connecting the upper and lower shells as to normally retain the upper shells in a raised position, the springs *R* connected to the frame and bearing upon the levers *L* so as to normally press the levers together, the rods *l'* connected to the shells *q'*, the lever *I* pivoted to the frame of the machine and to the rods *l'*, and the shaft *A* bearing the cams *J, j*, adapted respectively to operate upon the levers *L*, and the lever *I*, substantially as and for the purpose specified. 11th. A mould and mould operating mechanism for cigar making machines, comprising the following elements, the levers *L* pivoted on the frame of the machine, the lower cheeks or shells *q* supported thereby, the upper cheeks or shells *q'*, the springs *r* so connecting the upper and lower shells as to normally retain the upper shells in a raised position, the springs *R* connected to the frame and bearing upon the levers *L* so as to normally press the levers together, the rods *l'* connected to the shells *q'*, the lever *I* pivoted to the frame of the machine and to the rods *l'*, the shaft *A* bearing the cams *J, j*, adapted respectively to operate upon the levers *L* and the lever *I*, cams *i, i'* upon the shaft, and a lever *N* suitably pivoted and provided with jams to engage the cams *i, i'*, substantially as and for the purpose specified. 12th. A mould and mould operating mechanism for cigar making machines, comprising the following elements, the levers *L* pivoted on the frame of the machine, the lower cheeks or shells *q*, supported thereby, the upper cheeks or shells *q'*, the springs *r*, so connecting the upper and lower shells as to normally retain the upper shells in a raised position, the springs *R* connected to the frame and bearing upon the levers *L* so as to normally press the levers together, the rods *l'* connected to the shells *q'*, the lever *I* pivoted to the frame of the machine and to the rods *l'*, the shaft *A* bearing the cams *J, j*, adapted respectively to operate upon the levers *L* and the levers *I*, cams *i, i'* upon the shaft, and a lever *N* suitably pivoted and provided with jams to engage the cams *i, i'*, fixed and loose clutch members *P* and *F* upon the shaft, notched projections *S* upon the fixed member of the clutch, a stationary notched disc *F'* supported by the frame, a sliding bar *T* having a finger engaging a groove in the fixed clutch member *F*, and the lever *L*<sup>2</sup> pivoted to a fixed support

and to the said bar, the lever N being pivoted thereon in a frame at right angles to the aforesaid pivots, substantially as and for the purpose specified. 13th. In a cigar making machine, a holder and operating mechanism therefor, comprising the following elements, the needle D fast on the shaft D<sup>1</sup>, the slotted socket D<sup>2</sup> suitably journaled, the set screw v, the star wheel E fast upon the shaft D<sup>1</sup>, the shaft A having cams I thereon, the sliding bar T, pivoted lever L<sup>1</sup>, tappet t thereon adapted to engage a slot in the bar T, auxiliary bar T<sup>1</sup> adapted to be engaged by the lever L<sup>1</sup>, the arm b upon the said auxiliary bar, and a disc upon the shaft D<sup>1</sup>, with which the said arm is adapted to engage, substantially as and for the purpose specified. 14th. In a cigar making machine, a point cutter, comprising the vertically movable knife C, and the shaft A, cams I, the lower end of the knife being suitably shaped to be reciprocated by the cams i, substantially as and for the purpose specified. 15th. In a cigar making machine, a knife for trimming the rear end of cigar, comprising the knife C<sup>1</sup> fast on an horizontally movable bar B<sup>1</sup>, a projection s on the said bar, a lever O pivoted on the frame of the machine and having its free end resting against the back of the projection S, the auxiliary bar T<sup>1</sup>, a finger H hinged with a knuckle joint upon the said bar and normally held erect by a spring, substantially as and for the purpose specified.

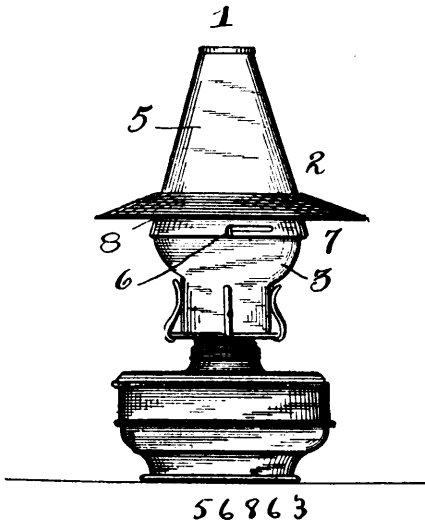
**No. 56,862. Coupling Pole Yoke. (Timon d'attelage.)**



John W. Soley, De Bert River, Nova Scotia, Canada, 3rd August, 1897; 6 years. (Filed 30th January, 1897.)

*Claim.*—The combination of the hook B, slide C C, button E, and keeper D, substantially as and for the purpose hereinbefore set forth.

**No. 56,863. Lamp Chimney. (Verre de lampes.)**



John Milton Gibbs, Statesville, North Carolina, U.S.A., 3rd August, 1897; 6 years. (Filed 8th February, 1897.)

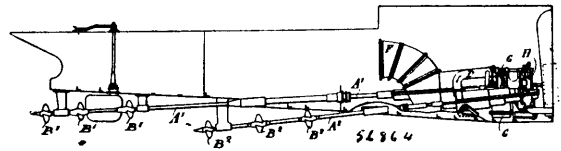
*Claim.*—A lamp chimney made up of a plurality of sections, the base being constructed of glass and having laterally extending pins thereon, and the upper section constructed of metal having slots therein, and grooves leading from said slits into which said pins are adapted to fit, substantially as and for the purpose described.

**No. 56,864. Steam Turbine. (Turbine à vapeur.)**

The Honourable Charles Algernon Parsons, Newcastle-on-Tyne, Northumberland, England, 3rd August, 1897; 6 years. (Filed 27th January, 1897.)

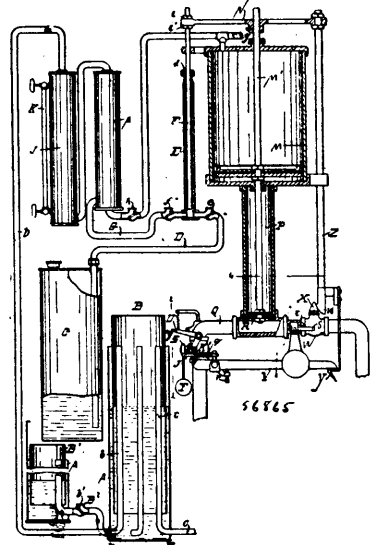
*Claim.*—In combination with the vessel, a plurality of steam turbines, a propeller connected to each turbine whereby the required

blade area is obtained and a steam supply, the said turbines being connected thereto, in series whereby the steam passes through the



turbines in series and the whole expansive force is utilized and distributed to the several propellers, substantially as described.

**No. 56,865. Gas Apparatus. (Appareil à gaz.)**



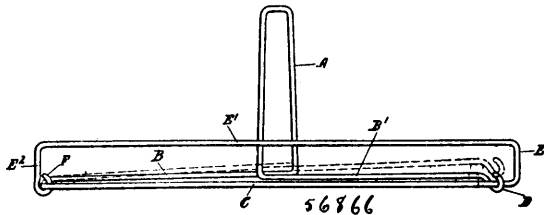
George F. Ransom, sr., Milwaukee, and Lucas D. Dorschell, Chilton, both in Wisconsin, U.S.A., 3rd August, 1897; 6 years. (Filed 8th February, 1897.)

*Claim.*—1st. A gas apparatus, comprising a tank of gasoline or analogous liquid, a pump for this liquid, and at least one generator in circuit with the tank, an air pump that discharges into the generator and co-operates with the pump aforesaid, a reciprocative gas holder in connection with said generator, a motor for the pump, suitable mechanism operated by the gas holder to start the holder, and other suitable mechanism operated by the air pump to stop said motor. 2nd. A gas apparatus, comprising a tank for gasoline or analogous liquid, a pump for this liquid, and a plurality of generators in circuit with the tank, an air pump that discharges into the generator system and co-operates with this pump aforesaid, a reciprocative gas holder in connection with said generator system, a motor for the pumps, suitable mechanism operated by the gas holder to start the motor, and other suitable mechanism operated by the air pump to stop said motor. 3rd. A gas apparatus, comprising a tank for gasoline or analogous liquid, a liquid pump, and at least one generator in circuit with the tank, an air pump that discharges into the generator and co-operates with the liquid pump, a reciprocative gas holder in connection with said generator, a conveyer for fluid under pressure exertive against the air pump piston, and suitable mechanism operated by said gas holder and air pump to effect intermittent flow and waste of said fluid. 4th. A gas apparatus, comprising a tank for gasoline or analogous liquid, a liquid pump and a plurality of generators in circuit with each other and the tank, an air pump that discharges into the generator system and co-operates with the pump aforesaid, a reciprocative gas holder in connection with said generator system, a conveyer for fluid under pressure exertive against the air pump piston, and suitable mechanism operated by said gas holder and air pump to effect intermittent flow and waste of said liquid. 5th. A gas apparatus, comprising a tank for gasoline or analogous liquid, a pump for this liquid in connection with the tank, an air pump having its piston rod connected to the plunger of the pump aforesaid, at least one generator connected to both pumps, a gas holder connected to the generator, a conveyer for fluid under pressure, a cylinder that depends from the air pump and is coupled to said conveyer, a piston in the cylinder on a continuation of the air pump piston rod, supply, waste and stop-cocks fitted in the aforesaid conveyer, and controlling mechanism for the stop-cocks co-operative with the gas holder and air pump. 6th. A gas apparatus, comprising a tank for gasoline or analogous liquid, a pump for this liquid in connec-



tion with the tank, an air pump having its piston rod connected to the plunger of the pump aforesaid, a plurality of generators connected with each other and both pumps, a gas holder in connection with the generator furthest from the tank, a conveyer for fluid under pressure, a cylinder that depends from the air pump and is coupled to said conveyer, a piston in the cylinder on a continuation of the air pump piston rod, supply and waste stop-cocks fitted to the aforesaid conveyer, and controlling mechanism for the stop-cocks co-operative with the gas holder and air pump. 7th. A gas apparatus, comprising a gas holder, a generator, an air pump connected therewith and having a depending cylinder that couples with a conveyer for fluid under pressure, a piston in the cylinder on a continuation of the air pump piston rod, supply and waste stop-cocks fitted to said conveyer, and automatic controlling mechanism for the stop-cocks co-operative with the gas holder and air pump. 8th. A gas apparatus, comprising a gas holder, a generator, an air pump connected therewith and having a depending cylinder that couples with a conveyer for fluid under pressure, a piston in the cylinder on a continuation of the air pump piston rod, supply and waste stop-cocks fitted to said conveyer, and automatic controlling mechanism for the stop-cocks co-operative with the gas holder and air pump. 9th. A gas apparatus, comprising a gas holder, a generator, an air pump connected therewith and having a depending cylinder that couples with a conveyer for fluid under pressure, a piston in the cylinder on a continuation of the air-pump piston rod, supply, waste and stop-cocks fitted to said conveyer, a tilt lever, an automatic latch carried by the lever to come under the handle of the supply stop-cock, suitable means for actuating said handle upon release of the latch, a latch retractor flexibly connected to the gas holder, a lever trip-catch and a waste stop-cock closer reciprocal with said air pump piston rod, and a waste stop-cock opener carried by said lever. 10th. A gas apparatus, comprising a gas holder, an air pump having a depending cylinder that couples with a conveyer for fluid under pressure, a piston in the cylinder on a continuation of the air pump piston rod, supply and waste stop-cocks fitted to said conveyer, a tilt lever, an automatic latch carried by the lever to come under the handle of the supply stop-cock, suitable means for actuating said handle upon release of the latch, a latch retractor operative in conjunction with the gas holder, a lever trip-catch and a waste stop-cock closer reciprocal with said air pump piston rod, and a finger that, being carried by said lever, clears the waste stop-cock handle coincident with a lift of the trip-catch, but exerts pressure on said handle upon disengagement of said trip-catch from the aforesaid lever. 11th. A gas apparatus, comprising a tank for gasoline or analogous liquid, a pump for this liquid, and at least one generator in circuit with the tank, an air pump that discharges into the generator and co-operates with the pump aforesaid, a reciprocative gas holder in connection with said generator, a motor for the pump, suitable mechanism operated to start the motor, and other suitable mechanism operated by the air pump to stop said motor, together with a gas reserve cylinder connected with the gas holder and arranged to discharge gas thereto when the pressure in the latter is nearly exhausted, substantially as described.

**No. 56,866. Trousers Holder and Stretcher.**  
(*Porte et tendeur de pantalons.*)



Arthur Hickling, Delhi, Ontario, Canada, 3rd August, 1897; 6 years. (Filed 22nd February, 1897.)

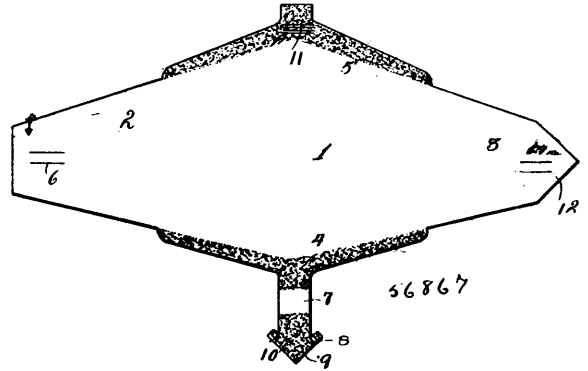
*Claim.*—1st. In a pant holder and stretcher, a loop member in combination with a clamping member for engaging the bottoms of the pants, substantially as and for the purpose set forth. 2nd. In a pant holder and stretcher, a loop A, in combination with the clamping members B, B, and C, the hook D, formed on the clamp C, the stiffening members E, E, and E, and a loop F, clasping the clamping members B and C, at their junction, substantially as and for the purpose set forth.

**No. 56,867. Safety Envelope.** (*Enveloppe de sûreté.*)

Susan Emily Watson, Newport, Rhode Island, U.S.A., 3rd August, 1897; 6 years. (Filed 8th March, 1897.)

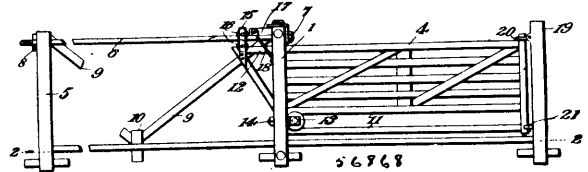
*Claim.*—1st. In an envelope consisting of a body portion having side flaps 2 and 3 provided with cuts or slits, a flap 4 to fold upon said

flaps 2 and 3 and provided with a tongue to pass through said cuts or slits, and a cut or slit outer or sealing flap 5 to receive the tongue



of said flap 4. 2nd. An envelope consisting of a body portion having the flaps 2 and 3 provided with cuts or slits, said flap 3 being provided with an extension 12, a flap 4 having a tongue to pass through said cuts or slits on flap 3, and an outer or sealing flap having a plurality of slits to receive said tongue. 3rd. In an envelope, the flaps 2, 3 and 4 pasted together, cuts or slits in flaps 2 and 3, a tongue upon said flap 4 passing through said cuts or slits and provided with a tongue having an anchor, said anchor being gummed on its inner face, and an outer or sealing flap 5 having a plurality of cuts or slits to receive said tongue, said cuts or slits of the flap 5 being gummed on their inner faces.

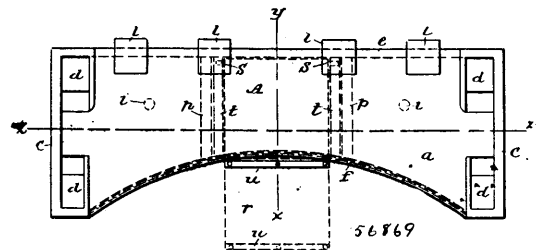
**No. 56,868. Gate.** (*Barrière.*)



John Anderson, Woodstock, Ontario, Canada, 3rd August, 1897; 6 years. (Filed 8th March, 1897.)

*Claim.*—The combination with a supporting base, brace post and intermediate braces, of a metallic guide rod, a gate provided with a tail piece upon its rear extremity, and with rollers above and below the guide track, a supporting roller upon one side of the supporting post, and an overhanging piece projecting from the opposite side of the post immediately above the guide rod constituting a stop for the tail piece, and means for regulating the resistance of the guide rod, substantially as specified.

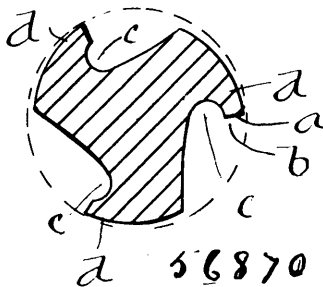
**No. 56,869. Resonating Support for Pianos.**  
(*Support d'appareil résonnant pour pianos.*)



Hermann Richard Schreiber, London, England, 3rd August, 1897; 6 years. (Filed 22nd March, 1897.)

*Claim.*—1st. The combination of the separate sound-box or resonator for pianos, consisting of end frames, c, c, having recesses, d, d, to receive the castors of the piano, back, e, and front, f, upper sounding board, a, lower sounding board, g, and sound posts, i, with the opening, k, between the back, h, of the piano and the upper sounding board, a, and the wedges, l, fitting and driven into said opening, substantially as described and illustrated. 2nd. In combination with the separate sound-box, the movable foot board, r, substantially as described and illustrated.

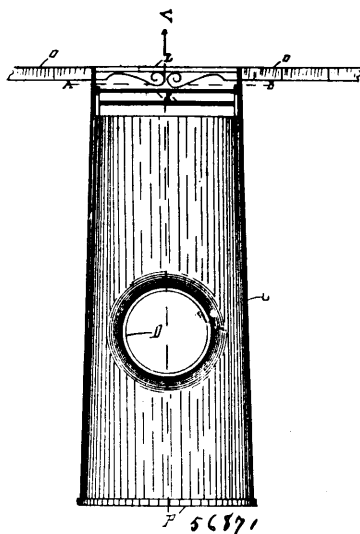
No. 56,870. Tap. (Filière.)



Martin Steudner, Gera Debschwitz, Reuss, Germany, 3rd August, 1897; 6 years. (Filed 23rd March, 1897.)

Claim.—Taps, dies and chasing tools, having a groove behind the cutting edges, substantially as described and for the purpose set forth.

No. 56,871. Cesspool. (Puisards pour égoutter les rues.)

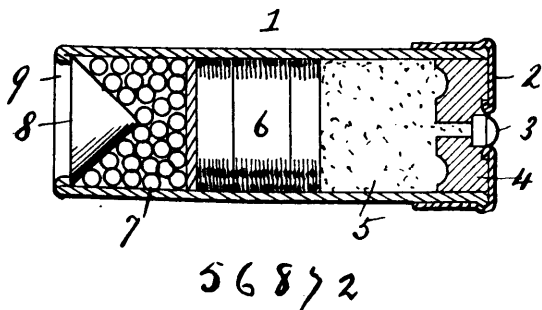


Louis Benoit, Montréal, Québec, Canada, 3 août 1897; 6 ans. (Déposé le 17 février 1897.)

Résumé.—La combinaison du puisard, E, qui est communiqué au levier, F, de la boule, E, de la barre, J, qui retient la boule au levier, F, H et I, tel que ci-dessus décrit pour les fins indiquées.

No. 56,872. Shot-distributing Wad. (Appareil à distribution de bourres.)

(Appareil à distribution de bourres.)

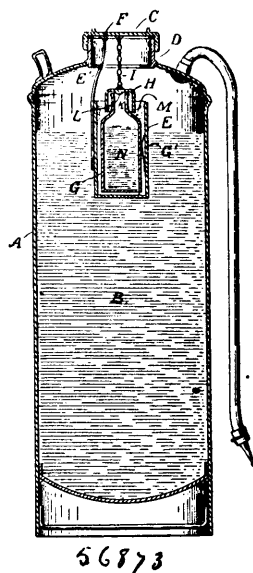


Robert Sage Elliott, Kansas, Missouri, U.S.A., 3rd August, 1897; 6 years. (Filed 26th March, 1897.)

Claim.—1st. A shot-gun shot-distributing wad, comprising a body, cone or conical in form, converging from a sharp pointed apex equilaterally to a base, substantially as shown. 2nd. In combination with a shell, loaded with shot in the customary manner, a conical wad which is secured in the shell in advance of the shot, and with its apex entering the shot charge, substantially as described.

No. 56,873. Fire Extinguisher. (Extincteur d'incendie.)

(Extincteur d'incendie.)

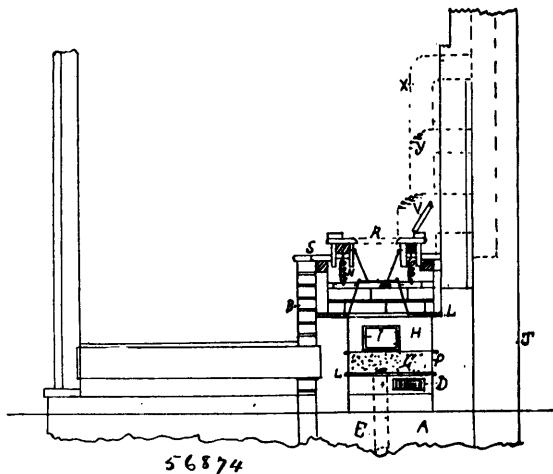


Victor C. Stempel, Berlin, Ontario, Canada, 3rd August, 1897; 6 years. (Filed 29th March, 1897.)

Claim.—1st. The combination of holder E, secured to cap C, by wires E<sup>1</sup>, and hinge F, acid bottle G, held in holder by spring G<sup>1</sup>, thimble H, and cone L, secured to cap C, by copper chain I, seal M, composed either of oils, mercury, glycerine or other suitable substances, the shape and form of acid bottle G, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with holder E, cap C, wires E<sup>1</sup>, and hinge F, the acid bottle G, held in holder by spring G<sup>1</sup>, thimble H, cone L, and chain I, oil, mercury or glycerine seal M, said parts placed in tank A, substantially as and for the purpose hereinbefore set forth.

No. 56,874. Dry Closet. (Système de latrine à air.)

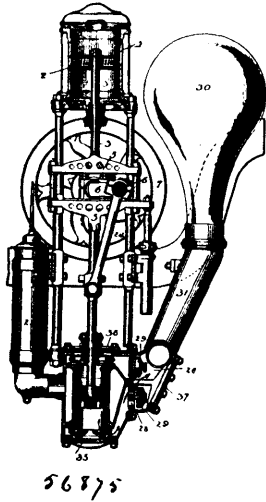
(Système de latrine à air.)



Robert Washburn, Harriston, Ontario, Canada, 3rd August, 1897; 6 years. (Filed 8th April, 1897.)

Claim.—1st. The combination of the hot air chamber W, and cold air flue C, under current and damper valve O, into chamber H, with ventilating pipe X, into smoke pipe V, and foul air pipe Y, into pipe V, substantially as and for the purposes hereinbefore set forth. 2nd. The combination of the hot air chamber W, and cold air flue C, under current and damper valve O, into chamber H, with ventilating pipe X, into smoke pipe V, and foul air pipe Y, into pipe V, substantially as and for the purposes hereinbefore set forth.

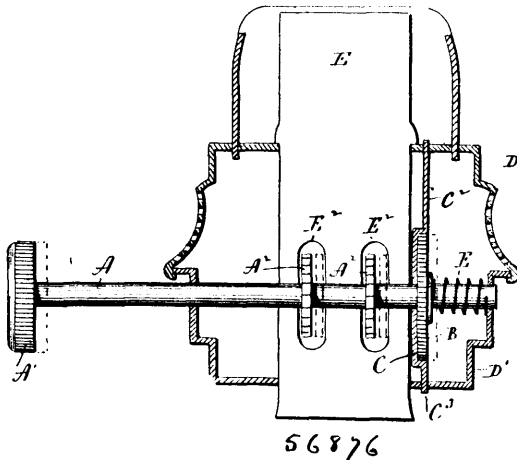
**No. 56,875. Fire Engine Pump.**  
(*Pompe à incendie.*)



The American Fire Engine Co., Seneca Falls, New York, assignee of Charles H. Fox, Cincinnati, Ohio, U.S.A., 4th August, 1897; 6 years. (Filed 10th April, 1897.)

*Claim.*—In a steam fire-engine, the combination of a rectangular horizontally-arranged casting formed with an inner suction-chamber upper and lower horizontal partitions and two chambers outside of said partitions each divided by a transverse wall into two compartments which operate reciprocally as suction and force-chambers, two pump-barrels mounted between the horizontal partitions, extending through but not communicating with the main suction-chamber and opening each into two opposite reciprocally-acting compartments, water supply inlets communicating with the respective ends of the main suction-chamber, valved openings arranged around the respective ends of the pump-barrels and forming a communication between the main chamber and the reciprocally-acting compartments, upper and lower cap-plates closing said compartments, a suitable discharge-chamber, an independent valved passage leading from each of the reciprocally-acting compartments to the discharge-chamber, and an engine of substantially the character described, controlling pump-pistons working in the respective barrels, as explained.

**No. 56,876. Lamp Burner.** (*Bec de lampes.*)

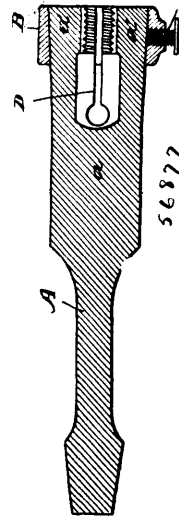


John Charles Miller and Albert Falcott Booth, Waterbury, Connecticut, U.S.A., 4th August, 1897; 6 years. (Filed 17th April, 1897.)

*Claim.*—1st. A burner having a longitudinally movable, normally locked wick-adjusting spindle, provided with a locking-wheel, in combination with means with which the said wheel is normally engaged for locking it against rotation, and from which it is disengaged by moving it longitudinally in one direction or the other. 2nd. In a burner, the combination with a longitudinally movable spindle, of a locking-wheel rigidly secured thereto, a locking-plate with which the wheel is normally engaged for locking the spindle against rotation, and a spring for maintaining the wheel in locking

engagement with the said plate. 3rd. In a burner, the combination with a longitudinally movable wick-adjusting spindle, of a locking-wheel rigidly secured thereto, a vertically arranged locking-plate located in the plane of the wheel, and formed with a locking recess with the edge of which the periphery of the wheel co-acts to lock the wheel against rotation, a spring encircling the extreme inner end of the spindle, and bearing against the wheel for forcing the same into the said recess, and normally maintaining it therein, one or more star-wheels mounted upon the spindle for engagement with the wick, and a wick-tube having one or more slots for the clearance of the said star-wheels.

**No. 56,877. Tool to Re-cut or Restore the Thread of Bolts and Screws.** (*Outil pour réparer les filets de vis.*)



Joshua J. Frith, Boissevain, Manitoba, Canada, 4th August, 1897; 6 years. (Filed 17th April, 1897.)

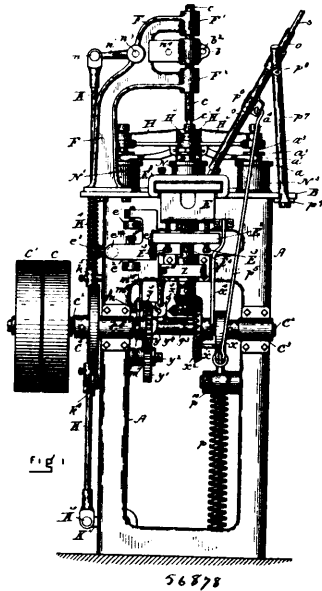
*Claim.*—1st. A tool for re-cutting or restoring the threads on bolts and screws, consisting of a die comprising a body composed of compressible jaws, a central screw-threaded bore formed in the body inwardly from the end of the jaws, a compression band embracing the jaws, a compression screw passing through the band, and a shank fitted to enter the stock of a brace formed integrally with the body, substantially as specified. 2nd. A tool for re-cutting or restoring the threads on bolts and screws, consisting of a die comprising a body composed of compressible jaws, a central screw-threaded bore formed in the body inwardly from the end of the jaws, a compression band embracing the jaws, and a compression screw passing through the band, the perimeter of the body of varying diameters decreasing from the ends of the jaws, substantially as specified. 3rd. A tool for re-cutting or restoring the threads on bolts and screws, consisting of a die comprising a body composed of compressible jaws, a central screw-threaded bore formed in the body inwardly from the end of the jaws, a compression band embracing the jaws, a compression screw passing through the band, and a shank fitted to enter the stock of a brace formed integrally with the body, the perimeter of the body of varying diameters decreasing from the ends of the jaws, substantially as specified. 4th. A tool for re-cutting or restoring the threads on bolts and screws, consisting of a die comprising a body having a central screw-threaded bore to re-cut or restore the thread, and a shank to enter the stock of a brace, substantially as specified.

**No. 56,878. Machine for Soldering End Pieces to Cans.**  
(*Machine pour souder les boîtes métalliques.*)

James Alexander Booth, Everett, assignee of Thor Helen Neilson, Boston, both in Massachusetts, U.S.A., 4th August, 1897; 6 years. (Filed 9th April, 1897.)

*Claim.*—1st. The combination of a series of arms, provided with movable can holders, a central standard adapted to be revolved and to which are attached said arms, a live and a dead spindle adapted to seize and revolve the can-body, a movable heater, provided with a heating plate, and suitable means for presenting the solder, and also for releasing and removing the can from the spindles, after the soldering is completed, and all arranged and adapted to operate, substantially as and for the purpose set forth. 2nd. In an automatic machine for soldering end pieces to cans, the gear wheel  $v$ , provided with the cam  $y^4$ , the gear wheel  $y^7$ , the loose gear wheel  $y^8$ , provided with the pin  $x^8$ , and the lever  $y^6$ , in combination with the gear

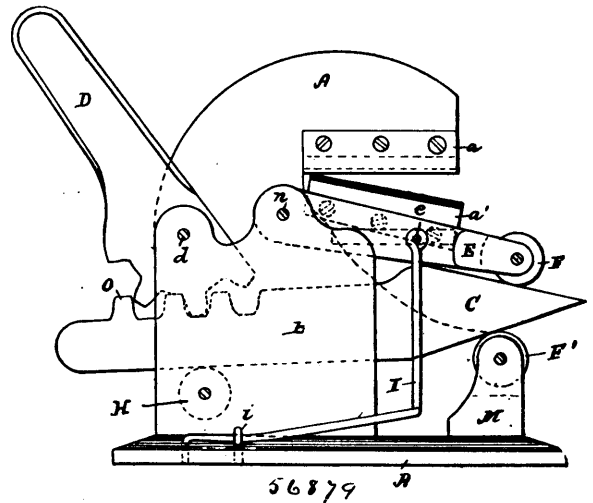
wheel  $g^4$ , provided with the recessed hub  $x^8$ , and gear wheel  $g^5$ , secured to the standard G, and adapted to actuate it, substantially



as and for the purpose set forth. 3rd. In an automatic machine for soldering end pieces to cans, the gear wheel  $y$ , provided with the cam  $y^4$ , the lever  $y^5$ , and gear wheel  $y^3$ , in combination with suitable devices for placing and removing cans in the process of soldering, substantially as set forth. 4th. In an automatic machine for soldering end pieces to cans, the main shaft  $C^2$ , gear wheel  $x^2$ , secured to said main shaft, the spindle shaft  $c^2$ , the gear wheel  $x^3$ , secured to said spindle shaft and adapted to actuate the live spindle by the rotation of the main shaft, in combination with suitable can soldering mechanism, substantially as and for the purpose set forth. 5th. In an automatic machine for soldering end pieces to cans, the cam wheel  $C^5$ , secured to the main shaft  $C^2$ , the lever  $k^2$ , provided with the wheel  $k^4$ , and adapted to actuate the vertical rod K, in combination with suitable can holding and can soldering devices, substantially as and for the purposes set forth. 6th. In an automatic machine for soldering end pieces to cans, the rod K, the piece  $K^6$ , secured to said rod and having the arm  $c^5$ , the spring  $K^4$ , the lever  $c^7$ , having the bent arm  $e^8$ , the set-screw  $e^{10}$ , the independent movable rod  $e^{11}$ , in combination with the hinge  $e$ , provided with the shelf  $E^2$ , and the extension end  $e^{12}$ , and the spring  $e^4$ , substantially as and for the purposes described. 7th. In an automatic machine, for soldering end pieces to cans, the cam wheel  $C^5$ , the lever  $k^2$ , provided with the wheel  $k^4$ , the rod K, movably secured at its lower end and provided with the adjustable piece  $k$ , secured thereto, the arm  $n^1$ , pivotally secured to the upper end of said rod, and also to the clamp  $b$ , the said arm being journalled to part F, in combination with the spindle  $c$ , and adapted to actuate said spindle, substantially as and for the purposes described. 8th. In an automatic machine for soldering end pieces to cans, the rod  $x^4$ , adapted to be operated by a suitable cam movement, the rod  $x^5$ , the spring  $x^6$ , provided with the projection  $x^7$ , in combination with the wheel  $g^1$ , having the notch,  $g^7$ , the said wheel secured to the standard G, and adapted to hold the same, substantially as and for the purposes set forth. 9th. In an automatic machine for soldering end pieces to cans, the heating plate  $E^5$ , having a concave circular bevelled edge, a slot upon its upper side and a recessed part underneath, and adapted to be removably secured to a movable heater box, substantially as and for the purposes set forth. 10th. In an automatic machine for soldering end pieces to cans, the solder holder and conveyor, consisting of the barrel  $o$ , the spring  $o^2$  secured at one end to said barrel, the other end being free and resting in the slot  $x^1$ , of barrel  $o$ , the movable slide  $p^5$ , provided with the spring piece  $o^2$ , secured at one end to said slide and the other end being free and resting in the slot  $x^1$ , of barrel  $o$ , and adapted to hold the wire solder within said barrel and to move the same forward, substantially as and for the purposes set forth. 11th. In an automatic machine for soldering end pieces to cans, the cam wheel  $x$ , secured to the main shaft  $C^2$ , the lever  $p^3$ , the spring  $p$ , the rod  $p^5$ , slide  $p^6$ , and the barrel  $o$ , arranged and adapted to hold and convey the solder intermittently to the soldering point, and in combination with suitable soldering mechanism, substantially as set forth. 12th. In an automatic machine for soldering end pieces to cans, the lever  $a^5$ , pivotally secured at one end to hub  $H^4$ , and contacting its other end with holder  $a^1$  the rod  $d$ , provided with the bevelled end piece  $d^1$ , and adapted to raise the holder  $a^1$ , in combination with suitable conveying and soldering mechanism, substantially as and for the

purposes herein set forth. 13th. In an automatic machine for soldering end pieces to cans, the acid tank  $m^1$ , the pipe  $m^2$ , the pipe  $m$ , adapted to deliver the acid at the soldering point, the said tank provided with a suitable valve for regulating the flow of the acid in the tank under pressure to the discharge pipe, and arranged to be actuated by suitable cam devices, and all combined with suitable can soldering mechanism and adapted to operate in connection therewith, substantially as and for the purposes set forth. 14th. In an automatic machine for soldering end pieces to cans, the independent socketed rotatable, removable and vertically movable can holder  $a^1$ , provided with the rim  $a^2$ , stem  $a^3$ , the rotating arm  $H^5$ , lever  $a^5$ , adjustable rod  $d$ , provided with the bevelled end  $d^1$ , and table B, combined with suitable can conveying and can soldering mechanism, all substantially as and for the purposes set forth. 15th. In an automatic machine for soldering end pieces to cans, the plate  $l$ , provided with the bevelled edge  $l^2$ , and adapted to be suitably secured to table B, in combination with the live spindle  $c^2$ , and suitable can revolving mechanism, all substantially as herein set forth and for the purposes described. 16th. In an automatic machine for soldering end pieces to can bodies, the guide ways L,  $L^1$ , secured to the table, in combination with automatic rotating mechanism adapted to deliver the cans within the guide ways, substantially as described. 17th. In a machine for soldering end pieces to cans, the adjustable hub  $H^4$ , provided with radiating arms, combined with adjustable can holders and adapted to be carried by said arms, arranged and adapted to operate substantially as set forth. 18th. In a machine for soldering end pieces to cans, the heating plate  $E^5$ , provided with a curved recess and adapted to be suitably heated, in combination with the live spindle, substantially as and for the purposes described. 19th. In a machine for soldering end pieces to cans, the standard G, the hub  $H^4$ , the radial arms provided with socketed can holders, in combination with the live and the dead spindles, substantially as described. 20th. In a machine for soldering end pieces to cans, a live spindle adapted to rotate the can in combination with the rotatable and vertically movable can holder, substantially as and for the purposes described.

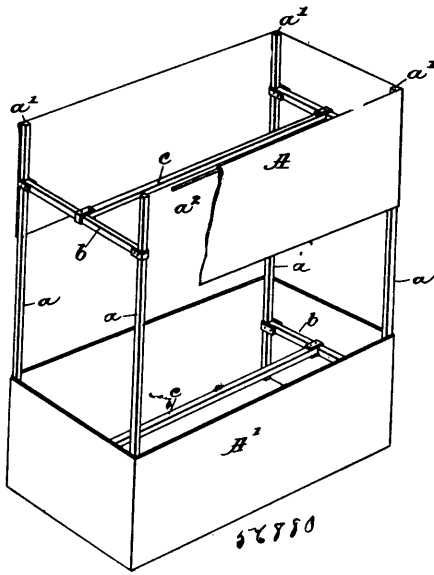
**No. 56,879. Shears for Cutting Cold Iron. (Cisailles.)**



George McCool, Laingsburg, Michigan, U.S.A., 4th August, 1897; 6 years. (Filed 17th May, 1897.)

*Claim.*—1st. In shears for cutting cold iron consisting of a frame provided with a base, said frame having a stationary blade rigidly secured thereto, an arm pivoted to said frame at one end and the opposite end provided with a friction roller, a cutting blade secured to said arm, friction rollers journalled on said frame, a slidable wedge provided with a rack, lever pivoted to said frame and having teeth meshing in said wedge to advance said wedge when said lever is pulled downward thereby raising the arm of the cutting knife to close said knives, a spring connected to the frame and the cutting arm to pull said arm downward, substantially as shown and described. 2nd. The herein described shears for cutting cold iron consisting of a main frame provided with two friction rollers near its base and a stationary cutting blade near the top, an arm pivoted to said frame near its centre, a cutting blade secured to said arm, a friction roller attached to said arm at its outer end, a wedge provided with a rack on rear end and travelling on said friction rollers, said wedge travels between the recess of said frame, a lever pivoted between said recess provided with teeth on its lower end and meshing in the rack on the wedge, said lever when pulled downward to advance said wedge thereby causing said arm provided with cutting blade to move upward causing the blades to close, a tension spring attached to said arm and frame to pull said arm downward, substantially as shown and described.

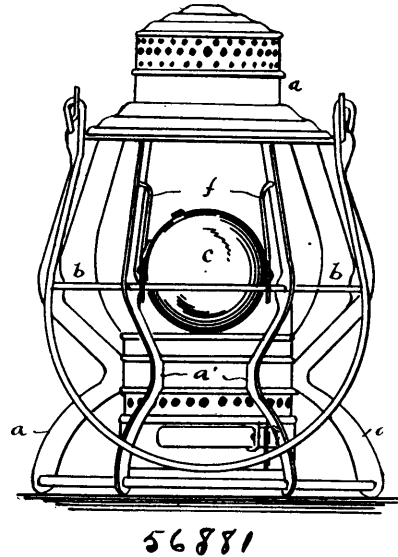
**No. 56,880. Kite. (Cerf-volant.)**



Henry Helm Clayton, Readville, Mass., U.S.A., 4th August, 1897; 6 years. (Filed 21st May, 1897.)

*Claim.*—1st. In a kite of the type having a cell at each end thereof, a frame comprising a corner post at each corner of said cells, each of said posts extending lengthwise of the kite from end to end thereof, and braces or struts separating said corner posts and maintaining the frame rigid, substantially as described. 2nd. A kite having cells at its opposite ends, said cells being supported by a frame including corner posts one for each corner of the cells, said posts extending from end to end of the kite, and struts or braces separating said posts and holding the kite rigid, said struts or braces being removably connected to said posts at their respective ends, whereby a knock-down kite frame is provided so that the kite may be readily and quickly folded together in small compass or stretched out into operative position at will, substantially as described. 3rd. The combination with a rectangular kite frame having corner posts extending from end to end of the kite, and having material stretched around its respective ends to constitute end cells thereof, of braces extending between said corner posts to maintain said frame in proper rectangular position, said braces extending in substantially parallel planes approximately midway of the depth of said cells respectively, substantially as described. 4th. The combination with a rectangular kite frame having corner posts extending from end to end of the kite, and having material stretched around its respective ends to constitute end cells thereof, of braces extending between said corner posts to maintain said frame in proper rectangular position, said braces extending in substantially parallel planes approximately midway of the depth of said cells respectively, said braces being slightly resilient and provided at their meeting portions with interlocking joints whereby they may be sprung into fixed relation with each other or may be separated therefrom at will, substantially as described. 5th. The combination with a rectangular kite frame having corner posts extending from end to end of the kite, and having material stretched around its respective ends to constitute end cells thereof, of braces extending between said corner posts to maintain said frame in proper rectangular position, said braces extending in substantially parallel planes approximately midway of the depth of said cells respectively, said braces being slightly resilient and provided at their meeting portions with interlocking joints whereby they may be sprung into fixed relation with each other or may be separated therefrom at will, substantially as described. 6th. A kite comprising a rectangular frame having corner posts separated from each other in pairs, material stretched around the ends of said rectangular frames to constitute end cells, said cells being oblong, with one of said pairs of posts extending across each shorter dimension thereof, and braces, said braces including cross-bars connecting and rigidly spacing apart said respective pair of posts, and other braces connecting said opposite pairs of posts, said braces lying in two substantially parallel planes approximately midway of the depth of said cells respectively, substantially as described. 7th. A kite comprising a rectangular frame, and end cells secured to the respective ends of said frame, said frame comprising ten pieces, including four corner posts, held together in pairs by bars secured thereto adjacent the ends thereof, and braces separating corresponding opposite pairs of said respective bars, of posts secured to said bars intermediate the ends of the latter, substantially as described.

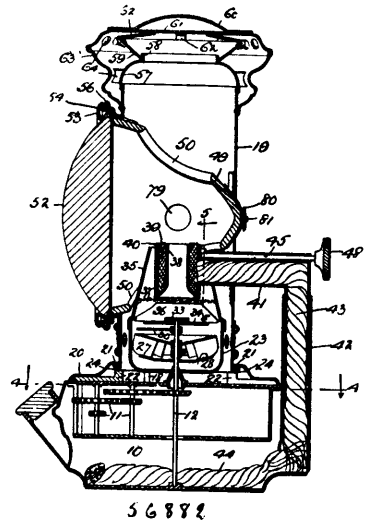
**No. 56,881. Lantern. (Lanterne.)**



David Edward Davidson, Harrisburg, Pennsylvania, U.S.A., 4th August, 1897; 6 years. (Filed 22nd May, 1897.)

*Claim.*—1st. An attachment for lanterns consisting of a lens supported by a metallic band secured to said lens and having lugs or extensions adapted to embrace the horizontal rib of a lantern, and spring-levers, pivoted to said band, and adapted to embrace the horizontal rib and the vertical ribs of a lantern, substantially as and for the purposes set forth. 2nd. An attachment for lanterns consisting of a lens, a metallic band secured thereto, pieces *c*, secured to or formed as a part of the metallic band, levers pivoted to the pieces *c*, and having their upper and lower ends cut out to embrace the vertical and horizontal ribs respectively of a lantern, substantially as described. 3rd. An attachment for lanterns consisting of a lens, a metallic band having a series of lugs formed therewith and adapted to embrace the lens, pieces *c*, secured to said bands and levers pivoted to said pieces, substantially in the manner and for the purposes set forth.

**No. 56,882. Lamps, etc. (Lampes, etc.)**



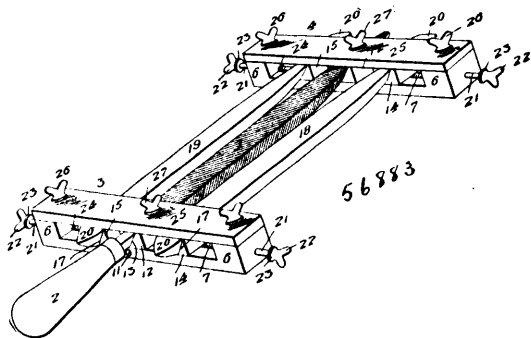
Elisha Gray, Highland Park, Illinois, U.S.A., 4th August, 1897; 6 years. (Filed 22nd May, 1897.)

*Claim.*—1st. A bicycle lamp having a burner, an oil chamber, a fan for supplying air to said burner, and a motor, arranged within said oil chamber, to be submerged in whole or in part in the oil therein, for actuating said fan. 2nd. A bicycle lamp having a burner, a fan 13, for supplying a draught of air to said burner, a motor 11, for actuating said fan, a spring arm 30, mounted at one end on the fan shaft 12, and carrying a brake shoe 31, at the other end thereof. 3rd. A bicycle lamp having a burner, a fan 13, for

supplying a draught of air to said burner, a motor 11, for actuating said fan, and a deflector plate 36, arranged edgewise between said burner and fan. 4th. A bicycle lamp having a burner, a fan 13, for supplying a draught of air to said burner, a motor 11, for actuating the same, a disc 34, interposed between said fan and burner, and a deflector plate 36, superimposed edgewise upon said disc. 5th. A bicycle lamp having a jacket 38, adapted to receive the igniting wick 39, means for supplying the oil thereto, a sleeve 40, arranged to inclose said jacket 38, said sleeve provided with projections 47, and a shaft 45, having a crank arm 46, arranged to operate between said projections. 6. A bicycle lamp having a shaft 12, a hub mounted thereon, a disc 26, carried by said hub, fan blades 27, carried by said disc, said blades being arranged radially with respect to said disc and having their inner ends in a plane slightly inclined relative to the axis of said shaft and the bodies thereof curved transversely and in the direction of movement thereof, and a motor for rotating said shaft. 7th. A bicycle lamp, having a burner, a chimney 19, inclosing the same, a grooved rim 56, forming a seat in said chimney adjacent to said burner, a cap plate or lens 52, having a peripheral flange, and a compressible spring 54, carried by said flange, said spring adapted to be received in the groove of said rim, whereby said lens or cap plate is removably held in place. 8th. A bicycle lamp having a burner, a chimney 19, inclosing the same, reversely arranged cone-shaped sleeves 57 and 59, mounted upon the upper end of said chimney, arms 62, mounted upon the upper edge of the upper of said sleeves, and a perforated inclosing cap 63, for said sleeves, said cap having a plate 60, to rest upon said arms and forming a cover for said sleeves. 9th. A lamp bracket for bicycle lamps, comprising a head 65, having clamping jaws 66 and 67, mounted thereon, adapted to engage a part of the bicycle frame, a rod 68, mounted in one of said jaws and carrying an eccentric 70, said eccentric being adapted to engage the other of said jaws to effect the clamping action. 10th. A lamp bracket for bicycle lamps having a head 65, means for attaching the same to a bicycle frame, a casing comprising spring arms 73, a headed bolt 64, arranged to pass loosely through perforations in said casing and head, a set nut 75, for securing said bolt in place whereby said casing and head are clamped together and rotatably adjustable on the axis of the bracket, and means, as bolts 78, for clamping said spring arms to the lamp. 11th. A lamp bracket for bicycle lamps having a head 65, means for attaching the same to a bicycle frame, a casing comprising spring arms 73, secured to said head, jaws 76, mounted in said arms for axial adjustment in a vertical plane, said jaws adapted to engage and hold the lamp, and bolts 78, for clamping said jaws together.

**No. 56,883. Adjustable Saw Filing Guide.**

(Guide pour limer les scies.)



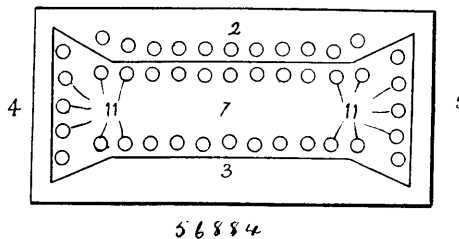
Charles Reichert, Chester, Pennsylvania, U.S.A., 4th August, 1897; 6 years. (Filed 22nd May, 1897.)

*Claim.*—1st. A saw filing guide comprising the clamps 3 and 4, each provided with a fixed and a movable jaw, and a top plate adjustably secured to each clamp, in combination with a triangular guide bar adjustably secured between said clamps 3 and 4, substantially as and for the purpose set forth. 2nd. A saw filing guide comprising the clamps 3 and 4, provided with a fixed jaw 12, having the V-shaped grooves 13, 13, and the lateral movable jaws 14, 15, formed with the V-shaped grooves 17, 17, the adjustable top plate 25, in combination with the parallel triangular guide bars 18 and 19, provided with the flanged heads 20, 20, and adapted to be adjustably secured in said adjustable jaws 14 and 15, substantially as and for the purpose set forth.

**No. 56,884. Safety Envelope.** (*Enveloppe de surtêt.*)

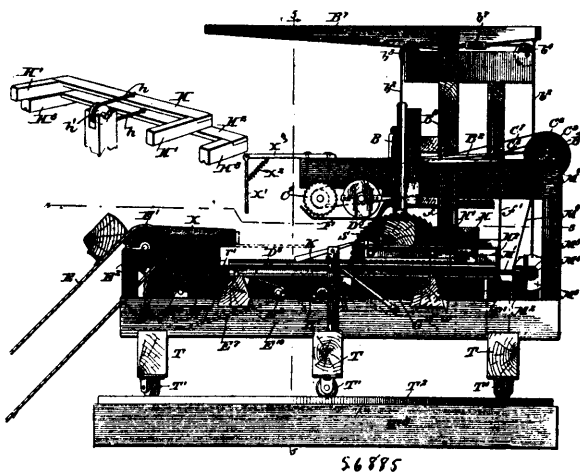
William M. Brevard, Macon, Georgia, U.S.A., 4th August, 1897; 6 years. (Filed 22nd May, 1897.)

*Claim.*—The herein described safety envelope, comprising the blank 1, provided with the side sealing flaps 4 and 5, the perforated



flap 2, and the flap 3, in combination with the perforated blank 7, provided with the slots 9 and 10, and the gummed sealing flap 8, substantially as described and shown.

**No. 56,885. Railroad Tie Boring and Trimming Machine.** (*Machine à percer et tailler les traverses de chemin de fer.*)



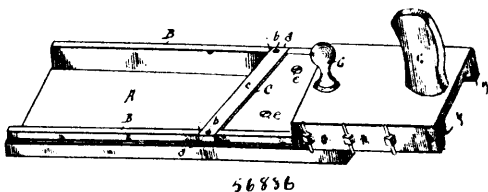
Alexander B. B. Harris, Bristol, Tennessee, U.S.A., 4th August, 1897; 6 years. (Filed 22nd May, 1897.)

*Claim.*—1st. A machine for planing and boring railroad ties, comprising a horizontally reciprocating carriage arranged to support the tie and move it laterally, a gang of scoring saws arranged in stationary bearings above the tie carriage to cut transverse scores in the top of the tie, cutter heads arranged behind the scoring saws parallel therewith and above the carriage, and a set of boring bits arranged vertically above the carriage and behind the cutter heads to move in a direction at right angles to the tie carriage and in the path of the cut on the tie, and means for actuating these parts substantially as shown and described. 2nd. A machine for planing and boring railroad ties, comprising a turn-table adapted to be carried upon a car, an elevator leading from the ground to the top of the turn-table, a tie carriage arranged upon the turn-table and planing and boring devices arranged upon the turn-table, substantially as shown and described. 3rd. A machine for cutting off the ends, planing the plate or rail seats, and boring the spike holes of railroad ties, comprising a horizontally reciprocating carriage arranged to support a tie and move it laterally, a gang of scoring saws arranged in stationary bearings above the carriage to cut transverse scores in the upper face of the tie, cutter heads arranged behind the scoring saws parallel therewith and above the tie carriage, a set of boring bits arranged vertically above the carriage and behind the cutter heads to move in a direction at right angles to the carriage and in a path of the cut on the tie, a saw arranged in a vertical plane at the end of the carriage to trim off the end of the tie, and means for actuating these parts substantially as and for the purpose described. 4th. In a tie boring machine, the combination with the reciprocating carriage carrying the tie, a set of boring bits arranged above it, and a compensating device for automatically centering the ties to the bits irrespective of the size of the ties, comprising two yielding stop frames, one arranged in the place of the tie and the other in the plane of the carriage, and both connected substantially as described for a reversed motion as set forth. 5th. A turn-table provided with a tie planing and boring machine at one end, and a boiler and engine at the other, and with supporting rollers underneath, combined with a subjacent circular track T<sup>2</sup> and supporting sills T<sup>3</sup> adapted to be carried upon the top platform car substantially as

shown and described. 6th. In a tie boring machine, the combination with a vertically adjustable head or frame carrying boring spindles at the ends thereof, and vertical guides for said frame, of suspending cords or chains  $b^2, b^2$ , pulleys  $b^3, b^3, b^4, b^4$ , at the top of the framework supporting said cords or chains, the front pulleys  $b^3, b^3$ , being set near the ends of the frame, and the rear ones  $b^4, b^4$ , close together, a single balance weight  $B^9$  connecting with cords  $b^2, b^2$ , below the pulleys  $b^4, b^4$ , and a hand lever  $B^7$  to throw the boring frame out of balance and move it up or down, substantially as and for the purpose described. 7th. A wood working machine, having a reciprocating carriage with automatically operating and compensating stop devices for stopping the carriage at various points to bring the centre of the object acted upon directly beneath the centre of the cutting tool, said compensating stop devices comprising two sliding stop frames, one in the plane of the object being acted upon and the other for contact with the carriage, and both frames being connected for a reverse movement, substantially as herein shown and described. 8th. The combination with the tie carriage and the gears for reciprocating it, of the compensating stop frames connected for a reverse motion, a wheel  $h^1$  having yielding journals, and a bracket for said journals with connecting mechanism extending to the feed gears of the carriage, whereby the yielding of the said wheel under the stop impact is made to stop the feed of the carriage, substantially as shown and described. 9th. The combination of the tie carriage, the cord  $r$ , pulleys  $r^1, r^2$ , shaft  $R$  with drum  $r^3$  and gear wheel  $R^1$ , and the stopping and reversing gear  $G$ , the compensating stop frames  $H, H^1, H^2, H^3$ , flexible connection  $h$  and pulley  $h^1$  for a reversed action, the journal of said pulley being carried in bracket  $G^9$ , and lever  $G^9$ , rod  $G^4$ , rock shaft  $G^3$ , and tappet arm  $G^2$ , connecting the said bracket with the stop devices of the carriage feed, substantially as shown and described. 10th. In a tie planing and boring machine, the combination of the horizontally reciprocating tie carriage, the scoring saws and cutter heads arranged above the carriage upon horizontal axes, and an adjustable lifting device on the carriage for raising the level of these ties to proper contact with the saws and cutter heads, substantially as and for the purpose described. 11th. In a tie planing and boring machine, the combination with the horizontally reciprocating carriage, of a series of pivoted and horizontally adjustable spacing arms  $D^2$  arranged on each side of the carriage to raise the level of the tie, substantially as and for the purpose described. 12th. In a tie planing and boring machine, the combination with the horizontally reciprocating carriage, of a pendent superposed and flexible stop gauge arranged in a vertical position above the point where the carriage receives the tie to stop the tie when the latter is raised and to yield with the tie and carriage when the latter are moved horizontally, substantially as shown and described. 13th. In a tie planing and boring machine, the combination with the carriage, of a pair of back stop pins  $D^6$ , keepers and wedges  $D^4$ , and pivoted levelling arms  $D^2$ , substantially as and for the purpose described. 14th. In a tie planing and boring machine, the combination with the reciprocating carriage, of a series of gravity pawls or detents fulcrumed on the stationary frame and made of different lengths and placed a little behind the position of extreme advance of the carriage to engage the tie on the retreat of the carriage and shove it off the carriage, substantially as and for the purpose described. 15th. In a tie boring and planing machine, the combination of the reciprocating carriage, the discharging pawls or detents fulcrumed on the stationary frame, and subjacent receiving rollers and mechanism for positively actuating one or more of them to discharge the tie from the machine, substantially as shown and described.

**No. 56,886. Planer for Wood Cuts and Electroplates.**

(*Spatule pour gravures sur bois et plaque electrode.*)



56886

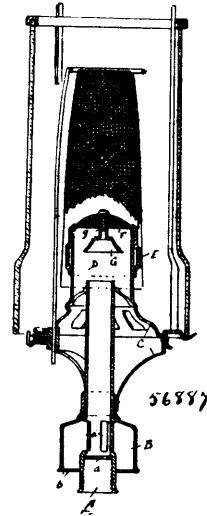
Michael P. Kenna, Dubuque, Iowa, U.S.A., 4th August, 1897; 6 years. (Filed 25th May, 1897.)

*Claim.*—1st. In a machine of the character described, a gauge for holding electroplates to be planed or shaved, having a plate  $E$ , one or more type-high gauges secured to said plate, means for rigidly securing an electroplate on said plate and a cutter for shaving said electroplate, for the purposes shown. 2nd. A machine of the character described, consisting of a bed  $A$ , having sides  $B$ , cutter  $C$ , gauge  $D$ , and a holder with a handle for operating the same and having one or more type-high gauges  $f$ , projection  $g$ , and set-screw  $H$ , all combined to operate, as and for the purposes shown. 3rd. A machine of the character described, consisting of a bed-plate with parallel sides, a cutter set in said sides flush with the same, a gauge for said cutter, a holder for the electroplate having one or more type-high gauges adapted to be moved along on the sides of the bed

and means for holding the electroplate in said holder, as and for the purposes shown. 4th. A machine of the character described, consisting of a bed with parallel sides, a cutter set with its upper edge flush with the top of said sides and at an angle to said sides, a gauge for said cutter, adjustably set in the bed, a holder provided with a type-high gauge having projections adapted to compass the sides pieces of the bed, means for adjustably holding the electroplate within the holder and handle for driving the holder with the electroplate secured therein over said cutter, whereby the cut is shaved or planed to the thickness of said gauge, for the purposes shown.

**No. 56,887. Atmospheric Burner.**

(*Bruleur atmospherique.*)



56887

Philip Meyer, Alameda, California, U.S.A., 4th August, 1897; 6 years. (Filed 25th May, 1897.)

*Claim.*—1st. In an atmospheric or Bunsen burner, the combination with the gauze diaphragm at the ignition end of the burner, with an underlying solid deflector plate. 2nd. In an atmospheric or Bunsen burner, the combination with the gauze diaphragm at the ignition end of the burner with an underlying solid deflector plate having a bell-shape. 3rd. In an atmospheric or Bunsen burner, the combination with the gauze diaphragm at the ignition end of the burner with an underlying solid deflector plate suspended from said diaphragm. 4th. In an atmospheric or Bunsen burner, the combination of the gauze diaphragm at the ignition end of the burner with an underlying solid deflector-plate suspended from said diaphragm and having a bell-shape. 5th. In an atmospheric or Bunsen burner, the combination of the pipe or tube for conveying the inflammable mixture, the extension chamber into which said pipe or tube enters and to which it delivers the mixture prior to ignition, and a solid deflector plate suspended in said chamber below its top. 6th. In an atmospheric or Bunsen burner, the combination of the pipe or tube for conveying the inflammable mixture the extension chamber into which said pipe or tube enters and to which it delivers the mixture prior to ignition, the gauze diaphragm in the top of said chamber at the point of ignition and the solid deflector plate in the upper portion of the chamber below the diaphragm.

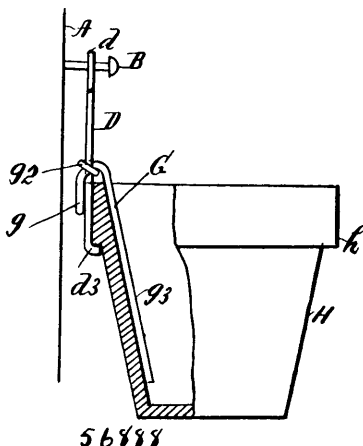
**No. 56,888. Holder or Support for Flower Pots, &c.**

(*Support pour pots de fleurs, etc.*)

James Francis Healy, New York, State of New York, U.S.A., 4th August, 1897; 6 years. (Filed 26th May, 1897.)

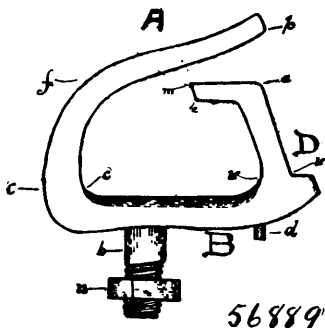
*Claim.*—1st. A holder for flower pots, and other vessels or receptacles, whereby said flower pot or other vessel or receptacle may be suspended from a wall or other support, said holder consisting of two parts, one of which is adapted to slide upon the other, one of said parts being provided with inwardly directed hooks or projections, and the other being mounted thereon above said hook or projections, and being adapted to slide thereon, and being also provided with a ring or loop, and with downwardly directed arms, substantially as shown and described. 2nd. In a holder for flower pots and other vessels or receptacles, consisting of two parts as  $D$ , and  $G$ , the part  $D$ , being adapted to be suspended from a pin or other support, and being provided at the lower end thereof with hooks or projections, and the part  $G$ , being mounted on the part  $B$ , and free to slide thereon, and being provided at one side of the part  $D$ , with downwardly directed arms, and at the opposite side thereof, with a downwardly directed extension, substantially as shown and described. 3rd. A holder for flower pots and other vessels or receptacles, composed of two parts as  $D$ , and  $G$ , each of which is formed

from spring wire, the part D, being provided at its upper end with a ring or loop, and at its lower end with hooks or projections, and



the part G, being adapted to slide on the part D, and being provided with a ring or loop as g, and with downwardly directed arms as g<sup>3</sup>, substantially as shown and described.

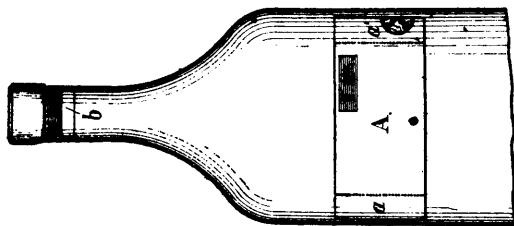
**No. 56,889. Check-rein Hook.**  
(*Crochet pour fausses-renes.*)



Mark Danby, North Augusta, Ontario, Canada, 4th August, 1897; 6 years. (Filed 29th May, 1897.)

*Claim.*—1st. A check-rein hook having its front and upper part A, rising out of the front end of the base B, and the posterior portion of said part A, in special position and relation to the back and vertical part D, substantially as and for the purpose hereinbefore set forth. 2nd. In a check-rein hook having its band and vertical part D, rising out of the back end of the base B, and the upper and horizontal portion of said part D, in special position and relation to the front and upper part A, substantially as and for the purpose hereinbefore set forth.

**No. 56,890. Label and Vouchers for Guaranteeing Authenticity and Origin.** (*Etiquette at titre.*)



André Braly and Louis Braly, both of Paris, France, 4th August, 1897; 6 years. (Filed 23rd April, 1897.)

*Claim.*—1st. An arrangement of labels and vouchers for guaranteeing the authenticity and origin of a product or article, consisting in the combination, substantially as described and illustrated by

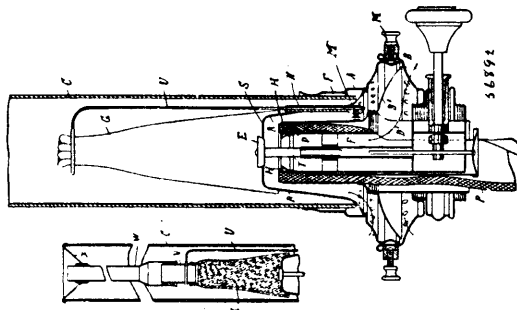
the drawings, of a guarantee label, the two ends of which are gummed upon the receiver, the central portion being easily detached, with a neck band also gummed around the neck of the receiver, of which a part is folded and can be easily detached, the label and neck band being provided upon their non-visible sides with signs or impressions, of which a portion is upon the neck band and the remainder upon the label. 2nd. The combination with this label, substantially as described and illustrated by the drawings, of a counterfoil, one of the ends of the label gummed upon the vessel bearing a partial impression, the remainder of which is upon the counterfoil. 3rd. The combination with this label, substantially as described and illustrated by the drawings, of a second counterfoil provided with signs or impressions, the remainder of which is upon the reverse of the ticket.

**No. 56,891. Multiplex Telegraphy.**  
(*Télégraphie multiple.*)

James Mark Barr, Shooters' Hill, Kent, England, 4th August, 1897; 6 years. (Filed 12th June, 1897.)

*Claim.*—The herein described method of effecting multiplex telegraphy in one line traversed by alternating or intermittent electric currents of certain periodicity and having transmitting and receiving instruments connected to it through condensers and self-induction coils, the condenser capacity and self-induction being different in quantity for each instrument, but such that the combined effect of these correlated pair, consisting of a transmitter and a receiver, is that suited to the periodicity for giving electric resonance.

**No. 56,892. Burner for Incandescent Lamps.**  
(*Bec de lampe incandescente.*)



Gerhard Ditmar, Vienna, Austria, 4th August, 1897; 6 years. (Filed 6th March, 1897.)

*Claim.*—1st. In an annular liquid combustible burner for producing incandescent lights without the aid of a separate gasifying flame, a hood R forming an annular passage for the outer current of air and having a bent-in edge S, an obstructing ring or flange H in the upper end of wick-tube D, and a disc E having tapering edge and whose under edge is arranged about in alignment with the edge S, of hood R, substantially as described and shown in the drawing. 2nd. An annular burner for liquid combustibles, comprising the parts A, B, having a series of apertures for admitting air, which latter passes between the hood R and wick-tube D and through opening D<sup>1</sup> to the inside of the tube D, substantially as described. 3rd. In an annular burner for liquid combustibles, comprising the parts A, B, having a series of apertures for admitting air, and a partition B<sup>1</sup> for separating the inner from the outer current of air, substantially as described and shown in the drawing. 4th. In combination with an annular burner for incandescent lights, a short tube V for supporting the incandescent body, a tube W receiving the tube V and extending to near the top of and held centrally in the chimney C, substantially as and for the purpose described and shown.

**No. 56,893. Treatment of Bluestone and Other Sulphurized Ores.** (*Traitement de sulfate de cuivre, etc.*)

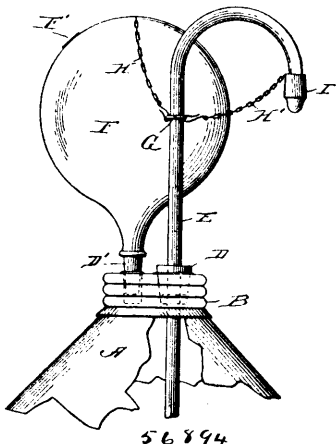
John Cope Butterfield, Westminster, England, 4th August, 1897; 6 years. (Filed 1st December, 1896.)

*Claim.*—1st. The process of treating bluestone or other sulphurized ores, which consists in subjecting it to the action of perchloride of iron, whereby soluble chlorides of copper, lead and antimony are produced, substantially as and for the purpose specified. 2nd. The process of treating bluestone or other sulphurized ores, which consists in subjecting it to the action of perchloride of iron, whereby soluble chlorides of copper, lead and antimony are produced, then in settling the solutions in suitable tanks, withdrawing the soluble chlorides and treating them with scrap iron to precipitate the metals of the chlorides, substantially as and for the purpose specified. 3rd. The process of treating bluestone or other sulphurized ores, which consists in subjecting it to the action of perchloride of iron, whereby soluble chlorides of copper, lead and antimony are produced, then in settling the solutions in suitable tanks, with-



drawing the soluble chlorides and treating them with copper and then scrap iron to precipitate the metals of the chlorides, substantially as and for the purpose specified. 4th. The process of treating bluestone or other sulphurized ores, which consists in subjecting it to the action of perchloride of iron, whereby soluble chlorides of copper, lead and antimony are produced, then in settling the solutions in suitable tanks, withdrawing the soluble chlorides and treating them with scrap iron to precipitate the metals of the chlorides, then in blowing heated air through the ferrous chloride formed in the solution, resulting in the formation of perchloride of iron in solution and the precipitation of hydrated ferric oxide, substantially as and for the purpose specified. 5th. The process of treating bluestone or other sulphurized ores, which consists in subjecting it to the action of perchloride of iron, whereby soluble chlorides of copper, lead and antimony are produced, then in settling the solutions in suitable tanks to precipitate the chloride of lead and the insoluble gold, silver, sulphur and mineral gauze, then in drying the residues and heating them with a flux composed of suitable compounds of lead and calcium and with fluor-spar, whereby the latter unites with the silica and the lead forms a regulus of lead, gold, silver and antimony, substantially as and for the purpose specified.

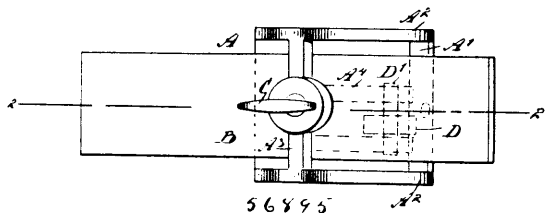
**No. 56,894. Apparatus for Transferring Liquids.**  
(Appareil pour transférer les liquides.)



Thomas M. Richardson, Oklahoma, Territory of Oklahoma, U.S.A.,  
4th August, 1897; 6 years, (Filed 8th May, 1897.)

*Claim.*—1st. The combination with a closure, of an air forcing device mounted thereon and arranged to force air into a channel leading through the closure to the interior of the vessel to which it may be applied, a tube bent to U-shape, having one arm passed through the closure into said interior, and arranged for longitudinal adjustment in the closure, a cap for closing the outer end of said tube, a ring sliding upon said arm above the closure, and flexible connections attaching both said air forcing device and the cap to said ring. 2nd. The combination with a vessel having a screw threaded neck of a threaded cap for closing said neck, provided with two conical openings leading to the interior of the vessel, two perforated stoppers removably fitted in said openings respectively, a tube bent to U-shape and having an arm sliding in the perforation in one of the stoppers, a ring sliding upon said arm above the stopper, an air forcing device mounted upon the cap and having a delivery tube fitting the perforation in the other stopper, a cap for closing the other arm of the U-shaped tube, and flexible connections attaching both said air forcing device and said cap to the ring, substantially as and for the purpose set forth.

**No. 56,895. Tool-Holder.** (Porte-outil.)

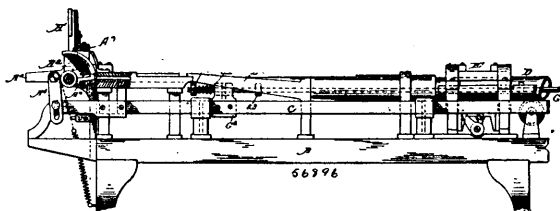


George Salot, Dubuque, Iowa, U.S.A., 4th August, 1897; 6 years.  
(Filed 10th May, 1897.)

*Claim.*—A tool-holder comprising a casing adapted to receive the tool to be sharpened, means for securing the tool in place in the casing, a wheel journalled in depending lugs on said casing, and a

gauge for predetermining the bevel to be formed on the tool, the said gauge being provided with a rear arm having a forked end adapted to be hooked on the shaft of said wheel, substantially as shown and described.

**No. 56,896. Machine for Making Cans of Angular form.** (Machine pour la fabrication de boîtes de ferblanc.)

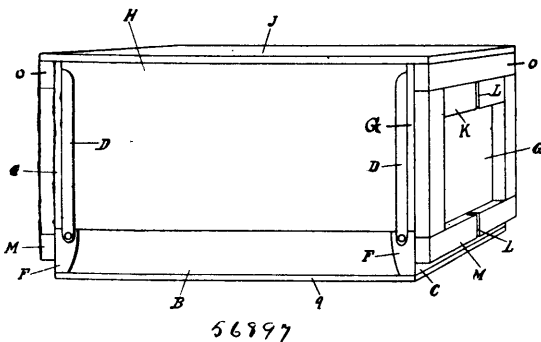


Robert Deniston Hume, Gold Beach, Oregon, U.S.A., 5th August, 1897; 6 years. (Filed 13th May, 1897.)

*Claim.*—1st. In a can making machine, the combination with a former or horn of angular cross-section of carriers for propelling can-bodies successively along said horn, and a movable shaping ring surrounding the horn, and of a cross-section corresponding to that of the horn, substantially as described. 2nd. In a can making machine, the combination, a blank feeding mechanism, a tapering former, for bending blanks into can-bodies of tubular form, a prolongation of the former of angular cross-section for shaping such can-bodies into angular cross-section, and carriers for propelling the can-bodies successively along the said former, substantially as set forth. 3rd. In a can making machine, and in combination, a blank feeding mechanism, a tapering former or horn, and a surrounding sheath for bending the blanks into a tubular form, mechanism for side seaming the can-body, a prolongation of the horn of angular cross-section, a movable shaping ring surrounding said angular part of the horn, and carriers for moving the cans in succession upon the horn, substantially as set forth. 4th. In a can making machine and in combination, a stationary horn of angular cross-section, a blank feeding mechanism, reciprocating carriers for moving said blanks along said horn successively and intermittently, a shaping ring fitting upon and around the horn, and a reciprocating side bar connected to said shaping ring, substantially as described. 5th. In a can making machine, the combination with the horn or former of the reciprocating side bar, the movable shaping ring surrounding said former and connected to the side bar, and carriers secured to and moving with said shaping ring, substantially as described. 6th. In a can making machine, the combination with a stationary and tapering horn or former, having spiral grooves, of carriers reciprocating in such grooves, such carriers being composed of two or more sections swivelled together, substantially as and for the purpose set forth. 7th. In a can making machine, the combination with a stationary and tapering horn or former, having spiral grooves, of recessed carrier blocks, whereby said blocks and latches are self adjusting in said grooves, substantially as and for the purpose set forth. 8th. In a can making machine, the combination with a former or horn having its top, bottom and sides formed on inwardly curved lines in cross-section, of a tapering ring having an inner edge of corresponding cross-sectional curvature, substantially as and for the purpose set forth. 9th. In a can making machine, the combination with a former or horn having its top, bottom and sides formed on inwardly curved lines in cross section, of a shaping ring surrounding said horn and having an inner edge of corresponding curvature, and a reciprocating side bar connected to said shaping ring, substantially as described. 10th. In a can making machine, a former or horn having a flat rear upper surface merging first into a tapered portion, thence into cylindrical cross section and thence into an angular cross section, in combination with a sheath inclosing the tapered portion, a separate shaping ring surrounding the angular portion and carriers for impelling flat blanks and can-bodies along such horn or former, substantially as set forth. 11th. In combination with the former or horn having at one end a sliding extension, a reciprocating side bar, rod connected loosely to said side bar, and an adjustable stop on said rod for regulating the length of the stroke derived from said side bar, substantially as described. 12th. A mechanism for heading cans comprising an open ended heading tube adapted to receive and hold a can-body, and can-heads in line, in combination with reciprocating heading rams and connections for operating such rams successively, whereby the can-heads are placed successively upon the ends of the can-body, substantially as set forth. 13th. In combination with a heading tube, having means for holding a can-body and two can-heads or covers in line, two heading rams, adapted to act independently and successively upon the respective heads or covers, substantially as described. 14th. In a can making machine, and in combination, a heading chamber or tube, a reciprocating plunger for placing can-bodies within such tube and for heading one end of such can-bodies, can-head feeding passages into said heading chamber for placing can-heads in position in line with said can-bodies, a heading ram for heading the other end of said can-bodies,

a driving shaft, and independent connections from said driving shaft to the plunger and to the heading ram, whereby they are successively operated to head both ends of the can and to discharge the headed can, substantially as described. 15th. In a can making machine, and in combination, a heading chamber or tube, a reciprocating plunger or ram for placing can-bodies within such tube and for heading one end of such can-bodies, can-head feeding passages into said heading chamber, a heading ram for heading the other end of such can-bodies, a driving shaft, a connecting rod for operating said plunger, and a cam for operating said ram, all substantially as described. 16th. In a can making machine, a can-body former having a telescopic extension, in combination with a heading tube, can-head feeding mechanism, a heading ram and driving means for causing the following consecutive operations; the introduction of a can-body into the heading tube by the forward stroke of the telescopic extension, the withdrawal of said extension, the feeding of two can-heads into line with the can-body, the securing of one can-head upon the can-body by the advancement of the heading ram, the placing of the other head upon the can by the next forward stroke of the telescopic extension, and the discharge of the headed can from the tube by the same stroke of said extension, substantially as set forth. 17th. In a canmaking machine, the combination with the heading tube, having can-head feeding passages communicating therewith, of a heading ram, a sliding cut-off, an arm for opening said cut-off normally in the path of said ram, and a safety latch connected to said arm, adapted, when no can-body is in the heading tube, to fall and thereby remove said arm from the path of the ram, substantially as and for the purposes set forth. 18th. In a machine for making cans of angular cross section, the combination with a heading tube and with can-body and can head supplying devices, of a heading ram having crimping sections and means for forcing such sections together so as to surround and bear upon the rim of the can-head, substantially as set forth. 19th. In a can making machine, the combination with the heading tube, of a two part heading ram, crimping sections, a cam for moving said two-part ram as one, for placing a can-head upon a can-body in the heading tube, and a cam for moving one part of said ram independently for operating the crimping sections, substantially as set forth. 20th. In a can making machine, a heading tube, can-head crimping sections, a reciprocating heading ram, having an independently movable plunger, bevelled pins in said plunger, and bevelled recesses in said crimping sections, all constructed and arranged to operate substantially as described and shown.

**No. 56,897. Folding Egg Case. (Boite à œufs.)**



William J. Hastings, Watford, Ontario, Canada, 5th August, 1897; 6 years. (Filed 14th May, 1897.)

*Claim.*—1st. The opposite end portions G, G, pivotally secured to a base or bottom portion, and metal straps D, in which the channels E, are formed, in combination with the upwardly projecting side portions H, H, the ends of which are secured in the sockets E, substantially as and for the purpose set forth. 2nd. The opposite end portions G, G, the metal straps D, in which the channels E, are formed, and their lower ends pivotally secured to the base portion of the case, the side portions H, H, the ends of which are secured in the sockets E, the cleats N, the central division I, substantially as and for the purpose set forth. 3rd. The opposite end portions G, G, the metal straps D, in which the sockets E, are formed, and their lower ends pivotally secured to the base portion of the case, the clasps F, the side portions H, H, the ends of which are secured in the sockets E, the cleats N, and the central division I, substantially as and for the purpose set forth. 4th. The opposite side and end portions H, H, and G, G, the metal straps D, in which the sockets E, are formed, and the ends of the side portions H, H, inserted in the sockets E, and said metal straps pivotally secured to and in combination with the side portions B, B, the base or bottom A, and the end portions C, C, substantially as and for the purpose set forth. 5th. The opposite end portions, G, G, pivotally secured to the base or bottom portion, the straps D, in which the sockets E, are formed, the side portions H, H, the ends of which are secured in the sockets E, the cleats N, the central division I, in combination with the cover J, battens O, battens K, in which the grooves

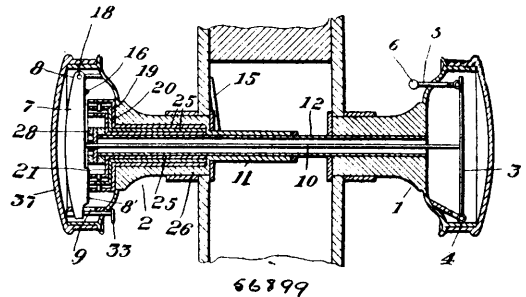
L, are formed, and the fasteners R, substantially as and for the purpose set forth. 6th. The base or bottom A, and the side and end portions B, B, and C, C, the battens M, in which the grooves L, are formed, in combination with the end portions G, G, pivotally secured to the base or bottom and the metallic straps D, in which the sockets E, are formed, the cover J, the battens O, and the fasteners R, substantially as and for the purpose set forth. 7th. The base A, the upwardly projecting side and end portions, B, B, H, H, and C, C, G, G, respectively, the metallic straps D, in which the grooves E, are formed, the partition I, and cleats N, in combination with the cover J, battens O, the battens K, and M, in which the grooves L, are formed, and the fasteners R, substantially as and for the purpose set forth.

**No. 56,898. Felt. (Feutre.)**

Johann Offermann, Günzburg, Bavaria, Germany, 5th August, 1897; 6 years. (Filed 14th May, 1897.)

*Claim.*—A process for manufacturing double or Esquimo cloth from felt, consisting in that the felt, after having been napped on both sides, shorn ready on the right side and subjected to a strong pressure, is shrunk, after which repeated napping makes the goods ready for the needle.

**No. 56,899. Combination Door Knob. (Bouton de porte.)**

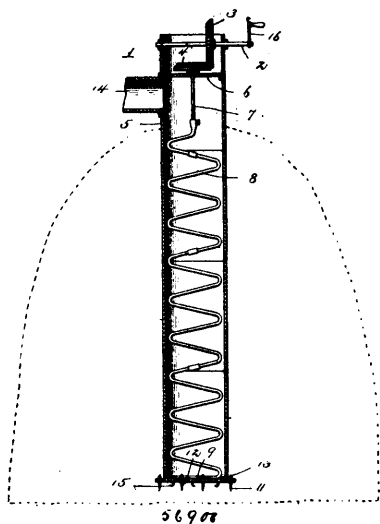


Charles Fremont Hill, Middlebranch, Ohio, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. The combination with a door lock, of a pair of knobs independently movable, and means for coupling said knobs so that they will turn together. 2nd. A pair of knobs constructed to be independently rotatable, in combination with means for locking or coupling said knobs together, whereby they may be simultaneously turned, substantially as described. 3rd. A pair of knobs loosely connected to each other so as to turn independently, in combination with means for placing said knobs in interlocked engagement, substantially as described. 4th. A pair of door knobs, one of which is provided with a hollow or tubular spindle, and the other with an independent spindle adapted to pass through the hollow spindle of the opposite knob, substantially as and for the purpose described. 5th. A knob having a hollow spindle, in combination with a second knob having a spindle mounted in said tubular spindle and adapted to rotate freely therein, and means for causing said spindles to interlock, substantially as described. 6th. A knob having a hollow spindle, in combination with a second knob having its spindle extended through said hollow spindle and carrying means for engaging the knob of the hollow spindle, substantially as described. 7th. A knob having a hollow spindle, in combination with a second knob, having its spindle rotatably mounted in the hollow spindle, and means located in one of the knobs whereby said spindles may be coupled together and turned simultaneously, substantially as described. 8th. A hollow knob and locking mechanism contained therein, in combination with a second knob having its spindle inserted into the first knob, and means on said spindle for engaging said locking mechanism, substantially as and for the purpose described. 9th. A hollow knob provided with a hollow spindle and containing locking mechanism, in combination with a second knob, having its spindle rotatably mounted in the hollow spindle of the first named knob and carrying a device for engaging and operating the locking mechanism, substantially as described. 10th. A pair of hollow knobs, each containing a lever mounted therein, and a connection between said levers for simultaneously operating them, in combination with locking mechanism arranged in one of the knobs and adapted to be engaged by one of said levers whereby the two knobs may be coupled together or uncoupled, substantially as described. 11th. A pair of hollow knobs, each carrying a spindle section, one of which is tubular, in combination with the levers mounted in said knobs, a connection between said levers for simultaneously operating them, and locking mechanism arranged in one of the knobs and adapted to be engaged by one of said levers, substantially as and for the purpose specified. 12th. Two hollow knobs, each having spindle sections, one of which is tubular, in combination with levers arranged one in each knob, a connection between said levers for simultaneously operating them, means projecting exteriorly of one of the knobs for operating one of the levers, and

locking mechanism in the other knob adapted to be engaged by the lever therein, substantially as and for the purpose described. 13th. The combination with a hollow knob, of a series of notched rotatable tumblers mounted therein, a device for engaging the notches in said tumblers, and a connection extending from said lever through the knob spindle and connected to means in the opposite knob, whereby said lever may be actuated, substantially as described. 14th. The combination with a hollow door knob, of a plurality of rotatable tumblers mounted therein and notched, a lever mounted in said knob for engagement with the notches in the tumblers, a spring for giving said lever a normal tendency, and an operating connection for said lever extending through the knob spindle and adapted to be operated from the opposite knob, substantially as described. 15th. The combination with a pair of knobs independently rotatable with relation to each other, of means located in one knob for coupling the two knobs together, and means on the other knob for effecting a coupling of the two knobs together, substantially as described. 16th. The combination with a hollow knob, of locking mechanism arranged therein, a lever for engaging the lock tumblers, and a latch for maintaining the engagement between said lever and tumblers, substantially as described. 17th. The combination with a hollow knob, of locking mechanism arranged therein, a lever adapted to engage the notched tumblers of the locking mechanism, and a latch for engaging the free end of said lever and provided with means exterior to the knob whereby said latch may be operated, substantially as described. 18th. In a lock, a plurality of nested tumblers having notched rims in combination with projections on the inner and outer surfaces of said rims, substantially as and for the purpose specified. 19th. In a lock, a series of nested tumblers having notched rims, each provided with a series of perforations, in combination with projections having a removable connection with said rims and made interchangeable as to the several perforations therein, substantially as described. 20th. A hollow knob, and a series of rotatable tumblers nested therein and provided with notches, as described, in combination with a second knob, having its spindle extended into the first named knob and provided with means for engaging one of said tumblers, and means on each of said tumblers for taking up and rotating the adjacent tumbler, all arranged for joint operation, substantially as described. 21st. The combination with a knob spindle, of a polygonal collar thereon, and a spring for engaging said collar, substantially as described. 22nd. The combination with a knob spindle, of an escutcheon plate, and a spring connected to the inner surface of said plate and bearing at its free end against said spindle, substantially as described.

**No. 56,900. Hay Boring Apparatus.**  
(Appareil à percer le foin.)

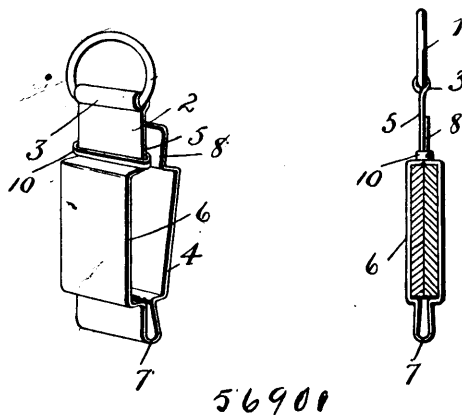


William Cole, Millerton, Pennsylvania, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. In a hay boring apparatus, the combination of a cylinder or tube, an auger or rotating shaft within the tube, a wormer operatively connected with the rotating shaft, a knife bar adjusted athwart the lower end of the tube carrying cutting blades outside the body of the tube, and means whereby motion may be imparted to the rotating shaft, substantially as described. 2nd. In an apparatus for boring in hay or straw, the combination of a tube or cylinder, a knife bar carrying knives upon which the cylinder rests, a series of fingers or projections connected with the knife bar, a wormer or elevator for lifting the cuttings within the cylinder, and means for imparting motion to the wormer and cutters, substantially as described. 3rd. In a hay boring apparatus having a rotary shaft and means for operating the same, the combination with such shaft, of a wormer, a knife bar carrying knives outside the

periphery of the tube or cylinder and also carrying knives within the periphery of said tube or cylinder, and carrying fingers for loosening and picking up the hay, substantially as described.

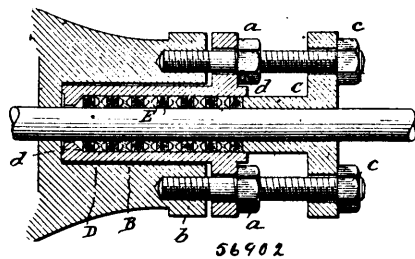
**No. 56,901. Trace Carrier.** (Porte-trails.)



William Oliver Kinne, Fargo, North Dakota, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. A trace supporter, provided with a trace securing clamp and supporting means, substantially as described. 2nd. A trace supporter, provided with a rectangular trace-securing clip and means for clamping the same upon the trace, substantially as described. 3rd. In a device of the character described, a flat strap of metal bent to form a hook at one extremity, a neck below the hook, a sprung loop at its opposite extremity, and a trace-securing clip intermediate the neck and the loop, substantially as described. 4th. In a device of the character described, the combination with a securing ring provided with a straight bar, of a flat strap of metal bent to form a hook encircling said bar, a neck below the hook, a sprung loop at its opposite extremity, a trace-securing clip intermediate the sprung loop and neck, and provided with an extremity designed to lie flat against the neck, and a clamping loop encircling the neck and designed to be slid upon the extremity, substantially as described.

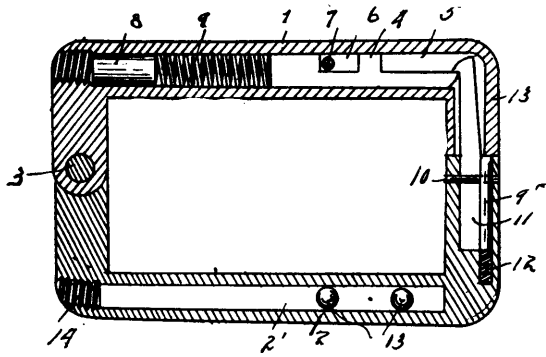
**No. 56,902. Metallic Packing for Piston and Valve Rods.** (Garniture métallique.)



Edwin J. Armstrong, Oswego, New York, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. A packing for piston and valve rods, consisting of a series of soft, anti-friction metal rings D having a continuous groove formed in each side thereof and formed with broad bearing surfaces, and suitable packing d interposed between said rings, whereby endwise pressure may force said last named packing into said grooves, substantially as described. 2nd. A packing for piston and valve rods, consisting of a series of soft, anti-friction metal rings D of cruciform section, and suitable packing d interposed between said rings, whereby endwise pressure will crush said rings, substantially as described. 3rd. A packing for piston and valve rods, consisting of a series of soft, anti-friction metal rings D of cruciform section, and braided-wire coils d arranged between said rings and at each end of the series of rings, substantially as described. 4th. The combination with the stuffing box A, of a steam engine, of an auxiliary packing-box B arranged within the main box, a series of soft, anti-friction metal rings D of cruciform section, a series of braided-wire packing coils d arranged between said rings, and a gland C adapted to follow said packing, substantially as described.

**No. 56,903. Lock. (Serrure.)**

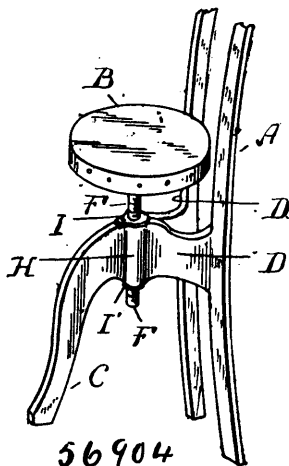


56903

Harry A. Stephens, Missoula, Montana, U.S.A., 5th August, 1897 ; 6 years. (Filed 16th July, 1897.)

*Claim.*—1st. A lock of the character set forth, consisting of a two-part case hinged together, a bolt in one member and a tumbler in the other, said tumbler adapted to engage said bolt and to be released therefrom by concussion, substantially as set forth. 2nd. A lock, consisting of two rectangular members pivoted together, a spring depressed tumbler in one member, a bolt in the other, said tumbler adapted to engage said bolt, and the gravity balls adapted to roll in one of said members, substantially as and for the purpose set forth. 3rd. A lock, consisting of two rectangular members pivoted together, said members being channelled substantially as shown, a tumbler and a spring in the channel of one of said parts, means for preventing the rolling of said tumbler in its longitudinal movements, a bolt secured in the other member, said tumbler adapted to engage said bolt and to release it by concussion of the member in which it is located, substantially as and for the purpose set forth. 4th. A lock, of the character set forth, consisting of the members 1 and 2 united by a rivet 3, said member 1 being channelled out at 6 and 13<sup>1</sup>, the recessed tumbler in said channel 6, the pin 7 extending through the recess of said tumbler, the screw plug 8 closing the opening of said channel 13<sup>1</sup>, the coiled spring 9 located between said tumbler and said plug, the bolt 11 secured in member 2, said bolt adapted to enter channel 13<sup>1</sup> of member 1 and to be engaged by said tumbler 4, all substantially as shown and described. 5th. A lock of the character set forth, consisting of the members 1 and 2 united by a rivet 3, said member 1 being channelled out at 6 and 13<sup>1</sup>, the recessed tumbler in said channel 6, the pin 7 extending through the recess of said tumbler, the screw plug 8 closing the opening of said channel 13<sup>1</sup>, the coiled spring 9 located between said tumbler and said plug, the bolt 11 secured in member 2, said bolt adapted to enter channel 13<sup>1</sup> of member 1 and to be engaged by said tumbler 4, the plunger located in the channel of member 2 at the side of said bolt and held therein by a recessed pin 10, the coiled spring under said plunger, member 2 being channelled out at 2<sup>1</sup> and having a screw plug 14 closing one end thereof, and the balls within said channel 2<sup>1</sup>, all substantially as shown and described for the purpose set forth.

**No. 56,904. Adjustable Chair. (Siège.)**

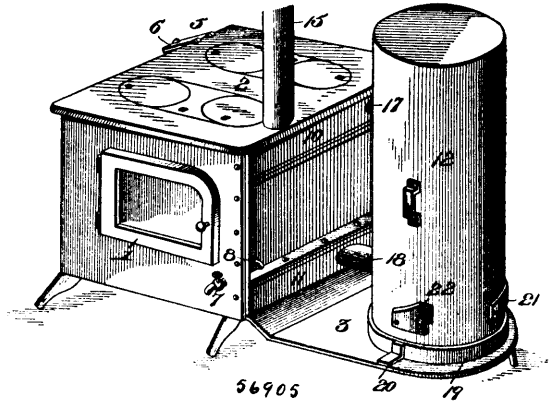


56904

Henry S. Jordan, Grand Rapids, Michigan, U.S.A., 5th August, 1897 ; 6 years. (Filed 15th July, 1897.)

*Claim.*—1st. In an adjustable chair, the combination with the back of a nut having upper and lower flanges provided with slots, braces connected with the back, and screws connecting the braces with the nut and passing through the slots in the flanges of said nut, and a front leg secured to said nut, substantially as described. 2nd. In an adjustable chair, the combination with the back of two braces secured thereto, a nut to which the braces are adjustably connected, a front leg secured to said nut, a spindle having engagement with said nut, and a seat carried by said spindle.

**56,905. Stove. (Poêle.)**



Andrew P. Johnson, Brooten, Minnesota, U.S.A., 5th August, 1897 ; 6 years. (Filed 14th July, 1897.)

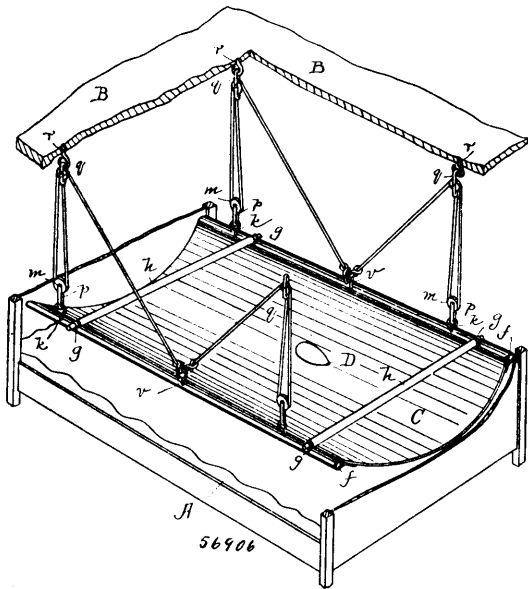
*Claim.*—1st. In combination, a stove having a hot-air space immediately below its top, and having the latter provided with a series of stove holes, a partition separating the holes in the stove top and dividing the hot-air space in communication with the said holes, a stove-pipe communicating with one end of the hot-air space, and a magazine containing the fire and in communication with the other end of the hot-air space substantially as and for the purpose set forth. 2nd. In combination, a stove provided with an oven and having a hot-air space at its bottom, rear and top, a stove-pipe communicating with one end of the hot-air space, and a magazine containing the fire, in communication with the opposite end of the hot-air space by means of a damper-controlled passage, substantially as and for the purpose set forth. 3rd. In combination, a stove having an oven provided at its top, bottom and rear side with a communication hot-air space, a magazine containing the fire, a damper-controlled connection between the upper portion of the magazine and the upper part of the said hot-air space, and a second damper-controlled connection between the lower portion of the magazine and the lower part of the said hot-air space, substantially as set forth. 4th. A stove provided with an oven and having a water space surrounding the oven, and a hot-air space exterior and adjacent to the water space, substantially as and for the purpose set forth. 5th. In combination, a stove provided with an oven having a surrounding water space and a communicating hot-air space at the bottom, rear and top of the water space, and a magazine containing the fire and having independent damper-controlled connections with the opposite ends of the hot-air space, substantially as set forth for the purpose set forth. 6th. In a stove for burning straw and light fuel, a magazine, a cap for closing the lower end of the magazine provided with extensions, and an arched fuel support applied to the cap, substantially as set forth. 7th. In a stove for burning straw and light fuel, a magazine having a draft opening in its side, and a damper for closing the draft opening at one end to the magazine and having its opposite end formed with an inclined portion notched in its lower end, substantially as shown for the purpose set forth.

**No. 56,906. Invalid Lifter. (Porte-invalides.)**

John Leard Dawson, Windsor, Nova Scotia, Canada, 5th August, 1897 ; 6 years. (Filed 13th July, 1897.)

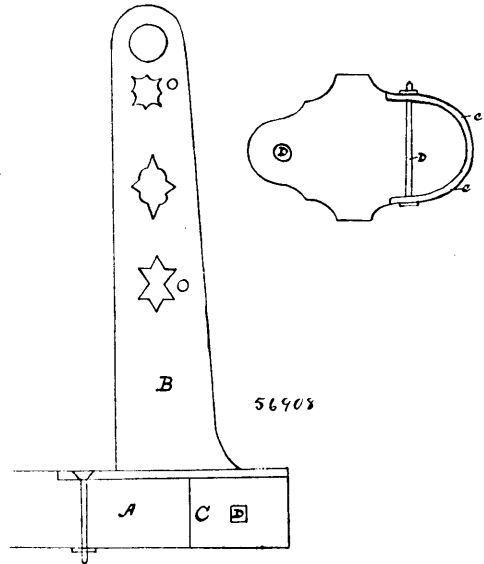
*Claim.*—1st. An invalid lifting device comprising a flexible body provided centrally with an aperture, rigid side rails detachably secured to said body, detachable braces for spreading said rails, and a hoisting device for connecting said rails with the ceiling, or other suitable support, substantially in the manner specified. 2nd. The combination of the hammock body provided with aperture D, the side rails f, the spreading braces h, and means for detachably secur-

ing them to said rails, the blocks and cords, means for detachably securing said blocks to the rails and an overhead support, and devices



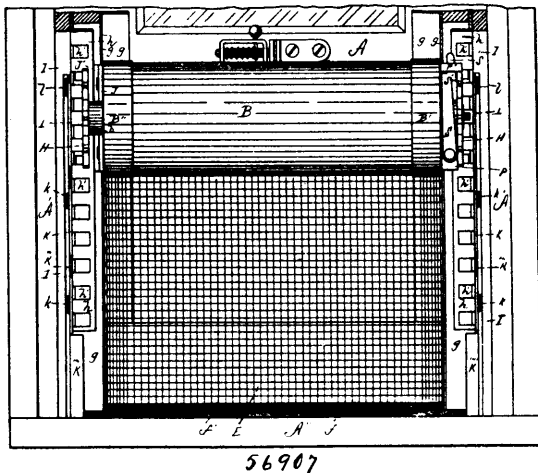
of the vertical plate F, and the horizontal base portion F<sup>1</sup>, extending centrally into said clamp between its two horizontal folds, and the netting E extending down in front of the vertical portion F of the angle-plate, between the horizontal portion F of said plate and the upper fold of the clamp f, around the front edge of said portion F<sup>1</sup>, and back between the said horizontal portion F<sup>1</sup>, and the under fold of the plate f, substantially as set forth.

No. 56,908. Iron Bolster Stake. (*Support d'épée.*)



for securing the ends of the cords to said rails, substantially as described.

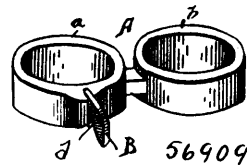
No. 56,907. Window Screen. (*Store de fenêtre.*)



William V. Schaus, Carrick, Ontario, Canada, 5th August, 1897 ; 6 years. (Filed 26th May, 1897.)

*Claim.*—An attachment to the stake in the form of a band and cast in one piece, which band covers the end of the bolster and prevents the same from splitting and by being bolted to the bolster crossways, gives the stake greater firmness and rigidity, substantially as and for the purpose hereinbefore set forth.

No. 56,909. Twine Cutter. (*Coupe-ficelle.*)



Louis M. Bray, Pittston, Virginia, U.S.A., 5th August, 1897 ; 6 years. (Filed 26th May, 1897.)

*Claim.*—A twine cutter comprising two rings rigidly secured together by an integral connection separating said rings, one of them formed with an enlargement, and a cutting blade held in said enlargement and provided with a notch adjacent to the outer face of the enlargement, substantially as and for the purpose described.

No. 56,910. Gas Reservoir. (*Réservoir à gaz.*)

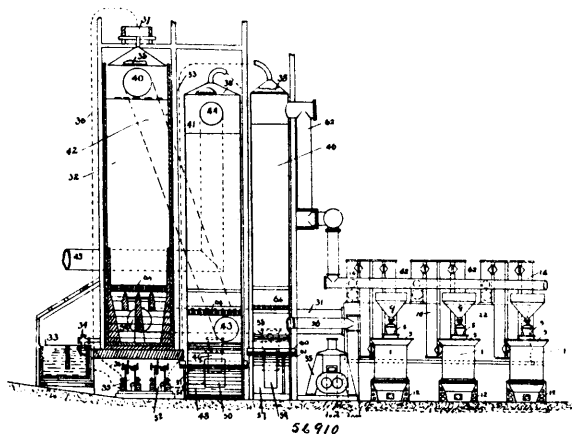
Ludwig Mond, Winnington Hall, Northwick, Chester, England, 5th August, 1897 ; 6 years. (Filed 26th May, 1897.)

*Claim.*—1st. The process of manufacturing gas rich in hydrogen, which consists in burning coal in a hot atmosphere of steam and air in the quantities substantially as described, transmitting the heat of the escaping gases to the mixture of air and steam used in generating those gases, washing the gases with hot water, acid and cold water successively to separate the impurities and utilizing the hot water obtained by the last washing to heat and load with moisture the air to be used for the further burning of coal, substantially as described. 2nd. The improvement in the process of making gas rich in hydrogen, which consists in washing the gases thoroughly by bringing them into intimate contact with hot water, whereby they are practically freed from tar and other solid impurities and are maintained at a temperature at which the ammonia in the gases is not condensed or absorbed, while the gases at the same time take up a considerable quantity of steam, which is subsequently utilized for heating and loading with moisture the air used for the generation of producer gas. 3rd. A combined apparatus for producing gas rich in hydrogen, consisting of a gas producer, a metallic casing with water lute surrounding the same, a heat transmitter for transmitting the heat of the escaping gases to the air and steam passing to the

James Allen Croker, Boston, Massachusetts, U.S.A., 5th August, 1897 ; 6 years. (Filed 13th July, 1897.)

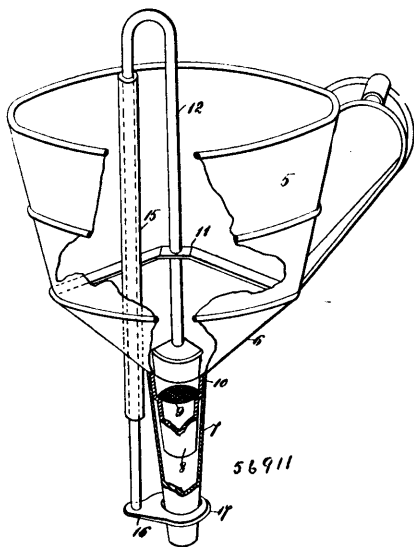
*Claim.*—1st. In a window screen of the character described, the combination with the foot or strip to which the lower edge of the netting is secured, of the slides K adapted to be moved vertically between the window-screen and the jambs and when at their lowest point to hold the said foot down upon the still, and the swinging stops L pivotally secured in the casing immediately above the slides, whereby said slides may be held down or released as desired, substantially as set forth. 2nd. In a window screen of the character described, the slides K provided with the vertical slots K<sup>1</sup>, and handles extending forward into an accessible position, said slides moving vertically between the racks h, and the jambs and held in such position by between k extending from the former into said slots, and swinging arm L pivotally hung from the racks and adapted in their normal position to act as stops for the slides whereby said slides are held down upon the foot of the netting, substantially as described. 3rd. In a window screen of the character described, the combination with the major and minor shafts C, D, spring d, gear-wheel H on the minor shaft, and cap B on the cylinder, of the bracket or plate J rigid with the cap, said plate being formed up into the lips P, P<sup>1</sup>, and the levers S pivoted to the lower lip P and bearing against the upper lip P<sup>1</sup>, said lever being formed with the shoulder or elbow S<sup>1</sup> for engagement with said gear-wheel, and said lever swinging at right angles with the plane of the gear-wheel, substantially as set forth. 4th. In a window screen of the character described, in combination, the spring-clamp f, f<sup>1</sup>, bent into two horizontal parallel folds as described, the angle-shape foot consisting

metallic casing, a mechanical washer for washing the said gases, an acid scrubber for absorbing the ammonia, a cold water scrubber where



the heat of the gases is transmitted to water, and a further scrubber where the heat of the water obtained from the previous scrubber is transmitted to the air used for combustion and this air loaded with steam substantially as described. 4th. In combination with a gas producer and heat transmitting device for transmitting the heat of the effluent gases to air and steam for generating those gases, a hot water washer for washing these gases, substantially as described. 5th. In connection with a gas producer, the combination of a washing device for thoroughly washing the effluent gases with hot water and a weak acid scrubber beyond the same, for the absorption of ammonia substantially as described. 6th. In combination with a producer gas plant, a washer having a water seal, a rotary stirrer and means for fishing out the impurities through the water seal, substantially as described.

**No. 56,911. Funnel. (Entonnoir.)**

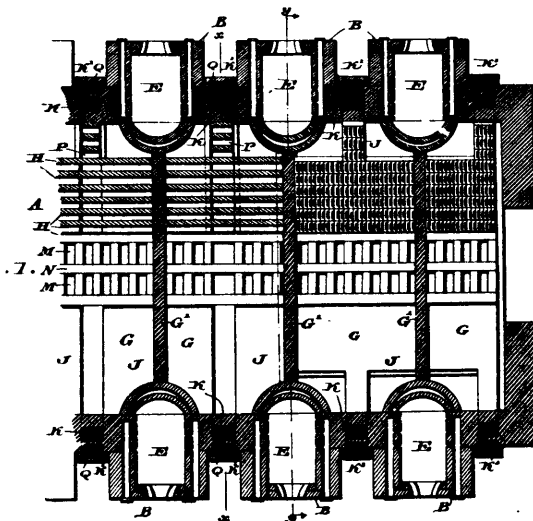


Anson Fleming Borland, Winnipeg, Manitoba, Canada, 5th August, 1897; 6 years. (Filed 28th May, 1897.)

*Claim.*—1st. A funnel of the usual form, provided with a discharge spout, the upper end of which is adapted to be closed by a vertically movable valve, a vertically movable rod mounted in said funnel, and provided with a valve, and at its upper end with an arm which is connected therewith, and which extends downwardly parallel therewith, and which passes through a vertical tube secured in the funnel, and which projects through the bottom thereof, said arm being provided at its lower end with an attachment which is adapted to strike the neck of the bottle or other vessel to be filled when the discharge spout of the funnel is inserted therein, substantially as shown and described. 2nd. A funnel of the usual form, and provided with a discharge spout, the upper end of which is adapted to be closed by a vertically movable valve, a vertically movable rod mounted in said funnel, and provided with a valve, and at its upper end with an arm which is connected therewith, and which extends downwardly parallel therewith, and which passes

through a vertical tube secured in the funnel, and which projects through the bottom thereof, said arm being provided at its lower end with an attachment which is adapted to strike the hook of the bottle or other vessel to be filled when the discharge spout of the funnel is inserted therein, said spout being also provided at its upper end with a detachable tube, in which is placed a screen or strainer, and the upper end of which fits within said spout, and is adapted to be closed by the valve, substantially as shown and described. 3rd. A funnel of the usual form, and provided with a discharge spout, the upper end of which is adapted to be closed by a vertically movable valve, a vertically movable rod mounted in said funnel, and provided with a valve, and at its upper end with an arm which is connected therewith, and which extends downwardly parallel therewith, and which passes through a vertical tube secured in the funnel, and which projects through the bottom thereof, said arm being provided at its lower end with an attachment, which is adapted to strike the neck of the bottle or vessel to be filled when the discharge spout of the funnel is inserted therein, said spout being also provided at its upper end with a detachable tube, in which is placed a screen or strainer, and the upper end of which fits within said spout, and is adapted to be closed by said valve, said valve rod being passed through and vertically movable in a cross bar or plate arranged within said funnel, substantially as shown and described.

**No. 56,912. Brick Kiln. (Four à briques.)**



Milton Morton Bushong and Franklin Fenton Bushong, both of Pawling, Pennsylvania, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

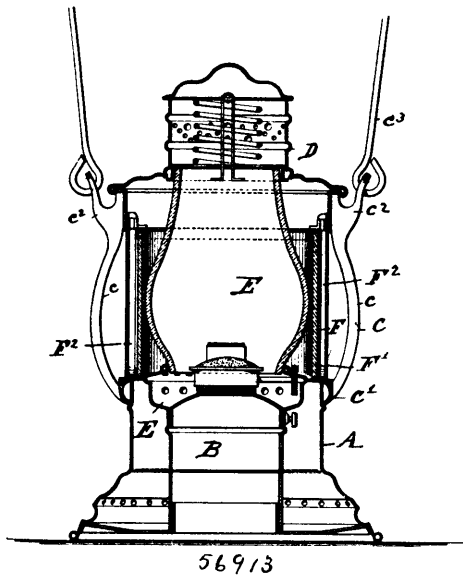
*Claim.*—1st. In a brick kiln, an interior compartment, fire-chambers therefor, passages leading to said compartment from said fire-chambers, a plurality of longitudinal channels extending throughout the length of the kiln, apertured plates supported over said channels, a series of laterally-extending flues located oppositely to each other, and leading from said channels to stacks on either side of the kiln, perforated base slabs on either side said channels, and other laterally-extending flues located oppositely to each other, and in communication with the perforations in said slabs, each of the above flues being arranged at intervals throughout the length of the kiln, and having suitable outlets leading to the atmosphere. 2nd. A brick kiln having an interior compartment, fire-chambers having passages leading therein, the longitudinally-extending channels M M, in the base of said compartment, the dividing wall N between the same, perforated plates supported above said passages M, the stacks K<sup>1</sup>, the laterally-extending oppositely-located passages P leading thereto from said channels, the perforated base slabs H on either side of said passages M, the laterally-extending oppositely-located passages J in communication with the openings in said slabs and leading to said stacks, said passages J and P being arranged at intervals throughout the length of the furnace.

**No. 56,913. Lantern. (Lanterne.)**

John Thomas Casey, Chester, Pennsylvania, U.S.A., 5th August, 1897; 6 years. (Filed 28th May, 1897.)

*Claim.*—1st. In a lantern, a body portion, an oil-cup sustained within the body portion, a casing comprising two parts, each of which is perforated, a said casing embracing the upper portion of the oil-cup, a burner, a stationary shade held with its lower end in engagement with the upper part of the casing, and a movable shade capable of being raised out of the body portion to embrace the burner, the movable shade being capable of alternately inclosing the two parts of the casing which have the perforations, substantially as described. 2nd. In a lantern, a body portion, a ring hinged on the

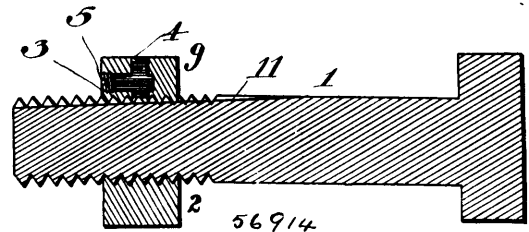
body portion, guides rising from the ring, a dome held above the guides, a burner, a stationary shade engaging the dome and having



its lower portion embracing the burner, a movable shade having parts co-operating with the guides, and means for operating the movable shade, substantially as described. 3rd. In a lantern, a body portion, a burner, a ring hinged on the body portion, guides rising from the ring, a dome sustained above the guides, a stationary shade engaging the dome and having its lower portion embracing the burner, and a movable shade adapted to be received within the body portion, said movable shade having portions co-operating with the guides, and being also adapted to be moved out of the body portion to embrace the burner, substantially as described. 4th. In a lantern, a body portion, a ring hinged on the body portion and having sockets, a guide fitted within each socket and secured thereby, the guides rising from the ring, a dome sustained above the guides, a burner, a stationary shade engaging the dome and having its lower portion embracing the burner, and a movable shade having parts co-operating with the guides, the movable shade being adapted to be received within the body portion and to be moved out of the same to embrace the burner, substantially as described. 5th. In a lantern, a body portion, a rigidly carried casing, a ring hinged to the casing, a dome sustained on the ring, a stationary shade engaging the bottom of the dome, a burner, a movable shade, and mechanism contained within the casing for operating the movable shade, substantially as described. 6th. In a lantern, a body portion, a burner, guides rising from the body portion, a dome held at the upper ends of the guides, a stationary shade engaging at the lower portion of the dome and embracing the burner, a movable shade, a frame for the movable shade and consisting of hingedly connected sections, angle plates connected to one section of the frame, and a bar carried on each angle plate, the bars being movable in the guides, substantially as described. 7th. A lantern having ears held thereon, and a spring bail pivotally connected to the ears and having a frictional engagement with the same sufficient to hold the bail in the desired position, substantially as described. 8th. In a lantern, a body portion, a burner, a stationary shade, a movable shade, a rack on the movable shade, an arbor, a gear carried thereon, a bell crank lever, a wheel sliding on the arbor, and a spring plate engaged with the lever and the plate and adapted to lock with the rack, substantially as described. 9th. In a lantern, a body portion, a burner, a stationary shade, a movable shade, a rack on the movable shade, a spring plate, a pin carried by the plate and adapted to lock with the rack, a bell crank lever engaging the plate, an arbor, a wheel sliding on the arbor and engaged by the bell crank lever, substantially as described. 10th. In a lantern, a body portion having an outwardly projecting and interiorly opening channel, a burner, a stationary shade, a movable shade, a rack carried on the movable shade and moving through the channel, a spring plate fixed to the exterior of the channel and adapted to lock with the rack, an arbor, a wheel sliding on the arbor, a gear wheel carried on the arbor and engaging the rack, and a bell crank lever connecting the spring plate and engaging the wheel, substantially as described. 11th. In a lantern, a body portion having a casing and an outwardly projecting and interiorly opening channel, a burner, a stationary shade, a ring embracing the upper part of the body portion and pivotally mounted on the casing, a dome, ribs sustaining the dome on the ring, a movable shade, a rack carried by the shade and movable through the channel of the body portion, an arbor in the casing, a gear carried by the arbor and engaging the rack, a wheel sliding on the arbor a bell

crank lever, and a spring pressed plate adapted to lock with the rack, substantially as described. 12th. In a lantern, a casing adapted to embrace the burner and having two parts, each of which is perforated to permit the passage of air to the burner, and a movable shade juxtaposed to the casing and capable of movement in relation thereto whereby it alternately closes and opens the two sets of perforations in the casing, substantially as described. 13th. In a lantern, the combination with a body portion, of a movable tubular shade, a frame for said shade, the frame having two sections hingedly connected by which the shade is removably held, and guides on the body portion along which the shade and its frame may move, substantially as described. 14th. In a lantern, the combination of a body portion, a ring hingedly mounted on the body portion, ribs carried by the ring and projecting upwardly therefrom, a band to which the upper ends of the ribs are connected, a guide extending from the ring to the band, and a movable shade capable of being received by the body portion and of moving upwardly between the ring and band, substantially as described. 15th. The combination of a body A, a ring C<sup>1</sup> pivoted thereon, a spring lock holding the parts together, and a screw carried by said spring lock and capable of preventing the movement thereof, substantially as described. 16th. A shade frame, consisting in a cylindrical structure, and a top for the cylindrical structure, the top being hinged to the structure so as to swing across the upper end thereof and close said upper end.

**No. 56,914. Nut Lock. (Arrête écrou.)**



Henry K. Halloper, Danville, Pennsylvania, U.S.A., 5th August, 1897; 6 years. (Filed 19th July, 1897.)

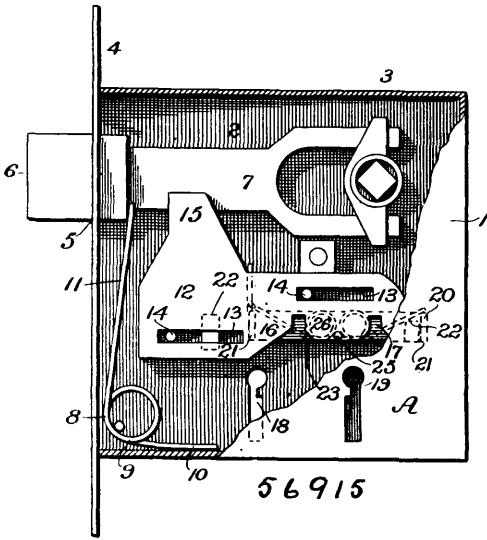
*Claim.*—1st. A nut lock comprising a bolt, a nut adapted to be positioned thereon, a locking pin adapted to move within the nut and engage the bolt, and an operating screw for operating the locking pin, substantially as described. 2nd. A nut lock comprising a nut, a locking pin movable therein and provided with teeth upon one of its sides, an operating screw formed with longitudinal projections for engaging and moving said locking pin, in combination with a bolt upon which the said nut is adapted to be adjusted, the locking pin engaging the threads of said bolt for locking the nut thereon, substantially as shown and described. 3rd. The combination with a bolt, of a nut adapted to be adjusted thereon, said nut provided with a screw threaded horizontal passage, the edge of said nut formed with a vertical perforation or passage opening into the horizontal passage, an operating screw adapted to be positioned in the horizontal passage and provided with a screw threaded head for engaging the screw threads of the said passage, and a locking pin movable in the vertical passage way and provided on one of its faces with teeth for engaging the longitudinal projections upon the operating screw, whereby when the latter is rotated the locking pin is moved downward into engagement with the bolt for locking the nut thereon, substantially as shown and described.

**No. 56,915. Door Lock. (Serrure de porte.)**

Andrew J. Oleson, Elcampo, Texas, U.S.A., 6th August, 1897; 6 years. (Filed 19th July, 1897.)

*Claim.*—1st. In a lock, the combination with a bolt, of a slide for locking said bolt, said slide being provided with spaced notches for the key, and a tumbler pivoted to said slide and normally covering both notches but adapted to be rocked by the key for moving the same into and out of engagement with a projection in the case, the tumbler being arranged to be held locked against movement by a key, substantially as described. 2nd. In a lock, the combination with a slide having spaced notches for the key, of a tumbler fulcrumed on said slide intermediate said notches and provided with a lip for engaging a stud or projection within the lock, and a spring bearing against said tumbler and permitting the same to rock in either direction, substantially as and for the purpose described. 3rd. In a lock, the combination with a slide bolt, of a spring for normally forcing said bolt outward, a slide having an extension lying in the path of said bolt, said slide being provided with spaced notches, and a spring actuated tumbler pivotally connected to said slide intermediate the notches, and having one of its ends bent at a right angle to form a lip for engaging with a fixed projection in the lock case, substantially as described. 4th. In a lock, the combination with the lock case and latch bolt, of a slide for locking the bolt, said slide being provided with slots, and also provided at one edge with spaced notches for the key, guide pins in the case passing through said slots, a tumbler fulcrumed intermediate its ends between said notches and provided with a lip, a fixed projection in

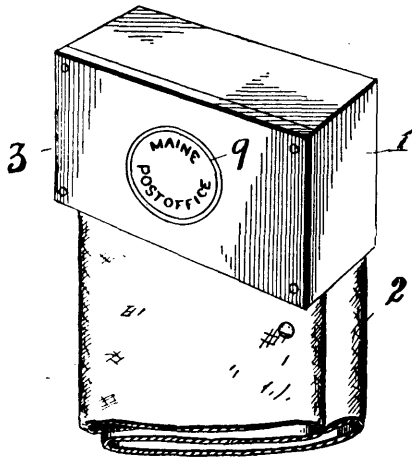
the lock for engaging with said lip, and a spring bearing against said tumbler for holding the latter in position to close said notches



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and at the same time allowing said tumbler to be rocked in either direction when acted upon by the key, substantially as described. 5th. In a lock, the combination with the case having the key hole in one side arranged out of alignment with the key hole in the outer side, of a slide for locking the bolt, said slide being provided with spaced notches for the key, and a spring actuated tumbler pivotally connected to said slide intermediate said notches, the arrangement being such that the insertion of the key in one of the key holes will prevent the turning of a second key in the other key hole, substantially as described.

**No. 56,916. Seal Lock. (Serrure à sceau.)**



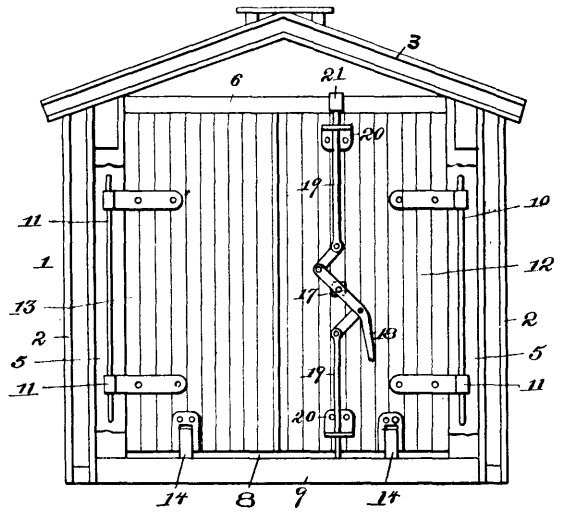
56916

Robert A. Mills, Orlando, Florida, U.S.A., 6th August, 1897; 6 years. (Filed 19th July, 1897.)

*Claim.*—1st. In a seal lock for bags, the holder case or box open at one side and provided with a removable lid or cover, in combination with an internally screw-threaded sleeve, and a headed screw engaging said sleeve, substantially as described. 2nd. In a seal lock for bags, the holder box or case for the mouth of the bag, an internally screw-threaded sleeve or cylinder in said case for engaging the bag, a headed screw engaging said cylinder, and a lead seal applied to cover the headed end of said screw, substantially as described. 3rd. The combination in a seal lock, of the holder box or case, the internally screw-threaded cylinder therein for engaging eyelets in the open end of the bag, a headed screw for

engaging said sleeve provided with a bevelled and counterstunk washer, and a lead seal applied to the said screw head and washer, substantially as described.

**No. 56,917. Car. (Char.)**



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Richard McCoy, Riverton, Virginia, U.S.A., 6th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. A shipping car or other receptacle whose sides and roof are made of two layers with interposed packing between the layers, of wood fibre, cow hair, or other suitable material, a sheathing upon the inner surface of said car, which is air, water and acid proof, doors at each end of the car, and means for forming a tight joint between said doors and said car. 2nd. In a shipping car or other receptacle for the purpose described, the combination with the main body part thereof, of a door frame made up of a pair of uprights and a cross-beam connecting the same at their upper ends, strips of rubber or other suitable material secured to the front faces of said uprights, said cross-beam and the floor of the car, vertically disposed rods secured to said uprights, doors hinged upon said rods whereby a sliding and a reciprocatory movement is permitted, anti-friction rollers upon the lower ends of said doors, segmental tracks in the floor of said car upon which said rollers move, the inner ends of said tracks being depressed, and a locking device for said doors, substantially as and for the purpose described. 3rd. In a shipping car or other receptacle for the purpose described, the combination with the main body part thereof, of a door frame, made up of a pair of uprights and a cross-beam connecting the same at their upper ends, strips of rubber or other suitable material secured to the front faces of said uprights, said cross-beam and the floor of the car, vertically disposed rods secured to said uprights, doors hinged upon said rods, whereby a sliding and reciprocatory movement is permitted, said doors having rabbeted inner surfaces, which are adapted to fit between said uprights and said cross-beam when the doors are in their closed position, anti-friction rollers upon the lower ends of said doors fitting within segmental grooves in the floor of the car, which are depressed at their inner ends, and a locking device for said doors, substantially as and for the purpose described.

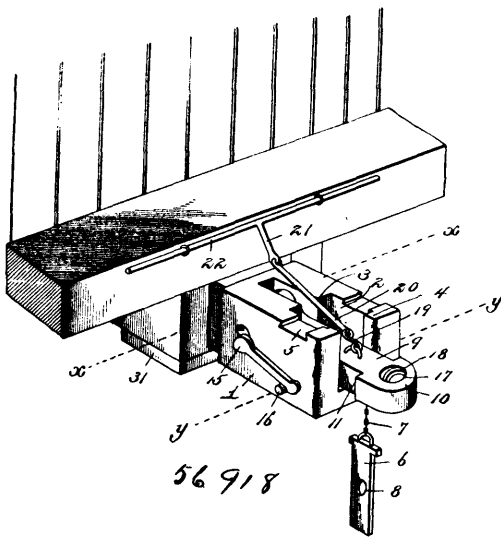
**No. 56,918. Car Coupler. (Attelage de chars.)**

John Andrew Cameron and Elmer Ellsworth Reeves, both of Princeton, Indiana, U.S.A., 6th August, 1897; 6 years. (Filed 19th July, 1897.)

*Claim.*—1st. In a car coupler, the combination of a draw-head having a slot therein which is contracted at the rear and widened at the front, the front of the draw-head forming inwardly extending flanges, a latch movably mounted in the said draw-head and furnished with an outer shouldered head, and means for operating the said latch, substantially as and for the purposes specified. 2nd. In a car coupler, the combination of a draw-head having a slot therein opening outwardly through the top thereof, a latch movably mounted in said slot and having a shouldered head, a cum carried by a rod engaging the rear of the said latch and provided with a lever, a stop-pin for said lever, and means for operating the said latch, substantially as and for the purposes specified. 3rd. A draw-head having dovetail recesses in the upper portion thereof and a lower pin opening, and a dovetail keeper adapted to engage the said recesses and also provided with a pin opening, substantially as and for the purposes specified. 4th. In a car coupler, the combination of a draw-head having a slot therein opening outwardly through the top thereof, a latch movably mounted in said slot and having an outer



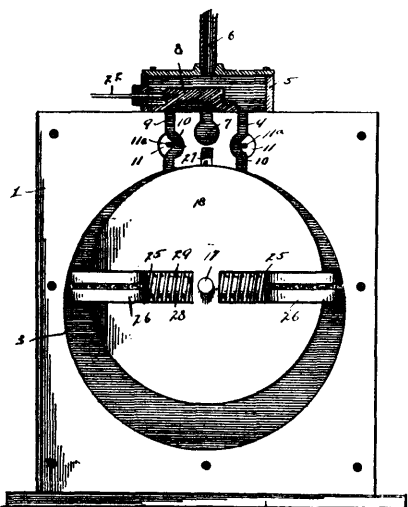
shouldered head, operating devices movably attached to said latch, and a keeper adapted to removably engage the top of the draw-head



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to form a pin support, substantially as and for the purposes specified. 5th. In a car coupler, the combination of a draw-head having a draw-bar with a spring enclosed therein, said draw-bar having rear lugs and the draw-head at the point of juncture with the draw-bar also formed with shoulders, an adjusting rod engaging the rear end of the draw-bar, a plate to which said guide-rod is movably attached, and lugs located on opposite sides of the draw-bar and adapted to engage the shoulders formed thereon, substantially as and for the purposes specified.

**No. 56,919. Rotary Engine. (Machine rotatoire.)**



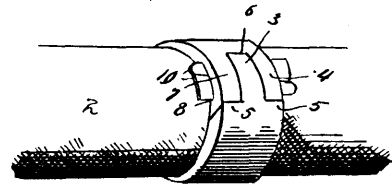
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Stigle S. Blevins and John Jones, both of Ottawa, Kansas, U.S.A., 6th August, 1897; 6 years. (Filed 16th July, 1897.)

*Claim.*—1st. In a rotary engine, the combination of the gear-wheel adapted to be rotated by means of the engine, a valve for reversing the engine, regulating valves for cutting off the motive medium, connections between the reversing and cut-off valves and the gear-wheel, and means for changing the relative location of the gear-wheel to alter the cut-off when the piston reaches any required position in its stroke or travel, substantially as set forth. 2nd. In a rotary engine, the combination of a valve for controlling the supply of motive medium so as to reverse the engine, valves for controlling the cut-off, a gear-wheel having connection with the cut-off controlling valves, and rotated when the engine is in operation, and a hand-lever having connection with the reversing valve and the

gear-wheel to control the position of each, substantially as and for the purpose set forth. 3rd. In a rotary engine, the combination of a gear-wheel caused to revolve with the axle of the engine, a hanger loosely mounted upon the axle, a second gear-wheel in mesh with the first-mentioned gear-wheel, a reversing-valve and a hand-lever having connection with the reversing-valve, and the said hanger, substantially as and for the purpose specified.

**No. 56,920. Hose Clamp. (Attache de boyaux.)**

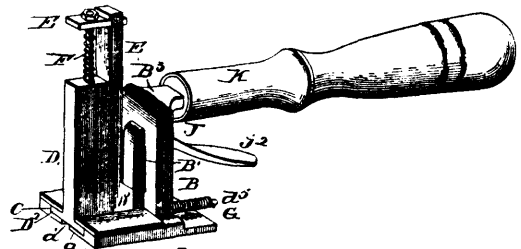


56920

Julius H. Plumb and Joseph S. Melteer, assignee of Silva Sparks, all of Pacific Grove, California, U.S.A., executrix of the estate of Charles Sparks, Pacific Grove, 6th August, 1897; 6 years. (Filed 7th April, 1897.)

*Claim.*—1st. A clamp for the purpose named, consisting of a band provided at its extremities with interlocking intermediate and lateral tongues having tapered extremities and transversely-registering key-seats, extremities of said tongues being adapted to underlap for concealment by the shoulders arranged respectively at the bases of the tongues, substantially as described. 2nd. A clamp for the purpose named, consisting of a band provided at its extremities with interlocking intermediate and lateral tongues having tapered extremities and transversely-aligned key-seats, the shoulders at the bases of the tongues being undercut or bevelled to overlap the tapered extremities of the tongues and duplicate oppositely-arranged tapered keys engaging key seats, substantially as described. 3rd. A clamp for the purpose named, consisting of a band provided at its extremities with interlocking intermediate and lateral tongues having tapered extremities and transversely-aligned key-seats, the extremities of said tongues being adapted to underlap the shoulders arranged respectively at the bases of the tongues, said tongues being formed by folding the extremities of the blank inwardly upon themselves and permanently securing them by means of fastening devices located, respectively, upon opposite sides of the key-seats, and a tapered key engaging said seats, substantially as specified.

**No. 56,921. Glazier's Point Setter. (Règlette de vitrier.)**



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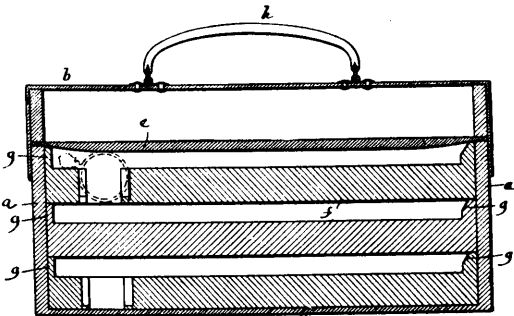
William S. Mallard, Darien, Georgia, and Joseph Hilton, New York, State of New York, both in the U.S.A., 6th August, 1897; 6 years. (Filed 5th May, 1897.)

*Claim.*—1st. An implement of the kind described comprising a holder for containing the fasteners, and having means for feeding the same in proper position, a presser plate having a handle member, said plate normally extending under the holder, such holder being supported and held to slide on the presser plate whereby to bring its discharge mouth in advance of such presser plate as shown and for the purposes described. 2nd. An implement for the purposes described, comprising a frame having a presser plate and a handle member, a point holder having means for automatically feeding the points in place, said holder being longitudinally movable on the presser plate, and a finger operated means for forcing the said holder outward to bring its discharge mouth in advance of the presser plate substantially as specified. 3rd. The combination in an implement as described, of the main frame, said frame having shoe or bearing member and a handle member, the feed magazine, held to slide on the shoe member, and spring pressed to its normal position, and the crank lever pivotally hung on the main frame, and having one end held to engage the feed magazine and to the other held adjacent the handle and adapted to be pressed outward by outward finger pressure substantially as shown and described. 4th. The combination with the shoe portion A provided with a slotted member B and a handle of the holder D held to slide on the shoe edge, having a discharge opening at the lower end, and means for feeding the points through such opening

and the crank lever J, fulcrumed in the slotted member B, having one end held in engagement with the holder D, and the other end held adjacent the handle member whereby it can be readily engaged by the forefinger substantially as shown and described. 5th. An implement for the purposes described, comprising a presser plate or shoe adapted to bear directly on the glass, a slotted member B, and a handle member, integrally or fixedly connected, said shoe having a groove or guideway, a feed magazine having guide members held to slide in the groove or guideway in the shoe, spring devices for holding the said magazine to its inner position and finger operated means for forcing such magazine to its outer position, as set forth. 6th. An implement for the purposes described, comprising a frame having a presser plate and a handle member, having a fixed relation to each other, a point holder having a discharge at the lower end and means for feeding the points to such discharge, said holder being longitudinally movable on the presser plate, and having its discharge opening so arranged that when such holder is slid back to the normal position, said discharge opening will be at a point above the presser plate and closed thereby, substantially as shown and described. 7th. An implement for the purposes stated, comprising a main frame, having a feed magazine at the front end and a thumb bearing member, said magazine having a discharge opening at the bottom, a hand movable longitudinally on the main frame, having a shoe member having its front end held to slide over the magazine discharge opening, said member adapted when drawn back from over the said opening to form a plunger to engage and force the fastener into the sash or frame, as specified. 8th. The combination in an implement, as described, of the main frame, the feed magazine, the thumb rest, a spring plunger for the feed magazine, the hand hold movable longitudinally on the main frame, and the shoe member having a reducer or plunger portion movable under the magazine discharge opening, as specified. 9th. The combination with the main frame, having a magazine provided with a discharge at the lower end, and the longitudinally movable hand hold having a shoe member provided with a plunger portion movable under the magazine discharge of the pivoted bracket member and the spring actuated plunger carried thereby, as set forth. 10th. The combination with the main frame, the magazine or holder, the movable handle and the combined shoe and plunger member arranged as shown, of the pivoted bracket and the spring actuated plunger, all arranged substantially as shown and described. 11th. The combination with the main frame, having the pendent member, having an aperture, 4*b*, of the magazine, the plunger and the bracket, 1*a*, the movable hand hold, spring pressed to its normal position, the shoe, 10, having a reduced front member movable under the aperture, 4*b*, and the front guide member, all arranged substantially as shown and for the purposes described.

**No. 56,922. Portable Kit.**

(*Trousseau d'instruments portatif.*)



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The Geneva Optical Co., assignee of Fred Harmon Smith, both of Chicago, Illinois, U.S.A., 6th August, 1897; 6 years. (Filed 7th May, 1897.)

*Claim.*—A portable kit for opticians' testing outfits, comprising a box-like case having its bottom, back and ends rigidly secured together, and having a front hinged to said bottom, and a chambered top hinged to said back and adapted to close over said ends and said front, and a series of superposed trays provided with recesses to receive the lenses, the ends of said trays projecting vertically beyond the sides to form ledges whereon the trays rest and whereby the trays will be interspaced, and a hinged lid beneath the top to close the chamber thereof, and guard the lenses against displacement, substantially as described.

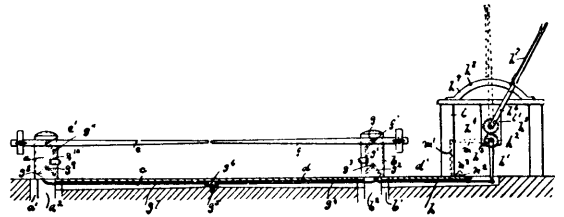
**No. 56,923. Railway Gate.**

(*Barrière de chemin de fer.*)

Alfred E. Gathercole and William Riley, both of Paterson, New Jersey, U.S.A., 6th August, 1897; 6 years. (Filed 9th July, 1897.)

*Claim.*—1st. The combination with a standard, of a shaft in said standard and traversing the same, a plate provided at each end

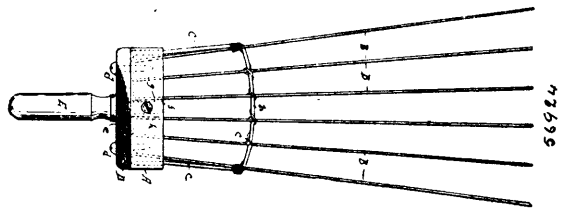
with projecting portions loosely arranged on one side of said standard, and a series of spring-controlled bolts penetrating said



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plate and the side of said standard, substantially as and for the purpose described. 2nd. The combination with a standard, of plumber-blocks adjustably arranged in said standard, a shaft traversing said standard and having its bearings in said plumber-blocks, a gate mounted on said shaft, a plate provided at each end with projecting portions loosely arranged on one side of said standard, a series of spring-controlled bolts penetrating said plate and the side of the standard, and mechanism for operating the shaft substantially as described. 3rd. The combination with a standard, of a ledge or shelf projecting inwardly from opposite sides thereof, a plumber-block adjustably arranged on each of said shelves, a shaft having its bearings in said plumber-blocks, a gate mounted on said shaft, mechanism for operating said shaft, and a spring-controlled striking-plate on said standard and provided with outwardly projecting portions, substantially as described. 4th. The combination with a standard, of a ledge or shelf projecting inwardly from opposite sides thereof, a plumber-block adjustably arranged on each of said shelves, a shaft having its bearings in said plumber blocks, a gate mounted on said shaft, mechanism for operating said shaft, a plate having outwardly projecting portions loosely arranged on one side of the standard, and a series of spring-controlled bolts penetrating said plate and the side of the standard, substantially as and for the purposes described. 5th. The combination, with a standard, of a shaft in said standard, a gate mounted on said shaft, a crank-arm also mounted on said shaft, an angle-lever fulcrumed in said standard, a link pivotally connecting the crank-arm with one arm of said angle-lever, a horizontally arranged rod pivotally connected with the other arm of said lever, two parallel shafts suitably supported away from said standard, gear-wheels on said shafts meshing with each other, a lever mounted on one of said shafts, and a crank-arm secured to the other shaft and pivotally connected with its free end to the free end of the horizontally arranged rod, substantially as described. 6th. The combination with a standard, of plumber-blocks adjustably arranged in said standard, a shaft traversing the standard and having its bearings in said plumber-blocks, a gate mounted on said shaft, a crank-arm also mounted on said shaft, an angle-lever fulcrumed in said standard, a link pivotally connecting the crank-arm with one arm of said angle lever, a horizontally arranged rod pivotally connected with the other arm of said angle-lever, and mechanism for operating said rod, substantially as described. 7th. The combination with a standard, of a shaft traversing the standard, a gate mounted on said shaft, a crank-arm also mounted on said shaft, an angle-lever fulcrumed in said standard, a link pivotally connecting the crank-arm with one arm of said angle-lever, a horizontally arranged rod pivotally connected with the other arm of said angle-lever, two parallel shafts suitably supported away from said standard, gear-wheels on said shafts meshing with each other, a lever mounted on one of said shafts, and a crank-arm secured to the other shaft and pivotally connected with its free end to the free end of the horizontally arranged rod, substantially as described.

**No. 56,924. Carpet Beater. (*Battoir à tapis.*)**

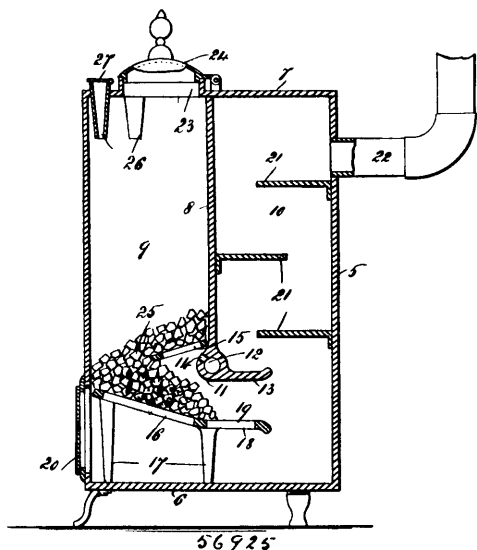


Edward Kent and Louie H. Clark, both of Fond du Lac, U.S.A., 6th August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—1st. As an article of manufacture, a beater consisting of a head having perforations extending therethrough, fingers passed through these perforations, and a cap or block removably secured to the head over the ends of the fingers projecting through these perforations, substantially as set forth. 2nd. As an article of manufacture, a beater consisting of a head having perforations extending therethrough, a wire brace the ends of which extend through two of the perforations, wire fingers extending through the remaining perforations, and secured to the brace, a cap or block removably

secured to the head over the ends of the brace and fingers, and a handle extending through the cap or block into the head, and means for securing said handle in place, substantially as set forth.

**No. 56,925. Stove. (Poêle.)**

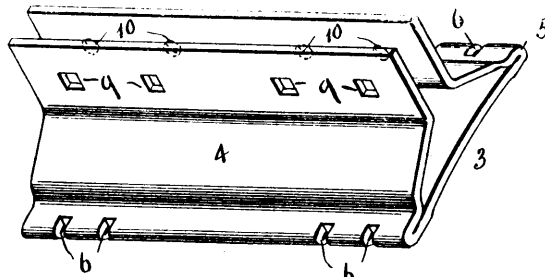


Frederick Girtanner, New York, State of New York, U.S.A., 6th August, 1897; 6 years. (Filed 8th July, 1897.)

*Claim.*—1st. A stove or heater comprising a casing which is provided with a door, in the bottom portion of the front thereof, said casing being also provided with a central vertical partition which extends to within a predetermined distance of the bottom of said casing, and by means of which the heater is divided into front and rear compartments, a grate which is placed in the lower portion of the stove in front of said partition plate, and which is inclined downwardly and backwardly and which is provided with a backwardly directed extension, a supplemental grate or shield mounted transversely of the front compartment of the stove adjacent to the lower end of said partition plate, said front compartment being also provided in the top thereof with an opening provided with a cover, and with a plurality of tubes which pass through the top of the compartment, and which are adapted to admit air therinto, and the rear compartment being also provided at or near the top thereof with a pipe or flue, substantially as shown and described. 2nd. A stove or heater comprising a casing which is provided with a door, in the bottom portion of the front thereof, said casing being also provided with a central vertical partition which extends to within a predetermined distance of the bottom of said casing, and by means of which the heater is divided into front and rear compartments, a grate which is placed in the lower portion of the stove in front of said partition plate, and which is inclined downwardly and backwardly, and which is provided with a backwardly directed extension, a supplemental grate or shield mounted transversely of the front compartment of the stove adjacent to the lower end of said partition plate, said front compartment being also provided in the top thereof with an opening provided with a cover, and with a plurality of tubes which pass through the top of the compartment, and which are adapted to admit air therinto, and the rear compartment being also provided at or near the top thereof with a pipe or flue, said rear compartment being also provided with partial transverse partition plates, which are arranged alternately therein, substantially as shown and described. 3rd. A stove or heater comprising a casing which is provided with a door, in the bottom portion of the front thereof, said casing being also provided with a central vertical partition which extends to within a predetermined distance of the bottom of said casing, and by means of which the heater is divided into front and rear compartments, a grate which is placed in the lower portion of the stove in front of said partition plate, and which is inclined downwardly and backwardly, and which is provided with a backwardly directed extension, a supplemental shield or grate mounted transversely of the front compartment of the stove adjacent to the lower end of said partition plate, said front compartment being also provided in the top thereof with an opening provided with a cover, and with a plurality of tubes which pass through the top of the compartment, and which are adapted to admit air therinto, and the rear compartment being also provided at or near the top thereof with a pipe or flue, said rear compartment being also provided with partial transverse partition plates which are arranged alternately therein, and the lower portion of said vertical partition plate being provided with a backwardly directed buffer plate, and with a cylindrical portion in which is formed a longitudinal bore or

passage which corresponds with openings in the casing of the heater, and said cylindrical portion being also provided with slots or openings which communicate with said bore or passage, and which open forwardly beneath said supplemental grate or shield, substantially as shown and described.

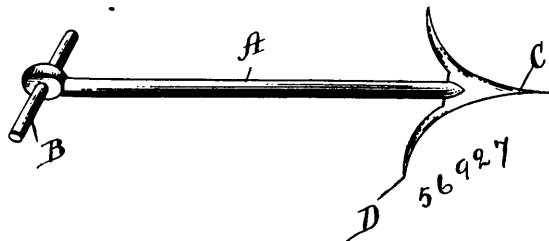
**No. 56,926. Rail Joint. (Joint de rails.)**



Jeremiah Downs, Argentine, Kansas, U.S.A., 6th August, 1897; 6 years. (Filed 5th July, 1897.)

*Claim.*—In a rail joint, the combination with the meeting ends of two rails, of a connecting plate, consisting of a base portion concave at its underside for its full length, side arms clamping the opposite sides of the rails below the heads thereof and bent to produce flattened flanges at the junction of the base and said side arms, and provided with registering circular and rectangular openings, headed pins or bolts extending through said openings, and also registering openings in the rails, and which are provided with rectangular necks fitting non-rotatably in said rectangular openings, and wedge-shaped keys extending downwardly through the openings of said pins or bolts, substantially as described.

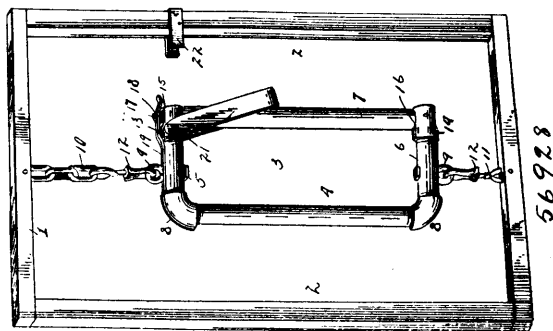
**No. 56,927. Straw Harpoon. (Harpon à paille.)**



John Alphonso McGreevey, Burrows, Indiana, U.S.A., 6th August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—1st. As a new article of manufacture, a harpoon, consisting of a head having concave edges and diverging barbs constituting spirally arranged continuations of the concave edges of the head. 2nd. As a new article of manufacture, a harpoon, consisting of a head having diverging concave edges and pointed diverging spirally arranged barbs curved to constitute continuations of the concave edges of the head in like degree of curvature.

**No. 56,928. Cattle Stanchion. (Etauçon pour bétails.)**

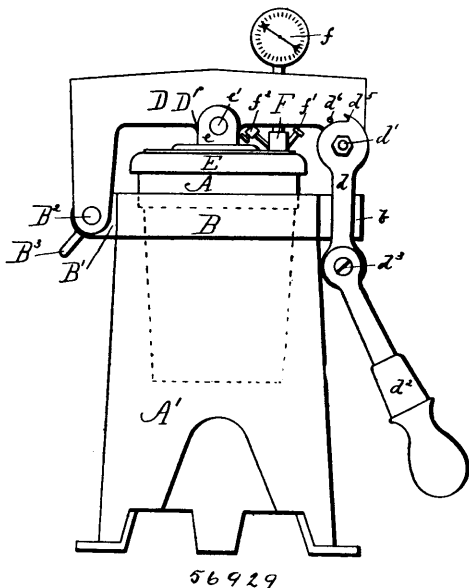


Jacob H. Virkler, Croghan, New York, U.S.A., 6th August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—A cattle stanchion, comprising a rectangular frame having opposite fixed and movable sides and upper and lower end pieces, the movable side being pivoted at its lower end to the lower end piece and carrying a stud at its upper end, a spring catch fitted to the upper end piece of the frame and adapted to engage with said stud, and a normally pendant U-shaped loop 20 loosely embracing

ing the movable side of the frame and loosely and pivotally suspended at its extremities from the upper end piece of the frame, said loop being sufficiently heavy to act as a gravity check for normally returning the movable side toward its catch when released from the latter, substantially as set forth.

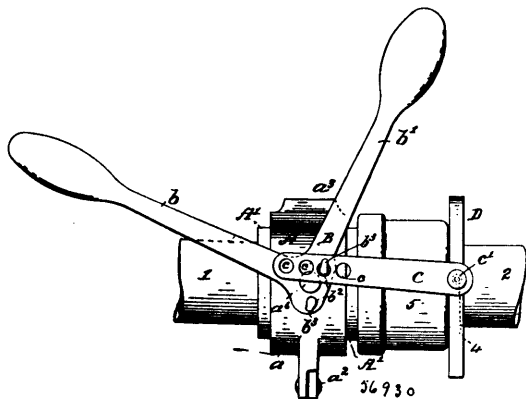
**No. 56,929. Vulcanizing Apparatus.**  
(Appareil à Vulcaniser.)



Philander James Davis, Rochester, New York, U.S.A., 6th August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—1st. The combination of a retort, a frame around the same having a pair of lugs on opposite sides thereof, a cover, a clamping lever pivoted to one of said lugs and extending over said cover and having said cover pivoted thereto, a cam or eccentric adapted to engage the under side of the other lug and provided with an operating handle, and a swinging connection permanently attached to said cam and to the free end of said clamping lever, whereby the cover is locked and unlocked and is lifted and replaced by operating the handle only. 2nd. In a vulcanizing apparatus, a retort A, a cover E, a support for the retort provided with a ring B thereof, a clamping lever D pivoted to the lug B^1 and pivoted at or near its middle to the cover E, a cam d^4 attached by the links d to the free end of the lever D, and arranged to engage the lower side of the lug b, an adjustable plug b^1 extending through said lug b and whereon the cam d^4 presses, and a handle d^2 for operating said cam, whereby the cover is locked and unlocked and is lifted and replaced by operating the handle only.

**No. 56,930. Double Cork Filling and Pressing Device.**  
(Appareil à bouchon double pour emplir et presser.)

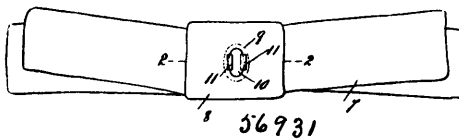


Henry Schulhoff, Lynn, Mass., U.S.A., 7th August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—1st. A double cork filling and pressing device, consisting of two metallic pipe surrounding sections, such having their lower ends pivoted together, and their upper ends free to swing, a lead pouring gate, and channels a^2, the lead casting and pressing chan-

nel a^5, the lead mould and pressing portions A^1 provided thereon, levers fulcrumed on the mould and pressing portion A, a connecting rod engaging the levers and the pressing mechanism portion D and the said pressing mechanism portion or pipe engaging portion D, as and for the purpose described. 2nd. In a double cork filling and pressing device, the two metallic pipe surrounding sections a and a^1, such having their lower ends pivoted together, and their upper ends free to swing, a lead pouring gate, and channels a^2, the lead casting and pressing channel a^5, the lead mould and pressing portions A^1, in combination with levers fulcrumed on the mould and pressing portions A, a connecting rod engaging the levers and the pressing portion D, and such portion D, substantially as and for the purpose hereinbefore set forth.

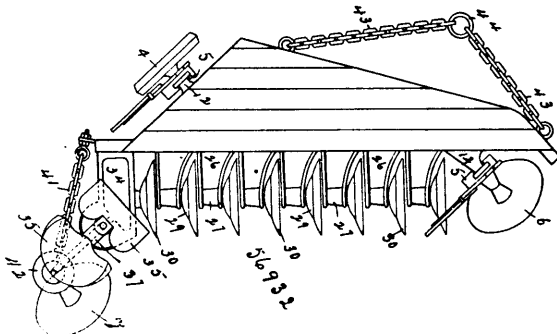
**No. 56,931. Fastening Devices for Neckties.**  
(Attache de cravates.)



Henry Richard Howland, Brooklyn, New York, U.S.A., 7th August, 1897; 6 years. (Filed 8th July, 1897.)

*Claim.*—1st. The herein described fastening device for a necktie, consisting of a hollow, spring-metal receiver provided at one side with an opening at the opposite sides of which are formed spring jaws, said receiver being adapted to be secured to a tie, substantially as shown and described. 2nd. The herein described fastening device for a necktie, consisting of a hollow, spring-metal receiver provided at one side with an opening at the opposite sides of which are formed spring jaws, said receiver being adapted to be secured to a tie and said opening being adapted to receive a collar button, substantially as shown and described. 3rd. The herein described fastening device for a necktie, consisting of a hollow, spring-metal receiver 9, which is provided at one side with an opening 10 at the sides of which are formed spring jaws 11, and a collar button consisting of a base disc or plate provided with a screw-threaded shank, and a supplemental shank which is mounted thereon and provided with a knob or head, substantially as shown and described.

**No. 56,932. Rotary Disc Plough.** (Charrue rotative.)

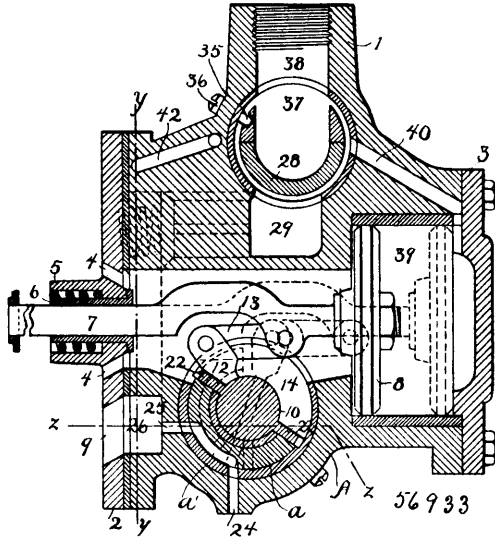


George Spalding and John Steele Robbins, both of San Francisco, California, U.S.A., 7th August, 1897; 6 years. (Filed 25th June, 1897.)

*Claim.*—1st. In a rotary disc plough such as described, a triangular frame having a straight disc carrying beam 3 set at an angle to the line of draft, and a draft beam 2 inclined from the furrow side backward to form a short landside 1 set back from the forward end of the disc beam. 2nd. In a rotary disc plough such as described, a triangular frame having a straight disc carrying frame 3 set at an angle to the draft and a short landside 1 set back from the forward end of the disc beam, in combination with two furrow wheels 6, 7, adapted to resist the side pressure produced by the discs, one located at each side of the disc beam 3, and a land wheel 4 mounted on the land beam near the rear furrow wheel to form a pivot on which the plough will swing to cause the discs to cut an even furrow in turning. 3rd. In a rotary disc plough, the combination of a traction wheel 6, 7, the face of which is recessed, with supplemental weights 9 adapted to fit in said recessed face, and suitable fastenings for maintaining the said weights in place. 4th. In a rotary disc plough, the combination of a beam 3 set at an angle to the line of draft, with a bracket mounted rigidly on said beam, a rotary cutting disc 30 having a concave face and a bevelled periphery 34, the bevel being formed on the back of the disc and to the line of draft of the plough to form a landside, and a bearing 28 for said disc mounted in said bracket. 5th. In a rotary disc plough, a cutting disc 30 having a solid concave face to operate at an angle to the line of draft and bevelled on the back of the peri-

phery of the disc to form a landside. 6th. In a rotary disc plough, a lever for raising and lowering the frame thereof, the combination with a journal bracket 5 having a vertical guide plate 11 attached, of a bracket extended from the frame provided with a rack-bar 10 adapted to slide in said guide plate and engaging the said rack-bar, and a pawl 15 mounted on said guide plate and having an inverted wedge shaped tooth 28 to engage the said pinion. 7th. In a rotary disc plough, in a lever for raising and lowering the frame thereof, the combination with a journal bracket having a vertical guide plate 11 attached, of a bracket extended from the frame provided with a rack-bar 10 adapted to slide in said guide plate, two pinions 13, 14, rigidly connected, mounted on said guide plate, one of which engages the rack-bar 10, a pawl 15 mounted on said guide plate, having an inverted wedge shaped tooth 23 to engage one of the pinions, a lever 20 to turn the pinions, and a lever 25 pivoted on the turning lever and adapted to throw the pawl out of engagement with the said pinion.

**No. 56,933. Brake Mechanism. (Mecanisme de frein.)**

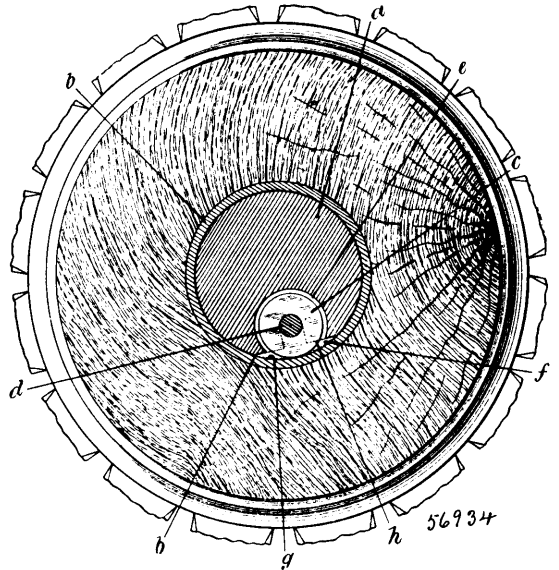


John Shourck, Pittsburg, Pennsylvania, U.S.A., 7th August, 1897; 6 years. (Filed 14th June, 1897.)

*Claim.*—1st. In an air-brake mechanism, the combination with a train-pipe, a brake-cylinder, and an auxiliary reservoir, of a piston-chamber communicating with the train-pipe and with the auxiliary reservoir, a piston arranged in said chamber, a valve-chamber having a port 25 communicating with the brake-cylinder and an exhaust-port, a rotary valve arranged in said chamber and having a sliding member provided with a groove or way adapted to connect the port 25 with the piston-chamber and the auxiliary reservoir or with the exhaust-port, and connections between the piston and the valve, substantially as set forth. 2nd. In an air-brake mechanism, the combination with a train-pipe, an auxiliary reservoir, and a brake-cylinder, of a rotary controlling-valve consisting of a body portion having laterally-projecting flanges on opposite sides thereof, and another member, fitted between said body and the wall of the valve-chamber and adapted to be moved by the flanges on the body, substantially as set forth. 3rd. A valve for an air-brake mechanism consisting of a rotary body having laterally-projecting flanges on opposite sides thereof, and another member partially surrounding the rotary body and adapted to be moved by the flanges thereon, said rotary body being adapted to have a limited movement independent of the other member, and the latter having formed therein a port adapted to be closed by one of the flanges on the rotary body, substantially as set forth. 4th. A valve for an air-brake mechanism consisting of a rotary body 10, having laterally-projecting flanges on opposite sides thereof, another member 21, partially surrounding the rotary body and adapted to be moved by the flanges thereon, and a sliding plate fitted in a way in the member 21, and having its ends in contact with both of the flanges on the body 10, and a passage or groove formed in its outer face, substantially as set forth. 5th. In an air-brake mechanism, the combination with a train-pipe, an auxiliary reservoir, a brake-cylinder, a piston-chamber communicating with the train-pipe and with the auxiliary reservoir, and a piston arranged in the piston-chamber, of a valve arranged between the piston-chamber and the brake-cylinder and consisting of a rotary body connected with the piston and having laterally-projecting flanges on opposite sides thereof, another member 21, partially surrounding the rotary body between and adapted to be moved by the flanges thereon, the member 21 having a port or ports in line with ports in the rotary body and another port adapted to be closed by a

plug or pin on one of the flanges of the rotary body, and a sliding plate fitted in a way formed in the member 21, and extending continuously from one of the flanges on the rotary body to the other and having in its outer surface an air-passage, substantially as set forth.

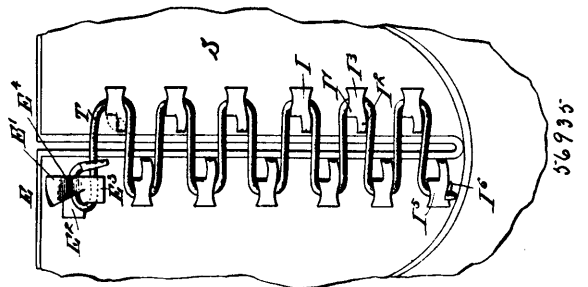
**No. 56,934. Axle Arm. (Bras d'essieu.)**



Francis Robert Richard Day, Brixton, Surrey, England, 7th August, 1897; 6 years. (Filed 10th June, 1897.)

*Claim.*—1st. The hereinbefore described combination of axle arm, reduced surface thereon and antifriction or roller surface projecting beyond the latter as far as a continuation of the circular surface of the said arm. 2nd. The hereinbefore described combination with either side of an axle arm, of a reduced surface thereon and an antifriction or roller surface projecting beyond the said reduced surface as far as a continuation of the circular surface of the said arm. 3rd. The hereinbefore combination with each side of an axle arm, of a reduced surface thereon and an antifriction or roller surface projecting beyond the said reduced surface as far as a continuation of the circular surface of the said arm. 4th. The hereinbefore described combination with the top or bottom and with either or both sides of an axle arm, of a reduced surface or surfaces, as the case may be, thereon, and an antifriction or roller surface projecting beyond each of the said reduced surfaces as far as a continuation of the circular surface of the said arm.

**No. 56,935. Fasteners for Strings and the Like. (Attache de laccs.)**

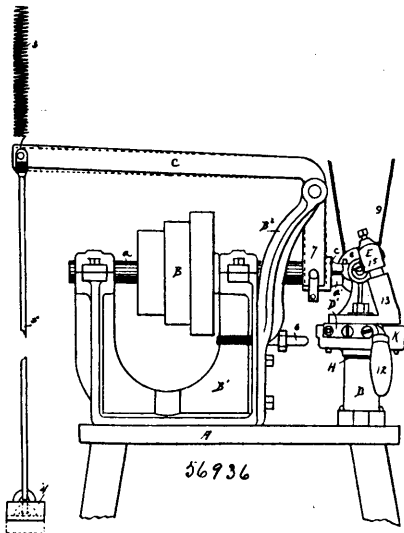


Henry Herbert Abell, Port Ewen, New York, U.S.A., 7th August, 1897; 6 years. (Filed 4th June, 1897.)

*Claim.*—1st. In fasteners for strings and the like, a body comprising two substantially parallel arms and a connection between them, and a slot between said arms open at one end, substantially as described. 2nd. In fasteners for strings and the like, a body comprising two substantially parallel arms and a connection between them, means carried by one of said arms for attaching the fastener to an object, and a slot between said arms open at one end for the reception of the string, the adjacent edges of said arms overlapping disposed in proximity and constituting at their adjacent faces the walls of said slot, substantially as described. 3rd. In fasteners for strings and the like, a fastener comprising two substantially parallel arms with overlapping adjacent edges in close

proximity, separated at one end and connected at another, whereby the space between them constitutes a slot, and means carried by one of said arms for attaching the fasteners to an object, substantially as described. 4th. In fasteners for cords and the like, a fastener adapted to be attached to a body and having two substantially parallel separate parts separated from each other at one end and connected to each other near their other ends, placed substantially side by side in different planes slightly overlapping at their adjacent edges and disposed with their adjacent edges in part out of contact, whereby between said edges there exists a narrow string slot, and attaching provisions on said fastener for attaching it to an object, whereby by passing the free end of a string into said slot it will be gripped by the adjacent edges of said parts, substantially as described. 5th. In fasteners for cords and the like, a fastener having two substantially parallel parts having adjacent opposite overlapping edges, said parts connected rigidly together near one end, and projecting slightly apart and disconnected at their other ends, and there having between them a tapering string-slot into which a string can be passed for connecting it to the fastener, and means carried by one of said parts for attaching it to an object, substantially as described. 6th. In fasteners for cords and the like, a fastener having two parts disposed substantially side by side, the edge of one overlapping the adjacent edge of the other, connected rigidly together at one point, free at their other ends and there in close proximity and capable of slight relative movement, the one part of greater projection at its free end than the other, and said parts having between them a narrow string-slot, entrance to which is between their free ends whereby a string can be passed in said slot to connect it to the fastener, and means for attaching the fastener to an object, substantially as described. 7th. The end fastener E, having a body with a diagonal slit forming two adjacent arms or members, substantially as described. 8th. The end fastener I<sup>6</sup> having two substantially parallel members and an additional tongue for holding the string or the like, substantially as described. 9th. The intermediate fastener having substantially parallel prong members with a wavy outline and a connecting portion at one end of said member, substantially as described. 10th. The intermediate fastener having prong members extending in the same direction, one member being longer than the other and curved to cover the point of the mating member when passed through the material, so as to produce a smooth inner surface, substantially as described. 11th. In fasteners for cords and the like, the fastener having two substantially parallel parts having their adjacent edges in close proximity and overlapping, said parts connected together near one end and free at their other ends, there differently bent and having between their bent portions and adjacent edges a narrow string-slot into which a string can be passed for connection to the fastener and attaching provisions carried by one part for attaching the fastener to an object, substantially as described.

**No. 56,936. Button Making Machine.**  
(Machine à faire les boutons.)

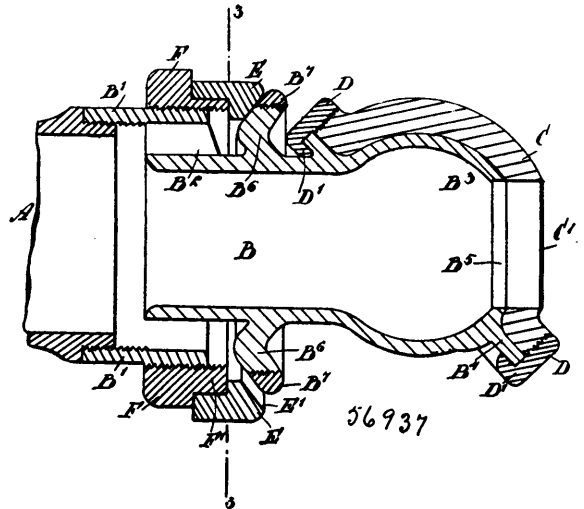


Frank J. Kaspar, Omaha, Nebraska, U.S.A., 7th August, 1897; 6 years. (Filed 29th May, 1897.)

*Claim.*—1st. In a button making machine, the combination with a suitable revolving button-chuck adapted to removably contain a button-blank, of a slide adjustably held in front of said button-chuck and provided with a grinding tool at one end, adapted to dish the button and a facing tool adjustably held at the other end of said slide, said slide being revolvably held with a suitable stand and ad-

justably within a horizontal plane, all substantially as and for the purpose set forth. 2nd. In a button making machine, the combination with a suitable chuck adapted to removably contain a suitable button-blank, of a slide positioned in front of said button-chuck provided with a dishing tool at one end and a facing tool at the other, said slide being pivotally held in a horizontal plane, and permitting a sliding movement in a horizontal plane and further being provided with a grinding tool at one end and a facing tool at the other end, so positioned that one of said tools will be in front of said chuck at one of its extreme positions and the remaining tool in front of the chuck when said slide is in its other extreme position, all arranged substantially as and for the purpose set forth. 3rd. In a button making machine, the combination with a suitable button-chuck adapted to removably contain a suitable button-blank, said chuck being operated by means of a treadle operated spring-arm to hold or release said button-blank, in combination with the slide D<sup>1</sup>, movably held with the holder K<sup>1</sup>, said holder K<sup>1</sup>, being revolvably held within a stock D, said slide D<sup>1</sup>, being provided with the stops M and 20, checking the movement of said slide at each end, said slide D<sup>1</sup>, being further provided with the revolving grinding tool x, held within the supports 8, 8, and the facing tool 15, held within the holder E, said holder and slides being adjustable, all substantially as and for the purpose set forth.

**No. 56,937. Nozzle.** (Lance de boyaux.)



Charles Albert Snider, Columbus, Georgia, U.S.A., 7th August, 1897; 6 years. (Filed 28th May, 1897.)

*Claim.*—1st. A nozzle, provided with a discharge pipe having a spherical end, and a cap mounted to rotate on said end about an axis which is at an oblique angle to the median line of the discharge pipe and formed with a series of graduated openings adapted to register with the mouth of said pipe, as shown and described. 2nd. A nozzle, provided with a discharge pipe having a spherical end and formed with an external flange on said end, and a cap mounted to turn on said end and flange, and formed with a series of graduated openings or apertures adapted to register with the mouth of the said discharge pipe, substantially as shown and described. 3rd. A nozzle, provided with a discharge pipe, a ring concentrically supported from the said pipe and adapted to engage the supply pipe, an angular, annular collar supported from the said pipe, and a collar mounted to turn eccentrically and formed with a conical seat adapted to engage all or part of said collar, substantially as shown and described. 4th. A nozzle, having a discharge pipe with a cylindrical or other sleeve end, and a cap mounted to rotate about an axis eccentrically in relation to said sleeve, said cap having a series of graduated openings adapted to register with the mouth of the pipe, substantially as described. 5th. A nozzle, provided with a discharge pipe, a ring concentrically supported from the said pipe and adapted to engage the supply pipe, an angular, annular collar supported from the said pipe, a collar mounted to turn eccentrically and formed with a conical seat adapted to engage all or part of the said collar, and a ring forming the eccentric seat for the said collar and held on the first named ring of the pipe, substantially as shown and described. 6th. A nozzle, provided with a fixed conical collar, and a ring mounted to turn eccentrically and formed with a conical seat adapted to engage the said conical collar, or to form a space with the same, substantially as shown and described. 7th. A nozzle, provided with a discharge pipe having a spherical end, and a hemispherical cap mounted to rotate on said end about an axis which is at an oblique angle to the median line of the discharge pipe, and formed with a series of graduated openings arranged to register with the mouth of said pipe, and a solid portion of sufficient size to entirely close said mouth, substantially as shown and described. 8th. A nozzle, comprising the discharge pipe formed with a conical collar and a spherical end therebeyond, a ring

formed with a conical seat and mounted to turn eccentrically, and arranged to form a space with said collar for the egress of water, and also to close said space, and the cap mounted to rotate on the aforesaid spherical end about an axis which is at an oblique angle to the median line of the discharge pipe and formed with a series of graduated openings arranged to register with the mouth of said pipe, all substantially as shown and described.

**No. 56,938. Solution for Hardening Steel.**

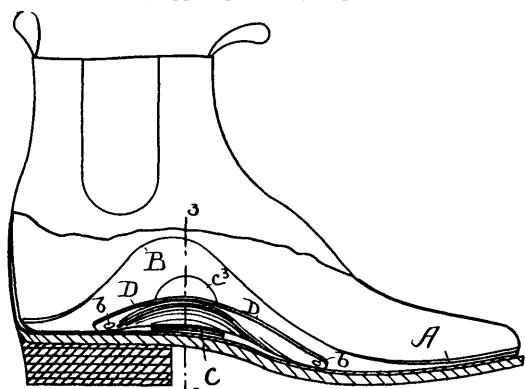
(Solution pour durcir l'acier.)

George M. Sorelle, Slocan, British Columbia, Canada, 7th August, 1897; 6 years. (Filed 28th May, 1897.)

*Claim.*—A solution for hardening steel, containing ammonium chloride, sulphate of copper, sodium chloride, and hydrous sodium baborate, substantially in the proportions specified, viz., thirty-two parts ammonium chloride, thirty-two parts copper sulphate, thirty-two parts sodium chloride, and four parts, hydrous sodium baborate.

**No. 56,939. Instep-Arch Supports for Feet.**

(Support pour coup-de-pieds.)



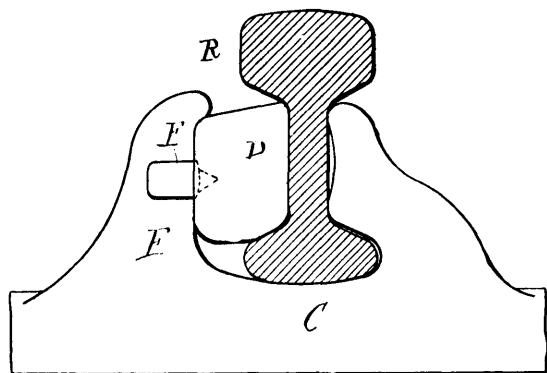
56939

Thomas Holland, London, England, 7th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A support for the instep-arch of the foot comprising the sole-shaped piece A, provided with the upwardly extended portion B, shaped to engage the waist of the foot, and the longitudinally arranged supporting plate D, secured to and engaging the under side of said moulded portion, substantially as described. 2nd. The herein described support for the instep-arch of the foot comprising in combination, the sole-shaped piece A, moulded at B, to engage the inside portion of the waist of the foot, the longitudinally arranged supporting-plate D, secured on a face of said moulded portion, and the transverse plate C, secured at one end to the piece A, with its free end resting on the plate D, substantially as and for the purpose specified.

**No. 56,940. Fastenings for Railway Rails.**

(Lien pour rails de chemins de fer.)

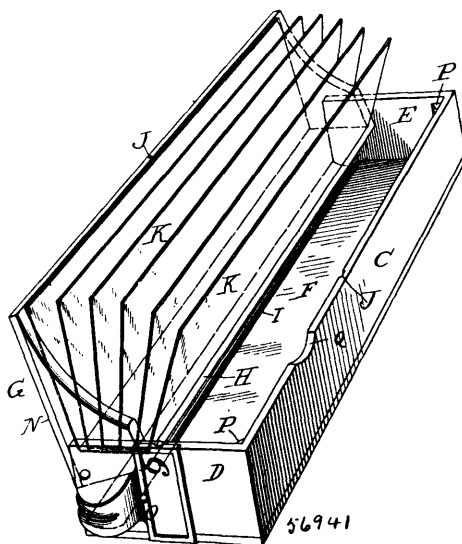


56940

Frederick William Schroeder, London, England, 7th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—In combination with the wooden wedge employed to secure a rail in a chair, a strip of iron or steel engaged by studs to the wedge, driven with the wedge and having its end parts bent back so as to embrace the jaw of the chair, substantially as and for the purpose set forth.

**No. 56,941. Box.** (Boite.)



Samuel T. Russell, Ilion, New York, U.S.A., 7th August, 1897; 6 years. (Filed 12th July, 1897.)

*Claim.*—1st. A box, comprising two integral parts designed to form a complete closure, one of said parts consisting of a side, top and ends, the other a bottom and side, and a pivot for said parts located at a point approximately midway of the ends of said bottom, whereby a leverage is secured to aid in opening the box. 2nd. A box, comprising two parts pivoted together and designed to form a complete closure, one of said parts consisting of a side, top and ends, and the other a bottom and side, stays at the ends of said bottom and side, substantially as and for the purpose described, and a pivot for said parts located at a point approximately midway of the ends of said bottom. 3rd. A box, comprising two parts pivoted together, substantially as shown, and designed to form a complete closure, one of said parts consisting of a side, top and ends, said side being formed with a recess or depression I, on its inner face near its lower edge, and said second part consisting of a bottom and side. 4th. A box, comprising two parts pivoted together and designed to form a complete closure, one of said parts consisting of a side, top and ends, and the other a bottom and side, said side being provided with a spring catch upon its upper edge designed to pass under and engage the under face of the top. 5th. A box, comprising two parts designed to form a complete closure, a series of leaves secured to the inner face of one of said parts and designed to be exposed when the parts are separated and the box opened, and to be entirely enclosed when the box is shut, and a pivot for said parts so arranged as to form a leverage to aid in opening the box, and to bring the leaves into their exposed position. 6th. A box, comprising two parts pivoted together and designed to form a complete closure, one of said parts being provided with a fixed inclined inner face, and a series of leaves mounted upon and carried by said face. 7th. A box, comprising two parts designed to form a complete closure, one of said parts consisting of a side, a top and ends, the second section comprising a side and bottom, a latch for holding said parts in their closed position, a stop to prevent said sections from closing too far, and a pivot for said parts located at a point approximately midway of the ends of said bottom. 8th. A box, comprising two parts pivoted together and designed to form a complete closure, one part comprising side F, top C, ends D and E, and stops P, the other side consisting of bottom H, side G, and end stays N, a series of leaves mounted on the upper face of bottom H, and a catch for holding the parts closed. 9th. In a box, the combination of the two pivoted sections substantially as described, a series of superposed strips L, secured to the upper inclined face of the bottom of the box, and a series of leaves secured to the edges of the strips by textile material, substantially as and for the purpose set forth.

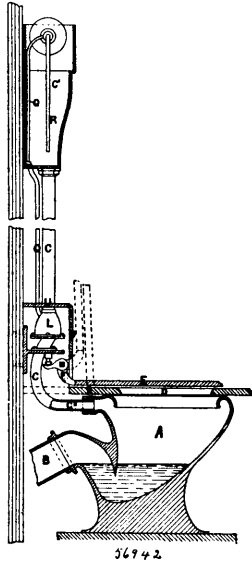
**No. 56,942. Water Closet Flushing Apparatus.**

(Appareil à lavage des latrines.)

Christopher O. Ellison, Liverpool, Lancaster, England, 7th August, 1897; 6 years. (Filed 12th July, 1897.)

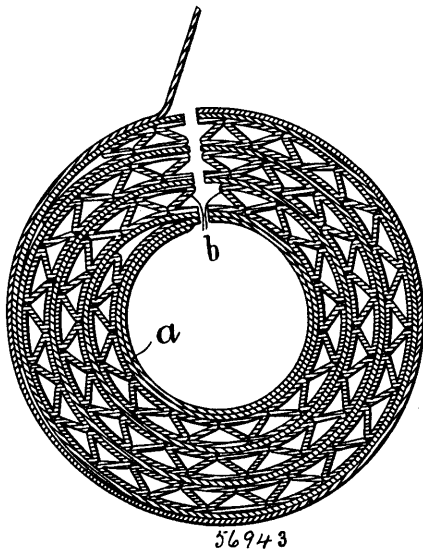
*Claim.*—1st. The herein described improvements connected with water closet, consisting of apparatus comprising a pan, a lid or cover, a flushing water container, a valvular device connected with and operated by the seat, and adapted to fill said container when the lid is opened, and empty it when closed, and flush the closet, and leave

said container empty, substantially as and for the purposes specified.  
 2nd. In water closet flushing apparatus, a flushing water container,



and a supply valve and a discharge or flushing valve connected and operated by a single actuating means, and so arranged that when one valve is open the other is shut, whereby the containing parts holding the flushing water are emptied after every use, for the purposes specified. 3rd. In a water closet flushing apparatus, a pan, a pan lid, a flushing water container, and a flushing valve connected with and opened by said lid when closed, and shut when said lid is open, whereby the flushing action is dependent upon the closing of the closet lid, and the lid must of necessity be down when the flush takes place, for the purposes set forth. 4th. The combination in a water closet of a tank and a syphonless flush pipe therefrom, a water supply pipe, a water supply valve connected with and opened and closed by the closet lid, and a flushing valve also connected with the closed and opened by the closet lid, substantially as set forth. 5th. In a water closet, the combination of the pan A, lid E, hinge spindle G, operated by the lid, water supply pipe Q, flush pipe C, supply and flush valves P, J, opened and closed by the spindle G, substantially as set forth. 6th. The combination with the water supply and flushing pipes Q, C, of the supply tap P, and a drain pipe S, connected with the flushing pipe below the flushing valve, and adapted to empty said supply pipe when the supply valve is closed to the entrance of water, substantially as set forth.

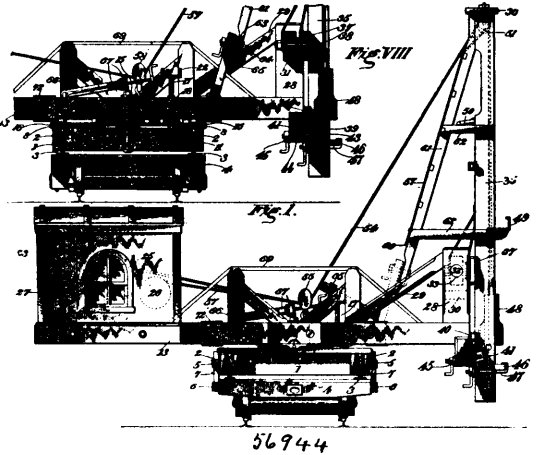
**No. 56,943. Non-conducting Covering.**  
 (Couverture non-conductrice.)



Albert Lantzke, Bath Beach, New York, U.S.A., 7th August, 1897; 6 years. (Filed 12th July, 1897.)

*Claim.*—As a new article of manufacture, a non-conducting flexible covering constructed of successive layers of sheets of non-conducting material, previously folded in triangular folds, each closed by itself and forming an isolated air space within the body of the covering.

**No. 56,944. Pile Driver. (Mouton.)**



John A. Spangler, Washington, Pennsylvania, U.S.A., 7th August, 1897; 6 years. (Filed 10th July, 1897.)

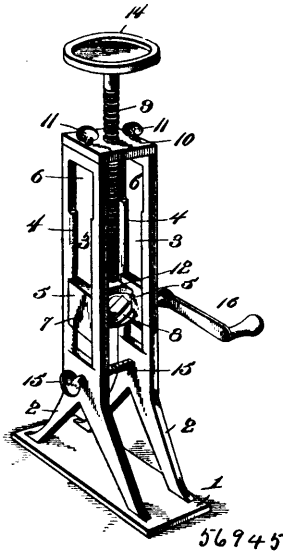
*Claim.*—1st. In pile-driving mechanism, the combination with a carriage, frame pivoted thereto, and frame revolving mechanism, of bearing plates 72 secured to the side beams of the carriage upon opposite sides of the axis of the carriage and provided with apertures immediately adjacent to the opposite sides of the beams, a segmental series of apertures 73 in the carriage, and pins 70 designed to enter the apertures upon opposite sides of the side beams of the frame, and to enter apertures 73 to prevent vibration of the frame upon the carriage, substantially as specified. 2nd. In pile-driving mechanism, the combination with a frame, of leaders pivotally secured thereto, a supporting frame likewise pivotally carried by the frame, and a detachable pivotal connection between the supporting frame and the leader frame at right angles to the pivotal connection between the leader support and frame, substantially as specified. 3rd. In pile-driving mechanism, the combination with a frame, and leaders pivoted thereto, of a ladder secured to the leaders, a ladder supporting frame carried by the frame and a detachable pivotal connection between the ladder and ladder supporting frame independent of, but in approximate axial alignment with the pivot of the leaders, substantially as specified. 4th. In pile-driving mechanism, the combination with a frame, of leaders pivotally secured thereto, and a folding leader support carried by the frame and designed to be folded thereupon, and mechanism carried by the leader support for securing the leaders in the depressed position, substantially as specified. 5th. In pile-driving mechanism, the combination with a frame, of leaders pivotally secured thereto, a ladder carried by the leaders, a ladder supporting frame, a detachable pivotal connection between the ladder and ladder supporting frame independent of, but in approximate axial alignment with the pivot of the leaders, and a leader support carried by the frame and designed to support the leaders in the depressed position, substantially as set forth. 6th. In pile-driving mechanism, the combination with a frame, leaders pivoted to the support, a ladder secured to the leaders, a hinged frame carried on the frame, and a pivotal connection between the ladder and the hinged frame, said pivotal connection and the pivotal connection between the leader support and the leaders being in approximate axial alignment, substantially as set forth. 7th. In pile-driving mechanism, the combination with a frame, of leaders having a plurality of pivotal connections therewith, a ladder secured to the leaders, a ladder supporting frame carried by the frame, and a detachable pivotal connection between the ladder and ladder supporting frame, substantially as specified. 8th. In pile-driving mechanism, the combination with a frame, of leaders pivoted thereto provided with a ladder, a folding leader support, and a hinged ladder supporting frame carried by the frame and designed to support the leaders in the depressed and elevated positions, substantially as specified. 9th. In pile-driving mechanism, the combination with a frame, of leaders pivotally secured thereto, a ladder carried by the leaders, a ladder supporting frame, a detachable pivotal connection between the ladder and ladder supporting frame independent of, but in approximate axial alignment with the pivot of the leaders, a leader support carried by the frame and designed to support the leaders in the depressed position, and mechanism carried by the leader support for securing the leaders thereto, substantially as specified. 10th. In pile-driving mechanism, the combination with a frame, of leaders pivotally secured thereto, a ladder carried by the leaders, a ladder supporting frame, a detachable pivotal connection between the ladder and ladder supporting frame, independent of, but in approximate axial alignment



with the pivot of the leaders, a folding leader support carried by the frame, and designed to support the leaders in the depressed position, and mechanism carried by the folding leader support for securing leaders thereto, substantially as specified. 11th. In pile-driving mechanism, the combination with a main frame and upright frame thereupon, of leaders pivoted thereto, a segmental track upon the frame, a pair of segmental bearings upon the leaders concentric and in substantially the same vertical plane with the segmental track upon the frame, whereby the track and bearings constitute guiding mechanism for the leaders when they are swung upon their pivot, corresponding holes in the frame and in one of the segmental bearings, and a bolt designed to be inserted in correlative holes, substantially as specified.

**No. 56,945. Saw Gummer.**

(Appareil pour l'affutage des scies)

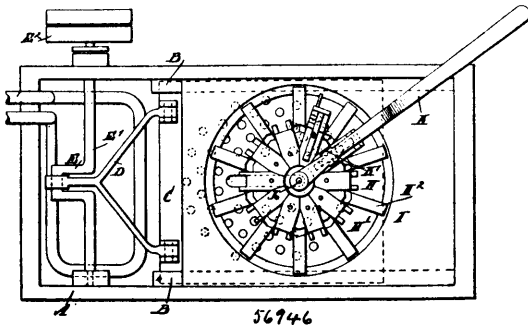


Thomas E. Winrod and Charles M. Derrick, both of Gilsonville, California, U.S.A, 7th August, 1897; 6 years. (Filed 10th July, 1897.)

*Claim.*—A saw-gummer, having paralled guides connected at one end by a cap-plate, said guides being longitudinally slotted to form opposite convex guide faces, which are cut away contiguous to the cap-plate, slides mounted respectively in the guides and having concave faces to fit the opposite convex faces thereof, said slides being co-extensive with said cut-away portions of the guides, whereby they are adapted to be introduced and removed at the cut-away portions, a follower arranged between the planes of the slides and provided with lateral projections fitting removably in registering sockets in the facing sides of the slides, a feed-screw threaded in said cap plate and swivelled at its extremity in the follower, a spindle mounted in bearings respectively in the slides and having an intermediate cross sectionally angular portion, a gumming cutter or bit removably fitted upon said angular portion of the spindle and adapted to be dismounted therefrom when the slides are removed from the guides, means for communicating rotary motion to the spindle, and saw-clamping devices, substantially as specified.

**No. 56,946. Bristle Washing Machine.**

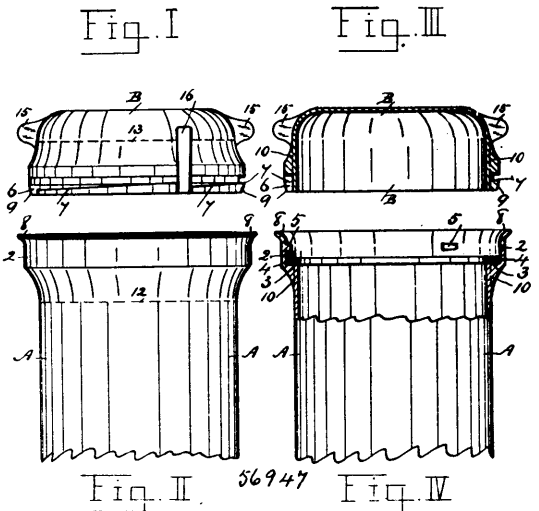
(Machine à laver le poil.)



Charles E. Tyler and James Dempster, both of Halifax, Nova Scotia, Canada, 7th August, 1897; 6 years. (Filed 9th July, 1897.)

*Claim.*—1st. A bristle washing machine, provided with a bristle holder comprising a body, a clamping jaw at the lower end of the body, a screw rod carried by the said body, a clamping bar held loosely on the said screw rod, and adapted to engage with its lower clamping end a bundle of bristles, to clamp the same in place on the clamping jaw of the said body, and a handled nut on the said screw rod for engaging the said clamping bar, substantially as shown and described. 2nd. A bristle washing machine, provided with a bristle holder comprising a body, a clamping jaw at the lower end of the body, a screw rod carried by the said body, a clamping bar held loosely on the said screw rod, and adapted to engage with its lower end a bundle of bristles, to clamp the same in place on the clamping jaw of the said body, a handled nut on the said screw rod, for engaging the said clamping bar, and a spring pressing on the said clamping bar for opening the latter upon unscrewing the handled nut, substantially as shown and described. 3rd. A bristle washing machine, provided with a bristle holder, comprising a body, a clamping jaw at the lower end of the body, a screw rod carried by the said body, a clamping bar held loosely on the said screw rod, and adapted to engage with its lower end a bundle of bristles, to clamp the same in place on the clamping jaw of the said body, a handled nut on the said screw rod, a clamping bar pivoted on the said body and having a cam surface for engaging the said clamping bar, to finally close the latter, substantially as shown and described. 4th. A bristle washing machine, provided with a disc having a body and two sets of radial arms extending from the said body, one set being provided with top recesses and the other with forwardly projecting forks, bristle holders having clamping devices for holding the bristles in place, and each holder being provided with a cleat, and a reduced portion for engaging the said recesses and forks in the radial arms, substantially as shown and described. 5th. The combination with a liquid receptacle, of a comb reciprocally mounted on the bottom thereof, means for sliding the comb, a disc revolvably mounted above the comb, and means on the disc for carrying bristles whereby the bristles may be held in the path of the comb, substantially as described. 6th. The combination with a liquid receptacle, of a comb mounted to slide on the bottom thereof and having a slot run longitudinally therein, means for reciprocating the comb, a shaft standing rigidly on the bottom of the liquid receptacle and passing through the slot of the slide, a disc mounted to turn on the shaft, and means carried by the disc for holding the bristles in the path of the comb, substantially as described. 7th. The combination with a support, of a disc revolvably mounted thereon, two arms projecting radially from the disc and having notches therein, a clamped body with lugs respectively fitted in the recesses of the arms, a clamping bar pivotally connected to the clamped body, and a lever pivoted in the clamped body and engaging the clamping bar whereby to move the clamping bar with reference to the body, the lever having a pin capable of engaging and locking with the disc, substantially as described. 8th. A clamp having a body portion, a clamping bar, a bolt passed between the body portion and bar and serving to movably mount the bar on the body portion, a spring attached to the body portion and pressing the bar, and a lever mounted in the body portion and engaging the clamping bar whereby to move the same relatively to the body portion, substantially as described. 9th. The combination with a box, of a comb rested on the bottom thereof, means for imparting a reciprocal movement to the comb, a support in the box, the support overhanging the comb, and a rotary bristle holder carried in the support and capable of moving the bristles circularly over the reciprocal comb.

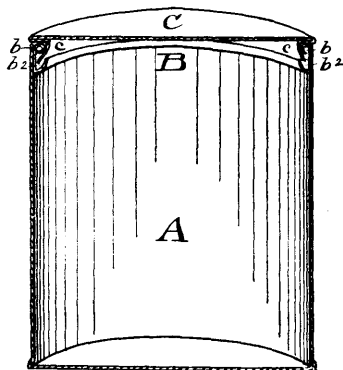
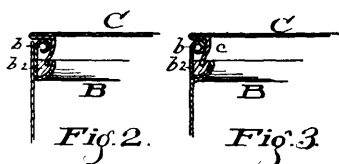
**No. 56,947. Can. (Boite metallique.)**



Robert S. Burten, Utica, New York, U.S.A., 7th August, 1897; 6 years. (Filed 10th July, 1897.)

*Claim.*—1st. A can or vessel of the character described, consisting of a vessel in two parts, the lower part enlarged at its open upper end forming an inner shoulder for washer, and a series of inner projections above said washer, and upper edge flared out, and upper half having open or closed top, and a series of circular inclined planes to conform to and engage with the projections of said lower half of vessel for fastening purposes as described. 2nd. A can or vessel of the character described, consisting of a vessel in two parts, the lower part having upper flared out enlargement to receive the lower part of the cover, or upper part, a shoulder formed provided with a flexible washer, in the lower part of said enlargement, as a seating for the edge of cover, a series of incline planes in said cover, with openings to conform to and capable of engaging with the series of projections in said enlargement of connected and secured vessel, as described. 3rd. A can or vessel of the character described consisting of a vessel with removable cover, the lower enlarged part of said cover capable of locking in the upper inner enlarged and flared out part of the vessel by means of a series of projections therein and incline planes with openings in cover to conform to said projections, ears on the cover, and a tapered pin, as key, for insertion in one of the series of openings to lock said cover, or upper part, as described. 4th. A can or vessel in two parts, each part having an attached enlargement, the enlargement of the upper part or cover having bevelled edge and capable of fitting into the enlarged flared out part of the vessel upon a washer on shoulder formed therein, a series of inner projections in vessel and a series of inclined planes around said cover to engage with said projections, and means, as ears or outer projections on said cover, to manipulate, in attaching and detaching the same, as described.

**No. 56,948. Can. (Boite metallique.)**



Charles Thomas Draper, Cleveland, Ohio, U.S.A., 7th August, 1897; 6 years. (Filed 9th July, 1897.)

*Claim.*—1st. The combination with the can body having the inner bead *b*, and channel *b*<sup>2</sup>, of cover *C*, having depending flange *c*, adapted to be inserted and secured in and removed from the channel by the springing of the expanded part of the flange under the bead *b*, substantially as described. 2nd. The combination with the can body having inner bead *b*, and channel *b*<sup>2</sup>, and a flexible gasket in said channel, of cover *C*, having depending flange *c*, adapted to be inserted and secured in and removed from the channel by the springing of the expanded part of the flange under the bead *b*, and pressing against the gasket, substantially as described.

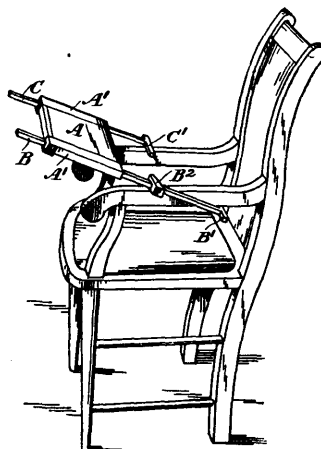
**No. 56,949. Book Support.**

(Support pour livres, papeterie, etc.)

John Tremearne, Creswick, Victoria, Australia, 7th August, 1897; 6 years. (Filed 9th July, 1897.)

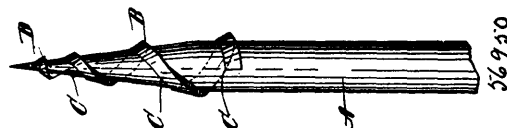
*Claim.*—1st. In combination, a desk or table *A*, a sliding bar *B*, provided with a foot *B*<sup>1</sup>, substantially as and for the purposes set forth. 2nd. In combination, a desk or stand *A*, a bar *B*, having foot piece *B*<sup>1</sup>, and a bar *C*, having foot piece *C*<sup>1</sup>, substantially as and for the purposes set forth. 3rd. In combination, a desk or stand *A*, provided with a slot *D*<sup>2</sup>, a bar *B* to work in same, and having a foot piece *F* and peg *F*<sup>2</sup>, an opposite support *C*, and foot piece *C*<sup>1</sup>, said desk or stand being arranged to slide along the bars *D* and *C*, substantially as and for the purposes set forth. 4th. In combination, a desk or stand *A*, having a slotted end with perforation for adjustment peg, and provided with a bar *B*, said bar ter-

minating in a foot piece *B*<sup>1</sup>, and a horizontal sliding bar *J*, substantially as and for the purposes set forth. 5th. The combination of



minating in a foot piece *B*<sup>1</sup>, and a horizontal sliding bar *J*, substantially as and for the purposes set forth. 5th. The combination of

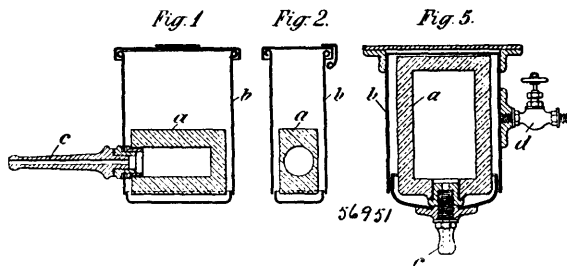
**No. 56,950. Pencil Sharpener. (Taille crayon.)**



Robert McClelland, Wakefield, Rockhill Furnace, Pennsylvania, U.S.A., 7th August, 1897; 6 years. (Filed 31st May, 1897.)

*Claim.*—1st. A pencil sharpener, consisting of a spiral, through which the point of the pencil is adapted to be inserted, said spiral being provided with a cutting edge throughout its length, substantially as shown and described. 2nd. A pencil sharpener, consisting of a strip of steel formed in a spiral, one side of which is provided with a cutting edge throughout its length, and the point of which is adapted to receive the point of the pencil, substantially as shown and described.

**No. 56,951. Filtering Material and Process of Making the Same. (Procédé et matière à filtrer.)**

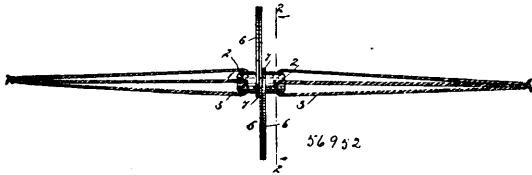


Franz Juschina, Kagrau, Austria, 9th August, 1897; 6 years. (Filed 29th May, 1897.)

*Claim.*—1st. An improved filtering material, consisting of granules of ground quartz, which are cemented together by silicates of calcium and magnesium, substantially as described. 2nd. An improved filtering material, consisting of granules of ground quartz, which are cemented together by the double silicates of calcium and potassium, calcium and sodium, magnesium and sodium, substantially as described. 3rd. The described process of making a filtering material, the said process consisting in wetting with water-glass a mixture of ground quartz and lixiviated or non-lixiviated wood ashes, pouring or pressing the mass into moulds, where it is allowed to harden, drying the unmoulded hardened bodies, and finally boiling them in water. 4th. The described process of making a filtering material, the said process consisting in wetting with water-glass a mixture of ground quartz and lixiviated or non-lixiviated wood ashes, pouring

or pressing the mass into moulds, where it is allowed to harden, drying the un moulded hardened bodies, heating them to a temperature of from 1,000° to 1,200° Celsus, and finally boiling them in water.

**No. 56,952. Chameleon Whirligig. (Tourniquet.)**

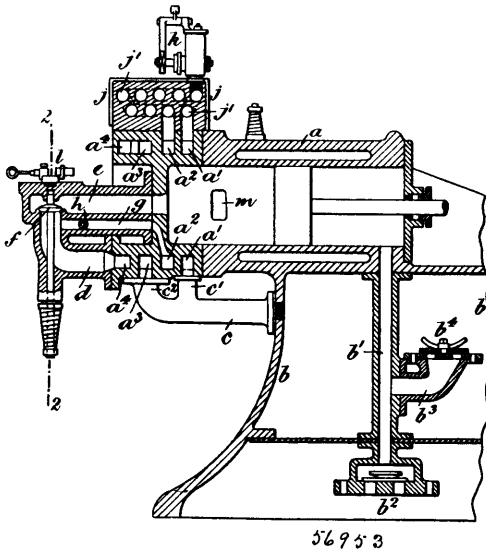


Robert Francis Donovan, Chicago, Illinois, U.S.A., 9th August, 1897; 6 years. (Filed 31st May, 1897.)

*Claim.*—1st. A whirligig having in combination a hub provided with means of rotation, a circular disc sleeved loosely upon said hub, and sectors secured rigidly to said hub and on diametrically opposite sides thereof, so as to balance the whirligig, substantially as set forth. 2nd. A whirligig having in combination a hub provided with means for rotating it, a complete circular disc sleeved loosely upon said hub and having patches of different colours extending radially thereon, and sectors partly covering opposite faces of said disc, and being rigidly secured to said hub on diametrically opposite sides thereof, substantially as set forth. 3rd. A whirligig having in combination the hub sections, provided with axial and transverse perforations, cords extending through said transverse perforations, a dowel passing through said axial perforations and securing said hub sections together at a slight distance apart, a circular disc sleeved loosely on said dowel between said hub sections, semi-discs secured rigidly to said hub sections, and partly covering opposite faces of said circular disc and being arranged diametrically opposite each other, substantially as set forth.

**No. 56,953. Hydrocarbon Motor.**

(Moteur à hydro-carbones.)



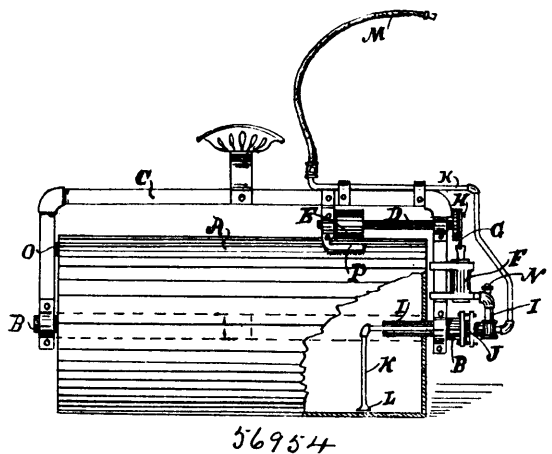
Edmund Wiseman and John Holroyd, both of Cheapside, Luton, Bedford, England, 9th August, 1897; 6 years. (Filed 3rd June, 1897.)

*Claim.*—1st. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, and means for supplying the charge to the valve. 2nd. The combination of a cylinder, a block heated by conduction from the cylinder, a circuitous passage in the block, an annular passage around the cylinder connected to the circuitous passage, an admission valve between the annular passage and the cylinder, and means for leading air to the valve and hydrocarbon to the circuitous passage. 3rd. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, a block heated by conduction from the cylinder, a circuitous passage in the block, an annular passage around the cylinder connected to the circuitous passage and to the valve, and means for leading air to the valve and hydrocarbon to the circuitous passage. 4th. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, a block heated by conduction from the cylinder, a circuitous passage in the

block, means for leading hydrocarbon into the passage, an annular passage around the cylinder connected to the circuitous passage and to an air supply, a second annular passage connected to the circuitous passage and to the valve, and a third annular passage connected to an air supply and to the valve. 5th. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, means for supplying the charge to the valve, a space between the axial pipe and the cylinder, and means for directing a flame into the space. 6th. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, a block heated by conduction from the cylinder, a circuitous passage in the block, an annular passage around the cylinder connected to the circuitous passage and to the valve, means for leading air to the valve and hydrocarbon to the circuitous passage, a space between the axial pipe and the cylinder, and means for directing a flame into the space. 7th. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, a block heated by conduction from the cylinder, a circuitous passage in the block, means for leading hydrocarbon into the passage, an annular passage around the cylinder connected to the circuitous passage and to an air supply, a second annular passage connected to the circuitous passage and to the valve, a third annular passage connected to an air supply and to the valve, a space between the axial pipe and the cylinder, and means for directing a flame into the space. 8th. The combination of a cylinder, an axial pipe open at the end of the cylinder, an admission valve at the other end of the pipe, means for supplying the charge to the valve, a space between the axial pipe and the cylinder, a plate fixed to the axial pipe, a passage in the plate, and an oil supply and burner connected to the passage. 9th. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, a block heated by conduction from the cylinder, a circuitous passage in the block, an annular passage around the cylinder connected to the circuitous passage and to the valve, means for leading air to the valve and hydrocarbon to the circuitous passage, a space between the axial pipe and the cylinder, a plate fixed to the axial pipe, a passage in the plate, and an oil supply and burner connected to the passage. 10th. The combination of a cylinder, an axial pipe open at one end to the cylinder, an admission valve at the other end of the pipe, a block heated by conduction from the cylinder, a circuitous passage in the block, means for leading hydrocarbon into the passage, an annular passage around the cylinder connected to the circuitous passage and to an air supply, a second annular passage connected to the circuitous passage and to the valve, a third annular passage connected to an air supply and to the valve, a space between the axial pipe and the cylinder, a plate fixed to the axial pipe, a passage in the plate, and an oil supply and burner connected to the passage. 11th. The combination of a cylinder, a heater connected to the cylinder, a reservoir, a hollow shell in the reservoir, a plug in the shell, a hole through the plug, means for rotating the plug, two opposite holes through the shell, one connected to an air supply and the other to the heater, and a hole through the shell into the reservoir.

**No. 56,954. Spraying and Sprinkling Apparatus.**

(Appareil à arroser et pulvériser.)

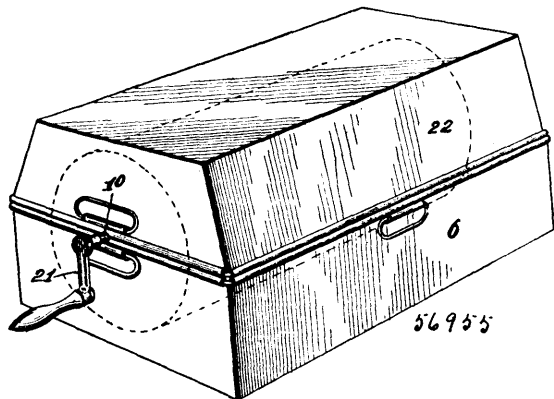


George Ambrose Dunn and Robert Franklin Dunn, both of Dinube, California, U.S.A., 9th August, 1897; 6 years. (Filed 3rd June, 1897.)

*Claim.*—1st. A sprinkling apparatus, consisting of a hollow cylinder or roller, a frame within which it is journaled and to which power may be applied to move it over the ground, a shaft journaled upon said frame, having fixed to it a wheel or roller adapted to make contact with the periphery of the cylinder whereby the shaft is revolved, a cleaner acting on the surface of the cylinder in advance of the wheel or roller, to keep that portion of the cylinder clean which the roller engages, a crank fixed upon the

shaft, and an air-pump with which it is connected, a pipe leading therefrom to the interior of the cylinder, and a discharge-pipe leading from the interior of the cylinder whereby the liquid contained therein is delivered under pressure. 2nd. A spraying or sprinkling device consisting of a hollow cylinder or roller adapted to contain liquid, a frame within which the trunnions of said cylinder are journaled and to which power may be applied to propel it over the ground, a shaft making connection with the cylinder and rotated thereby, a crank upon said shaft, an air-pump connected therewith, a pipe leading from the air-pump through the trunnion of the roller and delivering air to the interior of the cylinder, a second pipe extending through the air-pipe so as to leave a circumscribing air-passage, having its mouth terminating within the cylinder near the bottom and the outer end connected with a sprinkling or spraying device.

**No. 56,955. Cooking Apparatus.** (*Ustensile de cuisine.*)

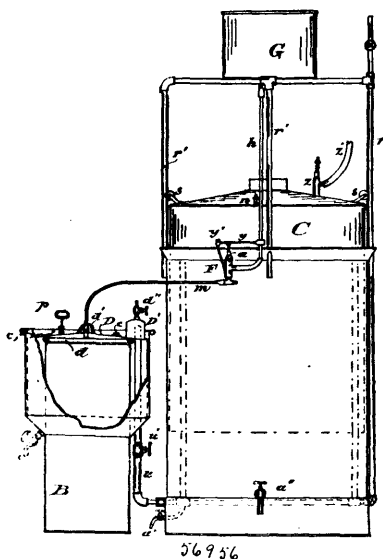


Frean A. Mabee, St. Louis, Missouri, U.S.A., 9th August, 1897; 6 years. (Filed 21st July, 1897.)

*Claim.*—1st. In a cooking apparatus, a suitable pan, a perforated cylinder rotatably mounted in said pan and means of rotating said cylinder, substantially as specified. 2nd. In a cooking apparatus, a suitable pan, a perforated cylinder rotatably mounted in said pan, said cylinder being constructed in two pieces removably attached together, and means of rotating said cylinder, substantially as specified. 3rd. In a cooking apparatus, a suitable pan, partition walls forming receptacles within said pan, a cylinder rotatably mounted in said pan, and means of operating said cylinder, substantially as specified.

**No. 56,956. Acetylene Gas Generator.**

(*Générateur de gaz acétyline.*)



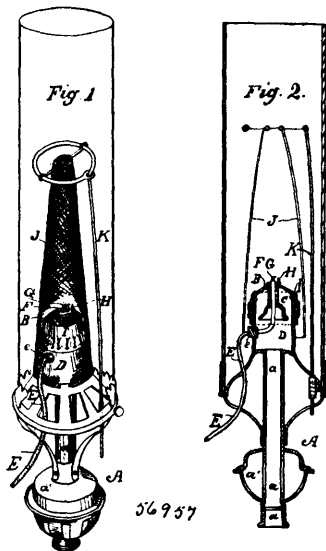
Peter McMurray, Welland, Ontario, Canada, 9th August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—The combination, in an acetylene gas generator, of the regulator F, with valve K, operated by a spring x and catch n acting automatically with the rise and fall of gas in the gasometer sub-

stantially as described. 2nd. In an acetylene gas generator, a vessel or pail d, containing the grate on which the carbide is deposited, and which can be readily placed in the generator, or taken out to be cleaned, or for other purposes as required, substantially as set forth. 3rd. In an acetylene gas generator, the combination of the lever v operating the lever r and piston b which shuts the water off from the spray holes m<sup>1</sup> and prevents the generator from being flooded, substantially as described. 4th. In an acetylene gas generator, the shaker p, for agitating the grate on which the carbide is placed, being operated vertically and consisting of two parts joined by the nut p<sup>1</sup> and easily separated by being turned horizontally, the upper part being attached to the lid D and passing through the packing box w, and the lower part remaining in the pail d, and attached to the grate e, substantially as described.

**No. 56,957. Electric Gas Lighter.**

(*Allumeur électrique de gaz.*)



Philip Meyer, Alameda, California, U.S.A., 9th August, 1897; 6 years. (Filed 26th March, 1896.)

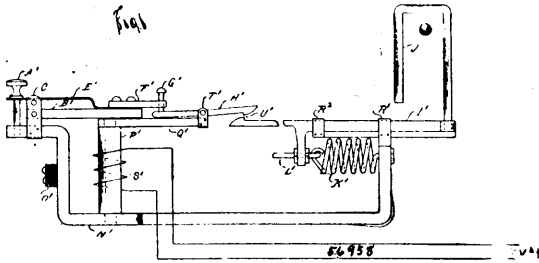
*Claim.*—1st. In combination with an atmospheric or Bunsen burner, having its surface of ignition enveloped by a mantle adapted to be rendered incandescent under heat, electrodes centrally disposed upon said ignition surface and suitable electrical connections for said electrodes. 2nd. In combination with an atmospheric or Bunsen burner having its surface of ignition enveloped by a mantle adapted to be rendered incandescent under heat, electrodes centrally disposed upon said ignition surface, and suitable electrical connections for said electrodes, including an inleading wire passing from without through the side of the burner, at a point below the mantle, and centrally upwardly through the burner to the electrode. 3rd. An atmospheric or Bunsen burner having an extension above the point of mixture of gas and air, and a gauze diaphragm on top of said extension, an electrode on top of said gauze diaphragm, an electric wire leading into the extension and centrally up through it, and properly insulated therefrom, an electrode of said wire centrally disposed above the diaphragm, and a mantle of material adapted to become incandescent under heat, said mantle enveloping the igniting surface of the burner and the electrodes. 4th. An atmospheric or Bunsen burner having an extension above the point of mixture of gas and air, a central deflector within said extension and a gauze diaphragm above said deflector on top of the extension, an electrode on top of said diaphragm, an electric wire leading into the tubular extension and centrally up through the deflector and properly insulated from both, an electrode of said wire centrally disposed above the diaphragm, and a mantle of material adapted to become incandescent under heat, said mantle enveloping the igniting surface of the burner and the electrodes.

**No. 56,958. Electric Stop Motion for Knitting Machinery.** (*Mécanisme de machine à tricoter.*)

Thomas J. Murphy, Montreal, Quebec, Canada, 9th August, 1897; 6 years. (Filed 28th December, 1896.)

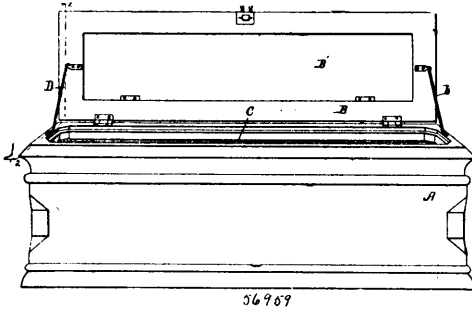
*Claim.*—1st. The combination in an electric stop motion, of a number of pairs of moving electric contacts A, mounted on some suitable non-conducting substance B, and so arranged as to be electrically connected by a metallic piece O, which is normally held out of reach of said contact by the yarn K, substantially as and for the purpose hereinbefore set forth. 2nd. The combination in an electric stop motion, of a cutting edge H, adapted to be kept in motion together

with a lever I, which normally keeps the yarn K, from coming in contact with the moving knife H, the function of said parts being



to weaken the thread at this point whenever an abnormal strain is exerted on it, substantially as and for the purpose hereinbefore set forth. 3rd. The combination in an electric stop motion, of a movable yarn guide M, in proximity to knife H, by which the tension necessary to bring the yarn down on knife H, is regulated substantially as and for the purpose hereinbefore set forth.

**No. 56,959. Burial Casket. (Cerceuil.)**



The Model Casket Co., assignee of William Charles Knapp, both of Kalamazoo, Michigan, U.S.A., 9th August, 1897; 6 years. (Filed 15th March, 1897.)

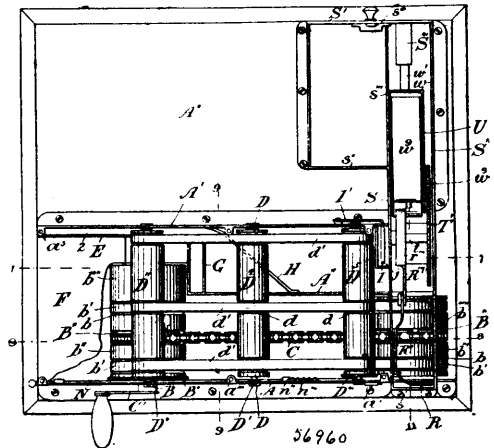
*Claim.*—1st. In a burial casket, the combination of the shell A, the bottom C, movably supported therein, the top B, hinged thereto at the back, links D, D, connecting the top and bottom together, anti-friction rollers E, E, E, E, upon the bottom to guide it within the shell, a shaft F, in each end of the bottom, pinions I, I, rigidly secured to each end thereof, vertical racks I', supported inside the shell in position to mesh with said pinions, and a lock or clasp for securing the cover in the closed position, all co-acting substantially as described for the purpose specified. 2nd. In a burial casket, the combination of the shell A, a bottom C, movably supported therein, the top B, hinged thereto at the back, links D, D, connecting the top and the bottom together, anti-friction rollers E, E, E, E, upon the bottom to guide it within the shell, and a lock or clamp for securing the cover in the closed position, all co-acting together substantially as described for the purpose specified. 3rd. In a burial casket, the combination of the shell A, the bottom C, movably supported therein, the top B, hinged thereto at the back, links D, D, connecting the top and the bottom together, and a lock or clasp for securing the cover in the closed position, all co-acting together substantially as described for the purpose specified. 4th. In a burial casket, the combination of the shell A, the bottom C, movably supported therein, the top B, hinged thereto at the back, links D, D, connecting the top and the bottom together, a shaft F, in each end of the bottom, pinions I, I, rigidly secured to each end thereof, vertical racks I', supported inside the shell in position to mesh with said pinions, and a lock or clasp for securing the cover, all co-acting together, substantially as described for the purpose specified. 5th. In a burial casket, the combination of the shell A, the bottom C, movably supported therein, the top B, hinged thereto at the back, a smaller cover B', on the top B, links D, D, connecting the top B, and the bottom together, and a lock or clasp for securing the cover in the closed position, substantially as described. 6th. In a burial casket, the combination of the shell A, a suitable cover therefor, the bottom movably supported therein, and suitable means for adjusting the shell up and down over the bottom to change the casket to a couch, as specified.

**No. 56,960. Machine for sealing Envelopes and attaching Postage Stamps. (Appareil pour sceller et timbrer les enveloppes.)**

J. Keith, Ottawa, Ontario, Canada, 9th August, 1897; 6 years. (Filed 6th May, 1897.)

*Claim.*—1st. In a machine for sealing and stamping envelopes, the combination of side plates or frames suitably secured, an intermediate frame co-extensive with said sides, a driving roller fast upon its axle journalled in one of said sides and intermediate frame

and provided with a crank, an axle journalled in the other outside frame at one end and in the intermediate frame, a roller journalled



upon the overhanging end of said axle, intermediate rollers journalled at one end and in the same outside frame as the driving roller, and at the other in the intermediate frame and other outside frame respectively, sprocket wheels in said main and intermediate rollers, a pitch chain meshing in said sprockets level with the surface of said rollers, a presser roller journalled in slots in the outside frame sides over the crank roller and each intermediate roller, springs pressing upon the journals of said presser rollers and spur wheels connecting each presser roller with the lower roller, substantially as set forth. 2nd. In the roller bed of a machine for sealing and stamping envelopes, the combination of suitable side supports, a driving roller having its axle journalled in said supports and provided with a crank, another roller some distance from said driving roller journalled upon an axle, an axle journalled in said supports, and carrying said roller upon its overhanging end, intermediate rollers between said aforementioned rollers journalled in said supports, all said rollers connected by suitable means to move in unison, a presser roller upon each of said rollers connected with the lower one so as to move in unison therewith journalled to have vertical play and pressed into contact with the lower one by suitable means such as springs, substantially as set forth. 3rd. In a machine for sealing and stamping envelopes, the combination of two side plates or frames rigidly secured to form supports, an intermediate plate or frame rigidly secured and jogged to form supports for rollers of different lengths, a driving roller journalled in one of the outside supports and the intermediate support, another roller a short distance from the aforementioned one similarly journalled but smaller and shorter, another roller a short distance from the last-mentioned roller extending across the bed and journalled in the outside supports, another roller close to the last-mentioned one of the same size as the driving roller, journalled upon the overhanging end of an axle, an axle journalled in the other outside supports and the intermediate support, means of connecting all said rollers to cause them to move in unison and form a support for the envelope at the intervals, bands connecting said rollers and form a support for the envelope at the intervals, top or presser rollers journalled in said outside supports to have vertical play one each over said rollers, except the end or delivery roller, means of pressing said top rollers into contact with the lower rollers and bands connecting said top or presser rollers one with another, and means of connecting one or more of said presser rollers with one or more of the lower rollers, substantially as set forth. 4th. In a machine for sealing envelopes, the combination of two sides or frames rigidly secured to a base to form supports, and intermediate frame co-extensive with the outer sides, and jogged to form a support for rollers of different length, a driving roller journalled in the intermediate frame and side frame, a top or presser roller above said driving roller and in contact therewith, journalled in slots in the outer sides and pressed down by springs and connected with the lower one to move in unison therewith, a feed plate approximately level with the contact line of the two rollers and extending from one side to the other, but leaving a narrow clearance space near that side where the driving roller is short, and a water trough or reservoir at the rear of the lower roller, and extending from said clearance space partly along said lower roller and having its edge in line with the clearance edge of the feed plate and extending partly along said lower roller and adapted for moistening portions of an envelope, substantially as set forth. 5th. In a machine for closing or sealing envelopes, the combination of sides forming a channel and the supports of rollers, an intermediate frame forming supports for one end of short rollers and for a water trough and closing wire, a driving roller journalled in one of said outer supports and the intermediate support, and provided with a crank, a top or presser roller upon said driving roller journalled in slots in the outside supports and pressed upon the lever by springs, a feed plate at the level of the contact line of the two rollers and extending across the channel

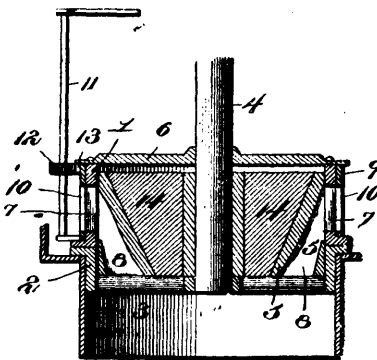
but leaving a clearance space between its left hand edge and the adjacent side, a water trough or reservoir near the end of the driving roller and extending partly along one side thereof and leaving a clearance space between its edge and the adjacent outside support, another roller some distance from the driving roller but shorter than the latter, and its upper surface on the same level and connected to move in unison therewith, a top or presser roller upon the same journaled in the outside supports in slots, and its journals pressed down by springs, an oblique wire at the level of the upper surface of the lower roller and placed between the end of said roller and the outside support and secured to the latter and the intermediate support and slanting from said outside support rearwardly to the intermediate support crossing said top roller and serving as a closing device for the flap of the envelope, substantially as set forth. 6th. In a machine for sealing envelopes, the combination of sides forming a channel and the supports of rollers, an intermediate frame forming supports for one end of short rollers and for a water trough and closing wire, a driving roller journaled in one of said outer sides and the intermediate frame, a water trough at the short end of said roller and partly along the rear of said roller, and leaving a clearance space between its outer edge and the adjacent outer side, and adapted to carry a moistening device such as a sponge coming in contact with an envelope passing over said roller, a top roller over said driving roller extending across the channel and journaled in slots in the outer sides pressed down upon the lower roller by springs, another roller some distance from the driving roller, but shorter, and journaled similarly to the driving roller and connected with the latter to move in unison therewith, a top or presser roller above said roller journaled in slots in the outer sides and pressed upon the lower one by springs, a closing wire extending obliquely under and across the said top roller from the outer side rearwardly to the intermediate frame, a short roller or friction support journaled on a stud on the outer side in line with the last named lower roller at the other side of the closing wire, another pair of rollers journaled in the outer sides some distance from the last named pair and similarly arranged as lower and top rollers, but extending right across the channel and connected with the others to move in unison therewith and their line of contact at the same level as the others, substantially as set forth. 7th. The combination of a roller bed consisting of supports and rollers of different lengths to provide room for moistening and closing device, and said rollers connected to move in unison, and provided with top or presser rollers pressed upon the lower rollers by suitable means, means for setting said roller bed in motion and means for providing a more or less continuous surface between the rollers, a moistening device on that side of the roller bed where that part of the envelope passes which carries the flap, a clearance space for the open downwardly projecting flap of the envelope, an oblique closing wire in the path of said flap, an axle journaled at one end in the support at the side in which the flap passes and in the intermediate support and passing loose through the last or discharge roller of the bed, said discharge roller being journaled upon the overhanging end of said axle, clutch mechanism adapted to connect said axle to said rollers, a cam upon said axle, a lever pivoted to the support at the side where the flap of the envelope passes having its free end bear upon said cam and its other arm carrying a brush or equivalent arranged over the space of the envelope where the stamp is to be placed and said cam adapted to dip said brush then raise it sufficiently to come into contact with the envelope for a short space, and then raise said brush entirely, a plate opposite the end of said discharge roller and level with the contact surface of the roller bed and a water trough under said plate and extending open between said plate and adjacent roller and under said brush, substantially as set forth. 8th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate plate and having one end overhanging said intermediate plate, a roller journaled upon the overhanging end of said axle, a disc secured to one end of said roller the face of which is provided with radial teeth, a disc feathered upon the end of said axle adjacent and near to said disc on the roller and provided with one or more radial teeth adapted to engage the teeth of said fast disc and said feathered disc provided with a lug, a spring upon said axle keeping said feathered disc apart from and out of gear with the disc on the roller, a perforation in the adjacent frame or plate corresponding to the shape of and registering with the feathered disc and lug and said spring holding said lugged disc normally in said perforation and said lug disc adapted to engage the disc on the roller when said lug is pressed on and bears against the inner side of said frame plate, substantially as set forth. 9th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides, and the intermediate plate and having one end overhanging said intermediate plate, a roller journaled upon the overhanging end of said axle so that roller and axle may rotate independently of each other, clutch mechanism at the end of said roller and axle adapted to connect said roller and axle, a cam upon said axle adapted to lift a lever and hold the same at three different elevations, a lever pivoted to the frame side and having one arm in contact with said cam and the other carrying a brush adapted to rise and fall with the movements of the other arm, and a spring to keep said free arm in contact with said cam substantially as set forth. 10th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate

plate and having one end overhanging said intermediate plate, a roller journaled upon the overhanging end of said axle so that roller and axle may rotate independently of each other, clutch mechanism at the end of said roller and axle adapted to connect said roller and axle, a cam upon said axle, a plate held vertically sliding and bearing upon said cam, a bearing for said sliding plate secured outside to one of the frame sides and a spring drawing down said sliding plate upon said cam, substantially as set forth. 11th. The combination of an axle suitably journaled and adapted to be started and stopped at will, a cam secured upon said axle adapted to hold up an object bearing upon it, and allowing it to descend quickly and raising it again, a plate bearing upon said cam and held vertically sliding, a bearer guiding said plate suitably secured to a frame or base, a spring drawing down said plate, an oblong perforation in said plate, a cutting edge on the upper edge of said perforation, and the upper end of said plate bent over laterally at a right angle to form a presser, substantially as set forth. 12th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate plate, a roller journaled upon the overhanging end of said axle, a disc rigidly connected with the end of said roller having radial teeth upon its face, a disc feathered upon the end of said axle adjacent to said fast disc and having one or more radial teeth adapted to engage the teeth of the fast disc, a spring coiled upon said axle adapted to press said feathered disc outwardly away from said fixed disc, a lug on said feathered disc projecting from its rim, a perforation in the adjacent side plate corresponding to and registering with said lugged disc, means of sliding said lugged disc on the shaft against the pressure of said spring out of its perforation and causing the teeth on the faces of the two discs to engage, and allowing said lug to bear on the inner face of said side plate to keep the discs in engagement, a pitman pivoted eccentrically to the face of said lugged disc, a lever pivoted to a frame or plate set transversely across said side plates and engaging said pitman, a link pivoted adjustably to said lever, a ratchet movement having an arm to which said link is pivoted adapted to turn a wheel in one direction only, and a frame or plate held transversely over said side frames, to which said lever is pivoted and to which said wheel is journaled, substantially as set forth. 13th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate plate, a roller journaled upon the overhanging end of said axle, a disc feathered upon the free end of the axle projecting from the end of the roller adapted to have a sliding motion upon said axle and forming part of a clutch mechanism, a spring upon said axle pressing said disc apart from the end of the roller, a lug on said disc, a perforation in the side plate corresponding to and registering with said lugged disc, into which the latter is normally pressed by said spring, a wire placed slidably in said frame transversely to said disc and having a hook adapted to engage said lug and press the same inwardly out of its perforation and clear of the side plate and causing the clutch mechanism to come into operation, a longitudinal rod with wedge end operating upon a lug on the cross wire, and causing it to press upon a lug of the disc, and springs to retract said rod and cross wire after pressure upon them ceases, substantially as set forth. 14th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate plate, a roller journaled upon the overhanging end of said axle, a disc feathered upon the free end of the axle projecting from the end of the roller adapted to have a sliding motion upon said axle and engage the end of the roller, a spring upon said axle pressing said disc apart from the end of the roller, a lug on said disc, a perforation in the adjacent side plate corresponding to and registering with said lugged disc, into which the latter is normally pressed by said spring, means of sliding said disc out of said perforation and causing it to engage the end of the roller and allowing the lug to bear on the inner face of the side plate while said disc rotates, a pitman pivoted eccentrically to the face of said disc, a lever engaging the end of said pitman, a link pivoted adjustably to said lever, an arm to which said link is pivoted forming part of a ratchet movement, a ratchet movement upon which said arm is centred, a spur wheel connected with said ratchet movement, and a frame or plate placed transversely across the frame sides to which the axle of the wheel and ratchet movement is journaled and said lever pivoted, substantially as set forth. 15th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate plate, a roller journaled upon the overhanging end of said axle, clutch mechanism adapted to connect roller and axle, means of connecting and disconnecting said clutches, a stamp plate secured to one of the sides above said axle and level with the upper surface of said roller, a cam upon the journaled end of said axle, a plate held vertically sliding above said cam and bearing upon it, a bearing guiding said sliding plate secured to the outside of said side, a spring drawing said sliding plate downwards, a perforation in said sliding plate adapted to pass a stamp and held by said cam normally level with said stamp plate, and a presser on the upper end of said sliding plate turned at a right angle and projecting over said stamp plate and adapted to come in contact therewith, substantially as set forth. 16th. The combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate plate, a roller journaled upon the overhanging end of said axle, clutch

mechanism adapted to connect roller and axle, means of connecting and disconnecting said clutches, a stamp plate secured to one of the sides above said axle and level with the upper surface of said roller, a trough or reservoir under said plate and extending with an open mouth from thereunder, a lever pivoted to said side carrying a brush adapted to be dipped into said trough and having another arm extending over and bearing upon a cam, a spring holding said lever arm upon a cam, a cam upon said shaft upon which said lever arm bears and which causes the brush on the other arm to be dipped and raised to two different positions, another cam upon the end of the shaft projecting from the side in which it is journaled, a vertically sliding plate close to the side and the edge of said stamp plate and bearing upon said cam, a spring drawing said sliding plate downwards, a bearing secured to said side guiding said plate, a perforation in said sliding plate held normally opposite the top of said stamp plate, and a presser forming the upper end of said sliding plate bent over said stamp plate at a right angle, substantially as set forth. 17th. In a machine for sealing and stamping envelopes, the combination of a roller bed adapted to carry envelopes, moisten the surface and turn and press the flaps and present them upon a plate to receive a stamp, a transverse frame or plate adapted to carry the stamp delivery mechanism, an axle journaled to said frame or plate, a spur wheel secured upon said axle, a die secured upon said axle, pockets having sloping bottoms in the rim of said die, balls in said pockets, springs pushing said balls towards the shallower ends of said pockets, a ring or rim mounted rotatively upon said die and bearing upon said balls, an arm on said ring or rim and mechanism to operate said arm, substantially as set forth. 18th. In a stamp box for a machine for stamping envelopes, the combination of two side plates rigidly connected a little more than the width of a strip of stamps apart, a taking-up roller or spool journaled in said plate adapted to take up a coil of tape or ribbon, a pair of feed rollers placed close to the front edge, one journaled in said plates, the other in a yoke, a yoke sliding and guided in said plates and having one of the feed rollers journaled therein, springs pressing said yoke so that its roller presses against the other, spur pinions connecting said feed rollers outside the plates, a winding roller or spool journaled in said plates close to said feed rollers and adapted to carry a coil of tape or ribbons having a projecting axle adapted for the application of a crank, a series of guide or friction rollers journaled in said plates adapted to guide a double layer of tape or ribbon separating at the mouth of the feed rollers in separate runs around the winding roller or spool to the taking-up roller or spool collecting them again before passing them on the latter, two lengths of tape or ribbon laid face to face and wound upon the winding roller, passing between the feed rollers, thence separately over guide rollers and collected upon a taking-up roller, a driving roller journaled in said plates close to the front edge and in such a position that the same wheel gearing into the pinions on the feed rollers will also gear into a pinion mounted on this roller, two guide or friction rollers journaled in the upper part of said plates and so that a line from one of them to the driving roller will be flexed by the coil upon the taking-up roller, and an elastic belt running over said driving and friction rollers last recited and bearing upon the taking-up roller, substantially as set forth. 19th. In a stamp box for a machine for stamping envelopes, the combination of a pair of plates rigidly connected a little more than the width of a strip of stamps apart, a winding roller or spool journaled in said plates provided with projecting axle adapted to have a crank applied, a double layer of tape or ribbon coiled upon said roller or spool and adapted to carry a strip of stamps within said layer, a pair of feed rollers near the edge of said plates, one journaled therein and the other journaled in a yoke, and said rollers passing said double layer of tape or ribbon between and partly around them, spur pinions connecting said rollers, a yoke sliding and guided in said plates having one of the rollers journaled in them, springs carrying said yoke and pressing said feed rollers together, and means of guiding and taking up said tape or ribbon after leaving said feed rollers, substantially as set forth. 20th. In a machine for stamping envelopes, the combination of a plate or frame, an axle journaled therein, a spur wheel fast upon said axle, means of turning said axle in one direction intermittently, a stamp box having a double layer of tape or ribbon coiled therein upon a roller, said layer adapted to carry a strip of stamps, a pair of feed rollers placed close to the edge of said box, adjacent to said spur wheel, between which and partly around said tape or ribbon passes one of said feed rollers journaled direct to the sides of said box, spur pinions connecting said feed rollers on the outside of the box, and the pinion on the roller journaled in the sides of the box adapted to gear in the spur wheel above recited, means of taking up the tape or ribbon discharged by said feed rollers, a handle on said box, a door on the casing in which the spur wheel is journaled, means of securing said door, and a projection on said door making contact with the handle on said box to secure the latter in its position and its pinions in gear with said spur wheel, substantially as set forth. 21st. In a machine for stamping envelopes, the combination of a plate or frame, an axle journaled therein, a spur wheel fast upon said axle, means of turning said axle in one direction intermittently, a stamp box having a double layer of tape or ribbon coiled therein upon a roller, said layer adapted to carry a strip of stamps in it, a feed roller journaled in said box near its edge, a spur pinion upon said feed roller adapted to gear in said spur wheel, another feed roller journaled in a yoke, a yoke having a feed roller journaled in it,

and adapted to slide in said stamp box, springs pressing said yoke and pressing said feed rollers together, a pinion on said feed roller gearing in the pinion on the other feed roller, said feed rollers passing said ribbon, a taking-up roller adapted to take up the ribbon discharged from the feed rollers, a driving roller journaled in said stamp box, a spur pinion upon the projecting axle of said roller adapted to gear in said spur wheel, two other rollers forming with said driving roller the points of a triangle, an elastic belt passing over said three rollers so as to be deflected out of the straight line, and pressing upon the coil of ribbon upon the taking-up roller, substantially as set forth. 22nd. In a machine for stamping envelopes, the combination of two side frames or plates and an intermediate frame or plate, an axle journaled in one of said sides and the intermediate plate, a roller journaled upon the overhanging end of said axle, clutch mechanism on said axle and roller, a stamp plate secured to one of the sides above said axle and level with the upper surface of said roller, a vertically sliding plate outside and close to the side in which the axle is journaled and to the edge of the stamping plate, and having a perforation adapted to pass a stamp and a presser formed by bending the top portion over the stamping plate, a cam lifting said plate, and a spring drawing it down, an upright transverse plate or frame adapted to carry mechanism and stamp box, a detachable stamp box containing a winding roller with a double layer of tape or ribbon coiled upon it and adapted to carry stamps in said layer, feed rollers in said stamp box between which said layer of ribbon passes, and the delivery of which is placed close to and about level with the stamping plate, a spur pinion on one of said feed rollers, means of taking up the ribbons discharged from said feed rollers, a spur wheel adapted to gear in the pinion on the feed roller, an axle journaled in said transverse plate or frame and carrying said spur wheel, a ratchet movement upon said axle and means of operating said ratchet movement intermittently by mechanism actuated by the roller axle, substantially as set forth. 23rd. In a machine for sealing and stamping envelopes, the combination of a roller bed consisting of sides, a series of rollers connected to move in unison and carry an envelope inserted with its flap open and projecting downwards, a moistening device for the back of the envelope under the flap, a flap turning device, a moistening device for the place to receive the stamp operating intermittently and at will in unison with the stamping mechanism, a plate opposite, the last roller of the roller bed supporting the envelope when receiving the stamp, an axle having an independent rotary movement in the delivery roller of the collar bed, clutch mechanism connecting said axle with the roller, devices connected with said axle by which an intermittent measured movement is given to a wheel actuating the stamp delivery, a stamp cutting and pressing device operated by said roller axle and a detachable stamp box containing stamps between a layer of double ribbon coiled upon a spool or roller and adapted to be drawn off by feed rollers turned by said wheel, a transverse casing across said roller bed containing said stamping mechanism and stamp box and provided with a slide-way for said stamp box and means for holding the latter in position, substantially as set forth. 24th. In a machine for sealing and stamping envelopes the combination of a roller bed consisting of sides, a series of rollers connected to move in unison and carry an envelope, a transverse casing across the delivery end of said roller-bed provided with stamping mechanism, a slide-way in said casing adapted to hold a stamp box, a hinged door at the end of said slide-way with latching device and means of contacting with stamp box to hold it in position, storage room at the side of said slide-away for additional stamp-boxes when not in use and a stamp-box adapted to pass on said slide-way and be held in position and in gear with the stamp delivery movement, substantially as set forth.

**No. 56,961. Turbine Water Wheel. (Roue d'eau.)**



56961

Robert D. Ralston and George W. Cochran, both of Wilscott, Georgia, U.S.A., 9th August, 1897; 6 years. (Filed 17th May, 1897.)

*Claim.*—A turbine water wheel constructed to operate horizontally and provided with a series of buckets at intervals in its periphery inclining inwardly and curving rearwardly from their upper ends

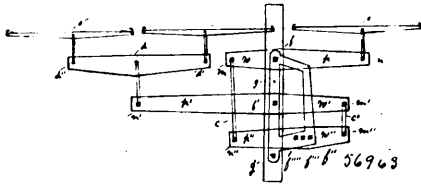
and opening through the lower side of the wheel a short distance from the periphery, and having the outer and the inner walls straight and divergent in central vertical section, and having the front walls extending radially to provide abrupt surfaces to receive the full impact of the water, and having the said inner walls curving rearwardly, thence outwardly and intersecting with the periphery of the wheel on lines parallel with the said front walls, substantially as specified.

**No. 56,962. Composition of Matter for Colouring Fabrics.** (*Composition pour teindre les tissus.*)

Maria Adella Stevens, Waseca, Minnesota, U.S.A., 9th August, 1897; 6 years. (Filed 14th June, 1897.)

*Claim.*—The herein-described dye-matter or colouring composition of matter, consisting of chloroform, benzine, gasolene and mineral paint of any desired colour, shade or combination of colours, in about the proportions stated.

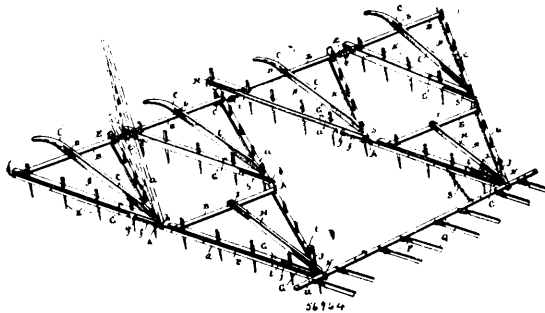
**No. 56,963. Triple Tree.** (*Arbre.*)



Mark Danby, North Augusta, Ontario, Canada, 9th August, 1897; 6 years. (Filed 17th June, 1897.)

*Claim.*—Triple trees comprising the three equalizers, figures 5, 6 and 7, and the frame-work, figure 8, and the attachment figure 9, all formed, arranged and combined, substantially as and for the purpose hereinbefore set forth.

**No. 56,964. Combined Harrow and Cultivator.** (*Herse et cultivateur.*)



John H. Brown, Rural Retreat, Virginia, U.S.A., 9th August, 1897; 6 years. (Filed 19th July, 1897.)

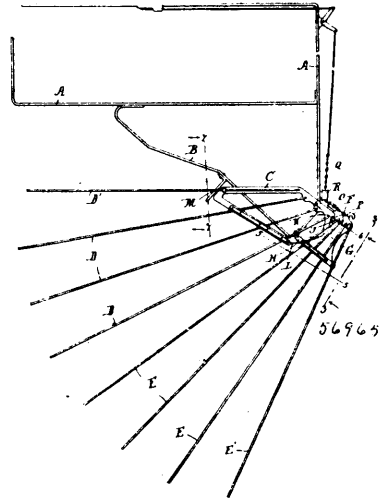
*Claim.*—1st. A combined harrow and cultivator consisting of six V-shaped harrows connected to form in outline a W, universal connections uniting the front ends of the rear harrows and the rear ends of the front harrows, flexible connections uniting the rear ends of the rear harrows, for the purpose described, and a draft bar spanning the space between the front harrows and firmly connected to the front ends of said front harrows to hold them in a horizontal position for the purpose described, substantially as described. 2nd. A combined harrow and cultivator consisting of six V-shaped harrows connected to form in outline a W, a connection between the front and rear harrows consisting of a rod having one end supported in a journal extending longitudinal the harrow, and its opposite end provided with an eye connected with the adjacent harrow, said longitudinal journal permitting the harrows an oscillation on a longitudinal axis, and the eye permitting the opposite ends of the harrows an up and down movement, substantially as described. 3rd. A harrow or cultivator consisting of a series of harrows flexibly connected, each harrow in the series having a detachable longitudinal central bar with a rear end central connection, and loops near the front ends of their side bars in combination with two handles connected at their rear ends by depending U-shaped connections with a central opening registering with the central openings in the harrows for the longitudinal handles when in series, whereby the harrows are adapted to be used in series as described or as one-horse harrows, substantially as described.

**No. 56,965. Bundle Carrier for Harvesting Machines.** (*Porte-gerbe pour moissonneuses.*)

Maurice Kane, Austin, Illinois, U.S.A., 9th August, 1897; 6 years. (Filed 20th July, 1897.)

*Claim.*—1st. In a bundle carrier, a supporting frame, a carrier frame mounted on said supporting frame, a series of bundle sup-

porting arms mounted on said carrier frame in rigid relation with respect to each other, a swinging bracket pivotally mounted upon



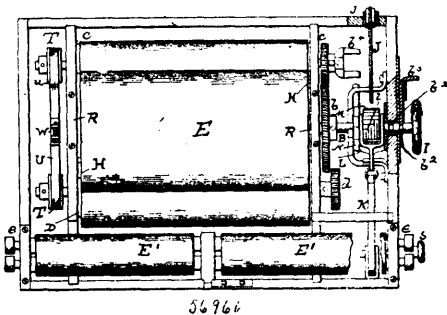
said carrier frame and a second series of bundle supporting arms mounted in said bracket in rigid relation with respect to each other, as and for the purpose set forth. 2nd. In a bundle carrier, a tilting frame, bundle supporting arms carried thereby, said arms arranged in sets, the members of each set rigidly held relative to each other, and means whereby one of said sets is moved, relative to the other, and independently of the tilting motion, as and for the purpose set forth. 3rd. In a bundle carrier, a supporting frame, a carrier frame mounted on said supporting frame, a series of bundle supporting arms mounted on said carrier frame in rigid relation with respect to each other, a swinging bracket pivotally mounted on said carrier frame, a second series of bundle supporting arms mounted upon said bracket in rigid relation with respect to each other, and means for rocking said bracket about its pivot, as and for the purpose set forth. 4th. In a bundle carrier, a tilting frame, a series of bundle supporting arms mounted thereon in rigid relation with respect to each other, a bracket pivotally mounted on said frame, a series of bundle supporting arms mounted upon said bracket, in rigid relation with respect to each other, and means for swinging said bracket and for tilting said frame, as and for the purpose set forth. 5th. In a bundle carrier, a frame, a series of bundle supporting arms mounted thereon, pintles or pivots upon which such frame is mounted to tilt, loose seats for said pintles whereby said frame may be tilted and swung in intersecting planes upon said pintles or pivots, as and for the purpose set forth. 6th. In a bundle carrier, a tilting frame, a series of bundle supporting arms mounted therein in rigid relation with respect to each other, the extreme inner arm of said series being arranged in a higher plane than the other members of said series, a bracket pivotally mounted on said frame, a second series of bundle supporting arms mounted in said bracket in rigid relation with respect to each other, the extreme outer arm of the said second series of arms being arranged in a higher plane than the other members of said series, and means for swinging said bracket on its pivot, as and for the purpose set forth. 7th. In a bundle carrier, a tilting frame, bundle supporting arms mounted thereon and arranged in sets, the members of each set being held rigid with respect to each other, one of said sets being pivotally mounted in a higher plane than the other of said sets, and means for swinging said higher set about its pivot and relative to the other of said sets, as and for the purpose set forth. 8th. In a bundle carrier, bundle supporting arms arranged in sets, the members of each set being rigidly mounted relative to each other, one of said sets being movably mounted in a higher plane than the other of said sets, a bracket rigidly connecting the members of said movable set, said bracket provided with a rounded or bevelled extension, and means for moving said movable set relative to the other set, as and for the purpose set forth. 9th. In a bundle carrier, a tilting frame, a series of bundle supporting arms mounted thereon in rigid relation with respect to each other, a bracket pivotally mounted on said frame, a series of bundle supporting arms mounted on said bracket in rigid relation with respect to each other, a flexible device connected to said bracket, a guide upon said frame, and means for actuating said device, whereby said bracket is swung upon said frame, as and for the purpose set forth. 10th. In a bundle carrier, a frame, a series of bundle supporting arms carried thereby, a bracket pivotally mounted on said frame, a series of bundle supporting arms carried by said bracket, means for swinging said bracket about its pivot, and means for locking said bracket to said frame when rocked or swung into position to receive the bundles whereby the pivot of said bracket is relieved of strains due to the weight of the bundles, as and for the purpose set forth. 11th. In a bundle carrier, a supporting frame, a carrier frame mounted thereon, a series of bundle supporting arms mounted on



said carrier frame in rigid relation with respect to each other, a swinging bracket pivotally mounted on said carrier frame, and a second series of bundle supporting arms mounted in said bracket, as and for the purpose set forth. 12th. In a bundle carrier, a tilting frame, bundle supporting arms carried thereby, said arms arranged in sets, one of said sets mounted to swing upon said tilting frame and in overlapping relation relative to the other set and independent of the tilting movement, and means for swinging said set, as and for the purpose set forth.

**No. 56,966. Railway Station Indicator.**

(Indicateur de station de chemin de fer.)



Alvin W. Chormann and Jonas Ely, both of Washington, Pennsylvania, U.S.A., 10th August, 1897; 6 years. (Filed 17th May, 1897.)

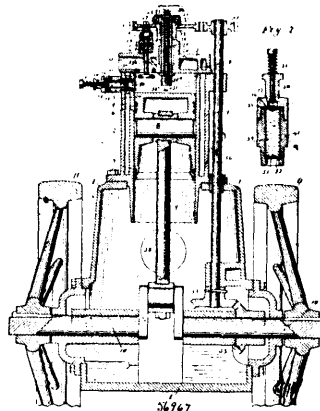
*Claim.*—1st. In a railway station indicator, the combination, with a frame, of two apron-rolls journaled therein, a drive-shaft B, and gearing for connection with either of said rolls, a two-pronged stop secured to the shaft of one of said rolls, a vertical sliding bolt, provided with a T-formed slot, said bolt being movably connected with shaft B, and adapted to connect with said two-pronged stop, a bar L, pivotally connected with shaft B, and having a projecting stud adapted to engage said sliding bolt, a ratchet-wheel on shaft B, and a spring-pawl carried by bar L, and a draw cord having a retracting-spring at one end, said cord being intermediately connected with said bar L, whereby the shaft B and said sliding bolt may be simultaneously actuated, substantially as and for the purposes described. 2nd. The combination, with the frame of an indicator, of a roll mounted therein, a two-pronged stop secured to the shaft of said roll, a drive-shaft with gearing connecting said shaft with said roll, a bar L, pivotally connected with said drive-shaft and provided with a projecting stud, a vertical slide-bolt, provided with a T-slot by which it is movably connected with said drive-shaft and may be engaged by said projecting stud, substantially as set forth and described. 3rd. In a railway station indicator, the combination, with a frame, of two apron-rolls having each a shaft journaled in said frame, pulleys T, T, borne by said shaft, tension devices arranged to engage said pulleys, a drive-shaft B, and gearing for connection with either of said rolls, a two-pronged stop secured to the shaft of one of said rolls, a vertical sliding bolt, provided with a T-formed slot, said bolt being movably connected with shaft B, and adapted to connect with said two-pronged stop, a bar L, pivotally connected with said two-pronged stop, a bar L, pivotally connected with shaft B, and having a projecting stud, adapted to engage said sliding bolt, a ratchet-wheel on shaft B, and a spring-pawl carried by bar L, and a draw-cord having a retracting-spring at one end, said cord being intermediately connected with said bar L, whereby the shaft B and said sliding bolt may be simultaneously actuated, substantially as and for the purposes described.

**No. 56,967. Explosive Engine.** (*Machin explosive.*)

Jessie Walrath, Racine, Wisconsin, U.S.A., 10th August, 1897; 6 years. (Filed 4th June, 1897.)

*Claim.*—1st. In an explosive engine, the combination with outwardly closing puppet valves, controlling the admission and exhaust of the explosive mixture, of a wheel mounted with its profile face passing over the stems of said valves and provided with a cam surface which is adapted to operate on said valves, in succession, the relative locations of said valves, with respect to each other and to said cam surface being such as to give the properly timed actions, substantially as described. 2nd. In an explosive engine, the combination with a cylinder head having inlet and exhaust ports, for the explosive mixture, of outwardly closing spring-seated puppet valves, controlling said ports, with their stems extending outward through said cylinder head parallel with an eccentric to the cylinder axis, a gear wheel with hollow hub centrally mounted on said cylinder head and having a profile cam shoe or surface operative on said valve stems, to open said valves, in the proper order, an electric igniter with its electrodes in the explosion chamber, one member of which is carried by a spindle extending through said wheel hub and rotated thereby, and connections for driving said gear wheel from the engine shaft, substantially as described. 3rd. The combination with the cylinder head with admission and exhaust ports for the

explosive material, of the spring-seated outwardly closing puppet valves, controlling said ports, the gear wheel with hollow hub



mounted on the cylinder head, and provided with the profile cam shoe or surface, for action on said valves, the hollow stub shaft or sleeve extending through said sleeve hub and cylinder head, the spring-held igniter spindle extending through said sleeve, with said spindle sleeve and wheel hub connected for common rotary movement but free for independent axial movement, and connections for driving said gear wheel from the engine shaft, substantially as described. 4th. The combination with the cylinder head having admission and exhaust ports for the explosive material, of outwardly closing puppet valves controlling said ports, the gear wheel mounted for rotary and a slight axial movement, a profile cam shoe on said gear wheel operative on said valves, and antifriction bearing devices working against the outer face of said gear wheel and resisting the outward pressure on the same, substantially as described. 5th. The combination with the cylinder head having admission and exhaust ports for the explosive material, of spring seated outwardly closing puppet valves controlling said ports, the hollow sleeve mounted for both rotary and axial movements in the head of said cylinder, the spring-held igniter spindle, rotatable with said sleeve but having a slight axial movement therethrough, the gear wheel with hollow hub rotatable with, but permitting axial movement of said sleeve, a profile cam shoe on said gear wheel, operative on said valves, and ball bearings working between the outer face of said gear wheel and the fixed bearing support, substantially as described. 6th. The combination with the cylinder head 3 having admission and exhaust ports, of the puppet valves 12b and 13b, controlling said ports, the yoke 21, the gear wheel 19 held by said cylinder head and yoke, the cam shoe 18, on said wheel, the caps 14 on said valve stems embracing the springs 16 and telescoping in the cup-like seats 15, the rollers 17 on said caps, the sleeve 23 working through the wheel hub and cylinder head, the spindle 24, working through said sleeve, with said ports 19, 23 and 24, rotatively connected with freedom for independent axial motion, the nut 25 and spring 26, and the driving connections 35, 36, 37 from the engine shaft to the gear wheel 19, all substantially as described. 7th. In a starter for explosive engines, the combination with a breech block and firing device, of a charge magazine constructed to retain a paper wad or disc, at or near its delivery end, insertible from the breech end thereof, for retaining and protecting the charge, and a permanent washer or cap-holder securable at the breech end of said magazine and provided with a perforated cap-seat, whereby the charge can be held and fired without the use of a cartridge and be protected from the combustion chamber of the engine without the use of a cut-off cock, substantially as described. 8th. The starter for explosive engines, comprising the magazine 56 having the wad seat *g* and the cap-holder *g*<sup>1</sup>, the breech-block 57 equipped with the spring-seated firing hammer 58 and separately connectible to said magazine, and the permanent cap-holder 62 provided with a perforated seat for a fulminating cap 63, all for co-operation, substantially as described.

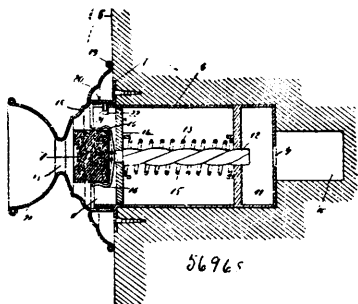
**No. 56,968. Billiard Cue Chalker.**

(Appareil à enduire de craie les queues de billiards.)

William Knoll, Jersey City, New Jersey, U.S.A., 10th August, 1897; 6 years. (Filed 3rd June, 1897.)

*Claim.*—A device for chalking billiard cues, consisting of a casing, which is open at one end, a longitudinally movable spring operated screw-threaded shaft mounted in casing, and provided at its outer end with a chalk holder, a detachable cap connected with said casing, and provided with an opening through which the tip of a billiard cue may be inserted, substantially as shown and described. 2nd. A device for chalking billiard cues, consisting of a casing which is adapted to be connected with a wall or other support, and which is open at its outer end, with a longitudinally movable spring operated screw-threaded shaft mounted in said casing, and provided at its outer end with a chalk holder, and a detachable cap

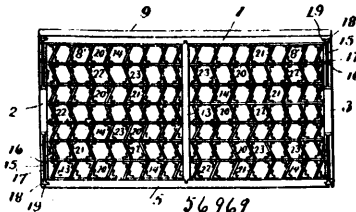
connected with the outer end of said casing, and provided with an opening through which a billiard cue may be inserted, substantially



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as shown and described. 3rd. A wall or other support, provided with a device for chalking billiard cues, consisting of a casing which is open at its outer end, and the inner end of which is provided with a central opening, a transverse partition mounted in said casing, and provided with a screw-threaded opening, a screw-threaded shaft mounted longitudinally of said casing, and passing through said partition, a piston or head connected with the outer end of said shaft, a spring mounted between said piston or head and said partition, a chalk holder connected with the outer end of said shaft, and a detachable cap connected with the outer end of said casing, and provided with central opening, substantially as shown and described.

**No. 56,969. Folding Egg Crate. (Boîte à œufs.)**

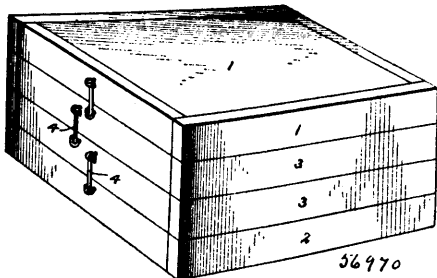


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John William Bennett, Baltimore, Maryland, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—1st. A folding crate, constructed and arranged substantially as shown and described. 2nd. A folding crate comprising a solid bottom, end pieces hinged thereto, a hinged front piece, and a hinged back piece, in combination with a folding top hinged at its rear edge to the upper contiguous edge of said back piece, substantially as shown and described. 3rd. A folding crate or box, comprising the solid bottom, 1, the end piece 2-3 hinged thereto and having their upper edges formed with grooves 17 and transverse recesses 19, a locking lever 15 fulcrumed in said groove, in combination with the hinged back piece 7 and the folding top 9 hinged thereto, and the folding front piece 5 hinged to a fixed rib 4 on the bottom, and having its upper edge near the outer ends provided with the vertical transverse slots 19 adapted to engage the locking levers 15, substantially as shown and described. 4th. A folding egg crate, comprising the solid bottom 1, the end pieces 2-3 hinged thereto, the removable partition 13, the folding front piece 5 and back piece 7, the latter provided with the hinged top 9, in combination with the removable collapsible nest 14 consisting of the rectangular strips 20 and the intersecting partitions 21 having the edges of their opposite sides hinged to the contiguous faces of the strips 20 by the flexible fabric 23, substantially as set forth.

**No. 56,970. Egg Crate. (Boîte à œufs.)**

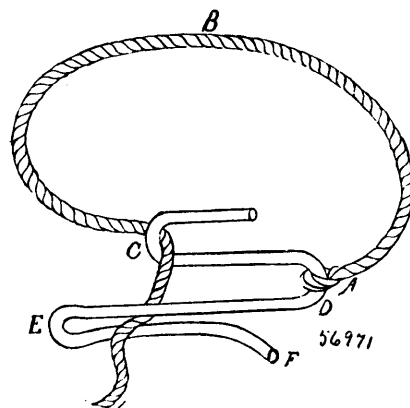


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McClellan Shepard, Bennington, Kansas, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—An egg crate composed of interlocking sections nested together, and means for securing the sections one to the other, substantially as set forth.

**No. 56,971. Binders for Binding Bales, Bags, etc. (Lien pour ballots, sacs, etc.)**

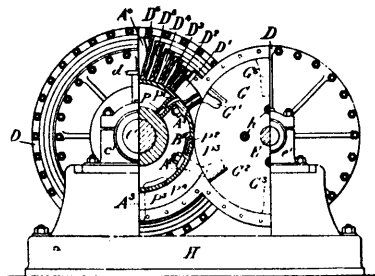


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John Laird, Picton, Ontario, Canada, 10th August, 1897; 6 years. (Filed 15th July, 1897.)

*Claim.*—The combination, with the rope or cord A, B, of the knotted C, D, E, F, substantially as and for the purpose hereinbefore set forth.

**No. 56,972. Rotary Engines Applicable for use as Motors, Pumps, etc. (Machine rotatoire en usage pour pompes, moteurs, etc.)**



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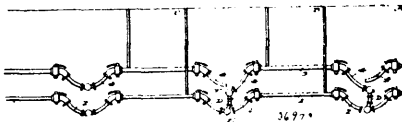
Henry Low Webster, Klerksdorp, South African Republic, 10th August, 1897; 6 years. (Filed 19th July, 1897.)

*Claim.*—1st. The improved rotary engine, constructed substantially as herein described and comprising a disc carrying on its periphery a radially projecting piston, a stopper or head arranged on a disc which serves as the valve for the pressure fluid, the piston and stopper revolving simultaneously in intersecting channels or chases in the casing, whereby the piston enters the path of the stopper, the latter being formed with a cavity to permit the piston to pass. 2nd. In a rotary engine of the character herein referred to, the employment of a disc, such as B, having a radially projecting piston, such as A, of circular or other suitable form secured to its periphery, the discs revolving in the cavity in the casing and working in steam-tight contact with the casing at or near its rim, substantially as described. 3rd. In a rotary engine of the character herein referred to, the employment of a stopper, such as G, having an opening G<sup>1</sup> in its periphery and mounted on a disc, such as F, the latter revolving freely within the casing D, and being provided with means for admitting and cutting off the flow of fluid pressure, substantially as and for the purposes specified. 4th. In a rotary engine of the character herein referred to, the combination with the casing D having an inlet-port d and an admission-port d<sup>1</sup>, of a rotating disc F having a port f and a quadrantal countersunk passage f<sup>1</sup>, substantially as described and for the purpose specified. 5th. In a rotary engine of the character herein specified, the improved mode of mounting the piston consisting in bolting the same to a plate having a shank let into the periphery of the disc and cottered through the web, substantially as described. 6th. In a rotary engine in which the stopper-disc revolves in a different plane to that of the piston, the mode of balancing the pressure on the back and front of the stopper-disc, same consisting in connecting the piston-orbit in front of the stopper and providing spaces at either side of the piston-orbit, whereby the pressure at every point of the piston revolution is equal on both sides of the stopper-disc, and the latter is consequently free to revolve without friction on the faces of the aperture, substantially as described. 7th. In a rotary engine in which a reciprocating stopper-plate is used instead of a revolving stopper-disc, the improved method of reciprocating the stopper-plate by means of a small auxiliary cylinder in which a piston connected to the stopper-plate by a rod is actuated positively by the steam as the piston-disc revolves, whereby the ports of the auxiliary cylinder

are brought into communication with the steam and exhaust ports alternately by means of the quadrantal countersunk passages in the disc, substantially as described and for the purpose specified. 8th. In a rotary engine in which a reciprocating stopper-plate is used instead of revolving stopper-disc, the method of balancing the stopper-plate at the commencement of the up stroke by the C-shaped by-pass disposed in the casing, and having an opening into the piston-orbit on each side of the exhaust port, whereby steam passes from the back to the front of the piston and equalizes the pressure on both sides of the stopper-plate, substantially as and for the purposes specified. 9th. In a rotary engine wherein a reciprocating stopper-plate is used as an abutment or head for the steam, the herein described method of admitting steam to the piston casing in the annular channels on each side of the piston-disc in order to balance the latter, and of establishing communication between the piston-orbit and the steam-inlet by means of the port and quadrantal countersunk passages in the piston-disc as the latter revolves, substantially as specified. 10th. In a rotary engine in which a reciprocating stopper-plate is used instead of a revolving stopper-disc, a parabolic toe or lifter, fixed in front of the piston, whereby the lifting of the stopper plate by the piston is ensured in case of accident to the auxiliary piston or rod, substantially as described. 11th. In a compound rotary engine of the character herein described, the improved method of mounting the pistons on a hollow cylindrical piston-carrier by letting the same into notches in the outer surface of the piston-carrier, and having strong shanks secured with cottars or nuts on the inner side of the cylindrical wall of the piston-carrier, thickened at these points, each piston revolving in an annular channel or orbit in the outer casing and working in unison with a corresponding stopper having an aperture in its periphery for the passage of the piston mounted on a shaft parallel to the piston-shaft, both shafts being furnished with spur wheels of equal pitch and diameter meshing with each other, substantially as described. 12th. In a compound rotary engine of the character herein described wherein a number of graduated pistons are fixed on the periphery of a revolving piston-carrier mounted on a shaft and working in unison with a corresponding number of stoppers mounted on a parallel shaft, forming the steam passages and ports connecting the piston-orbits in the cylindrical wall of the piston-carrier or drum, whereby the steam is conducted between the orbits by the shortest possible way and external radiation entirely prevented, substantially as described. 13th. In a rotary engine of the character herein referred to having a rotary disc or drum carrying a radially projecting piston which revolves in an annular channel or orbit, and a revolving or reciprocating stopper or head to form an abutment for the steam, the annular expansion discs in the side of the casing in conjunction with the annular steam space in the same, the inner disc moving in a lateral direction and having a port and quadrantal passage forming a fixed cut-off, the outer disc being capable of partial rotation by means of the spur teeth on its edge meshing with a spur pinion on the shaft connected to the governor lever, and the quadrantal passage in the disc being concentric with the passage in the inner disc and the annular steam space in the casing, its rotation in a forward or backward direction shortening or lengthening the period of steam admission according to the speed and position of the governor and its lever, substantially as described and for the purpose specified.

**No. 56,973. Air Brake for Railway Cars.**

(Frein à air pour chars de roues.)



Joseph Frank Coffin, Mobile, Alabama, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—The combination with the train pipes and signal pipes of a railway train, said pipes being provided with flexible couplings, of an auxiliary or supplemental coupling having a train pipe coupling head and a signal pipe coupling head, whereby should the air-brake mechanism of one coach get out of order, the couplings of the signal pipe and of the train pipe may be disconnected, and one coupling of each coupled by the auxiliary or supplemental coupling, substantially as set forth.

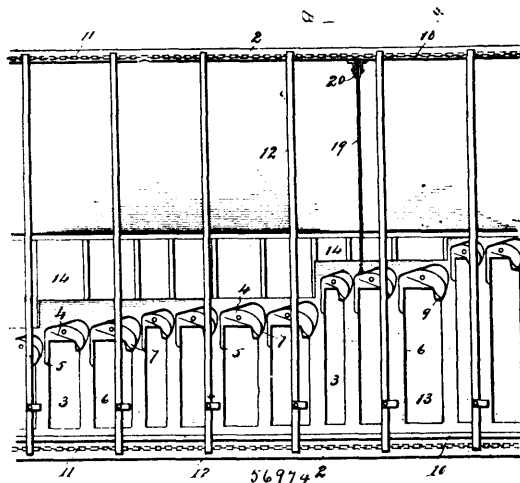
**No. 56,974. Combined Lumber Assorter and Bin.**

(Appareil à contenir et assortir le bois.)

Alpine Grant Higgins and George Dallas Robertson, both of Dendron, Virginia, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—1st. The combination with a table 2, provided with a series of parallel orifices 3, 3, of different widths and lengths, a gauge-dog 4, pivoted in said table at one end of each of said orifices, of the longitudinal guide-rail 10, arranged parallel with the series of orifices, and the carrier 12, traversing said table and provided with a lug-bottom 13, substantially as shown and described. 2nd. The combination with a lumber assorting table, its travelling carrier,

and means for operating said carrier, of a series of bins located beneath said table and provided with an inclined hinged bottom 17,



and means substantially as described for locking and unlocking said hinged bottom, as and for the purpose set forth. 3rd. The combination with a table 2, provided with rectangular orifices 3, 3, a gauge-dog 4, pivoted in said table at one end of each orifice, a guide-rail 10, extending longitudinally along the opposite ends of said orifices, of the endless carrier adapted to traverse the table across said orifices, substantially as shown and described.

**No. 56,975. Non-refillable Bottle.**

(Appareil pour empêcher le remplissage des bouteilles.)



Joseph Job Hayes, Louisville, Kentucky, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—A bottle provided with an annular recess 4, on the outside of its neck, in combination with the cork 5, and conical cup-shaped cap 6, substantially as shown and described.

**No. 56,976. Electrical Accumulator.**

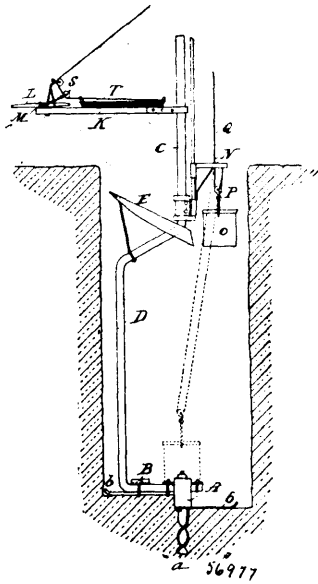
(Accumulateur électrique.)

Allbrecht Heil, Frankisch-Crumbach, Grand Duchy of Hesse, Germany, 10th August, 1897; 6 years. (Filed 21st July, 1897.)

*Claim.*—1st. An electrical accumulator in which the active mass (preferably composed of lead oxides and wood charcoal dust) is applied to the lead plates and when dry saturated with a solution of lead nitrate and the lead plates thus prepared are held by means of wood plates cut across the grain and are placed in a solution of double sulphate of potash or double sulphate of soda with dilute sulphuric acid, substantially as and for the purpose described. 2nd. For use in an electrical accumulator of the kind specified in the preceding claim, an active mass for the positive electrode, consisting of a paste composed of about 20 parts by volume of freshly precipitated sulphate of lead 20 parts by volume of wood charcoal dust, 10 parts by volume of peroxide of lead, and 50 parts by volume of metallic lead dust, and an active mass for the negative electrode, consisting of a paste composed of about 50 parts by volume of freshly precipitated sulphate of lead, 30 parts by volume of metallic lead dust and 20 parts by volume of wood charcoal dust, as described.

**No. 56,977. Well Boring Device.**

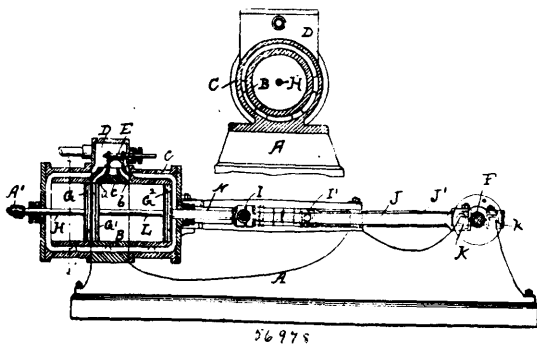
(Appareil pour creuser les puits.)



William W. Horr, St. Thomas, Ontario, Canada, 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—1st. A well boring auger having a platform above the cutters for the purpose described. 2nd. A well boring auger having a shielded platform above the cutters for the purpose described. 3rd. A well boring auger having a shank off set above the cutters for the purpose described. 4th. A well boring auger provided with a shank off set to admit of a workman standing in the well above the cutters, a platform for the workman to stand on and a protecting shield above. 5th. The combination with a well boring auger of a hoist comprising an arm or head slidingly secured on the shank of the auger, a bucket suspended from said arm and a rope or cable for raising said arm and bucket. 6th. The combination with a well boring auger having a shank off set to admit of a workman standing in the well above the cutters of an arm or head slidingly secured to said shank above the off set portion, a hoisting rope or cable secured at one end to said arm or head and a bucket suspended from a depending loop in said rope or cable. 7th. The combination with a well boring auger having a crank arm vertically slidingly secured, to the shank thereof, of a draft connection detachably secured to said crank arm, a hoisting rope or cable secured to said draft connection and extending down in the well and a bucket attached to said rope or cable. 8th. The combination with a well boring auger having a crank arm vertically slidingly secured to the shank thereof, of draft connections detachably secured to said crank arm, a hoisting rope or cable extending down into the well, having a bucket at its lower end and attached at its upper end to said crank arm, a sheave or pulley on said draft connection around which said rope or cable passes and a slack holder on said arm on which the slack of the rope is wound.

**No. 56,978. Steam-Engine. (Machine à vapeur.)**



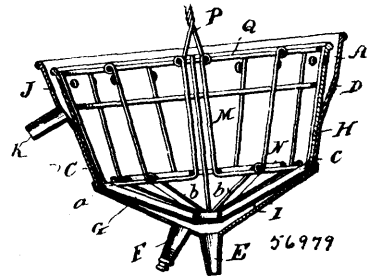
Jeremiah Adam Beltz and William A. Jordan, both of Mulvane, Kansas, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—1st. A steam-engine, comprising a cylinder connected at its open ends with a steam-chest, said cylinder being also provided

with ports leading from the steam-chest to the interior of the cylinder at points approximately one-third of the length of the cylinder from the ends thereof, and pistons mounted to travel in said cylinder and connected with the main driving shaft, one of the pistons travelling between the ports, and the other between the ports and the open ends of the cylinder, substantially as shown and described. 2nd. A steam-engine, comprising a cylinder connected at its open ends with a steam-chest, said cylinder being also provided with ports leading from the steam-chest to the interior of the cylinder at points approximately one-third of the length of the cylinder from the ends thereof, pistons mounted to travel in said cylinder, and connected with the main driving-shaft, one of the pistons travelling between the ports, and the other between the ports and the open ends of the cylinder, and a slide-valve controlling said ports in the steam-chest, substantially as shown and described.

**No. 56,979. Print and Negative Washer.**

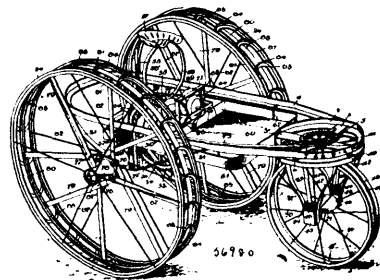
(Appareil à laver les impressions et négatifs.)



Apolonia Spraner, Huntingburg, Indiana, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—A negative washer, comprising an outer basin having a conical bottom, and an upwardly-projecting circumferential side-wall as C, an inner basin having a perforated conical bottom separated from the bottom of the outer basin, and an upwardly-extending circumferential side wall, fitting at its lower portion tightly within the lower portion of the adjacent wall of the outer basin, the upper portion of the side wall of the outer basin flared outward as at D to form an upper chamber between the side walls of the basins, the bottom and top of the outer basin having an inlet and an outlet respectively, substantially as shown and described.

**No. 56,980. Traction Engine. (Machine à traction.)**

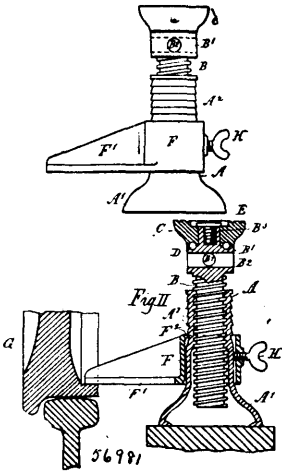


Horton Howard Shepherd, Fairland, Indian Territory, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—1st. A traction engine comprising a main frame carrying a prime motor, a main driving shaft provided with a fixed friction wheel, a pivoted frame carrying a fixed shaft provided with two friction wheels located one on each side of the fixed friction wheel, a flexible shaft connected to one end of the fixed shaft, and having its opposite end connected to a countershaft located in a circular frame in the forward end of the main frame, a worm screw on said countershaft, and meshing with a worm wheel mounted on a vertical steering post journaled in said circular frame, and carrying a lower circular frame in which the steering wheel is supported, as and for the purpose set forth. 2nd. A traction engine, comprising a main driving shaft, a worm screw fixed to said shaft, in combination with the main axle, a worm gear mounted thereon, and formed with skeleton teeth having antifriction rollers radially mounted therein, substantially as and for the purpose set forth. 3rd. A drive wheel for farm and road engines, comprising a divided hub, a series of tangential braces, the outer ends of which are secured to the rim of the wheel, and centrally secured between the divided hub, substantially as shown and described. 4th. A drive wheel for farm and road engines, comprising a rim formed of angle iron or steel, a series of semicircular shoes secured to said rim, in combination with a series of tangential braces or spokes having their outer ends secured to the said rim, and secured about midway between the contiguous flanges of the divided hub, substantially as and for the purpose set forth. 5th. A traction engine, comprising the main axle, the

sleeves 27 and 28 mounted on said axle, in combination with the bearing boxes 29, 29', having antifriction rollers 30x, substantially as and for the purpose set forth. 6th. The combination with the main driving shaft, a worm screw fixed on said shaft, of a counter-shaft and a worm gear fixed thereon, and formed with skeleton teeth having antifriction rollers radially mounted thereon, and in operative contact with said worm screw, as and for the purpose set forth.

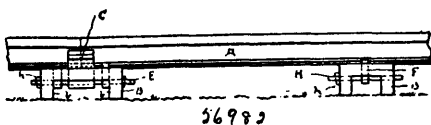
**No. 56,981. Screw Jack. (Cris à vis.)**



Alexander Hill Moyes, Ogden, Utah, U.S.A., 10th August, 1897 ; 6 years. (Filed 23rd July, 1897.)

*Claim.*—1st. A jack comprising a casing, a lifting device carried thereby, a transverse sleeve held on the casing at an invariable angle thereto and a pin slidable in said sleeve toward and from the casing, the free end of the pin being adapted to engage a car wheel substantially as described. 2nd. A jack provided with a casing, a sleeve held loosely on said casing and having an internal tooth at its upper portion and at one side, such tooth engaging with the exterior annular teeth on the casing and an arm projecting outward from the sleeve and from a point directly adjacent to the tooth on the sleeve, a bolt held in said arm and adapted to engage the wheel rim to hold the wheel down on the rail while jacking up the journal boxes, substantially as shown and described. 3rd. A screw jack comprising a casing provided with a base and formed with an interior screw-thread and exterior circular threads, a screw-post screwing in the said casing and provided at its upper end with a head, a cap mounted to turn on the said head, a ball-bearing interposed between the cap and head, a sleeve held loosely on the said casing and provided with an extension, or arm, said arm adapted to engage the inside of a wheel rim to hold the wheel down on the rail while jacking up the journal-boxes, substantially as shown and described. 4th. A screw jack comprising a casing provided with a base and formed with an interior screw-thread and exterior circular threads, a screw-post screwing in the said casing and provided at its upper end with a head, the cap mounted to turn on the said head, a ball-bearing interposed between the cap and head, a sleeve held loosely on said casing, and provided with a handle and an extension, a bolt fitted to slide in the said extension and adapted to engage the inside of the wheel rim to hold the wheel down upon the rail while jacking up the journal boxes, a sleeve loosely embracing the casing and having an internal tooth at its upper portion and at one side such tooth engaging with the annular teeth on casing substantially as shown and described.

**No. 56,982. Railway Rail Joint and Rail Fastening. (Joint et attache de rails.)**

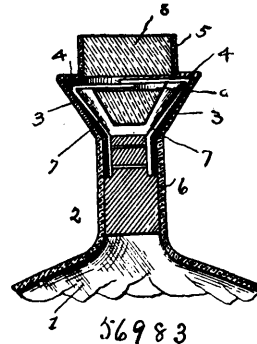


Jezreel Womeldorf, Scranton, Pennsylvania, U.S.A., 10th August, 1887 ; 6 years. (Filed 23rd July, 1897.)

*Claim.*—1st. The combination in a railway rail joint, with the metallic tie, having openings formed therethrough, of the rail sec-

tions having the corresponding open slots in their web portions at the joint ends, the pair of clamps inserted through said openings, one at each side of said sections, said clamps having inwardly-bent portions at the upper ends which engage the base flanges of said sections, and also enter the said slots, and a keying device which engages the lower portions of each of said clamps, together with auxiliary rail fastenings upon each side of the said clamps, substantially as specified. 2nd. The combination in a railway rail joint, of the metallic tie formed with vertical and with laterally-extending openings, of the rail sections having abutted, slotted ends, the main clamps C, C; having their upper portions shaped to fit the bases of said sections and formed with lips which engage the slotted ends thereof, one upon the other, the lower portions of said clamps having hooks or dogs at their upper ends which also engage the said base flanges, and with similar hooks or dogs at their lower ends, and the double-locking key inserted through the lateral opening or openings of the tie, and engaging the hook or dog portions of both the main clamps and the auxiliary fastenings, substantially as specified.

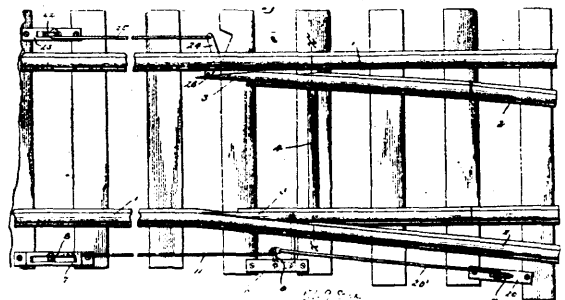
**No. 56,983. Bottle Stopper. (Bouchon de bouteilles.)**



Jacob Hahn and Charles H. Hahn, both of New Haven, Connecticut, U.S.A., 10th August, 1897 ; 6 years. (Filed 23rd July, 1897.)

*Claim.*—1st. In combination with a bottle presenting a neck having an enlargement therein, of the stopper carrying the spring members which enter said enlargement and present inturred ends, and a supplemental stopper having a transverse opening or opposite recesses with which the spring members engage, substantially as shown and for the purpose set forth. 2nd. The combination with a bottle presenting a neck having an enlargement therein, of a stopper fitting within the neck below the enlargement, and carrying spring members, which extend into said enlargement and are provided with inturred ends, and a supplemental stopper tapered at its lower end, and provided with a transverse opening or opposite recesses, substantially as shown and for the purpose set forth. 3rd. The combination with a bottle having a neck, the lower part of which is of increased thickness to present practically a permanent neck, said neck being extended outward at an inclination, and then abruptly inward to form a shoulder from which projects the mouth, of a stopper having spring members secured to the upper end thereof which projects outward, and then inward to fit the corresponding part of the neck of the bottle, and a solid stopper having a transverse opening or opposite recesses to engage the inturred ends of the spring members, substantially as shown and for the purpose set forth.

**No. 56,984. Railroad Switch. (Aiguille de chemin de fer.)**

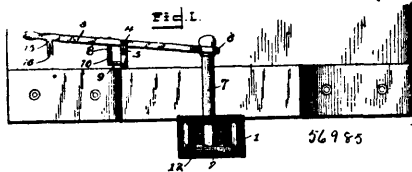


Charles Vaniver Richey, Washington, Columbia, U.S.A., 10th August, 1897 ; 6 years. (Filed 22nd July, 1897.)

*Claim.*—1st. In a railroad switch, the combination with the main track, of switch tongues connected together and mounted upon antifriction bearings, switch stands, a trip arm pivoted in the stand secured to the ties and provided with a pin adapted to

engage the spring catch, a bell crank lever, a rod connecting one limb of the bell crank lever to the trip. a link connecting one of the switch tongues to the other end of the bell crank lever, a pivoted arm that is arranged nearer the track than the trip aforesaid and is shorter than the same, a link connecting the arm to one of the limbs of the said bell crank lever, arranged on the opposite side of the track and provided with a pin adapted to engage one of the switch tongues and actuate the same, a trip arm, and a link connecting the trip arm with said bell crank lever, substantially as set forth. 2nd. The combination with a locomotive, of a bracket secured threoto and provided with a bottomless box, an arm pivoted in said box, and a cord attached to said arm, passing through an aperture in said box and leading to the cab of the locomotive, substantially as set forth.

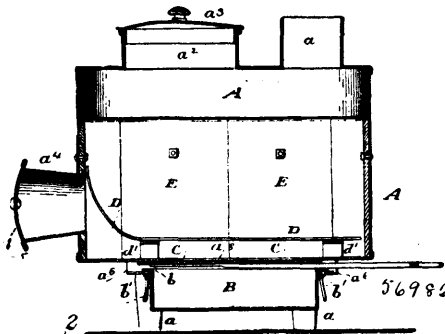
**No. 56,985. Car Coupler. (Attelage de chars.)**



William Hermann Henry Tabbert and William Tabbert, both of Saint Ausgar, Iowa, U.S.A., 10th August, 1897; 6 years. (Filed 22nd July, 1897.)

*Claim.*—A car coupling comprising the draw-head 1, provided with the inclined bottom 2, the transverse lever 3, the coupling pin 7 supported in the inner end of said lever, and the solid coupling link 12, provided with the vertical orifice 13, and having a bevelled lower face 14, in combination with the fixed guide stud 8, the spiral spring 10 encompassing said stud, and the locking arm 15, substantially as shown and described.

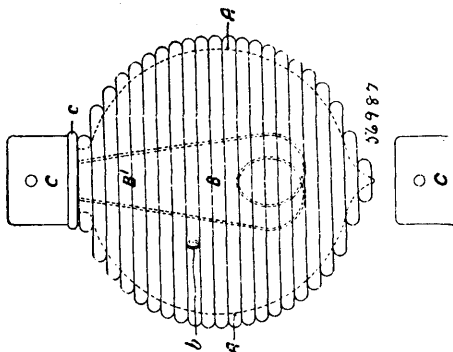
**No. 56,986. Air-tight Heating Stove. (Poêle.)**



William M. Milburn and John H. Roy, both of Harrison, Arkansas, U.S.A., 11th August, 1897; 6 years. (Filed 18th June, 1897.)

*Claim.*—A stove having a horizontal body, a draft inlet leading into the front of the body near the lower edge thereof, a smoke outlet located in the body, a grate consisting of a number of parallel bars extending longitudinally and slightly raised above the bottom of the stove body, the major portion of said bars being horizontal and at their forward ends extending up above the draft inlet and terminating in close proximity with the front of the stove body.

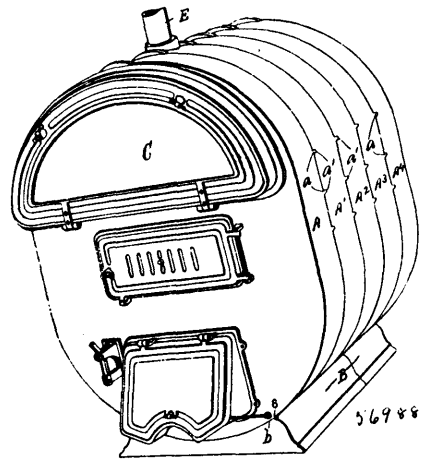
**No. 56,987. Light Refracting and Magnifying Envelope. (Enveloppe à magnifier et réfracter la lumière.)**



William Castner Chapin, San Francisco, California, U.S.A., assignee of Forest William Dunlap and John Robert Quain, both of London, England, 11th August, 1897; 6 years. (Filed 3rd June, 1897.)

*Claim.*—The combination with an incandescent electric lamp, of a light refracting envelope formed of a closely wound spirial of glass rod of circular or other section applied upon the lamp, substantially as specified.

**No. 56,988. Generator. (Générateur.)**



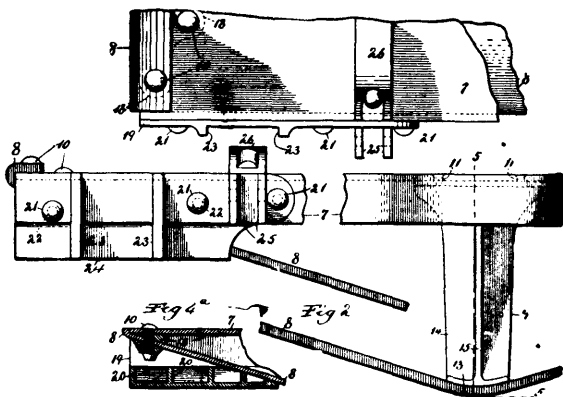
The A. A. Griffing Iron Company, Jersey, New Jersey, assignee of Edward Peter Waggoner, Syracuse, New York, both in the U.S.A., 11th August, 1897; 6 years. (Filed 8th July, 1897.)

*Claim.*—1st. A generator, comprising upright sections arranged one in advance of the other and enclosing the combustion and heating chambers, a number of the sections being provided with top and bottom walls formed with substantially smooth and continuous or unbroken outer faces having their opposite ends extended towards the longitudinal centre of the generator, and being provided with substantially flat front and rear walls having their upper and lower portions decreased in width towards their top and bottom edges, said front and rear walls being formed with upper and lower fluid openings, substantially as and for the purpose described. 2nd. A generator, comprising upright sections arranged one in advance of the other and enclosing the combustion and heating chambers, a number of said sections being provided with substantially flat front and rear walls having their upper and lower portions decreased in width towards their top and bottom edges, and formed with upper and lower fluid openings interposed between their top and bottom edges, tubes having their opposite ends arranged in adjacent fluid openings, and bolts passed through said tubes and sections, substantially as and for the purpose specified. 3rd. A generator, comprising upright sections arranged one in advance of the other and enclosing the combustion and heating chambers and the ash-pit, said sections having their top and bottom walls formed convex, and being provided with substantially flat front and rear walls having rounding upper and lower portions, and upper and lower fluid openings arranged substantially centrally in the contracted extremities of said rounding portions, the corresponding openings of adjacent sections being connected together, substantially as and for the purpose set forth. 4th. A generator, comprising upright sections arranged one in advance of the other and enclosing the combustion and heating chambers, connected flues extending one above the other through the heating chamber, and a fire-passage connecting the rear end of the lower flue to the combustion-chamber, a number of said sections being provided with substantially flat front and rear walls having their upper and lower ends decreased in width towards their outer edges, said front and rear walls being formed with upper and lower fluid openings, substantially as and for the purpose described. 5th. A generator, comprising upright sections arranged one in advance of the other, and enclosing the combustion and heating chambers, a number of said sections having their front and rear walls formed with upper and lower fluid openings, said number of the sections being provided with openings extending lengthwise therethrough from front to rear above the combustion-chamber for forming a closed flue extending lengthwise of the generator through the fluid-containing chambers of said sections, one of said sections being provided with a fire-passage depending from the rear extremity of the flue, and a section next in front of said one of the sections being formed with a hollow bridge-wall, and a fire-passage above the bridge-wall opening into the lower end of the former fire-passage, substantially as and for the purpose specified. 6th. A generator, comprising upright connected sections arranged one in advance of the other and enclosing the combustion and heating chambers, a number of said sections being provided with openings extending therethrough from front to rear for forming the combustion-chamber, and with additional openings extending therethrough one above the other from front to rear above the former openings for forming upper and lower flues extending lengthwise o

the generator, one of said sections being provided with a fire passage depending from the rear extremity of the lower flue, and a section next in front of said one of the sections being formed with a hollow bridge-wall, and a fire-passage above the bridge-wall opening into lower end of the former fire-passage, and front and rear chambers for connecting the corresponding ends of said flues, substantially as and for the purpose specified. 7th. A generator, comprising upright sections arranged one in advance of the other and having their upper and lower extremities decreased in width towards their top and bottom edges, and the upper and lower portions of their front and rear walls formed with fluid openings, said sections being provided with openings extending therethrough from front to rear above the lower fluid openings for forming the ash-pit and the combustion-chamber, and additional openings extending there-through from front to rear beneath the upper fluid openings for forming a flue, said flue being connected to the combustion-chamber, substantially as and for the purpose set forth. 8th. In a generator, the combination of a base extending lengthwise of the generator and having a lengthwise groove in its upper face and upright connected sections mounted upon the base, one in advance of the other, and extending downwardly into said groove, substantially as and for the purpose set forth. 9th. In a generator, the combination of a base extending lengthwise of the generator and having longitudinal separated bearing surfaces inclined downwards towards each other, and upright connected sections arranged one in advance of the other and having their bottom walls extended upwardly in opposite directions from their central portions, and mounted upon the bearing surfaces, said bottom walls being provided with shoulders engaged with the base and having their central portions depressed beneath said bearing surfaces, substantially as and for the purpose described.

**No. 56,989. Truck Bolster.**

*(Sellette de chassis de chars.)*



William Vallandigham Kelly, assignee of Waldo H. Marshall, both of Chicago, Illinois, U.S.A., 11th August, 1897; 6 years. (Filed 9th July, 1897.)

*Claim.*—1st. In a truss for car truck bolsters, the combination with a commercial rolled channel iron compression member and a flat plate tension member bent up at each end of said compression member and passing between the flanges of the same, of a support for separating the said compression and tension members at a point between their ends, arranged and combined substantially as shown and described. 2nd. In a bolster for car trucks, the combination with a commercial rolled channel iron compression member of a flat plate tension member and a king post, said tension member being bent up at each end of said compression member, after passing between the flanges of the same, in a manner substantially as shown and described. 3rd. In a car bolster, the combination of a channel iron compression member, a flat plate tension member, and a king post, arranged and combined substantially as shown and described.

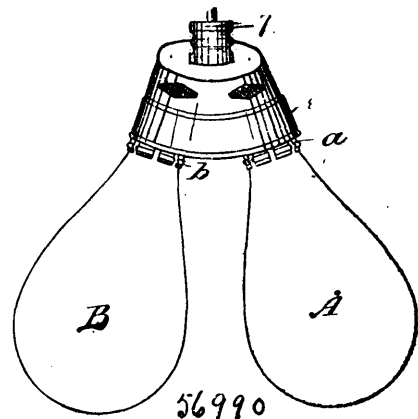
**No. 56,990. Subdued Electrical Light Socket.**

*(Lampe électrique.)*

Francis Alexander Coté and Emmanuel Tassé, both of Ottawa, Ontario, Canada, 11th August, 1897; 6 years. (Filed 28th May, 1897.)

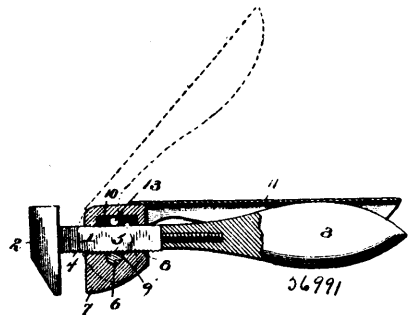
*Claim.*—1st. A lamp socket by which a subdued incandescent electric light is obtained, comprising two sockets, enclosed in a jacket, and connected electrically, substantially as described and shown. 2nd. In a socket for a subdued light the combination of

two sockets enclosed in one shell, and connected mechanically and electrically, for the purpose set forth. 3rd. In an electric lamp



socket, the combination of a plug 7, and ordinary key sockets A and B, for the purpose set forth.

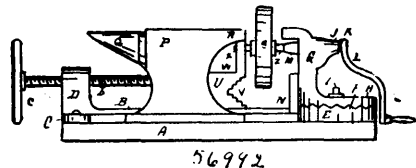
**No. 56,991. Wrench. (Clé à écrou.)**



J. A. McCawley and George W. Cobb, both of Canton, Kentucky, U.S.A., 11th August, 1897; 6 years. (Filed 28th May, 1897.)

*Claim.*—1st. In a wrench, the combination of a shank provided with teeth, a fixed jaw arranged in one end of the shank, a sliding jaw mounted on the shank, a pivoted segment arranged within and carried by the movable jaw and provided at its curved edge with teeth for engaging those of the shank, said segment being journaled on and extended through the sides of the movable jaw, and an operating lever provided with ears or extensions embracing the sides of the movable jaw and secured to and operating the said segment, substantially as and for the purpose described. 2nd. In a wrench, the combination of a shank provided with teeth, a fixed jaw, a movable jaw slidingly arranged on the shank and provided in front and in rear of the same with recesses, a pivoted segment mounted in the front recess of the movable jaw and provided at its curved edge with teeth, a pin located in rear of the shank and extending across the rear recess of the movable jaw in position for supporting the shank, and an operating lever connected with the segment, substantially as described.

**No. 56,992. Combination Tool. (Outil à combinaison.)**



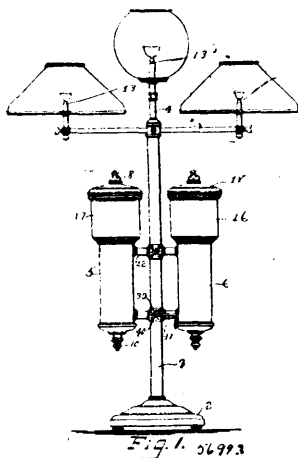
Christian Arthur Salzman and John A. Robbins, both of Hamilton, Ohio, U.S.A., 11th August, 1897; 6 years. (Filed 25th May, 1897.)

*Claim.*—1st. The combination with a base, a track thereon, an anvil movable on the base and engaging with the track, said anvil being provided with a perforated apron, a hand-screw engaging with a boss on the track and with the anvil, of a vise-jaw adjustable to different horizontal angles in relation to the track, a drill spindle journaled therein and provided with a socket in one end and a crank on the other, said spindle being in a line with the perforation in the apron and means to secure the vise-jaw immovably to the track. 2nd. The combination, with a base, provided with a track, of an anvil longitudinally movable thereupon, one end of which is provided with an apron and two jaws, a horizontally-adjustable jaw

secured to the track, a spindle journaled in the adjustable jaw opposite the apron, and a removable jaw upon the adjustable jaw and opposite one of the jaws of the anvil, substantially as set forth. 3rd. The combination, with a base provided with a track, of an anvil longitudinally movable thereupon, one end of which is provided with a perforated apron and two jaws, of a horizontally-adjustable jaw upon the opposite end of the track, the inner face of which is provided with two parallel flanges, a spindle journaled in the adjustable jaw opposite the apron, and a removable jaw between the flanges, substantially as set forth. 4th. The combination with a base, a track thereon, a vise-jaw adjustably mounted on one end of the track, a drill spindle journaled therein, of an anvil movable along the track on the base, an abutment depending from the heel of the anvil and formed integral therewith, a bearing formed in the abutment on the axial line of the spindle and a grindstone mounted on a journal adapted to engage with the spindle and with the bearing in the abutment. 5th. The combination with a base, a track thereon, a vise-jaw adjustably secured to the track, an anvil movable on the base and along the track, a hand-screw engaging with the anvil and with the track, of pipe-vise jaws formed integral with the anvil and projecting parallel with each other from one end thereof, and a pipe-vise jaw movable between said jaws formed on the anvil removably engaging with the vise-jaw or bracket on the track.

#### No. 56,993. Acetylene Gas Lamp and Generator.

(*Lampe et générateur à gaz acétylène.*)



The American Universal Lightning Co., Chippewa Falls, Wisconsin, assignee of William M. Dennis, Minneapolis, Minnesota, both in the U.S.A., 11th August, 1897; 6 years. (Filed 25th May, 1897.)

*Claim.*—1st. In a gas generating lamp, the combination of two adjacent vertical tanks, one for water and the other for gas producing material, of a duct or pipe connecting said tanks and provided with a valve through which the water is conveyed from the water tank to the material in the other tank, and the tank for gas producing material being provided with a movable part, movable by gas pressure within the tank and adapted to actuate said valve, for the purpose specified. 2nd. The combination, in an acetylene gas lamp, of a vertical support, with water and generator tanks or cylinders arranged on opposite sides of said support and connected by a water duct leading from the water tank to the upper part of the other tank or cylinder, the last mentioned tank having a gas outlet and having an open lower end, and a shell or holder adapted to be inserted in the open end of said tank and having a lower end, which when the said shell is in place forms the bottom of said tank, said shell being readily removable to permit the filling or emptying thereof, substantially as described. 3rd. The combination, in an acetylene gas lamp or generator, of two tanks or cylinders suitably supported in substantially the same horizontal plane and having their lower ends connected by a valved duct, with a holder or shell removably arranged in the lower part of one of said tanks and having a lower end forming the bottom thereof, a water space or channel leading upward from said duct to deliver water from the other tank into the top of said holder or shell, and forming a column of water which will be depressed by an access of gas pressure, whereby the water supply is interrupted and the lamp or generator made self regulable, substantially as described. 4th. The combination, in a gas generating lamp, of a pair of independent tanks or cylinders, one to contain water and the other being a generator, of a shell or holder movable in said generator tank and adapted to contain gas producing material, a water duct connecting the two tanks, a valve provided therein, and means whereby said shell, being moved by gas pressure, operates said valve, substantially as described. 5th. The combination, of a water supply tank, with a gas or generator cylinder or tank, into the upper part of which the water is fed, said cylinder having a gas outlet and having an open lower end, and a shell or holder for gas

producing material, said holder fitting into the lower part of said generator cylinder and being held there in friction and readily removable, substantially as described. 6th. The combination, with a gas cylinder or tank having a gas outlet at its top, and also provided with water supply or distributing means in its upper portion, of a shell fitting into the lower portion of said gas cylinder and having a lower end which closes or constitutes the bottom of the said gas cylinder, shoulders provided on the lower ends of the cylinder and the said shell, and a flexible packing carried by one part and bound between said shoulders when the shell is inserted, substantially as described. 7th. The combination, in a gas lamp, of a vertical support or standard, with the two tanks or cylinders supported therefrom and connected by a duct, one of said tanks having an opening in its top and adapted to contain water, said cylinder also containing a gas condenser having a connection with the upper part of the other tank, a gas burner or burners connected with said condenser, said other or second tank being provided in its upper part with water supply or distributing means connected with said duct, the second tank having a gas tight or closed top and an open lower end through which the material is inserted, and movable means for closing said lower end, substantially as described. 8th. The combination, in a gas lamp, of the two separate tanks, one a generator, with an open lower end, and the other a water container, with a material shell adapted to be inserted upward into the said generator, a duct between the tanks, a water distributor in the generator, and a water leg in the walls of the generator to cool the same and supplied from said water tank, substantially as described. 9th. The combination in a gas lamp, of the two tanks or cylinders, one for water and the other the generator, with a material shell or space within the latter, an annular water leg provided between the walls of the cylinder and said shell or space and of less height than the cylinder, means for circumferentially feeding the water from said water leg to said shell or space, and said water leg being connected with said water tank, substantially as described. 10th. The combination, in a gas lamp, of the two vertical tanks or cylinders arranged side by side, one for water and the other the generator, a water distributor in the upper part of the generator and above or over said space to drop water upon the contents thereof, a water leg in the walls of the generator to keep the lower outer walls of the generator cool, and means to supply both said distributor and said water leg with water from the said water tank, substantially as described. 11th. In a gas generating lamp, the combination, with the tank or chamber provided with a gas outlet, of a water leg surrounding or in the walls of the said tank, means to supply water thereto, and said water leg having an opening or openings at or near its top through which the water may fall into the space between the inner walls of the water leg and whereby the surface of the water is exposed to the pressure of gas, to be forced down thereby and cut-off the water feed or flow, substantially as described. 12th. In a gas generating lamp, the combination, with the tank having an open lower end, of a shell having a closed bottom and adapted to be inserted into said open lower end of said tank, a disc having drip openings, troughs leading thereto, and means for supplying water to the same, substantially as described. 13th. The water distributor for gas generating lamps comprising the concave disc, having drip holes, and the troughs leading thereto, substantially as described. 14th. In an acetylene gas lamp, the combination, of a suitable tank or chamber provided in its upper part with means for slowly feeding water into its lower part, said tank having an open lower end, and an independent or removable material shell or holder, having an open top and fitting up into said tank, and having a lower end or bottom constituting the bottom of said tank or chamber, and a support for the tank which permits the free removal of said shell, substantially as described. 15th. In a gas generating lamp, the combination, with the tank or cylinder, of a movable shell provided therein and adapted to be forced out by pressure of gas within said tank, means for supplying water to said shell, a valve for controlling the flow of water, a valve lever, and a lug upon said shell to engage the same, whereby when the shell is moved by gas pressure said water valve is closed automatically, substantially as described. 16th. In a gas generator, the tank or chamber having the removable top and the open bottom, and an intermediate partition, in combination with a removable shell adapted to be inserted into said tank, through the open lower end thereof, means for supplying water to the interior thereof, and a purifier basket above said partition and having a rack or sleeve projecting through the partition and communicating with the space beneath it, said basket being removable through the top of said tank or chamber, substantially as described. 17th. In a gas generating lamp, the combination, of a tank or cylinder, open at both its upper and lower ends and having a water leg in its walls, of a water tank wherefrom said water leg is supplied, a shell or holder adapted to be inserted in the open lower end of said tank or cylinder, to contain gas producing material and to close the lower end of said cylinder, means for conducting or spreading the water from the water leg upon the material in said holder, and the movable gas holder closing the top of said tank or cylinder and adapted to rise and fall in said water leg, which latter serves as a water seal, substantially as described. 18th. In a gas generating lamp, the combination, with a tank or cylinder having a space in its lower part to hold gas producing material, the walls of said tank or cylinder being provided with a water leg at its top, a movable gas holder adapted to rise and fall in said water leg, which serves as a water seal, means for conducting the water from said water leg to the material in the



lower part of said tank or cylinder, a supply tank, a water duct or pipe connecting the same with the water leg, a valve in said duct or pipe, a valve lever, and a yielding connection between the same and said gas holder, substantially as described and for the purpose set forth. 19th. A gas generating lamp, in combination with the adjacent vertical tanks or cylinders, one to contain water and the other gas, of a pipe or duct connecting the same, a water leg in the gas tank and into which the water flows from the water tank, a valve in said duct or pipe, both of said cylinders having open lower ends, removable shells or holders to be inserted therein and to contain gas producing material and purifying material, respectively, a movable gas holder provided in or forming the top of the gas cylinder, means for spreading the water from the water leg upon the material in the shell or holder in the gas tank, and a spring connecting the gas holder with said valve, to automatically operate the same, substantially as described. 20th. An acetylene gas lamp, substantially as described and as shown in Figs. 1 to 4. 21st. An acetylene gas lamp, substantially as described and as shown in Figs. 5 and 6.

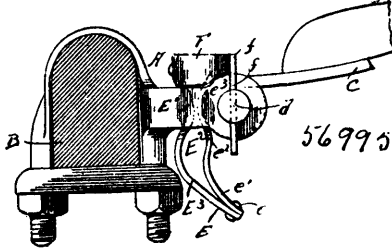
**No. 56,994. Chemical Compound.** (*Composé chimique.*)

Farbwerke vormals Meister Lucius and Bruning, assignee of Dr. Friedrich Stolz, all of Hoechst-a-Main, Germany, 11th August, 1897; 6 years. (Filed 10th February, 1897.)

*Claim.*—1st. The herein described manufacture of new derivatives of the aliphyl 2, alkyl 3, methyl 4, amido pyrazolones by alkylating and alkoxyating the amido group. 2nd. The herein described manufacture of 1 p-amidophenyl 2, 3, dimethyl 5 pyrazolone by condensing acetyl p-amidophenyl-hydrazine with ethylic aceto acetate in equal molecular proportions and by either methylating and hydrolysing the products thus obtained or by previously transforming them into such derivatives as contain a radicle linked with oxygen and then methylating and hydrolysing the latter. 2nd. The herein described manufacture of derivatives of 1 p-amidophenyl 2, 3, dimethyl 5, pyrazolone by alkylating and alkoxyating the amido group of this pyrazolone.

**No. 56,995. Antirattling Thill Coupling.**

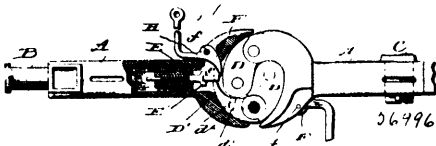
(*Compensateur pour armons de limonières.*)



William M. Burchman, Columbia, Tennessee, U.S.A., 11th August, 1897; 6 years. (Filed 14th July, 1897.)

*Claim.*—1st. The combination of the thill-clip, thill-iron and the securing bolt D having a head on one end and a slot in its other end, with the antirattling spring having a rear leaf E and front leaf e, connected at their lower ends, leaf E being bent at the points E<sup>1</sup>, E<sup>2</sup>, E<sup>3</sup>, and leaf e at the points e<sup>1</sup>, e<sup>2</sup>, e<sup>3</sup>, and the bolt-securing device consisting of a sheet metal plate F fastened vertically edgewise to the upper end of rear leaf E, bent forwardly at right angles over the slotted end of the bolt and having a vertically depending tapering extension f<sup>1</sup> on its lower edge adapted to transfix the bolt and bind it, and the spring to the clip, all substantially as described. 2nd. The combination of the thill-clip A, the thill-irons C, and the bolt D securing the iron to the clip having slot d in one end, with the antirattling spring having a rear leaf E, and front leaf e, connected together at their lower ends, and bent in the form shown and described, and the plate F attached edgewise to the upper end of rear leaf E, and bent forward to a point beyond leaf e, then bent outwardly as at f directly over the bolt, part f having a depending tapered key f<sup>1</sup> on its lower edge transfixing the bolt, and securing the bolt and spring in place, all substantially as shown and for the purpose described.

**No. 56,996. Car Coupler.** (*Attelage de chars.*)



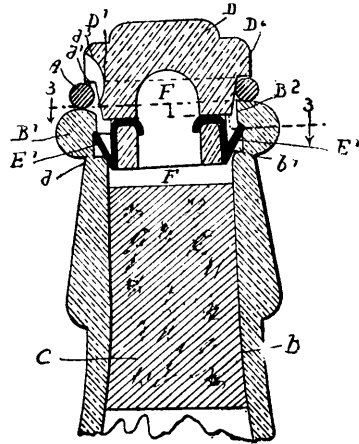
David Altman, The Ross & Robert Schwartz Co., both of Chattanooga, Tennessee, U.S.A., 11th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. In a car coupler, the combination with the draw-heads, jaws and knuckles pivoted therein, of a spring actuated lock-

ing bolt designed to normally engage with the end of the knuckle when closed, and a lever and notch engaging therewith designed to hold the said bolt out of the path of the pivoted knuckle, substantially as shown and described. 2nd. In a car coupler, the combination with the draw-head, jaws and knuckle, of the spring-actuated locking bolt, a casing inside of the draw-head, in which the said bolt is guided, shoulders on opposite sides of the bolt designed to abut against the end of said casing to limit its rearward throw, and a stop to limit its forward throw formed by the end wall of a recessed portion of the jaw in which the head of the jaw slides, substantially as shown and described. 3rd. In combination with the draw-heads, jaws and knuckles pivoted thereto, the spring actuated bolt and lever for actuating the same, the stop M to limit the forward throw of said bolt, the offset H over which the said lever may be made to engage, after the bolt is forced back in the draw-head, to hold the bolt from engaging with the end of the knuckle, substantially as shown and described.

**No. 56,997. Non-refillable Bottle.**

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



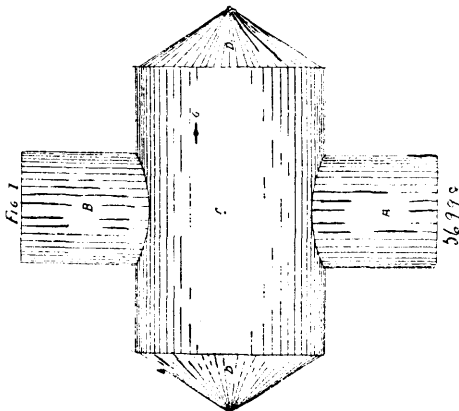
56997

Adolph Scharff, assignee of William Sale Hannaford, both of Pasadena, California, U.S.A., 11th August, 1897; 6 years. (Filed 14th July, 1897.)

*Claim.*—1st. A bottle, having a neck for the reception of the usual cork, a rim or flange surrounding the upper ends thereof, and having the neck within the same of an increased diameter, whereby the connection of the flange to the body of the neck is reduced in section, and a locking-cap having covered locking means for securing the same to the bottle, and a conical section adapted by the outer surface of its smaller end to engage the inner surface of the bottle-flange, and forming a wedge to break it off by forcing it outward when driven into the same, substantially as described. 2nd. A bottle, having an outer section of the neck connected to the body thereof by a section of reduced thickness, a cap having a conical section, the smaller end of which enters and closely fits the outer section of the bottle neck, forming a conical wedge to fracture the outer section of the neck, when driven into the same, a flange surrounding the cap outside of the conical section, a packing ring between the lower shoulder of said flange and the end of the bottle-neck, and means for locking the cap to the outer section of the neck, so that it cannot be withdrawn therefrom, substantially as described. 3rd. A bottle having the outer section of the neck connected to the body thereof by a section of reduced thickness, and having a recessed ring or groove upon its inner surface, a cap having a conical section, its smaller end entering and closely fitting the outer section of the neck, forming a wedge to force the sides of the outer section out, and spring catches attached to the cap, and adapted to engage said groove when the cap is inserted, substantially as described. 4th. A bottle having the outer section of the neck connected to the body thereof by a section of reduced thickness, and having a recessed ring or groove upon its inner surface, a cap having a conical section, its smaller end entering and closely fitting the outer section of the neck, forming a wedge to force the sides of the outer section out, and rearwardly-extending spring-bars attached to the cap, and adapted by their rear ends to engage said groove to lock the cap in place, substantially as described. 5th. A bottle having the outer section of the neck connected to the body thereof by a section of reduced thickness, and having a recessed ring or groove upon its inner surface, a cap having a conical section, its smaller end entering and closely fitting the outer section of the neck, forming a wedge to force the sides of the outer section out, and spring catches consisting of V-shaped bars, having each a side bend or hook at the end of one arm, by which it is fixed to the cap, and adapted to engage the groove in the neck by the other end,

substantially as described. 6th. A bottle, having the outer section of the neck connected to the body thereof by a section of reduced thickness, and having a recessed ring or groove upon its inner surface, a cap having a conical section, its smaller end entering and closely fitting the outer section of the neck, forming a wedge to force the sides of the outer section out, and longitudinal grooves below said conical section, spring catches within said grooves, consisting of V-shaped bars having a side bend or hook at the end of one arm, by which it is fixed to the cap and adapted to engage the groove in the neck by the other end, substantially as specified. 7th. A bottle having the outer section of the neck connected with the body thereof by a section of reduced thickness, and provided with an inner circumferential groove or recess, a cap having a conical section, the smaller end of which enters and fits the outer section of the bottle-neck, forming a wedge to force the sides of the conical section out, a flange surrounding the cap outside of the conical section, a packing-ring between the lower shoulder of this flange and the end of the bottle, and spring-catches consisting of bars attached to the cap and adapted by their upper or outer ends to engage the groove in the bottle-neck, substantially as described. 8th. A bottle having the outer section of the neck connected with the body thereof, by a body of reduced thickness, and provided with an inner circumferential groove or recess, a cap having a conical section, the smaller end of which enters and fits the outer section of the bottle-neck, forming a wedge to force the sides of the outer section out, a flange surrounding the cap outside of the conical section, and packing-ring below the lower shoulder of this flange and the end of the bottle, and spring-catches consisting of V-shaped bars, having each a side bend or hook at the end of one arm, by which it is fixed to the cap, and adapted to engage the groove in the neck by the other end, substantially as described. 9th. A bottle having a section about its mouth which is connected to the body thereof by a thin breaking-strip, a cap locking to its outer section, and provided with a conical section adapted to break the outer bottle-section, and release the cap by being forced into the same, and a ring interposed between the end of said outer section and the cap, said cap having a radial slot by which the ring may be engaged to cut or remove the same, substantially as described. 10th. A bottle having the outer section of the neck connected to the body thereof by a section of reduced thickness, and provided with an inner circumferential groove or recess, a cap having a conical section, the smaller end of which enters and fits the outer section of the bottle-neck, a flange surrounding the cap outside of the conical section, and provided with a vertical slot opening at the bottom surface of the flange, a packing-ring between the lower shoulder of this flange and the end of the bottle, and spring-catches consisting of bars attached to the cap, and adapted by their upper or outer ends to engage the groove in the bottle-neck, substantially as described. 11th. A bottle-neck, having the outer section of reduced thickness, and provided with an inner circumferential groove or recess, a cap having a conical section, the smaller end of which enters and fits the outer section of the bottle-neck, a flange surrounding the cap outside of the conical section, and provided with a radial slot opening to the bottom surface of the flange, a packing-ring between the lower shoulder of this flange and the end of the bottle, and spring-catches consisting of V-shaped bars, having each a side bend or hook at the end of one arm, by which it is fixed to the cap, and adapted to engage the groove in the neck by the other end, substantially as described.

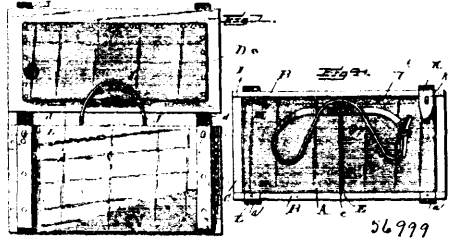
**No. 56,908. Damper for Stove and Furnace Pipes.**  
(*Régistre pour poêles et fournaies.*)



Eliza Jane Climo, assignee of Jonathan Brey Climo, both of Co-bourg, Ontario, Canada, 11th August, 1897; 6 years. (Filed 16th July, 1897.)

*Claim.*—A damper for stoves or furnace pipes, comprising a drum C, thimble F, deflecting register B, braces J, conical damper K, and damper rod G, all formed, arranged and combined as and for the purpose hereinbefore set forth.

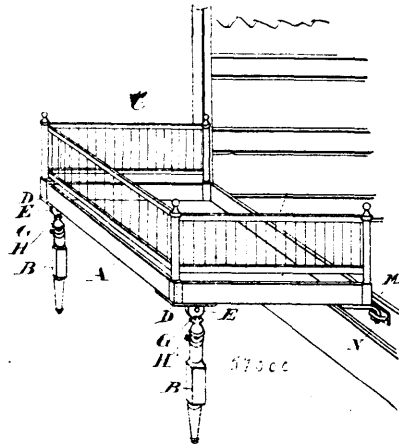
**No. 56,999. Folding Crate.** (*Boite pliante.*)



Magnus Ek and George Cusiter, both of Silveston, Oregon, U.S.A., 11th August, 1897; 6 years. (Filed 19th July, 1897.)

*Claim.*—1st. A folding crate having a hinged partition, substantially as described. 2nd. A folding crate having a hinged partition and a pad upon the under face of its cover, substantially as described. 3rd. A folding crate having a hinged partition, and a pad upon the under face of its cover, and a strap secured to said pad for holding the crate in its closed position, substantially as described. 4th. A folding crate consisting of a bottom, sides thereto, end pieces hinged to one of the sides, a partition hinged to the inner face of one of the sides, and a lid hinged to said side and adapted to fold down against the outer face thereof, substantially as described. 5th. A folding crate consisting of a bottom, sides thereto, end pieces hinged to one of the sides, a partition hinged to the inner face of one of the sides, and a lid hinged to said side and adapted to fold down against the outer face thereof, and provided with a pad upon its under face provided with a strap, substantially as described.

**No. 57,000. Crib.** (*Berceau.*)



Thomas Hope Churchill and George Bengough, both of Toronto, Ontario, Canada, 11th August, 1897; 6 years. (Filed 7th July, 1897.)

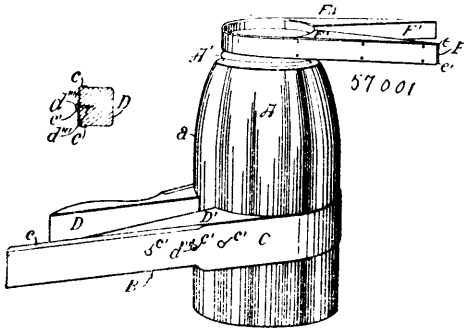
*Claim.*—In an attachable crib the combination of a frame having its base secured by means of an angle plate provided with a downwardly extending tongue provided with a tooth and bolted to a rod, said rod having a circular plate designed to fit said tongue, said plate provided with a projection to engage tooth, the rod being adjustable by means of a socket in the leg, said leg being encircled by a set-screw, substantially as and for the purpose specified. 2nd. In an attachable crib the combination of a frame having also at its base a hook-plate designed to engage with a staple-plate fastened to either side rail of a bedstead or other support, and when detached the leg foldable within the rails of said frame, substantially as and for the purpose specified.

**No. 57,001. Jar Sealer.** (*Appareil à sceller les jarres.*)

Almerin R. Sprague, Fairmount, assignee of Samuel B. Ragatz, Los Angeles, both in California, U.S.A., 11th August, 1897; 6 years. (Filed 23rd June, 1897.)

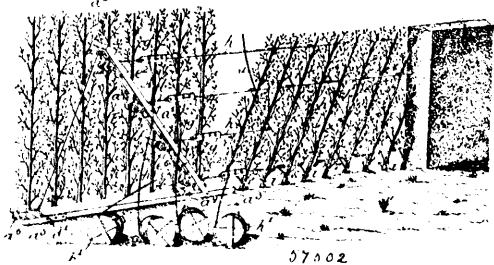
*Claim.*—1st. In a device for sealing and unsealing cans, the combination set forth of the U-shaped loop formed of a metallic strap having its ends each bent into channel shape, the blocks, one secured respectively to each end of the strap and seated within the channels thereof, and each having its inner end concaved to form a continuation of the loop and to fit against the can. 2nd. In a device for sealing and unsealing cans, the combination set forth of the U-shaped loop formed of a metallic strap having its ends bent into channel shape, the blocks seated within the channels of the strap and secured respectively one to each end thereof, the ends of the

blocks being concaved to form a continuation of the loop, and one of such blocks being provided with a shoulder, its respective end of the



strap being bent over such shoulder and secured by suitable means. 3rd. In a device for sealing and unsealing cans, the combination set forth of a metal strip forming a U-shaped loop, one end being provided with a series of perforations, blocks attached to the ends of the loop and each having a concaved face to form a continuation of the loop and to fit against the can, one of said blocks being rigidly attached to one end of the loop, and the other block being provided with a stud or projection to enter the perforations in the other end of the loop to adjust the wrench to fit different-sized cans. 4th. In a device for sealing and unsealing cans, the combination of the U-shaped loop formed of a metallic strap having one end provided with a series of perforations and having its sides bent inward to form a channel, a wooden block adapted to fit closely within the channel and provided with a stud or projection adapted to fit in the perforations in the metallic strap, a wooden block rigidly fixed to the other end of the strap, both of said blocks having their inner ends concaved to form a continuation of the loop and to fit against the can, substantially as set forth.

**No. 57,002. Improvements in Appliances for Plashing Hedges. (Appareil pour entrelacer les haies.)**



Michael Neil, Dayton, Ohio, U.S.A., 12th August, 1897; 6 years. (Filed 13th May, 1897.)

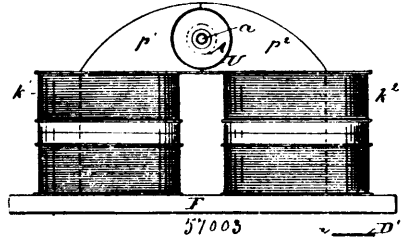
*Claim.*—1st. The combination with an inclined standard provided with a folding bed piece, a connecting rod therefor, a cable engaging a drum provided with a ratcheted end, said drum connected with an adjustable frame engaging said standard, and a pawl provided with a lug adapted to slide in a way so as to movably engage the ratcheted end of said drum, of a toothed wire holder connected with said cable and with a wire to maintain the latter taut during drawing, and means for actuating said drum, substantially as and for the purposes described. 2nd. The combination, with an inclined standard provided with a folding bed-piece and a detachable connecting rod, an adjustable frame connected with said standard and provided with a drum having a ratcheted end and a gravity pawl provided with a lug engaging a way of said adjustable frame, of a cable engaging said drum and a toothed wire holder connected with said cable and with a wire, substantially as and for the purposes described.

**No. 57,003. High Speed Dynamo. (Dynamo à grande vitesse.)**

Hans Carl Madsen and Frederick Sinding Christensen, both of Copenhagen, Denmark, 12th August, 1897; 6 years. (Filed 12th January, 1897.)

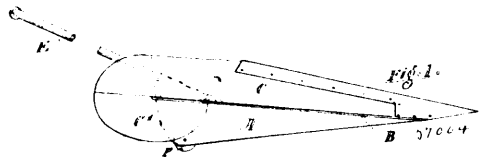
*Claim.*—1st. A dynamo electric machine with an armature turning around a fixed shaft, whereby a very high speed and a weak magnetic field is obtained. 2nd. In a dynamo as described, the application of an armature iron connected to the shaft, but this latter not taking part in the rotation. 3rd. In a dynamo as described, the application of an armature-cylinder consisting of a cylinder *c*, having a single slit throughout its length and two end pipes 1, 1, and between each pair of the said parts insulating layers

for the purpose of preventing extra-currents in the armature. 4th. In a dynamo as described, the application of centrifugal oiling



mechanism acting in such a way that the oil is drawn to the rotating cylinder *c* by an air current produced by centrifugal force, and passes through an elongated opening between the fixed shaft and the end pipes 1 1' of the rotating armature cylinder *c* and through holes in the wall of the said cylinder. 5th. In a dynamo as described, the application of windings for a drum-armature in which each winding forming a section is punched from a copper plate in such a way that they form rings *u* and *v*, the rails *o* and *n*, and the strips *d*, and is adapted to be laid upon the armature cylinder *c* and bent around same in such a way that they are absolutely fastened. 6th. In a dynamo as described, the application of a drum-ring-armature, in which the windings are punched out of a copper plate, and fastened to the armature-cylinder *c* by insulated screws passing through the ring-openings. 7th. In a dynamo as described, the application of a compound or "pair" shunt winding in which the windings are ventilated by an air space between the layers. 8th. In a dynamo as described, the use of a double shunt and compound winding, made in such a way that either one or both of said shunts can be partly or entirely switched out of, or into the circuit, and one of said shunts be parted into four or more sections. 9th. In a dynamo as described, the use of compound wound field magnets with double shunt in which the compound coils are inclosed between pair and pair of sections of one of the shunts. 10th. In a dynamo as described, the use of brush-attachments, which can be adjusted while the machine is running and characterized by the stand of the brush attachment being fastened outside the shaft horses, and the pressure of the brushes against the commutator adjustable by outside springs, and their positions relatively to the commutator adjustable by a small tooth-wheel, capable of acting while the machine is in motion, for the purpose set forth.

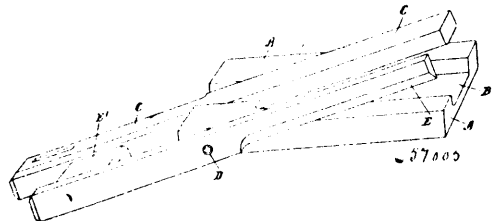
**No. 57,004. Machine for Shovelling. (Pelle.)**



John R. Hamilton, St. John, New Brunswick, Canada, 12th August, 1897; 6 years. (Filed 4th February, 1897.)

*Claim.*—1st. In a shovel the runners *A*, substantially as and for the purposes described. 2nd. A shovel having runners *A*, back piece *K*, handle *E*, and adjustable plough boards *C*, substantially as and for the purpose described. 3rd. The combination of the shovel blade *B*, having the handle *E*, and back board *K*, with the runners *A*, and adjustable plough *C*, having arms *L*, substantially as and for the purpose described.

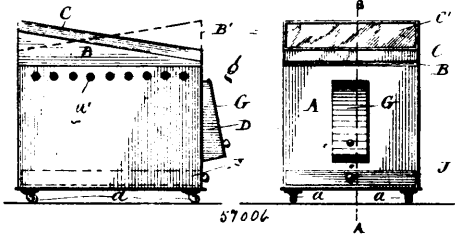
**No. 57,005. Broom Corn Breaker. (Balai.)**



William H. Gibson, London, Ontario, Canada, 12th August, 1897; 6 years. (Filed 26th April, 1897.)

*Claim.*—1st. In a broom corn breaker the combination of a bed piece *A*, in which a recess *B* is formed in combination with a pivotal compression bar *C*, and means for operating the latter, substantially as and for the purpose set forth. 2nd. A bed piece *A*, in which a recess *B* is formed in combination with the pivotal compression bar *C*, and the pivotal knife or cutter *E*, connected with the compression bar *C*, and means for operating the latter substantially as and for the purpose set forth.

No. 57,006. Show Bins or Cases for Seeds, Rice, Corn, etc., (*Caisse d'etalage pour graines, etc.*)

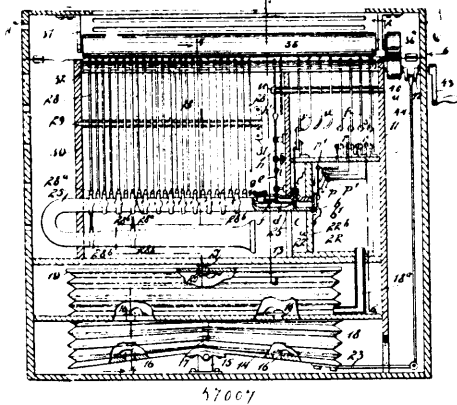


David Lloyd, Ystrad, Rhondda, Glamorganshire, South Wales, 12th August, 1897; 6 years. (Filed 17th April, 1897.)

Claim.—1st. The combined bin and show case having a reversible top cover, and internal screening surface substantially as herein described and shown. 2nd. In an improvement combined bin and show case the combination of a case or bin A, with removable and reversible top portion B, carrying a show case C, internal screening surface such as F, supported upon a sloping false bottom E, and E<sup>1</sup>, with collecting chamber such as D provided with a door or lid such as G, and slide such as H, substantially as herein described and shown.

No. 57,007. Musical Instrument.

(*Instrument de musique.*)



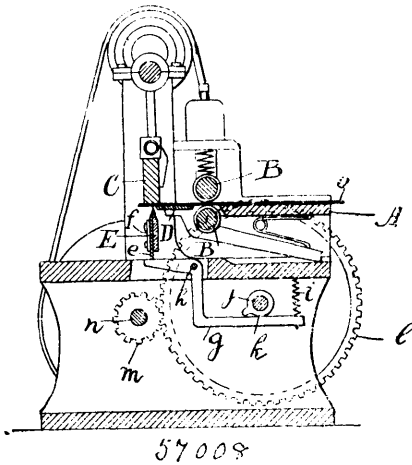
William Langenfeld, Halbur, Iowa, U.S.A., 12th August, 1897; 6 years. (Filed 15th May, 1897.)

Claim.—1st. The combination with a plurality of musical wind instruments, of means for supplying air to the said instruments for sounding them in concert, valves for admitting the air to the mouthpieces of said instruments, and valves for graduating the influx of air to the instruments, substantially as described. 2nd. The combination with a plurality of supported musical wind instruments having reed mouthpieces, of a source of air-pressure, means for conveying the air to said mouthpieces to sound the instruments in concert, and a device producing graduated pressure on the reeds, substantially as described. 3rd. The combination with a plurality of supported musical wind instruments having key holes, and keys therefor, of means for conveying air to said instruments to sound them in concert, mechanism adapted to automatically operate the keys for producing music, valves for admitting air to the mouthpieces of said instruments, and valves for automatically graduating the influx of air to the said instruments, substantially as described. 4th. The combination with a plurality of musical wind instruments, having mouthpieces provided with reeds, of means for conveying air to said instruments to sound them in concert, valves for admitting air to the mouthpieces of said instruments, and means for producing graduated pressure on the reeds, substantially as described. 5th. The combination with a plurality of musical wind instruments, having mouthpieces provided with reeds, of means for supplying air to said instruments to sound them in concert, valves for graduating the influx of air to the instruments, and means for producing graduated pressure on the reeds, substantially as described. 6th. The combination with a plurality of musical wind instruments, having reed mouthpieces and keyholes and supported in a case, a wind-chest connected with the mouthpieces of said instrument, and an air supply under pressure communicating with the wind-chest, of an automatically-operated set of keys for each instrument which are adapted for simultaneous movement, valves for admitting air to the mouthpieces of said instruments, and valves for graduating influx of air to the instruments, substantially as described. 7th. The combination with a plurality of musical wind instruments, supported in a case and having reed mouthpieces and keyholes, a wind-chest connected with the mouthpieces of said instruments, and

an air supply under pressure communicating with the wind-chest, of an automatically-operated set of keys for each instrument, which are adapted for simultaneous movement, automatically-operated valves for graduating the influx of air, and a device producing graduated pressure or simulating lip action on the reeds, substantially as described. 8th. The combination with a plurality of musical instruments, having keyholes and mouthpieces provided with tongue-pieces or reeds, of an air supply under pressure for blowing the instruments simultaneously, sets of keys for each instrument adapted for simultaneous automatic movement to produce music, and a device producing graduated pressure or simulating lip action on the reeds, substantially as described. 9th. The combination with a case, a bellows therein, and a wind-chest receiving air under pressure from the bellows, of a plurality of musical wind instruments having mouthpieces furnished with reeds and connected by said mouthpieces with the chest, and a device producing graduated pressure or simulating lip action on the reeds, substantially as described. 10th. The combination with a case a bellows therein, and a wind-chest receiving air under pressure from the bellows, of a plurality of musical wind instruments having mouthpieces furnished with reeds and connected with the wind-chest, an automatically-operated set of keys for each instrument adapted to open the keyholes they normally cover at predetermined intervals of time, and a device producing graduated pressure on the reeds, substantially as shown and described. 11th. The combination with a case, a bellows therein, a wind-chest receiving air pressure from the bellows, and means for actuating said bellows, of a plurality of musical wind instruments having mouthpieces supplied with reeds and connected at said mouthpieces with the wind-chest, valves for admitting air to the mouthpieces, valves for graduating the influx of air to the instruments, and means for automatically operating all said valves at correct intervals of time, substantially as described. 12th. The combination with a case, bellows therein, a wind-chest receiving air under pressure from the bellows, and means for actuating the bellows, of a plurality of musical wind instruments each having its mouthpiece connected with the wind-chest, and each instrument having a series of keyholes, valves admitting air to the mouthpieces of the instruments, valves graduating influx of air to the instruments, vibratile keys for the keyholes, and mechanism adapted to automatically move in unison the air-controlling valves and the keys of each instrument, substantially as described. 13th. The combination with a case, and a device for supplying air under pressure, of a plurality of musical instruments having mouthpieces provided with reeds, the said instruments being supported in the case and each having keyholes formed at intervals in its body, means for connecting the wind-supply device with the mouthpieces of the instruments, valves for graduating the flow of air to the instruments, means for producing graduated pressure on the reeds, keys for the keyholes in each instrument, said keys having pivoted levers, a movable sheet having projections for moving the key-levers and valves, to produce music when the instruments are blown, and means for moving the sheet over the ends of the key-levers, substantially as described. 14th. In a composite musical instrument substantially as described, the reed-controlling device for the mouthpiece of each musical wind instrument, comprising a presser-rod, a pad on the reed whereon the presser-rod seats, means for longitudinally adjusting the pad on the reed, and mechanism operated by a movable sheet which automatically moves the presser-rod for graduating pressure on the reed, as specified. 15th. In a composite musical instrument substantially as described, the reed-controlling mechanism for the mouthpiece of each wind instrument thereof, comprising a longitudinally-adjustable pad on the reed, a screw adapted to move the pad and hold it, an upright presser-rod seated on the pad, a spring-pressed bell-crank lever adapted to bear on the rod when said lever is rocked, an angle lever the lower end of which contacts with the upper limb of the bell-crank lever, and a movable sheet having projections that are adapted to rock the angle-lever and cause the graduated depression of the presser-rod, as specified. 16th. In a composite musical instrument substantially as described, the wind-controlling device for each musical wind instrument thereof, comprising the flap-valve at the inlet end of the mouthpiece, the vertically-slidable gate-valve in said mouthpiece, links and angle-levers connected with said valves, and a movable sheet having projections that contact with the angle-levers and when longitudinally moved rock levers, correspondingly moving the valves, as specified. 17th. In a composite musical instrument, the combination with a case having a lid, a bellows in the case, a wind-chest, and a plurality of musical wind instruments having reeds in the mouthpieces thereof and all the instruments having keyholes, the said mouthpieces being connected with the wind-chest, of valves admitting the air-blast to the mouthpieces, valves graduating the influx of air to the instruments, keys for the keyholes having pivoted levers, bell-cranks and links connected with the valves, a slotted keyboard loosely receiving the upper ends of the key levers and bell-crank levers, and a longitudinally-movable sheet having projections adapted to contact with and rock the bell-crank levers and key-levers operating the said valves, and the keys of the sets of instruments, substantially as set forth. 18th. In a composite musical instrument, the combination with a case, a bellows therein, a plurality of musical wind instruments supported in the case above the bellows and all having keyholes, a wind-chest receiving air blown by the bellows and transmitting the same under pressure to mouthpieces of the wind instruments, spring-closed valves controlling the air pass-

ing from the wind-chest to the mouthpieces, spring-pressed key-levers having yokes, and pads on said yokes adapted to normally close the keyholes, links and angle-levers adapted to move the air-controlling valves, a roller-supported flexible sheet having projections which contact with the upper ends of the key-levers and angle-levers, and means for rotating said rollers and longitudinally moving the sheet, as specified.

**No. 57,008. Manufacture of Match Card Blanks.**  
(Fabrication de blanc de cartes.)



Charles Freemont Scamman, Deering, Maine, U.S.A., 12th August, 1897; 6 years. (Filed 25th May, 1897.)

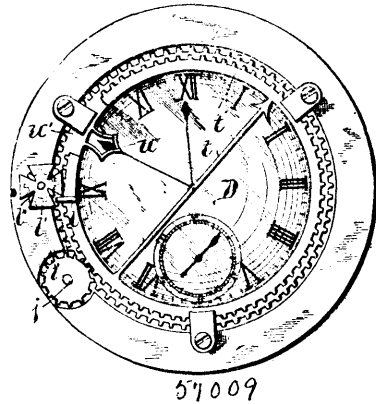
*Claim.*—1st. In a machine for making match cards from veneer strips, the combination of one or more straight slitting knives, transverse to the feed of the veneer and of less length than the width of the veneer, with a cut-off knife arranged in line with the first named knives, and means for causing said knives to operate on the veneer so timed that the cut-off knife comes into operation only once for several operations of the first mentioned knives. 2nd. In a machine for making match cards from veneer strips, the combination of one or more straight slitting knives, transverse to the feed of the veneer and of less length than the width of the veneer and having shaping cutters at the ends thereof, with a cut-off knife in line with the above mentioned knife or knives, and means for causing said knives to operate on the veneer so timed that the cut-off knife comes into operation only once for several operations of the first mentioned knife. 3rd. In a machine for making match cards from veneer strips, the combination of one or more straight slitting knives, transverse to the line of feed of the veneer and of less length than the width of the veneer and having shaping cutters at the ends thereof, with a cut-off knife in line with the above mentioned knife or knives, a pair of continuously acting feed-rolls, and means for causing said knives to operate upon the veneer so timed that the cut-off knife comes into operation only once for several operations of the first mentioned knife. 4th. In a machine for making match cards from veneer strips, the combination of a pair of feed rolls for feeding the veneer strips, a fixed slitting knife having shaped ends over which the veneer strip feeds, and having its slitting edge of less length than the width of the veneer strip, a cutting block reciprocating against the edge of said fixed knife, a cut-off knife mounted in guides on the face of said fixed knife and having its edge normally below the edges of said fixed knife, a lever for lifting the cut-off knife into operative position, and a cam for operating said lever at intervals of several cuts of said fixed knife. 5th. In a machine for making match cards from veneer strips, the combination of one or more straight slitting knives, transverse to the feed of the veneer and of less length than the width of the veneer and having V-shaped shaping cutters at the ends thereof, with a cut-off knife in line with the above mentioned knife or knives and means of causing said knife to operate upon the veneer so timed that the cut-off knife comes into operation only once for several operations of the first named knife.

**No. 57,009. Timing Instrument for Vehicles.** (*Appareil à enregistrer le temps pour voitures.*)

Edward Griffin, Dorchester, Geneva, New York, U.S.A., 12th August 1897; 6 years. (Filed 7th June, 1897.)

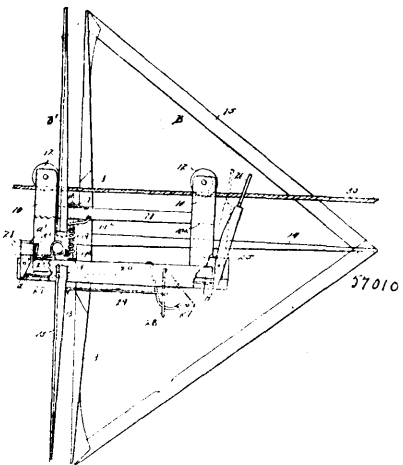
*Claim.*—1st. In combination with the wheel *o*, segment *C*, pawl and ratchet transmitting motion from said segment to the wheel, the tumbler 15 actuating said segment, and the wheel *e* actuated by the wheel of the vehicle, the wheel *a* fixed to wheel *e* and provided with the teeth *a'* and the radially movable pins *k* and the cam ring *s* mounted revolubly on the wheel *a* and pushing by its cams the aforesaid pins outward to project from the teeth, as set forth. 2nd. In combination with the wheel *o*, segment *C*, pawl and ratchet trans-

mitting motion from said segment to the wheel, the tumbler 15 actuating the segment, and the wheel *e* actuated by the wheel of the



vehicle, the wheel *v* pivoted to the hub of the wheel *c* and provided with the teeth *v'*, an adjustable catch for detaining and releasing the wheel *v*, the wheel *a* fixed to the aforesaid hub and provided with teeth *a'* double the number of, but shorter than the teeth *v'*, radially movable pins *k* in the teeth *a'*, which are intermediate the teeth *v'*, the cam ring *s* mounted revolubly on the wheel *a*, and the adjustable pin *s'*, locking and unlocking the wheel *v* to and from the wheel *a*, as set forth and shown.

**No. 57,010. Trolley for Kites.** (*Trolley pour cerf-volant.*)



Thomas Jefferson Rogers, Jacksonville, Illinois, U.S.A., 12th August, 1897; 6 years. (Filed 7th June, 1897.)

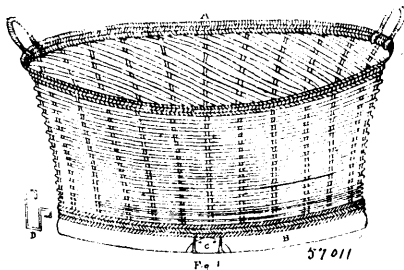
*Claim.*—1st. A trolley provided with wings, a pivoted-locking device for the wings, and a releasing mechanism for the locking device consisting of a trip bar having its forward end secured to said locking device, arranged to be brought into operation by impact with an object in the path of the trolley, substantially as and for the purpose specified. 2nd. A trolley provided with wings, a spring normally acting to hold the wings in a closed position, a pivoted keeper, latches carried by the wings and adapted for engagement with the said keeper to hold the wings in their open position, and a releasing mechanism connected with the aforesaid keeper consisting of a trip bar pivotally connected at its rear end to a lever designed to operate by impact with an object in the path of said trolley, as and for the purpose specified. 3rd. A trolley provided with wings, means for opening and closing the same, a hanger adapted to support the object to be carried, and a sweep actuated by the wings and operated to remove an object from the said hanger, substantially as and for the purpose set forth. 4th. A trolley, provided with spring-controlled wings, a hanger, a sweep adapted to have movement over the hanger to remove an object therefrom and a connection between the sweep and a wing, the said connection acting to carry the sweep over the hanger when the wings are closed, substantially as described.

**No. 57,011. Basket.** (*Panier.*)

Pierre Pelosse, Montréal, Québec, Canada, 12 août 1897; 6 ans. (Déposé le 22 avril 1897.)

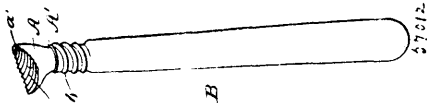
*Résumé.*—1° Un panier de forme ovale ou ronde ayant un projecteur B, pliés de façon à s'adapter à la forme du dit panier

rassemblés par des boîtes C, et retenu par des ferrements D tel que montre et pour les fins indiquées. 2° Dans un panier de forme ovale



ou ronde la combinaison des pièces B, B, des boîtes C, C, et des ferrements D, D, D, D pour les fins indiquées.

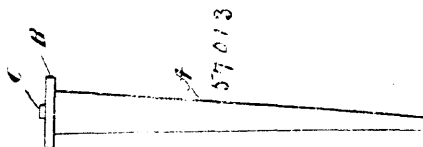
**No. 57,012. Tooth Cleaner. (Nettoyeur de dents.)**



Frank Downing Gould, Fort Richmond, New York, U.S.A., 12th August, 1897; 6 years. (Filed 10th June, 1897.)

*Claim.*—1st. A tooth cleaner, comprising a flexible body having a concave face of approximately egg-shaped contour and a handle projected approximately at right angles from the said face, substantially as shown and described. 2nd. A tooth cleaner, comprising a flexible body having a concave and ribbed face of approximately egg-shaped contour, and a projection extended approximately at right angles from the rear of said body, and a handle connected to said projection, substantially as shown and described. 3rd. In a tooth cleaner, the combination of a flexible body having a concave and ribbed face of approximately egg-shape contour, and a cylindrical projection extended rearwardly therefrom, and a handle having a threaded socket in the end thereof engaging with the said projection, whereby the flexible body may be secured to the handle or removed therefrom at will, substantially as shown and described.

**No. 57,013. Nail. (Clou.)**

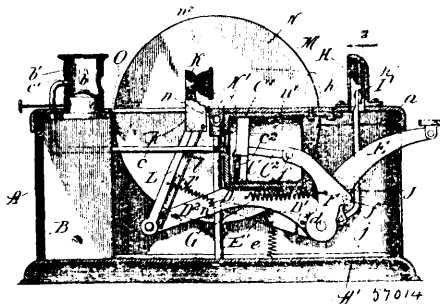


Humphrey Jones, Morristown, New Jersey, U.S.A., 12th August, 1897; 6 years. (Filed 9th June, 1897.)

*Claim.*—1st. A nail, the head of which is provided with a projection, substantially as shown and described. 2nd. A nail, the head of which is provided centrally of the outer surface thereof, with a projection, substantially as shown and described.

**No. 57,014. Cigar Cutter and Lighter.**

(Coupe et allume cigars.)

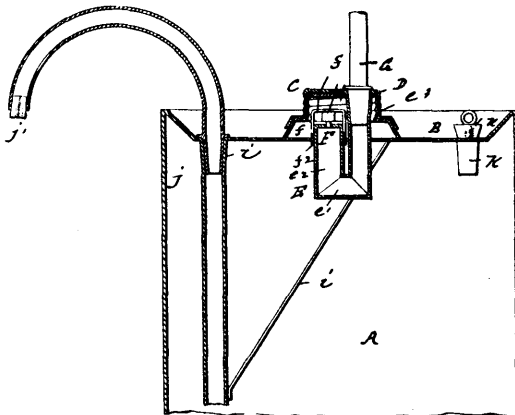


Edward Arthur Johnston, Chicago, Illinois, U.S.A., 12th August, 1897; 6 years. (Filed 8th June, 1897.)

*Claim.*—1st. In a cigar cutting and lighting device, the combination of cutting mechanism, lighting mechanism, and a cigar supporter which covers and protects the wrapper of the cigar around the end to be lighted, substantially as described. 2nd In a cigar cutting and lighting device, the combination of cutting mechanism, lighting mechanism, and a cigar supporter which covers and protects the

wrapper of the cigar around the end to be lighted and adjustable toward and from the lighting mechanism, substantially as described. 3rd. In a cigar cutting and lighting device, the combination of cutting mechanism, lighting mechanism, a cigar supporter which covers and protects the wrapper of the cigar around the end to be lighted and adjustable toward and from the lighting mechanism, and means for drawing the supporter and cigar towards the cutting mechanism, substantially as described. 4th. In a cigar cutting and lighting device, the combination of cutting mechanism, lighting mechanism, a cylinder adapted to be filled with air, a pipe leading from the cylinder to a point in proximity to the flame, a lever for operating the cutting mechanism and retracting the piston in the cylinder, and means, independent of the lever, for advancing the piston and expelling the air against the flame when the lever is released, substantially as described. 5th. In a cigar cutting and lighting device, the combination of a cutting knife, a receptacle adapted to contain a combustible fluid, a wick extending from such receptacle to the outside of the case, a cylinder adapted to contain air, a pipe leading from such cylinder to a point in proximity to the wick, a piston from the cylinder, a lever for advancing the cutting knife and retracting the piston, a spring for causing the piston to advance and expel the air from the cylinder, and a spring for restoring the lever to its initial position, substantially as described.

**No. 57,015. Dispensing Can. (Bidon-dispensateur.)**

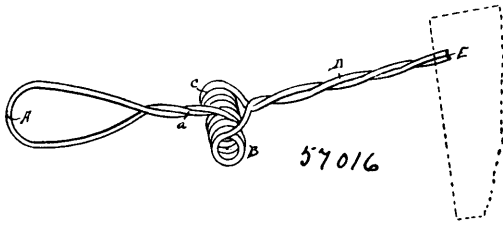


Theophilus W. Alexander, Burlington, Iowa, U.S.A., 12th August, 1897; 6 years. (Filed 14th June, 1897.)

*Claim.*—1st. The combination with a can, and an eduction pipe, of a filling nozzle, a cap attachable to said nozzle, an elbow-shaped air tube fastened at one end to said cap and having its other end carried or extended upwardly toward the cap, retaining fingers on the upturned end of said air tube, an automatic check valve confined within said fingers and adapted to seat itself on the open end of the air tube, and an attachable pressure pipe, substantially as described. 2nd. The combination with a can, and a liquid eduction pipe, of an elbow-shaped air-pressure pipe, having one arm attached to the can-head to open through the same and its other upturned arm terminating inside of said can-head, a blowpipe fitted removably in the open end of the air-pressure pipe, retaining fingers on the upturned end of said air pipe, and a check valve confined within the retaining fingers of said air pipe, as and for the purposes described. 3rd. The combination with a dispensing can, a liquid eduction tube therein, and a piston cylinder having a piston, of the air-pressure tube E coupled at its lower end to the piston cylinder, extending through the can-head and provided with an external, elbow-shaped upper extremity e<sup>1</sup>, which re-enters the can-head and forms a trap, when the can is inverted, against the passage of liquid from the can-chamber to the piston-cylinder, as and for the purposes described. 4th. The combination with a dispensing can, a liquid eduction tube, and a piston cylinder and a piston, of an air-pressure tube E passing through the can-head and provided with an external elbow e<sup>1</sup>, which re-enters the can-head to discharge air to the can-chamber and form a trap, should the can be inverted, against the passage of liquid to the piston cylinder, a valve tube D united by sealed joints to the lower end of the air-pressure tube and the piston cylinder, and a ball valve confined and seated within said valve tube, as and for the purposes described. 5th. The combination with a can, a piston cylinder, a piston, and an air-pressure tube, substantially such as described, of the valve tube D provided with a ground valve seat, a ball valve confined within said valve tube and adapted to its seat, and a hood coupled by hermetically sealed joints to the air-pressure tube and to the piston cylinder and having the valve tube housed therein, whereby said hood joins all the parts to the piston cylinder, as and for the purposes described. 6th. The combination with a dispensing can, a piston cylinder, having a lateral egress port and an air-pressure tube and provided with an internal ground seat and with stops above said seat, a ball valve confined within the valve tube, and a slotted hood united hermetically to the air pressure

and valve tubes and to the piston cylinder, said hood adjusted to bring its slot coincident with the egress port in the cylinder and to form a space or chamber *i* between the valve tube and the closed end of the hood, as and for the purposes described.

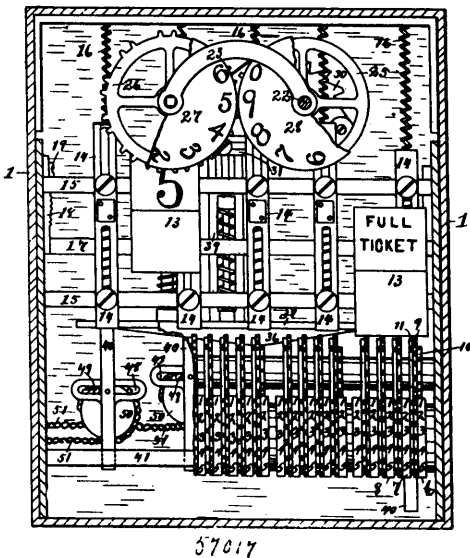
**No. 57,016. Card-Shooter. (Lance-cartes.)**



Clarence H. Judson, Council Bluffs, Iowa, U.S.A., 12th August, 1897; 6 years. (Filed 14th June, 1895.)

*Claim.*—A one-piece card-shooter, comprising a loop, the recurved strands of which are wound in opposite directions to form a spiral, then carried toward one another, the stems being finally twisted to form a single stem, terminating at the end in a jaw, all substantially as and for the purpose set forth.

**No. 57,017. Fare Register and Means for Operating the Same. (Régistre à billets.)**



John F. Ohmer, Dayton, Ohio, U.S.A., 12th August, 1897; 6 years. (Filed 14th June, 1897.)

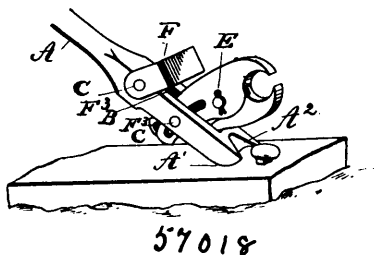
*Claim.*—1st. In a fare register, the combination with passenger indicator wheels, of a vertically movable slide extending across the machine, a lever having its fulcrum on the shaft of one of said wheels, and movable by the movement of said vertically movable slide, ratchet mechanism actuated by said lever and adapted to move said indicator wheels, a series of sliding bars having transverse slots, each of said bars being adapted to impart movement to said vertically movable slide, and a series of sheaves adapted to impart movement to said sliding bars, substantially as described and for the purposes set forth. 2nd. In a machine for registering and indicating fares in street railway cars, the combination with indicator wheels to indicate the number of passengers on each trip, a transverse vertically sliding bar having guide extensions, an angular lever having one end loosely connected to one of said guide extensions, and the other end fulcrumed on the shaft of one of said indicator wheels, a pawl pivoted to said lever and adapted to rotate one of said indicator wheels, a series of sliding bars any one of which may actuate said transverse vertically sliding bar, and means for actuating said series of sliding bars singly, substantially as described and for the purpose set forth. 3rd. In a machine for registering and indicating fares in street railway cars, the combination of a vertically movable sliding bar laying across the machine, a series of sliding bars any one of which is adapted to actuate said vertically movable sliding bar, the said sliding bars being each provided with a transverse slot, a lever having one end loosely connected to an extension from said vertically movable sliding bar, a pawl carried on said lever, a series of indicator wheels to indicate the number of passengers taken on each trip, and a ratchet wheel

engaged by said pawl to move one of said indicator wheels, substantially as described and for the purpose set forth. 4th. In a fare register, the combination of a system of register wheels, a system of indicators adapted to indicate the fares registered on said wheels, a transverse vertically movable bar lying across the machine and having guide extensions, a lever having one end loosely connected to one of said guide extensions, indicator wheels adapted to indicate the number of passengers taken on in each trip, ratchet mechanism interposed between said lever and wheels, and a series of sliding bars, the downward movement of any one of which will simultaneously operate said register wheels, a respective fare indicator, and the passenger indicator wheels, substantially as described and for the purposes set forth. 5th. In a fare register, the combination of a series of classified register wheels, a system of fare indicators, a transverse oscillating bar for controlling the positions of said fare indicators, a vertically movable sliding bar having guide extensions, a slotted lever loosely connected to one of said guide extensions, indicator wheels adapted to indicate the number of passengers taken on in each trip, and a series of sliding bars, the downward movement of any one of which will cause a simultaneous registration of a specific class of fare, a visible indication of said fare, and a visible indication of the number of passengers, substantially as described and for the purpose specified. 6th. In a fare register, the combination of indicator wheels adapted to indicate the number of passengers, a vertically moving bar laying across the machine, and provided with extensions to guide its movements, a series of independently movable sliding bars mounted below said wheels, a lever having its fulcrum on the shaft of one of said indicator wheels and a loose connection with the vertically movable bar, ratchet devices actuated by said lever to advance the indicator wheels, and means for operating said independently movable sliding bars one at a time, substantially as described and for the purposes set forth. 7th. In a fare register, the combination of indicator wheels to denote the number of passengers taken on in a trip, a vertically movable sliding bar lying across the machine, a lever having a fulcrum on the shaft of one of said wheels and one end slidingly connected with said vertically movable sliding bar, ratchet devices actuated by said lever to impart movement to said indicator wheels, a series of vertically movable bars, a movement of any one of which will move said vertically movable sliding bar, the said bars being each provided with a transverse slot, a series of sheaves, each one of which has a pin adapted to project into the slot on one of said bars, and means for actuating said sheaves one at a time, substantially as described and for the purposes set forth. 8th. In a fare register, the combination of indicator wheels adapted to indicate the number of passengers taken on in each trip, a continuous sliding bar extending across the machine, a slotted lever mounted adjacent to one of said indicator wheels, and loosely connected to said sliding bar, a series of vertical bars independently movable to impart movement to said continuous sliding bar, and ratchet devices operated by the slotted lever to move the indicator wheels, substantially as described and for the purposes set forth. 9th. A plurality of movable parts, in combination with a parallel rod adapted to both a rotary and longitudinal movement, and means on said rod adapted to engage with any one of said movable parts when said rod is rotated and through which the movable part so engaged is moved with the rod when the latter is moved longitudinally. 10th. A plurality of slides radially mounted, in combination with a sliding rod, and a finger on said rod that may be moved in a position to engage with any one of said slides to impart movement thereto. 11th. The combination with a plurality of ropes or cables, a series of angular slides to which said ropes are attached, a rotary and sliding rod mounted parallel with said slides, and means on said rod adapted to engage with any one of said slides to impart movement thereto. 12th. The combination with a plurality of ropes or cables, of a series of angular slides mounted in a part of a circle and to which said ropes are attached, a rod movable rotatably and longitudinally, and an engaging piece on said rod adapted to engage with any of said slides to impart movement thereto. 13th. The combination with a plurality of ropes or cables, of a series of angular slides mounted in a part of a circle, and to which said ropes are attached, a rod movable both rotatably and longitudinally, an engaging piece on said rod adapted to interlock with any one of said slides, and means for controlling the movements of said rod, substantially as described. 14th. The combination with a plurality of ropes or cables, of a series of slides arranged in a part of a circle, and to which said ropes are attached, a rod movable both rotatably and longitudinally, an engaging piece on said rod adapted to engage with any one of said slides to impart a sliding movement thereto, one or more pointers on said rod, and one or more dials to indicate the desired axial movement of said rod. 15th. The combination with a plurality of ropes or cables, of a series of slides mounted in a part of a circle, and to which said ropes are attached, a rod movable both rotatably and longitudinally, a finger projecting from said rod and adapted to be brought into a position to engage with any one of said slides by turning said rod, a spur gear rigid on said rod, and an antifriction roller adapted to engage with said spur gear to arrest the movement of said rod. 16th. The combination with a plurality of ropes or cables, of a series of slides having shoulders or stops thereon, and mounted in a segment of a circle, a rotary and sliding rod mounted in the centre of said circle and parallel with said slides, an engaging piece on said rod adapted to be brought into a position to engage any one of said

slides to impart an outward sliding movement thereto, and means for returning said slides and rod to their inner or normal positions. 17th. The combination of a plurality of slides mounted in a segment of a circle, a rod movable both rotatably and horizontally, and mounted in the centre of said circle, a finger on said rod adapted to be brought into a position to engage with any one of said slides upon a sliding movement being imparted to said rod, a spur gear, and a roller to arrest the rotary movement of said rod, pointers on said rod, and one or more indicating dials with which said pointers co-operate, substantially as and for the purposes specified. 18th. The combination of a series of slides mounted in a part of a circle, a rotary and sliding rod mounted in the centre of said circle, a finger projecting from said rod adapted to engage with any one of said slides, a spur gear, and a roller to arrest the rotary movement of said rod, and a detent adapted to engage with said spur gear to arrest the sliding movement thereof unless a proper rotary movement has been first given said rod. 19th. The combination with a plurality of ropes or cables passing over a corresponding number of pulleys arranged in a part of a circle, of slides mounted in a part of a circle, and to which said ropes are attached, a rod movable rotatably and horizontally and mounted in the centre of said circle, a finger projecting from said rod adapted to be moved into a position to engage with any one of said slides, one or more pointers fixed to said rod in line with said finger, and one or more dials bearing indications to which said pointers point, and means for resetting said slides and rod to their normal positions. 20th. The combination with a fare register of the type described, of a plurality of slides mounted in a segment of a circle adjacent to said fare register, and to which are connected the ropes or cables that lead from the interior mechanism for the fare register, a rod movable rotatably and horizontally and mounted parallel with said slides, a finger projecting from said rod and adapted to be moved into a position to engage with any one of said slides, one or more pointers fixed to said rod, one or more dials bearing indications to which said pointers point, and means for controlling the axial and horizontal movement of said rod. 21st. The combination with a series of ropes or cables, of a corresponding number of engaging parts to which said ropes or cables are connected, a rod adapted to be rotated and moved longitudinally, a projection on said rod adapted to be brought into a position to engage with any one of said engaging parts when the rod is rotated, and through which the ropes or cables may be singly actuated by each longitudinal movement of said rod.

**No. 57,018. Spike Puller.**

(Machine pour extraire les chevillettes.)



Lawrence C. Powell, California, Pennsylvania, U.S.A., 12th August, 1897; 6 years. (Filed 14th June, 1897.)

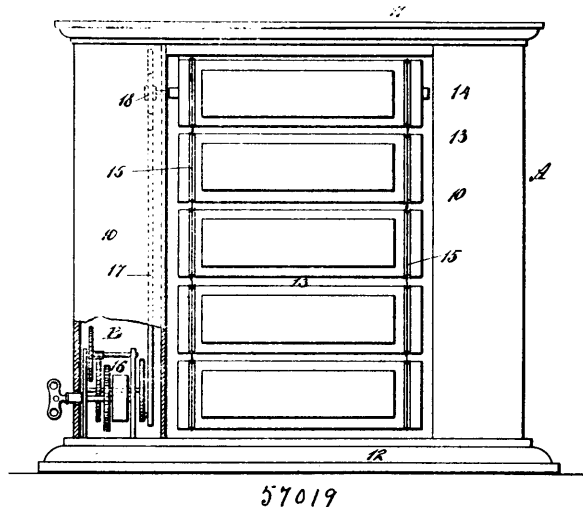
*Claim.*—The herein described spike puller consisting of the lever having the slotted lower portion, and a solid lower end beneath said slotted part provided with the cut-out portion, the clamping jaws pivotally connected directly above the cut-out portion, the oppositely arranged slots in the upper part thereof in which the slotted portion of the lever is journalled, the fulcrum block, secured to the lever in the rear of the slotted portion thereof, depending therefrom and adapted to rest on the rail, the claw at the forward end when the spike puller is turned in one direction raising the spike, while the spike puller when inverted by reason of the fulcrum block resting on the rail will permit the jaws to grip the spike as set forth.

**No. 57,019. Sign. (Enseigne.)**

William N. Ley, Wilbur, Washington, U.S.A., 12th August, 1897; 6 years. (Filed 12th June, 1897.)

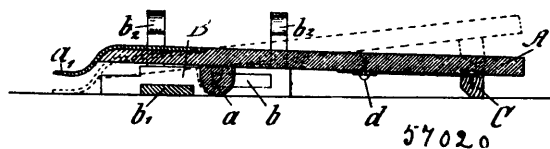
*Claim.*—1st. A sign comprising a supporting frame, a plurality of slats having looped connection one with the other and one suspended below the other, the upper slat being pivoted in the frame, and the loops connecting the slats being so formed that upon the reversal of one of the slats all of the said slats will be correspondingly reversed, and means for rocking the said upper slat, substantially as and for the purpose set forth. 2nd. A sign comprising a plurality, of slats connected together by a cord or strip passed around the upper slat and secured to the lower edge thereof and then having one end passed around the said upper slat to form a second loop and secured to the upper edge of the adjacent slat, the other end of the cord or strip being passed around the said adjacent slat forming a loop around the same and secured to the upper edge thereof, the upper slat being provided with trunnions at its ends to permit it to

be pivoted to a frame, and means for rocking the said upper slat, substantially as and for the purpose specified. 3rd. A sign consist-



ing in a stationary rectangular open frame A, one of the vertical members of which is hollow and provided with a motor, a series of slats, one above the other visible through both sides of the frame and having looped connection one with the other, the top slat having end pivots mounted in the upper ends of the frame uprights, and a crank and pitman connection between one of the pivots and the said motor to impart an oscillating rotary motion to the top slat, and cause the consecutive reversal of all the other slats, substantially as described.

**No. 57,020. Machine for Lifting and Holding Doors.**  
(Machine pour soulever les portes, etc.)



Rudolf Müller, Linz-on-the-Danube, Austria, 12th August, 1897; 6 years. (Filed 12th June, 1897.)

*Claim.*—1st. A combined door-lift and holder appliance specifically distinguishable by certain points, to wit, that, provided with a swinging lift-limiting prop C also with a roller-like bottom block a, and a metal foot or under-grip a', a treadle-board A and a shore B are united in such a manner as to be freely movable by means of the two pegs or ribs a' of the treadle-board A in the slits or grooves b in both sides of shore B, which latter borders or partly surrounds the treadle-board A and is by means of a cross-piece b' and stubs or struts b' held compactly together; that both these principal parts are inseparably combined, the shore, however, not being subjected to pressure from the lifted door, is pushed underneath the same and relieves the operator's foot.

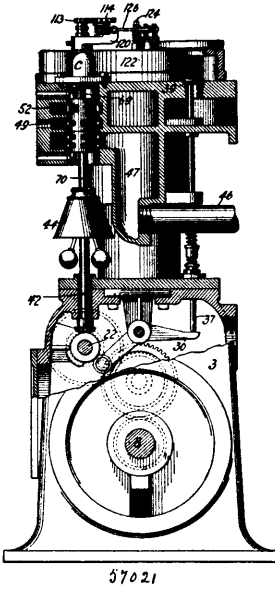
**No. 57,021. Gas Engine. (Machine à gaz.)**

George Westinghouse and Edwin Rund, both of Pittsburg, Pennsylvania, U.S.A., 12th August, 1897; 6 years. (Filed 11th June, 1897.)

*Claim.*—1st. The combination, in a gas engine, of a main shaft, a cam shaft parallel to the main shaft and actuated thereby, a cam on the cam shaft, a lever actuated by the cam, and adapted to engage with and operate the stem of an exhaust valve, a governor shaft at right angles to the cam shaft, and geared thereto by means of bevel gear wheels, a governor operatively connected with the governor shaft, and a valve controlled by the governor, substantially as set forth. 2nd. The combination, in a vertical gas engine, of two single-acting cylinders, mounted on a closed crank case, a main shaft, two similarly placed cranks on the main shaft, connections from the pistons of the cylinders to the crank, a cam shaft parallel to and geared to the main shaft, and located inside of the crank case, two cams on the cam shaft, an exhaust valve for each cylinder, and two levers actuated by the cams on the cam shaft, and adapted to alternately operate the exhaust valves, substantially as set forth. 3rd. The combination, in a vertical gas engine, of two single-acting cylinders mounted on a closed crank case, a main shaft passing through the crank case, two similarly placed cranks on the main shaft, connections from the pistons of the cylinders to the cranks, a gear wheel on the main shaft within the crank case, meshing with a gear wheel on the countershaft, a cam shaft which extends into the



crank case, and is geared to the countershaft by gear wheels outside of the crank case, cams on the cam shaft within the crank case,



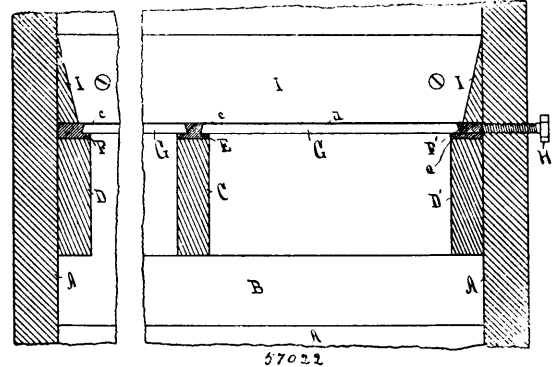
and levers actuated by the cams and adapted to alternately operate the exhaust valves of the two cylinders, substantially as set forth. 4th. The combination, in a vertical gas engine, of two single-acting cylinders mounted on a closed crank case, a main shaft passing through the crank case, two similarly placed cranks on the main shaft, connections from the pistons of the cylinders to the cranks, a cam shaft parallel to the main shaft and located within the crank case, a countershaft, gear wheels on the countershaft meshing with gear wheels on the main shaft and cam shaft, two cams oppositely placed on the cam shaft, and two levers adapted to be actuated by the cams to operate the exhaust valves of the two cylinders, substantially as set forth. 5th. The combination, in a vertical gas engine, of two single-acting cylinders mounted on a closed crank case, a main shaft, two similarly placed cranks on the main shaft, connections from the pistons of the cylinders to the cranks, a cam shaft parallel to and geared to the main shaft, two cams on the cam shaft, levers actuated by the cams for operating the exhaust valves of the cylinders, a bevel gear on the cam shaft engaging with a bevel gear on a vertical governor shaft, and a governor on the governor shaft connected with a controlling valve, substantially as set forth. 6th. The combination, in a vertical gas engine, of two single-acting cylinders mounted on a closed crank case, a main shaft, a cam shaft, within the crank case parallel to the main shaft and geared thereto, two levers actuated by cams on the cam shaft for operating the exhaust valves of the cylinders, and a removable bearing for the levers, which is supported by projecting portions or lugs on the upper portion of the crank case, substantially as set forth. 7th. The combination, of a casing having an air supply passage and a gas supply passage, air and gas admission ports communicating with said passages, a valve device having an internal mixing chamber receiving air and gas from said ports, and a governing device for operating the valve device which is adapted to automatically vary the capacity of air and gas admission ports, through which air and gas are admitted to the internal mixing chamber, substantially as set forth. 8th. In a regulating device for controlling the supply of air and other gases to a gas engine, the combination, with air and gas passages, of a valve device for controlling air and gas supply ports or passages, which is adapted to be adjusted in one direction to vary the capacity of air and other gases, and in another direction to vary the proportions of the air and other gases, substantially as set forth. 9th. In a regulating valve device, for controlling the supply of air and other gases to a gas engine, the combination, with air and gas supply passages, of two connected members, one controlling the supply of air and the other the supply of other gases, both adapted to be adjusted longitudinally to vary the quantity of air and other gases, and each adapted to be adjusted laterally to vary the proportions of the air and gases, substantially as set forth. 10th. In a regulating valve device, for controlling the supply of air and other gases to a gas engine, the combination, with air and gas supply passages, of a cylindrical chamber, two connected cylindrical valves located and movable within the chamber, one controlling the supply of air and the other the supply of other gases, both adapted to be adjusted longitudinally and rotatively to vary the quantity and proportions of the air and other gases, substantially as set forth. 11th. In a regulating valve device, for controlling the supply of air and other gases to a gas engine, the combination, with air and gas supply passages, of two connected, hollow, cylindrical members,

enclosing a mixing chamber, one of the members controlling the admission of air and the other controlling the admission of other gases and both adapted to be adjusted to vary the capacity of the air and gas admission ports, substantially as set forth. 12th. A hollow cylindrical valve device, formed of two members which are connected together and enclose a mixing chamber for air and other gases, ports controlled by one of the members for admitting air to the chamber, ports controlled by the other member for admitting other gases into the chamber, ports or passages through which the mixed air and other gases may pass to the cylinder, or combustion chamber of a gas engine, an automatic governor connected to the valve device, and controlling the supply of air and gas admitted to the mixing chamber, and means whereby either or both members of the valve device may be adapted to vary the proportion of the air and gas, substantially as set forth. 13th. In a regulating valve device, for controlling the supply of air and other gases to a gas engine, the combination, with air and gas supply passages, of two connected members, one controlling the supply of air and the other the supply of other gases, both adapted to be adjusted in one direction to vary the capacity of air and other gases, and each adapted to be adjusted in another direction to vary the proportions of the air and gases, substantially as set forth. 14th. In a regulating valve device, the combination, of a cylindrical, rotatively adjustable valve, a sliding plate on the casing of the valve, a pivoted arm on the plate, and an arm which is connected to the valve and extends into a slot in the pivoted arm on the plate whereby movement of the sliding plate may cause rotative movement of the valve, substantially as set forth. 15th. In a regulating valve device, for gas engines, the combination of two hollow cylindrical valves which are closed at their outer ends and open at their inner ends, so as to form an enclosed mixing chamber, air admission ports controlled by one of the valves and gas admission ports controlled by the other valve, a connection between the valves whereby they may be coincidentally moved longitudinally, and mechanism connected to each of the valves, whereby either may be rotated independently of the other, substantially as set forth. 16th. The combination, of a casing having air and gas admission ports, and a valve device independent of the admission valve of the engine having an internal mixing chamber receiving air and gas from said ports, and adapted to automatically vary the capacity of air and gas admission ports through which air and gas are admitted to the internal mixing chamber, substantially as set forth. 17th. The combination, in a regulating device for gas engines, of a mixing chamber, a valve device concentric therewith which is independent of the main admission valve of the engine, normally open air and gas admission ports through which air and gas are admitted to the mixing chamber, and a governing device whose shaft is in line with the axis of the valve and which is adapted to automatically operate the valve to control the capacity of the air and gas admission ports, substantially as set forth. 18th. In a regular device for controlling the supply of air and other gases to a gas engine, the combination, with air and gas supply passages, of a valve device for controlling the air and gas supply ports or passages, which is adapted to be adjusted in one direction to vary the proportions of the air and other gases and in another direction by means of a governor to vary the quantity only of the air and other gases, substantially as set forth. 19th. A regulating valve device for controlling the supply of air and other gases to a gas engine, which comprises a cylindrical chamber, two connected members located and movable within the chamber, one of which controls the admission of gas and the other the admission of air to the chamber, and an automatic governor connected to and adapted to operate both members to vary the capacity of the air and gas admission ports without varying the proportions of the air and gas, and thereby to control the quantity of air and other gases admitted to the chamber, substantially as set forth. 20th. The combination, in a regulating device for controlling the supply of air and other gases to a gas engine, of a mixing chamber, two connected members movable within the chamber, one of which controls the admission of gas and the other the admission of air to the chamber, an automatic governor connected to and adapted to operate both members to control the quantity only of air and other gases admitted to the chamber, and means for adjusting each of the members to vary the proportions of the air and gas, substantially as set forth. 21st. In a gas engine in which the operation of the engine is regulated by varying the quantity of air and gas admitted to the cylinder, the combination, in a valve device which is independent of the admission valve of the engine, of a mixing chamber, separate ports for the admission of air and gas to the mixing chamber, two connected members located and movable within the mixing chamber, one controlling the admission of gas and the other the admission of air to the chamber, a governing device connected to and adapted to operate both members to control the quantity only of air and gas admitted to the chamber, and means for separately adjusting each of the members to vary the proportions of the air and gas admitted to the chamber, substantially as set forth. 22nd. In a gas engine, the combination, of a valve device, and internal mixing chamber therein, normally open ports through which air and gas are admitted to the mixing chamber, and a governor for operating the valve device to vary the capacity of the air and gas admission ports independently of the opening or closing of the main admission valve of the engine, and without varying the proportions of the air and gas, substantially as set forth. 23rd. In a regulating device for controlling the supply of air and other gases to a gas engine, the combina-

tion with air and gas supply passages, of a valve mechanism, controlling the air and gas supply ports, or passages, which is adapted to be adjusted to regulate the proportions of air and other gases, and which is operative by a governor to vary the quantity of air and other gases admitted to the engine without substantial variation of the proportions, substantially as set forth. 25th. In a gas engine, the combination, in an igniting mechanism, in which a spark is produced within the cylinder, by breaking an electric circuit, of two movable electrodes each adapted by its movement to cause a spark within the cylinder, actuating mechanism for imparting motion to the movable electrodes, and in means whereby either of the movable electrodes is adapted to be operated by the actuating mechanism, substantially as set forth. 26th. The combination, with a gas engine cylinder, of a removable cap, or bonnet, two movable electrodes, mounted in the cap, or bonnet, each adapted by its movement to make and break a circuit, and an actuating mechanism for operating either of the movable electrodes, substantially as set forth. 27th. The combination, with a gas engine cylinder, of a removable cap, or bonnet, two movable electrodes mounted in the cap, or bonnet, each adapted by its movement to make and break a circuit, and mechanism operated by the engine, for transmitting motion to the movable electrodes, substantially as set forth. 28th. The combination, with a gas engine cylinder, of an igniting mechanism comprising two movable electrodes, each adapted by its movement to make and break a circuit, a cam operated from the engine, and a lever, or tappet, engaging with the cam, and adapted to transmit motion to one or both of the movable electrodes, substantially as set forth. 29th. The combination, with a gas engine cylinder, of a removable cap, or bonnet, two movable and two fixed electrodes mounted in the cap or bonnet, a lever or tappet, for imparting motion to the movable electrodes, and a cam with which the lever, or tappet, engages, and which is adapted to be operated from the engine, substantially as set forth. 30th. The combination, with a gas engine cylinder, of a movable electrode which is adapted to make and break a circuit, a lever or tappet, for actuating the movable electrode, to break the circuit, a spring unconnected with the movable electrode for moving the tappet in one direction, and a cam engaging with the lever, or tappet, and means whereby the cam may be adjusted to vary the time of action of the movable electrode, substantially as set forth. 31st. The combination, of an igniting mechanism for a gas engine, of a movable electrode, a lever or tappet, for actuating the movable electrode, a cam with which the lever or tappet engages, and a gear wheel operated from the engine, and so connected with the cam as to be capable of rotating the cam in one direction only, substantially as set forth. 32nd. In a gas engine, the combination, with a removable head, or bonnet, of a movable electrode mounted in the head, or bonnet, rigidly connected arms mounted on the opposite ends of the electrode, a lever or tappet, for engaging the arm on the outer end of the electrode, a spring unconnected with and disengaged from the movable electrode for moving the lever or tappet, to break the circuit, and means for adjusting the lever or tappet, to close the circuit, substantially as set forth. 33rd. In a gas engine, the combination, with a removable head, or bonnet, of a movable electrode, having rigidly connected arms on or near its opposite ends, and which is adapted to make and break a circuit, an adjusting device on the outer arm, a spring for actuating the movable electrode, and tending to close the circuit, a spring engaging a tappet, or lever, and tending to open the circuit, and means for actuating the movable electrode from the engine, substantially as set forth. 34th. The combination, with a removable cap, or bonnet, which is adapted to be applied to an opening in the wall or head of a gas engine cylinder, of two movable electrodes having rigidly connected arms on, or near, their opposite ends, and adjusting devices on the outer arms, substantially as set forth. 35th. The combination, with a removable cap, or bonnet, which is adapted to be applied to an opening in the wall or head of a gas engine cylinder, of two movable electrodes mounted in the cap or bonnet, and having rigidly connected arms on their opposite ends, and two fixed electrodes adapted to be engaged by two of the arms on the movable electrodes, substantially as set forth. 36th. In a gas engine, the combination, with a movable electrode, of a lever, or tappet, movable independently of but adapted to engage with the movable electrode, a cushioning device for the lever, or tappet, a cam with which the lever engages, and a spring tending to hold the lever in engagement with the cam, substantially as set forth. 37th. The combination, in an igniting mechanism, of a fixed electrode, a movable electrode, adapted to co-operate with the fixed electrode to make and break a circuit, a spring acting on the movable electrode and tending to close the circuit, and mechanism for operating the movable electrode which is actuated by a spring for breaking the circuit, substantially as set forth. 38th. The combination, in an igniting mechanism, of a fixed electrode, a movable electrode, adapted to co-operate with the fixed electrode to make and break a circuit, a spring acting on the movable electrode and tending to close the circuit, a rotating cam, a lever, or tappet, engaging with the cam, and a spring for actuating the lever to break the circuit, substantially as set forth. 39th. The combination, in an igniting mechanism, for a two-cylinder gas engine, of a fixed and a movable electrode for each cylinder, a lever, or tappet, for operating each of the movable electrodes, a cam engaging with and imparting motion to both levers, or tappets, and a countershaft on which the cam is mounted and which receives motion from the engine, substantially as set forth. 40th. In a gas engine, the combination,

with a governor shaft operated from the main shaft, of a cam shaft geared to the governor shaft, a cam on the cam shaft which engages with a lever, or tappet, and a movable electrode which is actuated by the lever, or tappet, substantially as set forth. 41st. In a two-cylinder gas engine, the combination, with a countershaft operated from the main shaft of the engine, of a cam shaft driven by the main shaft, a cam on the countershaft, two levers, or tappets, engaging with the cam, and two movable electrodes extending into each cylinder, and adapted to be actuated by one of the levers, or tappets, substantially as set forth. 42nd. In a gas engine, the combination, with a governor shaft, operated from the main shaft of the engine, a governor and a governor valve on the shaft, a cam operated by gearing from the governor shaft, a lever, or tappet, engaging with the cam, and a movable electrode operated by the lever, or tappet, substantially as set forth.

**No. 57,022. Pulp Screen. (*Tamis à pulpe.*)**

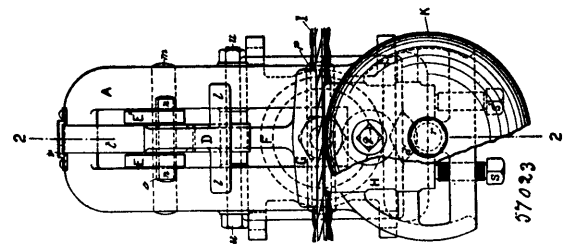


Henry J. Dickerson, Niagara Falls, New York, U.S.A., 13th August, 1897; 6 years. (Filed 19th June, 1897.)

*Claim.*—1st. A screen-plate consisting of several corrugated sheet metal plates, having the corrugations sawed upon one side upon the line of the apexes of the corrugations with intervening points of division and support, movable supports connecting said plates, and means for securing all of said plates and supports simultaneously by pressure upon the line of corrugation, substantially as set forth. 2nd. A pulp screen consisting of a frame provided with longitudinal cleats, transverse movable supports resting upon said cleats, dovetail plates secured to said movable supports, corrugated plates engaging with said dovetails, and set screws threaded through said frame and forcing all of said movable supports and plates to place upon the line of said corrugation simultaneously, for the purposes set forth. 3rd. In a pulp-screen, the combination of a series of screen plates made of corrugated metal, having the corrugations sawed upon one side upon the line of the apexes of the corrugations with intervening points of division and support, with a frame, longitudinal cleats secured thereto, movable transverse supports resting upon said cleats, dove tail plates secured to said movable supports and engaging the beveled sides of said plates, and set screws for forcing all of said plates and said movable supports carrying said dove tails into place and into contact simultaneously, for the purpose set forth.

**No. 57,023. Gripping Mechanism.**

(*Mécanisme de grippage.*)

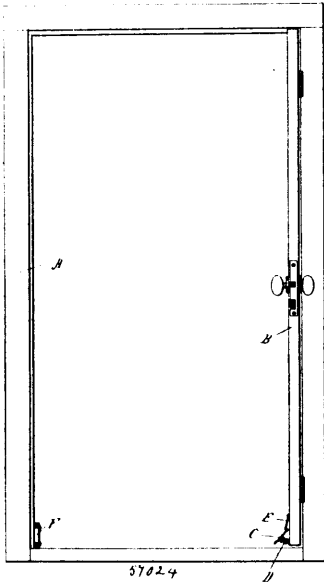


Samuel Storow Welber, Trenton, New Jersey, U.S.A., 13th August, 1897; 6 years. (Filed 19th June, 1897.)

*Claim.*—1st. In a gripping mechanism, the combination of a fixed jaw, a swinging jaw having a lever formed integral therewith, an operating-lever, and a toggle connection between said operating-lever and the lever formed integral with the swinging jaw, the links of said toggle connection being curved to take over a pin and lock thereon, and said pin. 2nd. In a gripping mechanism, a fixed jaw, a swinging jaw, an operating-lever, a toggle connection between said operating lever and swinging jaw, the links of said toggle connection being curved to take over a pin and lock thereon, said pin, and a spring bearing against the ends of said toggle-joint and operating to assist in maintaining the lock or to release the

jaws at the will of the operator. 3rd. In a gripping mechanism, the combination of a swivelling frame, said frame having a trunnion formed thereon, and a trunnion-box wherein said trunnion may turn, said box having a stop formed thereon to limit the swivelling motion of said frame. 4th. In a gripping mechanism, the combination of a swivelling frame having a trunnion formed thereon, a trunnion-box wherein said trunnion turns, a stop to limit the motion of the trunnion and frame, a fixed jaw, a movable jaw, and a locking connection between said movable jaw and the operating-lever, said locking connection comprising the bent links of a toggle connection adapted to take over a pin on the operating-lever, and a spring bearing against the end of said toggle-links and adapted to retain said links in their locking position and to release said locking connection and to open the jaws of the grip when unlocked at the will of the operator. 5th. In a gripping mechanism, the combination of a fixed jaw, a swinging jaw, an operating-lever, and a spring-assisted locking-toggle connection between said operating-lever and said swinging jaw.

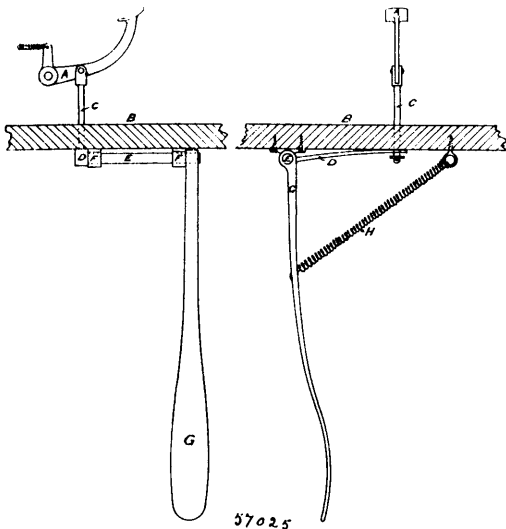
**No. 57,024. Weather Strip. (Bourrelet de porte.)**



Henry Kossuth Kimpton, Tilsonburg, Ontario, Canada, 13th August, 1897; 6 years. (Filed 22nd April, 1897.)

*Claim.*—The combination, with a door, and its frame, of a plate hinged at its upper edge to the door and provided with a spring for supporting it, a plate secured to the door over the upper edge of the said hinged plate, and a projection on the door frame for depressing the said hinged plate when the door is closed, substantially as set forth.

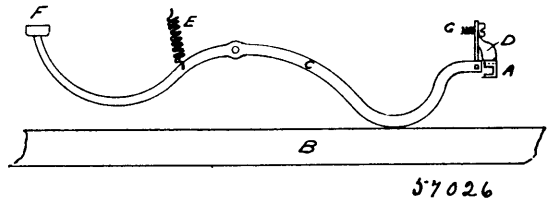
**No. 57,025. Typewriting Machine. (Clavigraphie.)**



Thomas Wilson Paterson, Victoria, British Columbia, Canada, 13th August, 1897; 6 years. (Filed 17th June, 1897.)

*Claim.*—The combination, attached to a typewriting machine, of the connecting rod C, arm D, spindle E, bearings F F, and arm or knee lever G, substantially as and for the purpose hereinbefore set forth.

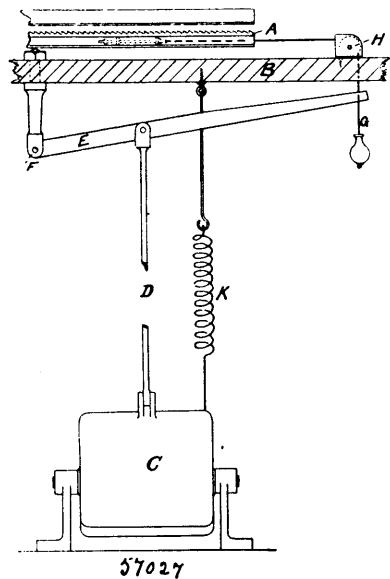
**No. 57,026. Typewriting Machine. (Clavigraphie.)**



Thomas Wilson Paterson, Victoria, British Columbia, Canada, 13th August, 1897; 6 years. (Filed 17th June, 1897.)

*Claim.*—The combination, attached to a typewriting machine, of the lever C, pawl D, key F, spring E, screws G, G, substantially as and for the purpose hereinbefore set forth.

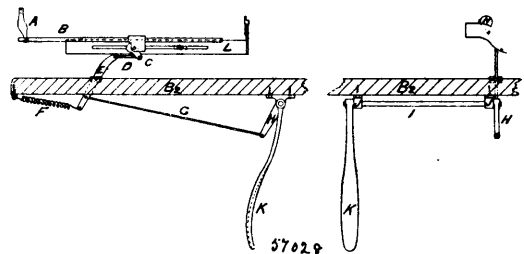
**No. 57,027. Typewriting Machine. (Clavigraphie.)**



Thomas Wilson Paterson, Victoria, British Columbia, Canada, 13th August, 1897; 6 years. (Filed 17th June, 1897.)

*Claim.*—1st. The combination attached to a type-writing machine of a trundle C, connecting rod D, lever E, fulcrum F, cord G, sheave H, catch I, rod J, and springs K, K<sup>2</sup>, substantially as and for the purpose hereinbefore set forth. 2nd. The combination, with drum L, of brake band M, stud N, connecting rod O, pin P, bell crank Q, pin R, key S, spring T, substantially as and for the purpose hereinbefore set forth.

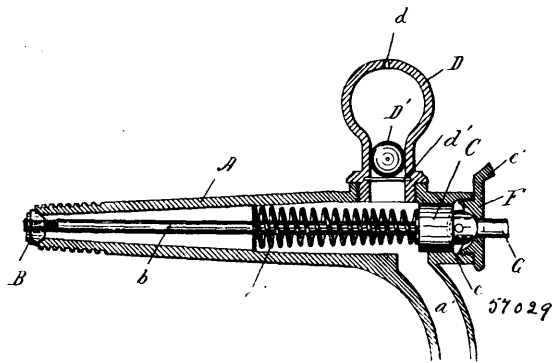
**No. 57,028. Typewriting Machine. (Clavigraphie.)**



Thomas Wilson Paterson, Victoria, British Columbia, Canada, 13th August, 1897; 6 years. (Filed 17th June, 1897.)

*Claim.*—The combination, with a typewriting machine, of the attachment of catch A, rod B, cam grip C, connecting rod D, lever E, spring F, connecting rod G, lever H, spindle I, bearings J, J, knee-lever K, gauge-bar L, screw M, cover N, adapted to fit a typewriting machine, substantially as and for the purpose hereinbefore set forth.

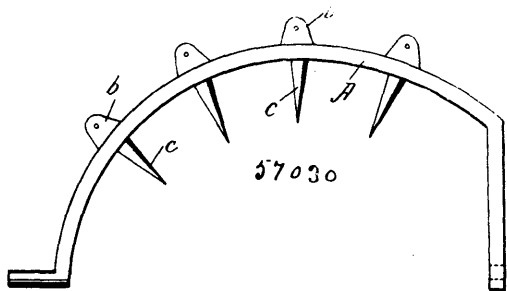
**No. 57,029. Measuring Faucet. (Robinet à mesurer.)**



Frederick Christ Borsh, New Hamburg, Ontario, Canada, 13th August, 1897; 6 years. (Filed 21st June, 1897.)

*Claim.*—1st. In a measuring faucet, the combination, with a hollow stem provided with a spout and a cylinder at its front end, of a spring-pressed piston, slidable in the said cylinder and operating to close the entrance to the spout when pushed back, and a valve closing the rear end of the said stem and connected with the said piston, substantially as set forth. 2nd. In a measuring faucet, the combination, with a hollow stem, and means for closing the opposite ends of the said stem alternately; of a chamber communicating with the said stem, and provided with an air-hole at its top, and a buoyant valve arranged in the said chamber and operating to close the said air-hole, substantially as set forth.

**No. 57,030. Jaws for Traps. (Mâchoire pour pièges.)**

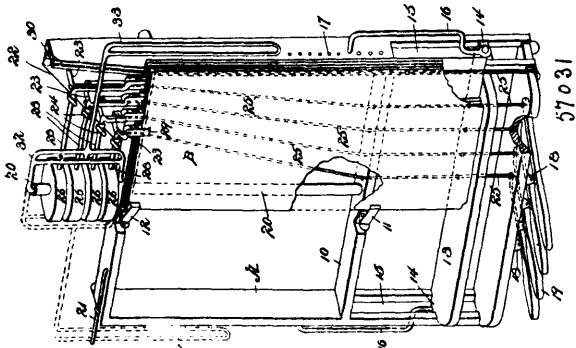


James A. Nisbet, Hamburg, Michigan, U.S.A., 13th August, 1897; 6 years. (Filed 15th June, 1897.)

*Claim.*—1st. A pair of jaws for a trap, each jaw being provided with a series of hooked teeth on its upper side, and a series of straight and sharp prongs on its under side, substantially as described and shown. 2nd. A pair of jaws for a trap, each jaw being provided with a series of hooked teeth on its upper side, and a series of straight and sharp prongs on its under side, the said teeth and prongs being formed integral with the jaws, substantially as described and shown.

**No. 57,031. Music Leaf Turner.**

(*Tourne-feuille de musique.*)



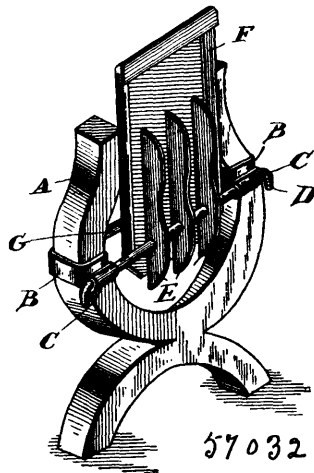
Hiram Hammond and Robert Hammond, both of Calwell, New York, U.S.A., 13th August, 1897; 6 years. (Filed 18th June, 1897.)

*Claim.*—1st. A music leaf turner having a frame provided with two horizontal bars, one located at the top of the frame

and one located intermediately on the frame, each horizontal bar having a notch in its front edge, a clasp secured within each notch and adapted to hold the inner portions of the leaves of music, a table located below the intermediate horizontal bar and having reduced ends slidable in vertical slots in the side of the frame, the table being adapted to engage the lower edges of the music leaves, a spring-arm carried at each end of the table, the arms projecting upwardly from the table and bearing against the frame to hold the table at various positions, and means on the frame for turning the table, substantially as described. 2nd. A music leaf turner having a frame with side portions and two horizontal bars, the bars being located one at the upper end of the frame and one intermediately on the frame, the forward edge of the horizontal bar being notched and the lower part of each side portion of the frame having slots, a table, the ends of which are reduced to fit the ends of the slots whereby the table is slidable vertically on the frame, a spring arm secured to each reduced end of the table and projecting upwardly therefrom to engage the sides of the frame, the sides having a series of vertically-aligned perforations receiving the spring-arms, and leaf-turning devices carried by the frame, substantially as described.

**No. 57,032. Foot-rest for Sewing Machine.**

(*Appui-pieds pour machines à coudre.*)

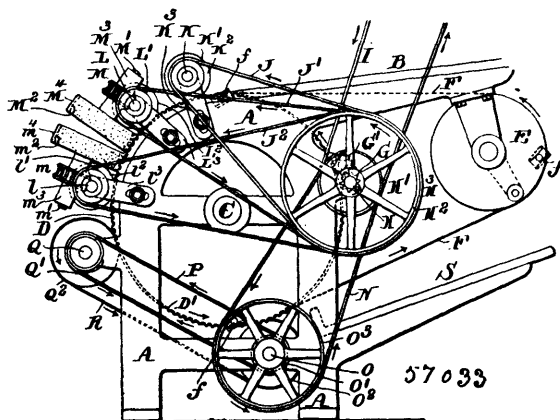


Mary A. Volkenrath, Huntington, West Virginia, U.S.A., 13th August, 1897; 6 years. (Filed 18th June, 1897.)

*Claim.*—The combination with the supporting-frame of a table or the like, of lugs secured thereto, formed with bearings, a shaft mounted in said bearings, arms fast upon said shaft at right angles thereto, a foot-rest supported upon said arms and extended at one end beyond the same, and stops extended inwardly from the opposite portions of the supporting-frame, to be engaged by the inner ends of said arms which are extended beyond the foot-rest.

**No. 57,033. Method of and Apparatus for Polishing Printed Matter.**

(*Methode et appareil pour polir les matières imprimées.*)



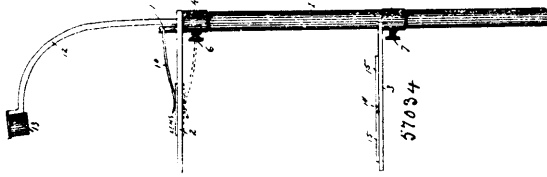
William Henry Reynell Toye, Philadelphia, Pennsylvania, U.S.A., 13th August, 1897; 6 years. (Filed 24th June, 1897.)

*Claim.*—1st. The method of polishing and brightening printed matter which consists in printing upon paper and then before the ink has become hard and dry rubbing the surface of the paper and

printed matter first with light and then with harder pressure. 2nd. In a machine for polishing printed matter, the combination with a carrier and a support for the printed sheets, of two or more rubbing devices some of which move in different directions from the others over the support and each having but a short and light contact with the printed paper at any one part, and a rubbing belt situated on the delivery side of the rubbers aforesaid and arranged to maintain a relatively longer and firmer contact with the printed paper. 3rd. In a machine for polishing printed matter, the combination with a supporting drum and a carrier for feeding the printed sheets through the machine, of rubbing rolls set across the drum and revolving in the same direction as the drum and rubbing belts lying across the drum and moving at right angles thereto. 4th. In a machine for polishing printed matter, the combination with a supporting drum and a carrier for feeding the printed sheets through the machine, of rubbing rolls set across the drum and revolving in the same direction as the drum, rubbing belts lying across the drum and revolving at right angles thereto, and a rubbing belt extending along and across the drum and moving in the opposite direction thereto.

**No. 57,034. Lens Rectifying Device.**

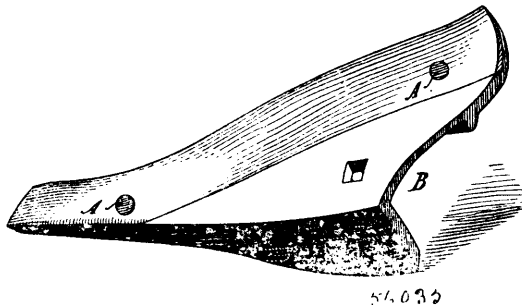
(Appareil à rectifier les lentilles.)



Harrison Cole, Columbus, Ohio, U.S.A., 13th August, 1897; 6 years. (Filed 26th June, 1897.)

*Claim.*—1st. In a device for determining the optical axes and centres of lenses, the combination with a transparent stage having a central line across its face, of a protractor arranged beneath said stage, and cross lines upon the face of the protractor plate, substantially as and for the purpose specified. 2nd. In a device for determining the optical axes and centres of lenses, the combination with a transparent stage having a central line thereon, of a protractor plate and protractor thereon arranged below said stage, crossed lines on the face of said protractor plate, and a fingered indicator pivotally supported within the protractor, substantially as and for the purpose specified. 3rd. In a device for determining the optical axes and centres of lenses, the combination with a transparent stage and a central line thereon, of a protractor plate and protractor thereon arranged beneath said stage, crossed lines on said protractor plate, a fingered indicator pivoted on said protractor plate, and lines extending throughout said fingers, substantially as and for the purpose specified. 4th. In a device for determining the optical axes and centres of lenses, the combination with a standard, a transparent stage supported therefrom, and adjustable thereon and a line across the stage, of a protractor plate and protractor thereon adjustably supported on said standard beneath said stage, crossed lines on said protractor plate, a fingered indicator pivotally supported on the protractor plate, and crossed lines as described on said indicator, substantially as and for the purpose specified.

**No. 57,035. Plough Point.** (Pointe de charrue.)



William Lisson, Merrickville, Ontario, Canada, 13th August, 1897; 6 years. (Filed 23rd July, 1897.)

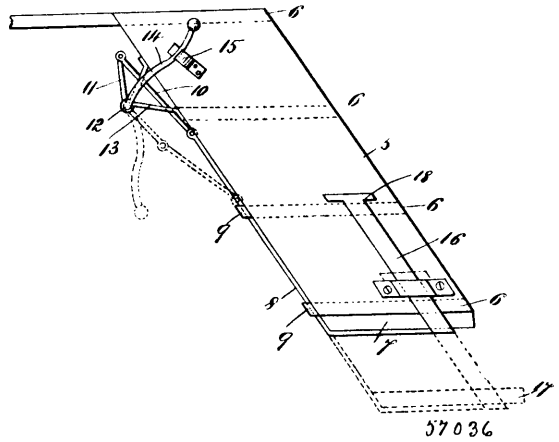
*Claim.*—The combination of a steel facing as shown in figure 3, with the cast iron body of the plough point as shown in figure 2 and when attached will appear complete as shown in figure 1, substantially as and for the purpose hereinbefore set forth.

**No. 57,036. Car Step.** (Marche de chars.)

Frank George Brubaker, New York, State of New York, U.S.A., 13th August, 1897; 6 years. (Filed 24th July, 1897.)

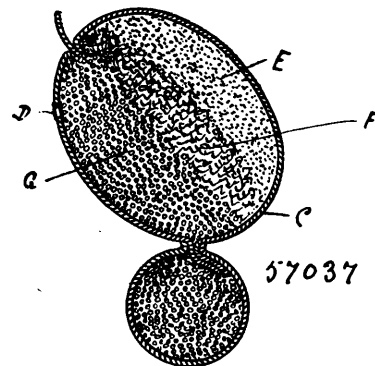
*Claim.*—1st. The combination with a set of car steps, of a supplemental step connected with the bottom thereof, and adapted to be lowered for the use and held in the raised position when desired,

said supplemental step being provided at the back thereof, with arms or bars which extend upwardly through keepers connected with the



lower steps, a rod mounted transversely of the steps above said arms or bars, and provided with cranks which are in operative connection said arms or bars, said rod being provided at one end with a crank, and a catch secured to one side of the steps in connection with which said crank is adapted to operate, and said supplemental step being provided at each end with rods or bars which extend upwardly through keepers connected with the sides of the main steps, substantially as shown and described. 2nd. The combination with a car step, of a supplemental step connected with the bottom thereof, and adapted to be lowered for use and locked in the raised position when not desired for use, substantially as shown and described. 3rd. The combination with a car step, of a supplemental step connected with the bottom thereof, and adapted to be lowered for use and locked in the raised position when not desired for use, said supplemental step being provided with end bars which move in keepers secured to the sides of the main step, and with back bars or arms which also move in keepers secured to the backs of the main steps, substantially as shown and described. 4th. The combination with a car step, of a supplemental step connected with the bottom thereof, and adapted to be lowered for use and locked in the raised position when not desired for use, said supplemental step being provided with end bars which move in keepers secured to the sides of the main step, and with back bars or arms which also move in keepers secured to the backs of the main steps, said last named bars or arms being provided with means for locking the supplemental step in the raised position, and for lowering it when desired, substantially as shown and described.

**No. 57,037. Horse Collar.** (Collier de cheval.)



George A. Rudd, Toronto, Ontario, Canada, 13th August, 1897; 6 years. (Filed 24th July, 1897.)

*Claim.*—A horse collar or like article having a casing or cover, a stuffing composed of a combination of hair, cork and straw as set out above, and also a contrivance for the ventilation of the collar by eyelets inserted in the outside or face of it.

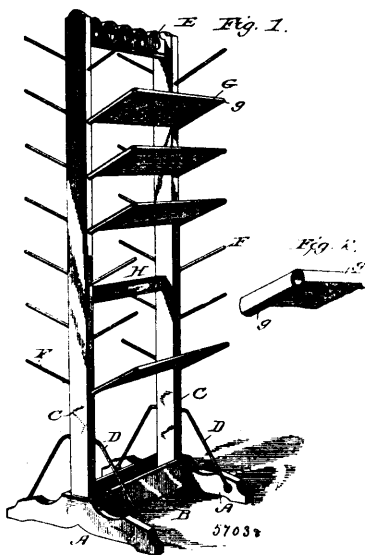
**No. 57,038. Dry Goods Display Rack.**

(Ratelier d'étalage pour marchandises.)

James P. Caldwell, Winnsboro, South Carolina, U.S.A., 13th August, 1897; 6 years. (Filed 28th June, 1897.)

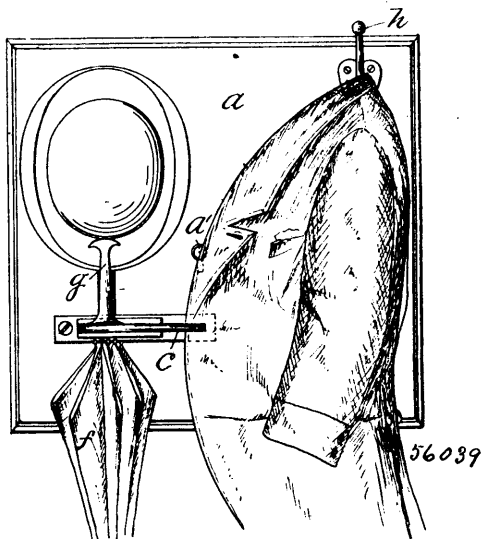
*Claim.*—1st. A rack for dry goods, comprising the two base pieces A A, the two cross-pieces B B, connecting them, the two uprights

secured to the base-pieces between said cross-pieces, the connecting cross-piece at the top of the uprights, the rods secured to opposite



sides of the uprights and inclined upwardly relatively thereto, and the sheet metal shelves each of which is formed integrally with tubular opposite ends which enclose the rods and slide longitudinally in an inclined direction thereon, and each of which has a tubular front edge, substantially as described. 2nd. The combination of the two vertical standards or uprights, a base to which they are secured, the rods secured to opposite sides of the uprights and inclined upwardly relatively thereto, and the sheet metal shelves, each of which is formed integrally with a tubular front edge and tubular opposite ends to stiffen it, to avoid sharp edges and to enclose the rods and slide longitudinally thereon, substantially as described.

**No. 57,039. Rack. (Ratelier.)**

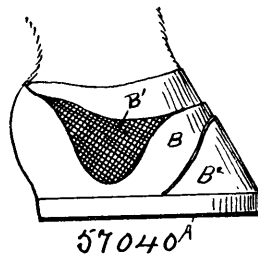


George Harry Thomas, Latrobe, Pennsylvania, U.S.A., 13th August, 1897; 6 years. (Filed 5th July, 1897.)

*Claim.*—1st. A rack comprising a base, an umbrella-holder consisting of a spring-clasp movably secured in the hasp base, a coat support comprising a hook, an opening in the end of the hasp base, for receiving the end of the swinging hasp which passes through the button-hole of the coat, said swinging hasp to lock and close the umbrella-holder and hat protector and to pass through a button-hole of a coat and be locked within said opening for the purpose set forth. 2nd. A rack comprising a base, an umbrella-holder consisting of a spring-clasp movably secured in the hasp base, a coat support comprising a hook, an opening in the end of the hasp-base, for

receiving the end of the swinging hasp which passes through the button-hole of the coat, said swinging hasp to lock and close the umbrella-holder and hat protector and to pass through a button-hole of a coat and be locked within the opening, the hat protector comprising a hook formed integral with the swinging hasp and a downwardly projecting arm which registers with said hasp, and suitable locking means, substantially as and for the purposes shown and described.

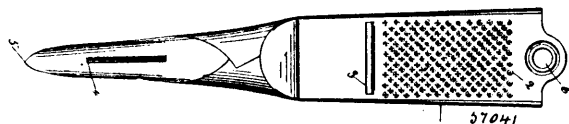
**No. 57,040. Detachable Horseshoe. (Fer à cheval.)**



Ernest F. Pfeuger, Akron, Ohio, U.S.A., 13th August, 1897; 6 years. (Filed 12th July, 1897.)

*Claim.*—1st. The herein-described detachable horseshoe, consisting of a flexible boot portion adapted to be held around the hoof, and having at its lower edge a series of inwardly-projecting metallic lugs, and a tread portion consisting of a thick pad of soft yielding material or character and adapted to fit within the said boot portion and having in its peripheral edge a number of recesses or openings for the reception of said lugs, substantially as specified. 2nd. The herein-described horseshoe comprising an elastic boot portion designed to be slipped over the hoof and retained in place by reason of its elasticity, and provided at its lower portion with inwardly-projecting lugs or plates, and a soft flexible tread portion having peripheral recesses designed to be engaged by said lugs or plates, substantially as specified. 3rd. The herein-described horseshoe, comprising an elastic boot portion designed to be slipped over the hoof and retained in place by reason of its elasticity, and provided at its lower portion with inwardly-projecting lugs or plates, and a soft flexible tread portion having peripheral recesses designed to be engaged by said lugs or plates, substantially as specified.

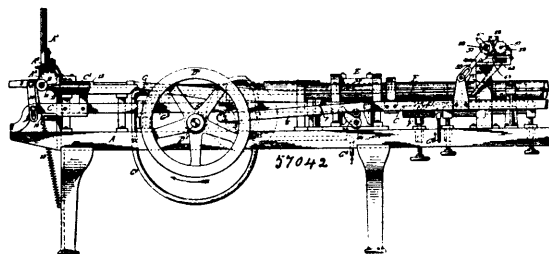
**No. 57,041. Fruit Slicer and Peeler and Nutmeg Grater. (Appareil à trancher et peler les fruits et râpe à muscade.)**



Gregory Rossler, Ottawa, Ontario, Canada, 13th August, 1897; 6 years. (Filed 15th July, 1897.)

*Claim.*—As an article of manufacture, a culinary tool comprising a grater 2, a fruit or vegetable slicer 3, a vegetable or fruit peeler 4, and a corer 5, the whole disposed so that the instrument may be conveniently handled from both ends, substantially as shewn and described.

**No. 57,042. Can-making Machine. (Machine à faire les boîtes métalliques.)**



Robert Deniston Hume, Gold Beach, Oregon, U.S.A., 14th August, 1897; 6 years. (Filed 13th May, 1897.)

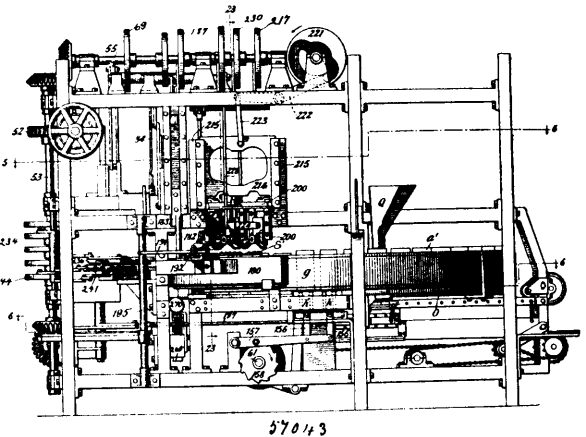
*Claim.*—1st. In an automatic can-making machine, the combination, with a can-body forming horn prolonged so as to form a guide for travelling can-bodies, of a movable extension of said horn, a can-heading chamber in line with said extension, can-head feeding devices connected to said chamber, and means for automatically regulating the feeding of said can-heads to the heading chamber, substantially as herein set forth. 2nd. In an automatic can-making machine, the combination of a can-body former, a can-header which

receives the can-bodies from said former, a can-head forming mechanism, and automatic means for transferring the can-heads from their former mechanism to the can-header, substantially as herein set forth. 3rd. In a can-making machine, a can-body former or horn prolonged to form a guide-way for tubular can-bodies, carriers for propelling such can-bodies along the horn, a movable extension or continuation of the horn, and a can-heading chamber in line with said extension; the extension constituting both a carrier for placing the can-bodies within the heading chamber, and a ram for placing the heads upon said can-bodies, substantially as described. 4th. In a can-making machine, a can-body blank cutting attachment comprising an open-bottomed holder for metal sheets, an oscillating cutter having a support for said sheets near its centre of oscillation, and means for oscillating the cutter against the protruding part of said sheet, whereby the protruding portion is cut off and carried by the same stroke to a horizontal position, and there left, substantially as described. 5th. In a can-making machine, and in combination, a can-body former or horn, carriers for propelling tubular can-bodies along said horn, a holder for metal sheets, having an open bottom through which said sheets protrude, an oscillating cutter having a support for the lower edge of said sheets, and means for oscillating said cutter against the exposed part of said sheets, whereby the cutting stroke severs a flat blank from said sheets and delivers said blanks to said carriers, substantially as described. 6th. In a can-making machine, the combination with a hollow horn slotted at top and bottom, of interior and exterior seam-closing dies, a reciprocating side-bar connected to the exterior die, and a thrust-plate in proximity to the interior die, whereby the side seam of the can-body is compressed by said dies, without strain upon said horn, substantially as described. 7th. In a can-making machine, the combination with the horn which supports the tubular can-bodies, and with heating devices, of a solder tank having a main compartment containing a soldering-iron, side compartments communicating with the main compartment into which the solder passes by overflow from the main compartment, and an automatic plunger in one of the side compartments for returning the solder to the main compartment, whereby a circulation of solder is produced, substantially as described. 8th. A machine for making cans, consisting of a can-body forming mechanism, can-head forming mechanism, can-heading mechanism, and connections between all of said mechanisms, whereby can-bodies, after being formed, are headed simultaneously at both ends, substantially as described. 9th. In an automatic can-making machine, and in combination, a horn or former for can-bodies, side-seaming and soldering devices, a can-heading chamber in line with such former, and a crimper for crimping the can-head flanges upon the can-bodies, and having a receiving opening in line with the heading chamber, substantially as described. 10th. In a can-making machine, the combination with the hollow horn or former of side-seam soldering devices adjacent to said horn, can-heading mechanism, a movable extension of the horn forming a heading-ram, and a combined gas supply pipe and connecting rod for operating said extension, substantially as described. 11th. In a can-making machine, a heading chamber adapted to contain a can-body and two can-heads in line with said body, in combination with a ram adapted to enter said chamber, and by a single stroke to head both ends of the can and drive it out of the chamber, substantially as described. 12th. In a can-making machine, a heading chamber having interior heading mechanism and forming a support for two can-heads and for a can-body in combination with a reciprocating ram adapted to enter said chamber and place a can-body in position for heading, and by the same movement to force the preceding can-body and heads through the heading mechanism and out of said chamber, substantially as described. 13th. A device for crimping can-head flanges upon can-bodies, consisting of a series of revolving and rotating can-holders, in combination with a circular crimping rim adapted to bear upon the flanges of the can-heads in said holders, substantially as described. 14th. A device for crimping can-head flanges upon can-bodies, consisting of a series of can-holding cylinders, means for revolving said cylinders step by step around a centre of revolution, means for independently rotating said cylinders, and fixed crimping rims adapted to bear upon the flanges of the can-heads, substantially as described. 15th. In a can-making machine, the combination with the heading chamber, of a ram adapted to enter and place can-bodies within said chamber, can-head feeding devices for supplying can-heads to said chamber, a movable plate or disc adapted to close the opposite end of said chamber, a driving shaft, and connections from the driving shaft for operating said ram and said movable plate, substantially as described. 16th. In a can-making machine, a body-forming horn, prolonged and having at its end a movable extension of ram, a heading chamber, a can-head feed, a rotary crimper in line with the heading chamber, a movable plate adapted to pass through the crimper and close one end of the heading chamber, and means for operating said ram and said plate, whereby said plate closes the heading chamber while the can-body is being headed, and afterwards forms, in connection with the ram, a movable clamp for the headed can being pushed out of the heading chamber and into the crimper, substantially as described. 17th. In a can-making machine, the combination with the heading chamber and with a can-head feed chute, of a pivoted lever having two arms adapted to alternately enter the chute, an arm projecting from said lever into the heading chamber, and a movable plunger or ram, which is a combined can-body carrier and heading ram, substan-

tially as described. 18th. In a can-making machine and in combination with can-body forming and can-heading mechanisms, dies for forming can-heads from flat blanks, and a discharge passage from said dies communicating with said heading mechanism, substantially as described. 19th. In a can-making machine, and in combination with can-body forming and can-heading mechanisms, dies for forming can-heads from flat blanks, chutes for supplying such can-heads to the heading mechanism, and a passage from said dies communicating with said chutes, substantially as described. 20th. In can-making machinery, a stationary die and a movable die for pressing can-heads, a feeding passage for delivering metal sheets to said dies, and a discharge passage for the pressed can-heads, both passages being arranged substantially at right angles to the line of movement of the movable die, substantially as described. 21st. In combination with the fixed female die, having a closed rear end, a pressing recess, and a discharge passage, a male die having a recessed face, and a yielding plate in said recess adapted to bear against the female die while the male die is in the said pressing recess, and to remain in contact with the female die until the male die is disengaged from said recess, substantially as described. 22nd. In combination with can-heading mechanism, die presses for forming can-heads, chutes for feeding such can-heads into the heading mechanism, cut-offs in said chutes for regulating the feed of such can-heads, and a carrier or elevator for transferring the can-heads from the presses to said chutes, substantially as described.

### No. 57,043. Bag-making and Packing Machine.

(Machine à faire et remplir les sacs.)



Henry Eyster Smyser, Brooklyn, New York, U.S.A., 14th August, 1897; 6 years. (Filed 30th June, 1897.)

*Claim.*—1st. In a packaging machine, the combination of a mechanism for making bags, means for filling the bags with material, and mechanisms for closing the tops of the bags, with carrying devices comprising a series of pockets adapted to receive the bags, to retain them until dry, and to carry them to the filling and top-closing mechanisms, and retain them during the filling and top-closing operations, whereby the bags are dried before being filled. 2nd. In a packaging machine, the combination of a mechanism for making bags, a series of moving pockets for receiving and carrying said bags, means for filling the bags with material, located sufficiently remote from the bag-making mechanism to enable the bags to dry while carried by the pockets before being filled, and mechanisms for closing the tops of the bags. 3rd. In a packaging machine, the combination of a revolving series of pockets, a bag-making mechanism having means for thrusting the completed bags into said pockets, means for filling the bags with material, located remotely from said bag-making mechanism, a drier arranged to act on the bags in their travel from the making to the filling positions, and mechanism for closing the tops of the bags. 4th. In a packaging machine, the combination of a revolving carrier wheel, a heating jacket extended along the path of travel of said pockets to constitute a drier, a bag-making mechanism having means of thrusting the completed bags into said pockets, arranged at one end of said drier, means for filling the bags with material, located at the other end of said drier, and a mechanism for closing the tops of the bags. 5th. In a packaging machine, the combination of a revolving carrier wheel, a series of pockets carried by said wheel, a table over which said pockets travel having means for heating it to constitute a drier for the bag bottoms, a bag-making mechanism having means for thrusting the completed bags into said pockets, arranged at one end of said drier, means for filling the bags with material, located at the other end of said drier, and a mechanism for closing the tops of the bags. 6th. In a packaging machine, the combination of a revolving carrier wheel, a series of pockets carried by said wheel having open outer sides, a drier consisting of a heated wall arranged to close said open sides of the pockets, a bag-making mechanism adapted to deliver the bags into said pockets with their upright seams on the open sides thereof against said drier, a means for filling the bags,

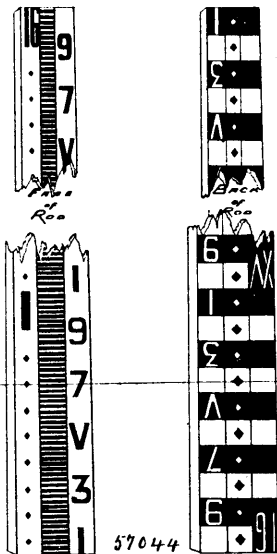
and a mechanism for closing the tops of the bags. 7th. The combination of a revolving carrier wheel, a series of pockets carried by said wheel, having each a movable wall, mounted on a radially movable slide, projecting behind the pocket, sideways in the wheel for said slides, and mechanisms for engaging said slides to move them for expanding and contracting the pockets. 8th. The combination of a revolving carrier wheel, a series of pockets carried by said wheel, having each a movable wall, mounted on a radially movable slide, the said pockets constructed with sections or castings between each two pockets forming the side walls thereof, and radial slideways in which said slides may move. 9th. The combination of a revolving carrier wheel P, sections or castings 133 fixed thereto having walls 133 and sideways 134, and movable walls f between the pairs of castings, mounted on slides 136 confined between said castings and movable in said ways. 10th. The combination of a revolving carrier wheel, a series of pockets carried by said wheel, having each a movable wall, mounted on a radially movable slide, projecting lugs on said slides, and mechanisms for contracting or expanding the pockets adapted to engage said lugs to move the slides out or in. 11th. The combination of a revolving carrier wheel, a series of pockets carried by said wheel, having each a movable wall, mounted on a radially movable slide, projecting lugs on said slides, and a mechanism for expanding and contracting the pockets consisting of a radially movable part 162 having projections 161 and 167 receiving said lugs between them and movable against the lug to displace the slide first in one direction to expand the pocket and then in the contrary direction to contract it. 12th. The combination of a revolving carrier wheel, a series of pockets carried by said wheel, having each a movable wall, mounted on a radially movable slide, projecting lugs on said slides, and a mechanism for expanding the pockets consisting of a stationary cam 168 arranged at a point in the rotary path of the pockets to be encountered by said lugs in passing, and by impingement upon them to displace them and thereby move the slides back. 13th. The combination of a revolving carrier wheel, a series of pockets carried by said wheel, having each a movable wall, mounted on a radially movable slide, and a mechanism for contracting the pockets consisting of a stationary cam 170 arranged to be encountered by said slides in passing, and by impingement upon them to displace them and thereby move the slides forward. 14th. The combination of a series of movable pockets, a bag-making mechanism adapted to deposit bags in said pockets, and a table extending beneath said pockets, over which the bags are carried by the pockets, arranged in an incline relatively to the pockets so that as the bags are moved over the table the latter approaches closer to the pockets and thereby exerts a continued pressure against the bag bottoms. 15th. The combination of a series of movable pockets, a bag-making mechanism adapted to deposit bags in said pockets, means for contracting the pockets to grasp the bags, a table extending beneath said pockets, over which the bags are carried by the pockets, arranged on an incline relatively to the pockets so that as the bags are moved over the table the latter approaches closer to the pockets and thereby exerts a continued pressure against the said bottoms while the bags are grasped by the pockets, and means for expanding said pockets to release the bags. 16th. The combination in a packaging machine, of a bag-making mechanism, a series of movable pockets receiving the bags therefrom and carrying them to a filling position, means for filling the bags in said latter position, mechanism for closing the tops of the bags, and a stationary table extending beneath said bags, over which the bags are carried by the pockets to the filling position, and a skeleton extension of said table at the filling position and extending thence to the top closing position, consisting of a narrow rail or rails supporting the bag bottoms and over which the filled bags are caused to slide by the movement of the pockets, whereby any material that may spill or leak from the bags or pockets is discharged from said narrow rails. 17th. The combination of a revolving carrier wheel, a series of pockets carried by said wheel, a series of notches in said wheel corresponding in spacing with said pockets, and a mechanism for intermittently rotating said wheel and holding it stationary between its movements, consisting of a radial arm, a propelling bolt carried thereby and movable radially to enter or leave said notches, a cam and lever engaging said radial arm for swinging it at intervals, a locking bolt movable in stationary bearings to enter or leave said notches, a two-armed lever having one arm connected to the propelling bolt and the other to the locking bolt, to move them oppositely, and a cam for moving said lever at intervals between the movements of the arm. 18th. The combination with carrier wheel P, having notches 137, of swinging arm 141, bolt 138, cam 145 for swinging said arm, locking bolt 139, two-armed lever 146, connections between the opposite arms thereof and said bolts, with a lost-motion device in one of said connections, and a cam 148 for moving said lever. 19th. The combination of paste vessel 62, paste plate C, slide 65 carrying it, cam 69, and intermediate connections for imparting vertical motion to said plate, scraper 64, oscillatory shaft 70 carrying it, cam 74 and intermediate connections for oscillating said shaft to cause said scraper to move over the paste plate. 20th. In a bag-making machine, a folder for making the first fold in one end of the bag, consisting of a plate, and mechanism for moving it adapted to impart to it a swinging movement while it is folding in the paper, and a sliding movement while it is being retracted from the bag. 21st. In a bag-making machine, the combination with a former and means for forming a paper tube

around it, of a folder H, for first turning in the bottom of the tube, consisting of a hinged plate, a slide movable transversely to said former to which said plate is hinged, mechanism for advancing and retracting said slide and for swinging said folder relatively thereto, so that the folder executes a swinging movement while folding in the paper and a sliding movement while retracting from the bag, and folders for completing the formation of the bag bottom. 22nd. In a bag-making machine, the combination with former F, of swinging folder H, slide H<sup>1</sup>, to which said folder is hinged, cam 98, connected to reciprocate said slide, and cam 101, connected to swing said folder H, constructed and adapted to cause said folder to swing from approximately an upright to a horizontal position while folding in the paper against said former, to slide out horizontally while being retracted, and to subsequently swing back to the upright position. 23rd. In a bag-making machine, the combination with former F, of first folder H, wing folders I, I, and back folder J, with driving mechanisms for operating them adapted first to advance and swing up the folder H, against the under side of the former, then to advance the wing folders I, I, along its sides while turned inwardly, then to oscillate these wing folders to cause them to turn outwardly in opposite directions, at the same time to slide out horizontally the first folder H, and advance the back folder J, beneath the former, then to swing inwardly the wing folders and simultaneously withdraw the folder J, then to retract the wing folders until they are drawn back of the first folder H, and finally to swing this folder down ready for the next operation. 24th. In a packaging machine, the combination of a bag-making mechanism, carriers for the bags, means for filling the bags with material, gumming mechanism for applying adhesive to the open tops of the filled bags, and a top closing mechanism for subsequently folding in the gummed tops of the bags. 25th. In a packaging machine, the combination of bag-making mechanism, carriers for the bags, means for filling the bags with material, gumming mechanism for applying adhesive to the open tops of the filled bags adapted to apply adhesive by successive movements in successive positions of the bag to separate portions of the top thereof, and a top closing mechanism for subsequently folding in the tops of the bags. 26th. In a packaging machine, the combination with pockets for carrying filled open-mouthed bags, of a top gumming mechanism comprising a vessel containing adhesive, a dabber movable to apply adhesive to the open tops of the bags in said pockets, means for applying adhesive to the dabbers, and a top closing mechanism for subsequently folding in the tops of the bags. 27th. In a packaging machine, the combination with means for carrying filled open-mouthed bags, of a top gumming mechanism consisting of a vessel containing adhesive, a dabber, means for applying adhesive thereto, said dabber constructed with folding wings adapted to stand open while receiving adhesive, movable relatively to the bag so that one wing enters the open top thereof while the other is exterior thereto, and said wings adapted to close upon the bag to press the latter between them in applying adhesive thereto. 28th. In a packaging machine, the combination with means for carrying filled open-mouthed bags, of a top gumming mechanism comprising a plurality of dabbers, means for applying adhesive to said dabbers, and means for moving the dabbers to apply the adhesive to the bags, said dabbers constructed to apply the adhesive simultaneously to different bags and in different positions relatively to the bags, whereby each bag receives adhesive in different positions by successive movements of the dabbers. 29th. In a packaging machine, the combination with means for carrying filled open-mouthed bags, of a top gumming mechanism comprising three successive dabbers, means for applying adhesive to said dabbers, and means for moving the dabbers to convey adhesive to the bags, the said dabbers constructed one to apply adhesive to the right side of the bag, another to apply it to the left side thereof, and the third to apply it to the rear side thereof, whereby by the action of the three dabbers the bag receives adhesive on three sides of its top or mouth. 30th. In a packaging machine, the combination with means for carrying filled open-mouthed bags, of a top gumming mechanism comprising three successive dabbers, means for applying adhesive to said dabbers, and means for moving the dabbers to convey adhesive to the bags, the said dabbers constructed each with folding wings standing open to receive adhesive, and closing together to press the bag between them in applying the adhesive, and the respective dabbers adapted to apply the adhesive, one to the right side of the bag, another to the left side thereof, and the third to the rear side thereof. 31st. In a packaging machine, the combination with means for carrying filled open-mouthed bags, of a top gumming mechanism comprising three successive dabbers, means for applying adhesive to said dabbers, and means for moving the dabbers to convey adhesive to the bags, the said dabbers constructed each with folding wings standing open to receive adhesive, and closing together to press the bag between them in applying the adhesive, and the respective dabbers adapted to apply the adhesive the one to the inner and outer surfaces of the right side of the bag, the second to the outer and inner surfaces of the left side thereof, and the third to the inner surface of the rear side thereof. 32nd. In a packaging machine, the combination with means for carrying filled open-mouthed bags, of a top gumming mechanism comprising three successive dabbers R, R, each constructed with folding wings r r, the said dabbers movable from an adhesive-receiving position with their wings extended to an adhesive-applying position, with their wings closed against the tops of the bags, mechanism for so moving the dabbers, a vessel containing adhesive, and a plunger S movable into the adhesive and out therefrom and into



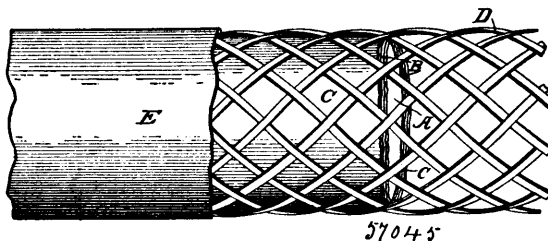
contact with the dabbers, said plunger having gumming plates or surfaces  $s^1$ ,  $s^2$ , for applying adhesive to limited portions of the surfaces of the dabber  $R^1$ , having surfaces  $s^3$ ,  $s^4$ , for applying adhesive to limited portions of the dabber  $R^2$ , and having surface  $s^5$  for applying adhesive to limited portions of the dabber  $R^3$ . 33rd. In a packaging machine, a top closing mechanism comprising a folder for making the first fold in the top of the package consisting of a swinging plate  $T$ , and mechanism for moving it, adapted to impart to it an advancing and swinging down movement while it is being retracted. 34th. In a packaging machine, a top closing mechanism comprising a folder for making the first fold in the top of the package consisting of a swinging plate  $T$ , a slide to which said plate is hinged, movable horizontally, mechanism for advancing and retracting said slide and for swinging said folder relatively thereto, so that the folder executes a swinging down movement while advancing to fold in the paper, and a sliding movement while retracting, and folders for completing the folding in of the top of the package. 35th. In a packaging machine, mechanisms for folding in the top of the package comprising the first folder  $T$ , a slide  $T^1$  to which it is hinged, a cam and connections for imparting longitudinal movement to said slide, a link 235 engaging said folder, and a cam 240 with connections to said link for imparting swinging movements to said folder, said cams constructed and adapted to cause said folder to swing up, to advance and swing down to the horizontal while folding in the paper, and to slide out horizontally in retracting. 36th. In a packaging machine, a top closing mechanism comprising folders for folding in the top of the bag, a supporting plate  $i$  on which the bag rests during the folding operation, mounted to be vertically movable, a spring for pressing up said plate, and an adjustable stop for limiting the height to which the plate can be raised by the spring. 37th. In a packaging machine, a top closing mechanism comprising folders for folding in the top of the bag, a supporting plate  $i$  on which the bag rests during the folding operation, mounted to be vertically movable, a spring 269 for pressing up said plate, and an adjusting screw 267 having a stop shoulder 268 for limiting the height to which the plate can be raised by the spring. 38th. In a packing machine, the combination with carrying pockets  $N$ ,  $N$ , and a top closing mechanism comprising as one of its elements a plunger  $W$  adapted to complete the pressing down of the flaps, a pair of vertically moving plungers  $X$  and  $Y$  adapted to receive the closed package between them, the upper plunger  $X$  constructed to lift sufficiently above the package during the movement of the package beneath it to clear said flaps, and movable down upon the package to again press down said flaps, and the plungers  $X$  and  $Y$  movable simultaneously to carry the package out of the pocket, and mechanism for so moving them. 39th. In a packaging machine, the combination with carrying pockets and a top closing mechanism, of a conduit  $A^1$ , vertically moving plungers  $X$  and  $Y$  adapted to receive the closed package in the pocket between them, and movable simultaneously to expel said package from the pocket, and a pusher  $Z$  movable to thrust the package from between said plungers and enter it into said conduit. 40th. In a packaging machine, the combination with carrying pockets and a top closing mechanism, of a conduit  $A^1$ , vertically moving plungers  $X$  and  $Y$  adapted to receive the closed package in the pocket between them, and movable simultaneously to expel said package from the pocket, and carry it to the level of said conduit, said conduit formed with a top plate  $m$  extending closely adjacent to the position assumed by the top plunger  $X$  at said movement, and a pusher  $Z$  movable to thrust the package from between said plungers and enter it into said conduit, whereby in this movement the top flaps of the package are confined by said top plate on passing out from under said plunger. 41st. The combination of pockets  $N$ ,  $N$ , vertically moving plungers  $X$ ,  $Y$ , and horizontally moving pusher  $Z$ , said plungers adapted to expel packages from the pockets by a vertical movement, and said pusher adapted to expel the package from between said plungers by a horizontal movement. 42nd. The combination with pockets  $N$ ,  $N$ , of vertically moving plungers  $X$ ,  $Y$ , movable downward simultaneously, horizontally movable pusher  $Z$ , the slides for the plunger  $Y$  and pusher  $Z$  constructed the former to one side of the path of the pusher when the plunger is elevated, and the latter to one side of the path of the plunger when the pusher is advanced, and driving mechanism for the plungers and pusher adapted to first move the plungers downward simultaneously, then advance the pusher between the plungers, then elevate the plungers, and finally retract the pusher. 43rd. The package drying conveying conduit  $A^1$ , consisting of a trunk, an endless conveyer belt mounted to travel along the bottom of said trunk, and an endless belt mounted to travel at the same speed along the top of said trunk, and means for elastically pressing said top belt downwardly upon the tops of the packages, consisting of a series of rollers  $p^1$ , a movable frame  $t$  carrying said rollers, and springs  $t^2$  pressing said frame downwardly. 44th. In a packaging machine, the combination with pockets  $N$ ,  $N$ , and a stationary table  $O$  over which they move, of brushes 325 between the pockets arranged to sweep over said table.

Claim.—1st. The application of an inverted graduated scale to the back, half face or side of an ordinary graduated levelling rod,



such as is commonly used by engineers, substantially as described, for the purpose of checking rod readings by means of complementary readings. 2nd. On any ordinary levelling rod, such as is used by engineers, two distinctively coloured graduated scales inverted with respect to each other, and so that the sum of the readings of the two scales at any one height on the rod will equal the whole length of the rod, substantially in the manner and for the purpose hereinbefore set forth.

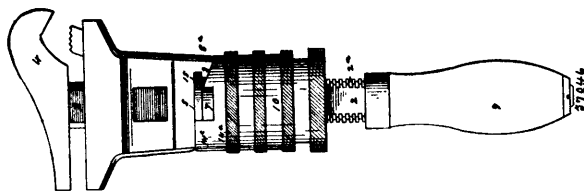
**No. 57,045. Hose Covering. (Couvercle de boyaux.)**



Robert Kelso and Morris Rosenbaum, both of Philadelphia, Pennsylvania, U.S.A., 14th August, 1897; 6 years. (Filed 22nd March, 1897.)

Claim.—1st. An interlaced metallic tubing to be used as a cover for hose or tubing of any manufacture to retain liquid or gas. 2nd. As a new manufacture, a hose or other flexible tubing, consisting of suitable liquid retaining layers, and interwoven strips surrounding said layers, as specified. 3rd. As a new article of manufacture, a covering for a hose and the like, consisting of a series of flexible metallic strips interwoven around said hose so as to bend therewith. 4th. A series of flexible strips interwoven around a hose, and a suitable covering surrounding said strips, substantially as shown and described.

**No. 57,046. Wrench. (Clé à écrou.)**



Richard S. Sample and Joseph E. Paul, assignees of Richard S. Sample, all of Huntington, West Virginia, U.S.A., 14th August, 1897; 6 years. (Filed 25th May, 1897.)

Claim.—1st. In a wrench of the kind described, an attachment therof, consisting of a rotatory body connected with the shank-engaging sleeve, adapted, when rotated, to move the said sleeve into a locked position with the shank, or free from engagement therewith,

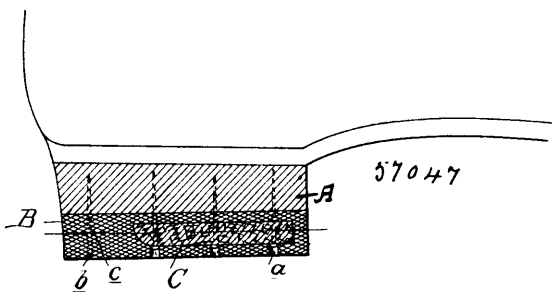
**No. 57,044. Graduation of Levelling Rods.**

(Appareil de nivellement.)

Arthur Edmund Breton Hill, New Westminster, British Columbia, Canada, 14th August, 1897; 6 years. (Filed 15th June, 1897.)

and arranged to hold such sleeve in such position, as set forth. 2nd. In a wrench of the kind described, the combination with the shank, the sleeve connected therewith and the sliding jaw connected with the sleeve, of a rotary member connected to the sleeve and having a vertical movement thereon, said rotary member having lock portions adapted to engage the sliding jaw and hold it to its adjusted position, substantially as shown and described. 3rd. In a wrench, the combination with the shank, the sleeve and the sliding jaw connected with the sleeve, of the outer rotary sleeve secured to turn with the inner sleeve, said rotary sleeve having vertical movement on the inner sleeve, and provided on its upper edge with lock and stop portions to limit the rotary movement of the wrench body and lock the sliding jaw to its adjusted positions. 4th. In a wrench as described, the combination with the shank, the inner sleeve having segment cogs or teeth to engage the tooth shank and an annular groove in its upper end, and provided with vertical slots, and the sliding jaw having a pendent member, having a flange to engage the annular groove in the inner sleeve, of the outer rotary sleeve, said sleeve having projections 14, 15 and 16 at the top, a recess 14<sup>a</sup> and an inclined portion connected with such projections, the screws secured to the rotary member and projected into the slots in the inner sleeve, and the spring for holding the outer sleeve forced normally upward, all being arranged substantially as shown and described.

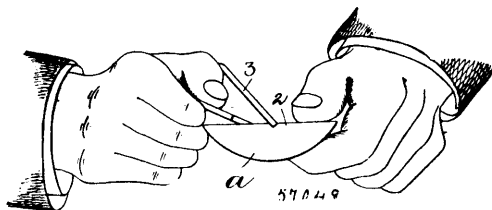
**No. 57,047. Cushioned Heel Plate for Boots and Shoes.**  
(*Plaque pour talons de chaussures.*)



The McKay Neverslip Sole Co., assignee of Robert McKay, both of Detroit, Michigan, U.S.A., 14th August, 1897; 6 years. (Filed 24th July, 1897.)

*Claim.*—In a cushion heel for boots or shoes, the combination of a heel plate of rubber conformable to the heel and adapted to form a complementary part thereof, and a truncated heel plate of non-elastic material embedded therein and forming a core for the forward portion of the rubber plate, the segmental rear portion being of solid rubber. 2nd. As a new article of manufacture, a cushion heel plate adapted to form a complementary part to the heel of a boot or shoe and composed of rubber, and of a block of wood truncated in relation to the shape of the heel plate and embedded in the forward portion thereof, the segmental rear portion being of solid rubber. 3rd. In a cushion heel for boots or shoes, the combination of the rubber plate B, the truncated wood body C embedded in its forward portion and united with the rubber, the countersinks *a* formed through the outer skin of rubber and the countersinks *b* in the solid rear portion of the rubber plate, combined with the washers *c* embedded therein.

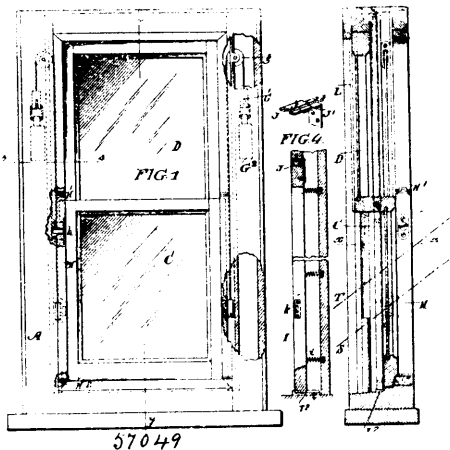
**No. 57,048. Eyeglass Case.** (*Etui de lorgnon.*)



The American Spectacle Case Co., assignee of Joseph Zepherin LePage, both of New York, State of New York, U.S.A., 14th August, 1897; 6 years. (Filed 7th June, 1897.)

*Claim.*—An elongated eyeglass case comprising a dished side or body, and a longitudinally divided flat side, one section of the flat side being affixed to the dished side and forming a thumb-rest, while the other section constitutes a movable lid which is located beside and is hinged to the said thumb-rest, the said lid when opened permitting a pair of eyeglasses to be moved edgewise, without folding, into or out of the case.

**No. 57,049. Window Structure.**  
(*Construction de fenêtres.*)

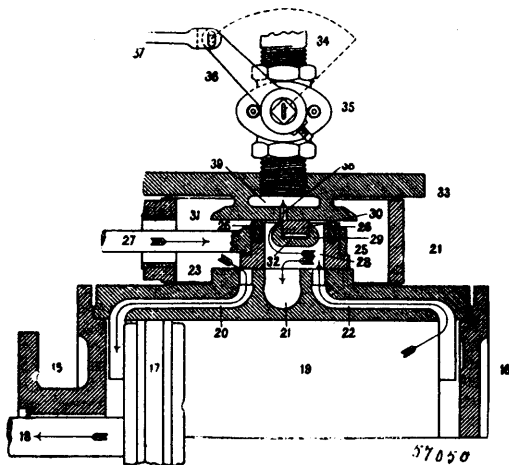


The Philadelphia Safety Window Co., Camden, New Jersey, assignee of Matthew Stochart, Philadelphia, Pennsylvania, both in the U.S.A., 14th August, 1897; 6 years. (Filed 20th July, 1897.)

*Claim.*—1st. In a window structure the combination of the main frame formed on each side with the weight boxes having the pulley stile provided with two vertical supplemental grooved guide strips forming a vertical space between them, adjustable parting strips adapted to the vertical spaces between the guides so as normally to project beyond the said strips, removable inside beads upon the inside of the main frame to project beyond the grooved guides, sash-hangers guided in the grooves of the guide strips, sash-cords or bands connected to the sash hangers and counterweighted by weights in the weight-boxes, and sashes journalled or pivoted to said sash-hangers. 2nd. In a window structure, the combination of the main frame formed on each side with the weight boxes having the pulley stile provided with two vertical supplemental grooved guide strips forming a vertical space between them, adjustable parting strips adapted to the vertical spaces between the guides so as normally to project beyond the said strips, permanent or fixed weather strips upon the upper portion of each side of the main frame outside of the guide strips, sash-hangers guided in the grooves of the guide strips, sash-cords or bands connected to the sash hangers and counterweighted by weights in the weight boxes, and sashes journalled or pivoted to said sash-hangers. 3rd. In a window structure, the combination of the main frame formed on each side with the weight boxes having the pulley-stile provided with two vertical supplemental grooved guide-strips forming a vertical space between them, adjustable parting strips adapted to the vertical spaces between the guide-strips so as normally to project beyond the said guide-strips, springs to force the parting strips out into normal position, removable inside beads upon the inside of the main frame to project beyond the supplemental grooved guide strips, permanent or fixed weather strips upon the upper portions of each side of the main frame outside of the supplemental grooved guide strips, means independent of the inside beads for holding the parting strips out of normal position, sash-hangers guided in the grooves of the guide-strips, sash-cords or bands connected to the sash-hangers and counterweighted by weights in the weight boxes and sashes journalled or pivoted to said sash-hangers. 4th. In a window structure, the main frame having its sides made of the box-frame A, having the pulley stile A<sup>1</sup>, supplemental grooved guides B, B<sup>1</sup>, fitted to the pulley stile and forming a groove between them, and adjustable parting strips I movable between the grooved guides, in combination with sash-hangers fitted to the grooved guides and movable therein, and sashes pivoted in the sash-hangers. 5th. In a window structure, the main frame having its sides made of the box-frame A having the pulley-stile A<sup>1</sup>, supplemental grooved guides B, B<sup>1</sup>, fitted to the pulley stile and forming a groove between them, adjustable parting strips I movable between the grooved guides, means to hold the parting strips out of normal position, and removable inside beads H detachably secured to the box-frame, in combination with sash-hangers fitted to the grooved guides and movable therein, and sashes pivoted in the sash-hangers. 6th. In a window structure, the combination of the main frame having upon each side removable inside beads and adjustable parting strips and further having vertical supplemental grooved guides upon each side of the parting strips, and outside weather strips upon its outer and upper half, with sash hangers guided in said grooved guides, counterweights for lifting the sash-hangers, and window sashes journalled or hinged to said sash-hangers and sustained by the counterweights. 7th. In a window structure, the main frame having each of its upright sides formed of a box-frame upon the pulley stile of which are secured vertical supplemental grooved guide-strips extending slightly beyond the box frame upon

the inside and an adjustable parting strip arranged between the supplemental grooved guide-strips and guided thereby, in combination with sash-hangers guided in said supplemental grooved guide-strips, sashes, pivoted or journaled in said sash-hangers, and removable inside beads secured to the box frame and extending inward beyond the inner faces of the grooved guides so as to prevent passage of dust and air between the guides and sash into the room. 8th. In a window structure, the combination of the main frame having adjustable inside beads and parting strips and vertical guides upon each side of the parting strips, with sash-hangers guided in such guides, window sashes journaled or hinged to said sash-hangers and thin outside weather strips carried by the main frame and fitting into a recess in the outer face of the upper sash when in normal position. 9th. In a window structure, the combination of the main frame provided with adjustable parting-strips and inside beads with a vertically adjustable upper window sash journaled at its sides exterior to the parting strips and beads, counterweights for said sash, and thin outside weather strips carried by the main frame and fitting into a recess in the outer face of the frame of the upper sash when in normal position. 10th. In a window structure, the combination of the main frame having upon each side vertical guides B B' with intermediate adjustable parting strips I, springs *i* to force the parting strips outward into normal position, removable inside beads H, means to normally hold the said beads in position, vertically moving window sashes, counterweighted or sash-supporting devices, and trunnion connections between the sash-weight-supporting devices and the window sashes arranged in the vertical grooves of the main frame. 11th. In a window structure, the combination of the main frame having upon each side vertical guides B, B', with intermediate adjustable parting strips I, springs *i* to force the parting strips outward into a normal position, removable inside beads H, means to normally hold the said beads in position, vertically moving window sashes, counterweighted or sash-supporting devices, trunnion connections between the sash weight-supporting devices and the window sashes arranged in the vertical grooves of the main frame and outside weather strips L secured to the main frame and projecting over the upper sash when in normal closed position. 12th. In a window structure, the combination of the main frame having upon each side adjustable spring-actuated parting-strips and detachable inside beads and vertical fixed supplemental grooved guide strips between them, means for holding the adjustable parting strips out of normal position against the action of the springs, independent means for holding the inside beads in normal position, sash hangers fitted to and movable in said grooved guides and counterweighted, and a sash hinged or journaled upon the said sash-hangers whereby it is guided vertically independent of the parting strips or inside beads. 13th. In a window structure, the combination of the main frame having removable inside beads and adjustable parting strips upon each side of the window frame partly rigid and partly adjustable, and vertical supplemental grooved guide-strips upon each side of the adjustable parting strips, means for holding the adjustable parting beads out of normal position, independent means for holding the inside beads in normal position, sash-hangers guided in said supplemental grooved guide-strips, and upper and lower window sashes journaled or hinged upon said sash-hangers.

**No. 57,050. Engine Valve. (Soupape de machine.)**

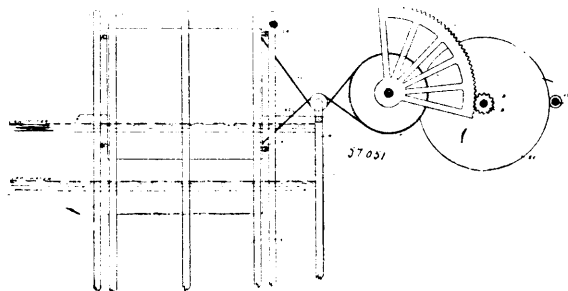


Henry Roland Fay and Chester Ellridge Fay, both of Boston, Massachusetts, U.S.A., 14th August, 1897; 6 years. (Filed 23rd July, 1897.)

*Claim.*—1st. In a steam engine, the combination of a steam cylinder provided with main and auxiliary exhaust ports, and a valve for directing the exhaust to the main port, and for controlling the auxiliary port without interference with the regular exhaust. 2nd. In a steam engine, the combination of a steam cylinder pro-

vided with main and auxiliary exhaust ports, and a valve directing the exhaust steam to the main exhaust, and intermittently opening and closing the auxiliary exhaust port, while the main exhaust port is open. 3rd. In a steam engine, the combination of a steam cylinder provided with main and auxiliary exhaust ports, and a main valve for directing the exhaust to the main exhaust port, said main valve carrying an auxiliary valve carried and operated by the main valve for controlling the auxiliary port without interference with the regular exhaust. 4th. In a steam engine, the combination of a steam cylinder provided with main and auxiliary exhaust ports, a valve for directing the exhaust to the main port, and for controlling the auxiliary port without interference with the regular exhaust, and an auxiliary exhaust pipe connected with the exhaust port. 5th. In a steam engine, the combination of a steam cylinder provided with main and auxiliary exhaust ports, a valve for directing the exhaust to the main port, and for controlling the auxiliary port without interference with the regular exhaust, and an auxiliary exhaust pipe connected with the exhaust port, and provided with an auxiliary regulating cock. 6th. In a steam engine, the combination of a steam cylinder provided with a valve seat, and admission and main exhaust ports connecting said valve seat with the interior of the cylinder, a steam chest mounted on said cylinder and surrounding said valve seat, the cover of said steam chest being provided with a balance plate having an auxiliary exhaust port, and a slide valve operating between said valve seat and balance plate for directing the exhaust to the main exhaust port, and for controlling the auxiliary port without interference with the regular exhaust. 7th. In a steam engine, the combination of a cylinder having main and auxiliary exhaust ports, a valve for directing the exhaust to the main port and for controlling the auxiliary port, an auxiliary exhaust pipe connected with the auxiliary exhaust port, and a regulating cock for said auxiliary exhaust pipe.

**No. 57,051. Tide Motor. (Moteur actionné par la marée.)**



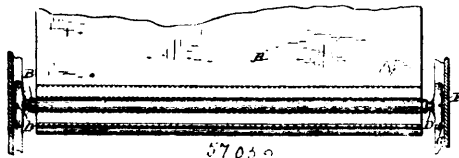
Eli E. Sager and Peter Gilley, both of Duluth, Minnesota, U.S.A., 17th August, 1897; 6 years. (Filed 28th May, 1897.)

*Claim.*—1st. The combination with the vertical guides, and a float body mounted for vertical movement therein, of a pulley located at one side of the float body, a drum rotatably supported in advance and in line therewith, cables connected to the float body, near the upper and lower ends thereof and passed in reverse directions about the pulley and beyond the same passed in reverse directions about and fastened to the drum, a toothed sector rocked by the drum, and a train of gearing operated by and connected to the sector, substantially as set forth. 2nd. The combination with vertical guides, and a float body mounted for vertical movement therein, of a plurality of pulleys located at the side of the float body, a corresponding number of drums supported for rocking and aligning with the pulleys, pairs of cables connected to the upper and lower ends of the float body, and passed in reverse directions about the pulleys and beyond the same, passed in reverse directions around and secured to the drums, a shaft for supporting the drums, and means for conveying motion therefrom, substantially as specified. 3rd. The combination with the series of guide posts or standards located as shown, the float body, and the antifriction rollers mounted on the latter and riding over the posts, of the breakwater, the bearings supported thereon, the pulleys journaled therein, the opposite side frames, the main shaft mounted in bearings thereon, the large drum carried by the main shaft, the pairs of the cables connected to the upper and lower ends of the float body and passed in reverse directions about the pulley and beyond the same in reverse directions about and secured to the drums, toothed segments of greater diameters than the pulleys, and drums mounted on the main shaft, a transverse shaft journaled in the side frames, small gears carried thereby and meshed with the sectors, large gears carried by the transverse shaft, a crank shaft journaled in bearings of the side-frames, small gears carried thereby and driven by the gears of the transverse shaft, and a pitman rod connected to the crank portion of the crank shaft, substantially as specified.

**No. 57,052. Shade or Curtain. (Persienne ou rideau.)**

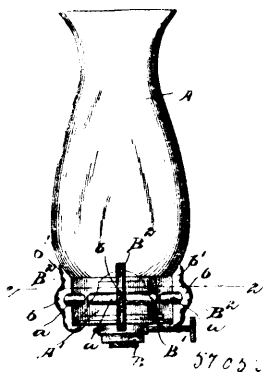
The E. T. Burrows Company, assignee of Pywell Vincent, both of Portland, Maine, U.S.A., 16th August, 1897; 6 years. (Filed 24th July, 1897.)

*Claim.*—1st. In a shade holding device, the combination with a shade stick, of boxes at the ends thereof, antifriction surfaces at or



near the ends of the boxes, shoes pivotally supported in the boxes between the antifriction surface and a spring or springs for pressing the shoes outward, substantially as described. 2nd. In a shade holding device, the combination with a stick, of pivoted friction shoes at the ends of the stick, means for forcing the shoes outward, and antifriction means above and below the shoes, substantially as described. 3rd. In a shade holding device, the combination with a stick, of oblong friction shoes pivotally supported and carried by the stick, antifriction devices above and below the pivotal plane of the shoes, and means for forcing the shoes outwardly.

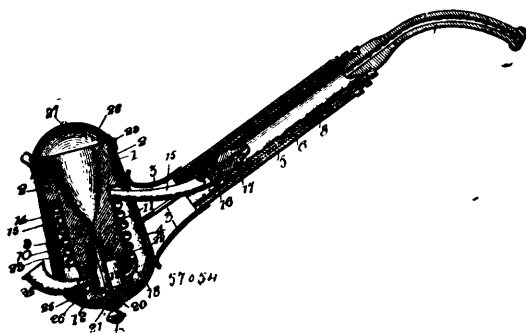
**No. 57,053. Burner for Lamps.**  
(*Bec de lampes.*)



Cecil R. Blundell, Waynesborough, Virginia, U.S.A., 16th August, 1897; 6 years. (Filed 18th June, 1897.)

*Claim.*—1st. The combination with the lamp-chimney A having cylindrical lower portion A<sup>1</sup> provided with segmental ribs a around the middle of said cylindrical portion, having rounded ends a<sup>1</sup>, and having guide passages a, o, between the ends of said ribs; of the burner B having base B<sup>1</sup>; rigid holding arms B<sup>2</sup> secured to said base, and having curved portions b adapted to fit over said ribs a, and flaring ends b<sup>1</sup> serving as guides for said holding arms and as supports for the body of the chimney, substantially as described.

**No. 57,054. Tobacco Pipe. (Pipe.)**



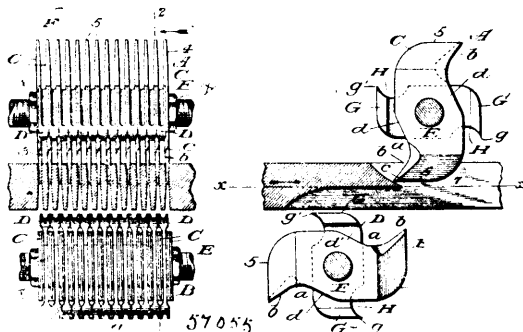
John Sigurdson, Glenboro, Jacob Gurdmundson, Gurdmundur J. Jonasson, both of Winnipeg, and Runy Magnusson, also of Winnipeg, all in Manitoba, Canada, 16th August, 1897; 6 years. (Filed 18th June, 1897.)

*Claim.*—1st. A pipe having a bowl, an extensible stem carrying a mouth-piece, and a flexible conductor connecting the mouth-piece with the interior of the bowl, substantially as specified. 2nd. A pipe having a bowl, an extensible stem carrying a mouth-piece, and a flexible conductor of uniform or permanent length connecting the mouth-piece with the interior of the bowl, substantially as specified. 3rd. A pipe having a bowl, an extensible stem carrying a mouth-piece, a flexible conductor for conveying smoke from the bowl, and a moisture-collecting chamber interposed between the mouth-piece

and the conductor and carried by the stem, substantially as specified. 4th. A pipe having a bowl, an extensible stem having a plurality of telescoping members, the interior of one of which forms a moisture-collecting chamber, a mouth-piece communicating with the moisture-collecting chamber, and a flexible tube communicating with the mouth-piece through said moisture-collecting chamber and connected with the tobacco receptacle of the bowl, substantially as specified. 5th. A pipe having a bowl, an extensible stem comprising a plurality of telescoping members of which the inner member carries a mouth-piece and the outer member is connected by spaced arms with the bowl, a plug removably fitted in the opposite end of said inner pipe-stem member from the mouth-piece and provided with a nipple, and a flexible smoke-conductor fitted at one end upon said nipple in communication with the inner pipe-stem member, for conveying smoke from the tobacco receptacle of the bowl, substantially as specified. 6th. A pipe having a bowl, an extensible stem carrying a mouth-piece, a flexible tube connecting the mouth-piece and bowl, and means for reeling the tube when the stem is contracted, substantially as specified. 7th. A pipe having a bowl, an extensible stem carrying a mouth-piece, a flexible tube connecting the mouth-piece and bowl, and a revoluble drum or spool around which the tube extends, and which is adapted to be turned to reel the tube when the stem is contracted, substantially as specified. 8th. A pipe having a bowl including a revoluble member, an extensible stem carrying a mouth-piece, and a flexible tube connecting the mouth-piece with the interior of the bowl and reeled upon said revoluble member, to take up slack when the stem is contracted, substantially as specified. 9th. A pipe having a bowl including a revoluble member provided with an interior tobacco receptacle, an extensible stem carrying a mouth-piece, and a flexible tube connecting the mouth-piece with said tobacco receptacle and reel exteriorly upon said revoluble pipe-bowl member, to take up slack when the stem is constructed, substantially as specified. 10th. A pipe having a bowl including an exterior shell and an enclosed revoluble member having a tobacco receptacle, an extensible stem carrying a mouth-piece and attached to the exterior shell, and a flexible tube connecting the mouth-piece with the tobacco receptacle and reeled exteriorly upon said revoluble pipe-bowl section within the shell, substantially as specified. 11th. A pipe having a bowl including an exterior shell, and an enclosed revoluble bowl-section having a tobacco receptacle, and a reduced extension forming a spool or drum, an extensible stem carrying a mouth-piece and attached to said shell, and a flexible tube connecting the mouth-piece with the tobacco receptacle and reeled upon said drum or spool within the shell, substantially as specified. 12th. A pipe having a bowl, a stem, a conductor for conveying smoke from the bowl to the stem, and means for varying the area of the orifice through which smoke passes from the tobacco receptacle of the bowl to the conductor, substantially as specified. 13th. A pipe having a bowl, a stem, a conductor for conveying smoke from the bowl to the stem, and a valve for controlling the passage of smoke from the tobacco receptacle of the bowl to the conductor, substantially as specified. 14th. A pipe having a bowl, a stem, a conductor for conveying smoke from the tobacco receptacle of the bowl to the stem, a nicotine-chamber interposed between the tobacco receptacle of the bowl and the conductor, a cigar and cigarette holder in communication with the nicotine-chamber, and means for cutting off communication between the tobacco receptacle and the nicotine-chamber, and between said holder and the nicotine-chamber, substantially as specified. 15th. A pipe having a bowl, a stem, a conductor for conveying smoke from the tobacco receptacle of the bowl to the stem, a nicotine-chamber interposed between the tobacco receptacle and the conductor, a valve for closing communication between the tobacco receptacle and the nicotine-chamber, a cigar and cigarette holder in communication with the nicotine-chamber, and a removable plug for cutting off communication between said holder and the nicotine-chamber, substantially as specified. 16th. A pipe having a bowl, a lid or cover for the bowl provided with a socket, a stem, a conductor for conveying smoke from the tobacco receptacle of the bowl to the stem, a nicotine-chamber interposed between the tobacco receptacle and the conductor, a valve for cutting off communication between the tobacco receptacle and the nicotine-chamber, a cigar and cigarette holder in communication with the nicotine-chamber, and a plug removably fitted in the bore of the said holder and adapted to be seated in said socket in the lid or cover, substantially as specified. 17th. A pipe having a sectional bowl comprising an exterior shell and an enclosed revoluble section provided with a tobacco receptacle and a communicating smoke-outlet, a nicotine-chamber secured to and revoluble with said enclosed bowl-section, an extensible stem carrying a mouth-piece and attached to the exterior member or shell of the bowl, a flexible conductor connecting the nicotine-chamber with the interior of the stem and adapted to be reeled upon the enclosed bowl-section, and a valve disposed axially with relation to the enclosed bowl-section, to control the smoke-outlet between the tobacco receptacle and the nicotine-chamber, and having an exterior handle whereby the enclosed bowl-section may be turned, substantially as specified. 18th. A pipe having a sectional bowl, comprising an exterior shell and an enclosed revoluble section provided with a tobacco receptacle and a communicating smoke-outlet, a nicotine-chamber secured to and revoluble with said enclosed bowl-section, an extensible stem carrying a mouth-piece and attached to the exterior member or shell of the bowl, a flexible conductor connecting the nicotine-chamber with the

interior of the stem and adapted to be reeled upon the enclosed bowl-section, a normally plugged cigar and cigarette holder removably fitted in registering openings in said shell and the wall of the nicotine-chamber, and a valve disposed axially with relation to the enclosed bowl-section to control the smoke-outlet between the tobacco receptacle and the nicotine-chamber, and having an exterior handle whereby the enclosed bowl-section may be turned when the said holder is dismounted, substantially as specified. 19th. A pipe having a sectional bowl, comprising an exterior shell, and an enclosed revoluble section having a tobacco receptacle and a communicating smoke orifice, extending downwardly and axially from the tobacco receptacle, a nicotine-chamber, having a removable top detachably secured to the lower end of the enclosed bowl-section, with the chamber in axial alignment therewith, the chamber being provided at its lower side with a collar revolubly mounted in an opening in the bottom of said exterior chamber, a valve threaded in said collar at the bottom of the nicotine-chamber, and arranged at one extremity in operative relation with a seat contiguous to the smoke orifice, and terminating at the other extremity in an exterior handle, an extensible stem carrying a mouth-piece and attached to the shell of the bowl, and a flexible tube connected at its opposite extremities with the nicotine-chamber and a movable member of the stem, and reeled at an intermediate point upon the enclosed bowl-section, substantially as specified.

**No. 57,055. Rotary Cutter. (Tranche rotatoire.)**



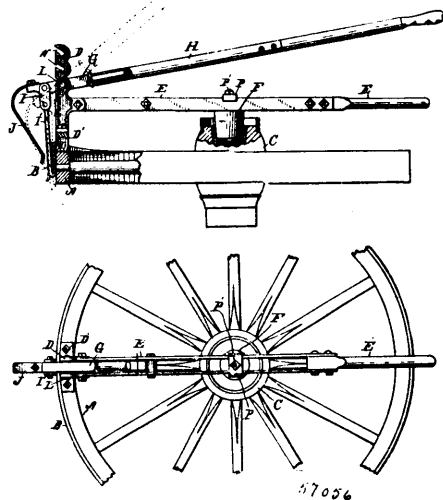
Thomson Kingsford, Oswego, New York, U.S.A., 16th August, 1897; 6 years. (Filed 19th June, 1897.)

*Claim.*—1st. A rotary cutter having the cutting faces of succeeding working portions bevelled transversely in opposite directions, and having the side of each working portion in which its front or cutting edge is arranged plain and bevelled or sloping from the base of the working portion to the outer edge thereof, and having the rear edge of the bevelled cutting face constructed with a clearance. 2nd. A rotary cutter, the working portions of which have their cutting edges bevelled alternately in opposite directions, and having both sides of each working portion plain and sloping, or converging from the straight base of each working portion to the outer edge thereof, the rear edge of each working portion being cut away more than the front edge to give a clearance at the heel, substantially as set forth. 3rd. A rotary cutting blade, having its front or advancing end bevelled along one side to form a single front cutting edge extending rearwardly from its outer end towards the heel, and having oppositely-inclined, flat, straight sides formed by bevelling the working portion of the blade outwardly to the periphery from a straight line joining the cutting edge and the heel of the cutter. 4th. A rotary cutting blade, having a pointed front or advancing end, and extending beyond the arc described by that portion of the blade between the point and the heel, and having its front end bevelled along one side to form a single front cutting edge, the working portion of the blade between the cutting edge and the heel having oppositely-inclined, straight, flat sides formed by bevelling the working portion of the blade in straight lines at right angles to the axis of the cutter outwardly to the periphery, from a straight line joining the cutting edge and the heel of the cutter. 5th. A rotary cutting blade, having its front or advancing end bevelled along one side to form a single front cutting edge, and having its heel of less diameter than the outer end or point of the cutting edge, and arranged entirely within the arc traversed by the point, the working portion of the blade between the cutting edge and the heel having oppositely-inclined, flat, straight sides formed by bevelling it in straight lines from the cutting edge to the heel at right angles to the axis of the blade. 6. A rotary cutter comprising two or more slitting blades having their front cutting edges alternately arranged on opposite sides of each blade so as to cut on opposite sides thereof, and having side clearance and edge clearance, in combination with edge-trimmed blades interposed between the slitting blades. 7th. A rotary cutter, comprising a pair of slitting blades having side clearance and edge clearance, and having bevelled cutting edges, and an edge cutter interposed between the slitting blades, and having rims extending beyond the side edges thereof. 8th. A rotary cutter, comprising a pair of slitting blades having bevelled cutting edges, and an edge-cutter interposed between the slitting blades

to hold them apart, and having a widened outer edge overlapping the slitting blades, but arranged at a shorter distance from the centre of rotation than the outer or working edges of the slitting blades. 9th. A rotary cutter, comprising a pair of S-shaped slitting blades having oppositely-inclined, straight, flat sides at opposite ends, and a single cutting edge at each working end, the working portion of the blade at each end between the cutting edge and the heel having straight, flat, bevelled sides, and interposed edge-cutting blades having at each opposite end enlarged edge portions, having front cutting edges transverse to the cutting edges of the slitting blades, and having also grooved peripheries. 10th. A rotary cutter, comprising a pair of S-shaped slitting blades having advancing cutting edges extending from the periphery of the blade inwardly, and an S-shaped edge-cutter interposed between the slitting blades extending beyond the side edges thereof, serving to hold them at a proper distance apart, and having one or more enlarged grooved and bevelled rims. 11th. The combination of a mandrel, a series of slitting blades thereon, each comprising a flat body having at opposite ends front, tangentially-arranged cutting edges on opposite sides of the blade, a series of edge-trimming blades interposed between the slitting blades provided with widened rims, and a second mandrel having a similar series of edge-trimming and slitting blades, the edge-trimming blades in the front series being arranged in the same vertical planes with the corresponding blades in the other series, and the slitting blades in one series being correspondingly arranged with those in the other series, the blades of each series being held in lateral contact. 12th. A rotary cutter, comprising a pair of slitting blades having tangentially-arranged cutting edges and an edge-cutter interposed between the slitting blades, serving to hold them a proper distance apart, extending beyond the side edges thereof, and having one or more enlarged grooved and bevelled rims. 13th. A rotary cutter, comprising a pair of slitting blades having tangentially-arranged cutting edges, and an edge-cutter interposed between the slitting blades, serving to hold them apart, and having widened outer edges overlapping the slitting blades, but arranged at a shorter distance from the centre of rotation than the outer edges of the slitting blades.

**No. 57,056. Machine for Removing Tires.**

(Machine pour enlever les traverses de chemins de fer.)

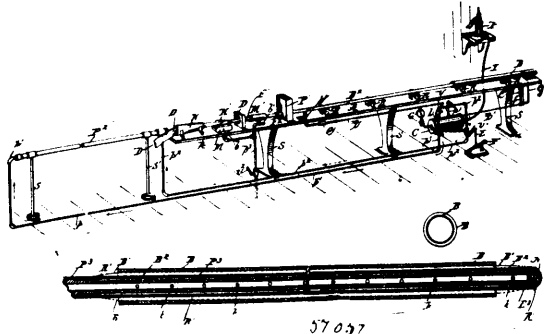


Henry H. Smith and Hector M. Dodge, both of Kalamazoo, Michigan, U.S.A., 16th August, 1897; 6 years. (Filed 23rd June, 1897.)

*Claim.*—1st. In a tire-pulling machine, the combination of the lever E, the bracket D, to one end of said lever, the handle E', at the other, plug F, on the underside of said lever E, adjustable by means of the clip P, and the bolt P', the block D', below the bracket D, adapted to rest upon the felly of the wheel, the lever H, with the pivot L, therein adapted to engage in suitable notches N, on the upper part of the bracket D', the hook I, extending downwardly from said lever H, links I', for attaching said hook I to the outer end of the lever H', and a spring J, to the outer end of the lever and curved over and downwardly to press the hook Y, against the tire of the wheel when lever H is operated, all co-acting together, substantially as shown for the purpose specified. 2nd. In a tire-removing machine, the combination of the lever E, bracket D', to one side of said lever, the plug F, adjustable along the underside of said lever, the bracket D, to one end of the lever, the block D', below the bracket D, adapted to rest on the felly of the wheel, the lever H, with the pivot L, therein fulcrumed to the upper side of said bracket D, hook I, extending downwardly from said lever H, adapted to engage under the tire for raising the same off from the wheel, all co-acting as specified. 3rd. In a tire-removing machine,

the combination of the lever E, bracket D, to one end of said lever, the plug F, to the underside of said lever for insertion into the hub of the wheel, the lever H, fulcrumed in said bracket, and the hook I, suitably connected to the outer end of said lever H, for engaging under the tire on the wheel for removing the same, as specified. 4th. In a tire-removing implement, the combination of the cross-piece E, having a suitable handle, a suitable plug on the underside of the said cross-piece for insertion into the hub of a wheel, a block to the outer end of the same for resting on the felly of the wheel, the said piece occupying a plane substantially parallel with that of the wheel, a lever pivoted above said block and extending in the general direction of the cross-piece E, with a hook connected to the outer end of said lever to extend down and engage under the tire to remove the same, constructed so that the implement can be placed upon the wheel to act thereon, all co-acting together as specified. 5th. In a tire-removing implement, the combination of the cross-piece E, having a suitable handle, a suitable plug on the underside of said cross-piece for insertion into the hub of a wheel, the said piece occupying a plane substantially parallel with that of the wheel, a block at the outer end of the cross-piece to rest upon the felly of the wheel, a hook to engage the tire, and suitable means of actuating the hook as the block is swung around over the felly to remove the tire, all adapted to rest upon the wheel and engage it at the hub and rim and operate as specified.

**No. 57,057. Method of Lining Metal Tubes With Fibrous Material. (Méthode de garnir les tubes métalliques de matières fibreuses.)**

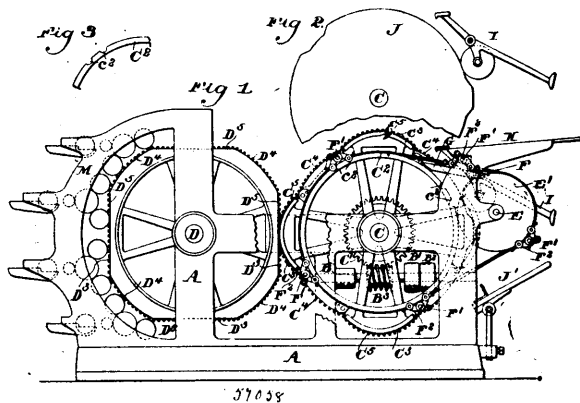


The Interior Conduit and Insulation Co., assignee of Edwin Truman Greenfield, New York, State of New York, U.S.A., 16th August, 1897; 6 years. (Filed 25th June, 1897.)

**Claim**—1st. One or more forming-dies for giving to a strip of pliable or fibrous material, such as paper, a tubular form, means for heating said forming die or dies, in combination with means for drawing the strip always in the same direction, substantially as described. 2nd. One or more forming-dies for giving to a strip of pliable or fibrous material, such as paper, a tubular form, means for heating said forming die or dies, in combination with a compressed-die and an additional heating-die and means for drawing the paper continuously forward, substantially as described. 3rd. Mechanism for forming a tube from a strip of pliable or fibrous material, such as paper, consisting of means for giving to the strip a tubular conformation and simultaneously heating and causing said tube to retain its tubular form, in combination with a source of heat and means for drawing the strip and the completed tube continuously in the same direction, substantially as described. 4th. Mechanism for forming a tube from a strip of pliable or fibrous material, such as paper, consisting of one or more forming-dies for giving tubular conformation to the strip in the direction of its length, means for supporting the paper in its tubular form as it is drawn forward, and additional means in the nature of an ironing-die which surrounds the formed tube and its supporting means in combination with means for heating the dies and additional means for drawing the tube and its support continuously forward, substantially as described. 5th. Mechanism for lining a tube from a strip of pliable or fibrous material such as paper, consisting of means for giving to a strip of such material a tubular form of substantially the same length as the tube to be lined but of an exterior diameter somewhat less than the interior diameter of said tube, means for carrying and supporting said completed tube within the tube to be lined and without touching the interior wall thereof as it is drawn in, in combination with means for coating the outer surface of said lining-tube with an adhesive agent, and additional means for expanding it against the inner wall of the outer tube after it is fully drawn therein, substantially as described. 6th. Mechanism for lining a tube from a strip of pliable or fibrous material, such as paper, consisting of means for giving to a strip thereof a tubular form with overlapping edges and of a completed length substantially that of the tube to be lined, supporting means around which said tube is formed and adapted to carry it, the completed tube, within the tube to be lined in such manner that it does not touch the inner wall of the latter, and means for expanding the lining outwardly against the inner wall of the outer tube, substantially as described. 7th. Mechanism for forming a tube from a strip of pliable or fibrous material, such as

paper, consisting of an air-chamber for holding air under pressure, connections between the air-chamber and a piston operatively connected with a mandrel adapted to move backward and forward with the piston, means for giving to the strip of pliable or fibrous material a tubular form around the mandrel, and additional means for controlling the supply of air to the opposite sides of the piston-head in such manner that as the piston is forced in one direction the strip of paper is given a tubular form around the forming-mandrel and as it is forced in the other direction the mandrel is restored to its normal or starting position, substantially as described. 8th. Means for expanding a tubular lining against the wall of a tube to be lined, consisting of an expandible tube adopted to be located within the tubular lining and expanded by air under pressure and then to be withdrawn after the lining is firmly set in place, substantially as described. 9th. Means for lining a tube with pliable or fibrous material, such as paper, consisting of a hollow perforated tube surrounded with an expandible tube, the hollow tube having connection with a source of air or liquid pressure, substantially as described. 10th. Mechanism for lining tubes with pliable or fibrous material, such as paper, consisting of means for forming the tube-lining of the pliable material, and additional means consisting of an expandible tube for causing a previously-formed tube-lining to adhere to the inner wall of the tube to be lined, substantially as described. 11th. Mechanism for lining tubes from a strip of pliable or fibrous material such as paper, consisting of means for furnishing air or gas under pressure, a piston rod operatively connected with said air supply, one or more forming-dies and a heating-die surrounding the outer or exposed portion of the piston-rod, means for heating both of said dies, means for coating the lining-tube with an adhesive agent, and additional means for supporting the tube to be lined in alignment with the tubular lining, in combination with an expandible device carried by the exposed end of the piston for expanding the lining-tube against the inner wall of the tube to be lined and automatically-controlled mechanism for giving to said expanding device movement in opposite directions, substantially as described. 12th. The described method of lining a tube with fibrous material such as paper, consisting in first forming by ironing with heat a completed tube of the fibrous material of lesser diameter than the inner diameter of the tube which is to be lined, then inserting or drawing said completed tube within the tube to be lined and finally expanding it outwardly by pneumatic pressure against the inner wall thereof. 13th. The described method of lining a tube with pliable or fibrous material, such as paper, consisting in first forming a completed tube of a strip of the material and simultaneously ironing it by heat and pressure in such manner as to cause it to retain its tubular form, then drawing this completed tube inside of the tube to be lined and without touching the inner wall thereof and finally expanding it against the inner surface thereof.

**No. 57,058. Printing Press. (Presse à imprimer.)**

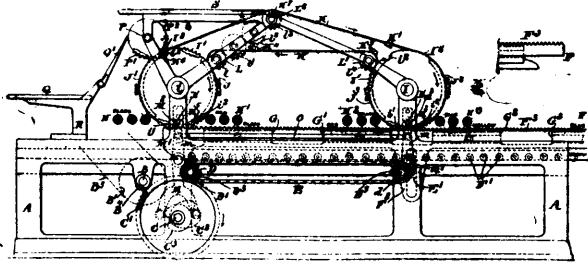


William Henry Reynell Toye, Philadelphia, Pennsylvania, U.S.A., 16th August, 1897; 6 years. (Filed 24th June, 1897.)

**Claim**—1st. The combination of two printing cylinders, one carrying a series of flat type forms and the other carrying a series of corresponding curved impression surfaces adapted as the cylinders revolve to roll over the type, gearing secured to and connecting the two cylinders so that one will drive the other and each will make an equal number of complete revolutions in the same time, said gearing corresponding in its pitch lines with the types and impression surfaces, cylindrical surfaces C<sup>2</sup>, C<sup>2</sup>, carried by the impression cylinder, a carrier extending around and driven by the cylindrical surfaces C<sup>2</sup> of the impression cylinder and a series of grippers one more in number than the number of impression surfaces secured to said carrier and adapted to register in turn with the forward ends of the said several impression surfaces. 2nd. The combination of two printing cylinders, one carrying a series of flat type forms and the other carrying a series of corresponding curved impression surfaces adapted as the cylinders revolve to roll over the type, gearing secured to and connecting the two cylinders so that one will drive

the other and each will make an equal number of complete revolutions in the same time, said gearing corresponding in its pitch lines with the type and impression surfaces, cylindrical surfaces C<sup>2</sup>, C<sup>2</sup>, carried by the impression cylinder, a flexible carrier extending around and driven by the cylindrical surfaces C<sup>2</sup> of the impression cylinder and a series of grippers, one more in number than the number of impression surfaces secured to said carrier and adapted to register in turn with the forward ends of the said several impression surfaces.

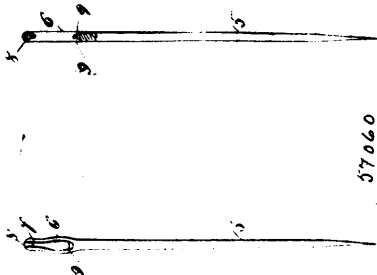
**No. 57,059. Printing Press. (Presse à imprimer.)**



William Henry Reynell Toye, Philadelphia, Pennsylvania, U.S.A., 16th August, 1897; 6 years. (Filed 24th June, 1897.)

*Claim.*—1st. In a printing press the combination of a reciprocating carriage adapted to support a series of printing forms, of two or more impression cylinders, each having two or more impression surfaces, each surface corresponding to one of the type forms and adapted to register and coat therewith, mechanism for driving the cylinders at the same speed as the carriage when said carriage moves in one direction and arresting the motion of the cylinders during the reverse motion of the carriage, a flexible carrier supporting a series of grippers for engaging sheets of paper and feeding them through the press, said grippers being arranged as specified to come into operative registry with each printing couple in the press in two or more revolutions of the carrier and said carrier being elevated above the type forms as it passes between the impression cylinders and two or more sets of inking mechanisms situated between the cylinders below the carrier. 2nd. In a printing press the combination of a reciprocating carriage adapted to support a series of printing forms and carrying a rack, of two or more impression cylinders each having two or more impression surfaces, each surface corresponding to one of the type forms and adapted to register therewith, gear wheels secured to each impression cylinder and in engaging relation to the rack on the carriage, each gear being intermitted or cut away at one point so as to disengage the cylinders from the rack, a flexible carrier supporting a series of grippers for engaging sheets of paper and feeding them through the press, said grippers being arranged as specified to come into operative registry with each printing couple in the press in two or more revolutions of the carrier and said carrier being elevated above the type forms as it passes between the impression cylinders and two or more sets of inking mechanism situated between the cylinders below the carrier. 3rd. In a printing machine the combination with a reciprocating carriage adapted to support printing forms and carrying a rack of two impression cylinders each having two or more impression surfaces corresponding to the type forms on the carriage and each carrying a gear wheel adapted to mesh with the rack and having its teeth cut away at one point so as to clear said rack, a starting lever M positively actuated and adapted to act upon one cylinder and engage it with the rack, a starting lever m adapted to start the other cylinder, a rod o connecting levers M and m so as to operate lever m simultaneously with lever M, a flexible carrier for supporting a series of grippers for engaging sheets of paper and feeding them through the press, said grippers being arranged as specified to come into operative registry with each printing couple in the press in two or more revolutions of the carrier and said carrier being elevated above the type forms as it passes between the impression cylinders and two or more sets of inking cylinders situated between the cylinders below the carrier.

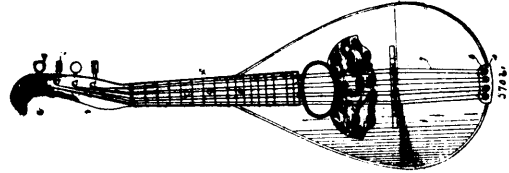
**No. 57,060. Needle. (Aiguille.)**



Emil Caesar, Long Island City, New York, U.S.A., 16th August, 1897; 6 years. (Filed 23rd June, 1897.)

*Claim.*—1st. A needle provided with an eye, the outer end of which is formed into a narrow slot, into which the thread is adapted to be wedged in the operation of the needle, substantially as shown and described. 2nd. A needle provided with an eye, the outer end of which is formed into a narrow slot, into which the thread is adapted to be wedged in the operation of the needle, the outer end of said eye being also closed by a wedge shaped portion which is narrower than the needle, substantially as shown and described.

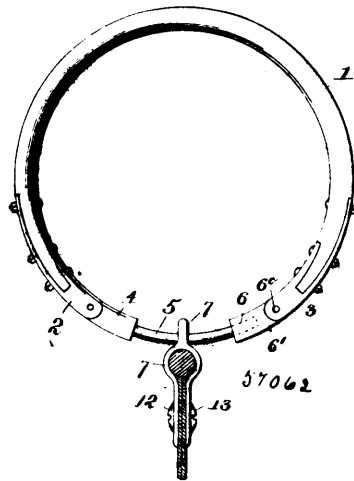
**No. 57,061. Mandolin. (Mandoline.)**



Eugene Blasius Baehr, New York, State of New York, U.S.A., 16th August, 1897; 6 years. (Filed 21st June, 1897.)

*Claim.*—1st. In a mandolin, a tail-piece, a pair of strings consisting of a single length engaging with the tail-piece, and a tuning post to which both ends of the string length are connected, whereby a pair of strings may be tuned in unison by the manipulation of a single key, substantially as specified. 2nd. In a mandolin, a tail-piece consisting of a plate secured to the body portion, studs rigidly secured to the plate, and rollers on said studs, substantially as specified. 3rd. A mandolin, comprising a body, a neck and a head, a tail-piece secured to the body portion and having rollers, pairs of strings, each pair consisting of a single length, and a single key for each pair of strings, all of the keys being located at one side of the head, substantially as specified.

**No. 57,062. Mast Hoop. (Cercle de mâit.)**

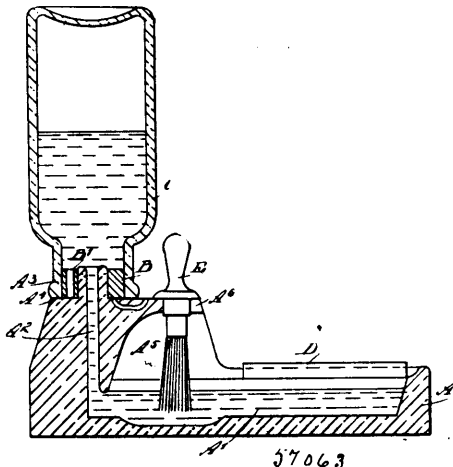


Braxton Bragg Lowe, Key West, Florida, U.S.A., 16th August, 1897; 6 years. (Filed 19th June, 1897.)

*Claim.*—1st. The combination of a hoop, a clamp adapted to be secured to the sail and positioned upon said hoop, and means for attaching and detaching the clamp from the hoop, substantially as described. 2nd. The combination of a hoop having its meeting ends terminating short of each other, a rod pivoted to one of said ends and adapted to be detachably secured to the opposite end, and a clamp adapted to engage the sail and be positioned upon said rod, substantially as described. 3rd. The combination of a hoop having its ends terminating short of each other, a rod pivoted to one of said ends and adapted to be detachably secured to the opposite end, a clamp consisting of two members adapted to engage the sail upon opposite sides thereof, said clamp provided with a passage through which the rod is adapted to extend when the clamp is positioned thereon, and means for securing the sections of the clamp together, substantially as described. 4th. The combination of a hoop having its ends terminating short of each other and reduced, forming shoulders, irons having their ends bifurcated and adapted to engage the reduced ends of the hoop and abut against said shoulders to form a neat joint, a rod pivoted in the end of one of the irons and reduced intermediate its ends, said rod adapted to be detachably secured to the opposite iron, a clamp comprising two members adapted to be secured together, said members being bulged to form a cavity when put together, to embrace the rope of the sail, said clamping members also formed with bolt passages having depressions surrounding the same, a bolt adapted to extend through said passage with its

head engaging the depression, and a cap adapted to be positioned upon the opposite end of the bolt with its head taking the depression of the clamping member in which it is positioned, substantially as described. 5th. A sectional mast hoop having one of its sections hinged and adapted to be detachably secured to the stationary section, and a clamp detachably positioned upon said hoop and engaging the sail, substantially as described. 6th. A sectional mast hoop comprising a stationary and swinging section, said swinging section hinged at one end to the stationary section and at its opposite end adapted to be secured to the opposite ends of said stationary section, said swinging section being reduced intermediate its ends, and a clamp adapted to be positioned upon said reduced portion, and engage the sail, substantially as described. 7th. The combination with a hoop adapted to embrace the mast, blocks detachably positioned thereon, and sheaves carried by said blocks, of clamps attached to the sail, sheaves carried thereby, and a rope passing alternately on the sheaves of the blocks and sail clamps, substantially as described.

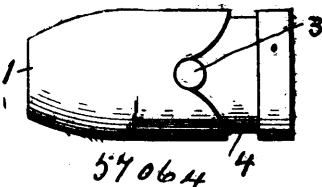
**No. 57,063. Gumming Apparatus. (Appareil à gommer.)**



William Henry Burland, Punta, Gorda, Florida, U.S.A., 16th August, 1897; 6 years. (Filed 19th June, 1897.)

*Claim.*—1st. mucilage receptacle having a body portion with a trough running longitudinally therewith, the body portion also having two bevelled portions respectively on the sides of the trough and slanting downwardly toward the trough, the body portion also having a scraper running parallel with one of the bevelled portions and the body portion having an overhanging seat capable of carrying a brush, and the body having an upwardly projecting nipple communicating with the trough, and a reservoir having a neck wherein the nipple is received, substantially as described. 2nd. A mucilage receptacle having a body portion with a trough running along a part of the upper side of the body portion, the body portion also having a seat overhanging one end of the trough, and capable of carrying a brush, and the body portion further having an upwardly projecting nipple adjacent to the seat and communicating with the trough and adapted for connection with the reservoir, substantially as described.

**No. 57,064. Bullet for Rifled Firearm. (Balle pour Armes à feu.)**

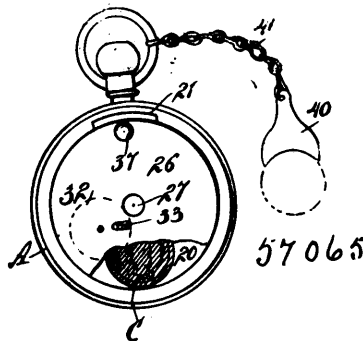


Samuel Clinton Steuardson, Santa Anna, Texas, U.S.A., 16th August, 1897; 6 years. (Filed 8th March, 1897.)

*Claim.*—1st. A bullet having a cavity upon its outer surface filled with grease or other lubricating material. 2nd. A bullet having a transversely extending opening in it filled with grease or other lubricating material. 3. A bullet having a longitudinally extending opening in its rear end terminating at a point adjacent to the centre thereof, and a laterally extending opening leading outwardly from the end of said longitudinal opening, the said openings being filled with grease or other lubricating material, substantially as and for the purpose described. 4th. A bullet having a longitudinal opening leading from the rear end thereof and terminating at a point adjacent to its centre, a laterally extending opening leading outwardly from the upper end of said longitudinal opening,

and a recess or cavity in the outer surface of said bullet, the said openings and said cavity being filled with heavy grease or other suitable lubricating material, substantially as and for the purpose described.

**No. 57,065. Savings Bank. (Caisse d'épargne.)**



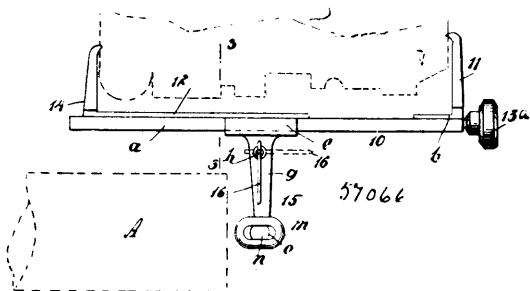
The Watch Bank Novelty Co., assignee of Clarence Lincoln Dawson, both of Tacoma, Washington, U.S.A., 16th August, 1897; 6 years. (Filed 21st June, 1897.)

*Claim.*—1st. The combination with the casing having an annular body portion, an outwardly movable back plate, a locking device to hold the back plate in its closed position, a circularly arranged series of coin-depositories normally closed at one end by said back plate, and a rotary front plate having a pocket to receive and convey coins to the said pockets until they are all filled, substantially as described. 2nd. In a bank, a casing having a marginal coin slot, depositories located within the said casing and adapted to receive coin, the said depositories being at a uniform distance from a common centre, and a revoluble plate having its pivot at the common centre around which the depositories are grouped, the said plate being provided with a pocket upon its inner face and opening through its periphery to register with said slot for the reception of a coin, the pocket being so placed that when the plate is revolved the said pocket will pass over all the depositories, as and for the purpose specified. 3rd. In a bank, a casing, depositories located within the said casing, adapted for the reception of coin, a revoluble plate provided with a pocket, so placed that as the plate is revolved the said pocket will pass over all of the depositories, and an extractor located within the said pocket, acting to force a coin from the pocket into the nearest depository capable of receiving it, and prevent the return of the coin to the pocket as and for the purpose specified. 4th. A bank consisting of a casing, depositories located within the said casing, a revoluble plate provided with a pocket adapted to receive a coin, the said pocket being so placed that as the plate is revolved the pocket will pass over all the depositories, a spring extractor located in the pocket of the said plate, and locking device located within the casing, adapted to enter keepers formed in the said revoluble plate, as and for the purpose set forth. 5th. In a bank, a casing, depositories located within the said casing, adapted to receive coin, a plate held to revolve over the depositories and provided with a coin-receiving pocket, adapted in the travel of the plate to pass over the said depositories, an extractor located within the said pocket, and coin-operated lock-latches adapted for locking engagement with the said revoluble plate when in its normal position, as and for the purpose set forth. 6th. In a pocket-bank, depositories located within the casing at a uniform distance from a common centre, a plate pivoted at the aforesaid common centre and provided with a coin-receiving pocket, so placed as to pass over the said depositories as the plate is revolved, a spring-extractor located within the said pocket, acting when the pocket is opposite a depository to force the coin from the pocket, a toothed register-wheel pivoted to pass by an opening in the said plate and pivoted on the said plate, and a post around which the plate revolves, provided with a projection engaging with the teeth of the register-wheel, whereby at each revolution of the said plate the register-wheel will be turned the distance of one tooth, as set forth. 7th. In a pocket-bank, a casing, depositories located within the said casing, a plate mounted to turn over the said depositories, being provided with a coin-receiving pocket arranged to pass over the depositories, an extractor located within the said pocket, recesses located one at each side of said pocket, latches located within the said casing, and adapted to enter the recesses in the revoluble plate, one of the said latches being operated by the introduction of a coin into the pocket, as and for the purpose set forth. 8th. In a pocket-bank, a casing comprising a body-band having a tubular pendant, a locking-bolt located within the said pendant and extending within the body-band, a coin-depository within the band and a face-plate closing the sides of the body-band, one of the said plates being revoluble and provided with a pocket to convey the coins to said depository and the other having locking engagement with the aforesaid bolt and adapted when unlocked to open the case and expose the coin-depository, as and for the purpose specified. 9th. In a pocket-bank, a casing comprising a body-band having a tubula



pendant, a locking-bolt located within the said pendant, and extending within the body-band, a coin depository within the band and a face-plate closing the respective sides of the body-band, one of the said plates being revoluble and provided with a pocket to convey the coins to said depository and the other having locking engagement with the aforesaid bolt and adapted when unlocked to open the case and expose the coin-depository, and a key adapted to manipulate the said bolt, substantially as shown and described.

**No. 57,066. Window Shade Fixtures and Curtain Poles.** (*Attache de stores et bâtons de fenêtres.*)

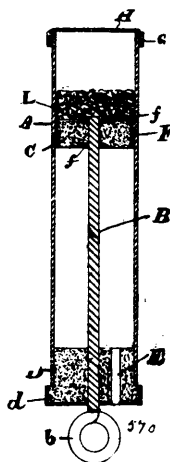


George Biehn, North Yakima, Washington, U.S.A., 16th August, 1897; 6 years. (Filed 29th July, 1897.)

*Claim.*—1st. A curtain bracket arm provided at its outer end with a plurality of seats for the holder studs, said seats being arranged at right angles to each other, substantially as described. 2nd. A curtain bracket arm provided at its outer end with a round seat for the round roller stud and opposite thereto and in a plane lateral to said round seat with a slot for the angular stud of said roller, substantially as described. 3rd. A curtain bracket arm provided at its outer end with a plurality of sets of seats for the roller studs, each set consisting of a round opening for the round stud and a slotted opening lateral to said round opening for the square stud, substantially as described. 4th. In a shade fixture, the combination of the plate or support, and the bracket arm divided at its inner end forming clamping sections gripping the opposite sides of the support, substantially as described. 5th. The combination with the plate or support, and the bracket arm divided at its inner end forming clamping sections gripping the opposite ends of the support, of means carried by the arm by which to draw its sections together, substantially as described. 6th. A curtain fixture comprising the bracket plate having dovetail edge plates or flanges, the clamping bar having dovetail edge plates or flanges slidably engaged with those of the bracket plate, and the screw by which to adjust said parts, substantially as shown and described.

**No. 57,067. Device for Blueing Clothes.**

(*Appareil pour passer le linge au bleu.*)

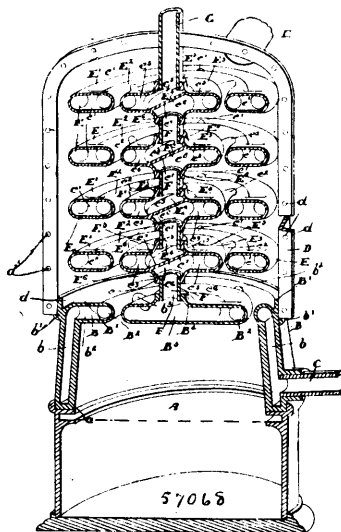


Francis William Rabbi, William Shillito Cranston and Robert Chamberlain Westover Lett, all of Ottawa, Ontario, Canada, 16th August, 1897; 6 years. (Filed 27th July, 1897.)

*Claim.*—1st. As a device for blueing clothes, a tube having its upper end provided with a straining device, internal mechanism for drawing water into and expelling it from the tube, and means for closing the lower end of the tube, as and for the purpose specified. 2nd. A device of the class described comprising a tube provided at its upper end with a strainer held in place by an adjustable metal strap, a suitable metal capped-retaining plug at the lower end of

the tube and internal mechanism for drawing water into and expelling it from the tube, as and for the purpose specified. 3rd. In a device of the class described in combination a tube, strainer at upper end of such tube, an adjustable metal strap for securing such strainer in place, a metal capped-retaining plug provided with a hole E, and internal mechanism for drawing water into and expelling it from the tube, as and for the purpose specified. 4th. In a device of the class described in combination, a tube, strainer at upper end of such tube, an adjustable metal strap for securing such strainer in place, a metal capped-retaining plug provided with a hole F, and plunger-head secured to a piston-rod having bearing in the retaining plug, as set forth and for the purpose specified.

**No. 57,068. Heater.** (*Calorijère.*)



Richard Bigley, Toronto, Ontario, Canada, 16th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. In a heater, a coil comprising an annular water space, ring bosses formed on each side of the water space, a diaphragm extending obliquely from one side to the opposite side and a flow pipe located to one side of the diaphragm and a return pipe at the opposite side, as and for the purpose specified. 2nd. In a heater, a coil comprising a plurality of annular water-containing rings and a central water space and passage-ways connecting the rings, ring bosses formed on each side of the central water space and a diaphragm extending obliquely from beneath one passage-way to above the opposite passage-way, and a flow pipe extending into the ring boss at one side of the oblique diaphragm and a return pipe extending into the ring boss at the opposite side, as and for the purpose specified. 3rd. In combination the lower section provided with an annular water space and return pipe leading into same, the outer ring forming a continuation of the water space, the inner ring and central water space and passage-ways connecting the same, and one or a plurality of coils provided with outer and intermediate rings and central water spaces and passage-ways connecting the same, ring bosses, oblique diaphragm extending from the bottom of one passage-way to the top of the opposite one and closing the direct passage of the water and nipples connecting the sections or coils as and for the purpose specified. 4th. In combination the lower section provided with an annular water space and return pipe leading into same, the outer ring forming a continuation of the water space, the inner ring and central water space and passage-ways connecting the same, and one or a plurality of coils provided with outer and intermediate rings and central water spaces and passage-ways connecting the same, ring bosses, oblique diaphragm extending from the bottom of one passage-way to the top of the opposite one and closing the direct passage of the water and nipples connecting the sections or coils and a casing made in two halves provided with diametrically arranged flanges extending around the the sides and top of the casing and means for connecting the flanges together, as and for the purpose specified.

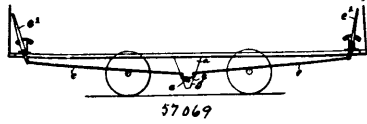
**No. 57,069. Track-Sanding Apparatus.**

(*Appareil à sabler.*)

Eusèbe Picard and Joseph Leblanc, both of Holyoke, Massachusetts, U.S.A., 16th August, 1897; 6 years. (Filed 27th July, 1897.)

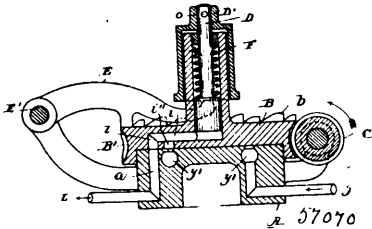
*Claim.*—1st. In a sanding device, the combination with a hopper consisting of an outer casing and an inner lining separated therefrom by an air-space, of an electrical conductor arranged in loops around the inside of said hopper and adapted to come into contact

with the sand therein so as to dry the same, substantially as described. 2nd. In a sanding device, a hopper having an elongated



outlet-opening, a sliding gate arranged to operate beneath said opening, an outwardly-opening door for filling said hopper, the said door having a prop, means for drawing said gate, means for retracting the same, consisting of springs connected with the bottom of the hopper and engaging the said gate, and means in said hopper for heating the sand therein to dry the same. 3rd. In a sanding device, in combination, a hopper consisting of an outer casing and an inner lining separated therefrom by an air-space, an elongated outlet opening in said hopper, a gate arranged to operate beneath said opening a discharge-chute arranged underneath said opening, a protecting casing arranged outside of said chute and extending below the mouth of the same, an outwardly-opening door for filling the hopper, the said door having a prop, and an electrical conductor arranged in loops inside of said hopper, close to the sides thereof, the said conductor being adapted to make contact with the sand in the hopper so as to dry the same, substantially as and for the purposes described.

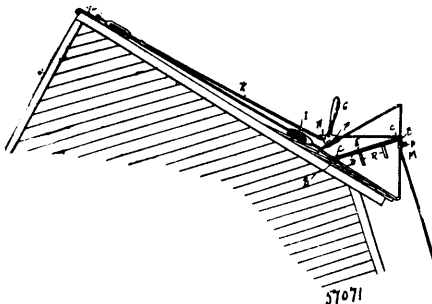
**No. 57,070. Lubricating Device. (Graisseur.)**



Emil Capitaine, Frankfort-on-the-Main, Germany, 17th August, 1897; 6 years. (Filed 30th July, 1897.)

*Claim.*—1st. In an automatic lubricating device, the combination with a body or frame having inlet and outlet orifices and passages leading therefrom, of a rotating disc governing such orifices, and having a passage adapted to be brought into communication with either of the same alternately, and means to discharge the contained oil in the disc passages, under pressure, when it shall be brought into register with the discharge orifice and passage in the body or frame, substantially as described. 2nd. In an automatic lubricating device, the combination with a body or frame having inlet and discharge passages and orifices, of a rotating disc having a passage adapted to be brought into register with either of the same alternately, gearing upon the periphery of the disc, means to actuate the same, a spring-controlled piston adapted to normally operate to exert a pressure upon the contained oil in the disc passages and means between the disc and the piston adapted to intermittently force back the piston against its spring, on the rotation of the disc, substantially as described. 3rd. In an automatic lubricating device, the combination with a body A having inlet and outlet openings, of a rotating disc having a passage adapted to register with either of the same alternately, means to rotate the disc, a suitably mounted spring-controlled piston, a lever adapted to raise the piston against the pressure of its actuating spring, and a series of tooth-like projections upon the upper side of the rotating disc adapted to raise the free end of the lever when brought into contact therewith on the rotation of the disc, substantially as described.

**No. 57,071. Portable Staging. (Echafaud.)**

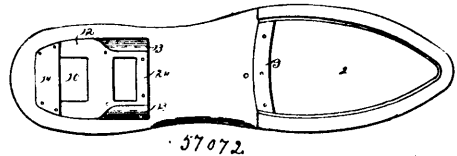


William Tileston Vose, Newton, Mass., U.S.A., 17th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. A scaffolding consisting of two triangular frames, collars adapted to slide thereon, bars pivoted to said collars, a plat-

form supported by said bars, braces secured on the lower side of said platform, as and for the purpose described. 2nd. In combination with the platform of a scaffold, two triangular frames having collars adapted to slide thereon and the bars D pivoted to said collars for supporting said platform, as shown and described. 3rd. A scaffolding consisting of two triangular frames, collars slidable on said frames, bars pivoted to said collars, a platform supported by said bars, braces secured on the lower side of the platform, said braces consisting of wires running lengthwise of the platform, uprights near the points of attaching the wires, substantially as described. 4th. A scaffolding consisting of two triangular frames, collars slidable on the base and one leg of the frame, bars pivoted to said collars, a platform supported by said bars, braces depending from the platform, a rope-clamp consisting of a collar slidable on the third side of the frame, a lever pivoted on said collar having a cam surface on its inner end, blocks and tackle secured to the frames, the free end of the rope being secured in the rope clamp, as and for the purpose described. 5th. A scaffolding consisting of two triangular frames, collars slidable thereon, bars pivoted to said collars, a platform supported on said bars, blocks and tackle secured to the frames, the free end of the rope being secured in a rope-clamp carried by the frames, substantially as shown and described. 6th. A scaffolding consisting of two triangular frames, a platform pivoted to collars slidable on said frames, as and for the purpose described.

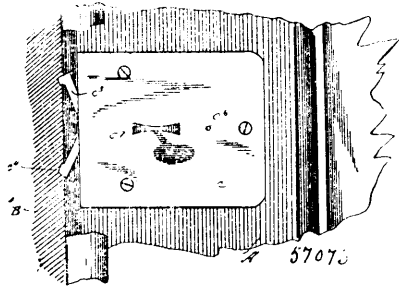
**No. 57,072. Detachable Heel for Boots and Shoes. (Talon de chaussures.)**



Manly Roland Vandervoort, Clinton, Illinois, U.S.A., 16th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. In a boot or shoe, the combination with the permanent sole having a recess at the rear, and the plate secured thereto having inwardly-turned flanges at the ends and a transverse plate at the rear of the removable heel, the strip secured thereto, the spring-plate secured to said s'rip, and its edges engaging with said flanges, and the plate at the rear formed with a tongue projecting between said transverse plate and the plate secured to the sole, substantially as described. 2nd. In a boot or shoe, the combination with the permanent sole, having a recess near the rear end and the plate seated therein, formed with inwardly-turned flanges at the front ends and with a transverse plate at the rear of the removable heel, the strip secured thereto, the spring-plate secured to said strip engaging with said flanges, the cross-piece secured to said plate, the rear provided with an inwardly-turned tongue engaging between the said transverse plate and the plate to which it is secured, and the spring slide secured to the sole and passing under said cross-piece, and projecting under said slot, substantially as described.

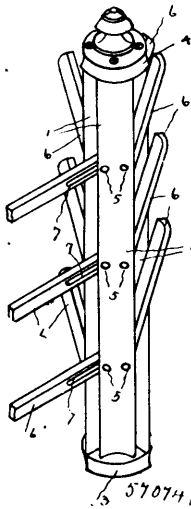
**No. 57,073. Sash Lock. (Arrête-croisée.)**



Willie Noble, West Union, West Virginia, U.S.A., 17th August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—1st. In a sash lock, the combination of a plate c, having a vertical flange c<sup>1</sup> across its rear end, elongated slots in said flanges 8, pivoted angular levers c<sup>2</sup> mounted upon said plate, and projecting through the slots a<sup>2</sup>, substantially as set forth. 2nd. In a sash lock, the combination of a plate c, having a vertical flange c<sup>1</sup> across its rear end, angular levers mounted upon said plate, and having their rear ends notched or roughened, a pivot pin c<sup>6</sup> through said levers and plate, a spring c<sup>5</sup> around said pivot pin for forcing open the levers automatically, and a plate c<sup>3</sup> attached to plate c<sup>1</sup> by means of a thumb-button c<sup>4</sup>, together with means for closing the levers by operating said thumb-button, substantially as set forth. 3rd. In a sash lock, the levers c<sup>2</sup> attached to a plate c, a spring c<sup>5</sup> for forcing the levers apart, means for engaging the end of said levers with a casing, and a plate c<sup>3</sup>, having pins c<sup>10</sup> at either end for operating said levers, substantially as set forth.

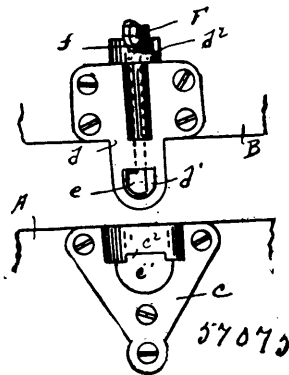
**No. 57,074. Gate. (Barriere.)**



Charles W. Burrington, Tomahawk, Wisconsin, U. S. A., 16th August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—1st. The combination with a gate-post and a vertically-slidable bar, of a spring controlling the movement of the bar, arms pivoted to the bar and fulcrumed on the post, said bar adapted to be raised to extend the arms, and lowered to retract the arms, as set forth. 2nd. The combination with a gate-post and a vertically-slidable bar contained therein, of arms pivoted to the bar, and having slots engaged by a fulcrum whereby the arms are slidably pivoted to the post, as set forth. 3rd. The combination in a gate-post having a vertical groove, a bar contained in the groove, and arms pivoted to the bar, and having slots engaged by a fulcrum on the post, said arms adapted to be extended from the post by sliding the bar upward, and retracted into the post by sliding the bar downward, as set forth. 4th. The combination in a compound-gate of a post formed of a plurality of vertically-grooved uprights, spring-controlled slidable bars in the grooves, and a series of slotted arms pivoted to each bar, and fulcrumed to the posts through the slots. 5th. In a turnstile gate, the combination of the post having a suitable support and a plurality of vertically-slidable bars, with a series of slotted arms pivoted to each bar and fulcrumed to the post, and a rod extending vertically through the post upon which the latter is pivoted to the said support, substantially as set forth.

**No. 57,075. Carriage Fastening. (Attache de voiture.)**

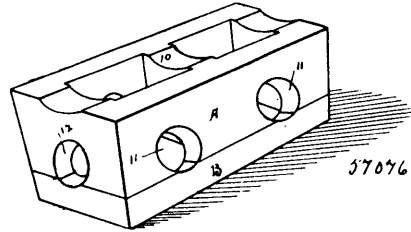


Claude Gorings, New London, New Hampshire, U. S. A., 17th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. In a tongue-and-socket-carriage fastening, a tongue having a perforation near its lower end, a socket having a perforation registering with that of the said tongue and a locking device consisting of a spindle mounted vertically and capable of rotary movement within said tongue and having at its lower end a lateral projection, and means for rotating the spindle and causing its projection to enter the perforations of the said tongue and socket. 2nd. In a tongue-and-socket carriage-seat fastening, a tongue having a perforation near its lower end, a socket having a perforation register-

ing with that of said tongue, a locking device consisting of a spindle mounted and capable of rotary movement within said tongue, and having at its lower end a lateral projection, and at its upper end an arm for rotating the same, and means whereby the projection of said spindle will maintain engagement with the perforation of said socket member. 3rd. A carriage-seat fastening comprising a tongue and socket member, the tongue member consisting of a plate having perforations for the reception of fastening-screws, a tongue projecting at its lower edge provided with a lateral perforation, and a lateral projection at the top of said plate having its upper surface spirally inclined, a spindle mounted vertically, and capable of rotary movement within said tongue member provided at its upper end with an arm having a spring bearing on said spirally-inclined projection, and at its lower end a lateral projection adapted to enter the perforation of said tongue, and a socket member consisting of a plate perforated for the reception of fastening-screws, and containing a socket having a perforation registering with that of said tongue, all substantially for the purpose set forth.

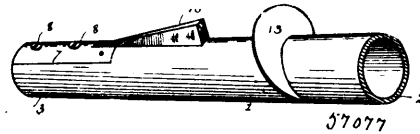
**No. 57,076. Fire Kindler. (Allumoir.)**



Nicoll MacDonald, Mount Oliver, Pennsylvania, U. S. A., 17th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. A fire-kindler consisting of agglomerated materials formed into cellular-shape with its lower portion constructed of thinner walls and a more easily combustible and more quickly-consumed material than its upper portion, substantially as and for the purpose set forth. 2nd. A fire-kindler consisting of a hollow brick made in two sections, each section of the brick being provided with a partition, and each partition, together with the end and side walls of each section of the brick being wedge-shaped in cross-section, as and for the purpose specified.

**No. 57,077. Pole Tip. (Bout de timon.)**



Thomas Nelson Martin, Omaha, Nebraska, U. S. A., 17th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—A new article of manufacture, a pole-tip comprising an inner tubular portion having a segmental flange and an outer solid portion having its end cut away or recessed on one side, and provided with a longitudinal groove, and having a longitudinal socket in the rear of the recessed end provided at the outer edges of its walls with inner flanges, a block secured to the recessed end of the body and completing the outline thereof, a catch pivoted to the inner end of the block and extending into the said longitudinal socket, and having lateral flanges to co-operate with the said inner flanges of the socket, and a flat spring having its outer end portion seated in the groove of the recessed end, and held therein by the block and its fastenings, and having its inner end portion projecting into the longitudinal socket and exerting an outward pressure against the said catch, substantially as and for the purpose set forth.

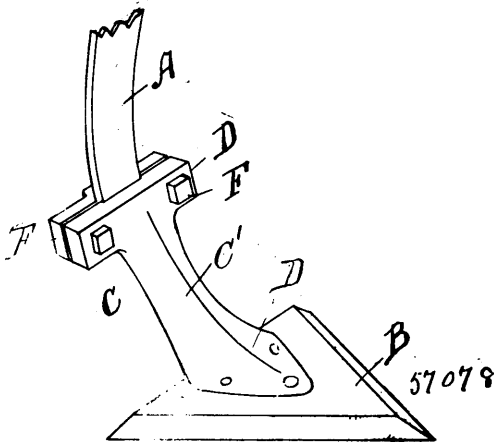
**No. 57,078. Harrow for Cutting Thistles. (Herse pour couper les chardons.)**

Charles F. Mavis, Yale, Michigan, U. S. A., 17th August, 1897; 6 years. (Filed 31st July, 1897.)

*Claim.*—1st. An attachment for spring tooth harrows, comprising a horizontal flat blade, a rearwardly inclined bracket to which the blade is attached, and a clamp for detachably holding the bracket on the lower end of a spring tooth harrow. 2nd. An attachment for spring tooth harrows, comprising a horizontal pointed sharpened blade, a rearwardly inclined bracket having the foot D and V-shaped face *e*<sup>1</sup> secured to the rear portion of the blade, and a clamp for detachably securing this bracket to the lower end of a spring tooth, substantially as described. 3rd. An attachment for spring tooth harrows, comprising a flat sharpened blade, a rearwardly inclined bracket to which said blade is attached, means on the bracket for attachment to a harrow tooth, and a gain or socket in the blade through which the tooth engages, substantially as described. 4th. An attachment for spring tooth harrows, comprising

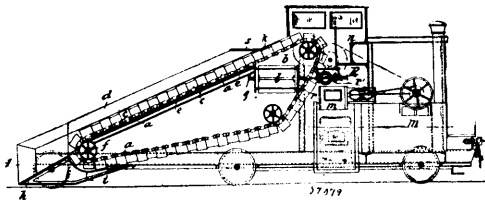
a pointed flat sharpened blade, a rearwardly inclined V-shaped bracket to which said blade is attached, ears on the bracket, com-

upon the withdrawal of the pot is automatically closed by the force of the spring, constructed and arranged substantially as hereinbe-



prising one member of the attaching means to the tooth, the plate E constituting the other member, and bolts clamping together and controlling the last two members, substantially as described.

**No. 57,079. Excavating Machine. (Machine à creuser.)**



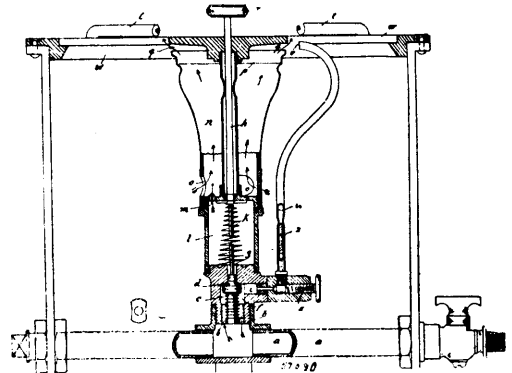
Wilhelm Paulitschke, Moedling, Lower Austria, 17th August, 1897. (Filed 30th July, 1897.)

*Claim.*—1st. In an excavating machine, the combination with a frame provided with an inclined plane, and guide rollers mounted on said frame, the upper rear guide roller being separated or spaced from the rear upper end of the inclined plane, of a series of endless elevator chains trained around said guide rollers and provided with elevator buckets or blades, and a transverse conveyor arranged in front of the rear guide rollers and below the space between the same and the upper end of the inclined plane, substantially as set forth. 2nd. In an excavating machine, the combination with a main frame provided with an inclined plane and guide rollers mounted on the said frame, of endless elevator chains guided over said rollers and provided with elevator buckets or blades, a plough, and a guide cylinder or drum arranged at the forward ends of the elevator chains and over which the same are guided between the plough and the lower end of the inclined plane, substantially as set forth. 3rd. In an excavating machine, the combination with a plough, and a liquid-containing trough arranged to the rear of the plough, of the endless elevator chains provided with buckets and adapted to dip into said trough, substantially as set forth. 4th. In an excavating machine, the herein described buckets, each being of scoop shape and provided with a springy or yielding blade portion formed from the rear wall, substantially as set forth. 5th. In an excavating machine, the herein described cutter of V-shape, provided with an intermediate shank, the forward edge of said V-shaped cutter being formed with a cutting edge, substantially as set forth. 6th. The combination with a bucket, of an elevator chain, provided with a V-shaped slot in its rear wall and having a transverse slot in its top wall, of a V-shaped cutter adapted to pass through said V-shaped slot and provided with a shank adapted to pass through said transverse slot, substantially as set forth. 7th. In an excavating machine, the combination with an endless elevator chain, of breaking cutters pivoted thereto and shovels also pivoted thereto, said cutters and shovels being provided with tail pieces adapted to engage the inclined plane over which the chain passes, substantially as set forth. 8th. In an excavating machine, the combination with endless elevator chains and buckets carried thereby, of a pressing roof arranged across the upper ends of said elevator chains and extending in a tangential or inclined direction with respect thereto, substantially as set forth.

**No. 57,080. Gas Cooking Stove. (Poêle à gaz.)**

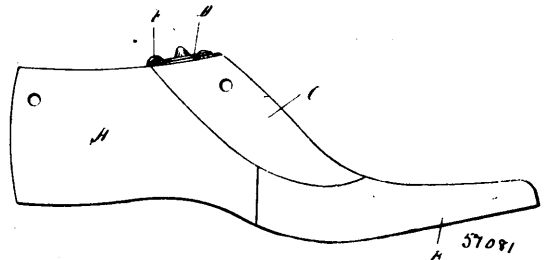
Wilhelm Jos. Schmitz, 61 Alter Sternweg, Hamburg, Germany, 17th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. A gas cooking stove, in which the main flame is automatically extinguished by means of mechanism *h, g*, which by reason of the weight of the pot maintains the gas valve *d*, open and



fore described. 2nd. In a gas cooking stove, in which the main flame is automatically extinguished by means of mechanism *h, g*, which by reason of the weight of the pot maintains the gas valve *d*, open, and upon the withdrawal of the pot is automatically closed by the force of the spring, the use of an auxiliary burner consisting of a nozzle *x*, and an air tube *u*, which ignites the main burner and remains burning after the closing of the main valve *d*, constructed and arranged substantially as hereinbefore described.

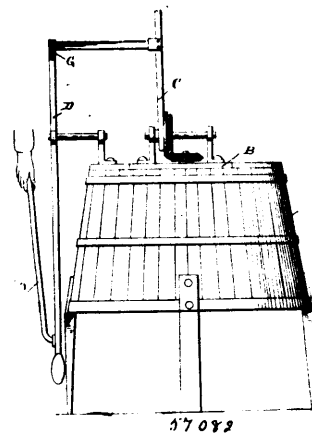
**No. 57,081. Boot Last. (Forme à chaussure.)**



Peter Kelley, Montreal, Quebec, Canada, 17th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. A last composed of two or more portions, combined with a hook and eye for securing the upper portion in position, substantially as shown. 2nd. In a last, the heel portion *A*, toe portion *B*, and the removable part *C*, combined with the pivoted hook and the stationary eye, the removable portion *C*, being provided with a groove in its inner end for the eye to pass through, substantially as described.

**No. 57,082. Mechanism for Operating Washing Machines. (Mécanisme de machine à laver.)**

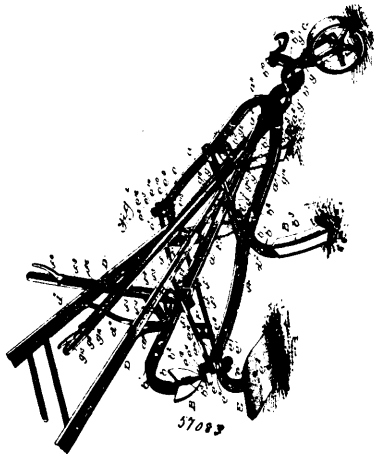


Hans Jacob Paarmann, Davenport, Iowa, U.S.A., 17th August, 1897; 18 years. (Filed 27th July, 1897.)

*Claim.*—1st. In a washing machine, an operating lever pivoted upon the cover, combined with a weighted pivoted rod, which is journaled beyond the cover but arranged to swing in unison with the lever, and which has its upper end to project above the top o

the body of the washing machine, and a means for connecting the rod and the lever while the machine is in operation, but which lever and weighted rod are adapted to be disconnected when the cover is to be raised, substantially as described. 2nd. In a washing machine mechanism, an operating lever pivoted upon the cover, combined with a weighted pivoted rod journalled upon the cover and arranged to swing in unison with the lever, its upper end projecting above the top of the body of the machine, and means for connecting the rod and the lever while the machine is in operation, the rod O, attached to the weighted end of the rod and by which the machine is operated, the lever and the weighted rod being adapted to be disconnected when the cover is to be raised, substantially as described.

**No. 57,083. Cultivator. (Cultivateur.)**

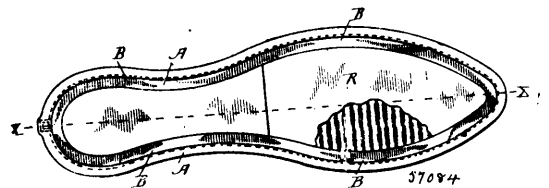


Marquis J. Todd, Buffalo, New York, U.S.A., 17th August, 1897; 6 years. (Filed 28th July, 1897.)

*Claim.*—1st. A cultivator having a central frame bar and two laterally adjustable side bars, hubs secured to the forward ends of the latter, upper and lower cap plates having lugs engaging said central bar and also having holes and recesses, and the nutted bolts passed through said hubs and the hole of said cap plates, substantially as set forth. 2nd. A cultivator having a central frame bar and two laterally adjustable side bars, hollow hubs secured to the forward ends of said side bars having reduced ends, upper and lower cap plates extending transversely over said central bar and having holes and inner recesses to accommodate said reduced ends, and also having lugs engaging the edges of said central bar, and nutted bolts for binding said parts, substantially as set forth. 3rd. In a cultivator having its frame composed of a central draft bar, and laterally adjustable side bars, means mounted on said draft bar for adjusting said side bars, a brace bar extending transversely across all of said frame bars and a yoke for binding said brace bars to said central bar, said brace bar bearing at its ends upon said side bars but not connected thereto, substantially as set forth. 4th. In a cultivator having a central draft bar and laterally adjustable side bars, a transverse bar secured to said central bar and having a longitudinal slot, the handles, supporting straps for said handles pivoted at their lower ends to said central draft bar, and a bolt working in said slot for holding the forward ends of said handles to said transverse bar, as set forth. 5th. In a cultivator having a central draft bar and laterally adjustable side bars, a transverse bar secured to said central bar and having a curved slot therein and grooved or channelled on its underside, handles having forward meeting ends, supporting straps for said handles secured to said central bar, and a bolt passed through said slot and holding said meeting ends of said handles, the head of said bolt fitting in the groove or channel of said bar, substantially as set forth. 6th. A cultivator having shovel standards composed each of two independent disconnected spaced apart bars rigidly held at their upper ends, clips engaging the rear edges of said bars, shovels thereon, and nutted bolts passed through said shovels and clips, said bars being drawn towards each other at their upper and lower ends, as set forth. 7th. A cultivator having bars provided with vertical hollow hubs, rotatable clips fitted in said hubs having vertical slots at their lower ends, and shovels having their standard extended through said slots and designed to be held against said hubs, as set forth. 8th. A cultivator having its side bars provided with vertical hollow hubs, rotatable clips having tapering bodies fitted in said hubs and provided with slots in their lower ends, standards extended through said slots whereby they are capable of being longitudinally adjusted, and shovels adjustably mounted on said standards, substantially as set forth. 9th. A cultivator having its side bars provided with vertical hollow hubs, rotatable clips having tapered bodies fitted in said hubs and also having threaded ends with nuts thereon, the lower ends of said clips being provided with vertical slots, standards extended through said slots, and shovels adjustable on said standards, substantially as set forth. 10th. A cultivator having hollow hubs, clips adjustably fit

in said hubs having their lower ends provided with two sets of opposite slots, standards composed each of two bars extended through said opposite slots, shovels on said standards, clips holding the lower ends of said bars, and nutted bolts engaging said shovels and standards, substantially as set forth. 11th. In a cultivator, the combination with the central bar, of the two side bars pivoted at their forward ends, and having hooks at their rear ends, adjusters having bars engaging said hooks, an adjusting head on said central bar also having hooks with which said bars engage, and a lever for moving said adjusting head, substantially as set forth. 12th. In a cultivator, the combination with the central bar, of the two side bars pivoted at their forward ends, and having hooks at their rear ends, adjusters having upper and lower parallel bars, those of each adjuster being connected together, said bars at their outer ends engaging said hooks, an adjusting head on said central bar also having upper and lower hooks with which the inner ends of said upper and lower bars engage, and a lever for moving said adjusting head, substantially as set forth. 13th. A cultivator having a central bar and laterally adjustable side bars, an adjusting head on said central bar connected to said side bars, an operating lever, and a wedging plate connected to said lever for binding said adjusting head against said central bar, substantially as set forth. 14th. A cultivator having a central bar and laterally adjustable side bars, an adjusting head on said central bar connected to said side bars, an operating lever engaging said head, and a wedging plate carried by said lever and located between the latter and said central bar, substantially as set forth. 15th. The combination with the central and side bars, of the adjusting head on said central bar having a rack bar, the operating lever, the spring pressed pawl carried by said lever, and the wedge plate connected to said pawl, as and for the purpose stated. 16th. The combination with the central and side bars, of the adjusting head on said central bar having a rack bar and a lower opening, the lever composed of two bars, the pivot bolt therefor passed through said opening, the spring pressed pawl between said bars of said lever, the hand lever connected thereto, and the plate extended from said pawl having wedging surfaces designed to bind said head and said central bar when said pawl is in engagement with said rack bar, substantially as set forth. 17th. A cultivator having a wheel, a lever on the free end of the long arm of which said wheel is mounted, and detachable means for engaging the free end of the short arm of said lever, as and for the purpose set forth. 18th. A cultivator having a wheel, a lever having long and short arms, said wheel being mounted on the outer end of said long arm, and a lever engaging the free end of said short arm for adjusting the position of said lever, and means for disengaging said levers, whereby said wheel lever is free to move on its fulcrum independent of said other lever, substantially as set forth. 19th. A cultivator having a wheel, a lever fulcrumed on the cultivator frame, said wheel being mounted on the free end of the long arm of said lever and an adjusting lever engaging the free end of the short arm of said wheel lever, as and for the purpose set forth. 20th. A cultivator having a wheel, a lever fulcrumed on the cultivator frame, said wheel being mounted on the free end of the long arm of said lever, a rack bar, an adjusting lever, and a spring pressed pawl mounted therein, for engaging said rack bar and the free end of the short arm of said wheel lever, as set forth. 21st. The combination with the frame having a central bar, and a rack bar secured thereto, of a wheel, a lever fulcrumed on said bar and composed of two bars between which, at one end, said wheel is mounted, said bars at the other ends being slotted, a lever also fulcrumed on line with said wheel lever and composed of two bars having opposite slots, a spring pressed pawl movable between said bars having lateral arms movable in said slots and designed to engage said slotted ends of said wheel lever, and means for operating said pawl, substantially as set forth. 22nd. The combination with the bar having holes therein, of the clevis fitted on said bar having a hole and housing on opposite sides, and a spring pressed bolt movable in said housing and hole, as set forth. 23rd. The combination with the bar having grooved sides, of the clevis having an inner portion surrounding said bar and provided with a hole and an opposite housing, a bolt having a reduced end extended through the outer end of said housing, and a spring in said housing encircling said reduced end, substantially as set forth.

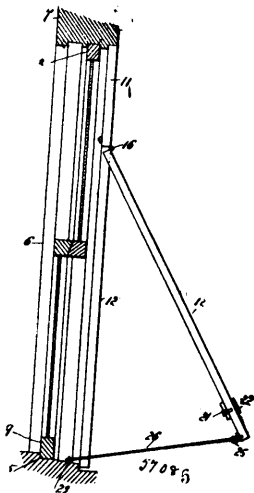
**No. 57,084. Boot and Shoe. (Chaussure.)**



John Franklin Warner, Boston, Mass., U.S.A., 17th August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—In a boot or shoe a filling to be placed between the outer and inner soles consisting of a tubulated elastic fabric each tube of which is elastic and compressible and interiorly connected to air passages whereby the boot or shoe is thoroughly ventilated, substantially as and for the purpose set forth.

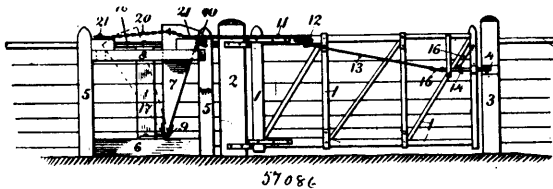
**No. 57,085. Combination Window Shutter and Awning.** (*Fenêtre, volet et tente.*)



Max Gluck, New York, State of New York, U.S.A., 17th August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—1st. A pair of window shutters which consist of an upper main frame, the back of which is provided with a downwardly directed extension, said main frame and the said extension being adapted to be hinged to the window frame and supplemental frames hinged to the bottom of the main frames, and extending downwardly to the bottom of said extension, substantially as shown and described. 2nd. A pair of window shutters which consist of an upper main frame, the base of which is provided with a downwardly directed extension, said main frame and the said extension being adapted to be hinged to the window frame, and supplemental frames hinged to the bottom of the main frames, and extending downwardly to the bottom of said extension, and fastening devices for connecting the main and the supplemental frames when the shutters are closed, substantially as shown and described. 3rd. A pair of window shutters which consist of an upper main frame, the base of which is provided with a downwardly directed extension, said main frame and the said extension being adapted to be hinged to the window frame, and supplemental frames hinged to the bottom of said extension, and fastening devices for connecting the main and the supplemental frames when the shutters are closed, and said supplemental frames being provided near their lower ends with a plate which is secured to one side thereof, and on the opposite side with a pivoted catch whereby the lower ends of said supplemental frames may be connected with the downwardly directed extensions of the main frames, substantially as shown and described. 4th. A pair of window shutters which consist of an upper main frame, the base of which is provided with a downwardly directed extension, said main frame and said extension being adapted to be hinged to the window frame, and supplemental frames hinged to the bottom of the main frames and extending downwardly to the bottom of said extensions, and fastening devices for connecting the main frames and also the supplemental frames when the shutters are closed, and said supplemental frames being provided near their lower ends with a plate which is secured to one side thereof, and a pivoted catch secured to the opposite side whereby the lower ends of said supplemental frames may be connected with the downwardly directed extensions of the main frames, and said supplemental frames being adapted to be swung outwardly and to be used as an awning, substantially as shown and described.

**No. 57,086. Farm Gate.** (*Barrière.*)

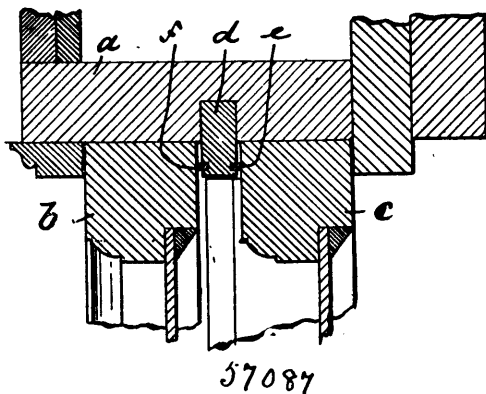


Thomas Farrow, Plattsville, Ontario, Canada, 17th August, 1897; 6 years. (Filed 29th July, 1897.)

*Claim.*—1st. A farm gate having an oscillating or tilting weight connected to the gate toward the hinge post thereof, said weight being supported so as to incline the gate either fully closed or fully opened, substantially as shown and described. 2nd. In a farm gate,

the combination of the oscillating or tilting counterweight connected to the gate toward the hinge post thereof, and a framework having guides to direct said counterweight, substantially as shown and described. 3rd. In a farm gate, the combination of the oscillating or tilting counterweight, the gate hinged to swing from a post, the rod connecting said weight with the gate, and the link or slot on the gate and to which said rod is connected, substantially as shown and described. 4th. In a farm gate, the combination of a tilting counterweight, the rod from said weight to the gate, the gate adapted to swing from a post, the link or slot on the gate, a rod and chain or similarly flexible connection from said rod to the latch-bar, and said latch-bar supported to act by gravity to engage a catch to secure the gate, substantially as shown and described. 5th. In a farm gate, the combination of the gate, a tilting counterweight supported as described, a rod connecting the gate to the counterweight, a link on the gate at the end of said rod, a second rod connecting said rod with a latch, the latch supported to act by gravity, a catch dovetailed adjustable on the latch-post, a framework having guides to direct said counterweight, rollers on said guides, chains over said rollers, rods or ropes from each of said chains to a lever, the said levers pivoted to vibrate centrally on posts, and said posts to carry the levers placed on opposite sides of and removed from said framework, substantially as shown and described.

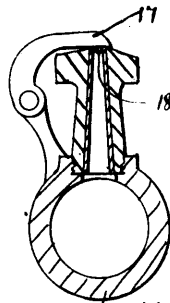
**No. 57,087. Combined Parting Rail and Weatherstrip for Window Frames.** (*Rail et bourrelet de porte.*)



Charles H. Mersereau, Paterson, New Jersey, U.S.A., 17th August, 1897; 6 years. (Filed 29th July, 1897.)

*Claim.*—1st. A parting rail for window frames provided with an elastic body projecting beyond the edges thereof, substantially as and for the purposes described. 2nd. A parting rail for window frames comprising the rail proper, an elastic body on the face of said rail and projecting beyond the edges thereof, and means for securing said elastic body to said rail, substantially as described. 3rd. A parting rail for window frames, comprising the rail proper, an elastic body on the face of said rail and projecting beyond the edges thereof, a strip on said elastic body, and means for securing said strip to the rail, substantially as described. 4th. In a window frame, the combination with the sashes, of a parting rail in said frame, and an elastic strip carried by said rail and bearing against the sashes, substantially as and for the purposes described.

**No. 57,088. Hydrocarbon Burner.** (*Foyer à hydrocarbonés.*)



Charles Storey Taggart, Ottawa, Ontario, Canada, 17th August, 1897; 6 years. (Filed 17th May, 1897.)

*Claim.*—1st. A hydrocarbon burner comprising an oil receptacle, conductor leading from said receptacle and extending paral-

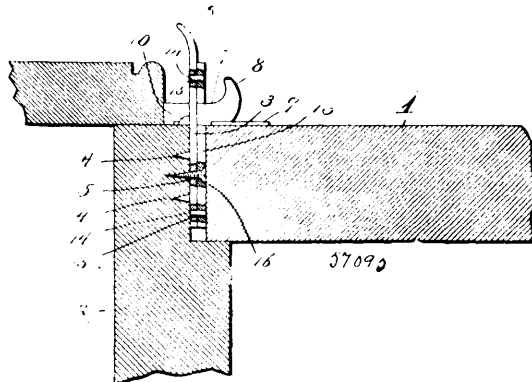
lel thereto and having one or more perforations to allow of the exit of the vaporized oil, and one or more removable mixing chambers located intermediate of said conductor and receptacle and adapted to receive said vaporized oil from said conductor, for the purpose set forth. 2nd. A hydrocarbon burner comprising an oil receptacle, conductor leading from said receptacle and extending parallel thereto and having one or more perforations to allow of the exit of the vaporized oil, and one or more mixing chambers located intermediate of said conductor and receptacle, and adjustable to and from said conductor and adapted to receive said vaporized oil for the purpose set forth. 3rd. A hydrocarbon burner comprising an oil receptacle, conductors leading from said receptacle and extending parallel thereto, and having one or more perforations to allow of the exit of the vaporized oil, and one or more removable mixing chambers located intermediate of said conductor and receptacle, and adapted to receive said vaporized oil, said chamber consisting of a suitably supported tubular section for the purpose set forth. 4th. A hydrocarbon burner comprising an oil receptacle, conductors leading from said receptacle and extending parallel thereto and having one or more perforations to allow of the exit of the vaporized oil, and one or more mixing chambers intermediate of said conductor and receptacle and adjustable to and from said conductor, and adapted to receive said vaporized oil, said chamber or chambers consisting of tubular sections having lugs on the exterior thereof, said lugs being provided with screw-threaded perforations adapted to receive the screw-threaded ends of supporting rods, for the purpose set forth. 5th. A hydrocarbon burner, comprising one or more oil receptacles communicating with one another, a conductor leading from said receptacle or receptacles and extending parallel thereto, a perforation in said conductor located centrally of each oil receptacle, a screw-threaded recess formed in said conductor concentric of each perforation, an externally screw-threaded nipple adapted to take into said recess, and having its interior of conical form, an integral conical lining section formed of porcelain or the like adapted to take into the conical interior of each nipple and rest upon the shoulder formed by each recess. 6th. A nipple consisting of a hollow body portion, and formed of porcelain or the like, and an integral lining section located within said hollow body portion. 7th. A nipple consisting of a body portion having its interior of conical form and an integral conical lining section located within said conical interior. 8th. In combination with a hydrocarbon burner, an enclosing casing for said burner, a tubular section extending from a point adjacent to said burner through said casing and downwardly and communicating with the upper end of a flared device, for the purpose set forth. 9th. In a hydrocarbon burner, the combination with an elbow-coupling having a screw-threaded opening in the side thereof, and a screw-threaded plug adapted to take into and close said opening, a section of asbestos or the like, located inside of said elbow-coupling, and one or more perforated discs formed of woven wire adapted to localize said asbestos, substantially as and for the purpose set forth. 10th. A hydrocarbon burner comprising a pipe section 5, formed with a series of lateral flat-bottomed extensions 6, 6, and coupled at one end to an oil supply pipe 7, by means of an elbow coupling 9, said coupling having a screw-threaded opening in the side thereof and a screw-threaded plug adapted to take into and close said opening a section of asbestos or the like, located inside of said elbow-coupling, and one or more perforated discs formed of woven wire adapted to localize said asbestos, the other end of this pipe 5 being coupled to the upwardly turned end of a pipe or conductor 10, of small diameter, which extends parallel to and beneath the receptacles 6, 6, said pipe or conductor 10 being provided with screw-threaded recesses 11, 11, directly beneath the centre of said receptacles and diminutive perforations 12, 12, concentric of said recesses, an externally screw-threaded nipple adapted to take into said recess, and having its interior of conical form, an integral conical lining section formed of porcelain or the like, adapted to take into the conical interior of each nipple and rest upon the shoulder formed by each recess, and a cap pivotally connected to the conductor adjacent to each nipple and adapted to close same, a series of mixing chambers located intermediate of said conductor and receptacle, and communicating with and adjustable to and from the nipples of said conductor, said chambers consisting of a tubular section having lugs on the exterior thereof, said lugs being provided with screw-threaded perforations adapted to receive the screw-threaded ends of supporting rods; all of the above being supported upon a frame comprising a base plate 23, having a vertical flange extending from end to end of the sides thereof, and vertical end pieces 24 and 25 formed at their upper ends with recesses 26, adapted to receive the main castings 5, while the end piece 25 is formed with a vertical slot 27, this frame and the parts carried thereby being adapted to be located in a fire-chamber; a length of tubing 31, provided with a damper 32 extends from a point in close proximity to the underside, of casting 5, through the front of the stove and downwardly to within a short distance of the flooring upon which said fire chamber is supported, and a flared section 33 connected to the lower end of said tubing 31, and resting upon feet 34, substantially as described and for the purpose set forth.

**No. 57,089. Fire Kindler. (Allumoir.)**

Sigurd Hendrik Olaf Elloe, Stavanger, Norway, 17th August, 1897; 6 years. (Filed 30th July, 1897.)

*Claim.*—1st. Fire-kindler, essentially consisting of peat, impregnated with a solution of one or more solid, combustible substances (stearine, dry paraffin, etc.) in liquid hydrocarbon. 2nd. Fire-kindler, as in claim 1, provided with a priming composition. 3rd. Proceedings for making fire-kindlers, according to claim 1, consisting in the peat being first pressed to briquets of suitable size and form, which briquets, after being dried, are impregnated with a hot solution of about two parts of stearine to three parts of petroleum.

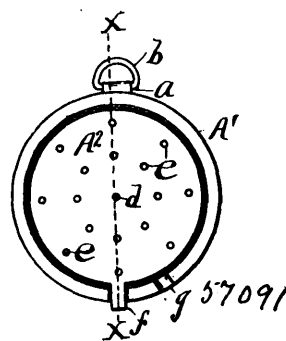
**No. 57,090. Door Holder. (Ferrure de porte.)**



John Franklin Sullivan, Florence, Colorado, U.S.A., 17th August, 1897; 6 years. (Filed 30th July, 1897.)

*Claim.*—1st. A door securer, consisting of a plate provided with devices for securing it to a door-jamb, an opening in said plate, and a bolt to enter said opening, substantially as described. 2nd. A door securer, consisting of a plate provided with a plurality of points or pins, an opening in said plate and a bolt to enter said opening and provided with a handle and with a spring, substantially as described. 3rd. A door securer, consisting of a plate provided with devices for fastening it to a door-jamb or other part, an opening 11 in said plate, projections 10 upon one side of said plate, and situated in alignment with the inner edge of said opening 11, and a bolt to enter said opening 11. 4th. The combination with a plate having devices for fastening it to a door-jamb or other part, and provided with an opening and a bolt, and openings 15 in said plate, of an auxiliary plate provided with pins 14 to enter said openings 15.

**No. 57,091. Vaporizer. (Evaporateur.)**



Hiram Walker, Ile-aux-Pêches, Ontario, Canada, 17th August, 1897; 6 years. (Filed 19th March, 1897.)

*Claim.*—The herein described medicament-vaporizing device, consisting of the flanged body A, the flanged and perforated cover A' fitting over it, the perforated disc A' pivoted thereto, and provided with the lever f engaging with the notch g in the flange of the said cover, substantially as and for the purpose set forth.

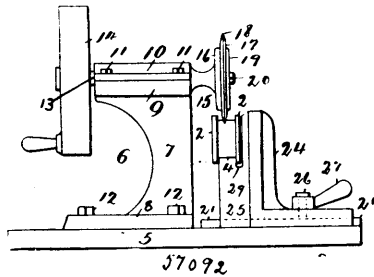
**No. 57,092. Box Making Machine.**

(Machine à faire des boîtes.)

Joseph H. Rahberger, Brooklyn, New York, U.S.A., 17th August, 1897; 6 years. (Filed 30th June, 1897.)

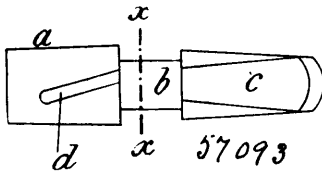
*Claim.*—1st. In a box making machine, the combination of a cutting blade, a movable mandrel, a supporting bed for the mandrel the plane of which is coincident with the plane of the latter's movement, and means for preventing the displacement of the mandrel, substantially as described. 2nd. In a box making machine, the combination of a rotatably supported cutting blade, a box mandrel, and a supporting guideway for the mandrel, substantially as described. 3rd. The combination in a device of the class described,

of the rotatably supported cutting blade, a box mandrel, and a restraining guideway for said mandrel conformed to the plane of



movement of said mandrel, substantially as described. 4th. The combination in a device of the class described, of the rotatably supported cutting blade, an independently rotatable box mandrel, and a supporting and restraining guideway conformed to the plane of movement of said mandrel, said guideway being adapted to be moved to or from the plane of movement of said knife blade, substantially as described. 5th. The combination, in a device of the class described, of a rotatably supported cutting blade, a box mandrel, and a support for the mandrel adjustable to and from the plane of movement of said blade, substantially as described. 6th. The combination with the head stock 6 carrying the longitudinal shaft 13, the circular blade 17, the tail stock 22, and the segmental ledge 28 formed in said tail stock, substantially as described. 7th. The combination with the head stock 6 carrying the longitudinal shaft 13, the circular blade 17, the tail stock 22, the segmental ledge 28 formed on said tail stock, and the abutment 24 at the rear of said ledge, substantially as described. 8th. The combination with the head stock 6 carrying the longitudinal shaft 13, the circular blade 17, the tail stock 22, the segmental ledge 28 formed in said stock, the abutment 24 at the rear of said ledge, and the channel 29 formed in said ledge adjacent said abutment, substantially as described. 9th. In a device of the class described, the combination with a box mandrel, a support for the mandrel, and a rotatably supported cutting blade having a cutting edge formed by bevels of unequal angles, substantially as described. 10th. In a device of the class described, the combination with a box mandrel, a support for the mandrel having a guideway and abutment, and a rotatably supported cutting blade formed by bevels of unequal angles, the most acute bevel being presented towards the abutment, substantially as described. 11th. The combination with the circular blade having the bevels *a, b*, forming the cutting edge 18, the bevel *a* being the most acute, a box mandrel, and a supporting guideway and abutment for said dummy, the bevel *a* being presented towards the abutment, substantially as described.

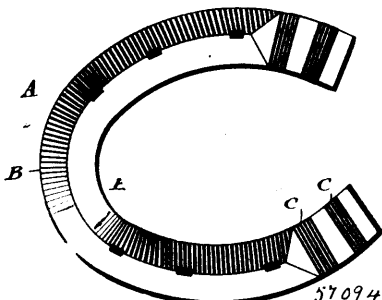
**No. 57,093. Turning Pin. (Cabillot.)**



Henry Müller, Camberwell, London S.E., England, 17th August, 1897; 6 years. (Filed 28th June, 1897.)

*Claim.*—1st. The improved turning pin formed in three diameters, having a diagonal slot *d* in the periphery of the conical end *a*, which enters the wrest plank, for receiving the end of the wire or string, a neck *b* of reduced diameter, upon which the wire is wound, and a square or otherwise formed end *c*, for turning the pin, substantially as hereinbefore described.

**No. 57,094. Horse Shoe. (Fer à cheval.)**

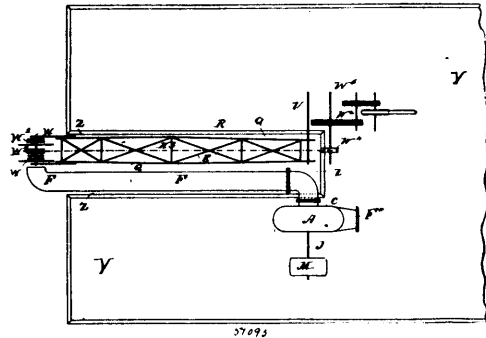


George Anthony Singerly, of Philadelphia, Pennsylvania, U.S.A., 17th August, 1897; 6 years. (Filed 15th June, 1897.)

*Claim.*—1st. A horse shoe having on the tread thereof depending rims and depending teeth. 2nd. A horse shoe having on the tread thereof depending segmental rims extending around the toe and heel portions thereof, and necks on the upper part of the shoe intermediate of said portions.

**No. 57,095. Dredging Apparatus.**

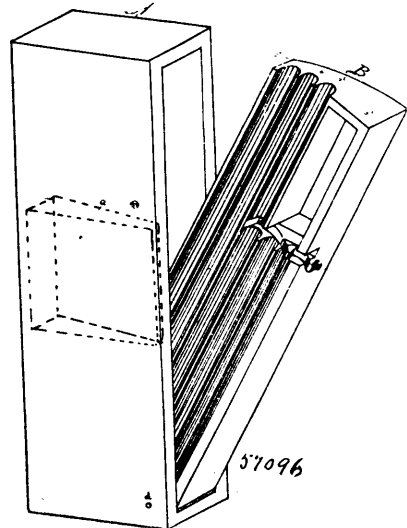
(Appareil de draguage.)



Charles Edward Beckman, Finsbury Park, London, England, 17th August, 1897; 6 years. (Filed 13th April, 1897.)

*Claim.*—1st. In a centrifugal dredging pump, the means for taking up the wear and tear between the end of the suction pipe *F*, and the internal runner or fan *Kx*, which consists in mounting the shaft *J*, of the said runner or fan in a headstock *N*, movable in a direction parallel to said shaft, substantially as described. 2nd. In a centrifugal dredging pump, a removable ring *F<sup>3</sup>*, in combination with the internal runner or fan *Kx*, substantially as described, and for the purpose set forth. 3rd. In a centrifugal dredging pump, a replaceable sleeve *J<sup>1</sup>* secured to the shaft *J*, substantially as described and for the purpose set forth. 4th. In dredging apparatus of the kind herein described, the scarifier consisting of a ladder beam or derrick, the upper end of which is adapted to be hinged to the desk of a punt and its lower end provided with revolving picks, and means for operating such picks, the whole constructed substantially as described and for the purpose set forth. 5th. In dredging apparatus of the kind herein described, the combination of a centrifugal pump and a scarifier arranged and operating substantially as described and for the purpose set forth.

**No. 57,096. Pencil Case. (Etui à crayons.)**



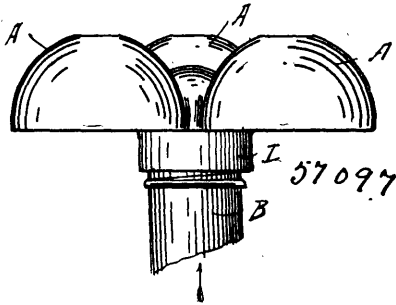
Ernest Pape, Portland, Oregon, U.S.A., 17th August, 1897; 6 years. (Filed 30th March, 1897.)

*Claim.*—1st. The combination of the incasement *A*, provided with a bolster in wedge form *a*, and the wedge formed drawer *B* provided with grooves for writing and drawing materials, substantially as and for the purpose set forth.



**No. 57,097. Lawn Sprinkler.**

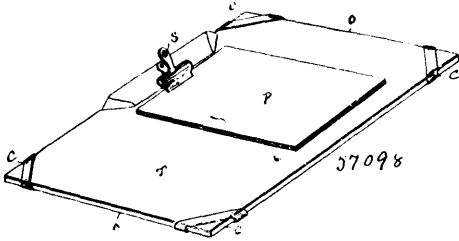
(Machine à arroser le gazon.)



John Pulaski Van Sickle, Pasadena, California, U.S.A., 17th August, 1897; 6 years. (Filed 5th July, 1897.)

**Claim.**—1st. A lawn sprinkler or irrigator consisting of two or more circular chambers, each having a central discharge orifice at the upper part, a vertical entrance passage for the water, common to said chambers at the centre of the under part of the sprinkler from which passages or avenues diverge horizontally, one to each chamber in a direction approximately tangentially to the circular wall of each chamber, the whole operating in the manner and for the purpose substantially as set forth.

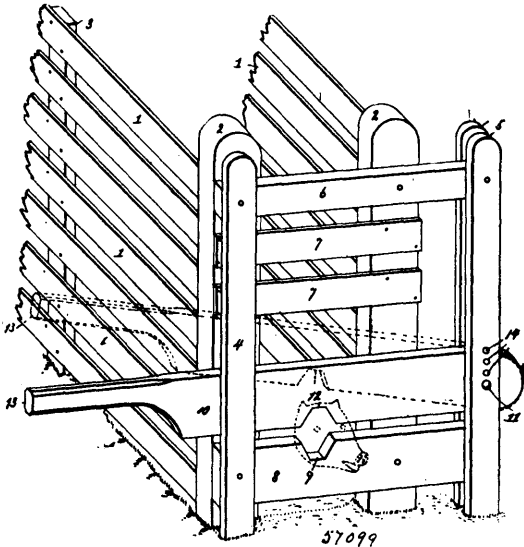
**No. 57,098. Writing Pad. (Calpin.)**



Matthew L. Bacon, Memphis, Tennessee, U.S.A., 17th August, 1897; 6 years. (Filed 5th July, 1897.)

**Claim.**—1st. The combination of the writing-pad O, O, to the side of which is attached the wood block W holding the thumb-spring S with corner-straps C, C, C, C, the blotter T and roundhead tacks D, D, D, D, D, as specified.

**No. 57,099. Hog Trap. (Piège à porc.)**

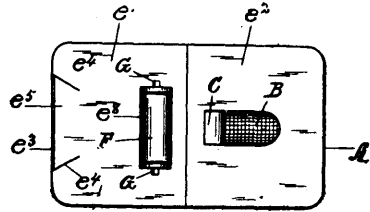


James W. Harrelson, Belton, Missouri, U.S.A., 17th August, 1897; 6 years. (Filed 5th July, 1897.)

**Claim.**—1st. A hog-trap, comprising a chute, cross-bars at the end of same, a grooved cross-beam at the end of the same below said cross-bars, and a lever playing vertically between said beam and cross-bars and provided with an opposing groove, substantially as described. 2nd. A hog-trap, comprising a chute, uprights at its front end, an upright companion to one said chute-uprights, an

upright at the opposite side of the other chute-upright, a cross-bar 6, connecting the uprights, one or more cross-bars below the same, a cross-beam 8 connecting said uprights near their lower ends and provided with a groove in its upper side opposite the middle of the chute, and a lever, arranged between the upright of the chute first mentioned and the opposing or companion upright, and pivoted to operate beyond the opposite upright of the chute, and provided with a groove in its underside opposing the groove of said cross-beam substantially as described.

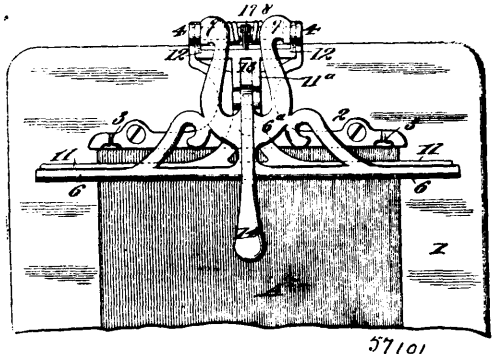
**No. 57,100. Ticket Holder. (Porte billet.)**



James Ellis Adkins, London, Ontario, Canada, 17th August, 1897; 6 years. (Filed 29th April, 1897.)

**Claim.**—1st. A case A, for holding tickets provided with an exit opening a<sup>2</sup>, in combination with a roller F, and means for holding the tickets in contact therewith, substantially as and for the purpose set forth. 2nd. A case A, for holding tickets, provided with an exit opening a<sup>2</sup>, and with a top portion e<sup>1</sup>, in which an opening e<sup>8</sup>, and recesses e<sup>7</sup> are formed, and which is provided with the socket flanges e<sup>6</sup>, in combination with a roller F, and roller spindle G, and means for holding the tickets in contact with said roller, substantially as and for the purpose set forth. 3rd. A case A, for holding tickets provided with an exit opening a<sup>2</sup>, and with the portion e<sup>2</sup>, in which the opening B, is formed, in combination with a roller F, and means for holding the tickets in contact therewith, substantially as and for the purpose set forth. 4th. A case A, for holding tickets provided with an exit opening a<sup>2</sup>, and a portion e<sup>2</sup>, provided with a shoulder C, in combination with a roller F, and means for holding the tickets in contact therewith, substantially as and for the purposes set forth. 5th. A case A for holding tickets, provided with an exit opening a<sup>2</sup>, and with the flangs b<sup>1</sup>, and a portion e<sup>2</sup>, provided with the returned side edges d, in combination with a roller F, and means for holding the tickets in contact therewith, substantially as and for the purposes set forth. 6th. A case A for holding tickets provided with an exit opening a<sup>2</sup>, and a portion e<sup>2</sup>, cut away at e<sup>3</sup>, slitted at e<sup>4</sup>, and adjustable at e<sup>5</sup>, in combination with a roller F, and means for holding the tickets in contact with said roller, substantially as and for the purpose set forth. 7th. A case A, for holding tickets provided with an exit opening a<sup>2</sup>, in combination with the roller F, table H, and springs I, substantially as and for the purpose set forth. 8th. A case A, for holding tickets in which an exit opening a<sup>2</sup>, is formed, in combination with a roller F table H, provided with the shoulders, n, and the springs I, substantially as and for the purpose set forth.

**No. 57,101. Paper Holding Device. (Porte-papier.)**

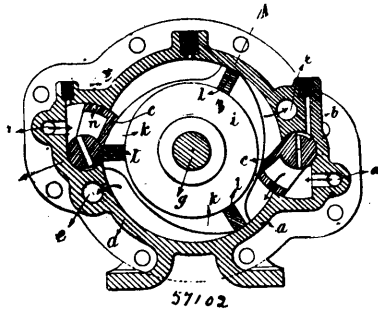


Emory Audell Trussell, St. Louis, Missouri, U.S.A., 17th August, 1897; 6 years. (Filed 28th June, 1897.)

**Claim.**—1st. In a paper holding device, the combination of a base, a pair of spring-controlled bars arranged to be alternately moved toward said base, and means through which said bars may be alternately moved, one toward said base and the other away from said base, substantially as and for the purpose set forth. 2nd. In a paper holding device, the combination of a base, a pair of spring-controlled bars arranged to be alternately moved toward said base, and a lever through means of which said bars are alternately moved, one toward said base and the other away from it, substantially as

and for the purpose set forth. 3rd. In a paper holding device, the combination of a base, a main bar, a spring adapted to throw said bar toward said base, a secondary bar, a spring adapted to elevate said secondary bar, substantially as and for the purpose set forth. 4th. In a paper holding device, the combination of a base, a main bar, a spring adapted to throw said bar toward said base, a secondary bar, a spring adapted to elevate said secondary bar, and means for elevating said main bar, substantially as and for the purpose set forth. 5th. In a paper holding device, the combination of a base, a main bar, a spring adapted to throw said bar toward said base, a secondary bar, a spring adapted to elevate said secondary bar, and a lever arranged to elevate said main bar, substantially as and for the purpose set forth. 6th. In a paper holding device, the combination of a base, a main bar, a spring adapted to throw said bar toward said base, a secondary bar, a spring adapted to elevate said secondary bar, and a lever provided with a cam adapted to elevate said main bar, substantially as and for the purpose set forth. 7th. In a paper holding device, the combination of a base, a main bar pivotally connected to said base, a spring adapted to throw said main bar toward said base, a secondary bar pivotally connected to said base, a spring adapted to elevate said secondary bar, and a lever arranged to elevate said main bar and depress said secondary bar, substantially as and for the purpose set forth. 8th. In a paper holding device, the combination of a base, a main bar pivotally connected to said base, a spring adapted to throw said bar toward said base, substantially as and for the purpose set forth. 9th. In a paper holding device, the combination of a base, a main bar pivotally connected to said base, a spring adapted to throw said bar toward said base, a secondary bar pivotally connected to said base, a spring adapted to elevate said secondary bar, a lever arranged to elevate said main bar and throw said secondary bar toward said base, and stops adapted to limit the extent of insertion of a sheet of paper beneath said main bar or both of said bars, substantially as and for the purpose set forth.

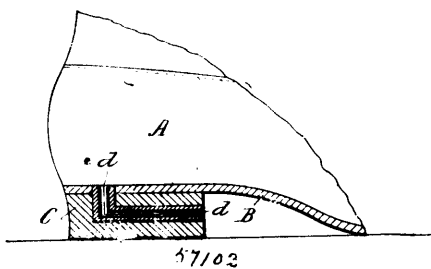
**No. 57,102. Rotary Machine. (Machine rotative.)**



Gaston Michel Schmid, Pauten, et Eugène Jules Henri Lesue, Paris, France, 18 août 1897; 6 ans. (Déposé le 19 juin 1897.)

*Résumé.*—Un moteur rotatif caractérisé par un piston spécial *i*, calé sur l'arbre *g*, et muni des parties excentrées *k*, des obturateurs *b* et *h*, en combinaison avec des cames distributrices *e*, équilibrées et disposées de façon à laisser agir d'abord la vapeur à pleine pression puis de lui permettre de se détendre pendant une certaine partie de la course. Le tout en principe comme décrit ci-dessus, en référence au dessin spécimen annexé.

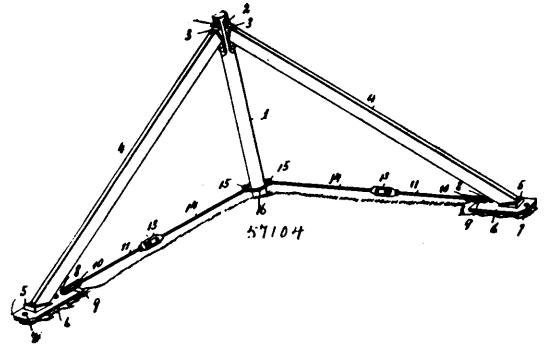
**No. 57,103. Ventilated Shoe. (Chaussure ventilée.)**



Aristide Eugène Garreau, Montréal, Québec, Canada, 18 août 1897; 6 ans. (Déposé le 6 août 1897.)

*Résumé.*—Une chaussure dans le talon de laquelle se trouve disposée une pièce métallique *D*, perforée pour faire communiquer le dedans de la chaussure avec l'air extérieur, en substance tel que décrit et pour les fins indiquées.

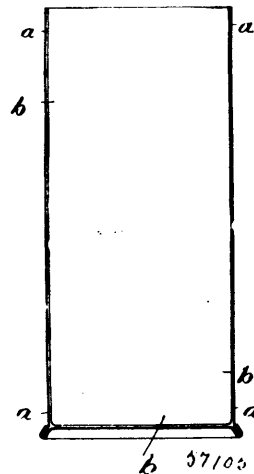
**No. 57,104. Post Brace. (Attache de poteau.)**



Harrison A. Hill, Huntsville, Kansas, U.S.A., 18th August, 1897; 6 years. (Filed 2nd August, 1897.)

*Claim.*—1st. In a post-brace, the combination with a post, sockets secured to the same near its upper end, foot-plates upon the ground at a suitable distance from the post, and also provided with sockets, inclined brace-bars fitting in said sockets, and non-elastic connections between said plates and the post at or near the ground, substantially as described. 2nd. In a brace-post, the combination with a post, sockets secured to the same near its upper end, foot-plates upon the ground at a suitable distance from the post, and also provided with sockets, inclined brace-bars fitting in said sockets, and non-elastic connections secured to said plates and extending through said posts, and adapted to be tensioned by drawing them longitudinally through the latter, substantially as described. 3rd. In a post-brace, the combination with a post, sockets secured to the same near its upper end, foot-plates upon the ground at a suitable distance from the post, and also provided with sockets, inclined brace-bars fitting in said sockets, and non-elastic devices connected to said plates and extending through openings or holes in the post, and means to secure them from slipping back through the post, substantially as described. 4th. In a post-brace, the combination with a post, socket-plates secured to the same near its upper end, foot-plates upon the ground at a suitable distance from the post and also provided with sockets, and tie-rods connected at the outer ends to the plates and extending through said post, and clamping-nuts engaging the opposite and threaded ends of said tie-rods, and bearing against the post, substantially as described.

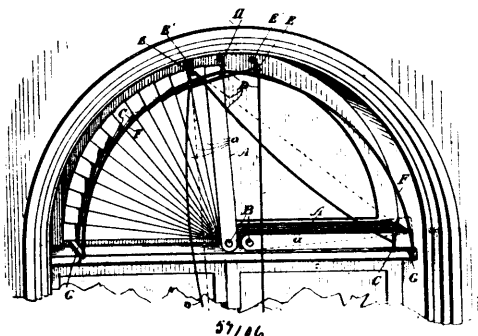
**No. 57,105. Metal Can. (Boîte métallique.)**



William J. Harries, Liverpool, Lancaster, England, 18th August, 1897; 6 years. (Filed 3rd August, 1897.)

*Claim.*—1st. The herein described process of making metal packing cans for perishable edibles, consisting in first seaming steel or iron plate into a box or case, then covering the interior with enamel, and then "firing" the same. 2nd. The herein described process of making packing cans for perishable edibles, consisting in first cold-rolling steel or iron plate until it is bright, then forming said plate into a can with seamed joints, then covering the interior of the can so formed with enamel, and then "firing" the can. 3rd. The herein described packing can consisting of thin sheet metal body and lid adapted to fit over the upper end thereof, and an internal coating or lining "fired" onto the metal and constituting an integral part thereof, and having the lid soldered onto the body, substantially as set forth.

**No. 57,106. Collapsible Blinds for Arched Windows.**  
(*Persienne pour fenêtres.*)



George Wells, Montreal, Quebec, Canada, 18th August, 1897; 6 years. (Filed 3rd August, 1897.)

*Claim.*—1st. A blind for arched windows comprising a series of slats pivotally held in fan shape on a bolt substantially central to the arc of the arch, such slats being arranged so that their outer edges follow substantially the arc of the arch when open as and for the purpose specified. 2nd. In a blind for arched windows and the like, in combination a series of slats pivotally held in fan shape on a bolt substantially central to the arc of the arch and having their outer edges following such arc when open, a continuous band secured to the casing and looped successively around and attached to each slat, and means for spreading the slats at their outer end, as and for the purpose specified. 3rd. In a blind for arched windows and the like, in combination a series of slats pivotally held in fan shape on a bolt substantially central to the arc of the arch and having their outer edges following such arc when open, a continuous band secured to the casing and looped successively around and attached to each slat, and a cord attached to an end slat and passing over a suitable pulley, as and for the purpose specified. 4th. In a blind for arched windows and the like, in combination a series of slats pivotally held in fan shape on a bolt substantially central to the arc of the arch and having their outer edges following such arc when open, a continuous band secured to the casing and looped successively around and attached to each slat, means for spreading the slats at their outer ends, and a slantingly arranged arc-shaped guide rod connected at both ends to the casing alongside the outermost ends of the slats, as and for the purpose specified.

**No. 57,107. Cant Hooks for Lumbermen.** (*Renard.*)



James Mark Ellis, Galesburg, Illinois, U.S.A., 18th August, 1897; 6 years. (Filed 4th August, 1897.)

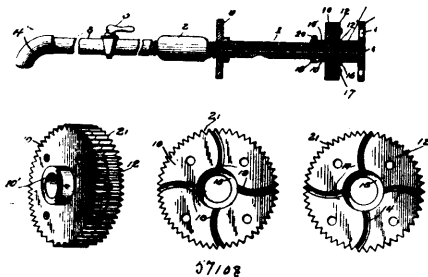
*Claim.*—1st. A cant hook or dog comprising the handle 1, provided with the transverse groove 5, the adjustable clamp 2, provided with the integral parallel ears 4, 4, and the hook 10, fulcrumed on the bolt 12 between said ears and formed with the straight shank 9, having the rabbeted end 8, substantially as shown and described. 2nd. A cant hook or dog, comprising the handle 1, provided with the transverse groove 5, the clamp 2 adjustably secured on said handle 1, by the bolt 3, and formed with the parallel ears 4, 4, the curved plate 6 secured on said handle by the said clamp, and provided with the longitudinal slot 7, the hook 10 fulcrumed on the bolt 12, between said ears, and having the rabbeted end 8 projecting into the slot 7 of the plate 6, substantially as shown and described. 3rd. A cant hook or dog, comprising the handle 1, provided with the transverse groove 5, the clamp 2 secured on said handle by the bolt 3, and provided with parallel ears 4, 4, the curved plate 6 secured between the clamp and the handle, and provided with the longitudinal slot 7, the hook 10, fulcrumed on the bolt 12 between said ears and provided with the straight shank 9 and rabbeted end 8 engaging said slot 7, and the spiral spring 13 connecting said hook and handle, substantially as shown and described.

**No. 57,108. Rotary Boiler-Flue Cleaner.**  
(*Nettoyeur de tubes de chaudières.*)

Robert Gibbens Bidwell, Washington, Columbia, U.S.A., 18th August, 1897; 6 years. (Filed 4th August, 1897.)

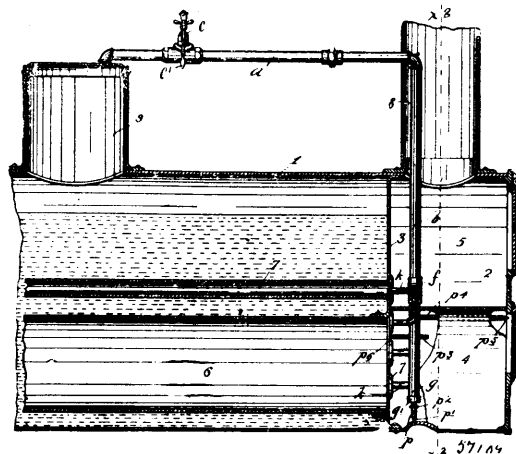
*Claim.*—1st. A rotary boiler-flue cleaner, comprising a shank or handle, in combination with a serrated disc loosely journaled in said shank and means for rotating said serrated disc, as and for the purpose set forth. 2nd. A steam-boiler-flue cleaner comprising a tubular shank, a cylindrical head mounted on said shank and pro-

vided with radial passages communicating with said tubular shank, and means as described for imparting a rotary motion to said



cylindrical head on said shank, as and for the purpose set forth. 3rd. A steam-boiler-flue cleaner, comprising the tubular shank 1, closed at one end, and provided with radial orifices 16, 16, in combination with the rotating head mounted on said shank and provided with a series of crescent-shaped radial passages communicating with the orifices in said shank, substantially as shown and described. 4th. The tubular shank 1, provided with the orifices 16, 16, the cap 6 fixed to one end of said shank and the washer 9 fixed on the opposite end thereof, in combination with the rotating head loosely mounted on said tubular shank, and comprising the serrated discs 10, 12, having contiguous aligned radial grooves 13, 14, the inner ends of which communicate with said orifices 16, 16, on said shank, substantially as shown and described.

**No. 57,109. Permanent Steam Boiler Flue Cleaner.**  
(*Nettoyeur de tubes de chaudières.*)



Henry J. Johnson, Fargo, North Dakota, U.S.A., 18th August, 1897; 6 years. (Filed 4th August, 1897.)

*Claim.*—1st. The combination with a boiler, of a flue-cleaning device involving nozzled pipe sections suspended within the smoke-box or similar compartment, and one or more extensible or adjustable rods or spuds adapted to be extended for engagement within a fixed part of the boiler, substantially as described. 2nd. The combination with a boiler, of a flue-cleaning device involving nozzled pipe sections suspended within the smoke-box or similar compartment, and adjustable or expandable rods or spuds, at least one projecting downward, one forward, and one rearward, for contact with fixed parts of the boiler, substantially as described. 3rd. The combination with a boiler, of a flue-cleaning device involving the pipe sections *f* and *g*, provided with the discharge nozzles *k* and the extensible arms of spuds *p* working through the lower closed end of said pipe sections *g*, substantially as described. 4th. The combination with a boiler, of a flue-cleaning device involving the pipe sections *f* and *g*, with discharged nozzles *k*, the extensible screw-threaded rods or spuds *p*, working through the lower closed ends of said pipe sections *g*, and the screw-threaded extensible arms or spuds *p*<sup>3</sup>, *p*<sup>4</sup>, the former extending forward, and the latter extending rearward from said pipe sections *g*, for engagement, respectively with the boiler head 2 and flue sheet 3, substantially as described.

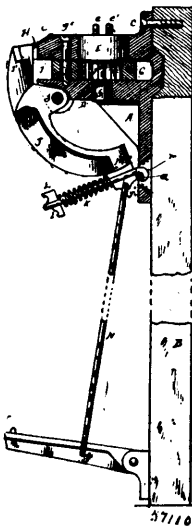
**No. 57,110. Wire Bender.**

(*Appareil à plier le fil de fer.*)

Marion T. Deck, Milton, Indiana, U.S.A., 18th August, 1897; 6 years. (Filed 4th August, 1897.)

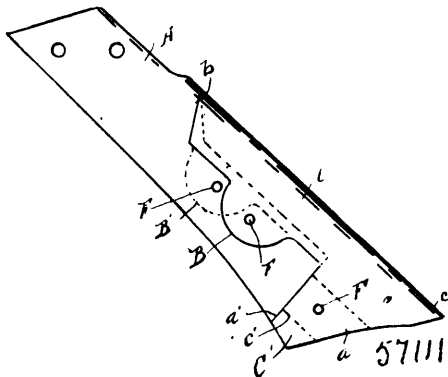
*Claim.*—1st. A wire bender housing having a pair of pins, *c*, *c*<sup>1</sup>, and a single reciprocating rotary hub *E*, journaled in it, the hub being provided near its periphery with a pair of pins, *e*, *e*<sup>1</sup>, and the housing-pins *c*, *c*<sup>1</sup>, being situated on opposite sides of said hub, al

as herein described and for the purpose stated. 2nd. The combination, in a wire bender, of a housing, A, C, D, having a pair of



pins  $c, c^1$ , a hub E, turning in the plates C, D, of said housing and having a pair of pins  $c, c^1$ , a pinion F, integral with said hub, and a segmental rack G, gearing with said pinion, for the purpose described. 3rd. The combination, in a wire bender, of a housing having a lug  $H^1$ , grooved at  $h^1$ , and a jaw J, pivoted to said housing, and adapted to hold a wire within said groove, as described. 4th. The combination, in a wire bender, of a housing, A, C, D, a lever G, swinging between the plates C, D, of said housing, and a stop I, uniting said plates, for the purpose set forth. 5th. The combination, in a wire bender, of a housing; a jaw pivoted thereto; a stirrup M,  $M^1$ , between which the lower portion of said jaw swings, a coiled spring K, surrounding said stirrup, and a wedge L, applied to the latter, the edge of said wedge being provided with a series of notches l, to engage with the bend  $m$ , of said stirrup, and thereby regulate the tension of said spring, all as herein described. 6th. The combination, in a wire bender, of a housing and a laterally-adjustable gauge-plate O, provided with stops P, for the purpose described. 7th. The combination, in a wire-bender, of the housing A, C, D,  $c, c^1$ , the bending device E,  $e, e^1, F, f$ , journaled therein, the segmental rack G, gearing with the pinion F, the jaw J, and a treadle for operating said jaw, in the manner described. 8th. The combination, in a wire bender, of a housing having a pair of parallel flanges, C, D, a jaw J, pivoted to the lower flange D, and adapted to clamp a wire against the end of the upper flange C, and a lever  $g$ , swinging between said flanges, and having a lateral shoulder  $g^1$ , that operates against said clasped wire, in the manner described and for the purpose stated.

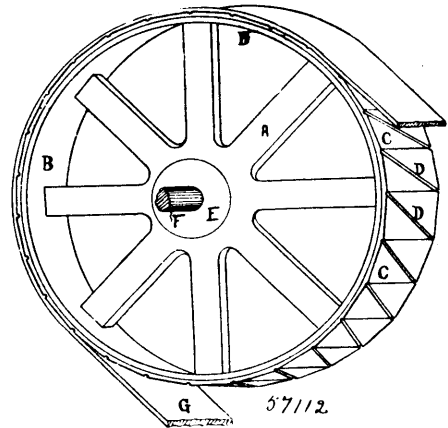
**No. 57,111. Plough Coulter.** (*Coulter de charrue.*)



George Conley, Caseville, Michigan, U.S.A., 18th August, 1897; 6 years. (Filed 4th July, 1897.)

*Claim.*—1st. The combination with the body portion having the concavities in different transverse planes, of the point having a socket to receive the end of the body portion and depending portions fitted to said concavities, substantially as described. 2nd. The combination with the body portion having the concavities, of the point having a socket to receive the end of the body portion and depending portions fitted to said concavities, and detachable means for securing the point to the body portion, substantially as described. 3rd. The combination with the body portion having the concavities, of the point having a socket to receive the end of the body portion and depending portions fitted to said concavities, and detachable means for securing the point to the body portion, said concavities being in different transverse planes, substantially as described. 4th. The combination with the body portion having the concavities, of the point having a socket to receive the end of the body portion, and depending portions fitted to said concavities, and detachable means for securing the point to the body portion, said concavities being in different transverse planes, and the inner faces of the depending portions being convex, substantially as described.

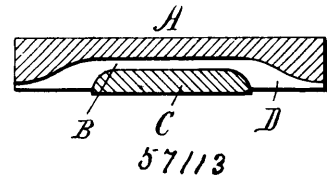
**No. 57,112. Pulley.** (*Poulie.*)



Malcolm Scott, St. Thomas, Ontario, Canada, 18th August, 1897; 6 years. (Filed 5th August, 1897.)

*Claim.*—1st. The combination with the hub and arms of a pulley, of a rim constructed with corrugated facets, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the rim of a pulley, of diagonally corrugated, flatted facets, bolted or otherwise secured thereto, substantially as and for the purpose hereinbefore set forth.

**No. 57,113. Device for Holding Clothes Upon the Line.** (*Appareil pour assujettir le linge sur les cordes.*)



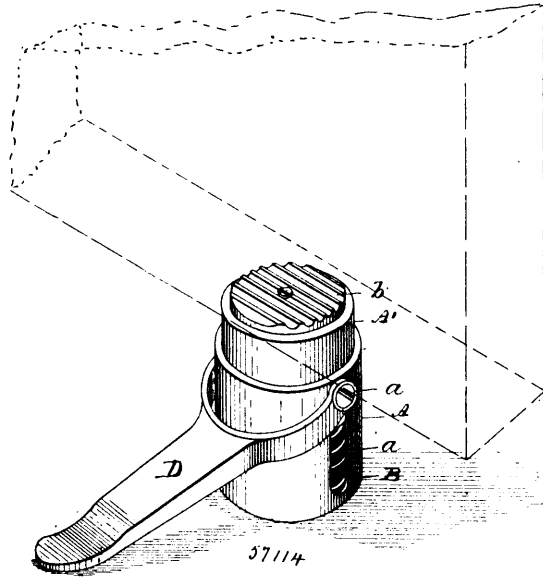
William Henry Orr, Beauséjour, Manitoba, Canada, 18th August, 1897; 6 years. (Filed 6th August, 1897.)

*Claim.*—1st. A block having an opening through one portion thereof, and a suitable groove extending from one end of the opening, combined with a clothes line which is passed through the opening, substantially as shown. 2nd. A block having an opening made through its underside and extending both ways beyond the centre, and having a groove extending from each end of the opening, substantially as described. 3rd. A block having an opening therethrough for the passage of the clothes line, the block being shaped at one or both of its ends so as to catch over the edge of the cloth or piece of clothing hung upon the line, substantially as set forth. 4th. As a new article of manufacture, a block having a suitable opening therethrough for the passage of the clothes line, and which is freely movable back and forth upon the line, one or both ends of the block being so shaped as to catch over an article or piece of clothing placed upon the line, substantially as specified.

**No. 57,114. Door Check.** (*Arrête-porte.*)

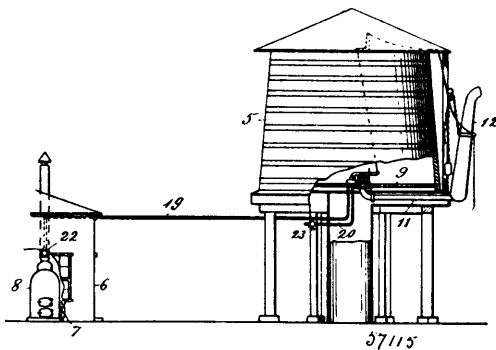
Charles Bradley Harness, Reading, Massachusetts, U.S.A., 18th August, 1897; 6 years. (Filed 6th August, 1897.)

*Claim.*—The movable door check, consisting of the telescoping abutments A, A', spring B, lever D, and means to connect the



abutments A and A' and the abutment A' and lever D, combined and operating substantially as and for the purpose set forth.

**No. 57,115. Railroad Water Tank. (Château d'eau.)**



Samuel E. Long, Richmond, Virginia, U.S.A., 18th August, 1897; 6 years. (Filed 6th August, 1897.)

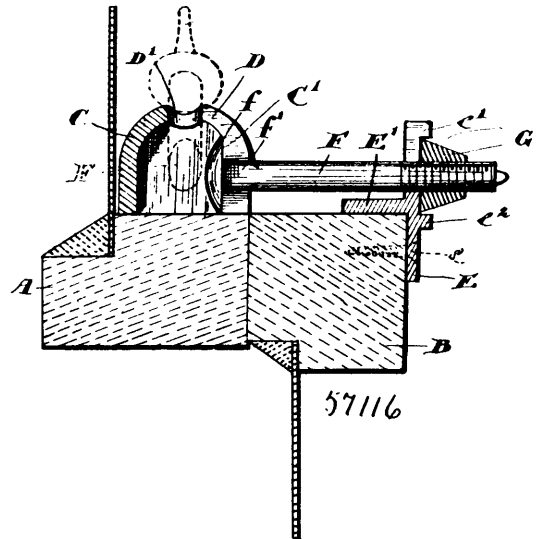
*Claim.*—1st. The combination with a tank-valve having its casing provided with a passage for circulation of steam or hot water to prevent freezing of the valve to its seat, of a spray distributor leading from said circulating-passage of the valve casing and projected within the tank to spray steam or hot water therein, and a check-valve for said spray-distributor, substantially as described. 2nd. The combination with the tank, of a railway water-station and its discharge or outlet valve having a casing provided with a passage for the circulation of steam or hot water around said valve to prevent freezing of the valve to its seat, of a valved pipe for supplying steam or hot water to said circulating-passage, a valved exhaust pipe leading from said circulating-passage, and a spray distributor located within the tank and communicating with said circulating-passage of the valve casing to spray steam or hot water into the tank, substantially as described. 3rd. The combination with the elevated tank, of a railway water station, and its steam supply pump and boiler, of a tank-outlet valve having its casing provided with a passage for the circulation of steam or hot water around said valve to prevent freezing of the valve to its seat, spray-distributors leading from said circulating-passage of the valve casing for delivering hot water or steam into the tank, a pipe leading from the boiler to the said circulating-passage of the tank valve casing and provided with a hand valve to control the supply of steam or hot water, and a valved exhaust-pipe leading from said circulating passage of the tank-valve casing, substantially as described.

**No. 57,116. Window Fastener. (Arrête-croisée.)**

Ernest George Edgar McConkey, Toronto, Ontario, Canada, 18th August, 1897; 6 years. (Filed 6th August, 1897.)

*Claim.*—1st. In a sash fastener, the combination with the hollow-arched cap secured to one meeting-rail and provided with the inner

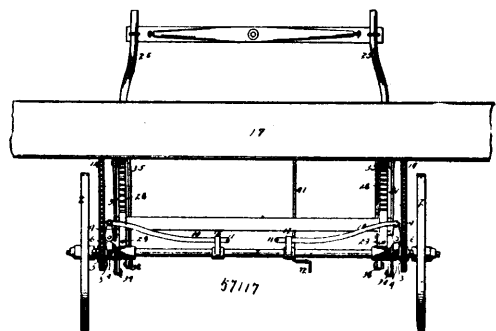
cross slot, of the plate secured to the adjacent meeting-rail and having an open slot, the bolt having a head fitting within the cap



and spanning the slot, and the threaded end extending through the open slot, and a butterfly nut on the threaded end of the bolt for clamping the parts together, as and for the purpose specified. 2nd. In a sash fastener, the combination with the hollow-arched cap secured to one meeting-rail and provided with the inner cross slot, of the plate secured to the adjacent meeting-rail, and having an open slot and an inwardly-extending lip resting on the rail, the bolt having a head fitting within the cap and spanning the slot, and the threaded end extending through the open slot of the plate, and a butterfly nut on the threaded end of the bolt for clamping the parts together, as and for the purpose specified. 3rd. In a sash fastener, the combination with the hollow-arched cap secured to one meeting-rail and provided with the inner cross slot, of the plate secured to the adjacent meeting-rail and having an open slot and an outer circular flange, the bolt having a head fitting within the cap and spanning the slot, and the threaded end extending through the open slot, and a butterfly nut on the threaded end of the bolt, and having its inner end extending within the flange when the parts are clamped and locked together, as and for the purpose specified. 4th. In a device of the class described, the inner hollow cap secured to one meeting-rail and provided with a cross slot and lateral extension slot, and a suitable bolt designed to be held within the lateral extension slot when the sash is unfastened, as and for the purpose specified. 5th. In a sash fastener, the combination with the hollow arched cap secured to one meeting-rail and provided with the inner crossslot having flat inner edges, of the bolt provided with circular head and square shank beneath the head, and means for fastening the opposite end of the bolt to the other meeting-rail, as and for the purpose specified.

**No. 57,117. Agricultural Implement. (Instrument d'agriculture.)**

(Instrument d'agriculture.)

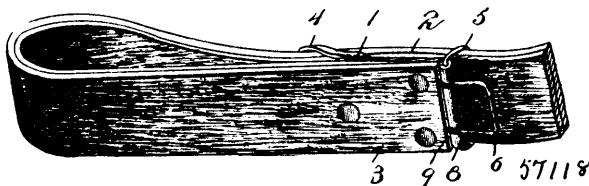


Lloyd T. Miller, Caseyville, Illinois, U.S.A., 18th August, 1897; 6 years. (Filed 6th August, 1897.)

*Claim.*—1st. In an agricultural implement, in combination with an axle, and its ground-wheels forming a support, a feed-box, rods connecting said box to said support, and means for raising and lowering the box, whereby the height of the box may be adjusted without changing its upright position, substantially as set forth. 2nd. In an agricultural implement, in combination with an axle,

and its ground-wheels forming a support, a feed-box, an upper and a lower pair of rods connecting said box to said support, racks secured to the support, pinions secured to said box, and which engage said racks, and means for turning said pinions, substantially as set forth. 3rd. In an agricultural implement, in combination with an axle, and its ground-wheels forming a support, a feed-box, parallel rods connecting each end of said feed-box to said support, and means for raising and lowering the box, whereby the height of the box may be adjusted without changing its upright position, substantially as set forth. 4th. In an agricultural implement, in combination with an axle, and its ground-wheels forming a support, a feed-box, parallel rods connecting each end of said feed-box to said support, a shaft provided with pinions and carried by said box, a pair of tracks with which said pinions engage, a pinion on said shaft, a worm engaging said pinion, and a crank-rod for operating said worm, substantially as and for the purpose described. 5th. In an agricultural implement, the combination of an arched axle, ground-wheels journaled to said axle and having notched hubs, sliding clutches fitted on said axles and adapted to engage said hubs, sprocket-wheels carried by said clutches, cranks having pinions fitting in grooves formed in said clutches, rock-shafts to which said cranks are secured, cranks secured to the upper ends of said rock-shafts, bars secured to the last-mentioned cranks and provided with hand-pieces, a feed-box, and chain belts fitting over said sprocket-wheels and passing around sprocket-wheels secured to the feed-shaft of said box, substantially as and for the purpose set forth. 6th. In an agricultural implement, the combination of an arched axle, ground-wheels mounted on said axle, a feed-box, endless chain connecting sprocket-wheels on said axle to sprocket-wheels on the shaft of said feed-box, parallel rods connecting said box to said axle, and means for raising and lowering the box whereby the elevation of the box may be adjusted, while not changing its position nor affecting the distance between the sprocket-wheels on the axles and the sprocket-wheels on the shaft of the box, substantially as set forth.

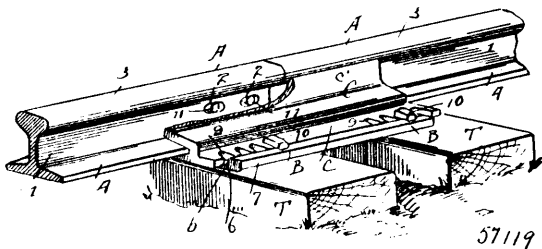
**No. 57,118. Buckle. (Boucle.)**



George Theodore Wolff, Bird Island, Minnesota, U.S.A., 18th August, 1897; 6 years. (Filed 6th August 1897.)

*Claim.*—1st. In a martingal buckle, the combination of a plate provided at one end with an eye, a loop adapted to receive a choke or collar strap, extending from one face of the plate and provided with eyes, and a loop extending from the opposite face of the plate and provided with a pintle engaging the eyes of said loop and said plate, whereby both loops are hinged to the plate, substantially as described. 2nd. In a martingal buckle, the combination of a plate provided at one end with an eye and having slots intersecting the same, a loop adapted to receive a choke or collar strap, extending from one face of the plate and provided with eyes arranged in the said slots, and a loop extending from the other face of the plate and having a transverse portion arranged in the eye of the latter and engaging the eyes of the said loop, whereby the same is hinged to the plate, substantially as described.

**No. 57,119. Railroad Rail Chair. (Joint de rails.)**

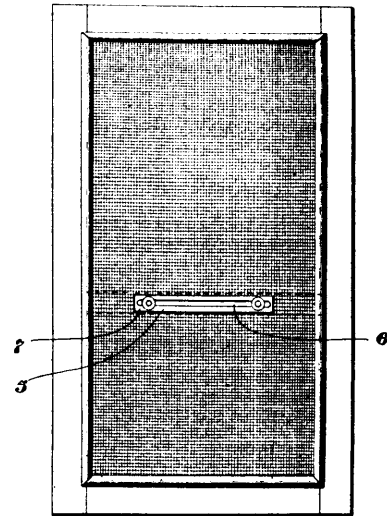


Robert O. Bingham, Sidney, Ohio, U.S.A., 18th August, 1897; 6 years. (Filed 6th August, 1897.)

*Claim.*—1st. A two-part railroad rail chair comprising a main section of the full width of the chair having a longitudinal conical channel and a vertical slot near each end in register with said channel, and a conical key-section adapted to operate in the channel in the main section and having a series of spike-receiving notches near each end in register with the slots in the main section, each of said sections having a jaw adapted to bear against the respective

sides of the rails. 2nd. A two-part railroad rail chair comprising a main section of the full width of the chair having a longitudinal conical channel, and a vertical slot near each end in register with said channel, and a conical key-section adapted to operate in the channel in the main section, and having a series of spike-receiving notches in its outer edge near each end in register with the slots in the main section, each of said sections having a jaw adapted to bear against the respective sides of the rails, the jaws of the main section being provided with fixed studs designed to enter holes formed in the ends of the rails. 3rd. A two-part railroad rail chair comprising a main section of the full width of the chair but forming only a portion of the rail seat, said section having a longitudinal conical channel in its base and a vertical slot near each end in register with said channel, and a conical key-section adapted to operate in the channel in the main section, the inner portion of its base lying flush with the inner wall of the channel and thus completing the rail-seat, the outer portion of its base having a series of spike-receiving notches formed therein near each end in register with the slots in the main section, each of said sections having a jaw adapted to bear against the respective sides of the rails.

**No. 57,120. Storm Door. (Contre-porte.)**



Sarah Ann Addis, Neodesha, Kansas, U.S.A., 19th August, 1897; 6 years. (Filed 7th August, 1897.)

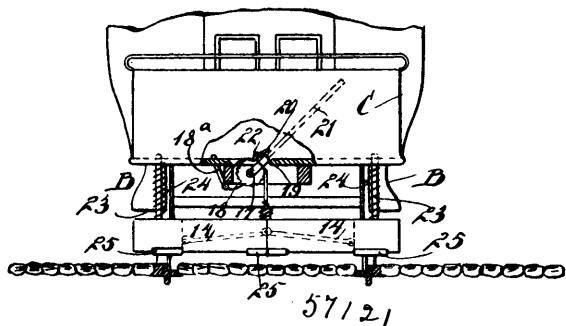
*Claim.*—1st. A combination screen and door frame, consisting of a door having a door frame covered on its inner face by a screen, two upright stationary panels on the outside of said door frame and two movable panels situated between said stationary outside panels and said screen and adapted to close the opening between the inner edges of said stationary panels. 2nd. A combination storm and screen frame covered on the inside with a screen, stationary panels on the outside of said door, a transverse bar secured between said stationary panels and said screen, a slot in said bar and in said screen, and movable panels situated between said stationary panels and said screen and provided with knobs extending through the transverse slots in said bar and screen. 3rd. A combination storm and screen door frame covered on the inside with a screen, stationary panels on the outside of said door, a transverse bar secured between said stationary panels and said screen, a slot in said bar and in said screen, and movable panels situated between said stationary panels and said screen and provided with knobs extending through the transverse slots in said bar and screen, said knobs being provided with set screws.

**No. 57,121. Car Fender. (Defense de chars.)**

Montgomery Queen, Brooklyn, and Arnold R. Weber, New York, both in New York, U.S.A., 18th August, 1897; 6 years. (Filed 26th July, 1897.)

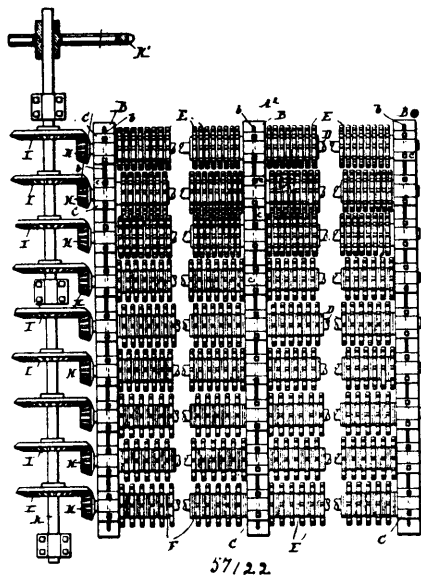
*Claim.*—1st. A fender, consisting of a curved band, a cross bar at the rear portion of said band, a block secured to each end of the cross bar, the blocks being respectively connected to the ends of the band, a third block secured to the inner front portion of the band, three links connected with each other and respectively with the blocks, a drum connected to the links, and guide rods respectively rigidly carried by the blocks, substantially as described. 2nd. The combination, with a car having a platform and a step extended downwardly from each side of said platform, the platform projecting forward of the steps, of a curved band, a cross bar connected to the rear portion of said band, a block attached to each end of the

cross bar and respectively to the ends of the band, a third block attached to the inner front portion of the band, three links con-



nected with each other and respectively connected with the blocks, a drum mounted on the platform and connected with the links, a rod rigidly carried by each block, the rods sliding in the platform, and springs embracing the rods, substantially as described. 3rd. A fender consisting of a curved band, a cross bar at the rear of said band, a plurality of blocks in connection with the band, a link connected to each block, the links being also connected to each other, a drum in connection with the links, and guide rods respectively rigidly carried by the blocks, substantially as described.

**No. 57,122. Screen for Coal. (Tamis à charbon.)**

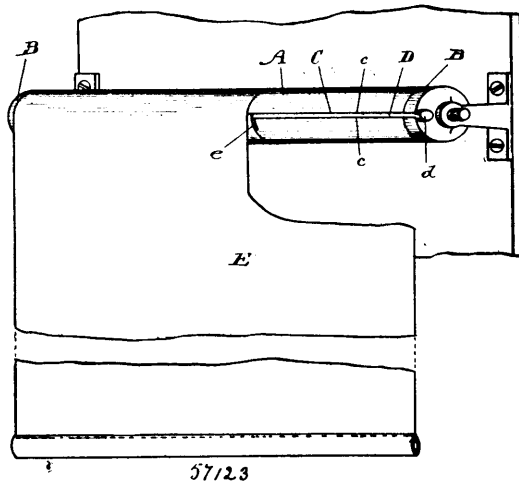


Rockwell King, Chicago, Illinois, assignee of Edward Collins Smith, Oskaloosa, Iowa, both in the U.S.A., 16th August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—1st. A screen for coal or similar material comprising a suitable supporting frame, a series of transverse shafts sustained by said frame, a drive shaft geared to said transverse shafts to rotate the same, said transverse shafts being provided with a series of interspaced discs, the discs of certain of said shafts being arranged opposite the spaces between the discs of adjacent shafts whereby the said spaces are left unobstructed to permit the material to descend therethrough, substantially as described. 2nd. A screen for coal or similar material comprising a suitable supporting frame, a series of adjustable transverse shafts sustained by said frame, a drive shaft geared to said adjustable shafts so as to cause them to run in one and the same direction, said adjustable shafts being provided with a series of interspaced discs, the discs of certain of said shafts being arranged opposite the spaces between the discs of adjacent shafts whereby said spaces are left unobstructed to permit the material to descend therethrough, substantially as described. 3rd. A screen for coal or similar material comprising a suitable supporting frame, rotary shafts having revoluble discs mounted thereon, adjustable journal boxes for said shafts and slotted angle bars extending lengthwise of said supporting frame and bolts extending through the top plates of said slotted angle bars and serving to adjustably connect the journal boxes therewith, substantially as described. 4th. A screen for coal or similar material comprising a suitable supporting frame, a series of transverse shafts

sustained by said frame, a drive shaft geared to said transverse shafts to rotate the same, said transverse shafts being provided with a series of discs and a series of independent washers interposed between said discs, said discs and said washers being removable endwise from said shafts and being so relatively arranged that the spaces between the discs of adjacent shafts are left unobstructed at each side of the shafts for the free descent of the material, substantially as described. 5th. A screen for coal or similar material comprising a suitable supporting frame, a series of adjustable transverse shafts sustained by said frame, a drive shaft geared to said transverse shafts to rotate the same, a series of discs removably mounted upon said transverse shafts and a series of independent washers interposed between said discs and removably mounted upon said shafts, said discs and said washers being so relatively arranged that the spaces between the discs are left unobstructed at each side of the shafts for the free descent of the material, substantially as described. 6th. A screen for coal or similar material comprising a suitable supporting frame, a series of transverse shafts sustained by said frame, a drive shaft geared to said transverse shafts to rotate the same, a series of discs mounted upon each of said shafts and a series of non-revoluble washers interposed between said discs, provided with depending arms, means engaging said arms for holding said washers in stationary position, said discs and said washers being so relatively arranged that the spaces between the discs are left unobstructed at each side of the shafts for the free descent of the material, substantially as described.

**No. 57,123. Window Shade and Roller. (Store et rouleau de fenêtres.)**



George McCleary, assignee of Henry Satchville, both of Toronto, Ontario, Canada, 19th August, 1897; 6 years. (Filed 30th July, 1897.)

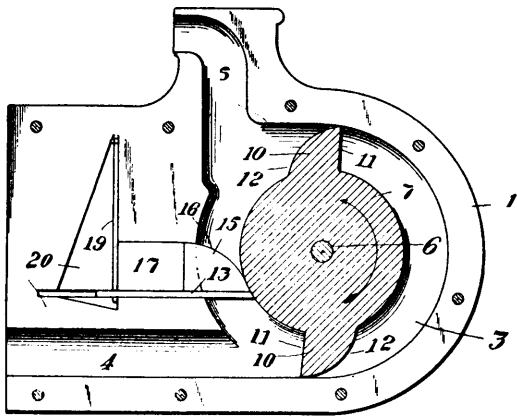
*Claim.*—A fastener for window shades and rollers consisting of a longitudinal circular bore in the window shade roller extending from end to end thereof, a longitudinal slot extending from the perimeter of the roller to the bore, less in width than the diameter of the bore, a rod located within the bore of substantially the same diameter, and a window shade extending through the slot into the bore, adapted to be held in position by the rod, substantially as specified.

**No. 57,124. Rotary Pump. (Pompe rotatoire.)**

Nels G. Iverson, Grafton, North Dakota, U.S.A., 19th August, 1897; 6 years. (Filed 7th August, 1897.)

*Claim.*—1st. In a rotary pump, a rotating piston, a shaft for imparting motion thereto, a casing having ingress and egress passages communicating with an annular passage concentric to the axis of rotation, blades carried by said piston, a cut-off for said annular passage, and means for automatically reciprocating said cut-off, substantially as described. 2nd. A pump casing formed of two sections meeting on a central longitudinal line and formed in their meeting surfaces with grooves constituting ingress and egress passages and an annular waterway, in combination with a rotary piston, blades carried thereby and traversing said annular waterway, and an automatically reciprocated cut-off for said annular waterway, substantially as described. 3rd. In a rotary pump, the combination with a suitable casing, of a rotary piston, a cut-off, and blades carried by the piston and comprising inclined faces for automatically reciprocating said cut-off, substantially as described. 4th. In a rotary pump, a suitable casing having an annular waterway and ingress and egress passages, in combination with a rotary piston, blades carried thereby and having inclined surfaces, a reciprocating cut-off having an inclined surface against which said blades operate, and a spring for restoring said cut-off to its normal position, substantially as described. 5th. In a rotary pump, the combination

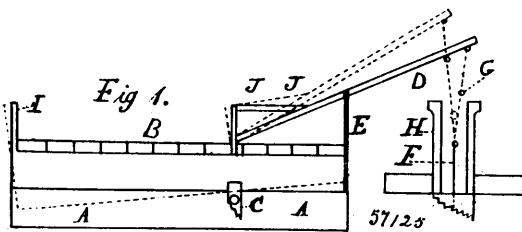
with a rotary piston, of blades carried thereby and embodying inclined faces, a reciprocating cut-off having a cam lip for co-operation



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tion with said blades, and a spring for returning said cut-off to its normal position, substantially as described. 6th. In a rotary pump, a pump casing, in combination with a rotary piston mounted therein, blades carried thereby and having inclined surfaces, a reciprocating cut-off having a cam lip for co-operation with said blades, said cut-off being also provided with an opening, and a spring arranged in a recess in the casing and having its free end loosely fitted in said opening in the cut-off, substantially as described. 7th. In a rotary pump, a pump casing comprising an annular waterway and ingress and egress passages leading thereto, in combination with a rotary piston comprising a flat disc mounted between the meeting faces of the sections of the pump casing, blades carried by said disc and having a substantially cylindrical cross sectional shape, and a cut-off arranged in the path of said blades and adapted to be automatically reciprocated in one direction thereby, substantially as described.

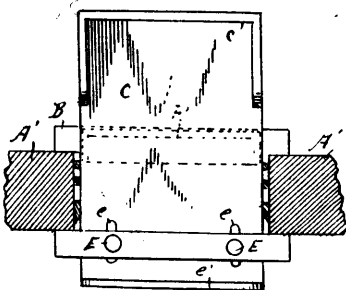
**No. 57,125. Cattle Pump. (Pompe pour bétail.)**



Robert Henry Scott, Oshawa, Ontario, Canada, 19th August, 1897; 6 years. (Filed 7th August, 1897.)

*Claim.*—A device consisting of a combination with a tilting platform normally in a horizontal position on bearings centrally located and connected at one end with a pump rod, of fences forming a passage-way across the platform and an enclosure so that cattle going through the passage-way must tilt the platform and work the pump, and a water trough connected with the pump to receive the water.

**No. 57,126. Adjustable Platform. (Plate-forme.)**

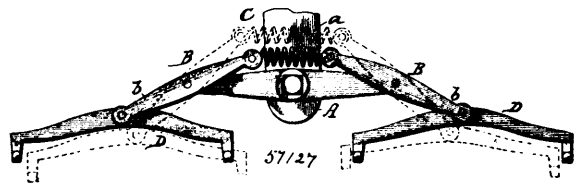


57126

Elijah H. Fisher, Grand Rapids, Michigan, U.S.A., 19th August, 1897; 6 years. (Filed 9th August, 1897.)

*Claim.*—1st. In a window bracket or platform, the combination with the main platform having means for securing the same to a window-casing, the portion of the platform which extends beyond the outer side of the window-casing having secured thereto an upwardly projecting end strip and inwardly projecting side strips, together with a step-ladder the outer legs of which are pivotally attached adjacent to the outer ends of the side strips the step-section of the ladder being pivoted to and folding within the aforesaid legs, the ladder being maintained in vertical position by engagement with the end strip, substantially as shown. 2nd. In combination with a window-cleaning platform, of a main platform having rigidly secured thereto a cross-piece, said cross-piece extending beyond the sides of the platform, and provided with recessed ends, side strips secured to the upper edges of the platform, and a cross-strip attached to the outer end thereof, the inner portion of the platform having slots, a cross-bar of greater length than the width of the platform, and means for securing said cross-bar to the platform, together with a ladder having legs or members pivotally connected to each other, one of the pair of legs being pivotally secured to the upwardly-projecting side pieces of the platform at a point adjacent to the transverse strip, the parts being organized substantially as shown.

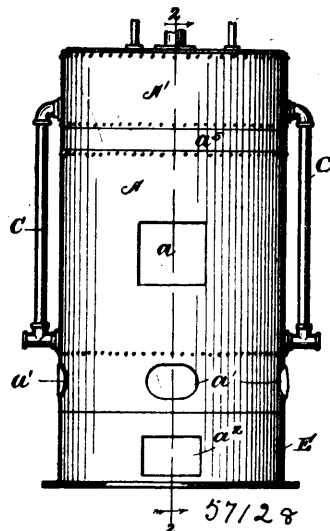
**No. 57,127. Draft Equalizing and Cushioning Device. (Régulateur de tirage et appareil de coussinet pour wagons, charrues, etc.)**



Hermann Leonhardt, Umlandstrasse, Hamburg, assignee of Otto Günther, Grossenhain, Mullitz, Saxony, both in Germany, 19th August, 1897; 6 years. (Filed 5th August, 1897.)

*Claim.*—1st. A draft cushioning or equalizing device, consisting of a bar as A, a pair of similar levers pivoted on the ends of said bar, and a resilient spring interposed between and connecting the rear or inner ends of said levers, the draft devices being applied to their outer ends, for the purpose and substantially as described. 2nd. The herein-described draft cushioning and equalizing device, consisting of the beam A, the opposite levers B, B, pivoted on the ends of the beam, the spring C, connecting the inner or rear ends of levers B, B, and the single trees D, D, connected to the outer or front ends of said levers, all substantially as and for the purpose set forth.

**No. 57,128. Boiler. (Chaudière.)**



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Mary E. Morgan, assignee of Doctor Franklin Morgan, both of Chicago, Illinois, U.S.A., 19th August, 1897; 6 years. (Filed 23rd July, 1897.)

*Claim.*—1st. A fire-pot having double walls, an annular space between such walls, an additional annular space between the fire-pot and the wall surrounding it, means for admitting air to the annular space between the walls of the fire-pot and means for delivering such air to the gaseous products of combustion obtained in the



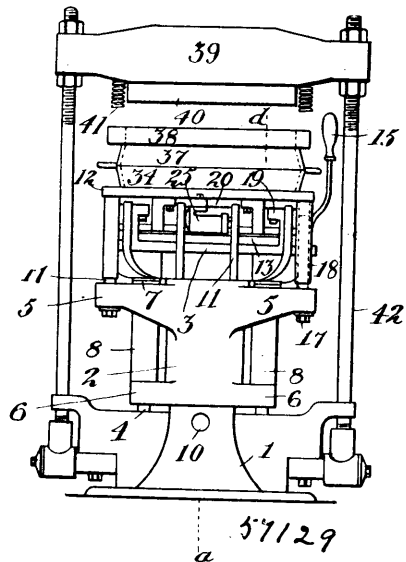
fire-pot before the same enter the second annular space, to which they are delivered over the rim of the fire-pot, substantially as described. 2nd. A fire-pot having double walls, an annular space between such walls and an additional annular space around the fire-pot communicating therewith, flues communicating with the outer annular space, means for admitting air to the annular space between the walls of the fire-pot and means for delivering such air to the gaseous products of combustion obtained in the fire-pot before the same enter the flues, substantially as described. 3rd. A fire-pot surrounded by a water-leg, such fire-pot having an annular space between the walls of the fire-pot and the water-leg, to which space the products of combustion are delivered over the rim of the fire-pot, and down which such products pass before entering the tubes of the water-leg, and having an additional annular space between it and the first-named annular space, means for supplying air to the last-named annular space and means for discharging air therefrom to the products of combustion leaving the fire-pot, substantially as described. 4th. A fire-pot surrounded by a water-leg, such fire-pot having two annular spaces or chambers surrounding it, one of such annular spaces communicating with the ash-pit, and the other thereof communicating with the fire-pot, to which last-named annular chamber or space the products of combustion are delivered over the rim of the fire-pot and down which such products pass before entering the tubes of the water-leg, substantially as described. 5th. A fire-pot surrounded by a water-leg, such fire-pot having two annular spaces or chambers surrounding it, one of such annular spaces communicating with the ash-pit and to the fire-pot through apertures near the top thereof and the other thereof communicating with the fire-pot, to which last-named annular chamber or space the products of combustion are delivered over the rim of the fire-pot and down which such products pass before entering the tubes of the water-leg, substantially as described. 6th. A vertical boiler having a circular water-leg, flues extending through the boiler and water-leg, a second boiler above the first-named one, a chamber between the boilers with which chamber the flues communicate and a passage-way for water between the boilers, in combination with a fire-pot having an annular space or chamber between it and the water-leg and a partition extending partly around the fire-pot at the bottom of the annular space or chamber, whereby the products of combustion from the fire-pot extending therefrom and down the annular space will be deflected into some of the flues in the water-leg and extend upward therethrough into the chamber between the boilers and from thence will extend downward through the remaining flues and to the chimney, substantially as described. 7th. A vertical boiler having a circular water-leg, flues extending through the boiler and water-leg, a second boiler above the first named one, a chamber between the boilers with which chamber the flues communicate and a passage-way for water between the boilers, in combination with a fire-pot having more than one annular space or chambers between it and the water-leg, the inner space communicating with the ash-pit and with the fire-pot near the top of such fire-pot and the outer one having a partition at the bottom thereof extending partly around the boiler and communicating at its upper end with the fire-pot, whereby the product of combustion from the fire-pot extending therefrom into such outer annular space and down the same will have fresh and heated air delivered thereto as it leaves the fire-pot and after extending through such annular space will be deflected into and extend upward through some of the flues into the chamber between the boilers and from thence will extend downward through the remaining flues and to the chimney, substantially as described.

**No. 57,129. Metal Founding Machine.**  
(Machine à fondre le métal.)

The Toronto Radiator Manufacturing Company (Limited), Toronto, Ontario, Canada, assignee of Harris Tabor, Elizabeth, and Edgar H. Humford, Plainfield, both in New Jersey, U.S.A., 19th August, 1897; 6 years. (Filed 30th June, 1897.)

*Claim.*—1st. In a metal-founding machine, the combination, substantially as set forth, of a downwardly-presenting ramming head, an upstanding piston supported on a base centrally below said ramming-head, a sliding cylinder disposed on said piston and open at its upper end and having a cylindrical exterior surface at its upper end, a plate disposed over the upper end of said cylinder and secured thereto and projecting outwardly from said cylinder at all sides to form a table substantially corresponding in size with said ramming-head, a hub integrally formed with said plate and projecting downwardly therefrom and closely fitting the cylindrical exterior of the upper end of the cylinder, and fingers or braces integrally formed with said hub and plate and engaging the exterior of the hub and reaching outwardly under said plate. 2nd. In a metal-founding machine, the combination, substantially as set forth, of an upstanding piston, a cylinder upon the piston and adapted for vertical movement thereon and carrying guide-eyes, guide-studs projecting upwardly from the piston-base and engaging said guide-eyes, and caps carried by said cylinder and covering the upper ends of said guide-studs. 3rd. In a metal-founding machine, the combination, substantially as set forth, of an upstanding piston, a cylinder upon the piston and adapted for vertical movement thereon, stationary guide-studs projecting upwardly rigidly from the piston-base, guide-eyes carried by the base of the cylinder and engaging said guide-studs, caps carried rigidly by the upper portion of the cylinder and disposed over the upper ends of said guide-studs, and

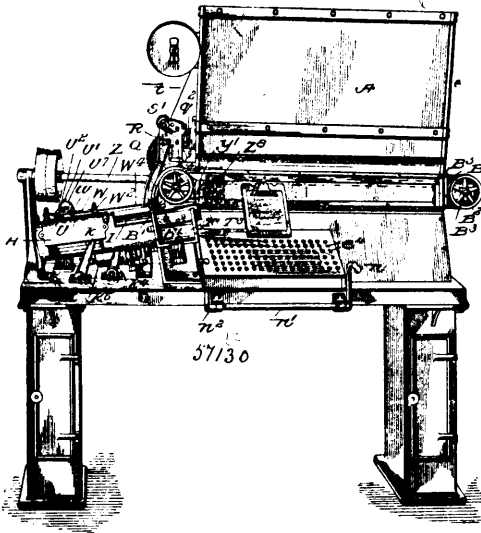
springs disposed upon the guide-studs within said caps and engaging the roofs of the caps. 4th. In a metal-founding machine, the com-



bination, substantially as set forth, of an upstanding piston, a cylinder upon the piston and adapted for vertical motion thereon, guide-studs projecting upwardly from the piston-base, guide-eyes carried by the base of the cylinder and engaging the guide-studs, caps carried by the upper portion of the cylinder and disposed over the upper ends of the guide-studs, and tubes engaging said guide-eyes and caps surrounding the intermediate portions of the guide-studs. 5th. In a metal-founding machine, the combination, substantially as set forth, of a downwardly-projecting ramming-head, an opposing press member arranged for vertical motion and adapted to support a flask and superposed sand-box, and springs carried by said ramming-head and adapted to engage over said sand-box. 6th. In a metal-founding machine, the combination, substantially as set forth, of a flask-supporting frame, a pattern-plate disposed within said flask-supporting frame and supported flush therewith, bolts serving in uniting said pattern-plate to its support, and elastic bushings surrounding said bolts. 7th. In a metal-founding machine, the combination, substantially as set forth, of a rapping-engine comprising a cylinder having a pair of inlet-ports and having a pair of exhaust ports disposed between the inlet-ports, a middle piston member adapted to alternately uncover said exhaust-ports, end piston members rigidly connected with the middle piston member, and adapted to alternately uncover said inlet-ports and having passages through them to and from their respective ends of said cylinder, and anvils at the ends of the cylinder to arrest the motion of the piston. 8th. In a metal-founding machine, the combination, substantially as set forth, of a pattern-plate having patterns secured thereto and having mortises or apertures through it between the patterns and away from the margins of the patterns, patches fitting said mortises or apertures and adapted for movement upwardly from the face of the pattern-plate, and supports for said patches below said pattern-plate. 9th. In a metal-founding machine, the combination, substantially as set forth, of pattern-plate having mortises or apertures between the patterns, and away from the margins of the patterns, a flask-supporting frame surrounding said pattern-plate and normally supported flush therewith, patches fitting said mortises or apertures in the pattern-plate and connected rigidly with said flask-supporting frame, and mechanism adapted to move said flask-supporting frame and said patches vertically with reference to said pattern-plate. 10th. In a metal-founding machine, the combination, substantially as set forth, of a pattern-plate provided with mortises or apertures between the patterns and away from the margins of the patterns, a flask-supporting frame surrounding said pattern-plate, patches fitting said mortises or apertures and supported below said pattern-plate, mechanism for moving said flask-supporting frame and said patches vertically with relation to said pattern-plate, and a rapping-engine adapted to agitate said pattern-plate. 11th. In a metal-founding machine, the combination, substantially as set forth, of a pattern-plate provided with mortises or apertures between the patterns and away from the margins of the patterns, a flask-supporting frame surrounding said pattern-plate and supported normally flush therewith and patches connected below said pattern-plate with said flask-supporting frame and having their upper surfaces in position to engage the mould-sand over the points of location of said mortises or apertures. 12th. In a metal-founding machine, the combination, substantially as set forth, of a pattern-plate, a flask-supporting frame surrounding said plate, fingers disposed below said flask-supporting frame and adapted to support said frame normally flush with said pattern-plate, and

guard-strips at the sides of said fingers and adapted to prevent the entry of sand between said frame and the upper ends of said fingers.

**No. 57,130. Type Setter.** (*Machine à composer.*)



The Cox Type Setting Machine Company, assignee of Paul Flemming Cox, both of Chicago, Illinois, U.S.A., 19th August, 1897; 6 years. (Filed 25th May, 1897.)

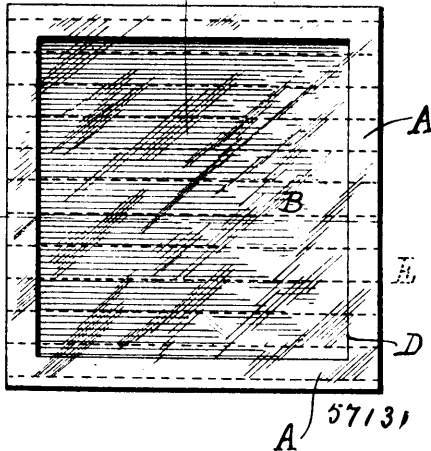
*Claim.*—1st. In a typesetting machine, the combination of the type reservoir having slots as  $A^1$  in its upper end, with the removable type holders  $a^1$  having their lower ends slotted as at  $a^2$ , whereby the holders are adapted to fit the upper ends of slots  $A^1$ , for the purpose and substantially as described. 2nd. The combination of an oscillating key-piece, the supporting rod, the adjustable collar  $c^7$  on the rod, and the spring  $c^8$  connected to said collar and engaging the key-piece, substantially as and for the purpose described. 3rd. The combination with the type-forwarding mechanism, of a typesetting machine, and a receiver into which the types as composed are forwarded, of a rotary pusher for forwarding type into said receiver, and mechanism, substantially as described, for moving said pusher automatically toward or from the receiver, substantially as and for the purpose described. 4th. The combination of the type-forwarding mechanism, a rotary receiver having type-receiving channels, a rotary pusher for forwarding types into said channels, a rocking sleeve in which the shaft of the pusher is journaled, and means whereby the sleeve is rocked so as to move the pusher away from the receiver prior to the rotation thereof, for the purpose and substantially as described. 5th. The combination of the rotary type line receiver, the rotary pusher for forwarding type into the receiver, and the rocking sleeve in which the pusher shaft is journaled, with the bolt  $j$  for locking said receiver, and means for moving said bolt, the rock shaft  $G^7$  actuated by said bolt, and connections between said rock shaft and the rock sleeve, whereby the sleeve is rocked by the movement of the bolt  $j$ , all substantially as and for the purpose described. 6th. The combination of the type line receiver, the plungers in the channels thereof, and means for moving said receiver so as to bring its channels successively to the type-receiving and type-ejecting points, with the slide adapted to engage the plungers in the receiver and cause them to eject the lines of type therefrom, and the wedge adapted to put final compression upon the line of type, substantially as and for the purpose specified. 7th. The combination of the casing  $H$ , the casting  $h$  having groove  $h^2$  and the rotary type-line receiver within the casing, the slide  $K$  having a dovetailed flange engaging groove  $h^2$ , whereby it is mounted on casting  $h$  and adapted to engage plungers in the channels of the receiver, and means for reciprocating said slide, substantially as and for the purpose described. 8th. The combination of the type-line receiver, the followers in the channels thereof, the slide  $K$  for causing said followers to eject the lines of type from the receiver, means for reciprocating said slide, and the wedge  $L$  adapted to engage the slide and cause it to more powerfully operate the plungers to justify the line of type by lineal compression, substantially as and for the purpose described. 9th. The combination of the galley, the rotary channelled type-line receiver, mechanism for rotating said receiver, mechanism for locking it, a rotary pusher having its shaft eccentrically journaled in a rocking sleeve, and connections substantially as described, whereby the sleeve is rocked simultaneously with the locking and unlocking of the receiver, for the purpose and substantially as described. 10th. The combination of the channelled type-line receiver, the plungers in the channels thereof adapted to be projected by the incoming lines of type, and means for pushing said plunger back into the channels to eject the type therefrom, with the wedge  $L$  and its

operating mechanism, substantially as described, for causing said plungers to justify the line by lineal compression, substantially as and for the purpose described. 11th. The combination of the wedge  $L$ , and the yoke  $L^1$ , having flange  $L^4$  and  $L^5$ , with the rotating arm  $L^2$  adapted to engage flanges  $L^4$ ,  $L^5$ , and the rod  $L^1$  and spring  $L$ , all constructed and arranged substantially as and for the purpose described. 12th. The combination of the galley, the plunger therein, the rule-carrying frame having upstanding slotted bar  $O^3$ , with interchangeable rules  $O$ , each having a shank  $O^1$  adapted to fit in the slot of the bar  $O^3$ , and mechanisms for operating the rule and plunger at the proper times, substantially as and for the purpose described. 13th. The combination of the friction driven shaft  $Q^1$ , the cam disc  $Q^3$  thereon, the key-controlled catch adapted to engage the disc and lock the shaft, the shaft  $r^1$  geared to shaft  $Q^1$ , the segmental gear  $s^2$  on shaft  $r^1$ , and the ribbon feed rolls operated by said segmental gear, with the reciprocating cutter operated by rock shafts and lever-arms  $O^3$ , and the space crimpers  $R$ ,  $R^1$ , the sliding one being operated by shaft  $r^1$ , all constructed and arranged to operate, substantially as and for the purpose set forth. 14th. The combination with the slide  $K$  and its operating mechanism, substantially as described, with the wedge  $L$ , the yoke  $L^1$ , having cam-flange  $L^4$ ; and the rotating arm  $L^2$ , adapted to engage said cam-flange; and means for retracting the wedge, all substantially as and for the purpose described. 15th. The combination with the receiver, the type-line plungers, the slide for operating the plungers, and the wedge  $L$ , for the purpose and substantially as described; of the adjustable tapered blocks  $h^7$ ,  $h^8$ , on opposite sides of said wedge, for the purpose and substantially as described. 16th. The combination of the main shaft, a hanger casting on the main shaft, a stub shaft on the hanger casting driven by gearing from the main shaft, and a worm on the end of said stub shaft; an auxiliary shaft, and a worm-gear thereon, adapted to be driven by said worm, and means for throwing said worm into engagement with the worm-gear; with a latch adapted to engage said hanger casting and lock it in position to hold the worm in engagement with the gear, and a pin on said shaft adapted to strike a lug on said latch, and cause it to disengage the hanger casting when the auxiliary shaft has made one complete revolution, substantially as and for the purpose described. 17th. The combination of the main shaft, a hanger casting on the main shaft, a stub shaft on the hanger casting driven by gearing from the main shaft, and a worm on the end of said stub shaft; an auxiliary shaft, and a worm-gear thereon adapted to be driven by said worm; with the lever  $n$ , rock-shaft  $n^1$ , crank-arm  $n^2$ , bar  $N^2$  pivotally connecting arm  $n^2$  to a depending arm  $N^1$  of the hanger casting; and the spring  $N^3$  for swinging the worm away from the gear; the pivoted latch  $V$  having bevelled lug  $v$ , and the stud  $r^1$  on the hub of the worm-gear, all substantially as and for the purpose described. 18th. The combination of the galley, the rising and falling frame  $O^4$ , having a side-bar  $O^3$  rising beside the galley provided with groove  $O^2$ , and mechanism for vibrating said frame; with the rule  $O$ , having an arm  $O^1$  engaging groove  $O^2$ , whereby it is detachably connected to bar  $O^3$ , substantially in the manner and for the purpose described. 19th. The combination of the galley stand having slot  $F^4$ , the reciprocating frame  $O^4$  attached thereto, having upstanding arm  $O^3$ ; with the rule attached to said upstanding arm, and overlying slot  $F^4$ ; the lead-box  $P$  underlying the galley, the spring plunger for pressing the leads forward, and the plate  $P^2$  attached to frame  $O^4$ , and adapted to lift a lead into the galley through slot  $F^4$  as the rule is lifted, substantially as and for the purpose described. 20th. The combination of the ribbon feeding devices, with the crimping jaws  $R$ ,  $R^1$  for corrugating a space, the eccentric pin for operating jaw  $R^1$ , and mechanism for severing the space from the ribbon, substantially as and for the purpose described. 21st. The combination of the ribbon feed rolls; mechanism for intermittently operating them, and the reciprocating cutter  $q^2$ ; with the cam-disc  $Q^3$ , the arm  $q$ , stub-shaft  $q^1$ , and arm  $q^2$  on said shaft for operating said cutter after the rolls have fed a proper length of ribbon, substantially as and for the purpose described. 22nd. The combination of the main shaft, the shaft  $Q^1$ , the friction gearing between said disc and a driving shaft; the cam disc  $Q^3$  on said shaft having a tooth on its periphery adapted to be engaged by a dog  $T$ , and key-controlled devices whereby said dog is caused to release the tooth and allow the shaft to make one revolution; with the space-making mechanism controlled by and operated from shaft  $Q^1$  adapted to make one space for each operation of said shaft, substantially as and for the purpose set forth. 23rd. The combination of a push rod, a rotating shaft carrying a series of radially-movable dogs adapted to engage the push-rod, a pivoted retractor  $D^1$  below and beside the shaft adapted when in normal position to prevent the dogs operating the rod; with a pivoted catch  $e$  for holding said retractor in normal position, and a key, and mechanical connections, substantially as described, mediate the key and catch, whereby the latter may be disengaged from the retractor, substantially as and for the purpose described. 24th. The combination of the type-line-receiver, and notched plungers in the channel thereof, substantially as described, and means for causing said plungers to eject lines of type, substantially as described; with the retractor plate  $i$  attached to the casing of the receiver and capable of a slight longitudinal movement, and having a tooth on its front end adapted to be engaged by a plunger just as it finally ejects a line of type, and having a tooth on its rear end adapted to be engaged by the plunger operating mechanism on its return stroke, whereby the retractor is moved so as to draw the

planger slightly backward, for the purpose and substantially as described. 25th. The mechanism for sounding an alarm upon the setting-up of a line of type, comprising the bar W, lever U<sup>3</sup>, dog U<sup>4</sup>, hammer and bell, and their connections, substantially as shown in figures 26, 31, and hereinbefore described. 26th. The mechanism for indicating visually the amount of oversetting of the line, comprising the bar W, rod W<sup>4</sup>, indicator X, and their operative connections, substantially as shown in figures 26, 31, and hereinbefore described. 27th. The mechanism for indicating the number of spaces in a line being composed, comprising the indicator Y<sup>3</sup>, segment Y, escapement pawl y, and their operative connections, substantially as shown in figures , and hereinbefore described.

**No. 75,131. Prismatic Light and Prism Plate.**

(Lumière et plaque prismatique.)

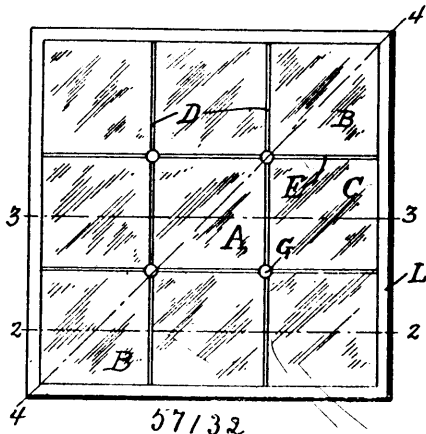


William Herman Winslow, Chicago, Illinois, U.S.A., 19th August, 1897; 6 years. (Filed 13th July, 1897.)

Claim - 1st. As a new article of manufacture, a prism light consisting of a body of glass with projecting ribs on the prism side and an excessively elevated rough surface on the plane side adapted to be removed to constitute a smooth, uniform surface when assembled with other prism lights in a prism plate, substantially as shown and described. 2nd. The process of producing prism lights which consists in putting in the mould an excess of molten glass and thus forming two surfaces, one, the established surface, the other an excessively elevated surface on the plane side of the prism light, then grinding such excessively elevated surface to a uniformity with the established surface. 3rd. The process of producing prism plates which consists in putting into the mould for each prism light an excess of molten glass and thus forming two surfaces, one, the established surface, the other the excessively elevated surface on the plane side of the prism light, then grinding said excessively elevated surface to a uniformity with the established surface, then uniting the series of said prism lights in a prism plate with intermediate metallic portions, then bringing the surface of said metallic portions to a uniformity with the established surface of the prism lights and thus producing a prism plate having a smooth unbroken surface on its plane side of glass and metal.

**No. 57,132. Process of Framing Vault Lights.**

(Procédé pour encadrer la lumière en voûte.)

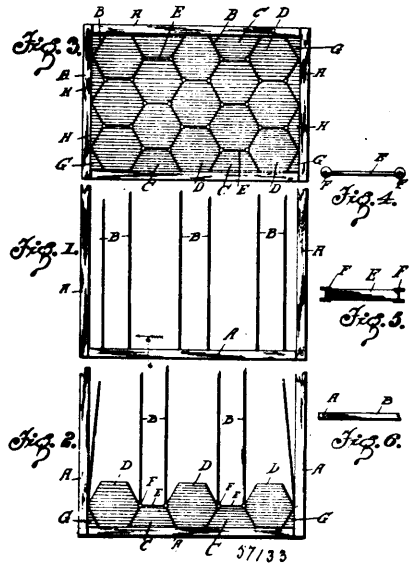


William Herman Winslow, Chicago, Illinois, U.S.A., 19th August, 1897; 6 years. (Filed 13th July, 1897.)

Claim.—1st. In a pavement, the combination of the pavement frame with a series of combination tiles consisting each of several tiles arranged so as to form an arch and adapted to be received in and be supported by the pavement frame. 2nd. In a prism pavement, the combination of the pavement frame with a series of combination prism tiles consisting each of several prism tiles arranged so as to form an arch and adapted to be received in and be supported by the pavement frame. 3rd. As a new article of manufacture, a combination tile consisting of a series of tiles shaped so as to form an arch in combination with a supporting and surrounding frame to hold them together. 4th. As a new article of manufacture, a prism tile comprising a series of prism tiles shaped so as to form an arch, a surrounding frame to take the stress received by the arch, and an intermediate filling between the prism tiles.

**No. 57,133. Mounting Tile Sections.**

(Montage de tubes en section.)

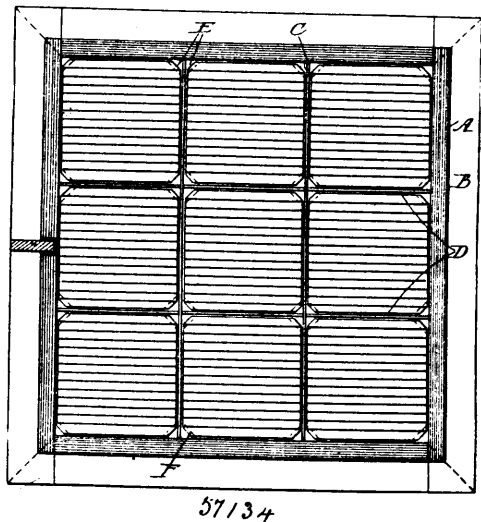


William Herman Winslow, Chicago, Illinois, U.S.A., 19th August, 1897; 6 years. (Filed 13th July, 1897.)

Claim.—A plate composed of a series of sections, a surrounding frame, a series of zigzag strips extending across the frame in one direction and separated from each other by intervening sections, and a series of short transverse strips between the sections and connecting the zigzag strips at their points of nearest approach, the whole securely tightened together.

**No. 57,134. Prismatic Plate and Frame for same.**

(Cadre pour plaques prismatique.)

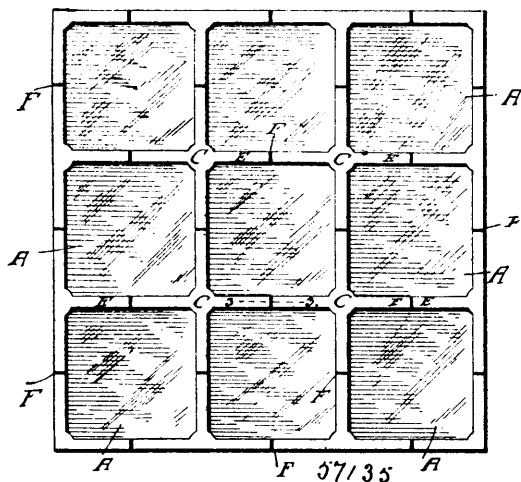


William Herman Winslow, Chicago, Illinois, U.S.A., 19th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A prism plate comprising a series of prism lights each cut off and indented at the corner and a grid or frame with a mass of material at each corner, said material binding the portions of the grid together and projecting into the indentations of the prism lights to hold them in position. 2nd. A prism plate comprising a series of prism lights, a net-like frame in the meshes of which the prism lights lie, said prism lights reduced and indented at the corners of such meshes, a mass of solder about the corners of the meshes and filling the space between the same and the lights and lying in the indentations. 3rd. A prism plate comprising a series of prism lights, a net-like frame in the meshes of which the prism lights lie, said prism lights reduced and indented at the corners of such meshes, a mass of solder about the corners of the meshes and filling the space between the same and the lights and in the indentations, and a mass of electrically deposited metal between the sections of the net and the edges of the prism lights and over the surface of such solder. 4th. A prism plate comprising a series of prism lights, and a frame, and a surrounding outwardly bent channel bar edge, and a wood filling frame adapted to be received within the channel bar and thus to complete the plate. 5th. A prism plate comprising a series of prism lights and a series of frame pieces, said prisms reduced at the junction of the frame pieces, and indented and deposited metal about the junction of the frame pieces and in such indentation, so as to hold the parts together.

**No. 57,135. Mounting Tiles and the Like.**

(*Montage de tuiles.*)

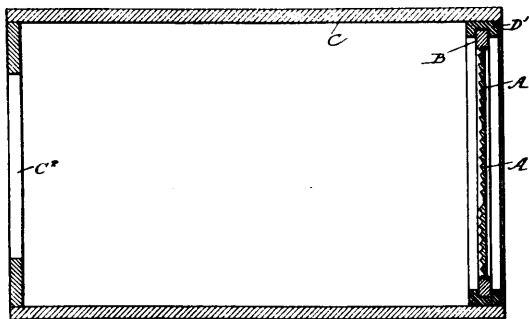


William Herman Winslow, Chicago, Illinois, U.S.A., 19th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A net or grid for holding together prism sections so as to make a complete prism plate, comprising a series of corner pieces with radiating arms I-shaped in cross-section, the ends of the arms on associated corner pieces meeting each other at points along the edges of the prism lights, and means for connecting such pieces together at such points. 2nd. A net or grid for holding prism sections together to make a complete prism plate, consisting of corner pieces with socket-like formations to receive the corners of the prism lights, and radiating arms which project between the sections and meet and are secured to similar arms from other corner pieces at points along the sides and between the corners of such prism lights.

**No. 57,136. Prismatic Light Testing Device.**

(*Appareil à éprouver la lumière.*)

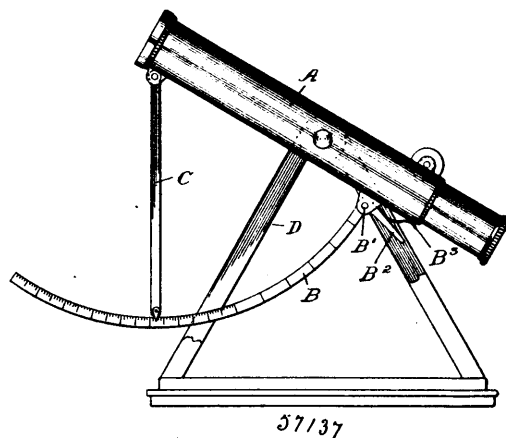


Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 12th April, 1897.)

*Claim.*—1st. A testing device to be used in connection with prismatic windows or the like, comprising a series of prisms of various angles connected together and adapted to be mounted in a testing frame, provided with two openings, said prisms interposed between the openings in the testing frame. 2nd. A testing device comprising a testing frame provided with two openings, a series of prisms of varying angles connected together and removably mounted in said testing frame between said openings, said prisms adapted when held between the eye of the observer and a given window to indicate the proper prism to be used in order to best direct the light toward the point where the observer stands. 3rd. A testing device to be used in connection with prismatic windows or the like, comprising a series of prisms of various angles connected together and adapted to be interposed between the eye and the window or opening through which the light is admitted, said testing device adapted to indicate the proper prism to be used in said opening. 4th. A testing device to be used in connection with prismatic windows comprising a series of prisms of various angles connected together and adapted to be mounted in a testing frame provided with two openings so as to be interposed between said openings, the angles of said prisms gradually increasing from one end of the series to the other, the whole mounted so that when held up between the observer's eye and the window or opening through which the light is admitted, the proper prism to be used in said opening is indicated by the first bright prism in the series. 5th. A testing device to be used in connection with prismatic windows or the like, comprising a series of prisms of various angles connected together and adapted to be mounted in a testing frame provided with two openings, said prisms interposed between said openings, each prism being marked so as to indicate the angles thereof, said prisms uniformly varying from one end of the series, toward the other whereby the proper prism for any given window may be found by interposing the series of prisms between the observer's eye and the window and noting the first bright prism in the series.

**No. 57,137. Angle Measure Device.**

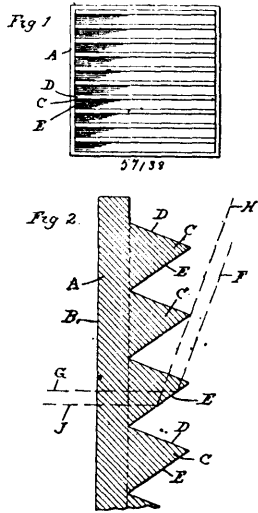
(*Appareil à mesure les angles.*)



Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 12th April, 1897.)

*Claim.*—1st. An angle measuring device comprising a graduated scale, an indicating device or pointer associated with said scale, the scale and pointer being movable with relation to each other, said scale or pointer responsive to the force of gravity so that their relative position is varied when the parts are moved, and a sighting device associated with said scale or pointer. 2nd. An angle measuring device comprising a graduated scale, a pointer or indicator, said scale and pointer being movable with relation to each other, a sighting device associated therewith, said scale and pointer connected with said sighting device, or some part associated therewith. 3rd. An angle measuring device comprising a sighting device, a graduated scale, an indicator associated therewith, said scale and indicator being movable with relation to each, and being each provided with a point which is fixed with relation to said sighting device. 4th. An angle measuring device comprising a sighting device, a graduated scale connected therewith, an indicating device or pointer adapted to move along said scale and connect it with said sighting device or some part associated therewith, said pointer responsive to the force of gravity so as to move along said scale when the position of the sighting device is varied. 5th. An angle measuring device comprising a graduated scale, an indicating device or pointer associated with said scale, the scale and pointer being movable with relation to each other, said scale or pointer responsive to the force of gravity so that their relative position is varied when the parts are moved, a sighting device associated with said scale and pointer, and a supporting device upon which the parts are mounted.

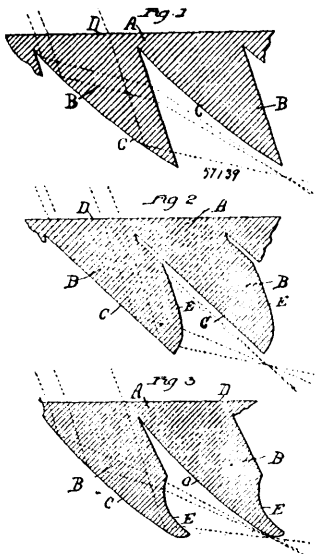
No. 57,138. Prismatic Glass. (Verre prismatique.)



Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 12th April, 1897.)

Claim.—As a new article of manufacture, a prismatic reflecting glass, comprising a body of glass with a comparatively smooth inner surface, and a series of prismatic ribs running across the opposite surface, each of such ribs having inclined surfaces set at such an angle to the perpendicular as that the interior angle of the upper surface equals two times the complement of the interior angle of the lower surface.

No. 57,139. Vault Light. (Lumière vaultée.)

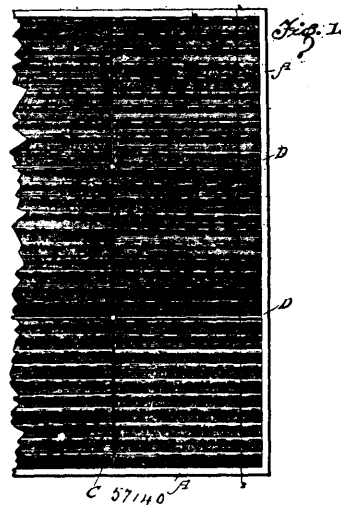


Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 12th April, 1897.)

Claim.—1st. A prism tile, comprising a part with a substantially plane receiving surface and a projecting prism having one curved surface, the curvature of such surface and the character of the other prism surface being such that substantially all the rays of light falling upon the receiving surface from a given direction will be so treated successively by the prism surfaces as to be converged substantially along a line a little farther below the plane of the receiving surface than the lower line of such prism and in advance of the lower line of such prism by a distance about equal to the greatest width of such prism in the direction in which the light is to be thrown. 2nd. A prism tile, comprising a part with a substantially plane receiving surface and a projecting prism having one curved surface and one plane surface, the curvature of such surface and the character of the other prism surface being such that substantially all the rays of light falling upon the receiving surface from a given direction will be so treated successively by the prism surfaces as to be converged substantially along a line a little farther below the

plane of the receiving surface than the lower line of such prism and in advance of the lower line of such prism by a distance about equal to the greatest width of such prism in the direction in which the light is to be thrown. 3rd. A prism pavement, comprising a series of prism tiles, each having a receiving surface substantially parallel with the pavement surface and a downwardly projecting prism, which is provided with two surfaces transverse to the direction in which the light is to be thrown, one of such surfaces being curved and the curvature of that surface and the character of the other surface being such that substantially all the light received on the receiving surface from a given direction is successively so treated by the prism surface as to be converged along a line just below the lower line of the next preceding prism. 4th. A prism tile, comprising a part with a substantially plane receiving surface and a projecting prism having one curved surface, the curvature of such curved surface and the character of the other prism surface being such that part of the rays of light falling upon the receiving surface from a given direction will be so treated successively by the prism surfaces as to be converged substantially along a line a little farther below the plane of the receiving surface than the lower line of such prism and in advance of the lower line of such prism by a distance about equal to the greatest width of such prism in the direction in which the light is to be thrown, and the remainder of the rays will be directed into horizontal lines. 5th. A prism tile, comprising a part with a substantially plane receiving surface and a projecting prism having one curved surface and one plane surface, the curvature of such surface and the character of the other prism surface being such that part of the rays of light falling upon the receiving surface from a given direction will be so treated successively by the prism surfaces as to be converged substantially along a line a little farther below the plane of the receiving surface than the lower line of such prism and in advance of the lower line of such prism by a distance about equal to the greatest width of such prism in the direction in which the light is to be thrown, and the remainder of the rays will be directed into horizontal lines. 6th. A prism pavement, comprising a series of prism tiles, each having a receiving surface substantially parallel with the pavement surface and a downwardly projecting prism which is provided with two surfaces transverse to the direction in which the light is to be thrown, one of such surfaces being curved and the curvature of that surface and the character of the other surface being such that part of the light received on the receiving surface from a given direction is successively so treated by the prism surface as to be converged along a line just below the lower line of the next preceding prism, and the remainder of the light is directed into horizontal lines.

No. 57,140. Prismatic Light. (Lumière prismatique.)

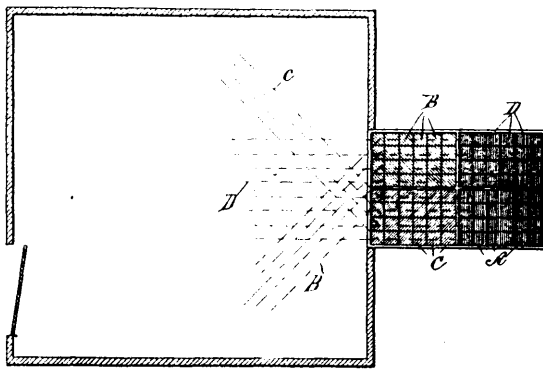


Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

Claim.—1st. A prism plate comprising a series of prism lights secured together in a suitable frame so as to form such plate, each prism light having uniform prisms but the prisms of different lights varying in angular arrangement. 2nd. A prism plate comprising a series of prism lights and a frame by which they are bound together to form the plate, the prisms of the plate having different angles, but the number of prisms being uniform for each unit of distance measured transversely to the prisms. 3rd. A prism plate comprising a series of prism lights joined together to form such prism plate, the prisms of the plate having different angles, such prisms arranged so that there are uniform numbers of prisms for equal distances measured transversely to such prisms, and all the prisms of an equal elevation measured from the plane side of the prism plate. 4th. A prism plate comprising a series of prism lights joined together to

form such prism plate, the prisms of the plate having different angles, such prisms arranged so that there are uniform numbers of prisms for equal distances measured transversely to such prisms, and all the prisms of an equal elevation measured from the plane side of the prism plate and all the prisms having equal widths at their bases. 5th. A prism plate comprising a series of prism lights joined together to form such prism plate, the prisms of the plate having different angles, such prisms arranged so that there are uniform numbers of prisms for equal distances measured transversely to such prisms, and all the prisms of an equal elevation measured from the plane side of the prism plate and all the prisms having equal widths at their bases, the plane surfaces of such prisms being connected by the curved surface. 6th. A substantially flat prism plate provided with a receiving surface on one side and a series of prisms running across the plate on the opposite side substantially from edge to edge, such prisms systematically arranged to produce an increased illuminating effect in the apartment and having equal bases and equal elevation, equal numbers for equal distances measured across such prisms, and angles varying systematically and regularly from one portion of the plate to another to give an increasing refraction of the light from one portion of the plate to another. 7th. A substantially flat prism plate provided with a receiving surface on one side and a series of prisms running across the plate on the opposite side substantially from edge to edge, such prisms systematically arranged to produce an increased illuminating effect in the apartment and having equal bases and equal elevation, and angles varying systematically and regularly from one portion of the plate to another to give an increasing refraction of the light from one portion of the plate to another.

**No. 57,141. Prismatic Canopy. (Voûte prismatique.)**



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Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

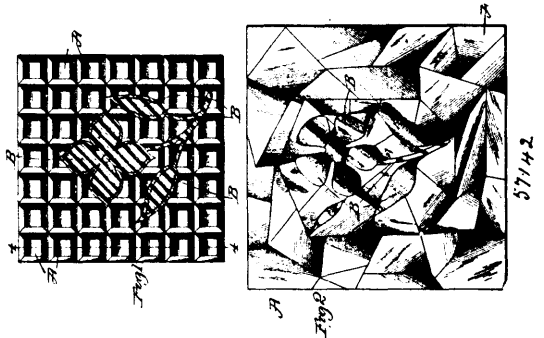
*Claim.*—1st. A canopy for illuminating a dark interior, comprising a frame, projecting from the building opposite the aperture through which the light is to be introduced, with a series of prism lights held in such frame, each prism light provided with a series of parallel prisms systematically arranged thereto to produce an increased illuminating effect, said prism lights arranged in groups with the prisms of one group tilted with reference to the prisms of another group, so that the light received upon one group is thrown through the aperture in one direction while the light received upon the other group is thrown through the aperture across the path of the light from the first group. 2nd. A canopy for illuminating a dark interior, comprising a frame projecting from the building opposite the aperture through which the light is to be introduced, with a series of prism lights held in such frame, each prism light provided with a series of parallel prisms systematically arranged thereon to produce an increased illuminating effect, said prism lights arranged in at least three groups with the prisms of one group tilted with reference to the prisms of another group, so that the light received upon one group is thrown through the aperture in one direction while the light received upon the other group is thrown through the aperture across the path of the light from the first group, and a third group with its prisms set so as to throw the light directly in through the aperture.

**No. 57,142. Ornamental Prismatic Glass. (Verre prismatique ornamental.)**

Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A prism plate for windows comprising a series of prism lights united together to form the plate, the prism lights arranged in groups so as to form a predetermined design or figure, and the prisms of the prism lights forming such design or figure inclined or tilted with reference to the prisms of the prism lights surrounding the same, substantially as and for the purpose specified. 2nd. A prism plate for a window having a receiving surface and a

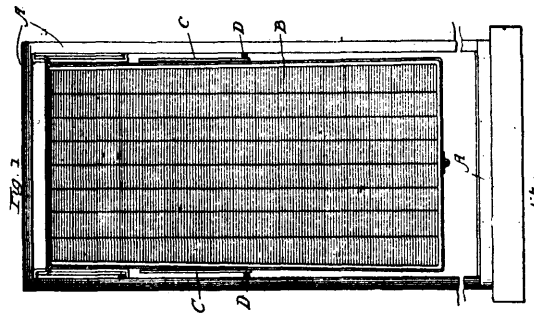
series of projecting prisms systematically arranged to produce an increased illuminating effect for the apartment on the other surface,



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the prisms of the group which forms a design varied with reference to the surrounding prisms so as to throw the light in a different direction and thus exhibit the design.

**No. 57,143. Adjustable Prism Canopy. (Voûte prismatique.)**

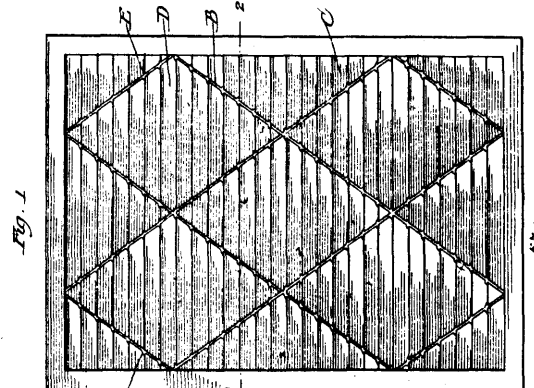


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Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—A plate supported at its upper end by vertically moving pivots, in combination with supporting arms which are approximately one-quarter the length of the plate, are pivotally secured at a fixed point below the moving pivot, and are also pivoted to the plate at a distance from its upper end approximately equal to one-quarter of its length.

**No. 57,144. Prismatic Window Plate. (Plaque de fenêtre prismatique.)**

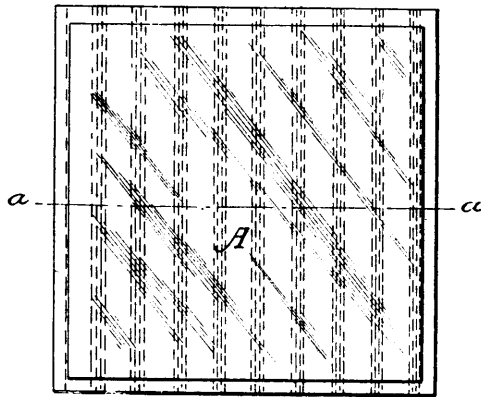


57/44

Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—A prism plate, comprising a series of prism lights, each of which has all of its surrounding edge interrupted at comparatively regular intervals by prism grooves, in combination with a grid or net, in the meshes of which the prism lights are fixed, and electrically deposited metal attached to the net and projecting into the ends of the prism grooves.

**No. 57,145. Prism Light.** (*Lumière prismatique.*)

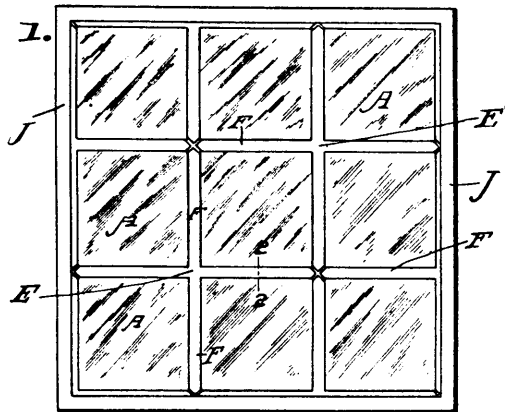


Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—A prism light, having a plane surface on one side and a prism surface on the other, such prism surface composed of a series of primary prisms, each having one plane surface and a prism surface, such prism surface on the primary prism being itself formed into secondary prisms, each having a face at right angles to the plane surface of the prism light, and a face parallel to the plane surface of the primary prism.

**No. 57,146. Mounting Prism Lights.**

(*Montage de lumière prismatique*)



Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—A grid or net for uniting tile-like sections into a complete plate, consisting of a series of corner pieces, each having as many legs as there are tile-like sections coming together at such corner, and each of said legs equal in length to the side of the section along which it lies, and I-shaped in cross section, in combination with a surrounding frame to hold the grid or net and its tile-like sections together so as to make a complete plate, substantially as shown and described.

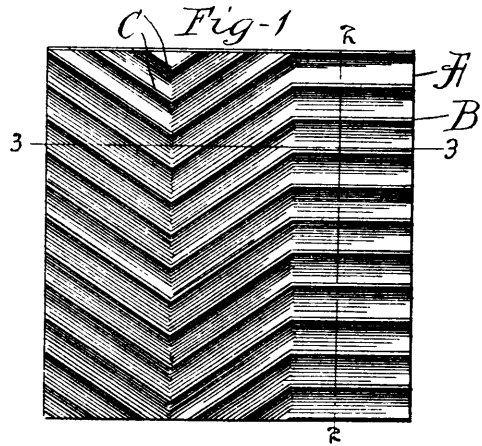
**No. 57,147. Light-diffusing Device.**

(*Appareil à répandre la lumière.*)

Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A prism light, comprising a substantially flat glass body, with prisms on one side, some of said prisms extending in a broken straight line across the body, substantially from edge to edge. 2nd. A prism light, comprising a substantially flat glass body, with prisms on one side, some of said prisms extending in a broken straight line across the body, substantially from edge to edge, and the edges of the adjacent prisms substantially equidistant from each other throughout their lengths. 3rd. A prism light, comprising a substantially flat glass body, having a substantially plane surface on one side, and with prisms on the other side, some of said prisms extending in a broken straight line across the

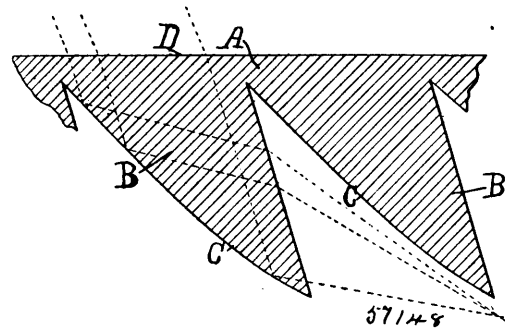
body, substantially from edge to edge. 4th. A prism light, comprising a substantially flat glass body, having a substantially plane



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surface on one side, and with prisms on the other side, some of said prisms extending in a broken straight line across the body, substantially from edge to edge, and the edges of the adjacent prisms substantially equidistant from each other throughout their lengths.

**No. 57,148. Vault Light.** (*Lumière vaulté.*)

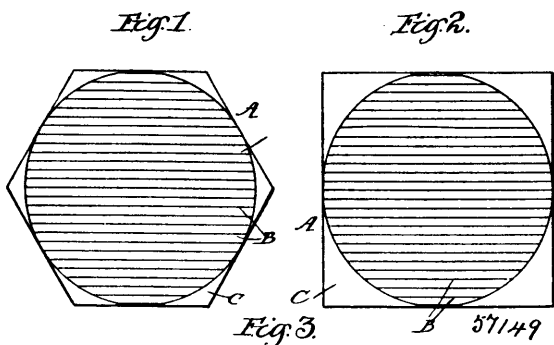


Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A vault light, comprising a receiving surface adapted to be placed in an approximately horizontal plane, one or more projecting ribs or prisms on the opposite sides thereof, each prism having two converging surfaces, one for reflecting, the other for refracting, the light, and one of said surfaces curved in such manner that substantially all of the light falling upon the surface of the vault light will pass thereinto and be successively treated by the two surfaces of the prism, so that it is converged upon a line a little further from the receiving surface than is the lower edge of such prism, and in advance of the lower edge of such prism by a distance substantially equal to the greatest width of such prism measured in the direction toward which the light is to be thrown. 2nd. A vault light, comprising a receiving surface adapted to be placed in an approximately horizontal plane, one or more projecting ribs or prisms on the opposite sides thereof, each prism having two converging surfaces, one for reflecting, the other for refracting, the light, and both of said surfaces curved in such manner that substantially all of the light falling upon the surface of the vault light will pass thereinto and be successively treated by the two surfaces of the prism, so that it is converged upon a line a little further from the receiving surface than is the lower edge of such prism, and in advance of the lower edge of such prism by a distance substantially equal to the greatest width of such prism measured in the direction toward which the light is to be thrown. 3rd. A prism light, comprising a substantially flat body of glass, with a receiving surface on one side, and one or more prisms on the other side, said prisms forwardly projecting at their lower extremities, and having two converging surfaces, one of which is curved, the lower extremity of each of said prisms projecting in front of a line drawn through the forward upper extremity of such prism, and substantially perpendicular to the receiving surface, so that substantially all of the light fallin

upon the surface of the vault light will pass thereinto and be successively treated by the two surfaces of the prism, so that it is converged upon a line a little further from the receiving surface than is the lower edge of such prism, and in advance of the lower edge of such prism by a distance substantially equal to the greatest width of such prism measured in the direction toward which the light is to be thrown. 4th. A vault light, comprising a receiving surface adapted to be placed in an approximately horizontal plane, and provided with projecting ribs or prisms having each two converging surfaces, one for reflecting the light received, and the other for refracting the reflected light, the reflecting surface being curved, and the lower edge of such prism projecting forward of a line through the upper forward surface of such prism, and substantially perpendicular to the receiving surface, and the refracting surface of such prism substantially parallel to the direction from which the light to be treated is to be received, so that substantially all of the light falling upon the surface of the vault light will pass thereinto and be successively treated by the two surfaces of the prism, so that it is converged upon a line a little further from the receiving surface than is the lower edge of such prism, and in advance of the lower edge of such prism by a distance substantially equal to the greatest width of such prism measured in the direction toward which the light is to be thrown.

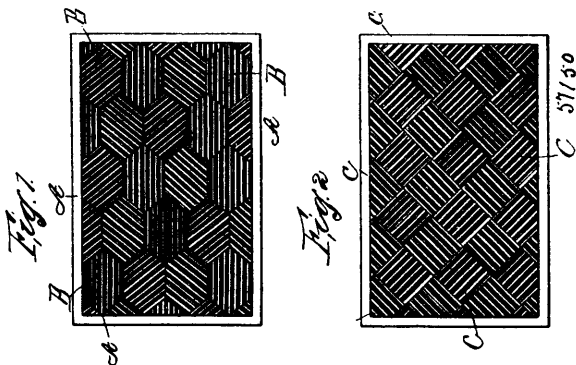
**No. 57,149. Prism Lights and Plates.**  
(*Lumière prismatique et plaque.*)



Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. As a new article of manufacture, a substantially flat prism light comprising a body portion of transparent material having a receiving surface and an outline other than circular, with an inscribed circular surface consisting of a series of substantially parallel prisms systematically arranged with each other and with the particular outline of the body portion of the prism light to produce an increased illuminating effect and to throw substantially all the light into a predetermined direction, the diameter of such circular prism surface not exceeding the shortest diameter of the body portion, so that the prism surface can be set in any relation to the outline of the body portion, and thus throw substantially all of the light affected in any predetermined direction with reference to the outline of such body. 2nd. A prism plate comprising a series of prism lights combined together in a suitable frame or grid, all the lights having bodies non-circular in outline but uniform, each body having a circular prism surface consisting of a series of prisms systematically arranged to produce an increased illuminating effect, substantially as shown and described.

**No. 57,150. Window Light.** (*Lumière de fenêtre.*)

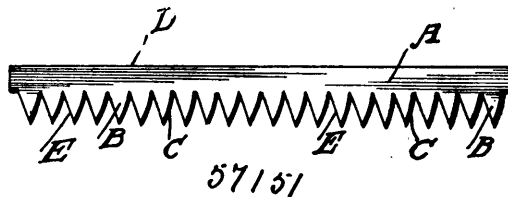


Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—A prism plate for a window, consisting of a series of individual prism lights, each prism light having on one side a receive-

ing surface and on the other a prism surface comprising a series of prisms systematically arranged to produce an increased illuminating effect, and a frame whereby all of these prism lights are attached together to produce a prism plate, the individual prism lights tilted or inclined in their positions in the plate so as to set the prisms at angles to each other to throw the light from any part of the completed plate in any desired direction, substantially as shown and described.

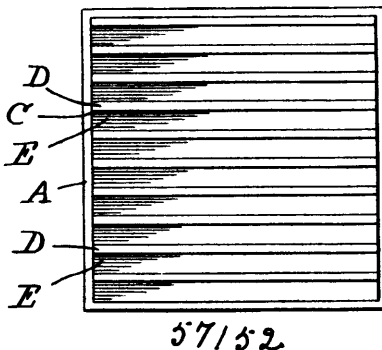
**No. 57,151. Prism Light.** (*Lumière prismatique.*)



Olin Hanson Basquin, Chicago, Illinois, U.S.A., 20th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A prism light comprising a substantially flat glass part having a receiving surface on one side and a series of projecting prisms on the other, each prism having one curved surface, the curvature of such surface and the character of the other prism surface being such that substantially all the rays of light falling upon the receiving surface from a given direction will be so treated successively by the prism surfaces as to be part of them directed forward in parallel lines and part of them converged substantially along a line a little farther from the plane of the receiving surface than the lower line of such prism and in advance of the lower line of such prism by a distance about equal to the greatest width of such prism, in the direction in which the light is to be thrown, but parallel to the plane receiving surface. 2nd. A prism light comprising a flat glass part with a receiving surface on one side and a series of projecting prisms on the other, each prism having one curved surface and one plane surface, the curvature of such surface and the character of the other prism surface being such that substantially all the light received from one direction will be so treated successively by the prism surfaces as to be part of them directed forward in parallel lines and part of them converged substantially along a line a little farther from the plane of the receiving surface than the lower line of such prism and in advance of the lower line of such prism by a distance about equal to the greatest width of such prism, in the direction in which the light is to be thrown, but parallel to the plane receiving surface. 3rd. A prism light comprising a flat glass part with a receiving surface on one side and a series of projecting prisms on the other, each prism having its two surfaces so shaped and related to each other that substantially all the light received from one direction will be so treated successively by the prism surfaces as to be part of them directed forward in parallel lines and part of them converged substantially along a line a little farther from the plane of the receiving surface than the lower line of such prism and in advance of the lower line of such prism by a distance about equal to the greatest width of such prism, in the direction in which the light is to be thrown, but parallel to the plane receiving surface.

**No. 57,152. Prismatic Glass.** (*Verre prismatique.*)



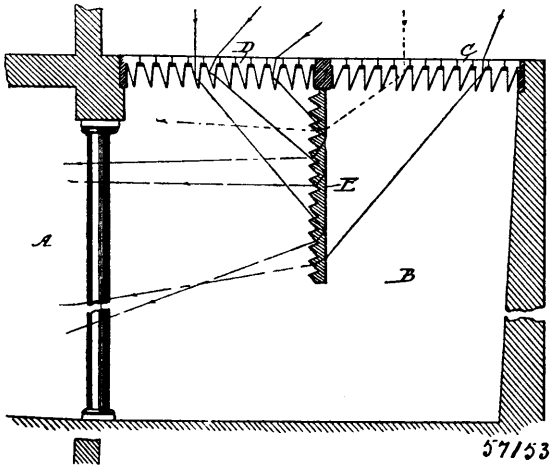
Frank C. Soper, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 12th April, 1897.)

*Claim.*—1st. A prism light for window illumination consisting of a body of glass having a plane surface on one side and a series of prisms extending substantially across the body of glass on the opposite side and having each two surfaces inclined to the plane surface so that the interior angle of the upper surface is equal to the complement of the interior angle of the lower surface plus the angle whose sine is two-thirds the sine of the lower angle, the lower surface inclined to the plane surface so that when the plane surface is substantially vertical the lowest light received thereon is transmit-



ted and directed into a substantially horizontal plane. 2nd. A prism light for window illumination consisting of a body of glass having a plane surface on one side and a series of prisms extending substantially across the body of glass on the opposite side and having each two surfaces inclined to the plane surface so that the interior angle of the upper surface is 70° and the interior angle of the lower surface 50°.

**No. 57,153. Device for Lighting Basements.**  
(Appareil pour éclairer les soubassements.)



Frank C. Soper, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

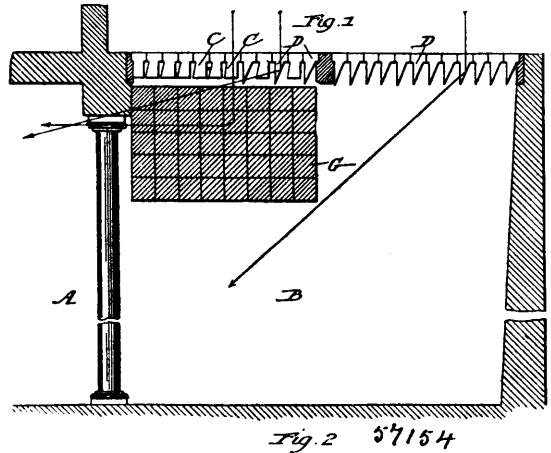
*Claim.*—1st. A device for lighting basements and the like, comprising a series of prism tiles arranged in oppositely facing sections, in combination with a transparent prism plate depending beneath and between such sections. 2nd. A device for lighting basements and the like, comprising a series of prism tiles arranged in sections, oppositely faced, in combination with a prism plate having a comparatively smooth surface on one side with a prism surface on the other side, the several prisms set at an angle so that the light will be thrown from the one section of the prism tiles upon the prism surface of the plate and be thence reflected into the direction desired, while light from the other section of tiles will be thrown upon the smooth surface of the plate and will be transmitted there-through and be refracted thereby so as to be directed into the room to be illuminated. 3rd. A device for lighting basements comprising two sets or sections of prism tiles, a receiving prism plate intermediate between said two sets or sections and suspended in a substantially vertical plane, said prism plate so formed as to refract the light received from one set of prism tiles and direct it into the basement and reflect the light from the other set of tiles and also direct it into the basement. 4th. A device for lighting basements and the like, comprising a transparent pavement-like body projecting substantially horizontally from the building and provided with two sets of prism tiles adapted to throw the light in opposite directions, a substantially vertically arranged transparent prism plate so suspended between the two sections that light from one section of tiles passes through the prism plate and is refracted into substantially horizontal lines, while the light from the other section of tiles is reflected from the prism plate into substantially horizontal lines.

**No. 57,154. Device for Lighting Basements.**  
(Appareil pour éclairer les soubassements.)

Frank C. Soper, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

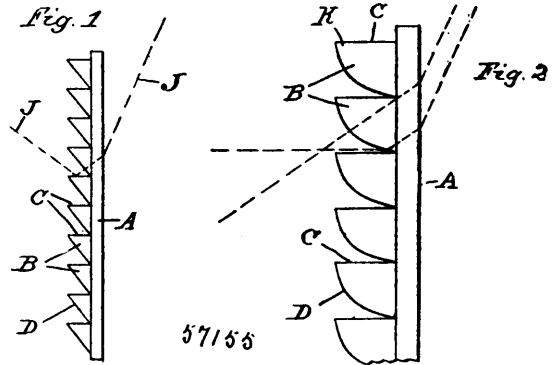
*Claim.*—1st. A device for lighting basements and the like, comprising a series of prism tiles arranged in a pavement-like body substantially at right angles to the building, said tiles arranged in groups, one group adapted to throw the light into the room to be illuminated, the other groups adapted to throw the light on opposite sides, in combination with reflectors placed at the sides and adapted to receive the light from such side-throwing prism tiles and to direct it forward into the room to be lighted. 2nd. A device for lighting basements and the like, comprising a series of prism tiles arranged in a pavement-like body substantially at right angles to the building, said tiles arranged in groups, one group adapted to throw the light into the room to be illuminated, the other groups to throw the light on opposite sides, in combination with transparent prism reflectors placed at the sides and adapted to receive the light from such side-throwing prism tiles and to direct it forward into the room to be lighted. 3rd. A device for lighting basements and the like, comprising a series of prism tiles arranged in a pavement-like body substantially at right angles to the building, said tiles arranged

in groups, one group adapted to throw the light into the room to be illuminated, the other groups adapted to throw the light on oppo-



site sides, in combination with transparent prism plates placed at the sides and adapted to receive the light from such side-throwing prism tiles and to direct it forward into the room to be lighted.

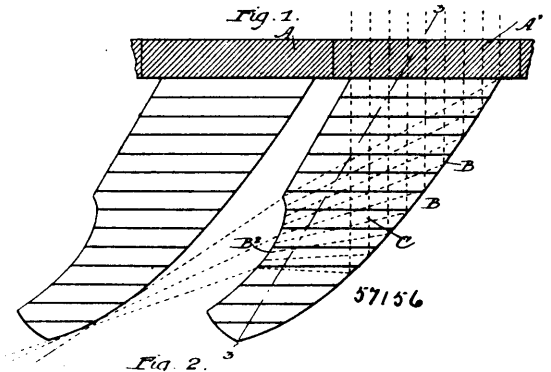
**No. 57,155. Prismatic Glass.**  
(Verre prismatique.)



Frank C. Soper, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—As a new article of manufacture, a prism light comprising a substantially flat body of glass with a receiving surface on one side and a series of prisms on the opposite side, extending substantially across the body and systematically arranged to produce an increased illuminating effect in the apartment, each prism having two faces, one a plane face and the other a curved face, the curvature being other than the arc of a circle and such, substantially as shown and described, that all the rays of light falling from a predetermined direction upon the receiving surface pass into the body and are thence transmitted in such manner that equal quantities of such light fall on equal areas taken at different distances from the prism light along a horizontal line, such areas perpendicular to the direction of the ray of such light derived from the prism light.

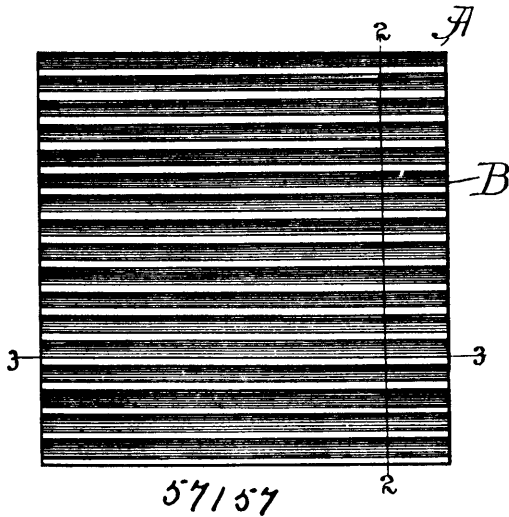
**No. 57,156. Vault Light.** (Lumière de voûte.)



Frank C. Soper, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A prism tile consisting of a body of transparent material having on one side a receiving surface and on the other side a prism provided with front and rear principal refracting and reflecting surfaces, and with edges which converge towards the receiving surface which are substantially flat and lies in planes substantially parallel with the direction in which the light treated by the principal surfaces is projected and secondary prisms on such edges. 2nd. A prism tile consisting of a body of transparent material having on one side a receiving surface and on the other a prism provided with front and rear principal refracting and reflecting surfaces, and edges which are provided with secondary prisms and lie in planes substantially parallel with the direction in which the light treated by the principal surfaces is projected.

**No. 57,157. Window Light.** (*Lumière de fenêtre.*)



Frank C. Soper, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

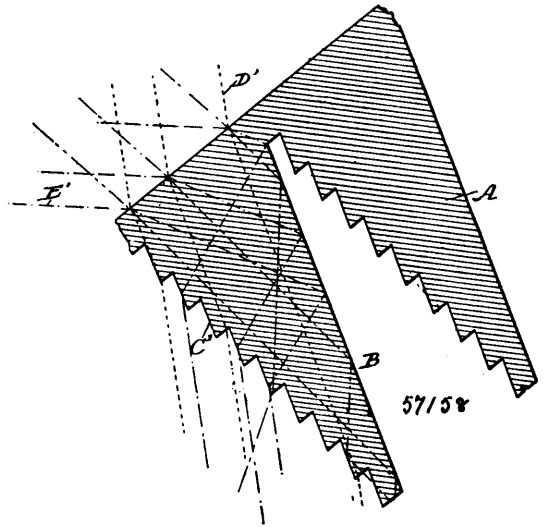
*Claim.*—1st. As a new article of manufacture, a prism light comprising a glass body substantially flat and having on the receiving side extended plane surfaces and on the other side a series of prisms systematically arranged to produce an increased illuminating effect in the apartment, the receiving side being broken by a series of faces nearly perpendicular to the plane surfaces. 2nd. As a new article of manufacture, a prism light comprising a glass body substantially flat having on the receiving side extended plane surfaces and on the other side a series of prisms systematically arranged to produce an increased illuminating effect in the apartment, the receiving surface being broken by a series of wide grooves whose sides are nearly perpendicular to the plane surfaces of such receiving side. 3rd. As a new article of manufacture, a prism light comprising a glass body substantially flat and having on the receiving side extended plane surfaces and on the other side a series of prisms systematically arranged to produce an increased illuminating effect in the apartment, the receiving side being broken by a series of faces nearly perpendicular to the plane surfaces, such prisms and perpendicular faces running across the prism light substantially at right angles to each other. 4th. As a new article of manufacture, a prism light comprising a glass body substantially flat, having on the receiving side extended plane surfaces and on the other side a series of prisms systematically arranged to produce an increased illuminating effect in the apartment, the receiving surface being broken by a series of wide grooves whose sides are nearly perpendicular to the plane surfaces of such receiving side, such prisms and grooves running across the prism light at substantially right angles to each other.

**No. 57,158. Sky-Light.** (*Lucarne.*)

Frank C. Soper, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A sky-light or the like, comprising one or more projecting or prisms, each provided with converging surfaces, said surfaces so positioned with relation to each other that when the device is in position the rays of light which come from a vertical direction remain practically unchanged in direction after passing through the sky-light while the rays of light falling obliquely upon said sky-light are changed in direction so as to leave the sky-light in a substantially vertical direction. 2nd. A sky-light or the like, comprising one or more projecting parts or prisms, each provided with converging surfaces, said prism or prisms so shaped that when

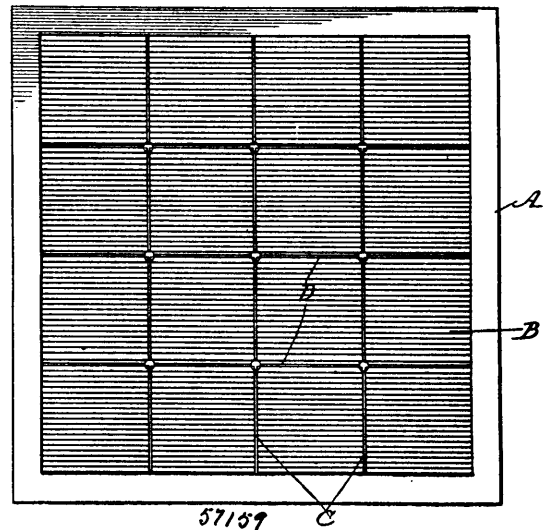
placed at an angle to the horizontal the vertical light which passes through such prism or prisms is discharged therefrom in a vertical



direction, while particular oblique rays of light are changed in direction so as to be discharged from the prism or prisms in a substantially vertical direction, whereby the amount of light falling vertically into the building is increased. 3rd. As a new article of manufacture, a prism light for sky-lights or the like, comprising a body of glass with a receiving surface on one side and a prism surface on the other side, said prism surface consisting of a series of projecting prisms having each one plane surface and one prism surface, such last named prism surface made of a series of prisms having each one surface parallel with the receiving surface, and the other surface inclined to the receiving surface and parallel with the plane surface of the prism.

**No. 57,159. Mounting Prism Lights.**

(*Montage de lumière prismatique.*)

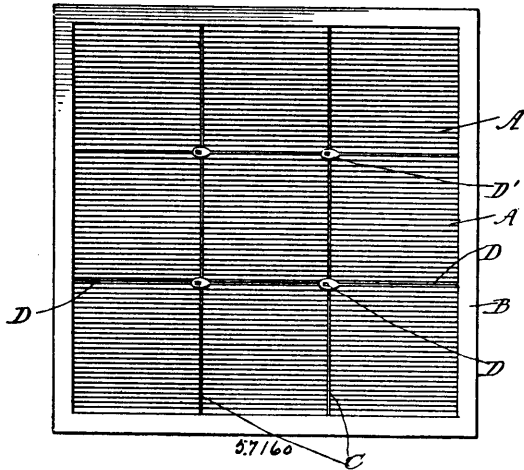


Henry Foster Belcher, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A prism plate comprising a series of prism lights, a grid or frame comprising bars which pass in opposite directions between the prism lights and disc-like keys, said prisms slotted at their bases and at the corners of the prism lights to receive such keys and thus hold all the parts securely in position. 2nd. A prism plate comprising a series of prism lights, a grid or frame comprising bars which pass in opposite directions between the prism lights, and

disc-like keys, said prisms slotted at their bases and at the corners of the prism lights to receive such keys and thus hold all the parts securely in position, and a mass of electrically deposited metal in and about the metal portions of such grid to hold the parts securely together.

**No. 57,160. Framing Prism Lights or Tiles.**  
(*Encadrement de lumière prismatique ou tuiles.*)

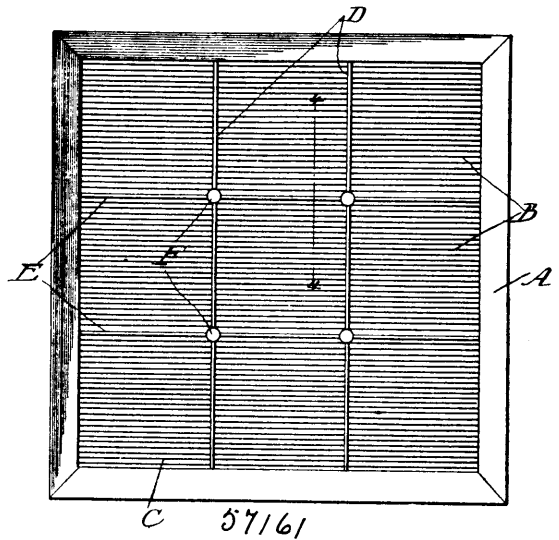


Henry Foster Belcher, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A frame for connecting separate pieces into a plate, comprising a surrounding outer frame, provided with a series of cross-pieces, a series of connecting pieces between said cross-pieces and extending across the frame at an angle thereto, some of said connecting pieces provided at one end with enlarged parts or lugs adapted, when the connecting pieces are in position, to engage said cross-pieces, the other end of said connecting pieces adapted to fit between the lugs or enlarged parts on the adjoining connecting pieces, one of said lugs on each cross-piece being perforated so as to expose the connecting piece and cross-piece engaged thereby. 2nd. A frame for connecting separate pieces into a plate, comprising a surrounding outer frame, provided with a series of cross-pieces, a series of connecting pieces between said cross-pieces and extending across the frame at an angle thereto, some of said connecting pieces provided at one end with enlarged parts or lugs adapted, when the connecting pieces are in position, to engage said cross-pieces, the other end of said connecting pieces adapted to fit between the lugs or enlarged parts on the adjoining connecting pieces, and provided with projections which project through openings in said lugs so as to connect the parts together. 3rd. A frame for connecting separate pieces into a plate, comprising a surrounding outer frame, provided with a series of cross-pieces, a series of connecting pieces between said cross-pieces and extending across the frame at an angle thereto, some of said connecting pieces provided at one end with enlarged parts or lugs adapted, when the connecting pieces are in position, to engage said cross-pieces, the other end of said connecting pieces adapted to fit between the lugs or enlarged parts on the adjoining connecting piece, and provided with projections which project through openings in said lugs so as to connect the parts together, said projections each provided with a bevelled or inclined face. 4th. A frame for connecting separate pieces into a plate, comprising a surrounding outer frame, provided with a series of cross-pieces, a series of connecting pieces between said cross-pieces and extending across the frame at an angle thereto, some of said connecting pieces provided at one end with enlarged parts or lugs adapted, when the connecting pieces are in position, to engage said cross-pieces, the other end of said connecting pieces adapted to fit between the lugs or enlarged parts on the adjoining connecting piece, and provided with projections which project through openings in said lugs so as to connect the parts together, said projections being battered or riveted so as to lock the parts in position. 5th. A frame for connecting separate pieces into a plate, comprising a surrounding outer frame, provided with a series of cross-pieces, a series of connecting pieces between said cross-pieces and extending across the frame at an angle thereto, some of said connecting pieces provided at one end with enlarged parts or lugs adapted, when the connecting pieces are in position, to engage said cross-pieces, the other end of said connecting pieces adapted to fit between the lugs or enlarged parts on the adjoining connecting piece, and provided with projections which project through openings in said lugs so as to connect the parts together, said projections being battered or riveted so as to lock the parts in position. 6th. A frame for connecting separate pieces into a plate, comprising a surrounding outer frame, provided with a series of cross-pieces, a series of connecting pieces between said cross-pieces extending across the frame at an angle thereto, some of said connecting pieces provided at one end with enlarged parts or lugs adapted, when the connecting pieces are

in position, to engage said cross-pieces, the other end of said connecting pieces adapted to fit between the lugs or enlarged parts on the adjoining connecting piece, and provided with projections, which project through openings in said lugs so as to connect the parts together, said projections being battered or riveted so as to lock the parts in position, and a quantity of solder engaging the several parts so as to form the finished joint. 7th. A joint for frame and the like, comprising a cross-piece, a connecting piece provided at its end with projecting lugs, between which said cross-piece passes, one of said lugs provided with an opening through which said cross-piece is exposed, a second connecting piece, having its end inserted between said lugs, a portion of said connecting piece being exposed through said opening, said pieces firmly united together by means of a quantity of solder inserted through said opening. 8th. A joint for frames and the like, comprising a cross-piece, a connecting piece provided with projecting lugs, between which said cross-piece passes, each lug being provided with an opening, a second connecting piece, adapted to be inserted between said lugs, and provided with projections which project through the openings therein, and engage said lugs so as to hold the parts in position. 9th. A joint for frames and the like, comprising a cross-piece, a connecting piece provided with projecting lugs, between which said cross-piece passes, each lug being provided with an opening, a second connecting piece adapted to be inserted between said lugs, and provided with projections which project through the openings therein, and engage said lugs so as to hold the parts in position, said projections being battered or riveted so as to connect the parts together. 10th. A joint for frames and the like, comprising a cross-piece, a connecting piece provided with projecting lugs between which said cross-piece passes, each lug being provided with an opening, a second connecting piece adapted to be inserted between said lugs, and provided with projections which project through the openings therein, said projections being battered or riveted so as to hold the parts in place, the several parts of the joint being rigidly connected together by means of solder or otherwise.

**No. 57,161. Framing Prism Light.**  
(*Encadrement de lumière prismatique.*)



Henry Foster Belcher, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A plate comprising a series of transparent sections with interposed supporting bars, the bars whose broad sides lie in the path of the light being cut out or internally reduced. 2nd. A plate comprising a series of sections of transparent material, and a series of supporting bars interposed between the edges of such sections, the cross bars internally perforated. 3rd. A prism plate comprising a series of prism sections placed close together edge to edge, an interposed frame consisting of flat bars between the several edges, the cross bars cut out internally so as to admit of the passage of light therethrough, while at the same time presenting an unbroken exterior surface.

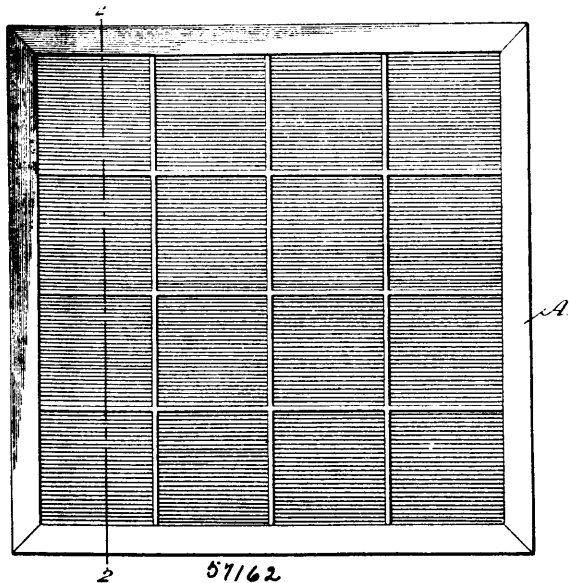
**No. 57,162. Method of Mounting Prism Lights and Ornamental Glass.** (*Méthode de montage de lumière pneumatiques et verre décoré.*)

Henry Foster Belcher, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A plate consisting of a series of sections united by means of a grid, a paste interposed between the grid and the sections

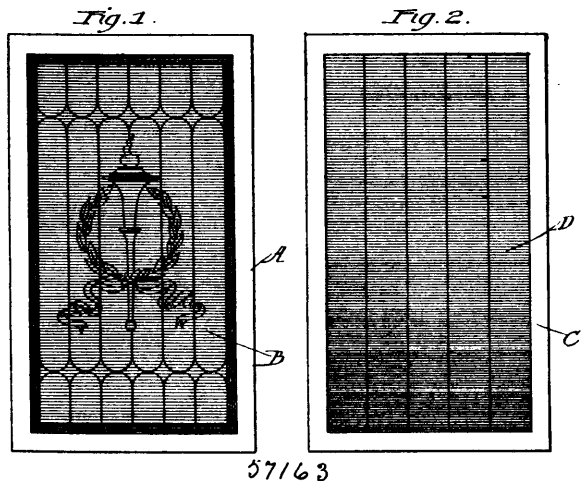
and an electrically deposited coat of metal over the exposed surfaces of such cement. 2nd. A plate consisting of a series of sections

said first mentioned strips and tile sections interposed between the squares thus formed between the several strips. 3rd. A complete



united by means of a grid, a paste interposed between the grid and the sections, and an electrically deposited coat of metal over the exposed surfaces of such cement and over the exposed surfaces of the grid also.

**No. 57,163. Combined Prism and Ornamental Glass.**  
(Verre prismatique et décoré.)



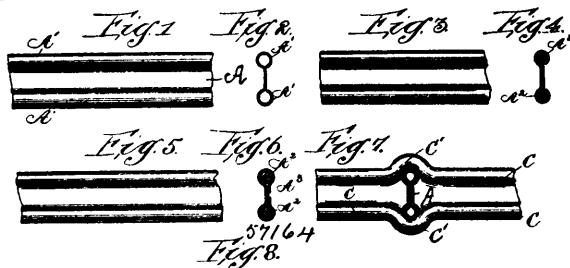
Henry Foster Belcher, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—The combination of a stained glass window with varying colours and varying degrees of translucency, with a prism plate window comprising a transparent body having a series of prisms on one side systematically arranged to produce an increased illuminating effect and adapted to receive the light from without, bend the rays and direct them upon the stained glass window in a predetermined manner to vary the effects produced by the stained glass window.

**No. 57,164. Method of Mounting or Framing Glass.**  
(Méthode de monter et encadrer le verre.)

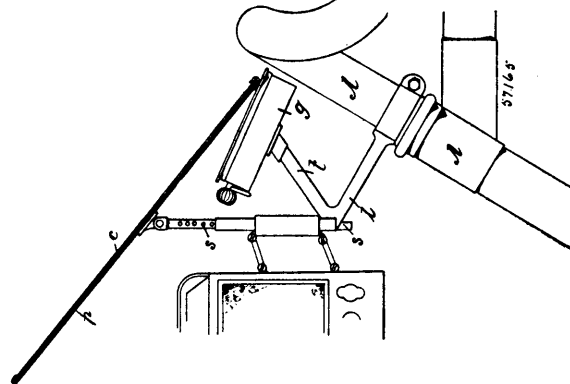
Henry Foster Belcher, Chicago, Illinois, U.S.A., 21st August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. A complete window comprising a series of tile sections with a series of double beaded metallic strips running in one direction and a series of double headed metallic strips running at right angles to and passing through the first mentioned strips, the sections of tile being placed within the squares formed by such strips. 2nd. A complete window comprising a series of strips, double beaded with a strengthening parts within the strips, transverse similar strips running at right angles to and passing through



said first mentioned strips and tile sections interposed between the squares thus formed between the several strips. 3rd. A complete window comprising a series of double beaded strips running in one direction, thin strengthening wires in the beads, a series of double beaded strips running at right angles to and passing through the first mentioned strips and a series of tile sections interposed in the spaces between the said strips. 4th. A complete window comprising a series of double beaded metallic strips, each perforated and the beads spread at such perforations so as to make the length of the perforations equal to the width of the body of the beaded strip, a series of double beaded strips passing through such perforations, and a series of tile sections in the spaces between such strips.

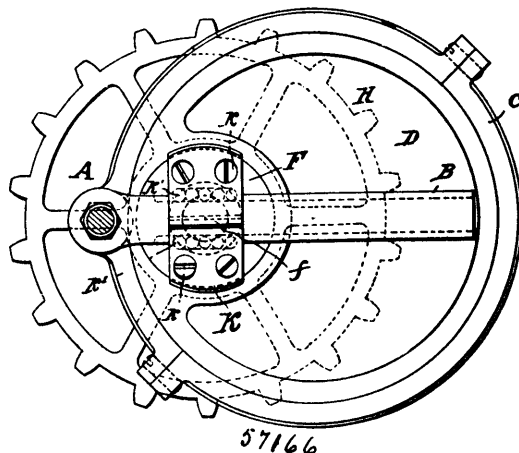
**No. 57,165. Bicycle Lamp Holder.**  
(Porte-lampe de bicyclette.)



Hans Freiherr von Ketelhodt, Ober, Ehrenbreitstein, near Coblenz, Germany, 21st August, 1897; 6 years. (Filed 10th June, 1897.)

*Claim.*—1st. In a lamp holder for bicycles, in combination, the part projecting at right angles or nearly so, which serves to carry the lamp, also receives and holds an adjustable rod *s*, the upper end of which is provided with a map-holder, consisting of a plate *p*, upon which the map is laid, substantially as described. 2nd. In a lamp holder for bicycles, in combination, an arm *t* projecting diagonally back from the lamp holder *L*, this arm *t* carrying a case *g* to receive the watch, substantially as described. 3rd. In a lamp holder for bicycles, in combination, a plate *p* fitted with a transparent cover *c* hinged to the plate *p*, being connected to the rod *s* by a link or hinge, substantially as described.

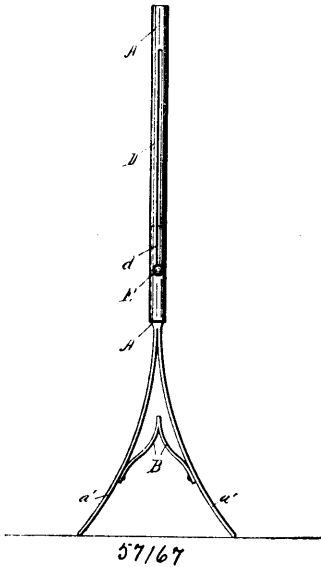
**No. 57,166. Crank Mechanism.** (Mécanisme de manivelles.)



Guillaume Louis van Doormun, Apeldoorn, Netherlands, 21st August, 1897; 6 years. (Filed 26th June, 1897.)

*Claim.*—The improved crank mechanism characterized by the combination of parts, consisting essentially of a crank pin fixed at one side of a ring, such as G, which ring is placed revolvably upon the periphery of a disc, such as D, fixed to the cycle frame, whilst the driving axle E is supported in bearings eccentrically in the said disc, which axle ends in front in a guiding piece G, K, having a sliding bar B pivoted upon the pedal pin A and sliding in the afore-said guide piece G, K, so that the motion of the pedal around the ring G and the disc D causes the turning of the driving axle A through the section of the sliding bar B in the guide piece G, K, substantially as described and shown in the accompanying drawings.

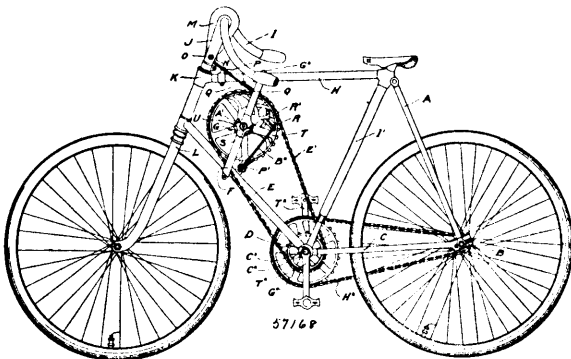
**No. 57,167. Bicycle Support.** (*Support de bicycles.*)



William Edward Hunt, Montreal, Quebec, Canada, 21st August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—1st. In a bicycle support, the combination, with an upper portion provided with a longitudinal slot, of spring legs slidable within the said upper portion, and a clamping screw for securing the said parts together, substantially as set forth. 2nd. In a bicycle support, the combination, with an upper portion provided with a longitudinal slot, of spring legs slidable within the said upper portion, a spring for forcing apart the said legs, and a clamping screw for securing the said legs to the upper portion of the support, substantially as set forth.

**No. 57,168. Detachable Hand Driving Gear for Cycles.** (*Manche pour mécanisme conducteur de cycles.*)

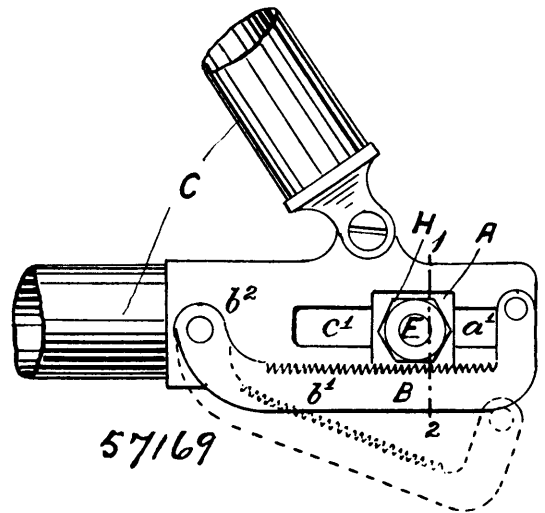


Walter Taylor, Brisbane, Queensland, 21st August, 1897; 6 years. (Filed 6th July, 1897.)

*Claim.*—1st. The combination and arrangement of the movable handle bar I, cam M, forked stem J, steel cords, Q and Q, quadrants R and R<sup>1</sup>, the endless steel cord B<sup>2</sup>, pawls A<sup>4</sup> and A<sup>4</sup>, ratchet wheels U and U<sup>1</sup>, top sprocket wheel T, axle S, with cones, endless chain E<sup>1</sup>, sprocket wheel C<sup>2</sup>, and the crank-axle C<sup>2</sup>, of the ordinary driving gear, situated between said crank-axle C<sup>2</sup>, and the rear wheel of cycles, as hereinbefore described and as illustrated in my drawings. 2nd. A detachable hand-driving gear for all kinds of cycles, in addition to the ordinary driving gear, this hand-driving gear to be situated in the body of cycle frame, and in a direct line from handle-bar to crank axle of cycle, as hereinbefore described and as illustrated.

**No. 57,169. Bicycle and other Vehicles.**

(*Bicycle et autres véhicules.*)

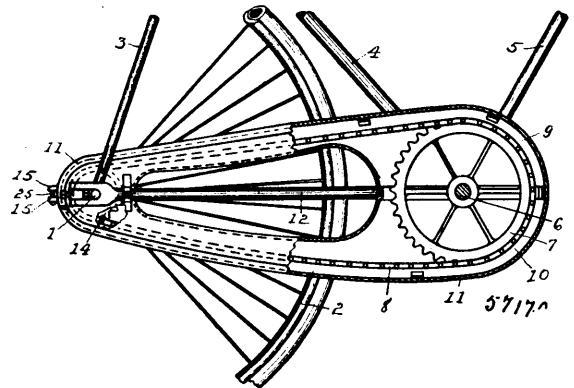


Harry Turner Haydon, Union Passage, Birmingham, Warwick, England, 21st August, 1897; 6 years. (Filed 16th July, 1897.)

*Claim.*—The sliding block A, having teeth a<sup>1</sup>, in combination with the toothed rack B, substantially as and for the purpose herein set forth and shown upon the accompanying drawing.

**No. 57,170. Gear Cases for Bicycles, etc.**

(*Etui d'engrenage de bicycles.*)



Harry J. Buell, Fort Wayne, Indiana, U.S.A., 23rd August, 1897; 6 years. (Filed 9th April, 1897.)

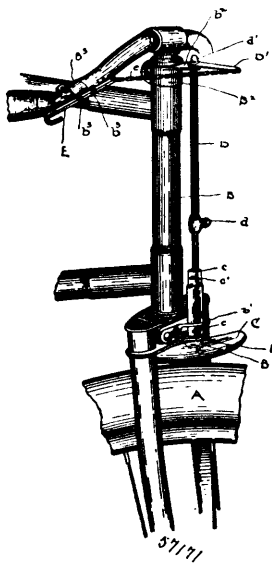
*Claim.*—1st. A dust-proof gear-case for cycles, comprising two separable interlocking sections, each section formed of a single piece of sheet-metal as shown, an interlocking peripheral closer formed of a single piece of sheet-metal folded upon itself, and adapted to form an interlocking union with the outer edges of said sections and to firmly clamp said sections together, as described, and means for detachably securing said case-sections to the cycle frame. 2nd. In a dust-proof gear-case for cycles, the combination of the separable interlocking sections 9 and 10, each section being formed of a single piece of sheet-metal, a peripheral closer 11 folded upon itself, adapted to close the outer and open faces of the said case sections by an interlocking engagement with the sides thereof, and to rigidly clamp the said sections together, substantially as described. 3rd. The combination in a gear-case for cycles of two separable sections stamped or pressed from a single piece of sheet-metal, a peripheral closer adapted to securely close the outer and open faces of said case-sections and to firmly clamp the said sections together, means for securing the meeting ends of said closer, and means for detachably securing said two-part case in position on the vehicle, all substantially as described.

**No. 57,171. Brake.** (*Frein.*)

John Lees, Indianapolis, Indiana, U.S.A., 23rd August, 1897; 6 years. (Filed 16th July, 1897.)

*Claim.*—1st. The combination, with a vehicle, of a brake composed of a brake-shoe having a stem containing a screw-formed perforation, and a brake-operating-rod having a screw-formed end entering said perforation, said parts being suitably mounted on the vehicle-frame, so that by rotating said rod, said brake-shoe may be forced

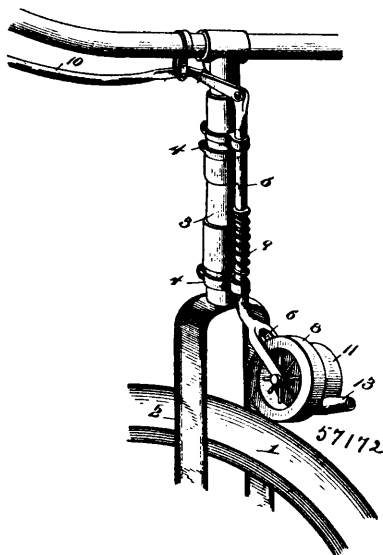
into contact with the wheel-tire, substantially as set forth. 2nd. The combination, in a brake, of the brake-shoe C having a stem c



with a longitudinal screw-formed perforation therein, a brake-rod D having a screw-formed end adapted to enter said perforation, and a spring S interposed between a stationary part on the vehicle-frame and a projection upon the stem of said brake-shoe, said spring operating to normally hold said shoe out of contact with the wheel-tire, and said rod when rotated operating to force said brake-shoe into contact with said wheel-tire, substantially as set forth. 3rd. The combination, with a vehicle, of clips or other devices having projecting wings, a brake-shoe having a stem the formation whereof prevents its rotation, which stem passes through similarly-formed perforations in wings on one of said clips and entering a perforation in the stem of the brake-shoe, those portions of said rod and said stem which come in contact being of a screw-form, and means for rotating said rod and thus operating said brake, substantially as set forth. 4th. The combination, in a vehicle-brake, of a brake-shoe provided with a stem mounted to move longitudinally but not to rotate, said stem having a screw-formed perforation running longitudinally thereof, and an operating-rod provided with a screw-formed end entering into said perforation and mounted to revolve in its bearings but not to move longitudinally, and suitable means for revolving said rod, substantially as and for the purposes set forth.

**No. 57,172. Pneumatic Bicycle Alarm and Brake.**

(Avertisseur et frein pneumatique de bicycles.)



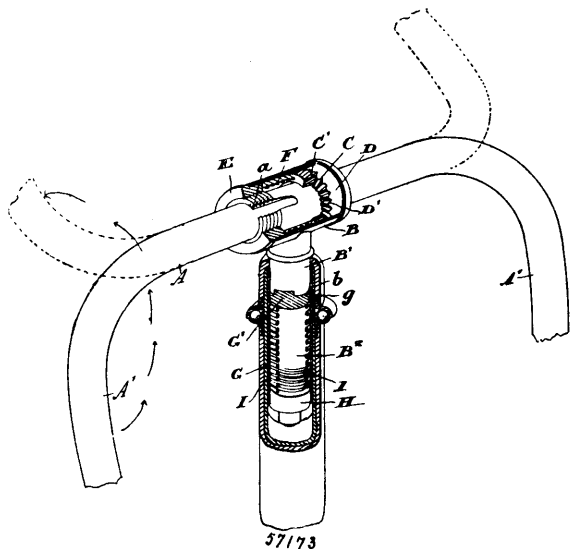
Frank Madden, Greeley, Colorado, U.S.A., 23rd August, 1897; 6 years. (Filed 7th July, 1897.)

Claim.—A combined brake and alarm attachment for bicycles, comprising a normally spring elevated vertically movable stem

adapted to be slidably supported on the head of the machine frame and provided at its lower end with a fork, a transverse shaft 7 connecting the side arms of the fork, a friction brake-wheel 8, fitted to the shaft within the fork, and having a continuous wide flat tread, and an alarm device attached to the fork at one side of the wheel and encircling the shaft 7, a working part of the said alarm device being carried by the shaft to provide for the simultaneous operation of the brake and the alarm, substantially as set forth.

**No. 57,173. Handle Bar for Bicycles.**

(Poignée de barre de bicycles.)

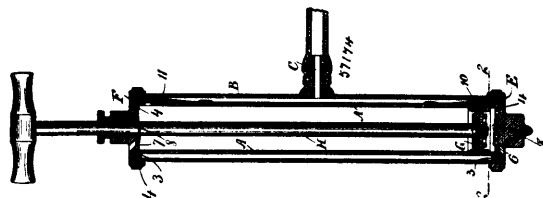


Albert Ross, Woodstock, Ontario, Canada, 23rd August, 1897; 6 years. (Filed 17th July, 1897.)

Claim.—1st. The combination with the handle bar and a ring secured in the central portion of the same and provided with face teeth, of the hollow cross head secured to the upper end of the standard and provided with an internal sleeve having face teeth designed to engage with the face teeth on the ring, and means for normally holding such teeth in engagement and withdrawing same to adjust the height of the handle bar, as and for the purpose specified. 2nd. The combination with the handle bar, a ring secured in the central portion of the same and provided with face teeth, of the hollow cross head secured to the upper end of the standard and provided with an internal sleeve having face teeth designed to engage with the face teeth on the ring, a thread formed on the handle bar within the opposite side of the hollow cross head, an internal threaded ring designed to be adjusted upon such thread, and the spiral spring extending between such ring and the ring attached to the hollow cross head, as and for the purpose specified. 3rd. The combination with the handle bar, cross head and depending stem extending downwardly therefrom, of the hollow post secured in the standard, the sleeve provided with diametrical recesses, the depending lugs forming part of the enlarged upper end of the stem and designed to normally fit in such recesses, and means for holding them in such position, as and for the purpose specified. 4th. The combination with the handle bar, cross head and depending stem extending downwardly therefrom, of the hollow post secured in the standard, the sleeve provided with diametrical recesses, the depending lugs forming part of the enlarged upper end of the stem and designed to normally fit in such recesses, a nut secured on the lower end of the stem and a spiral spring extending between such nut and the internal sleeve in the post, as and for the purpose specified.

**No. 57,174. Air Pump for Pneumatic Tires, etc.**

(Pompe à air pour bandages pneumatiques, etc.)



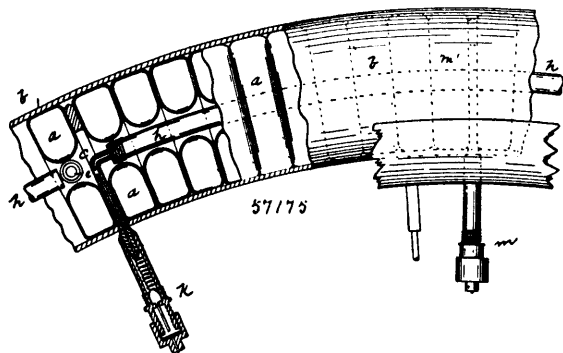
Charles Diss, Brooklyn, New York, U.S.A., 23rd August, 1897; 6 years. (Filed 19th July, 1897.)

Claim.—1st. The combination in a pneumatic pump, of a cylinder having end collars and valves on the exterior of such cylinder and near the ends, a case surrounding the pump cylinder and the collars

and forming an air chamber between the case and pump cylinder, heads screwed upon the case and washers intervening between the heads and the ends of the case and pump cylinder, and inlet valves within the heads, substantially as set forth. 2nd. The combination in a pneumatic pump, of a case, a pump cylinder and end collars within the case, valves on the exterior of the pump cylinder and near the ends, heads screwed upon the case, washers intervening between the heads and the ends of the pump cylinder, and valves formed of the material of the washers and covering the holes through the respective heads, substantially as set forth.

**No. 57,175. Pneumatic Tire.**

(*Bandage pneumatique.*)



Georges d'Infreville, New York, State of New York, U.S.A., 23rd August, 1897; 6 years. (Filed 20th July, 1897.)

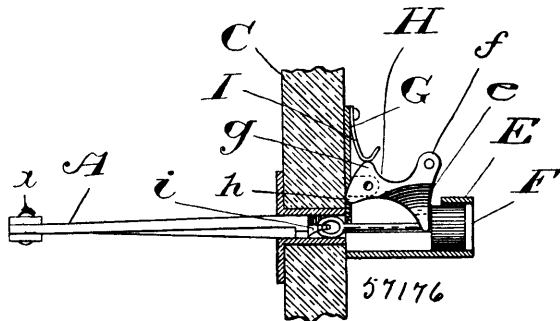
*Claim.*—1st. A wheel tire composed of a series of small inflated hollow rings of rubber, cemented together to form a larger hollow ring or tube, having an inner air-tight conduit, substantially as set forth. 2nd. A wheel tire composed of a series of small inflated hollow rings of rubber cemented together to form a larger hollow ring or tube having an inner air-tight conduit, and an outer covering therefor, substantially as set forth. 3rd. A wheel tire composed of a series of small hollow rings of rubber, cemented together to form a larger hollow ring or tube having an inner air-tight conduit, and means for inflating the tire thus formed, substantially as set forth. 4th. A wheel tire composed of a series of small hollow rings of rubber, cemented together to form a larger hollow ring or tube having inner air-tight conduit, and means for inflating the small hollow rings forming the larger tube, substantially as set forth. 5th. A wheel tire composed of a series of small hollow rings of rubber, cemented together to form a larger hollow ring or tube having an inner air-tight conduit, each of the said small hollow rings being provided with an inflating valve on its inner circumference, and means for forcing air into the said inner conduit, substantially as set forth. 6th. A wheel tire composed of a series of small hollow rings of rubber, cemented together to form a larger hollow ring or tube having an inner air-tight conduit, each of the said small hollow rings being provided with an inflating valve on its inner circumference, and a valved passage to the said inner conduit, substantially as set forth. 7th. A wheel tire composed of a series of hollow rings cemented together to form a larger hollow ring or tube having an inner air-tight conduit, each of the said small hollow rings being provided with an inflating valve-stem passing into the inner conduit, a loose pipe in the said conduit, and means for inflating the said pipe, and means for forcing air into the said conduit, all substantially as and for the purposes set forth.

**No. 57,176. Lock Wall Support for Bicycles and Other Articles,** (*Support avec serrure pour bicycles, etc.*)

Thomas Mounce, Toronto, Ontario, Canada, 23rd August, 1897; 6 years. (Filed 21st July, 1897.)

*Claim.*—1st. A wall support for cycles, adapted to embrace a portion of a bicycle and shaped to enter a socket or hole in the wall, in combination with mechanism on the inside of the wall for locking the support within the wall, substantially as and for the purpose set forth. 2nd. A wall support for bicycles adapted to embrace a portion of a cycle and shaped to enter the socket in the wall, in combination with a dog pivoted at the inner side of the wall and adapted to engage the suitably shaped portion of the said support extending through the wall, substantially as and for the purpose specified. 3rd. A divided and suitably hinged wall support for cycles adapted to embrace a portion of a cycle, its free ends being shaped to enter a socket or hole in the wall, in combination with mechanism on the inside of the wall for locking a portion of the support within the wall, substantially as and for the purpose specified. 4th. A divided and suitably hinged wall support for cycles adapted to embrace a portion of a cycle, its free ends being shaped to enter a socket or hole in the wall, in combination with a dog

pivoted at the inner side of the wall and adapted to engage a portion of the support within the wall, substantially as and for the purpose



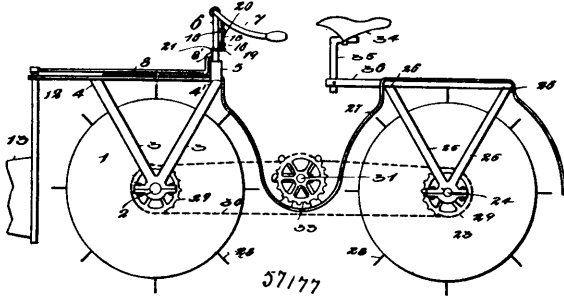
specified. 5th. A divided ring forming a wall support for cycles, two ends of the halves of the ring being hinged together and the other ends shaped so as to be brought into juxtaposition and insertion in a socket or hole formed in the wall, in combination with a wire or rod connected to one of the said ends, a head formed on the said rod, a guide for the said head connected to the inner surface of the wall, and a dog so pivoted as to engage with the said head when the ends of the support are inserted into the hole, substantially as and for the purpose specified. 6th. A divided ring forming a wall support for cycles, two ends of the halves of the ring being hinged together and the other end shaped so as to be brought into juxtaposition and insertion in a socket or hole formed in the wall, in combination with a wire or rod flexibly connected to one of the said ends, a head formed on the said rod, a guide for the said head connected to the inner surface of the wall, and a dog so pivoted as to engage with the said head when the ends of the support are inserted into the hole, substantially as and for the purpose specified. 7th. A divided ring forming a wall support for cycles, two ends of the halves of the ring being hinged together and the other ends shaped so as to be brought into juxtaposition and insertion in a socket hole formed in the wall, in combination with a wire or rod connected to one of the said ends, a head formed on the said rod, a guide for the said head connected to the inner surface of the wall, a dog so pivoted as to engage with the said head when the ends of the support are inserted into the hole, a projection upon the upper side of said dog, a rigidly-supported spring with which said projection may be engaged to retain the dog in a raised position, and a projection on the lower side of the dog with which the head of the rod engages when drawn forward, substantially as and for the purpose specified. 8th. A divided ring forming a wall support for cycles, two ends of the halves of the ring being hinged together and the other ends shaped so as to be brought into juxtaposition and inserted in a socket or hole formed in the wall, in combination with a wire or rod connected to one of the said ends, a head formed on the said rod, a guide for the said head connected to the inner surface of the wall, a dog so pivoted as to engage with the said head when the ends of the support are inserted into the hole, and a projection on the lower side of the dog with which the head of the rod engages when drawn forward, substantially as and for the purpose specified. 9th. A divided ring forming a wall support for cycles, two ends of the halves of the ring being hinged together and the other ends shaped so as to be brought into juxtaposition and inserted in a socket or hole formed in the wall, in combination with a wire or rod flexibly connected to one of the said ends, a head formed on the said rod, a guide for the said head connected to the inner surface of the wall, a dog so pivoted as to engage with the said head when the ends of the support are inserted into the hole, a projection upon the upper side of said dog, a rigidly-supported spring with which said projection may be engaged to retain the dog in a raised position, and a projection on the lower side of the dog with which the head of the rod engages when drawn forward, substantially as and for the purpose set forth. 10th. A divided and suitably hinged wall support for bicycles adapted to embrace a portion of a cycle, its free end being shaped to enter a socket or hole in the wall, in combination with mechanism on the inside of the wall for locking a portion of the support within the wall, and a chain connected to one part of the divided ring, curved recesses being made in the free ends of the halves of the ring to embrace and lock the chain near its other end when the free ends of the ring are brought together, substantially as and for the purpose specified.

**No. 57,177. Water Bicycle.** (*Bicycle pour l'eau.*)

Charles Lemuel Knepper, Buffton, Indiana, U.S.A., 23rd August, 1897; 6 years. (Filed 22nd July, 1897.)

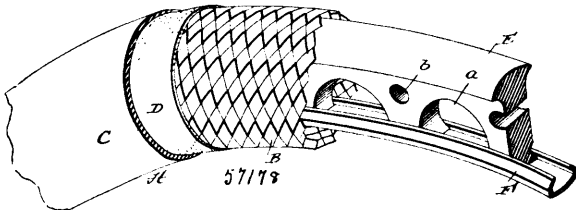
*Claim.*—1st. A water bicycle comprising the air-tight cylinders and means substantially as described for propelling the same, in combination with the rudder, its shaft, the connecting rod, and the handle-bar, as and for the purpose set forth. 2nd. A water bicycle comprising the air-tight cylinders and means for rotating the same, in combination with the rudder, the lever 14, and the clamp 20, substantially as and for the purpose set forth. 3rd. A water bicycle comprising the frame 27, the brackets 25, depending therefrom, a

forwardly projecting horizontal bracket 36, secured to the rear portion of said frame, the standard 35, and seat 34, secured to said



bracket 36, the air-tight cylinder 23, provided with the blades 28, and shaft 24, journaled in the brackets 25, the sprocket wheel 29, mounted on said shaft, in combination with the crank shaft 31, the sprocket wheel 33, and the friction rollers 37, the depending brackets 3-3, secured to the front end of the frame, the air-tight cylinder 1, provided with blades 28, mounted on the shaft 2, and journaled in said brackets 3-3, the sprocket wheel 29, mounted on said shaft 2, the sprocket chain 30, in operative engagement with said sprocket wheels on the cylinders and crank shaft, and the rudder 13, mounted in the forward end of the frame on the post 12, the lateral arm 8', secured to said post, the vertical post 5, the tube 6, mounted on said post and provided at its upper end with the handle-bar 7, a lateral arm 8', fixed on said tube 6, and the connecting rod 8, connecting the arms 8' and 10, substantially as shown and described.

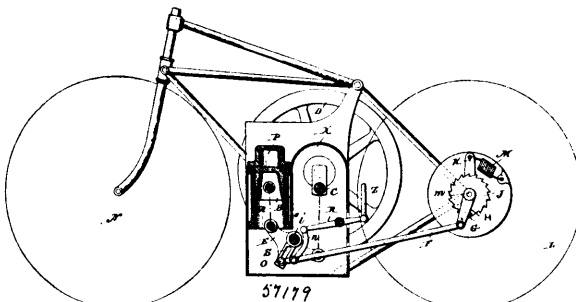
**No. 57,178. Bicycle Tire. (Bandage de bicycles.)**



Jared Henry Beamer, Brampton, Ontario, Canada, 23rd August, 1897; 6 years. (Filed 24th July, 1897.)

*Claim.*—1st. In a tire for bicycle and other wheels, an endless and seamless tube formed of plaited strips of resilient metal, substantially as specified. 2nd. In a tire for bicycle and other wheels, the combination of an endless tube formed of plaited strips of resilient metal, and an annular bridge or support of rubber arranged within said tube and conforming in width to the interior diameter thereof and having recesses in its inner edge and transverse apertures at points intermediate of said recesses, substantially as specified. 3rd. In a tire for bicycle and other wheels, the combination of an endless and seamless tube formed of plaited strips of resilient metal, an annular bridge or support of rubber arranged within said tube, and an annular seat of light metal arranged within the tube and receiving the inner edge of the bridge or support, substantially as specified. 4th. A tire for bicycle or other wheels, comprising an endless tube formed of plaited strips of resilient metal, a covering and a tubular layer of textile interposed between the covering and the metallic tube and saturated with paraffine wax, substantially as specified.

**No. 57,179. Mechanism for Transmitting Power in Petroleum Motor Vehicles, (Mécanisme pour transmettre la force aux véhicules à moteur à pétrole.)**

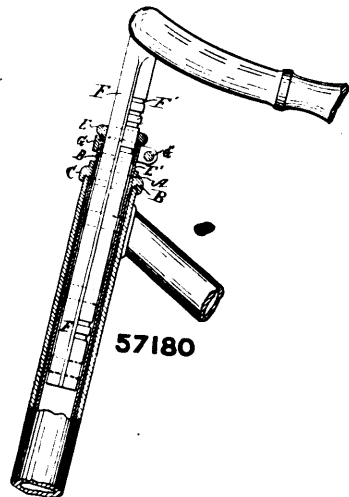


George T. Harris, Frankfort, Germany, 23rd August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—1st. In a motor vehicle, the combination with the piston of a petroleum or other like motor, of mechanism operating to trans-

mit the power impulse thereof direct to the driving wheel of the vehicle, consisting of a centrally pivoted lever E directly actuated by the piston, a ratchet wheel J loosely journaled upon the axle of the driving wheel, a connection between one arm of said lever and the ratchet wheel whereby the latter is operated, and a spring connected to the ratchet wheel and to the driving wheel and adapted to be brought under tension and exert a propelling force upon the driving wheel when the ratchet wheel is actuated, substantially as specified. 2nd. In a device of the character described, the combination with the piston, of a frame supporting the motor, a fly-wheel journaled in said frame, a centrally pivoted lever E connecting devices actuated thereby, a ratchet disc J loosely journaled upon the axle of the driving wheel, and a spring M between the same and adapted to be brought under tension upon the partial rotation of the ratchet, substantially as described. 3rd. The combination in a device of the character described, of a supporting frame, a motor the piston of which is directly connected with a centrally pivoted rocking lever, a fly-wheel journaled in the frame and driven by said rocking lever, a spring mounted upon the driving wheel of the vehicle, devices partially rotatable upon the axle thereof and adapted thereby to exert a tension upon the spring, and connecting actuating devices between the same and the pivoted rocking lever, substantially as described. 4th. The combination in a device of the character described, of a supporting frame, a motor, a centrally pivoted rocking lever E, slotted at S, the rod F vibrated thereby, driving mechanism actuated by said rod, and devices to adjust the throw of the rod F, consisting of the link n, the rod R and the operating bar Z, the same being constructed and operating substantially as described. 5th. The combination in a device of the character described, of a supporting frame, a motor, a centrally pivoted three-armed lever, one of whose arms is directly connected to the piston of the motor, a fly-wheel connected with the opposite arm of said lever, a ratchet disc loosely mounted on the shaft of the driving wheel, connecting actuating devices between the said disc and the third arm of said lever, and a spring connected to said driving wheel and to the disc, and adapted to be put under tension by the actuation of said disc, substantially as specified. 6th. The combination in a device of the character described, of a supporting frame, a motor, a centrally pivoted three-armed lever one of whose arms is directly connected to the said piston, a fly-wheel connected with the opposite arm of said lever, a ratchet disc loosely mounted upon the axle of the driving wheel, a lever for operating the same, a connecting rod from said lever to the third arm of the centrally pivoted lever, means for varying the throw of said rod, and a spring connected to an arm of said ratchet disc and to the driving wheel, substantially as specified.

**No. 57,180. Velocipede. (Vélocipede.)**



Edward L. Evens, Malvern, South Australia, 23rd August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—In combination with the steering head B, a socket E at the top thereof having a rectangular bore and the projection therein, and the steering spindle F having a rectangular cross-section to fit the socket and grooves extending about it at different heights, said socket E and steering head being split and the clamp surrounding the said parts to fix the socket E in place and to clamp the same upon the steering rod, substantially as described.

**No. 57,181. Bicycle Support. (Support de bicycles.)**

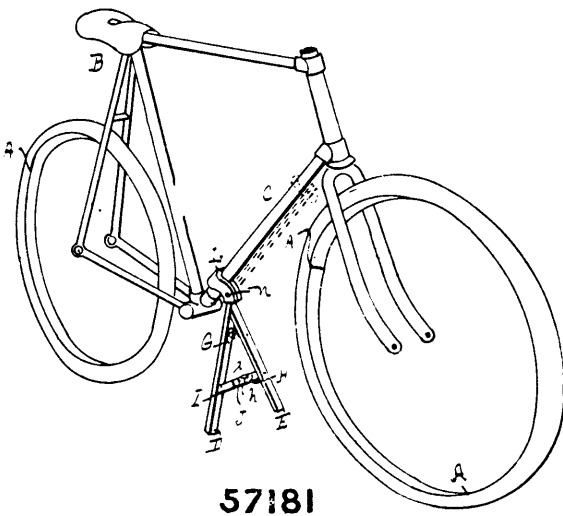
George Steese and Jefferson P. Myers, both of Detroit, Michigan, U.S.A., 23rd August, 1897; 6 years. (Filed 26th July, 1897.)

*Claim.*—1st. In a bicycle support, the combination of the legs D, E, adapted to spread apart and fold together, and means for securing



said legs to the bicycle frame, said legs being pivotally secured to said means for securing them to the bicycle frame, substantially as

the frame and having their front ends correspondingly recessed, substantially as set forth. 3rd. The combination with the saddle



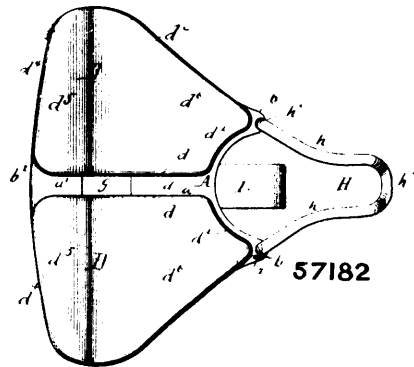
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shown and for the purpose described. 2nd. In a bicycle support, the combination of the legs D, E, adapted to be spread apart and folded together, and means for securing said legs to the bicycle frame, both of said legs being pivotally secured to said means for securing them to the bicycle frame, so as to swing in a plane parallel to the bicycle frame, substantially as shown and for the purpose described. 3rd. In a bicycle support, the combination of the legs D, E, pivoted together as at K, and the yoke L, adapted to be secured to the lower frame-tube of the bicycle, both of said legs being pivotally secured to said yoke between the legs of said yoke, so as to swing in a plane parallel to the frame of the bicycle, the legs of said yoke being bent and extended below the pivot of said legs, substantially as and for the purpose described. 4th. In a bicycle support, the combination of the legs D, E, adapted to be spread apart and folded together, and means for securing said legs to the bicycle frame, and the braces H, I, each of said braces being pivoted at one end to one of said legs, and at the other end to the other of said braces, said braces being provided with a stop to prevent them from turning much below a horizontal position, substantially as and for the purpose described. 5th. In a bicycle support, the combination of the legs D, E, adapted to be spread apart and folded together, and means for securing said legs to the bicycle frame, said support being provided with a stop for limiting the distance said legs can be spread apart, substantially as shown and described. 6th. In a bicycle support, the combination of the legs D, E, adapted to be spread apart and folded together, and the braces H, I, each of said braces being pivoted at one end to one of said legs, and at the other end to the other of said braces, the brace H being provided with a notch h, or lug i, the brace I being extended beyond the pivot of said braces, and being provided on its extended portion with the lug i, or notch h, said lug being adapted to enter said notch and lie against the bottom and one or both sides of said notch, substantially as shown and described. 7th. In a bicycle support, the combination of the legs D, E, adapted to be spread apart and folded together, means for securing said legs to the bicycle frame, said support being provided with a stop for limiting the distance said legs can be spread apart, and a spring G, acting to spread said legs apart, substantially as shown and described. 8th. In a bicycle support, the combination of the legs D, E, adapted to be spread apart and folded together, a stop for limiting the distance said legs can be spread apart, consisting of the braces H, I, pivoted to said legs and to each other, said braces being provided with a stop adapted to prevent them from turning much below a horizontal position, a spring G acting to spread said legs apart, means for securing said legs to the bicycle frame, both of said legs being pivoted to said means for securing them to the bicycle frame, so as to swing in a plane parallel to the bicycle frame, substantially as shown and described.

**No. 57,182. Velocipede Saddle. (Selle de velocipede.)**

Alfred E. Ames, Toronto, Ontario, Canada, 23rd August, 1897; 6 years. (Filed 27th July, 1897.)

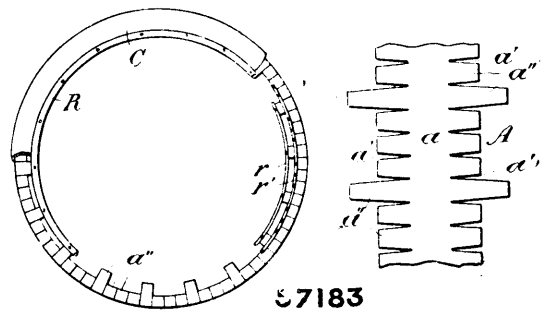
Claim.—1st. The combination with the saddle frame, having its rear portion raised above its front portion, of a pad arranged on said frame and having its rear portion raised above its front portion, substantially as set forth. 2nd. The combination with the saddle frame, provided with a recess in its front end, of pads arranged on



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frame plate, of an open pommel consisting of a bent rod secured with its rear end to the frame plate, substantially as set forth. 4th. The combination with a saddle plate, having in its front a recess, and two projecting horns an opposite sides of said recess, of an open pommel formed of a bent rod and secured with its rear ends to said horns on opposite sides of said recess, substantially as set forth. 5th. The combination with the saddle frame plate, of an open pommel composed of two longitudinal portions, a transverse depending portion connecting the front ends of the longitudinal portions and two depending feet arranged at the rear ends of the longitudinal portions, and secured at their lower ends to the frame plate, substantially as set forth. 6th. The combination with the saddle frame plate, provided with two openings at its front end, of an open pommel consisting of a bent rod having at its rear ends two feet which are arranged in said opening, and which are provided on the under side of said plate with toes which are secured to said plate, substantially as set forth. 7th. The combination with the saddle of two supporting springs arranged at right angles to each other, and secured to the saddle frame, substantially as set forth. 8th. The combination, with the saddle, of a spring support composed of an elliptical spring arranged longitudinally underneath the saddle, and another elliptical spring arranged transversely underneath the saddle, substantially as set forth.

**No. 57,183. Bicycle Tire. (Bandage de bicyclette.)**

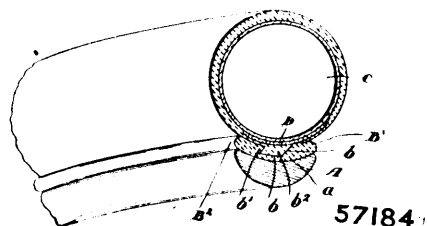


57183

Walter McKillican and Henry Fisher Brading, both of Ottawa, Ontario, Canada, 23rd August, 1897; 6 years. (Filed 30th July, 1897.)

Claim.—In a bicycle tire, a continuous strip of hard flexible metal having at short intervals transverse incisions extending from each edge to within a short distance of the centre line, leaving an unimpaired flat tread, and forming side flaps adapted to be bent transversely to any desired outline of cross-section, substantially as set forth.

**No. 57,184. Pneumatic Tire. (Bandage pneumatique.)**

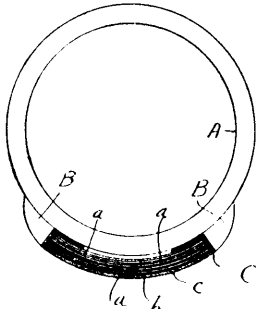


57184

William A. D. Graham, Owen Sound, Ontario, Canada, 23rd August, 1897; 6 years. (Filed 30th July, 1897.)

*Claim.*—1st. A pneumatic tire for bicycles and other wheels comprising the envelope or tire proper having a supplemental portion integrally formed with one edge thereof on its interior periphery and fitting in a groove on the rim, a circumferential recess in the supplemental portion forming an interlocking lip at one edge, an interlocking lip on the opposite edge of the tire designed to fit in such recess, laterally extending circumferential beads extending freely out from the supplemental portion and the air tube located within the tire, as and for the purpose specified. 2nd. A pneumatic tire for bicycles and other wheels comprising the envelope or tire proper having a supplemental portion integrally formed with one edge thereof on its interior periphery and fitting in a groove on the rim, a circumferential recess in the supplemental portion forming an interlocking lip at one edge, an interlocking lip on the opposite edge of the tire designed to fit in such recess, laterally extending circumferential beads extending freely out from the supplemental portion, an interior circumferential flap attached to or forming part of the tire laterally to the inside of the recess and covering such recess and resting on the free beaded edge, and the air tube located within the tire, as and for the purpose specified.

**No. 57,185. Tires for Vehicle Wheels.**  
(*Bandage pour roues de véhicules.*)

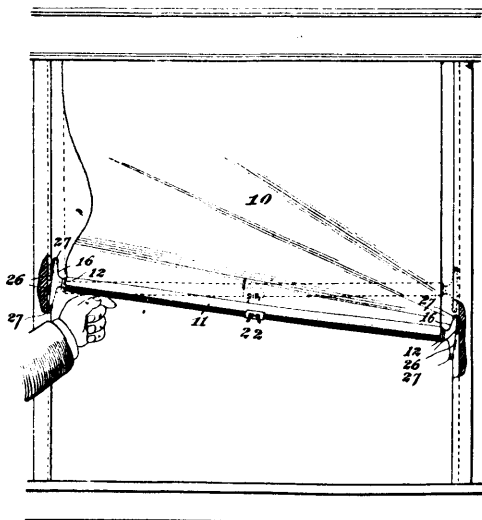


57185

Gustav Podoll, Henry W. Theis, Charles J. Fox and Delbert H. May, assignees of Julius Minnott Farmer, all of Milwaukee, Wisconsin, U.S.A., 23rd August, 1897; 6 years. (Filed 5th August, 1897.)

*Claim.*—1st. A tire for vehicle wheels consisting of a continuous hollow tube, with a continuous tread exterior to said hollow tube and composed of strips of thin cloth coated upon one surface with ground emery mixed with a suitable adhesive solution, a strip of fabric arranged around the described composite strips, and an outer sheet of thin rubber surrounding the said fabric, completing the said continuous tread, and all vulcanized together to the said continuous hollow tube.

**No. 57,186. Shade-holding Device.** (*Support de stores.*)



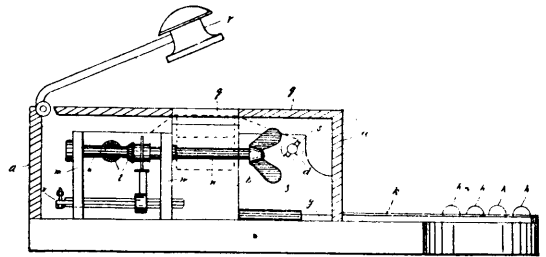
57186

Henry Hazlitt Forsyth, sr., and Henry Hazlitt Forsyth, jr., both of Chicago, Illinois, U.S.A., 24th August, 1897; 6 years. (Filed 3rd July, 1896.)

*Claim.*—1st. A spring-actuated shade provided at its lower end with a shade stick having at its extremities heads with friction or

holding points which bear on the casing when the shade is straight and antifriction or releasing points which bear on the casing when shade is tilted, substantially as and for the purpose described. 2nd. A self-righting holding mechanism for spring-actuated shades comprising in combination with a shade, heads carried thereby, said heads having projecting friction-tips or blocks in the vertical faces thereof, and antifriction rollers journaled in the heads, said tips being normally in contact when the shade is straight, and said rollers being in contact when the shade is tilted, substantially as and for the purpose set forth. 3rd. A holding device for spring-actuated shades, comprising in combination rods carried by the lower end of the shade and projecting beyond the slide margins thereof, heads or tip-holders mounted upon the projected ends of said rods and adapted to be adjusted lengthwise thereon, and split-collars applied to said rods, substantially as described. 4th. In a shade-holding mechanism, the combination with a sliding spring-actuated rod having its end projected beyond the side-margin of the curtain, a pendant having threads to engage threads on the inner end of said rod, a metallic head or tip-holder applied to the projected end of the rod and said projected end and said tip-holder having registered apparatus to receive a pin whereby to lock the tip-holder and rod together, substantially as and for the purpose described.

**No. 57,187. Mechanism for Checking the Receipt of Bills.** (*Mécanisme pour vérifier les reçus de billets.*)



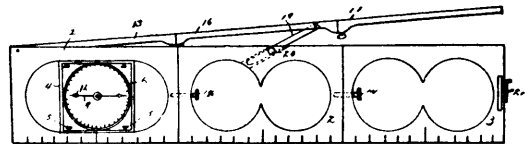
57187

Albert Edward Hodder, Brockley Road, Brockley, Kent, England, 24th August, 1897; 6 years. (Filed 3rd April, 1897.)

*Claim.*—1st. In apparatus for checking the receipt of bills the combination of discs or wheels *c* with figures or numerals upon their peripheries and their actuating pinions and toothed racks combined with printing ribbons, a paper roll, hinged descending or striking hammer or plunger, and slotted number plate, all operating substantially as and for the purposes hereinbefore described and shown. 2nd. In mechanism for checking the receipt of bills, the frame or casting *a*, the bearings *b*, the figure wheels or discs *c*, the paper roll *d*, the disc or wheel teeth *e*, the pinions *f*, the tooth racks *g* with ends *g*<sup>1</sup>, and projections *h*, the plate *k*, with slots *i* therein and numbers thereon, the index fingers *l*, upon rack and projections *h*, the bearings *m*, rollers *n* and printing ribbon or ribbons *n*<sup>1</sup>, the bearings *o* and rollers *o*<sup>1</sup>, and paper strip or roll *p*, the lid *q* with aperture *q*<sup>1</sup> therein, and the hammer and plunger *r*, and the fly nuts *s*, bevel gearing *t*, shafting *u*, and rocking lever *v* forming the actuating mechanism of the paper and ribbon rollers; all constructed, combined and operating substantially as hereinbefore described and shown.

**No. 57,188. Mason's Combination Tool.**

(*Outil à combinaison pour masons.*)



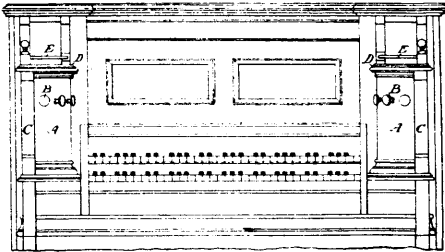
57188

John P. Kane, Dawson, and Samuel O'Neil, Fayette, both in Pennsylvania, U.S.A., 24th August, 1897; 6 years. (Filed 1st May, 1897.)

*Claim.*—1st. In a combination plumb and mitre tool, the combination with said mitre of a levelling device, consisting of a metal band having transparent faces and dials held therein, a shaft loosely journaled in said dials, and a gravity weight secured to said shaft, the indicating hands secured to the end of said shaft and adapted to traverse the faces of said dials as said device is tilted, substantially as and for the purpose set forth. 2nd. A plumb level of the character set forth, consisting of sections removably united, the levelling device in one end and the lineal tape and roll in the other, and said level having lineal graduations along one of its edges, for the purpose set forth. 3rd. A combined plumb and mitre tool, said plumb consisting of sections removably united, said sections having

a continuous grooved edge, said mitre consisting of a bar composed of sections corresponding in length with said plumb sections, and said plumb sections detachably united, and the detachable arm for holding the free end of said bar distant from said plumb sections, for the purpose set forth. 4th. A combined tool, consisting of a plumb beam composed of sections having levelling devices in one end and a tape and roll in the other, said plumb beam having lineal graduations along one of its edges and a movable arm pivoted in its opposite edge, said bar consisting of sections detachably united and corresponding in length with the sections of said plumb beam, the adjustable arm and the screw 14, dowels and dowel cavities 13 and 13' for uniting the sections of the plumb beam, substantially as shown and described for the purpose set forth.

**No. 57,189. Organ Case. (Boîte d'orgue.)**



57189

William Doherty, assignee of William George Doherty, both of Clinton, Ontario, Canada, 24th August, 1897; 6 years. (Filed 15th May, 1897.)

*Claim.*—1st. The construction of an organ case with cylinder boxes or frames A, A, and with organ stops B, B, substantially as and for the purposes hereinbefore set forth. 2nd. The construction of an organ case with cylinder boxes or frames A, A, with tops D, D, and railings E, E, as and for the purposes hereinbefore set forth.

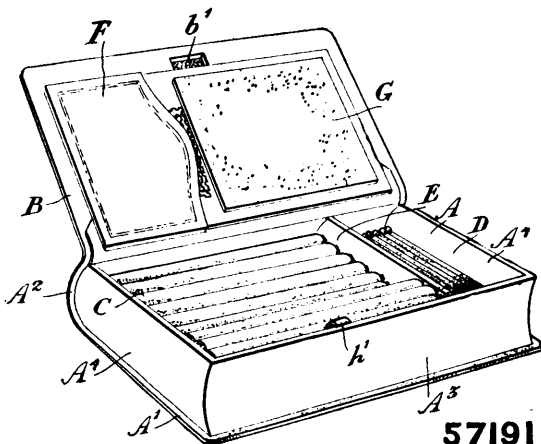
**No. 57,190. Composition for Treating Sheet Metal.**

(Composition pour traiter le métal en feuille.)

William Edwin Harris, Niles, Ohio, U.S.A., 24th August, 1897; 6 years. (Filed 20th May, 1897.)

*Claim.*—The improved composition for treating metallic sheets herein described, which consists of copper filings, pulverized soapstone, iron ore, plumbago or black lead, or analogous substance, substantially as described.

**No. 57,191. Cigarette Box. (Boîte à cigarettes)**



57191

Henry Graetz, Montreal, Quebec, Canada, 24th August, 1897; 6 years. (Filed 25th May, 1897.)

*Claim.*—In a box made to imitate a closed book, the combination with the clasp H, having forward extensions h which pierce through the stiff front of the box and are bent back to retain the clasp to the said front, and having an upwardly, then forwardly extending arm or hook h', of a hole b' formed in the stiff cover near its front edge to receive the arm or hook h' of the clasp H, as and for the purpose specified.

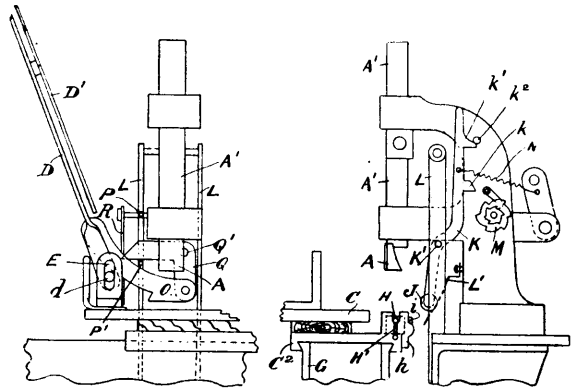
**No. 57,192. Index Cutting and Printing Machine.**

(Machine à imprimer et découper un index.)

William Corfe, Liverpool, England, 24th August, 1897; 6 years. (Filed 7th June, 1897.)

*Claim.*—1st. In combination, a table capable of longitudinal movement, a rack bar pivotally mounted thereon, one face of said

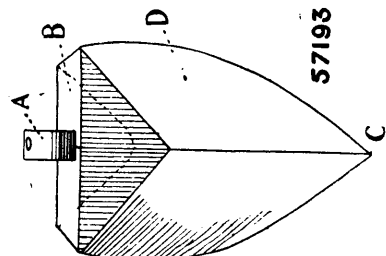
bar forming a cutting block on which the edges of the sheets to be indexed are laid, and another face of said bar being provided with



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printing type, and a reciprocating knife adapted to cut index spaces in said sheets on said bar, and to advance the table after each cut by means of a pawl gearing with said rack bar, whereby, after the necessary spaces have been cut, the pivoted rack bar may be revolved so as to bring its printing surface in position for printing the sheets to be indexed, said sheets being pressed on to said printing surface as the table is drawn back, by spring actuated rollers, substantially as described. 2nd. In index cutting and printing machines, the employment of the bar H, one face of which forms a cutting block on which the sheets to be indexed are cut, another face of said bar being provided with printing type and a toothed rack, whereby such bar may be moved step by step before a reciprocating knife by a pawl operated by said knife which gears with said rack until the required spaces are cut, when the bar may be revolved so as to bring its printing surface into position for printing the said sheets, substantially as described. 3rd. The employment with a machine such as described, of change bars H, having teeth I and type i, set at different pitches, whereby (by substituting different bars and altering the travel of the pawl O) the same machine may be used for various classes of indexing, substantially as described. 4th. Index cutting and printing machines, the combination of a bar H, two of whose faces form, respectively, a cutting block on which sheets of paper are cut with index spaces, and a printing surface, with spring actuated rollers s', which, after the index spaces have been cut and the bar revolved, press the edges of said sheets on to said printing surface as the bar, table and pile of sheets are drawn back, substantially as described. 5th. In index cutting and printing machines, the combination of a bar H, two of whose faces form, respectively, a cutting block on which sheets of paper are cut with index spaces, and a printing surface, which bar is caused to pass step by step before a reciprocating knife by pawl and ratchet mechanism, and a pivoted lever K, carrying one or more inking rollers and connected with said knife, so that at each or every alternate complete movement of the latter, the said roller or rollers ink individual type of said printing surface, whereby said type are inked simultaneously with the cutting operation and are ready inked when the bar H is revolved into position for printing the sheets, substantially as described. 6th. In combination with the lever K operating as herein described, the tooth wheel M having teeth of different depths, whereby, when the projection K engages such teeth successively, more or less travel is allowed to the lever K, and the ink rollers J are caused to come into contact with the type i, or escape them, by the spring N, substantially as and for the purpose herein described. 7th. In combination with the lever K operating as herein described, an inclined ink slab, L', and a reciprocating lever K, carrying one or more ink rollers J, said rollers being brought in contact with said inclined slab as the lever K reciprocates, substantially as described.

**No. 57,193. Scoop. (Ecope).**

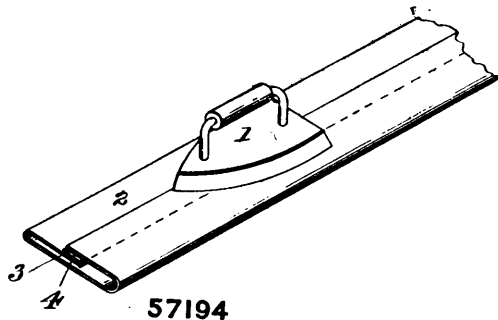


57193

Joseph Moses, Toronto, Ontario, Canada, 24th August, 1897; 6 years. (Filed 19th June, 1897.)

*Claim.*—An article of manufacture, made in angular form, having two flat sides, being both sides and bottom, and forming a funnel or trough, and having the outer edges of its sides cut in rounded form, from the back to a point at its mouth, and having an upright back which is prolonged and extended backwards and turned down forming a flange, upon which back the handle is placed, substantially as and for the purpose described.

**No. 57,194. Process of Seaming or Joining Waxed-Oiled Paper, etc.** (*Procédé pour joindre et assembler le papier ciré et huilé, etc.*)

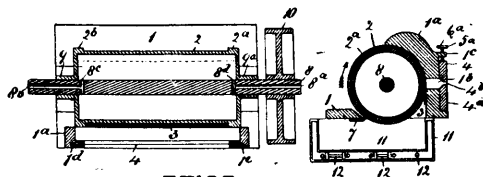


57194

The firm of C. C. Macbair & Co., composed of Charles Courtenay Macbair and Hines Strobidge, assignee of William Wesley Simonson, all of Cincinnati, Ohio, U.S.A., 24th August, 1897; 6 years. (Filed 21st June, 1897.)

*Claim.*—1st. The herein described method of seaming or joining together the edges of previously waxed fabric, consisting in applying an adhesive material thereto, then overlapping said edges, and then applying heat and pressure to the edges, substantially as set forth. 2nd. The herein described method of seaming together the edges of previously waxed fabric, consisting in applying a glutinous adhesive material thereto, then overlapping said edges, and then applying heat and pressure to the edges, substantially as set forth.

**No. 57,195. Method of and Apparatus for Making Sheeted Wax and Artificial Honey-comb Foundations.** (*Methode et appareil pour la fabrications de matieres chambrées et cirées.*)



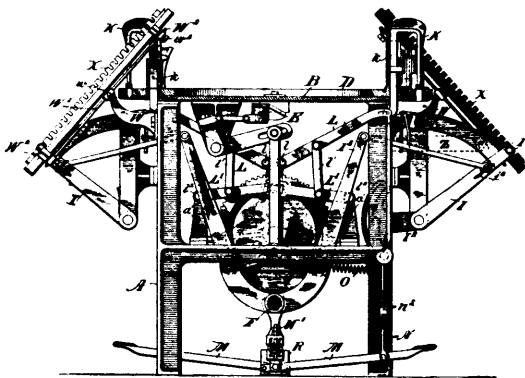
57195

Richard F. Holtermann, Brantford, Ontario, Canada, assignee of Edward B. Weed, Medina, Ohio, U.S.A., 24th August, 1897; 6 years. (Filed 22nd June, 1897.)

*Claim.*—1st. The herein described process of making sheet-wax, consisting of first making the wax plastic, second, in subjecting the plastic wax to pressure, and third, in forming the wax into sheets, substantially as described. 2nd. The herein described improvement in the art of making wax, consisting in making the wax plastic and subjecting the plastic wax to pressure, substantially as described. 3rd. The herein described improvement in the art of making sheet wax, consisting in forcing the wax while in a plastic state through an opening between dies, substantially as described. 4th. The herein described improvement in the art of making sheet wax, consisting in making the wax plastic and then forcing it by pressure between the walls of an opening whereby the wax is made highly cohesive, substantially as described. 5th. A machine for making sheet wax, consisting of a pan, a roller adapted to be partially submerged in wax in the pan, a scraper to regulate the amount of wax carried from the pan by the roller, a chamber into which wax is diverted from the roller, and an opening from the chamber through which wax is forced out of the chamber, substantially as described. 6th. A machine for making sheet wax, consisting of a pan, a roller adapted to be partially submerged in wax in the pan, a scraper to regulate the amount of wax carried from the pan by the roller, a chamber into which wax is diverted from the roller, a guide to divert wax from the roller into the chamber, and an opening through which wax is forced from the chamber, substantially as described. 7th. The combination in a machine for making sheet wax, of a roller, a chamber in front of the roller, a scraper for diverting wax from the roller into the chamber, a retaining plate above the chamber, and an outlet from the chamber, substantially as described. 8th. In a machine for making sheet wax, the combination of a pan, a hollow roller adapted to be partially submerged in wax in the pan, con-

nections to the roller whereby a current of water may be caused to flow through the roller, a chamber into which wax may be diverted from the face of the roller, said chamber being provided with an opening through which wax may be forced from the chamber, substantially as described. 9th. In a machine for making sheet wax, the combination of a pan, means for heating the pan, a hollow roller adapted to be partially submerged in wax in the pan, connections to the roller whereby a current of water may be caused to flow through the roller, and a chamber into which wax is diverted from the face of the roller, substantially as described. 10th. In a machine for making sheet wax, the combination of a frame, a roller, a pan below the roller, means for keeping wax warm in the pan, and a slotted opening through the frame through which wax is forced from the roller, substantially as described. 11th. In a machine for making sheet wax, a chamber, an outlet from the chamber, means for adjusting the size of the said outlet, and means for subjecting wax in the chamber to pressure and forcing wax through the outlet, substantially as described.

**No. 57,196. Cigar Bunching Machine.** (*Machine à lier les cigares.*)



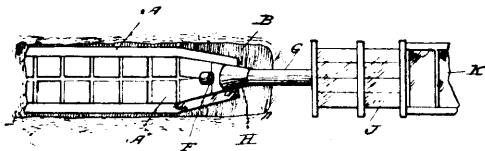
57196

William Yellowley and Charles Meyer, both of Allegheny, Pennsylvania, U.S.A., 24th August, 1897; 6 years. (Filed 26th June, 1897.)

*Claim.*—1st. In a cigar bunching machine, the combination with the frame A, of brackets a, a<sup>1</sup>, fastened thereto, lever L, fulcrumed on the bracket a, rock arms L<sup>1</sup>, fulcrumed on the brackets a<sup>1</sup>, links L<sup>2</sup>, connecting the rock arms with the levers, a disc H, having a cam groove engaging with the free ends of the rock arms, and rams engaged by the free ends of the levers, substantially as described. 2nd. The combination with a cigar bunching machine, of a clutch controlling the main shaft, a spring holding said clutch normally closed, a treadle and operative connections between said clutch and the bunch rolling mechanism whereby said clutch is opened and the treadle is depressed at the completion of a bunch, substantially as described. 3rd. The combination with a cigar bunching machine, of a clutch controlling the main shaft, a treadle for operating said clutch, an extension on one of the radius arms provided with a notch, a rod connected with the treadle and adapted to be engaged with said notch, and means for disengaging said rod therefrom, substantially as described. 4th. The combination with a cigar bunching machine, of a clutch controlling the main shaft, a spring for closing said clutch, a treadle for opening said clutch, an extension on one of the radius arms containing an arc-shaped slot having a notch on one side, a rod connected with the treadle and carrying a pin or roller engaging with said slot, and a spring acting to force the rod away from the notch, substantially as described. 5th. In a cigar bunching machine, a ram provided with a head made in two parts, each adapted to move transversely to the line of motion of the ram, substantially as described. 6th. In a cigar bunching machine, a ram provided with a head made in two parts k<sup>1</sup>, k<sup>2</sup>, jointed together on a bolt k<sup>3</sup>, and having their upper corners chamfered off at k<sup>4</sup>, substantially as described. 7th. In a cigar bunching machine, the combination with a roller apron, of a slotted T-shaped weight attached to one end thereof, and an adjustable stud engaging with the slot in said weight, substantially as described. 8th. In a cigar bunching machine, the combination with the rolling apron S, the rolling table S<sup>1</sup>, and the socket S<sup>2</sup>, of a plate T, secured to said socket and having a dotted flange T<sup>1</sup>, a T-shaped weight U, attached to the apron and having a slot in the stem of the T, and a stud V, adjustable vertically on the socket S<sup>2</sup>, and passing through the slot in the weight, substantially as described. 9th. In a cigar bunching machine, an arm secured to the frame and having a sleeve, a rod adjustable lengthwise in said sleeve and brackets adjustably mounted on said rod, and adapted to support a cigar mould board, substantially as described. 10th. In a cigar bunching machine, the combination with concentric feeding rings, of a table supporting the same, guide rollers bearing against the rings, and studs supporting said rollers and having eccentric stems secured to said table, substantially as described.

**No. 57,197. Hydraulic Mining Machine.**

(Machine hydraulique à miner.)



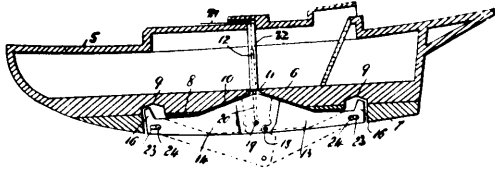
57197

Thomas Badgley Ludlum, Denver, Colorado, U.S.A., 24th August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—The hydraulic mining apparatus herein shown and described, consisting of the lower sluice-box provided with riffles and having its exit end tapered or converging, the upper conductor having the flaring mouthpiece fitting snugly in the converging end of the said lower sluice-box, the upper sluice-box having the enlarged mouth portion and the reduced terminating portion the upper walls formed with the transverse separating-blocks and the lower walls of said upper sluice-box being provided with riffles and the forcing-nozzle above and below the lower sluice, whereby the forcing-nozzles serve to force or drive the material toward the converging end of the sluice-box through the conductor to the enlarged mouth of the upper sluice receiving the gold and preventing it from being carried away and preventing jamming in the sluice.

**No. 57,198. Centre Board for Yachts.**

(Semelle de bateau.)

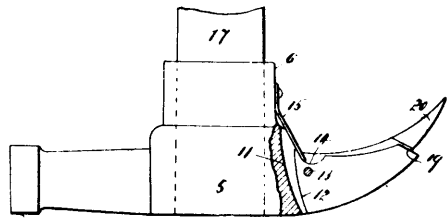


57198

Joseph Northup, Angevine Northup, and Henry Edward Northup, all of Brooklyn, New York, U.S.A., 24th August, 1897; 6 years. (Filed 3rd July, 1897.)

*Claim.*—1st. A yacht provided with a keel, in the bottom of which is a longitudinal slot which opens downwardly, and a centre board mounted in said slot, said centre board being composed of two parts which are pivotally connected at their inner ends, and the outer ends of which are pivotally mounted in the ends of said slot, and devices connected with the central portion of the central board for raising and lowering the same, substantially as shown and described. 2nd. A yacht provided with a keel in which is formed a longitudinal slot which opens downwardly, and a centre board mounted in said slot, said centre board being composed of two parts which are pivotally connected, and the outer ends of which are provided with slots through which are passed pivot pins, and one of said parts being provided at its inner end with projecting jaws or side pieces between which the inner end of the other part passes, substantially as shown and described. 3rd. A yacht provided with a keel in which is formed a longitudinal slot which opens downwardly, and a centre board mounted in said slot, said centre board being composed of two parts which are pivotally connected and the outer ends of which are provided with slots through which are passed pivot pins, and one of said parts being provided at its inner end with projecting jaws or side pieces between which the inner end of the other part passes, said centre board being provided with means for raising and lowering the same, substantially as shown and described. 4th. A yacht provided with a keel in the bottom of which is a longitudinal slot which opens downwardly, said slot being extended upwardly at the centre, and at both ends, and a centre board composed of two parts which are pivotally connected at their inner ends, and the outer ends of which are provided with upwardly directed extensions, said outer ends being provided with slots through which are passed pivot pins, substantially as shown and described. 5th. A yacht provided with a keel in the bottom of which is a longitudinal slot which opens downwardly, said slot being extended upwardly at the middle thereof, and at each end so as to form upwardly directed cavities or recesses, and a centre board composed of two parts which are pivotally connected at their inner ends, one of said parts being provided with projecting jaws or side pieces at its inner end, between which the inner end of the other part passes, said separate parts being provided at their outer ends with upwardly directed extensions, and with slots through which are passed pivot pins, and a rod pivotally connected, with the jaws or side pieces of one of said parts, a tube mounted centrally of the yacht and extended upwardly therethrough into which said rod passes and a rope connected with the upper end of said rod by which said centre board may be raised or lowered, substantially as shown and described.

**No. 57,199. Hammer. (Marteau.)**

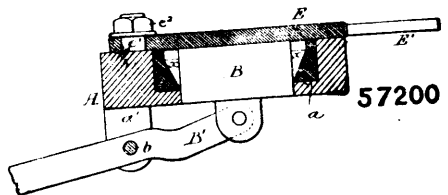


57199

Alonzo Henry Harrum and Charles Bartlett Ring, both of Orono, Maine, U.S.A., 24th August, 1897; 6 years. (Filed 5th July, 1897.)

*Claim.*—1st. A claw hammer, the claws of which are cut away on their inner surfaces and provided with supplemental pivoted jaws, said jaws being pivoted between said claws at their rear ends, and said jaws being provided in their upper sides with notches or recesses, and a spring which is secured to the socket of the hammer through which the handle is inserted, and which projects into said notches or recesses, substantially as shown and described. 2nd. A claw hammer, the claws of which are cut away on their inner surfaces and provided with supplemental pivoted jaws, said jaws being pivoted between said claws at their rear ends, and said jaws being provided in their upper sides with notches or recesses, and a spring which is secured to the socket of the hammer through which the handle is inserted, and which projects into said notches or recesses, said jaws being also separated at their pivoted ends by a block through which the pivot pin passes, and the inner surfaces of said claws being curved inwardly and downwardly, and said jaws being correspondingly formed, substantially as shown and described.

**No. 57,200. Mould. (Moule.)**



57200

The United States Metallic Packing Company, Philadelphia, Pennsylvania, assignee of Harvey Arvine Pike, Chicago, Illinois, both in the U.S.A., 24th August, 1897; 6 years. (Filed 5th July, 1897.)

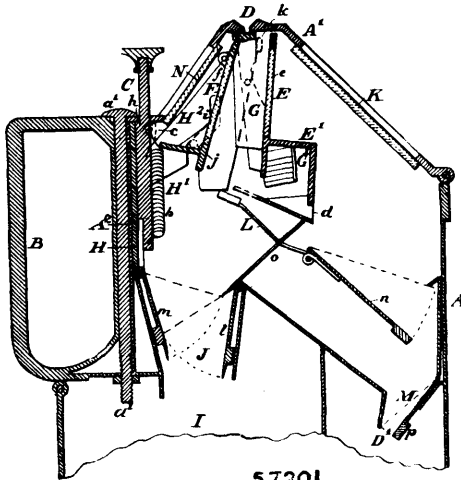
*Claim.*—1st. The combination in a mould for making packing rings, of the body A, having a central opening and an annular recess, a ring D resting in said recess, a core B adapted to the central opening, a lever hung to the body and carrying the core B, a cover plate E pivoted to the body and adapted to slide thereon, said plate having a pouring opening communicating with the space between the rings D and cover B, substantially as described. 2nd. The combination in a mould for making packing rings, of the body A, having a central opening and an annular recess, a ring D resting in said recess, a core B adapted to the central opening, a lever hung to the body and carrying the core B, a segment I having notched ends resting in the space formed by the core and ring, a cover plate E pivoted to the body and adapted to slide thereon, said plate having a pouring opening communicating with the space between the ring D, core B and segment I, substantially as described.

**No. 57,201. Fare Box. (Boite à billets.)**

John Maitland Smith, Toronto, Ontario, Canada, 24th August, 1897; 6 years. (Filed 5th July, 1897.)

*Claim.*—1st. In a fare box the combination with the receiving slot, of a receiving case, composed of a stationary or front portion, a movable back portion, and a movable central portion, both movable portions being pivotally supported, a plunger and means of connecting the plunger to the case, substantially as shown and described. 2nd. In a fare box the combination with the receiving slot, of a receiving case bottomless in its normal state composed of a stationary or front portion, a movable back portion having a pin extending laterally from the end of said back portion, a movable central portion, both movable portions being pivotally supported, a plunger, an arm connected to the plunger and extension thereof having in it a slot into which the pin enters when the plunger is depressed, as and for the purpose specified. 3rd. In a fare box the combination with the receiving slot, of a receiving case, bottomless in its normal state, composed of a stationary or front portion, a movable back portion having a pin extending laterally from the end of said back portion, a movable central portion, both movable portions being pivotally supported, a plunger, an arm connected to

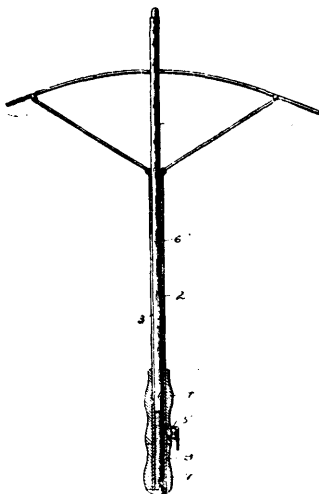
the plunger and extension thereof having in it a slot into which the pin enters when the plunger is depressed and having a lug at the



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end of the extension which is designed to come into contact with the front of the central portion when the plunger is depressed, as and for the purpose specified. 4th. The combination, with the receiving slot of the receiving case, bottomless in its normal state, consisting of a front, a back and central portion and means for closing it to receive the fare by the depression of the plunger, a downwardly extended tapering mouth on the right side of the case, a ticket compartment and chute leading from the bottom of the case into such compartment and a money compartment situated beneath the chute leading from such tapering mouth, both of said chutes having flaps serrated at the lower edges hinged to the front and back sides of the ticket and money compartments respectively, as and for the purpose specified. 5th. In a fare box a receiving case, bottomless in its normal state, consisting of a stationary or front portion with a lateral extension formed with a downwardly extended tapering mouth on the right side, a movable or back portion, and a central portion with a step block attached, both pivotally supported on brackets attached to the stationary or front portion, so designed that upon the depression of the plunger the several parts are closed together forming the receiving case for the fare, substantially as shown and described. 6th. In a fare box a receiving case consisting of a stationary or front portion with a lateral extension formed with a downwardly extended tapering mouth having two brackets attached to the back thereof to form the ends of the receiving case, the one to the right being half the length of the other to allow an opening through which the coin may roll down the step block into the said mouth, a movable or back portion and a central portion with a step-block attached, both movable portions pivotally supported, substantially as shown and described.

**No. 57,202. Umbrella. (Parapluie.)**



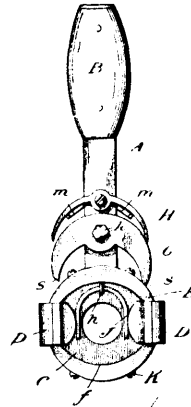
57202

James Clarke Hall, Waldo, Florida, U.S.A., 24th August, 1897; 6 years. (Filed 5th July, 1897.)

*Claim.*—1st. In an umbrella or the like, a stem to which the ribs are connected, a relatively sliding operating stem to which the

spreading levers are connected, a detent carried by said stem to engage the operating stem, and a spring for moving said parts apart. 2nd. In an umbrella or the like, a stem, a tubular operating stem in which said stem is situated, a longitudinal slot in said operating stem, a sleeve mounted upon said operating stem and connected through said slot with said stem, a detent upon said sleeve to engage said operating stem, a handle upon said operating stem, and a spring situated within said operating stem and engaging the rear end of said stem.

**No. 57,203. Wrench. (Clé à écrou.)**



57203

Gusten McEachren, Carlshend, assignee of George McEachren, Brampton, both in Michigan, U.S.A., 25th August, 1897; 6 years. (Filed 5th July, 1897.)

*Claim.*—1st. In a ratchet-wrench of the class described, the jaw operating band E, having an opening oval in shape, upon one side and round upon the other, said oval being formed by the lips f, and the ratchet-ring C, interiorly threaded at one end, having teeth a and a groove c, in combination with the handle A, and the thimble-bolt F, substantially as set forth. 2nd. In a ratchet-wrench, the combination of the handle A, having an opening in its lower end to receive a thimble-bolt F, and having a lever I, a curved spring H, and the dog G, pivoted thereto, with the thimble-bolt F, the ratchet-wrench C, and the band E, adapted to be mounted upon the ratchet-ring C, and held thereon by means of the screws K, having the plain ends g, substantially as shown and described. 3rd. In a ratchet-wrench of the class described, the combination of the thimble bolt F, having the head j adapted to secure the handle of the ratchet-ring C, and the ratchet-ring C having the plain portion b, provided with the groove c, the teeth a, and having the jaws D, pivoted thereto, with the band E, secured upon the said plain portion b, of the ratchet-ring C, by means of the screws K, the plain ends of which enter the groove c, thereby permitting the said bands to rotate, and the handle A, provided with the ratchet levers and holding devices, of substantially as shown and described. 4th. In combination in a ratchet-wrench, of a ratchet-ring C, having teeth a, a plain portion b, and a groove c, and the jaws D, mounted therein; the band E, having the lips f, and threaded openings around its circumference, and adapted to be secured upon the ratchet-ring C, by means of the screws K, with the thimble-bolt F, threaded at one end to enter a like threaded portion of the ratchet-ring C, and having a head j, and the handle A, carrying the dog G, the spring H, and the lever I, substantially as set forth. 5th. In combination in a ratchet-wrench of the class described, the handle A, having the projecting portion p, the lever I, having the arms m, and the bent ends o, the curved spring H, the dog G, the thimble-bolt F, the ratchet-ring C, having teeth a, and a groove c, the jaws D, pivotally mounted in said ring C, a spring J, secured to said ring C, by means of a staple h, and a band E, having lips f, and adapted to be secured to the ring C, by means of the screws K, having the plain ends g, to enter the groove c, in said ring, all substantially as shown and described.

**No. 57,204. Fluid Pressure Machine.**

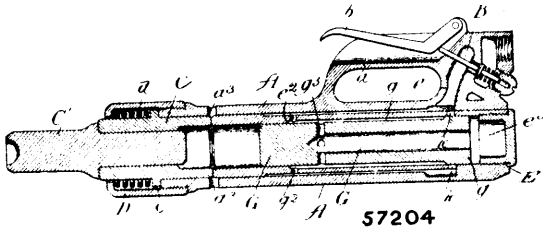
(Machine à pression hydraulique.)

Charles Harris Johnson, Springfield, Illinois, U.S.A., 25th August, 1897; 6 years. (Filed 6th July, 1897.)

*Claim.*—1st. A valveless portable pneumatic hammer, in which there is combined a casing provided with inlet and exhaust openings, an operating tool in one end thereof, a reciprocating piston in such casing arranged to contact the tool at one limit of its stroke, and provided with a fluid pressure channel whereby fluid pressure is admitted from one side of the piston to the other to reciprocate and operate the same, substantially as described. 2nd. In a machine of the class described, a casing provided with a fluid pressure chamber and inlet and exhaust openings, an operating tool in one end

thereof, a reciprocating piston hammer in the casing arranged to contact the operating tool at one limit of its stroke and divide the

and triangular blocks located in front of the holes and positioned to leave a space between them; together with balls, and a cue

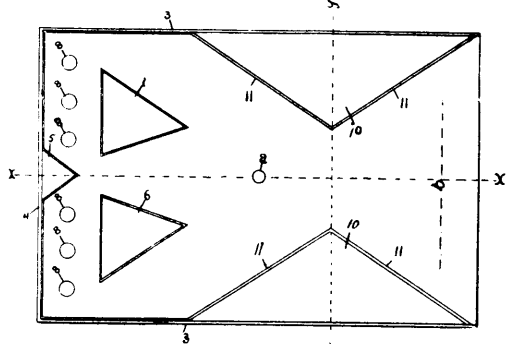


pressure chamber into two chambers, and means whereby fluid pressure is admitted constantly to one side of the piston and through the piston is alternately admitted to and exhausted from the other side of the piston to reciprocate the same and operate the parts, substantially as described. 3rd. In mechanism of the class described, the combination of a casing provided with a cylindrical chamber, and two reciprocating portions mounted therein so as to have opposite motions at substantially the same time, substantially as described. 4th. In mechanism of the class described, the combination of a casing provided with a cylindrical chamber, a reciprocating cylinder mounted therein, a reciprocating piston mounted in the reciprocating cylinder, and means for furnishing fluid pressure to the parts so as to move them in opposite directions, substantially as described. 5th. In mechanism of the class described, the combination of a casing provided with a cylindrical chamber, a reciprocating cylinder mounted therein and having one end closed, a reciprocating piston mounted in the open end of the reciprocating cylinder, and means for furnishing fluid pressure to the parts to move them in opposite directions during substantially or nearly the same period of time, substantially as described. 6th. In mechanism of the class described, the combination of a casing provided with a cylindrical chamber, a reciprocating cylinder mounted therein having one end closed and providing an annular fluid pressure chamber between it and the casing to drive it in one direction, and a reciprocating piston mounted in the open end of said cylinder so as to provide a second annular pressure chamber between it and the cylinder and provided with a longitudinal passage therethrough to furnish communication with the annular chamber and the space between the inner end of the piston and cylinder so as to furnish fluid pressure to drive the piston in one and the cylinder in an opposite direction, substantially as described. 7th. In mechanism of the class described, the combination of a casing provided with a longitudinal cylindrical chamber, a cylindrical tool-holder yieldingly mounted in one end of the casing, a tool in said holder, a reciprocating cylinder mounted in the casing so as to contact the tool-holder at one limit of its motion, a piston hammer reciprocatingly mounted in the cylinder and arranged to contact the tool at one limit of its motion, and means for furnishing fluid pressure to the parts so as to operate the same and alternately drive them so as to contact the tool-holder and the tool alternately, substantially as described. 8th. In mechanism of the class described, the combination of a casing provided with a longitudinal cylindrical chamber, a cylindrical tool-holder yieldingly mounted in said chamber at one end of the casing, a tool in said tool-holder, a reciprocating cylinder mounted in the chamber of the casing and arranged to contact such tool-holder at one limit of its motion and providing an annular fluid pressure chamber between it and the casing, a piston hammer reciprocatingly mounted in said cylinder arranged to contact the tool at one limit of its motion, providing between it and the cylinder an annular pressure chamber and provided with a longitudinal opening or passage to alternately admit and exhaust fluid pressure between the end of the piston and the end of the cylinder to assist in the reciprocation of the parts, and means for furnishing fluid pressure so as to operate the parts to contact the hammer and holder alternately, substantially as described. 9th. In mechanism of the class described, the combination of a casing provided with a cylindrical chamber, a reciprocating cylinder mounted therein having one end closed and provided with an annular fluid pressure chamber between it and the casing to drive it in one direction, and with pressure inlet openings g<sup>2</sup> at one end and exhaust openings K at or near the opposite end, and a reciprocating piston mounted in the open end of said cylinder so as to provide a second annular pressure chamber between it and the cylinder and connected with the inlet opening g<sup>2</sup>, and providing a second pressure chamber between it and the cylinder and provided with a longitudinal passage through the piston to furnish communication with the annular chamber, and space between the inner end of the piston and the closed end of the cylinder, with the exhaust openings near the forward end of the piston, substantially as described.

No. 57,205. Parlor Game. (Jeu de salon.)

William Henry Perry, Hamilton, Ontario, Canada, 25th August, 1897; 6 years. (Filed 6th July, 1897.)

Claim.—1st. The combination in a game board having side and end rails, a series of holes located adjoining the end rail, a triangular block at the centre of said rail and projecting inward therefrom,

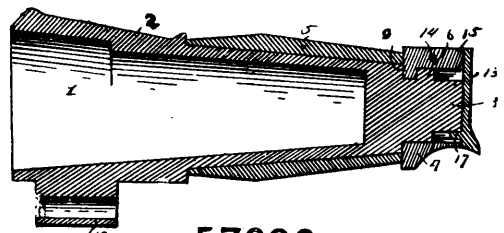


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employed to complete the game, substantially as shown and for the purpose set forth. 2nd. The combination in a game board having side and end rails and a series of holes adjoining the end rail, a board or transverse strip forming the bottom of the holes and having numbers thereon, a triangular block extending inward from the end rail, and triangular blocks located in front of the holes, the said blocks being positioned to leave a space between them; together with rails or strips extending inward from the side rails forming receptacles or pockets, balls adapted to be rolled on the table, and cues for striking the balls, substantially as shown and described.

No. 57,206. Locking Device for Axle Skins.

(Serrure pour rouleaux d'échecaux.)

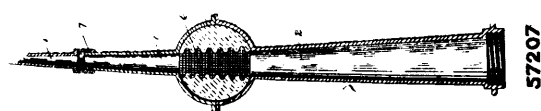


57206

Charles Henry Worner Relyea and John Mills Williams, both of North Adams, Michigan, U.S.A., 25th August, 1897; 6 years. (Filed 28th July, 1897.)

Claim.—1st. In a device of the class described, the combination of a spindle having an extension 3 provided at one side with a flat face, the annular series of inner and outer lugs 6 and 7, disposed in pairs on the extension 3 and arranged transversely of the same, the outer lugs 7 being disposed opposite the intervals of the inner lugs 6, longitudinal flanges 8 connecting the adjacent ends of the inner and outer lugs 6 and 7, the longitudinal flanges 9 extending from the other ends of the inner lugs to the body portion of the spindle, said lugs 6 and 7, and flanges 8 and 9 forming double bayonet-grooves, the axle-nut having a flat face adjacent to a flat face of the extension 3 and provided with inner and outer series of lugs 11 and 12 alternately arranged, and adapted to interlock with the lugs and flanges of the double-bayonet grooves to form a double lock, and the cover hinged at the top to the axle-nut, and provided at one side with the vertical locking flange 16 to fit in the space between the flat faces of the extension 3 and the nut, and having the curved locking lugs 17 at its bottom, said locking flange and lugs 16 and 17 fitting in the entrance opening of the double bayonet-grooves and filling the spaces between the adjacent lugs 7, substantially as described.

No. 57,207. Fire Extinguisher. (Extincteur d'incendie.)

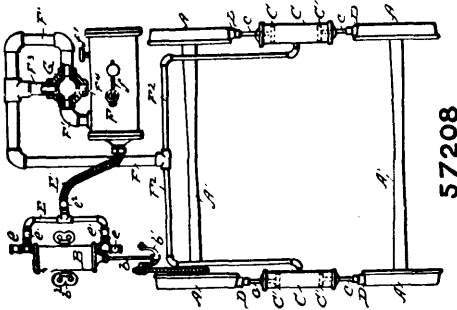


Thomas F. Handly, Allegheny, Pennsylvania, U.S.A., 25th August, 1897; 6 years. (Filed 28th July, 1897.)

Claim.—1st. A nozzle formed to produce a chamber, a chemical charge, coated to exclude moisture, arranged therein to come in contact with the water, and a supplemental nozzle having an open end arranged on the nozzle and adapted to be broken, for the purpose described. 2nd. A nozzle formed to produce a chamber, a chemical charge arranged therein to come in contact with the water, a sup-

plement nozzle having an open end and arranged on the nozzle and having the walls reduced to facilitate the fracture, as and for the purpose described. 3rd. A nozzle formed to produce a chamber, a chemical charge arranged therein to come in contact with the water and a supplement nozzle having an open end arranged on the nozzle and adapted to be broken, and lugs on the sections of the nozzle formed as to produce a handle when the sections are screwed together. 4th. A fire extinguisher provided with a nozzle chemically charged, and a supplemental open end designed to be broken, for the purpose described. 5th. A nozzle formed in sections, angular lugs arranged on the sections for turning the same and forming handles when the sections are screwed together, for the purpose described.

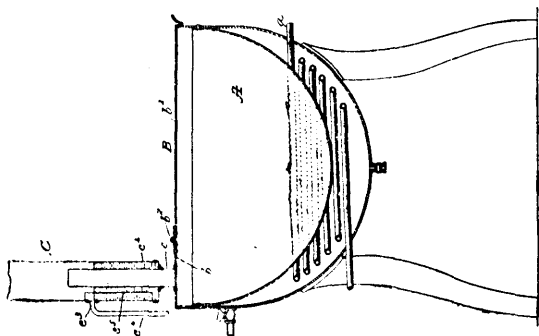
**No. 57,208. Air Brake. (Frein à air.)**



Dennis Beemer, Detroit, Michigan, U.S.A., 25th August, 1897; 6 years. (Filed 30th July, 1897.)

*Claim.*—1st. In an air brake system for street or other cars, a pump for compressing the air, a cylinder for receiving the air under compression, a brake cylinder for receiving the air from the compression cylinder, pistons travelling in said brake cylinder and adapted to move in opposite directions, the piston rods of said pistons connecting with the brake shoes, substantially as described. 2nd. In an air brake system for street or other cars, a pump for compressing air, means for conveying the air from said compression pump into a cylinder adapted to hold the air under compression, brake cylinders having communication with said compression cylinders, said brake cylinders provided with pistons adapted to be forced in opposite direction by the passage of the air into said brake cylinders, means whereby the said pistons are adapted to force brake shoes in frictional contact with the car-wheels, substantially as described. 3rd. In an air brake system for street or other cars, a pump for compressing air, a cylinder for receiving the air from said pump and provided with means for holding the air in said cylinder under compression, a brake cylinder having communication with said compressed air cylinder, said communication provided with means whereby the passage of the air from the compressed air cylinder to the brake cylinder may be established or cut off, and the air in said brake cylinder allowed to exhaust, said brake cylinder being provided with pistons travelling in opposite directions in connection with means whereby the brake shoes may be set, substantially as described. 4th. In a brake system for street or other cars, a piston provided with rings C<sup>2</sup>, C<sup>2</sup>, and a packing ring of rubber C<sup>3</sup>, and a nut C<sup>4</sup>, substantially as described.

**No. 57,209. Vent Trap. (Tuyau d'airage.)**

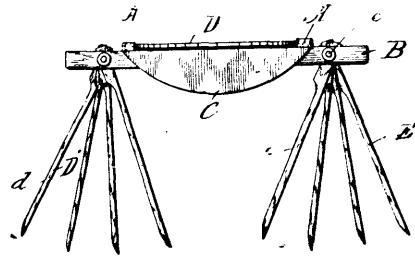


Silas James Rand and George D. Burgess, both of Boston, Massachusetts, U.S.A., 25th August, 1897; 6 years. (Filed 3rd August, 1897.)

*Claim.*—The combination with a cooking vessel having a cover, of a short vent tube rising therefrom, an outlet pipe, larger in diameter than said vent tube and through and above the closed lower end of which said vent tube rises, leaving an annular chamber between said vent tube and outlet pipe to receive the condensation flowing downwardly within and on the walls of said outlet pipe, the

larger diameter of said outlet pipe extending throughout the vertical portion thereof which rises directly from said vent tube to thereby prevent condensation on the inner walls thereof, dropping into said vent tube to contaminate the latter and the contents of the vessel, and a discharge outlet for said annular chamber, substantially as described.

**No. 57,210. Clothes Rack. (Ratelier à linge.)**

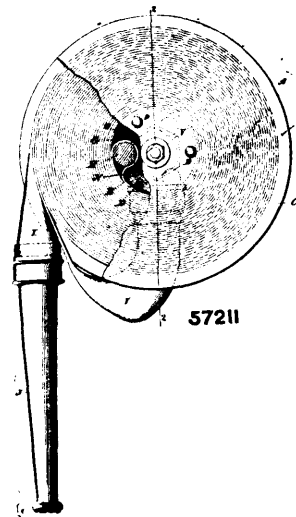


57210

Charles E. Rapley and Winslow Richardson, both of Leonardville, New Brunswick, Canada, 25th August, 1897; 6 years. (Filed 6th August, 1897.)

*Claim.*—1st. In a clothes rack, the combination, with horizontal cross-pieces, of arms provided with longitudinal recesses in their front sides and pivoted between the end portions of the said cross-piece, and arms provided with recesses in their rear sides and pivoted between the other end portions of the said cross-pieces, and interlocking with the aforesaid arms when turned backward, substantially as set forth. 2nd. In a clothes rack, the combination, with vertical uprights, and horizontal cross-pieces secured to them, of a horizontal shelf secured to the upper cross-piece, two series of arms pivoted between the respective end portions of the said cross-pieces, the arms of one series being provided with recesses in their rear sides and the arms of the other series being provided with recesses in their front sides, substantially as set forth.

**No. 57,211. Hose Reel. (Dévidoir de boyaux.)**



57211

Seth Armitage Crone, New York, State of New York, assignee of Edward Cliff, Newark, New Jersey, both in the U.S.A., 25th August, 1897; 6 years. (Filed 7th August, 1897.)

*Claim.*—1st. The water-supply apparatus having the valve, the valve-casing, the hose-attaching nozzle directly on one side of and stationary with said valve-casing, and the valve-stem projecting from another side of said casing, combined with the reel mounted upon and connected with said valve-stem and adapted on being revolved to open and close said valve, and the hose at one end connected with said stationary nozzle and thence wound upon said reel, substantially as set forth. 2nd. The water-supply apparatus having the valve, the valve-casing, the projecting valve-stem, and the hose-attaching nozzle directly on and stationary with said valve-casing, combined with the reel mounted upon and connected with said stem, means permitting the revolving of said reel around said stem to re-wind the hose without acting on said valve, and the hose at one end connected with said stationary nozzle and thence wound



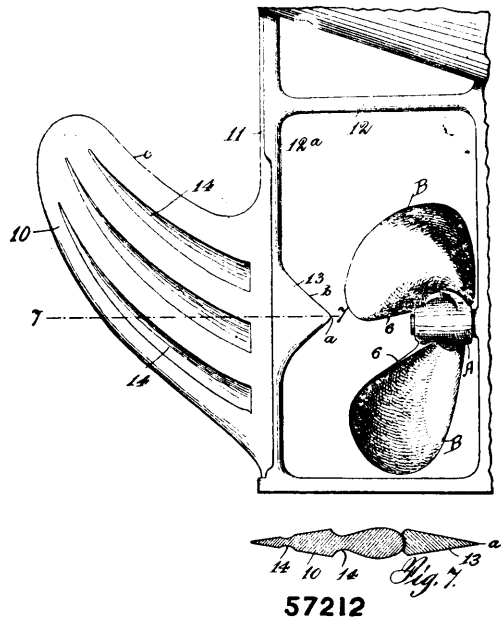
upon said reel, substantially as set forth. 3rd. In combination with the water-supply apparatus having the valve, projecting valve-stem and hose-attaching nozzle, the reel receiving within its bore said stem and being keyed thereto, and means permitting said reel to be manually shifted in line with said stem to unkey itself therefrom and then be revolved around said stem to re-wind the hose without acting on said valve, substantially as set forth. 4th. In combination with the water-supply apparatus having the valve, projecting valve-stem and hose-attaching nozzle, the said stem having the polygonal portion, the reel receiving within its bore said stem and having a conforming recess to receive said polygonal portion of said stem, substantially as set forth. 5th. In combination with the water-supply apparatus having the valve, projecting valve-stem and hose-attaching nozzle, the said stem having the polygonal portion at its outer end, the reel receiving within its bore said stem and having at its outer side a conforming recess to receive said polygonal portion of said stem, substantially as set forth. 6th. The water-supply apparatus having the pipe L, the valve-casing M connected therewith the outlet-nozzle K, the valve within said casing, and the valve-stem projecting from said casing at right angles to said nozzle K, combined with the reel mounted on and adapted to operate said stem, and the hose at one end connected to said stationary nozzle K and thence wound upon said reel, substantially as shown and described. 7th. In combination with the water-supply apparatus having the valve, projecting valve-stem and hose-attaching nozzle, the reel mounted on and adapted to operate said stem, and the hose at one end connected with said nozzle and thence while doubled at about its centre wound upon said reel, substantially as set forth. 8th. The water-supply apparatus having the pipe, the valve-casing M connected with said pipe, the outlet nozzle K on and stationary with one side of the said valve-casing, the valve, the valve-stem projecting from another side of said casing, and the sleeve surrounding said stem and connected with said casing, combined with the reel having the central bore and receiving therein said sleeve and being keyed to said stem, and the hose at one end connected with said stationary nozzle K and thence wound upon said reel, substantially as and for the purposes set forth. 9th. The water-supply apparatus having the pipe, the valve-casing M connected with said pipe, the outlet-nozzle K on and stationary with one side of the said valve-casing the valve, the valve-stem projecting from another side of said casing, and the sleeve surrounding said stem and connected with said casing, combined with the reel having the hub and plates and the bore in said hub to receive said sleeve and stem, means locking the outer side of said reel to the projecting end of said stem and capable of manual removal to permit the revolving of said reel on said sleeve without affecting said stem, and the hose at one end connected with said stationary nozzle K and thence wound upon said reel, substantially as and for the purposes set forth. 10th. The water-supply apparatus having the valve-casing, hose-attaching nozzle, threaded sleeve, valve and valve-stem, the latter extending through and beyond said sleeve and having the polygonal outer portion and threaded extremity, combined with the reel having the central bore and provided with the recess conforming to said polygonal portion of said stem, and the nut securing said reel on said stem, substantially as set forth. 11th. In combination with the water-supply apparatus, the reel and hose connected with said apparatus, said reel having within the periphery of its hub the recess to receive the folded part of the hose and the core within said fold, substantially as set forth. 12th. In combination with the water-supply apparatus, the reel and hose connected therewith, said reel having within the periphery of its hub the recess to receive the folded part of the hose and the core within said fold, the surface of said periphery below said recess being set inward from the circle of said periphery above said recess, substantially as and for the purposes set forth.

**No. 57,212. Propeller. (Propulseur.)**

Albert Viert, Chicago, Illinois, U.S.A., 25th August, 1897; 6 years. (Filed 8th March, 1897.)

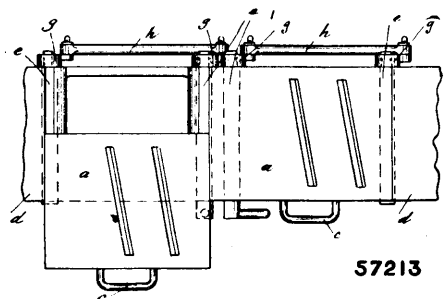
*Claim.*—1st. A propeller for vessels comprising a plurality of blades having spiral outer edges lying in a cylindrical plane, said blades being spirally mounted upon a hub and set at a gradually increasing incline to the perpendicular radii of said hub from the forward to the rear end portion of said hub, substantially as described. 2nd. A propeller for vessels comprising a plurality of blades having spiral outer edges lying in a cylindrical plane, said blades being spirally mounted upon a hub of conical shape and provided with spiral shoulders adjacent said blades, substantially as described. 3rd. A propeller for vessels comprising a plurality of blades having spiral outer edges lying in a cylindrical plane and spirally mounted upon a hub, said blades gradually increasing in extent from their forward edges to their rear edges, said blades being set at a gradually increasing incline to the perpendicular radii of said hub from the forward to the rear end portion of said hub, substantially as described. 4th. A propeller for vessels comprising blades of spiral outline, spirally mounted upon a hub provided with spiral shoulders parallel with said blades, substantially as described. 5th. A propeller for vessels comprising blades of spiral outlines spirally mounted upon a hub provided with spiral shoulders parallel with said blades, said blades being set at a gradually increasing

angle to perpendicular radii of said hub from the forward to the rear end portions of said hub, substantially as described.



6th. In a propeller, a hub having blades spirally mounted thereon, and having its outer surface cut away to form spiral shoulders extending practically parallel with said blades, substantially as described. 7th. In a propeller, a hub having blades spirally mounted thereon, said hub being cut away to form spiral shoulders thereon corresponding in number and parallel with said blades, and facing the rear end of said hub, substantially as described. 8th. In a propeller, a hub of conical form gradually increasing in diameter from its front to rear end and cut spirally away to form spiral shoulders thereon facing the rear end of said hub, substantially as described. 9th. In a propeller, a hub of conical form gradually increasing in diameter from its front to rear end, and cut spirally away to form spiral shoulders thereon gradually increasing in depth from the front to the rear end of said hub and facing said rear end, substantially as described.

**No. 57,213. Planing Machine. (Machine à raboter.)**



Anders August Westman, 21 Gamla Kungsholmsbrogatan, Stockholm, Sweden, 25th August, 1897; 6 years (Filed 15th March, 1897.)

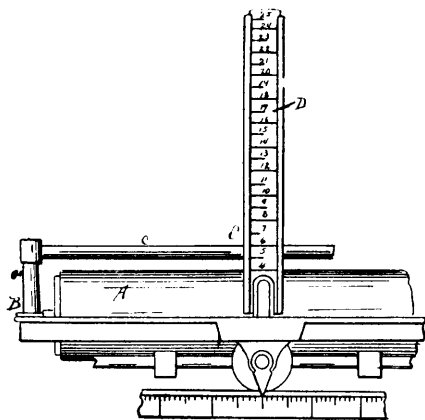
*Claim.*—The combination with a planing machine, of two or more knife frames, revolvable shafts or rollers on which the said knife frames rest, said rollers having a flat surface on one side and the rollers for each frame being so connected that both ends of the frame will simultaneously rest either on the flat or round surfaces, substantially as and for the purpose specified.

**No. 57,214. Typewriter. (Clavigraphie.)**

Amy M. Derrick, Palmyra, New York, U.S.A., 25th August, 1897; 6 years. (Filed 6th May, 1897.)

*Claim.*—In a typewriting machine, the combination of an arm attached to a stationary part and extending over the platen, a

knuckle on said arm adjustable to different positions, a holder consisting of a metal plate attached to the knuckle and extending

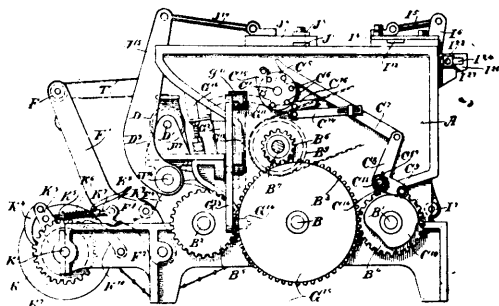


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above the machine, and a scale provided with a series of numerals arranged in reverse order resting in the holder, as shown and described and for the purpose specified.

**No. 57,215. Machine for Making Nets.**

(Machine pour faire des filets.)



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C. Nurnberger & Co., Chicago, Illinois, assignee of Mathias Jensen, Astoria, Oregon, U.S.A., 25th August, 1897; 6 years. (Filed 19th June, 1897.)

*Claim.*—1st. In a machine for making nets, the combination of a row of pegs about which the knots are formed, a row of spools for supplying the warp threads, a row of shuttles for supplying the weft threads, a row of prongs or fingers for receiving and guiding the warp threads, two independent rows of hooks adapted to draw a loop of the weft thread from each shuttle and wind it around a prong or finger, and a loop from each prong or finger around a shuttle and a means for drawing these loops into knots upon the pegs. 2nd. In a machine for making nets, the combination of a row of pegs about which the knots are formed, a row of spools for supplying the warp threads, a row of shuttles for supplying the weft threads, a row of prongs or fingers, receiving and adapted to guide the warp threads, two rows of independently operating hooks adapted to draw a loop of the weft thread from each shuttle and wind it around a prong or finger, one of said rows of hooks being further adapted to carry a loop from each prong around a shuttle and cast off said loops, and means for drawing these loops into knots upon pegs. 3rd. In a machine for making nets, and in combination with the pegs for receiving the knots, the spools and the shuttles for supplying the warp and weft threads respectively, the independent acting rows of hooks adapted to loop and knot the threads above the pegs and the prongs or fingers for guiding the weft threads, the swinging spindle about which the warp threads pass whereby the loops are drawn into knots on the pegs. 4th. In a machine for making nets, the combination of successive rows of pegs adapted to receive successively the knots to be tied upon them, spools and shuttles carrying the warp and weft threads respectively, the prongs or fingers for guiding the warp threads, said prongs or fingers having a side movement, and means for reversing said movement for every alternate row of knots tied on the pegs whereby the threads are led from right to left of said knots alternately, and means for uniting the threads into rows of knots on said pegs. 5th. In a machine for making nets, the combination of successive rows of pegs adapted to receive successively the knots to be tied upon them, spools and shuttles carrying the warp threads and weft threads respectively, and the prongs or fingers for guiding the warp threads,

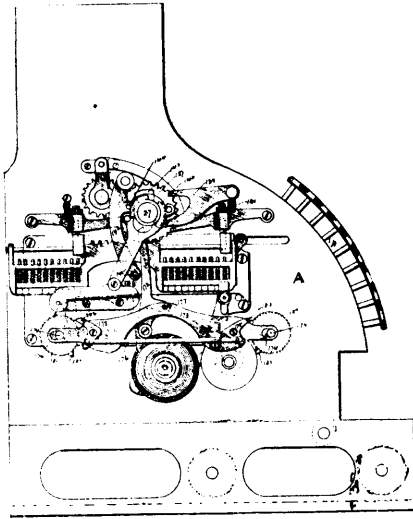
said prongs or fingers having a side movement, the means for reversing said movement, for every alternate row of knots tied on pegs whereby the threads are led from right to left of said knots alternately; and means for uniting the threads into rows of knots on said pegs, consisting of the independently operating hooks having side movements, and means for reversing said movement to alternate rows of knots. 6th. In a machine for making nets, the combination of a plurality of rows of pegs upon which the knots are formed, spools and shuttles for supplying the warp and weft threads respectively, prongs or fingers carrying the warp threads to said pegs and two rows of hooks adapted to catch the threads and intermingle their movements with that of the prongs or fingers in such a manner as to draw the thread from said shuttle and prongs or fingers, and tie it into knots on said pegs, said hooks having their side movements reversed for every alternate row of knots tied whereby the threads will alternately lead from right to left off each knot upon successive pegs. 7th. In a machine for making nets, the combination of a plurality of pegs upon which the knots are formed and from which they are successively discharged, spools and shuttles for supplying the warp and weft threads, prongs or fingers for carrying the warp threads, two rows of hooks adapted to loop and knot the threads about the pegs, and means for drawing the loops into knots upon said pegs, and a pusher for disengaging previously formed knots from one row of pegs while another row is receiving the freshly formed knots. 8th. In a machine for making nets, the combination of a row of pegs, a row of prongs or fingers for carrying the warp threads, a row of shuttles for supplying the weft thread and two rows of independently operative hooks, said row of hooks having direct vertical and side-reciprocating movements whereby they are adapted to catch the threads from the shuttles and tie them in knots on the pegs. 9th. In a machine for making nets, the combination of a row of pegs upon which the knots are to be formed, a row of shuttles to supply the weft threads, a row of prongs or fingers to carry and guide the warp threads, a row of hooks to draw the weft threads from the shuttles and pass them over the prongs over the shuttles again, and means by which the shuttles are caused to meet the hooks when the threads are passed over them, and to tie the threads into knots upon rows of pegs. 10th. In a machine for making nets the combination of an intermittently rotating cylinder provided with successive rows of pegs upon which the knots are adapted to be formed, a row of prongs or fingers for carrying the warp threads to the pegs, a row of shuttles for supplying the weft threads to said pegs, and two rows of independently operating hooks for forming the threads into knots upon said pegs. 11th. In a machine for making nets, the combination of an intermittently rotating cylinder provided with successive rows of pegs upon which the knots are adapted to be formed, a row of prongs or fingers for carrying the warp threads to the pegs, a row of shuttles for supplying the weft threads to said pegs, the two rows of independently operating hooks for forming the threads into knots upon said pegs, and means under said cylinder for forcing the previously formed row of knots from said pegs. 12th. In a machine for making nets, the combination of an intermittently rotating cylinder provided with successive rows of pegs upon which the knots are adapted to be formed, and a row of prongs or fingers for carrying the warp threads to the pegs, a row of shuttles for supplying the weft threads to said pegs, the two rows of independently operating hooks for forming the threads into knots upon said pegs, a means under said cylinder for forcing the previously formed row of knots from said pegs, and a reel for receiving and widening up the completed net as it comes from the pegged cylinder.

**No. 57,216. Cash Register. (Régistre de monnaie.)**

The Capital Cash Register Company, assignee of John Sharpe, both of Ottawa, Ontario, Canada, 25th August, 1897; 6 years. (Filed 30th June, 1897.)

*Claim.*—1st. In a combined cash register, indicator and recorder, a series of banks of finger keys, a rock lever for each bank of keys, a segmental toothed lever, a main rotary shaft, a train of gear interposed between the said main shaft and the revoluble indicators, the latter deriving their primary movement by a main shaft, a rocking lever, and the printing mechanism interposed between the said lever and the indicators, as and for the purpose herein specified. 2nd. In a combined cash register, indicator and recorder, a series of banks of keys, a rock lever for each bank of keys, a secondary segmental toothed lever that may be brought into mesh with an idler wheel on the main shaft when any of the keys have been operated, and move the said idler in one direction, carrying with it the train of gear interposed between the shaft and the indicators, also moving the latter and their transferring mediums to the secondary indicators, as and for the purpose herein specified. 3rd. In a combined cash register and recorder, a series of banks of keys, a rock lever for each bank of keys, a segmental toothed lever connected thereto, and for the purpose of engaging with a train of gear interposed between the main shaft and the revoluble indicators simultaneously engaging the printing mechanism interposed between the said segmental toothed lever and the rock lever, 142, as and for the purpose herein specified. 4th. A series of revoluble indicators, the combination of the connecting mechanism interposed between the said indicators and the settable type frames, the idler pinions, the main shaft, and the segmental toothed levers, and means for transmitting the ultimate motion to the said indicators, as and for the purpose

herein specified. 5th. A series of revoluble indicators, a series of settable type frames, the latter being directly connected with the said



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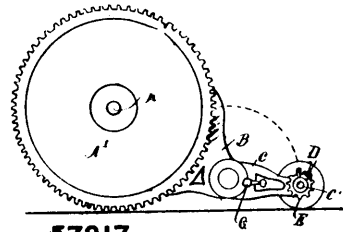
indicators are thereby moved simultaneously to their normal positions by a rocking frame, and means interposed between the said rocking frame and the main shaft, as and for the purpose herein specified. 6th. A series of revoluble indicators in sets of four, having suitable transmitting motion from one set to the other, and an adjustable locking device, such as an arm secured to a rocking shaft, deriving its motion from a main shaft and held in one position by its respective cam on the said shaft, as and for the purpose herein specified. 7th. In combination with a series of finger keys, and the means interposed between the said keys and the main shaft, and a series of part gear and part serrated toothed wheels, a detent engaging therewith, forcing the said part gear and serrated wheels into alignment, thereby, through the interposed mechanism of the indicators cause, the latter also to be brought into alignment, as and for the purpose herein specified. 8th. In combination with a series of finger keys, and means interposed between the said keys and the main shaft and a series of part gear and serrated wheels, co-acting with a detent and a series of type frames, said detent with its connecting parts serving to bring the said type frames into alignment, as and for the purpose herein specified. 9th. A series of operating finger keys, a detent for the purpose of locking the latter, a slide and a sliding frame with means interposed to release the said keys by the initial movement of the main shaft, as and for the purpose herein specified. 10th. In combination with a revoluble shaft, a rock lever, and means to rock the said lever, a lateral moving frame, having suitable actuating dogs arranged in the path of ratchet wheel as a means for moving the same one space, as and for the purpose herein specified. 11th. In combination with a revoluble shaft, a rock lever, means whereby the said rock lever moves back and forth a frame, the said frame being provided with a means to move, an ink ribbon holder in one direction until the said holder has made a revolution, whereby automatic means the said holder will be wound and unwound, as and for the purpose herein specified. 12th. In combination with a series of banks of finger keys and the detent in the paths of the said finger key, provided with means for unlocking the said keys, by the initial movement of a sliding frame and a main shaft, as and for the purpose herein specified. 13th. In combination with a series of type frames, a rocking lever, deriving its movement from a main shaft, and means interposed between the type frames, a rocking lever, and the main shaft, so that the rocking lever will positively gather the said type frames in its path of movement from their distributed positions to their normal positions, as and for the purpose herein specified. 14th. In combination with a series of type frames, a rock lever, deriving its motion from the movement of a main shaft, and means for restoring the pinions on the said shaft to their normal positions, so that they will be in a position to engage with the tooth of a segmental toothed lever selected and placed in a position by a depressed key, as and for the purpose herein specified. 15th. In combination with a main shaft and an idler wheel mounted thereon, and the connecting mechanisms engaging therewith, the said idler positively moved in one direction by a rocking lever and in the opposite direction by the segmental toothed lever and the shaft, as and for the purpose herein specified.

**No. 57,217. Lawn Mower Sharpener.**

(Appareil à affûter les faucheuses.)

George R. Davidson, Port Huron, Michigan, U.S.A., 25th August, 1897; 6 years. (Filed 2nd July, 1897.)

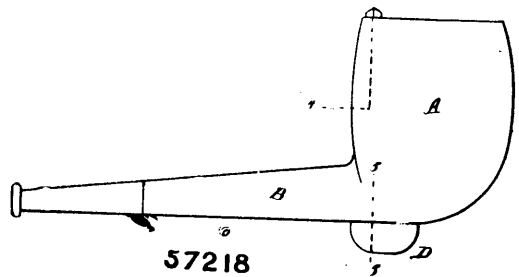
Claim.—1st. In a lawn-mower sharpener, the combination of the traction-wheel, the stationary disc forming the inner side thereof,



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the ear projecting from said disc, the arm pivoted to said ear, the shaft journalled in said arm, the grinding-roll on said shaft, the pinion also mounted on said shaft, said arm adapted to swing from its pivot to bring said pinion in contact with said traction-wheel, and the cutters adapted to rotate in a path that touches the surface of the roller. 2nd. In a lawn-mower sharpener, the combination of the traction-wheels, the stationary discs forming their inner sides, the ears projecting from said discs, the arms pivoted to said ears, the shaft journalled in said arms, the grinding-roll mounted on said shaft between said pivoted arms, the pinions mounted on said shaft outside of said arms, said pinions adapted to be brought in contact with the rims of the traction-wheel and the cutters, etc., for the purpose set forth. 3rd. In a lawn-mower sharpener, the combination of the traction-wheels, the stationary discs forming their inner sides, the ears projecting from said discs, the arms pivoted to said ears, the shaft journalled in said arms, the pinions and grinding-roll mounted on said shaft, means for locking said arms in an extended position, and means for locking said arms in a retracted position, with the pinions in engagement with the rim of the traction-wheels and the cutters, substantially as set forth. 4th. In a lawn-mower sharpener, the combination of the traction-wheels, the stationary discs forming the inner sides thereof, the ears projecting from said discs, the arms pivoted to said ears, the shaft journalled in said arms, the grinding-roll and pinion on said shaft, said arms adapted to be swung toward said traction-wheels, to bring said pinions in mesh with the teeth on the face of said wheels, means for locking said arms in an extended as well as a retracted position, means for taking up the wear between the cutting knives and the grind-roll, and the cutters, etc., substantially as set forth. 5th. In a lawn-mower sharpener, the combination of the roll composed of grinding material, said roll adapted to be brought to bear against the cutting edges of the cutting-knives and means for rotating said roll, for the purpose set forth.

**No. 57,218. Tobacco Pipe.** (Pipe à tabac.)

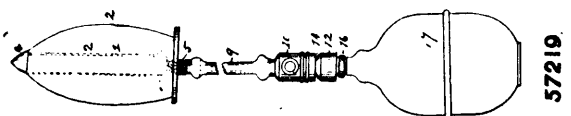


57218

George R. Davidson, Port Huron, Michigan, U.S.A., 25th August, 1897; 6 years. (Filed 2nd July, 1897.)

Claim.—1st. In a tobacco-pipe of the character described, the combination of the bowl, the catch-basin, the flue, and apertured tongue for directing the passage of smoke out of a right line between the opening in the lower portion of the bowl and the mouth-piece of the pipe, for the purpose set forth. 2nd. As an improved article of manufacture, the bowl A, stem B, and flue C, said flue being located between said bowl and stem, the tongue, with the catch-basin at one end and a suitable plug or stopper at the opposite end, said plug adapted to snugly enter said flue, and the opening e in the said tongue, all arranged substantially as shown.

**No. 57,219. Rectal Dilator.** (Dilatateur.)

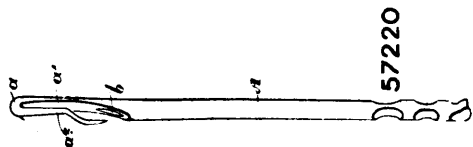


57219

Nathan D. Mussey and Bruce D. Mussey, both of Los Angeles, California, U.S.A., 25th August, 1897; 6 years. (Filed 2nd July, 1897.)

*Claim.*—1st. In a rectal dilator, the combination of an expansible bulb-sack, an air-supplying bulb, a tube connecting the bulbs, ports for admitting a supply of air to the tube and air-bulb, a valve for closing said ports against outward pressure, and a release-valve located in the tube, substantially as set forth.

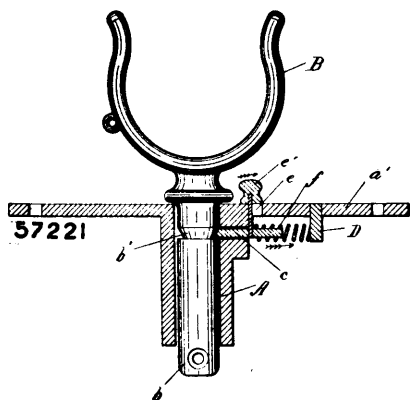
**No. 57,220. Needle for Knitting Machine.**  
(*Aiguille de machine à tricoter.*)



James Wheeler, Paris, Ontario, Canada, 27th August, 1897; 6 years.  
(Filed 8th July, 1897.)

*Claim.*—In a knitting machine needle, a shank having a spring back formed by an arc-shaped recess, the tapered barb and an enlarged intermediate portion between the arc-shaped recess and the tapered barb forming the head of the needle, as and for the purpose specified.

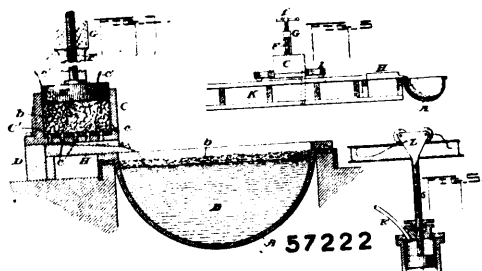
**No. 57,221. Row-Lock. (Toiletère.)**



Frederick R. Dakin, Pugwash, Nova Scotia, Canada, 27th August, 1897; 6 years. (Filed 9th July, 1897.)

*Claim.*—In a row-lock, the combination, with a socket, and a row-lock having a stem journalled in the said socket and provided with a circumferential groove, of a spring pressed bolt slidable laterally in a hole in the said socket and engaging with the said groove, substantially as set forth.

**No. 57,222. Method of Desilverizing Lead.**  
(*Procédé pour désargenter le plomb.*)

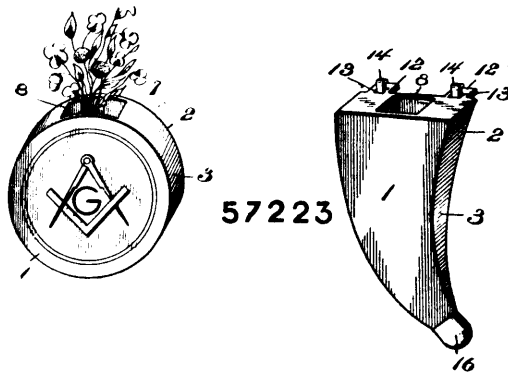


William Henry Howard, Pueblo, Colorado, U.S.A., 27th August, 1897; 6 years. (Filed 9th July, 1897.)

*Claim.*—1st. As an improvement in Parkes' process of desilverizing lead bullion, subjecting the zinc crust to pressure after removing it from the desilverizing kettle, substantially as described. 2nd. The process of liquating zinc crusts formed in the desilverization of lead bullion which consists in subjecting said crusts to pressure without the application of heat, substantially as described. 3rd. The process of liquating zinc crusts formed in the desilverization of lead bullion, which consists in collecting said crusts adjacent to the lead in the desilverizing kettle, and then subjecting them to pressure to squeeze out the unalloyed lead, substantially as described. 4th. The process of liquating zinc crusts formed in the desilverization of lead bullion, which consists in collecting said crusts, immersing them in the lead in the desilverizing kettle, and subjecting them to pressure to squeeze out the unalloyed lead, substantially as de-

scribed. 5th. The combination with a desilverizing kettle for the production of zinc crusts from lead bullion, of a press, and means for moving said press to and away from said kettle, substantially as described. 6th. In apparatus for the desilverization of lead bullion, the combination with the desilverizing kettle, of a press comprising a cylinder having a perforated bottom, and means for lowering said press into said kettle, and raising it therefrom, substantially as described. 7th. In apparatus for the desilverization of lead bullion, the combination with a desilverizing kettle, of a press comprising a cylinder having a perforated bottom, means for raising and lowering said press, and means for conveying it to and from a point above said kettle, substantially as described.

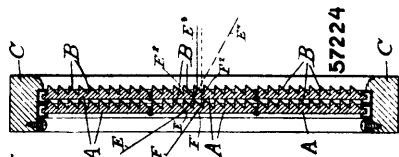
**No. 57,223. Combined Badge, Bouquet and Perfume Holder.**  
(*Porte-insigne, bouquet et parfums.*)



John Hansen, Everett, Washington, U.S.A., 27th August, 1897; 6 years. (Filed 12th July, 1897.)

*Claim.*—1st. A combined badge, perfume and bouquet holder comprising a hollow casing having an opening in its edge communicating with its interior, absorbent pads secured within the casing, and a pin secured to one face of the casing, substantially as and for the purpose specified. 2nd. A combined badge, perfume and bouquet holder comprising a casing formed of two sections, one of said sections having a flange around its edge, said flange being cut at two points and the metal between the cuts being turned inwardly to serve as a clamp and also to form an opening in the flange, and the other section having an integral lug bent inwardly to form a clamp, absorbent pads secured to the sections by said clamps, means to secure the two sections together, and a pin secured to one face of the casing, substantially as described. 3rd. A combined badge, perfume and bouquet holder comprising a hollow casing formed of two sections detachably connected together, and having an opening in its edge communicating with its interior, absorbent pads secured within the casing, and a pin secured to one face of the casing, substantially as described. 4th. A combined badge, perfume and bouquet holder comprising a horn-shaped hollow casing formed of two sections, an absorbent pad secured to the inner face of each section, a hook and eye connection between the wide upper ends of said sections, a cap removably secured on the lower narrow ends of said sections, and a pin secured to one face of the casing, said casing having an opening in its upper edge communicating with its interior, substantially as described.

**No. 57,224. Prismatic Light. (Lumière prismatique.)**

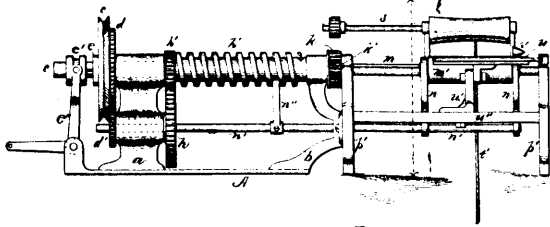


John Meiggs Ewen, Chicago, Illinois, U.S.A., 26th August, 1897; 6 years. (Filed 13th July, 1897.)

*Claim.*—1st. The combination of two layers of prismatic lights placed so as to receive the light successively and transmit it from one place to another. 2nd. The combination of two window lights, each consisting of a series of sections of prismatic glass, the two lights associated together in proximity and parallelism so that the light passes through them successively. 3rd. The combination of two window lights, each consisting of prismatic glass, the prisms on the two of the same size and shape, and the two lights related in close proximity and parallelism, so that the light passes through them successively. 4th. The combination of two window lights, each consisting of prismatic glass, the prisms on the two of the same size and shape and having each one face substantially perpendicular to the plane of the light and the other face inclined thereto, and the

two lights related in close proximity and parallelism so that the light passes through them successively. 5th. The combination of two window lights, each consisting of prismatic glass and associated together in hinged relation so that one or both can be used to control the aperture through which the light is to be received.

**No. 57,225. Cigar Machine. (Machine à cigares.)**

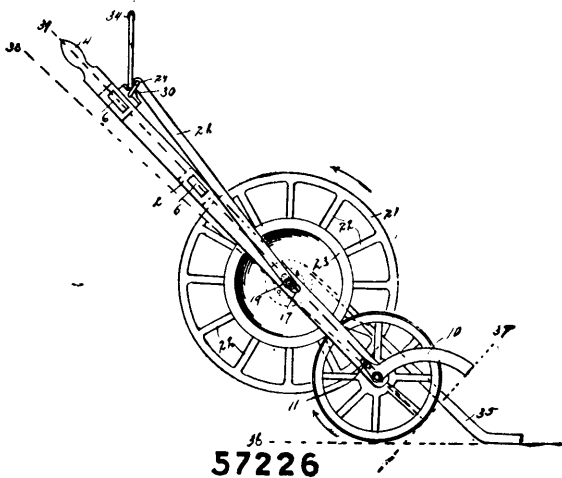


57225

John Bunn, Binghamton, New York, U.S.A., 27th August, 1897; 6 years. (Filed 14th July, 1897.)

*Claim.*—1st. In a cigar machine, a stationary main frame suitably supported, a stationary wrapper-table mounted thereon, and a guide-rod across the rear of said frame, in combination with a bunch-carrying frame mounted upon and adapted to traverse the main frame, and engaging with said guide-rod, an auxiliary frame pivoted upon said guide-rod, and comprising side pieces, shafts journaled therein, and wrapper tolling rollers mounted upon and rotated by said shafts, and means to reciprocate said traversing frame upon said guide-rod and longitudinally across the end of the wrapper-table. 2nd. In a cigar machine, the combination with the main frame, the guide-rod thereon, and the wrapper-table upon the main frame, of a traversing bunch-carrying frame, connected to and guided by said guide-rod, an apron upon the traversing frame, an auxiliary frame pivoted upon said guide rod, and carried above the traversing frame, rotatable shafts journaled in the auxiliary frame, bunch-rolling and wrapper-winding rollers mounted upon said shafts, and means to simultaneously actuate said rollers and apron, and to reciprocate the traversing frame and rollers longitudinally upon said guide-rod and shafts.

**No. 57,226. Reel for Sprinkling Hose. (Dévidoir pour boyaux à arroser.)**



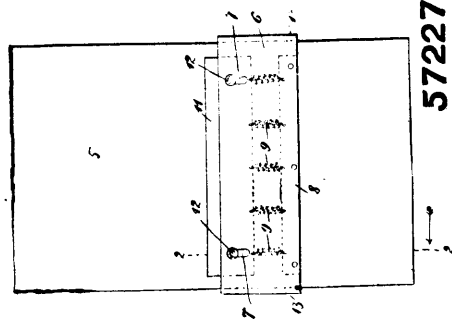
57226

Charles Kessler, Troy, Ohio, U.S.A., 27th August, 1897; 6 years. (Filed 14th July, 1897.)

*Claim.*—1st. In a reel for sprinkling hose, the combination of a wheeled carriage, a winding-reel adjustably mounted thereon in slotted ways and having one or more discs thereon adapted to be brought into frictional driving contact with the wheels of said carriage by the adjustment of said reel, a yielding or springy operating means for manually adjusting said winding reel, and arms 10 on and normally supporting said carriage, substantially as specified. 2nd. In a reel for sprinkling hose, the combination of a wheeled carriage, a winding reel mounted to reciprocate thereon in slotted ways, said winding reel having one or more discs thereon adapted to be brought into frictional driving contact with the wheel of said carriage when the said reel is reciprocated, connecting-rods 26 between crank-arms 30 and shaft 19 upon which said winding reel is supported, and a yielding or springy operating handle, for the crank arms 30, substantially as specified. 3rd. In a winding reel for sprinkling hose, the combination of a two-wheeled truck or carriage supporting a wind

ing reel adapted to be driven by frictional contact with said truck or carriage wheels, the curved arms 10 having integral fastening projections 11 and being secured to said truck or carriage by nuts 12 and rigid collars 8 and 9 upon an axle for said wheels, for supporting said truck or carriage in an upright position in connection with said truck-wheels, substantially as specified. 4th. The combination of the side frames 2 and 3, having operating handles 4 and 5, cross-frame 6 at one end and shaft 7 at the other, curved arms 10 on said side frames 2 and 3, said shaft passing through said side frames and curved arms 10 and clamping the same together between collars 8 and 9 and their nuts 12, and wheels 13 and 14 upon shaft 7 respectively adjacent to collars 8 and 9, said wheel being held in position by collars 15 and 16 respectively, substantially as specified. 5th. The combination of a two-wheeled truck or carriage having side frames 2 and 3 and one or more cross-frame pieces 6, of a winding-reel consisting of end-discs 21, having a series of spokes 22, a friction disc or flange 23 and hub 24 provided with a bearing for shaft 19 supporting said reel said end discs being supported by a substantially circular portion 25, collars 20 on shaft 19 for engaging slots 17 and 18 respectively, inside frames 2 and 3, connecting-rods 29 between the outer ends of shaft 19 and crank-arms 30 on shaft 31 having a series of bearing boxes 32 secured to the frame-pieces, said shaft being provided in its centre with an integral operating handle formed with a loop 33 to provide handhold 34, said friction-discs or flanges 23 of the winding reel adapted to be forced into frictional driving contact with the two wheels of the truck or carriage, substantially as specified.

**No. 57,227. Writing Pad. (Calpin.)**

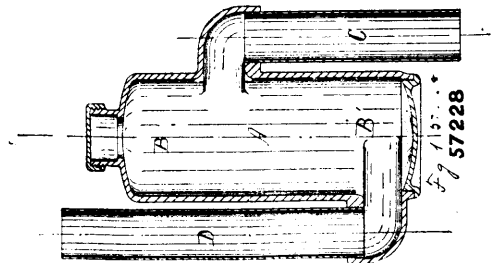


57227

Edith Ferguson Black, San Antonio, California, U.S.A., 27th August, 1897; 6 years. (Filed 15th July, 1897.)

*Claim.*—1st. An attachment for writing pads consisting of an oblong plate, and a transversely movable spring operated plate mounted beneath one side thereof and adapted to be projected therefrom, substantially as shown and described. 2nd. An attachment for writing pads consisting of a main oblong plate in one side of which are formed short transverse slots or openings, a transversely movable plate mounted thereunder, and connected therewith by pins which pass through said slots or openings and springs connected with the bottom of said oblong plate by which said movable plate is projected, substantially as shown and described. 3rd. An attachment for writing pads consisting of a main oblong plate in one side of which are formed short transverse slots or openings, a transversely movable plate mounted thereunder, and connected therewith by pins which pass through said slots or openings, and springs connected with the bottom of said oblong plate by which said movable plate is projected, said oblong plate being also provided at each end with downwardly directed flanges, substantially as shown and described.

**No. 57,228. Trap. (Piège.)**

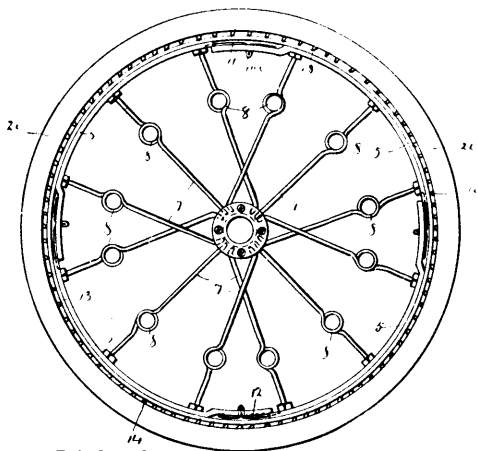


57228

Hiram T. Bush, Detroit, Michigan, U.S.A., 25th August, 1897; 6 years. (Filed 15th July, 1897.)

*Claim.*—A trap, consisting of a tight vessel provided with a tangential inlet, an outlet located vertically higher than the inlet by a distance substantially equal to the cross diameter of the vessel, and a chamber above the outlet having a capacity to hold sufficient water to seal the trap, substantially as described.

**No. 57,229. Wheel. (Roue.)**



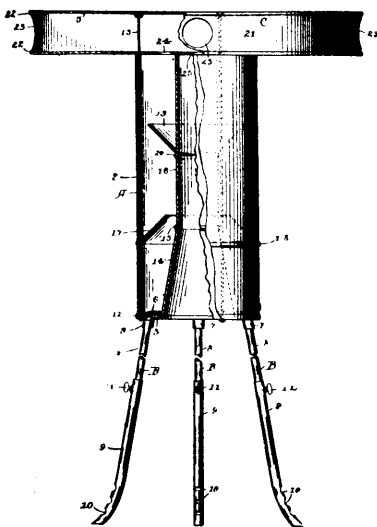
57229

William Murphy and James Leggett, both of Montreal, Quebec, Canada, 27th August, 1897; 6 years. (Filed 16th July, 1897.)

*Claim.*—1st. A wheel having a tire, flexible rim and resilient spokes, as and for the purpose set forth. 2nd. A wheel having a resilient tire, a flexible rim and resilient spokes, as and for the purpose set forth. 3rd. A wheel having a hub, a tire, a flexible rim and resilient spokes connecting said rim to said hub consisting of a series of bow-springs each having a portion thereof coiled, as and for the purpose set forth. 4th. A wheel having a hub, a resilient tire, composed of an annulus formed of a continuous length of spirally coiled wire, a rim consisting of a series of rigid sections held flexibly together by an elastic band, resilient spokes connecting said rim to said hub and consisting of a series of bow-springs each having a portion thereof coiled, as and for the purpose set forth. 5th. A wheel having a hub, a resilient tire composed of an annulus formed of a continuous length of spirally coiled wire, a rim consisting of a series of overlapping rigid sections held flexibly together by an elastic band and localized by means of a tongue and groove formed upon the adjacent faces of the ends of said overlapping sides, said tongue section being formed from a short length of wire having a finger projection adapted to take through a perforation about centrally of said groove, a series of resilient spokes connecting said rigid section of the rim to said hub and each consisting of a bow-spring having a portion thereof coiled, substantially as described and for the purpose set forth.

**No. 57,230. Heating Drum for Lamps.**

(Poêle-sourd pour lampes.)



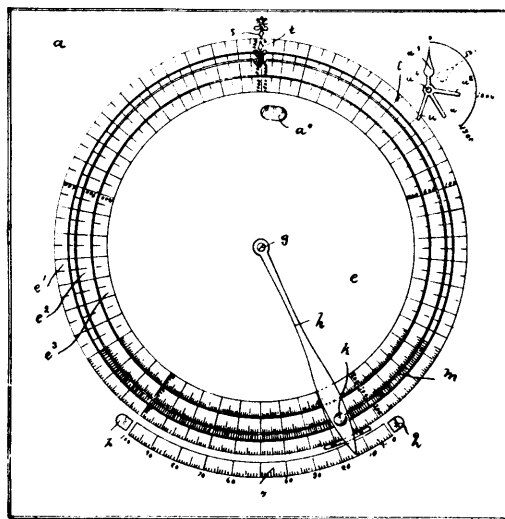
57230

Robe Carl White, as Trustee, assignee of Carl Henry Barnholdt Randleff, both of St. Paul, Minnesota, U.S.A., 27th August, 1897; 6 years. (Filed 9th August, 1897.)

*Claim.*—1st. In a heating apparatus of the class described, in combination the drum having lateral vents at its top, the

hollow, adjustable, air-conducting standards opening into the bottom of said drum and supporting the same, and the funnel-shaped pipe on the interior of the drum adapted to be fitted over the lamp chimney, and opening into the interior of the drum. 2nd. In an apparatus of the class described, the combination with the cylindrical drum, of the hollow, air-conducting standards supporting and communicating with the same, the conical pipe for the inlet of the heated gases arranged axially in the drum, the deflectors arranged in the space between the drum and pipe, the constructed openings above the funnel and the annular space between the funnel and drum, and the drum of larger diameter arranged above, and in communication with said openings, and provided with lateral outlets. 3rd. In an apparatus of the class described, the combination with the cylindrical drum, of the annular base formed with double walls constituting an annular chamber or conduit, the upper wall being formed with perforations serving as distributing outlets for the chamber, the openings in the bottom wall to connect with hollow, supporting, air-conducting standards, the conical axially arranged pipe within said drum, the connecting cylindrical pipe serving as a continuation of said conical pipe, and the deflectors intermediate of said pipe and drum.

**No. 57,231. Calculating Device. (Machine a calculer.)**



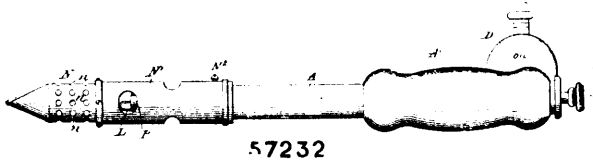
57231

Levy Maybaum, Newark, New Jersey, U.S.A., 27th August, 1897; 6 years. (Filed 15th July, 1897.)

*Claim.*—1st. A calculator consisting of a graduated disc, a graduated vernier co-operating with said disc, one of said parts being movable with relation to the other, and a hand or pointer co-operating with said disc and vernier, substantially as and for the purposes described. 2nd. A calculator consisting of a graduated disc, a graduated vernier co-operating with said disc, one of said parts being movable with relation to the other, a hand or pointer co-operating with said disc and vernier, and an indicator controlled by said disc or vernier, substantially as and for the purposes described. 3rd. A calculator consisting of a revolvably mounted graduated disc, a stationary graduated vernier concentrically arranged with said disc, a pivoted hand or pointer independently movable of said disc, and means for connecting said pointer with the disc at intervals during the operation, substantially as and for the purposes described. 4th. A calculator consisting of a frame, a graduated disc revolvably mounted in said frame, a stationary graduated vernier concentrically arranged with said disc, a hand or pointer loosely mounted on the fulcrum of the disc, and provided with a downwardly extending pin, and a toothed rack on the disc and concentrically arranged with the graduation marks on the latter and adapted to be engaged by the downwardly extending pin of the hand or pointer, substantially as and for the purposes described. 5th. A calculator consisting of a frame, a graduated disc revolvably mounted in said frame, a stationary graduated vernier concentrically arranged with said disc, a hand or pointer loosely mounted on the fulcrum of the disc, and provided with a downwardly extending pin, a toothed rack on the disc and concentrically arranged with the graduation marks on the latter and adapted to be engaged by the downwardly extending pin of the said hand or pointer, an indicator on the frame, and means for operating said indicator by the revolving disc, substantially as and for the purposes described. 6th. A calculator consisting of a frame, a graduated disc revolvably mounted in said frame, a stationary graduated vernier concentrically arranged with said disc, a hand or pointer loosely mounted on the fulcrum of the disc, and provided with a downwardly extending pin, a toothed rack on the disc and concentrically arranged with the graduation marks on the latter and adapted to be engaged by the downwardly

extending pin of the hand or pointer, an indicator on the frame, means for operating said indicator by the revolving disc, and a spring carried by the hand or pointer for normally holding its pin out of engagement with the toothed rack, substantially as described.

**No. 57,232. Soldering Iron.** (*Fer a souder.*)

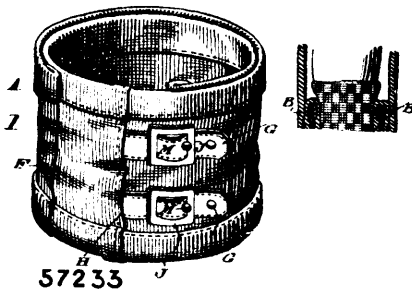


57232

Willis Mitchell, Malden, Massachusetts, U.S.A., 27th August, 1897; 6 years. (Filed 24th June, 1897.)

*Claim.*—1st. In combination with the body, burner, jet block and point of a soldering iron, a pipe supplying gasoline to the jet, a relatively fixed sleeve surrounding the jet, a regulating point arranged opposite the jet and fixed with relation thereto, and means for adjusting the jet block back and forward within the sleeve, in order that the said point may close or open the jet more or less, substantially as set forth. 2nd. In combination with the body, burner, jet block, and point of a soldering iron, a pipe supplying gasoline to the jet, a relatively fixed sleeve surrounding the jet, a screw-threaded rod engaging the threads in a fixed part and also engaging the said jet block to move it endwise, and a hook attached to the said sleeve and presenting its point reversely to the said jet, substantially as set forth. 3rd. In combination with the hollow body of a soldering iron, a tubular rod B, extending lengthwise through the said body, and having both external and internal screw-threads on its outer end, a nut receiving the said external screw-thread and adapted to turn into contact with the end of the said body, another rod R, within the said rod B, threaded to engage with the said internal threads, a jet block connected to said inner rod R, for endwise adjustment, and a regulating hook presenting the point opposite the jet, substantially as and for the purpose set forth. 4th. In combination with the hollow body of a soldering iron, an air pump enclosed therein, and comprising a tubular piston rod, a gasoline receptacle, air and oil pipes for supplying the contents of the same under the action of the said pump to the jet, a jet-block adjustable longitudinally of the said iron, a regulating point presented opposite the said jet, a tubular rod clamped to the said body, and extending lengthwise through the said piston rod, and an adjusting rod extending through the said tubular rod to the said jet block and adapted to move the latter lengthwise as set forth. 5th. In combination with a hollow soldering iron body, air-forcing means within the same, a source of oil supply acted on by such means, communications therefrom to the heating flame, a rod extending lengthwise through the said body and provided with a conoidal part near the forward end, and means for drawing the said conoidal part and a correspondingly recessed part of the body together to prevent leakage of air, substantially as set forth. 6th. In combination with the jet block of a soldering iron or other heated implement, a tubular coil supplied with fuel and arranged to discharge into the jet and be heated thereby, the said coil being provided with a conoidal part at its discharge end, and the jet passage being adapted to receive it, and a bifurcated clamp straddling the said conoidal part as set forth.

**No. 57,233. Trousers Guard.** (*Garde-pantalon.*)



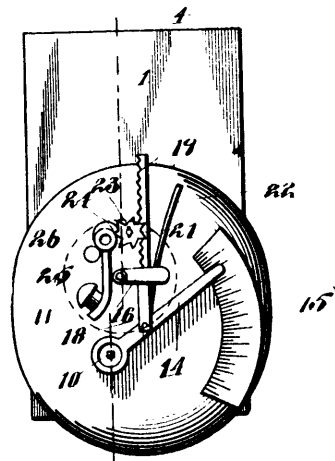
57233

Edward Wolfgang Hanauer, Philadelphia, Pennsylvania, U.S.A., 27th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. A trousers guard consisting of a skeleton frame formed of a pair of spring plates curved in a longitudinal direction thereof, and having their ends overlapping, and bars connecting the opposite ends of said plates. 2nd. A trousers guard consisting of a skeleton frame formed of a pair of spring plates curved in the longitudinal direction thereof, and having their ends overlapping, and bars connecting the opposite ends of said plates, said plates being slotted for the purpose described. 3rd. A trousers guard consisting of a skeleton frame formed of a pair of spring plates curved in the longitudinal direction thereof, and having overlapping shoe, and bars pivoted at their ends to the opposite ends of said plates. 4th.

In a trousers guard, a frame formed of a rim, cross-bars and a tongue simulating a buckle and spurs for attaching the frame to the place of service.

**No. 57,234. Heat Indicator and Alarm.**  
(*Indicateur et avertisseur de chaleur.*)

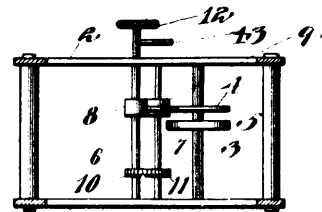


57234

William Bright, Plateau, Utah, U.S.A., 27th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—In a device of the character set forth, the combination with a plate of metal, of a pair of bars of a metal having a higher coefficient of expansion acting in engagement with said plate, one of said bars being pivoted to said plate at one end and connected at the other end to one arm of a lever fulcrumed in said plate, and the other bar pivoted to the other arm of said lever and to a second lever fulcrumed in said plate, a dial plate secured to said main plate and separated slightly therefrom, a shaft mounted to rotate in said plates, an arm upon the lower end of said shaft, a rod or pitman connecting said arm and the arm of said second lever, an index finger or pointer secured to the other end of said shaft, a gong secured to the upper side of said dial plate, a hammer therefor, pivoted in said plate and having a lug upon its rear end, a ratchet-wheel adapted to engage said lug, a pinion to which said ratchet-wheel is secured, and a rod or bar having teeth along one edge adapted to engage said pinion and pivoted to said index finger, substantially as and for the purpose described.

**No. 57,235. Watch and Clock Regulating Device.**  
(*Appareil à régler les montres et horloges.*)



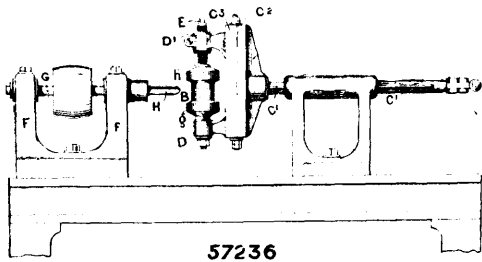
57235

Thomas R. Bolton, New York, State of New York, U.S.A., 27th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. In a regulating device for clocks and watches, in combination with the hair spring, disc mounted upon suitable shafts and positioned to clamp the outer end of the hair spring between the same, gear-wheels mounted upon the shafts and in mesh to turn said shafts in unison, means for turning one of the shafts and an indicator for the regulating device, substantially as shown and for the purposes set forth. 2nd. In a regulating device for clocks and watches, the combination with the hair spring, of discs mounted upon suitably journaled shafts and positioned to clamp the outer end of the hair spring between the same, intermeshing gear-wheels mounted upon the shafts, a knob attached to the outer end of one of the shafts, and a pointer travelling over the scale plate, substantially as shown and for the purposes set forth. 3rd. In a regulating device for clocks and watches, in combination with the hair spring, of discs mounted upon shafts and having shallow recesses in their

periphery, said discs being positioned to clamp the outer end of the hair spring between the same, intermeshing gear-wheels mounted upon the shafts, a device for turning one of the shafts, and a pointer indicating the adjustment, substantially as shown and for the purposes set forth.

**No. 57,236. Apparatus for Perfecting Tubes, etc.**  
(Appareil pour perfectionner les tubes, etc.)

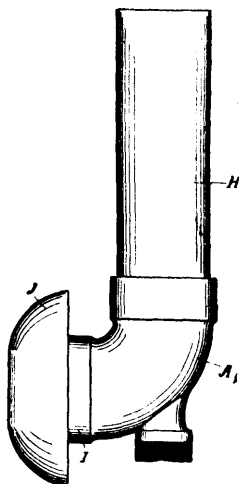


57236

The Standard Weldless Tube and Cycle Co., Philpot Lane, London, England, assignee of Rudolf Chillingworth, Ostbahnhof, Nuremberg, Germany, 27th August, 1897; 6 years. (Filed 30th June, 1897.)

*Claim.*—1st. A machine or apparatus for calibrating, truing up, or finishing tubes, tubular unions or tube sockets, having a rotating rimer or the like, in combination with a clamping device arranged opposite said rimer, and serving to clamp the tubes or tubular parts which are situated in a hollow case, said case being adapted to be moved by means of a sliding carriage C perpendicular to the axis H of the spindle, carrying the tool or rimer, and also to be moved in the direction of the said axis towards the rimer, in such a manner that the said rimer is caused to enter the tubular socket situated in front of it, all arranged and acting substantially as and for the purposes hereinbefore described. 2nd. In finishing, perfecting, or truing up tubes, tubular unions, sockets or the like, a case adapted to receive the article to be treated in a heated state, such case being composed of divided parts when brought together, an internal space to correspond with the external configuration the article should assume, clamps adapted to be brought towards each other to close together the parts of the case and thereby force the article into true external form, a sliding shaft to carry the clamping device and case, means for adjusting the latter relatively to the axes of a rotating rimer, and means for sliding the shaft and causing the rimer to enter apertures in the case and true up the interior of the article, substantially as set forth.

**No. 57,237. Vacuum Boiler Tube Cleaner,**  
(Nettoyeur de tubes.)



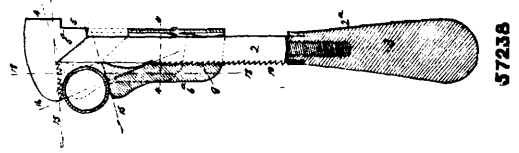
57237

Charles Alteman and John W. Cowan, both of London, Ontario, Canada, 28th August, 1897; 6 years. (Filed 17th August, 1897.)

*Claim.*—1st. In a vacuum boiler tube cleaner, the body A, the steam inlet C, formed therein, the pipe D, cones E and F, and means for supporting the cone F, centrally in the cone E, in combination

with the suction chamber I, and the discharge pipe H, substantially as and for the purpose set forth. 2nd. In a vacuum boiler tube cleaner, the body A, the steam inlet C, formed therein, the pipe D, cones E and F, and bridges G, in combination with the suction chamber I, provided with the rounded flange J, and the discharge pipe H, substantially as and for the purpose set forth.

**No. 57,238. Wrench.** (Clé à écrou.)

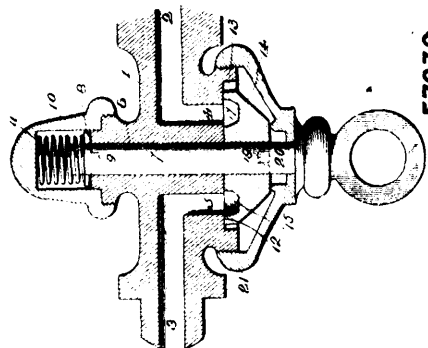


57238

Logan W. Everhart, Zachery Y. Postlethwaite, and Alonzo W. Postlethwaite, all of Chanute, Kansas, U.S.A., 28th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. A wrench, comprising a fixed jaw, having its shank provided with ratchet teeth, a sliding jaw having a shank in casing member provided with a tooth portion to engage the ratchet teeth of the shank, said jaws having their grip faces inclined at an angle to the vertical line of the shank, whereby the pressure on the sliding jaw is in a line substantially parallel to the pitch of the ratchet teeth and in a transverse direction relatively to the shank, substantially as shown and for the purposes described. 2nd. A wrench, having a fixed jaw, its shank having ratchet teeth, and a sliding jaw having a shank in casing member provided with a tooth portion to engage the ratchet teeth of the shank, said jaws having their grip faces inclined at an angle to the vertical line of the shank, the incline of one jaw being greater than that of the other, whereby the grip points of such jaws will be at diagonally opposite, and the purchase or strain of the lower jaw be in a line transverse to the shank, whereby to force the tooth of the sliding jaw in close grip with the teeth of the shank, as specified. 3rd. An improved wrench, comprising a fixed jaw having a shank provided with ratchet teeth at one edge, a sliding jaw having a shank in casing portion provided with ratchet teeth to engage the teeth of the shank, the grip face of the fixed jaw being inclined at an acute angle to the vertical line of the shank, the grip face of the sliding jaw being inclined at an acute angle greater than the angle of the fixed jaw, substantially as shown, whereby its gripping point will be nearer the shank than the gripping face of the fixed jaw, whereby the line of strain on the said sliding jaw will be in a diagonal direction substantially parallel with the pitch of the ratchet teeth, as set forth. 4th. A wrench, comprising a shank having a fixed jaw, the sides of which project laterally over the sides of the shank, and which have inclined reinforce or thickened portions, said shanks having ratchet teeth on its front faces, a movable jaw having casing held to slide on the shank, said casing having a slight rocky movement on such shank, and having internal teeth to engage the shank teeth, a spring device for normally holding the said casing teeth and shank teeth in a locked engagement, said casing having inclined upper edge, whereby to admit of a sliding jaw being closed up against the fixed jaw, as specified. 5th. The combination with the shank having ratchet teeth at one side, said shank having a fixed jaw at its upper end, of a casing held to slide on the shank, having at its upper end a clamp or jaw portion, said casing having lateral movement on the shank, and its front internal face provided with a tooth portion at the lower end, and a fulcrum portion at the upper end, and having a spring connected to its rear internal face to engage the shank at a point opposite the tooth portion, whereby, when a pressure is applied against the rear face of the casing, its teeth will be disengaged from the shank teeth, as specified.

**No. 57,239 Valve.** (Soupape.)



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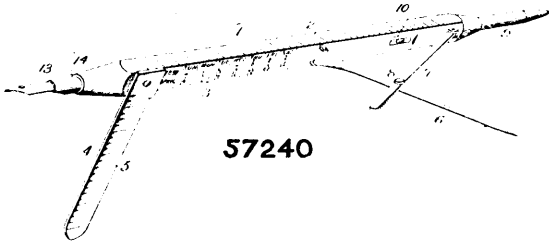
Orlando Ferdinand Conibe, Charlestown, Massachusetts, U.S.A., 28th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. In a valve, the combination of a body portion, a stem extending therethrough, a washer gate carried by said stem,



and adapted to be rotated by the movement of said stem, and a pawl normally locking said valve when closed, substantially as described. 2nd. In a valve, a body portion having passages extending therethrough, a stem, a washer gate carried by said stem, and provided with a passage having a contracted end portion, passages extending around the opening through which the stem passes, and a recess communicating with said passages, and a cap extending from said washer gate, substantially as described. 3rd. In a valve, a body portion having a central passage adapted to receive a valve stem, extended end portions provided with valve openings, a stem held to rotate within said central opening, a washer gate having passages therein adapted to be rotated by said stem, a cap held upon the body portion of said valve and adapted to retain the washer gate in position, a cap extending over the upper portion of said stem having a recess therein, a spring held within said recess normally urging said stem outward, and a locking device adapted to hold said valve in closed position, substantially as described. 4th. In a valve, a washer gate having a central opening adapted to receive a valve stem, and provided with an entrance passage having a contracted end, passages extending from said entrance passage around each side of the central opening, and an egress passage with which said passage communicates, substantially as described.

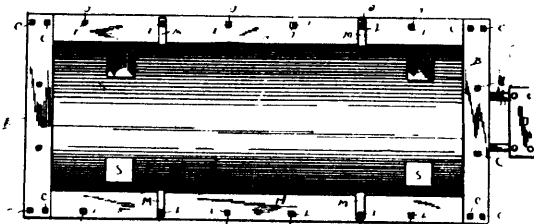
**No. 57,240. Combination Pen Holder. (Porte-plumes.)**



Clay C. Moore, Finley, and John C. Martiny, Dyersburg, both in Tennessee, U.S.A., 28th August, 1897; 6 years. (Filed 17th July, 1897.)

*Claim.*—1st. In a device of the character set forth, the combination of a triangularly formed handle or stock having a calendar on one side, division marks representing inches or fractions of an inch, on another side, and openings in the third side, and a pen and pencil attachment to engage opposite ends, the said pen attachment having a whistle in connection therewith to co-act with the holes in one of the sides of the holder and stock, substantially as and for the purpose specified. 2nd. In a device of the character set forth, the combination of a stock or holder of triangular form having on one side thereof an arm movably attached to form an angle, a calendar and a centre point with a keeper therefor, inches and fractions of an inch on the second side, and openings in a third side, and pen and pencil attachments inserted in the ends of the said stock or handle, one of which carries an ink-tube, and the other a whistle, substantially as and for the purposes specified.

**No. 57,241. Wagon Body or Box. (Boîte de wagon.)**

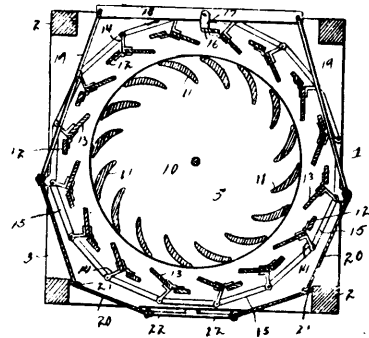


John Muir, Hunter, North Dakota, U.S.A., 28th August, 1897; 6 years. (Filed 2nd August, 1897.)

*Claim.*—1st. Combined in a wagon-body or box having the semi-circular ends, one having a discharge-opening provided with a door, the side staves, the side top plates, the end top plates, hoops having burs adapted to tighten said hoops, said wagon-box built on and supported by bolsters. 2nd. Combined in a wagon-body or box having a semi-circular form, the half circular ends, and a series of side staves, the side top plates, the hoops, and burs on said hoops. 3rd. Combined in a wagon-body or box having a semi-circular form, the half circular ends, and the series of side staves, the side top plates, the hoops, the end top plates, the braces, and the cross-rods. 4th. Combined in a wagon-body or box having a semi-circular form, the half circular ends and a series of side staves, the side top plates, the hoops, the burs, the end top plates and the bolsters. 5th. Combined in a wagon-body or box, having a semi-circular form, the half circular ends, and a series of side staves the side top plates, the hoops, the burs, the end top plates, the bolsters,

and the bolster side plates. 6th. Combined in a wagon-body or box having a semi-circular form, the half circular ends, and a series of side staves, the side top plates, the hoops, the burs, the end top plates, the bolsters, the bolster side plates, and the stake boxes. 7th. Combined in a wagon-body or box having a semi-circular form, the half circular ends, and a series of side staves, the side top plates, the hoops, the burs, the end top plates, the bolsters, the bolster side plates, the stake-boxes, and a door at the rear end of the box for controlling a discharge-opening therein. 8th. Combined in a wagon-body or box having a semi-circular form, the half circular ends, and a series of side staves, the side top plates, the hoops, the burs, the end top plates, the bolsters, the bolster side plates, the stake-boxes, the door closing the opening in the end of the box, and the foot-board at the front end of the box.

**No. 57,242. Windmill. (Moulin à vent.)**

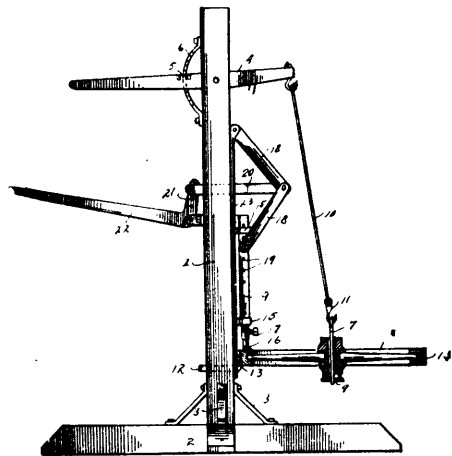


Myron Twiss, Norfolk, Nebraska, U.S.A., 28th August, 1897; 6 years. (Filed 2nd August, 1897.)

*Claim.*—1st. In a windmill, the combination with a tower, of the wheel journaled therein, the blades secured to the wheel, as described, a series of links pivotally connected together and extending circumferentially around the wheel and concentrically thereto, a series of lugs pivotally connected at one end to the links and extending inwardly therefrom, a series of uprights or posts arranged around the wheel, a series of blinds connected pivotally at one end of the posts and secured to the inner end of the lugs and each of said blinds adapted to extend across and temporarily close the opening between two adjacent posts, a bracket secured to one of the posts, a lever pivoted centrally to the bracket, links pivoted at one end to the opposite ends of the lever, and at the opposite end pivoted to two of the circumferentially-arranged links, ropes connected at one end to said two links, a bell-crank lever to which the other ends of the rope are connected, all as specified.

**No. 57,243. Tire Remover.**

(Appareil à enlever les bandages.)

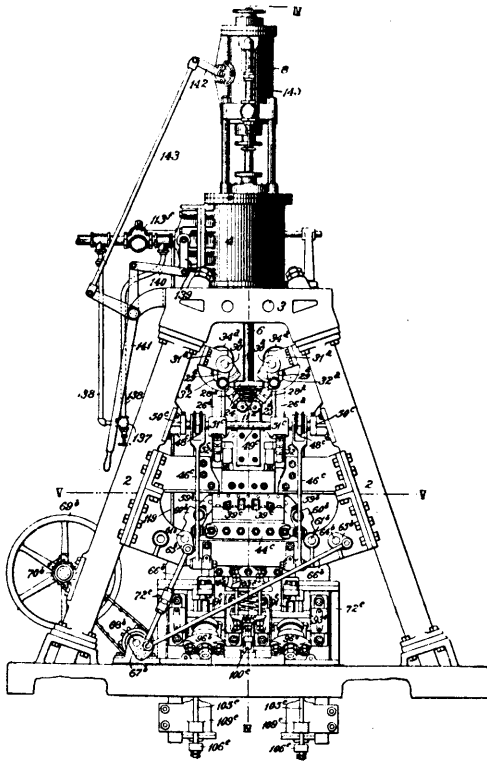


Robert Monroe Otey, Goleta, California, U.S.A., 28th August, 1897; 6 years. (Filed 2nd August, 1897.)

*Claim.*—1st. In a tire remover, the combination of a post provided with a rest to engage with the tire, a pusher-bar to engage with the

rim or felly and slidably mounted upon the post, actuating mechanism supported by the post for operating the pusher-bar, a link engaging with the hub of the wheel and having the latter rotatably mounted thereon, a rod having loose connection with the link, a lever fulcrumed to the upper end of the said post and having the rod loosely connected therewith, and adapted to raise and lower the link, and means for holding the lever in adjusted position, substantially as set forth. 2nd. In a tire-remover, the combination with a post, and means supported thereby for removing the tire, of a lever fulcrumed to the post and provided with means for holding it in an adjusted position, a rod having loose connection with the lever and adapted to swing outward at its lower end to suit different-sized wheels, a link having loose connection with the lower end of the swinging rod to pass through the hub of a wheel and having the latter rotatably mounted thereon, and a pin passing transversely through the lower end of the link and supporting the wheel thereon, substantially as set forth. 3rd. The herein-described means for removing the tire from a wheel, consisting of a post, a plate secured to the post and having upper and lower guides, a rest having adjustable connection with the plate and forming a support for the tire, a puncher-bar slidably mounted in the guides, a foot detachably connected with the pusher-bar and constructed to engage with the rim or felly, toggle-levers having pivotal connection with the said plate at one end, and adjustable connection at the opposite end with the pusher-bar, a bell-crank lever, a link adjustably connecting the toggle-levers with an arm of the bell-crank lever, a supporting rod, a lever fulcrumed to the post and having the supporting rod connected therewith, and provided with means whereby it may be secured in an adjusted position, and a link having loose connection with the rod, and adapted to rotatably support the wheel to be operated upon, substantially as set forth.

No. 57,244. Press. (Press.)



57244

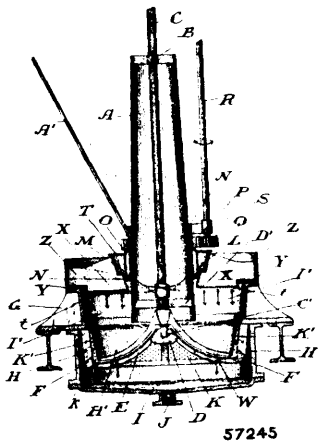
George Lee Peabody, Pittsburg, Pennsylvania, U.S.A., 28th August, 1897; 6 years. (Filed 2nd August, 1897.)

Claim.—1st. In a press, the combination of a reciprocating plunger, a compressing box or mould open at both ends, stationary cutting blades arranged on opposite sides of the box at the charging end thereof, and blades attached to the plunger, and a retaining plunger for holding the material in the box or mould during the return movement of the main plunger, substantially as set forth. 2nd. In a press, the combination of a main plunger, a retaining plunger, means for holding the retaining plunger stationary, a box or mould open at both ends, catches arranged at the upper end of the box or mould, and means for shifting the catches, substantially as set forth. 3rd. In a press, the combination of a main plunger, a retaining plunger, means operative by the main plunger for holding the retaining plunger stationary, a box or mould open at both ends,

catches arranged at the upper end of the box or mould, and means for operating the catches, substantially as set forth. 4th. In a press, the combination of a main plunger, a retaining plunger, means for holding the retaining plunger stationary, a box or mould, catches arranged at the upper end of the box or mould, and means operative by the main plunger for shifting the catches, substantially as set forth. 5th. In a press, the combination of a main plunger, a retaining plunger, a cross-head connected to the retaining plunger, a spring arranged between the cross-head and the main plunger, cams and connections from the cams to the main plunger whereby the cams are moved inwardly over the cross-head during the downward movement of the main plunger, and are forced outwardly during the upward movement of the latter, substantially as set forth. 6th. In a press, the combination of a plunger, a box or mould, catches for retaining the material in the box or mould, springs for shifting the catches inwardly, levers connected to the catches, and cams operated by the plunger for shifting the levers and catches outwardly during the downward movement of the plunger, substantially as set forth. 7th. In a press, the combination of a plunger, a box or mould open at both ends, two side walls of the box or mould being provided with movable sections and means for shifting said sections and locking them in closed position, substantially as set forth. 8th. In a press, the combination of a plunger, a box or mould open at both ends, and provided on opposite sides with movable sections, arms secured to shafts and having a link connection to the movable sections, and means for simultaneously rotating the arms to shift the sections to and from closed position, substantially as set forth. 9th. In a press, the combination of a stationary box or mould having open ends, a plunger for forcing the material into the box or mould, and supports for yieldingly preventing the onward movement of the block or bale through the box or mould, whereby the material is subjected to compression during its passage through the box or mould, substantially as set forth. 10th. In a press, the combination of a plunger, a box or mould having open ends, yielding supports for resisting the onward movement of the material being pressed through the box or mould, and means for withdrawing said supports on a predetermined movement of such material through the box, substantially as set forth. 11th. In a press, the combination of a plunger, automatic means for operating the plunger, a box or mould open at both ends, yielding supports for resisting the onward movement of the material through the box, and mechanism operative on a predetermined movement of the material being pressed through the box for stopping the plunger, substantially as set forth. 12th. In a press, the combination of a plunger, automatic means for operating the plunger, a box or mould open at both ends, mechanism operative to stop the plunger on a predetermined movement of the material being pressed through the box and to start the plunger on a further movement of such material, substantially as set forth. 13th. In a press, the combination of a plunger, a box or mould open at both ends, tongues projecting into the path of movement of the material being pressed, and springs arranged to present a gradually increasing resistance to the movement of the tongues when shifted by the material, substantially as set forth. 14th. In a press, the combination of a plunger, a box or mould open at both ends, tongues projecting into the path of movement of the bale or block, springs arranged to prevent a gradually increasing resistance to the movement of the tongues during a portion of their travel and to shift the tongues in the direction of the movement of the bale or block after a further movement of the tongues, and springs arranged to resist the secondary action of the first springs, substantially as set forth. 15th. In a press, the combination of a plunger, a box or mould open at both ends, tongues projecting into the path of movement of the bale or block, springs arranged to present a gradually increasing resistance to the movement of the tongues during a portion of their travel and to shift the tongues in the direction of movement of the bale or block after a further movement of the tongues, springs arranged to resist the secondary action of the first springs, and means for withdrawing the tongues from the path of movement during conjoint operation of both springs, substantially as set forth. 16th. In a press, the combination of a plunger, a box or mould open at both ends, a movable block, a tongue mounted on the block and projecting into the mould, a lever having an adjustable connection with the tongue and means operative by the block for shifting the lever, whereby the tongue is withdrawn from the box or mould, substantially as set forth. 17th. In a press, the combination of a plunger, a box or mould open at both ends, a movable block, a tongue mounted on the block and projecting into the box or mould, a lever having an adjustable connection with the tongue, a pivotally mounted dog having a pivotal connection to the lever, and provided with toes and a finger attached to the block and adapted to engage the toes on the dog, substantially as set forth. 18th. In a press, the combination of a plunger, a box or mould open at both ends, a movable block, a tongue mounted on the block and projecting into the box or mould, a bar or rod having a pivotal connection to the block, a pivotal support for the bar or rod constructed to permit of a longitudinal, as well as a rocking movement of the bar or rod and a spring arranged to resist the longitudinal movement of the bar or rod, substantially as set forth. 19th. In a press, the combination of a plunger, a box or mould open at both ends, a movable block, a tongue mounted on the block and projecting into the box or mould, a bar or rod having a pivotal connection to the block, a pivotal support for the bar or rod normally holding the latter at an angle less than a right angle to the path of movement of the block and con-

structed to permit of a longitudinal, as well as rocking, movement of the bar or rod, a spring arranged to resist the longitudinal movement of the bar or rod, and a spring arranged to impart an initial upward movement of the block, substantially as set forth. 20th. In a press, the combination of a plunger, a box or mould open at both ends, a movable block, a tongue mounted on the block and projecting into the box or mould, a shaft, a bar or rod passing through the shaft and having a pivotal connection to the block, the shaft being arranged so that in the normal position of the parts the bar will be at an angle less than a right angle to the path of movement of the block, a spring arranged to resist the longitudinal movement of the bar or rod through the shaft, an arm secured on the shaft and a spring arranged in the path of movement of said arm, substantially as set forth. 21st. In a press, the combination of a plunger, automatic means for operating the plunger, a box or mould open at both ends, a movable block, a tongue mounted on the block and projecting into the box or mould, a shaft connection from the movable block to the shaft whereby the latter is rotated by the block when shifted, an arm secured to the shaft, a pawl pivotally mounted on the shaft, an arm loosely mounted on the shaft, connections from the arm to the mechanism operating the plunger, the loosely mounted arm being held in engagement with the pawl by such connections and a trip for shifting the pawl out of engagement with the loose arm, substantially as set forth.

**No. 57,245. Filtering Device.** (*Appareil a filtrer.*)



Henry James Murney and William Thomas Murney, both of Goderich, Ontario, Canada, 28th August, 1897; 6 years. (Filed 20th February, 1896.)

*Claim.*—1st. In a filtering device, means for continually feeding fresh supplies of filtering material to the material being filtered, in combination with a suitable outlet for the filtered material, and means for discharging the filtering material from the device, substantially as and for the purpose specified. 2nd. In a filtering device the combination with the feed cylinder A, of the suitably perforated chamber I<sup>1</sup>, the rotatable and suitably perforated trough T, and scraper U, operating in the chamber I<sup>1</sup>, substantially as specified. 3rd. In a filtering device, the combination with the feed cylinder A of the suitably perforated chamber I<sup>1</sup>, the rotatable trough T, provided with outlet t<sup>1</sup>, the perforated basin X, attached to the trough T, and the rotatable scraper U for removing the filtering material, substantially as specified. 4th. In a filtering device, the combination with the feed cylinder A, of the perforated base plate K, and perforated sides K<sup>1</sup>, suitably supported, the rotatable trough T, provided with perforated outlets t<sup>1</sup>, the perforated basins X, X, attached to the trough T, and the rotatable scrapers U, U, for removing the filtering material, substantially as specified. 5th. In a filtering device, the combination with the feed cylinder A, of the perforated base plate K, and perforated sides K<sup>1</sup>, suitably supported, the baffle ring H<sup>1</sup>, inside the perforated sides K<sup>1</sup>, the rotatable trough T, provided with perforated outlets t<sup>1</sup>, the perforated basins X, X, attached to the trough T, and the rotatable scrapers U, U, for removing the filtering material on to the ledge formed by the flange Y, and the auxiliary scrapers Z, Z, for removing the filtering material from the ledge through the hole Y<sup>1</sup>, substantially as specified. 6th. In a filtering device, the combination with the feed cylinder A of the rotatable main shaft C, suitably journaled, the worm L, one or more rotatable arms W, the perforated base plate K, and perforated sides K<sup>1</sup>, suitably supported, the rotatable trough T, provided with suitable outlets, one or more basins X, attached to the trough T, and one or more rotatable scrapers U, for removing the filtering material, substantially as specified. 7th. In a filtering device, the combination with the feed cylinder A, of the rotatable main shaft C, suitably journaled, the worm L, one or more arms W, the perforated base plate K, and perforated sides K<sup>1</sup>, suitably supported, the rotatable trough T, provided with suitable outlets, one or more basins X, attached to the trough T, one or more rotatable scrapers

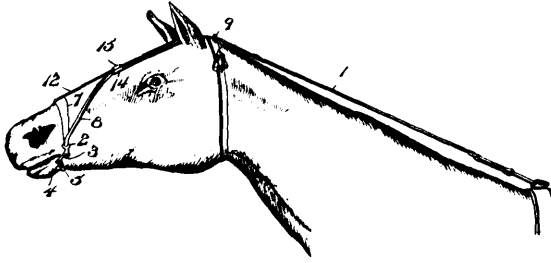
U, and one or more auxiliary scrapers Z, for removing the filtering material from the ledge formed by the flange Y, through the hole Y<sup>1</sup>, substantially as specified. 8th. In a filtering device, the combination with the feed cylinder A, of one or more rotatable arms W, the chamber I<sup>1</sup>, provided with perforated sides K<sup>1</sup>, suitably supported, and the baffle ring H<sup>1</sup>, substantially as specified. 9th. In a filtering device, the combination with the feed cylinder A, of the shaft R, the bearing box S, toothed pinion Q, and toothed wheel P, meshing therewith, the sleeve ring O, movable in the guideway N, and the trough T, attached to the sleeve ring O, substantially as specified. 10th. In a filtering device, the combination with the feed cylinder A, of the shaft R, the bearing box S, toothed pinion Q, and toothed wheel P, meshing therewith, sleeve ring O, guideway N, for the sleeve ring O, rotatable trough T, with suitable outlet, the perforated basin X, and the scraper U, operating in the upper chamber I<sup>1</sup>, substantially as specified. 11th. In a filtering device, the combination with the feed cylinder A, of the shaft R, bearing box S, the toothed pinion Q, and toothed wheel P, meshing therewith, sleeve ring O, guideway N, for the sleeve ring O, rotatable trough T, with suitable outlet, one or more perforated basins X, suitably attached to the rotatable trough, one or more scrapers U, and one or more scrapers Z, for removing the filtering material from the ledge formed by the flange Y, through the hole Y<sup>1</sup>, substantially as specified. 12th. In a filtering device, the combination with the feed cylinder A, of the rotatable main shaft C, suitably journaled, the worm L, suitably attached to the main shaft and rotated thereby, the socket block D, suitably supported in operative position for the main shaft, the perforated base plate K, and perforated sides K<sup>1</sup>, forming with the main frame the open upper chamber I<sup>1</sup>, the baffle ring H<sup>1</sup>, and the bottom chamber I, with outlet orifice J, substantially as specified. 13th. In a filtering device, the combination with the feed cylinder A, of the rotatable main shaft C, with pivot C<sup>1</sup>, the spiders B, D<sup>1</sup>, for holding the shaft in operative position, the worm L, suitably attached to the main shaft and rotated thereby, the socket block D, and legs E, for holding the socket block D in operative position, the base ring F, the braces H, connecting the ring F to the main frame, perforated base plate K, and perforated sides K<sup>1</sup>, forming with the main frame the open upper chamber I<sup>1</sup>, the baffle-ring H<sup>1</sup>, and the bottom chamber I, with outlet orifice J, substantially as specified. 14th. In a filtering device, the combination with the feed cylinder A, of the rotatable main shaft C, suitably journaled, one or more arms W, the open upper chamber I<sup>1</sup>, and a suitable outlet for the liquid, substantially as described and for the purpose specified. 15th. In a filtering device, the combination with the feed cylinder A, of the rotatable main shaft C, suitably journaled, one or more arms W, the open upper chamber I<sup>1</sup>, suitably perforated, and the chamber I, with suitable outlet for the liquid, substantially as specified. 16th. In a filtering device, the combination with the feed cylinder A, of the rotatable main-shaft C, suitably journaled, the worm L rotatable by means of the shaft C, the suitably perforated open upper chamber I<sup>1</sup>, and one or more arms W, operating in said chamber I<sup>1</sup>, substantially as specified. 17th. In a filtering device, the combination with the feed cylinder A, of one or more rotatable arms W, and the chamber I<sup>1</sup>, suitably perforated and supported, substantially as specified. 18th. In a filtering device, the combination with the feed cylinder A, of the suitably perforated chamber I<sup>1</sup>, one or more rotatable scrapers U, operating in the chamber I<sup>1</sup>, and one or more rotatable arms W, substantially as specified. 19th. In a filtering device, the combination with the feed cylinder A, of the perforated chamber I<sup>1</sup>, suitably supported, one or more rotatable scrapers U, and one or more auxiliary scrapers Z, for removing the filtering material from the ledge Y, substantially as specified. 20th. In a filtering device, the combination with the feed cylinder A, of the rotatable main shaft C, suitably journaled, one or more rotatable arms W, the chamber I<sup>1</sup>, the guideway N, and sleeve ring O, the annular trough T, and basins X, substantially as specified. 21st. In a filtering device, the combination with the feed cylinder A, of the rotatable main-shaft C, suitably journaled, one or more rotatable arms W, the chamber I<sup>1</sup>, guideway N, and sleeve ring O, the toothed wheel P, meshing with the toothed pinion Q, the bracket S, and the shaft R, journaled therein, and one or more rotatable scrapers U, substantially as specified.

**No. 57,246. Horse Checking Device.** (*Appareil a arreter les chevaux.*)

George E. Hutton, Holton, Kansas, U.S.A., 28th August, 1897; 6 years. (Filed 2nd August, 1897.)

*Claim.*—1st. A horse breaking and driving bit having a bowed and centrally broadened body portion provided with upturned extremities terminating in check rings, and downwardly and forwardly curved arms of reduced thickness springing from the upturned extremities of the body portion adjacent to the check rings and terminating in eyes for engagement by the extremities of a chin-rest, said eyes being below the plane of the body portion of the bit, substantially as described. 2nd. The combination with a bit having terminal check rings and forwardly extending levers, and a chin-rest connected to the front extremities of said levers, of a nose-band provided with integral extensions arranged to slide in the check rings and extended to form draw-reins, a check strap connected to said draw-reins, and means for adjusting the centre of the nose-band forwardly and rearwardly upon the nose of the horse, sub-

stantially as specified. 3rd. The combination with a bit having check rings and a chin-rest connected to the bit, of a nose-band

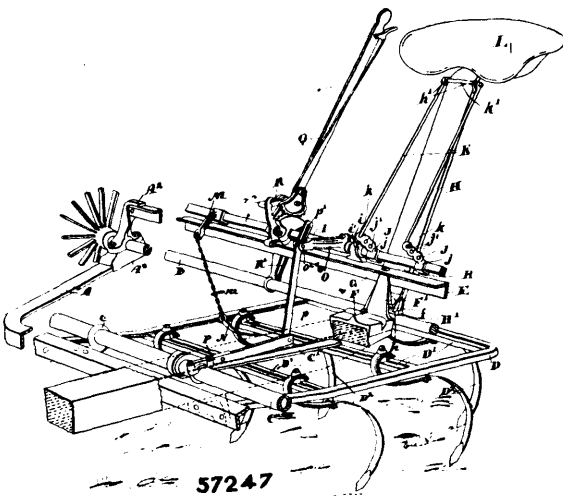


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provided with extensions arranged to slide in the check rings and extended to form draw-reins, a check strap connected to said draw-reins, and an adjusting strap attached to the centre of the nose-band and extending longitudinally of the nose of the horse between the draw-reins, and provided with means for varying its tension to arrange the centre of the nose-band at the desired point on the nose of the horse, substantially as specified. 4th. The combination with a bit provided with terminal check rings and forwardly extending levers, and a chin-rest attached at its extremities to said levers, of a nose-band having integral extensions arranged to slide in said check rings and extended to form draw-reins, a check strap connected to the extremities of the draw-reins, and a loop mounted to slide upon the draw-reins and hold the same together at the point of contact therewith and adapted to be arranged near the nose-band or remote therefrom to vary the upward pressure of the bit and the downward pressure of the nose-band, substantially as specified. 5th. The combination with a bit having check rings, of a nose-band having extensions arranged to slide in said check rings and extended to form draw-reins, a check strap connected to the extremities of the draw-reins, and a loop mounted to slide upon the draw-reins at an intermediate point and hold opposite or corresponding parts of said draw-reins contiguous to each other, said loop being adapted to be arranged near the nose-band or remote therefrom to vary the downward pressure of the nose-band, substantially as specified. 6th. The combination with a bit having terminal check rings, and forwardly extending levers, and a chin-rest connected to said levers, of a nose-band having extensions arranged to slide in said check rings and extended to form draw-reins which are attached to a check strap, a crown piece having guides through which the draw-reins extend, a loop mounted to slide upon the draw-reins and hold the same together at an intermediate point, and a central adjusting strap attached at one end to the centre of the nose-band, extending through a clip on the loop and attached to the crown piece by a buckle, substantially as specified.

**No. 57,247. Spring Tooth Cultivator.**

(Cultivateur à dents élastiques.)



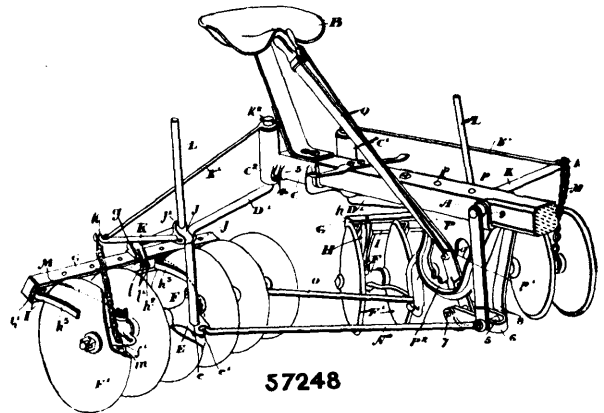
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The Massey-Harris Company, assignee of William F. Johnston and William John Clokey, all of Toronto, Ontario, Canada, 28th August, 1897; 6 years. (Filed 10th August, 1897.)

Claim.—1st. In a spring tooth cultivator, in combination, the sections suitably hinged to the frame, means for raising the sections, and a seat having a standard pivoted on the frame and connections between such standard and the raising means for the sections to

counterbalance the weight of such sections, as and for the purpose specified. 2nd. In a spring tooth cultivator, in combination, the sections suitably hinged to the frame, means for raising the sections, the tongue, the seat, the seat standard pivotally connected at the rear end of the tongue and connections between such standard and the raising means for the sections to counterbalance the weight of such sections, as and for the purpose specified. 3rd. In a spring-tooth cultivator, in combination, the sections suitably hinged to the frame, means for raising the sections, the tongue provided with a bracket at the rear end and a hook forming part of same, the seat, the seat standard having a stirrup-plate fastened to its lower end, so that the bar extends within the hook and connections between such standard and the raising means for the sections to counterbalance the weight of such sections, as and for the purpose specified. 4th. In a spring tooth cultivator, in combination, the sections suitably hinged to the frame, the controlling rod suitably journaled in the frame and a flexible connection from the arm to the section, the seat, the seat standard pivoted on the frame, the arm secured on the controlling rod and rods connecting such arms to the upper end of the seat standard, as and for the purpose specified. 5th. In a spring tooth cultivator, in combination, the sections suitably hinged to the frame, the controlling rod suitably journaled in the frame, the eccentrically formed toothed quadrant secured on the controlling rod, the lever, the eccentrically pivoted quadrant on the lever, meshing with the quadrant on the controlling rod, means for holding the lever in any desired position, the seat, the seat standard pivotally held on the frame, connections between the upper end of the seat standard and supporting means between the upper end of the seat standard and the controlling rod, as and for the purpose specified. 6th. In combination, the sections hinged to the front portion of the frame, the tongue having the rear bracket F, with inclined end F', and hook f, the cross bar E, suitably held in the frame, the controlling rod I, provided with the arm M, and chain m, and arm N, connecting it to the sections, the journal sleeve I, and bearings I, secured to the rod E, the seat, and seat standard having stirrup plate H', fitting within the hook, the arms J, rods K, and bolts K', and means for turning the rod, as and for the purpose specified. 7th. In combination, the sections suitably hinged to the front portion of the frame, the axle B, bearings A', cross bar E, controlling rod I, quadrant, supporting bracket R, having a depending portion R', secured on the axle by a staple bolt, the arms M, chain m, arm N, eccentrically formed toothed quadrants S and T, stationary toothed quadrants r', forming part of the supporting bracket R, and lever O, provided with plunger q, all arranged as and for the purpose specified. 8th. In combination, the frame, the section or sections hinged to the frame, the cross bar C, journaled in brackets secured to the front bar of the frame, the rearwardly extending flat spring secured to the cross bar, the arm P, bar p, provided with an upper slot p', controlling rod I, arm O, with forked end and pin o', extending through the slot p', and means for turning the controlling rod as and for the purpose specified. 9th. In combination the frame, the section or sections hinged to the frame, the cross bar C, journaled in brackets secured to the front bar of the frame, the rearwardly extending flat spring secured to the cross bar, the arm P, bar p, provided with an upper slot p', controlling rod I, arm O, with forked end and pin o' extending through the slot p', the eccentrically formed quadrant S, the quadrant T forming portion of the lever O, pivoted on the stud t, and meshing with the quadrant S, the plunger q, and the ratchet shaped toothed quadrant forming part of the bracket R, and arranged as and for the purpose specified.

**No. 57,248. Disc Harrow. (Herse à disque.)**



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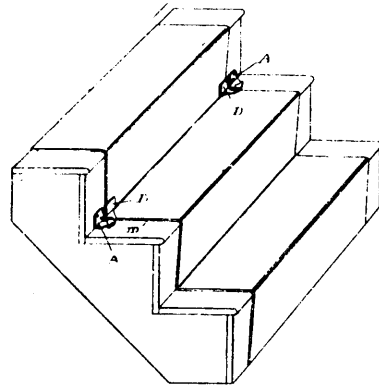
The Massey-Harris Company, assignee of William F. Johnston and William John Clokey, all of Toronto, Canada, 28th August, 1897; 6 years. (Filed 10th August, 1897.)

Claim.—1st. In a disc harrow, a frame having laterally extending independent arms arranged to swing with the gangs and a flexible connection with the arms at or near the centre of the gangs to

allow of vertical action to each gang, as and for the purpose specified. 2nd. In a disc harrow, a frame having laterally extending independent arms arranged to swing with the gangs and a flexible connection with the arms at or near the centre of the gangs to allow of vertical action to each gang and a chain connection between the concaved end of each disc gang and a suitable relative point of the arms, as and for the purpose specified. 3rd. In a disc harrow, in combination the pole or tongue, the gangs, the vertical sleeves suitably secured to the rear end of the pole, the independent arm journalled at the inner end in sleeves and having a flexible connection at the outer end to the centre of the gangs, as and for the purpose specified. 4th. In a disc harrow, in combination the pole or tongue, the gangs, the bracket embracing the rear end of the pole and provided with two vertical sleeves one forward of the other and at opposite sides of the pole, the L-shaped arms journalled at the inner end in the sleeves and having the outer vertical end flexibly connected to the centre of the gangs, as and for the purpose specified. 5th. In a disc harrow, in combination the pole or tongue, the gangs, the vertical sleeves secured to the rear end of the pole, the independent arms journalled at the inner end in the sleeves, and having a flexible connection at the outer end to the centre of the gangs, and flexible means for connecting the inner ends of the gangs when they are arranged to throw the soil inwardly to a point beneath the pivot or hinging point of the arms, as and for the purpose specified. 6th. In a disc harrow, in continuation, the pole or tongue, the gangs, the vertical sleeves secured to the rear end of the pole, the independent arms journalled at the inner end in the sleeves and having a flexible connection at the outer end to the centre of the gangs, eyes on the inner end of the journals, retaining logs having inclined interior ribs and a chain connection extending through eyes formed on the journals at the inner end of the gangs and held at the upper end within the inclined ribs of the lugs, as and for the purpose specified. 7th. A disc harrow comprising a stationary centre frame, upright sleeves forming part thereof, laterally extending arms journalled at the centre in such sleeves and the gangs flexibly connected at or near the centre to the outer ends of the arms and means for angling the gangs, as and for the purpose specified. 8th. A disc harrow comprising a stationary centre frame, upright sleeves forming part thereof, laterally extending arms journalled at the centre in such sleeves, the gangs flexibly connected at or near the centre to the outer ends of the arms, a bracket on the tongue provided with an open centre and an internal quadrant, the tie-rods flexibly connected to eyes on the inner ends of the gangs and eyes on the lower rear ends of the bracket, the draught-rods flexibly connected at the rear end to eyes in the centre of the gangs, the adjusting lever having a plunger designed to engage with the internal quadrant of the bracket and having a U-shaped lower end, a U-shaped link, hangers supporting the same from the tongue and a bolt extending through the rear of the U-shaped link, U-shaped lower end of the lever and the forward ends of the draught-rods, as and for the purpose specified. 9th. In a disc harrow, in combination, the pole or tongue, the gangs, the vertical sleeves secured to the rear end of the pole, the independent arms journalled at the inner end in the sleeves and having a flexible connection at the outer end to the centre of the gangs, the supplemental arms extending laterally outwardly from the ends of the main arms and a chain connection between the outer end of such supplemental arms and the outer ends of the gangs when such gangs are arranged to throw the soil outwardly, as and for the purpose specified. 10th. In a disc harrow, in combination, the pole or tongue, the gangs, the vertical sleeves secured to the rear end of the pole, the independent arms journalled at the inner end in the sleeves and having a flexi-

ble connection at the outer end to the centre of the gangs, a bracket secured at the outer angles of the arms by a staple bolt, supplemental arms secured at the inner ends in such brackets and having forked ends, bracing rods connecting the outer ends of the supplemental arms to the inner ends of the main arm over its pivot point and a chain connection extending at the lower end through eyes in the journal box and held in the forks of the supplemental arms at the upper end when the gangs are arranged to throw the soil outwardly, as and for the purpose specified. 11th. In a disc harrow, in combination, the pole or tongue, the gangs, the vertical sleeves secured to the rear end of the pole, the independent arms journalled at the inner end in the sleeves and having a flexible connection at the outer end to the centre of the gangs, the scraper beams and standards connecting them to the gangs, the scraper rods and scraper L-shaped lever suitably journalled at the outer angle of the arms, the bracket on the scraper beam to receive the rear end of the lever, the fork-shaped hanger secured to the lever and the pin on the scraper-rod, which such fork-shaped hanger straddles, as and for the purpose specified.

**No. 57,249. Stair Carpet Fastener,**  
(*Attache de tapis d'escalier.*)



57249

Christian Gottlob Triesler and Robert Charles Burns, assignee of  
Christian Gottlob Triesler, all of Baltimore, Maryland, U.S.A.,  
28th August, 1897; 6 years. (Filed 12th August, 1897.)

*Claim.*—1st. In a fastener for stair carpets, the combination of a base-plate, a carpet-pressing arm hinged to said base-plate, and having a lateral member with a rear end, and a cam pivoted to the base plate, and having an edge curved eccentrically with respect to its pivot—said curved edge serving to bear on said rear end, and thereby tighten the arm against the carpet. 2nd. In a fastener for stair-carpets, the combination of a base-plate, a carpet-pressing arm hinged to said base-plate and having a lateral member with a rear end, a cam pivoted to the base-plate and having an edge curved eccentrically with respect to its pivot—said curved edge serving to bear on said rear end and thereby tighten the arm against the carpet, and a spring acting on the said cam to keep its curved edge pressed against the said rear end of the lateral member.

# TRADE - MARKS

Registered during the month of August, 1897, at the Department of Agriculture—  
Copyright and Trade-Mark Branch.

6128. B. HOUDE ET COMPAGNIE, Québec, Qué. Tabac à fumer et chiquer, 3 août 1897.
6129. WILLIAM MANN, Montreal, Que., Trading as WILLIAM CLENDIN-  
NENG AND SON. Stoves, Ranges and Heaters, 3rd August, 1897.
6130. CLARK AND COMPANY, LIMITED, Paisley, Scotland. Sewing and  
Crochet-Cottons and Woollen Yarns and Threads, 3rd August,  
1897.
6131. HIRAM WALKER AND SONS, LIMITED, Walkerville, Ont. Distilled  
Liquors, 3rd August, 1897.
6132. HERMANN H. WOLFF AND COMPANY, Montreal, Que. Worsted Serge,  
5th August, 1897.
6133. THOMASPHOSPHAT-FABRIKEN GESELLSCHAFT MIT BES-  
CHRANKTER HAFTUNG, Karlsbad 17, Berlin, Prussia, Ger-  
many. Fertilizers, 6th August, 1897.
6134. WILLIAM HOLLINS AND COMPANY (NOTTINGHAM) LIMITED,  
Pleasley Works, Mansfield, Nottingham, England. Cloths and  
Stuffs of Wool, Worsted or Hair, and other similar goods, 9th  
August, 1897.
6135. } B. HOUDE ET COMPAGNIE, Québec, Qué. Tabac coupé, plug et cigarettes,  
6136. } 9 août 1897.
6137. E. A. SMALL AND COMPANY, Montreal, Que. General Trade-Mark, 11th  
August, 1897.
6138. J. LEMESURIER AND SONS, Quebec, Que. Tobacco, 11th August, 1897.
6139. THE GEO. E. TUCKETT AND SON COMPANY, LIMITED, Hamilton,  
Ont. Tobacco, 13th August, 1897.
6140. McALPIN TOBACCO COMPANY, Toronto, Ont. Cut Smoking Tobacco,  
13th August, 1897.
6141. IMPERIAL OIL COMPANY, LIMITED, Petrolia, Ont. Kerosene Oil,  
14th August, 1897.
6142. S. DAVIS AND SONS, Montreal, Que. Cigars, Cigarettes and Tobaccos,  
16th August, 1897.
6143. R. J. GRAHAM, Belleville, Ont. Cheese, 17th August, 1897.
6144. BESSON AND COMPANY, LIMITED, 198 Euston Road, London, England.  
Musical Instruments, 18th August, 1897.
6145. ERASTE D'ODET D'ORSONNENS, Hull, Qué. Remèdes, 19 août 1897.
6146. Z. S. LAWRENCE, West Shefford, Que. Butter, 19th August, 1897.
6147. } ST. LAWRENCE STARCH COMPANY, LIMITED, Port Credit, Ont.  
6148. } Starch, 20th August, 1897.  
6149. }
6150. GUSTAV WILLIBALD HANSEN, Halle on the Saale, Prussia, Germany.  
Watertight dressing for Leather, 21st August, 1897.
6151. ADAM BLACKHALL MITCHELL, Toronto, Ont. Collars and Cuffs, 21st  
August, 1897.
6152. D. S. PERRIN AND COMPANY, London, Ont. Biscuits, Candies and Con-  
fectionery, 21st August, 1897.
6153. NORTH AMERICAN CHEMICAL COMPANY, LIMITED, Goderich,  
Ont. Salt, 21st August, 1897.
6154. JAMES EWART McWILLIAM, Hubbardston, Massachusetts, U.S.A.  
Cement for Bicycle Tires, 23rd August, 1897.
6155. } WILLIAM PATON, Johnstone, near Glasgow, Scotland. Boot and Shoe  
6156. } Laces, 25th August, 1897.  
6157. }  
6158. }
6159. } FARBERWERKE VORMALS MEISTER, LUCIUS AND BRÜNING,  
6160. } Höchst on the Main, Germany. Chemical Substance, 26th  
August, 1897.
6161. HERMANN H. WOLFF AND COMPANY, Montreal, Que. Skirt Binding,  
26th August, 1897.



# COPYRIGHTS

Entered during the month of August, 1897, at the Department of Agriculture—  
Copyright and Trade-Mark Branch.

9388. GLADSTONE AND LAURIER, AT HAWARDEN CASTLE, 10TH JULY, 1897. (Picture.) Andrew Stewart, Montreal, Que., 3rd August, 1897.
9389. GÉOGRAPHIE. A l'usage des élèves de la Congrégation de Notre-Dame, Cours Moyen et Cours Supérieur. (Deuxième Edition.) La Communauté de la Congrégation de Notre-Dame de Montréal, Montréal, Qué., 3 août 1897.
9390. IN THE NEW CAPITAL; OR, THE CITY OF OTTAWA IN 1899. By John Galbraith, Barrister, Toronto, Ont., 3rd August, 1897.
9391. LOVELL'S MONTREAL DIRECTORY, 1897-98. John Lovell & Son, Montreal, Que., 5th August, 1897.
9392. SHEPARD'S MONTREAL PRACTICAL HOUSE-KEEPERS' ACCOUNT BOOK AND GUIDE. William A. Shepard, jr., Montreal, Que., 5th August, 1897.
9393. PROTESTANT UNION AT LAST; OR, THE NEW CHURCH. (Showing the Proceedings of Private Meetings of the Christian Endeavour Union for More Unity in Worship.) By C. K. Chisholm. C. K. Chisholm, Moose Creek, Ont., 5th August, 1897.
9394. MONSEIGNEUR PAUL BRUCHESI, ARCHEVÊQUE DE MONTREAL. (Photographie.) Laprés et Lavergne, Montréal, Qué., 5 août 1897.
9395. AWAY FROM NEWSPAPERDOM, AND OTHER POEMS. By Bernard McEvoy, with Decorations by G. A. Reid, R.C.A. George N. Morang, Toronto, Ont., 6th August, 1897.
9396. LE CHIEN DU CAPITAINE, by Louis Enault, and LA FÉE (The Comedy), by Octave Feuillet. Edited with Notes, Exercises and Vocabulary by F. H. Sykes, M.A., Ph.D., and E. J. McIntyre, B.A. The Copp, Clark Co. (Ltd.), Toronto, Ont., 7th August, 1897.
9397. DIRECTIONS HOW TO MAKE THE BEST WINDOW ATTRACTION IN THE WORLD. Alfred Buckenham, Bothwell, Ont., 7th August, 1897.
9398. SYSTEMATIC COURSE OF EXERCISES IN COMPOSITION FOR LEAVING AND CONTINUATION CLASSES IN PUBLIC SCHOOLS, &c. David Williams, Collingwood, Ont., 9th August, 1897.
9399. THE HISTORY OF THE DOMINION OF CANADA. By W. H. Clement, B.A., LL.B. The Copp, Clark Co. (Ltd.), and William Briggs, Toronto, Ont., 9th August, 1897.
9400. JUBILEE WALTZ. By Ida May Black, Quebec, Que., 10th August, 1897.
9401. THE CHRISTIAN. (A Story.) By Hall Caine. D. Appleton & Co., New York, N.Y., U.S.A., 10th August, 1897.
9402. SIMPSON'S TABULATED SYLLABIC AND VOWEL-CENTRE BUSINESS CHART, FOR SCHOOLS, TYPEWRITERS, PRINTERS' CASES, LINOTYPES, &c. Caleb P. Simpson, London, Ont., 10th August, 1897.
9403. A COLLECTION OF RELIABLE RECIPES--CAKE COOKING. Lawson & Jones, London, Ont., 11th August, 1897.
9404. THE CAUSE OF DISEASE, Part II. Frank Mirton Robertson Spendlove, Montreal, Que., 17th August, 1897.
9405. THE DELINEATOR. (A Journal of Fashion, Culture and Fine Arts), September, 1897. The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th August, 1897.
9406. THE GLASS OF FASHION UP TO DATE. (September, 1897.) The Butterick Publishing Co. (Ltd.), New York, N.Y., U.S.A., 12th August, 1897.
9407. McALPINE'S HALIFAX DIRECTORY, 1897. Hezekiah M. McAlpine, Halifax, N.S., 12th August, 1897.
9408. THE CANADIAN MAGAZINE. (July, 1897.) The Ontario Publishing Co. (Ltd.), Toronto, Ont., 13th August, 1897.



9409. THE CANADIAN MAGAZINE. (August, 1897.) The Ontario Publishing Co. (Ltd.), Toronto, Ont., 13th August, 1897.
9410. FALL AND WINTER CATALOGUE, No. 39. The T. Eaton Company (Limited), Toronto, Ont., 13th August, 1897.
9411. BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, TORONTO MEETING, 1897,—HANDBOOK OF CANADA. R. Ramsay Wright, Toronto, Ont., 14th August, 1897.
9412. THE STORY OF THE UNION JACK. By Barlow Cumberland, Toronto, Ont., 16th August, 1897.
9413. PITMANIC SHORTHAND SIMPLIFIED. By R. Stanton Wright, Montreal, Que., 17th August, 1897.
9414. KLONDYKE NUGGETS. By Joseph Ladue. John Lovell & Son, Montreal, Que., 18th August, 1897.
9415. IN KEDAR'S TENTS. By Henry Seton Merriman. The Copp, Clark Co. (Ltd.), Toronto, Ont., 18th August, 1897.
9416. THE PROVINCE MAP OF THE KLONDYKE. The Province Publishing Co. (Ltd.), Victoria, B.C., 18th August, 1897.
9417. HAGAR OF THE PAWNSHOP. (Now being published in "Canadian Magazine," Toronto, Ont.) (Temporary Copyright.) National Press Agency (Ltd.), London, England, 18th August, 1897.
9418. CODE DE PROCÉDURE CIVILE DE LA PROVINCE DE QUÉBEC. Par O. P. Dorais et A. P. Dorais, avocats. Camille Theoret, Montréal, Qué., 19 août 1897.
9419. CATALOGUE OF THE AUTOMATIC ACETYLENE GAS APPARATUS. Niagara Falls Acetylene Gas Machine Co. (Ltd.), Niagara Falls, Ont., 21st August, 1897.
9420. HELLO! WHO RANG ME UP. A Key to the Telephone Subscribers of Toronto. G. M. Rose & Sons, Toronto, Ont., 21st August, 1897.
9421. MUSKOKA SOCIETY TWO-STEP. By Gertrude Smith. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 23rd August, 1897.
9422. THE PIANISTS' ALBUM. (A Selection of Compositions for the Piano.) The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 23rd August, 1897.
9423. SELECT POEMS. (Being the Literature prescribed for the Junior Matriculation and Junior Leaving Examinations, 1898.) Edited with Introduction, Notes and Appendix. By W. J. Alexander, Ph.D. The Copp, Clark Co. (Ltd.), Toronto, Ont., 23rd August, 1897.
9424. OFFICIAL TELEPHONE DIRECTORY OF THE CITY OF MONTREAL AND SUBURBS, JULY, 1897. The Bell Telephone Company of Canada (Ltd.), Montreal, Que., 23rd August, 1897.
9425. PHOTOGRAPHIE DE MONSEIGNEUR BRUCHÉSI. Quéry Frères, Montréal, Qué., 23 août 1897.
9426. LE BRETON EXILÉ À LA PATRIE ABSENTE. Paroles du Rév. J. Laperche. Musique du Rév. S. J. Arsenault. Rév. Sylvere J. Arsenault, C.S.C., St. Joseph, N.B., 23 août 1897.
9427. INTRODUCTION, by James Gibson Hume, M.A., Ph.D., to PSYCHOLOGY APPLIED TO THE ART OF TEACHING, by Joseph Baldwin, A.M., LL.D. (International Education Series.) (George N. Morang, Toronto, Ont., 25th August, 1897.
9428. LITHOGRAPHIE EN COULEUR CONTENANT LES PORTRAITS DES MEMBRES DU GOUVERNEMENT FEDERAL ACTUEL ET DU CABINET DE LA PROVINCE DE QUEBEC. Leclerc et Roy, Québec, Qué., 25 août 1897.
9429. VIRGIL'S ÆNEID. BOOK I. (With Introduction, Notes and Vocabulary.) By J. C. Robertson, B.A. The W. J. Gage Co. (Ltd.), Toronto, Ont., 26th August, 1897.
9430. LIVRE GÉNÉALOGIQUE DE LA FAMILLE. Par Joseph Cadieux, Montréal, Qué., 26 août 1897.
9431. MONTHLY PAYMENT PLAN OF LIFE INSURANCE. (Leaflet.) The Excelsior Life Insurance Company of Ontario (Ltd.), Toronto, Ont., 27th August, 1897.
9432. THE RIGHT HONOURABLE SIR WILFRID LAURIER AND THE RIGHT HONOURABLE W. E. GLADSTONE. (Steel-engraving portraits.) A. C. F. Finzel, Montreal, Que., 27th August, 1897.
9433. THE GAME OF BLOW BALL—RULES—ILLUSTRATED. Maurice G. Thompson, Toronto, Ont., 27th August, 1897.

9434. LABRADOR ET ANTICOSTI. Par l'Abbé V. A. Huard, Chicoutimi, Qué., 28 août 1897.
9435. McALPINE'S ILLUSTRATED TOURISTS' AND TRAVELLERS' GUIDE; BARRISTERS' AND ATTORNEYS' LISTS OF NOVA SCOTIA, NEW BRUNSWICK AND PRINCE EDWARD ISLAND. Thos. H. McAlpine, St. John, N.B., 30th August, 1897.
9436. MABEL GRAY, AND OTHER POEMS. (Revised Edition.) Lyman C. Smith, Oshawa, Ont., 30th August, 1897.
9437. KLONDYKE FACTS. (Being a Complete Guide Book to the Great Gold Regions of the Yukon and Klondyke and the North-west Territories.) By Joseph Ladue. John Lovell & Son, Montreal, Que., 31st August, 1897.
9438. INTRODUCTION À L'ARITHMETIQUE ET AU CALCUL MENTAL. Par C. S. V. Livre de l'Éleve. A. Archambault, C.S.V., ès qualité des Clercs Paroissiaux ou Catéchistes de Saint Viateur, Outremont, Qué., 31 août 1897.